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FOLD: The Definitive Guide to Folding for Print Publications

A Designer's Guide

by
Trish Boyle

A thesis project submitted in partial fulfillment of the
requirements for the degree of Master of Science
in the School of Printing Management and Sciences
in the College of Imaging Arts and Sciences of the
Rochester Institute of Technology

May 1999

Thesis Advisor: Professor Archie Provan
Technical Advisor: Professor Werner Rebsamen

School of Printing Management and Sciences
Rochester Institute of Technology
Rochester, New York

Certificate of Approval

Master's Thesis

This is to certify that the Master's Thesis of

_____
name of student

With a major in Graphic Arts Publishing
has been approved by the Thesis Committee as satisfactory
for the thesis requirement for the Master of Science degree
at the convocation of

May, 1999
date

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FOLD: The Definitive Guide to Folding for Print Publications

I, Trish Boyle, hereby **deny** permission to the Wallace Memorial library of R.I.T. to reproduce my thesis in whole or in part.

May 10, 1999

Acknowledgments

I would like to thank the following people who gave so generously of their time, knowledge and resources:

Technical Advisors:

Robert Franzen, Director of Quality, The Riverside Group

Nancy Marrer, Assistant Professor NTID Electronic Publishing and Printing Technology Department

Pete Marron, co-owner, Upstate Litho

Werner Rebsamen, Bindery Expert/Professor, Rochester Institute of Technology

Chuck Scorsone, Bindery Foreman, Tucker Printers, Inc.

Dan Tucker, Vice-president, Tucker Printers, Inc.

Mark Witkowski, Digital Workflow Consultant, Dartmouth Printing

Usability Advisors:

David Ewald, Designer, Independent

Marie Freckleton, Professor, Rochester Institute of Technology

Tim Hurd, Digital Services Specialist, The Sheridan Press

Paul Korthius, Marketing Consultant, Independent

Bernie O'Hara, President, PREpress Consultants, Inc.

Archie Provan, Professor, Rochester Institute of Technology

Kevin Willi, Designer, Independent

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Abstract

FOLD: The Definitive Guide to Folding for Print Publications is an extensive yet organized and systematic manual for the representation of existing folding techniques. It is intended to serve as a quick reference for graphic designers and others in the graphic arts industry, aiding in the difficult decision-making process of print production.

In this digital age, the role of the graphic designer has changed and expanded into the areas of planning and finishing and pre-flight preparation. Though technology brings with it more design and finishing options, it also brings faster production and turn-around time, leaving designers with little time for research.

This guide provides all of the necessary information required to make a confident and educated decision regarding folding techniques for printed matter. The *Guide* simplifies and organizes all of the existing folding options by family. It lists the advantages and disadvantages of using different folds, limitations of production, a simple affordability scale, information for proper digital document setup, labeled illustrations, questions to ask the printer and the correct terminology to use. A standard page layout and design format was developed for ease of use and visual consistency.

Chapter 1

Introduction

There was a time when the issues of folding and finishing were left up to the professionals. Bookbinding was a craft—time-consuming, rewarding, respected—and folding was done by hand as well. Although there is still a market for fine handi-work, the majority of the industry has become automated. With the introduction of automation comes the variation in styles, methods and prices. In an intensely competitive market, binderies are doing everything they can to advertise their products. Brochures and websites brag of their capabilities, some explaining and illustrating just what makes them different. The problem is that they fail to consider the part designers play in the scheme of things.

The job of a graphic designer has changed over time from the creative person, to print buyer, typesetter and pre-flight expert. Modern designers are forced to play a large role in the production of their jobs—choosing the paper, folding style and more—and are held responsible for the technical mistakes that they make. This is a big concern for designers who are primarily taught to concentrate solely upon the aesthetic, with little thought given to the technical aspects of print production.

"Designers" are graduating from vocational schools and top-ranked universities by the thousands every year. Curriculum varies with every educational institution, and being a creative field, oftentimes focus can be placed solely upon innovation, style and composition, instead of the delicate balance between the aesthetic and the practical. A year of teaching has reinforced the author's belief that these young designers

are not prepared to work in their field. Most educational institutions do not require a co-op for work experience. Therefore, the much-needed practical information is left out of their education altogether, forcing the students to learn by their costly mistakes.

Another population often overlooked is the in-house desktop publisher. This title includes people who publish their own work from their home, and companies who, looking to cut costs, assign projects to computer-savvy non-designers. These people know how to use a computer well enough, but know nothing about production setup for printed matter. A guide to folding could only help their situation.

The Statement of a Problem

There presently exists a gap in communication between graphic designers and their printers. Although it would be almost impossible to clear up every issue and technicality that splits the two on a daily basis, it is important to realize that things can be done to help them work better together. Designers want to understand how to set up and plan their documents for good results—and they want to understand their printers. Printers just want the job to go to press, print and finishing without major production problems.

One of the most common technical mistakes of designers is failing to plan—specifically in the areas of binding and folding. Getting caught up in a great idea, they may fail to consider possible limitations such as proper document setup, budget or technical problems. In a digital age, time is short and research is usually at a minimum. Designers have neither the time nor the desire to read extended manuals on the capabilities of folding machines. Often unaware of all of their options and short on time, they end up choosing what to them is the familiar, and setting up the document in whatever way they think it should be set up.

Although there have been many attempts to educate, illustrate and explain by folding

machinery companies, paper companies, desktop publishing fanatics and printers; all are either incomplete, overdesigned, too extensive, too technical, or too one-sided and commercial. The graphic arts industry needs a quick reference which would simply provide all of the available folding options, common uses, advantages and disadvantages, correct terminology, questions to ask the printer, illustrations, budgetary considerations and instructions for proper document setup.

Background and Significance

Book production has evolved over the years from the clay tablets of the Assyrians, to the Egyptians and their papyrus in 3500 B.C., from the vellum and parchment of the scribes in the middle ages to the paper and presses of Gutenberg in the 1400s. Books were assembled, folded and bound by hand—an art form and respected craft. Before mechanized methods of book sewing were developed, commercial binders used loom sewing, a method of mounting the assembled signatures on a sewing frame and passing a needle through the folds of the paper and around several suspended threads.

The last few decades of the nineteenth century brought continued mechanization throughout the printing trade. There were cutting and folding machines by 1875 and the binding machinery of the 1890s could stitch 1,500 magazine covers per hour.

Contemporary binding and folding is faster and more efficient than ever before. Many printing houses bind and finish in-house, but there are also specialized and all-inclusive binderies for them to outsource as well.

In the mail, everyday, we receive folded pieces of printed material, and among that material, if we pay attention, we will see a pattern of folding styles which repeats itself in different sizes and papers. Many of those folds have names, many of them don't—and no one really knows what to call them. This is a major problem.

Not many designers know all of their choices for folding, or the difference between a single gate fold and a double gate fold, etc. Examples of folding styles are: accordian, broadside fold, single parallel, letter fold, double parallel, double gate, map fold and short fold—just to name a few (Appendix A). Many of these techniques have multiple names which adds to the confusion. Each of the many folding styles require special considerations for document setup.

By providing a manual of the available folding styles with detailed and specific information regarding document setup, limitations, advantages and affordability, along with prominent and consistent terminology, designers, desktop publishers and graphic arts professionals will be able to make educated and confident decisions concerning their folding needs.

This guide will also have an effect on the communication between designers and printers, helping them to understand each other through a common terminology.

Most importantly, *FOLD: The Definitive Guide to Folding for Print Publications* will establish a standard—a quick reference to aid in the important decisions of designers and graphic arts professionals. It is designed to save time and costly mistakes, to educate and to illustrate. Nothing of its kind presently exists, and with the changing responsibilities of the designer, it is needed.

Reasons for Interest

As an artist and designer who studied printing in graduate school, it is hard to ignore the differences between the aesthetic experience of a design degree and the practical experience of a printing degree. Design and printing are two fields intertwined—one cannot survive without the other—but they are dramatically different, which explains the aforementioned communication problem.

It is fascinating to think about the possibility of a day when printers and graphic designers can actually understand each other. With the roles of the printer and designer constantly evolving, it only makes sense to find the standards which can be simplified for the benefit of both parties. Although bridging the communication gap between designers and printers will definitely take some effort from both sides, it will be a fantastic challenge to face.

Chapter 2

A Review of the Literature in the Field

There are many sources for finding information folding: the World Wide Web, *Books in Print,* thesis stacks, printing and paper companies and folding machinery companies. If found, the information can be quite helpful, but most of the important specifications for document setup and limitations are buried deep within technical manuals and advertising brochures which would not be readily available to a graphic designer. There have been many attempts to cover the subject of folding for designers, but none are complete—usually overdesigned, providing small illustrations and a page or two dedicated to talking about what folding is, and not how to do it successfully.

One thing to remember is that the job of the designer is changing. There was a time when all the designer needed to know was how to design. They could leave the typesetting, planning and finishing up to the professionals. Now designers work hand in hand with their printers, trying to speak their language and keep up with the constant changes of modern technology. They are not only in charge of their own creative development, but now they are held responsible for proper digital document setup—which is directly affected by the chosen finishing methods—and some or all of the pre-flighting.

The existing resources for designers are incomplete and outdated, reflecting the aesthetic responsibilities of the designers of the past and not the growing technical responsibilities facing the designers of the future. Other resources are industry-minded, technical and practically out of reach.

The World Wide Web

If fortunate enough to stumble upon the right key word combination, and if blessed with patience one might find something helpful on the web. When searching for these sites, keywords which come to mind are the obvious: folding, print-finishing, folding techniques or standards, and desktop publishing. Even with a refined search these key words bring up thousands of entries from orgami to folding machinery. The majority of the sites are folding machinery company websites dealing with advertising and information on the services that they provide geared to production minded customers, not designers.

Sites with some information are Ward Press (www.wardpress.com/binding/ssvert.html), Printfold (www.printfold.com/folding.htm.) and OTI (www.helio-pause.com/oti/binding. html#SADDL).

On the other end of the spectrum is the designerly Warren Idea Exchange website (www.warren-idea-exchange.com/graphic/wolc.html#3.). It's a fun and visual web page done in the tradition of most designer's resources—heavy on imagery, light on information. This page contains lots of tiny illustrations for folding styles and even a cute falling elephant, but absolutely no body text or itemized instructions whatsoever.

Books in Print

When searching for books in print which cover the topic of folding techniques, the overwhelming realization is that the majority of books deal with folding as a simple concept which requires little explaining. In the area of actual reference books, there are very few choices.

Rochester Institute of Technology's own Werner Rebsamen, a master bookbinder, has compiled two educational texts: *Print Finishing Management* and *Bookbinding: Creative Print Finishing.* Although both contain extensive information, they are

available for the educational purposes of the School of Printing Management and Sciences and therefore are not readily available for any consumer who may want to use them as a resource. Also, these textbooks are structured for his bookbinding classes and not for the benefit of graphic designers.

The Graphic Arts Technical Foundation (GATF) misses the mark with their book *Binding and Finishing* (Ralph Lyman). While providing plenty of photos of machinery and lots of terminology (with a good glossary), the important information gets buried in its 154 pages of technical writing. They recently made a better attempt with *Binding Finishing and Mailing: The Final Word* (T. J. Tedesco). It has some more concise and useable information, but still talks to the bindery and not the designer.

Two other notable resources are the books *Getting it Printed* (Mark Beach, Steve Shepro, Ken Russon) and *Production for the Graphic Designer* (James Craig). These two books are actually meant to be read by designers, each dedicating a chapter to binding and folding techniques. Besides being outdated (1970s and 1980s), these books just touch upon the subject.

Other published resources came from the thesis stacks, trade magazines and sources in industry such as Heidelberg, Webcom, Warren Paper, Riverside Bindery and others (see bibliography). Though these sources will be the most informative for this project, it must be noted that it would be difficult at best for a designer to obtain them for reference.

Chapter 3

Statement of Project Goals

The goals for this project are quite practical:

1. To simplify, organize and illustrate all folding options identified in this project.

2. To establish information for proper digital document setup when planning for a folded piece.

3. To establish a common folding terminology between printers and designers through the use of an intuitive and logical naming system and clearly labeling visuals throughout the guide.

4. To help designers understand their folding options and save time while becoming more educated about folding techniques.

Chapter 4

Methodology

Extensive research and collection of information and illustrations was the first step in the production of the *Guide*. Much data exists, but in many stages of incompletion and complexity.

All conceivable search outlets were exhausted, including the World Wide Web, books in print, periodicals, theses, printing and paper companies and folding machinery companies.

Once all information was collected, it was then seperated and compared for overlap, conflicts of data, common terminology, consistency of illustrations, etc. After careful collection, organization and observation, a definite family structure and pattern was evident—that was the biggest hurdle. Once the skeleton structure was laid, all fell into place and other issues could be addressed, such as affordability, benefits and limitations, questions to ask and guidelines for digital document setup.

When a rough draft of the document was finished, copies were given to a panel of experts (listed below) for both technical and usability issues.

Technical advisors

Robert Franzen, Director of Quality
The Riverside Group

Nancy Marrer, Assistant Professor
NTID Electronic Publishing and Printing
Technology Department

Pete Marron, co-owner
Upstate Litho

Werner Rebsamen, Bindery Expert/Professor
Rochester Institute of Technology

Chuck Scorsone, Bindery Foreman
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Dan Tucker, Vice-president
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Paul Korthius, Marketing Consultant
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Bernie O'Hara, President
PREpress Consultants, Inc.

Archie Provan, Professor
Rochester Institute of Technology

Kevin Willi, Designer
Independent

When all rough drafts were returned, feedback was compared, suggestions were considered and technical issues were resolved. A final draft was completed and printed on the Xerox Docutech.

Chapter 5

The Results

The results of this project were quite surprising. When the project began, it was intended to cover both folding and binding. But as the beginning list of 20 folding styles swiftly grew to 50, then 80, then 108 folding styles, it was determined about halfway through the time frame of the project that the entire project would focus on folding alone. A smart decision.

As the folding styles were collected, a pattern established itself as well as a distinct family structure of folding styles.

The hardest work was in the organization and classification of the folding styles. Once the family and organizational structures were in place, the grunt work could begin. Months were spent creating the 900 illustrations. Over 200 diagrams were developed along the way, and a book style was completed. Front matter was also written and illustrated to cover how to use the *Guide,* the basics of folding, reference materials and three different indexing references.

The *Guide* was a year-long project, and expectedly it evolved in small ways which then needed to be corrected. Much time was wasted back-tracking and fixing inconsistencies in book style.

As the rough drafts came back from the technical and usability experts, a wave of changes were made. Most changes dealt with usability and presentation suggestions, which meant small changes in format of the book.

It was surprising how few technical edits there were—a sign of thorough research on the part of the author.

Chapter 6

Conclusions

One of the most wonderful discoveries made during this project was the incredible generosity of professionals in the graphic arts industry. One expects to hit walls once in a while when compiling research and asking of others' time. In this case, every turn was met with a helping hand. Printing companies put their folding experts to the task, tours were arranged, resources were lent, questions were answered.

Another surprise was the willingness to accept such a guide. It was estimated that the *Guide* would be met with criticism from all angles—because it was something new. Instead it was met with much curiosity, praise and enthusiasm. It was quite humorous observing how quickly everyone was willing to adapt to the new naming system, too.

Although the *Guide* is quite complete, there are small details which could not be completed in time. There was a request for more (!) illustrations, and requests to label folding sequences on the diagrams. There were also plans to make the visual index into a reference poster. Unfortunately, time ran out, but all original objectives were met.

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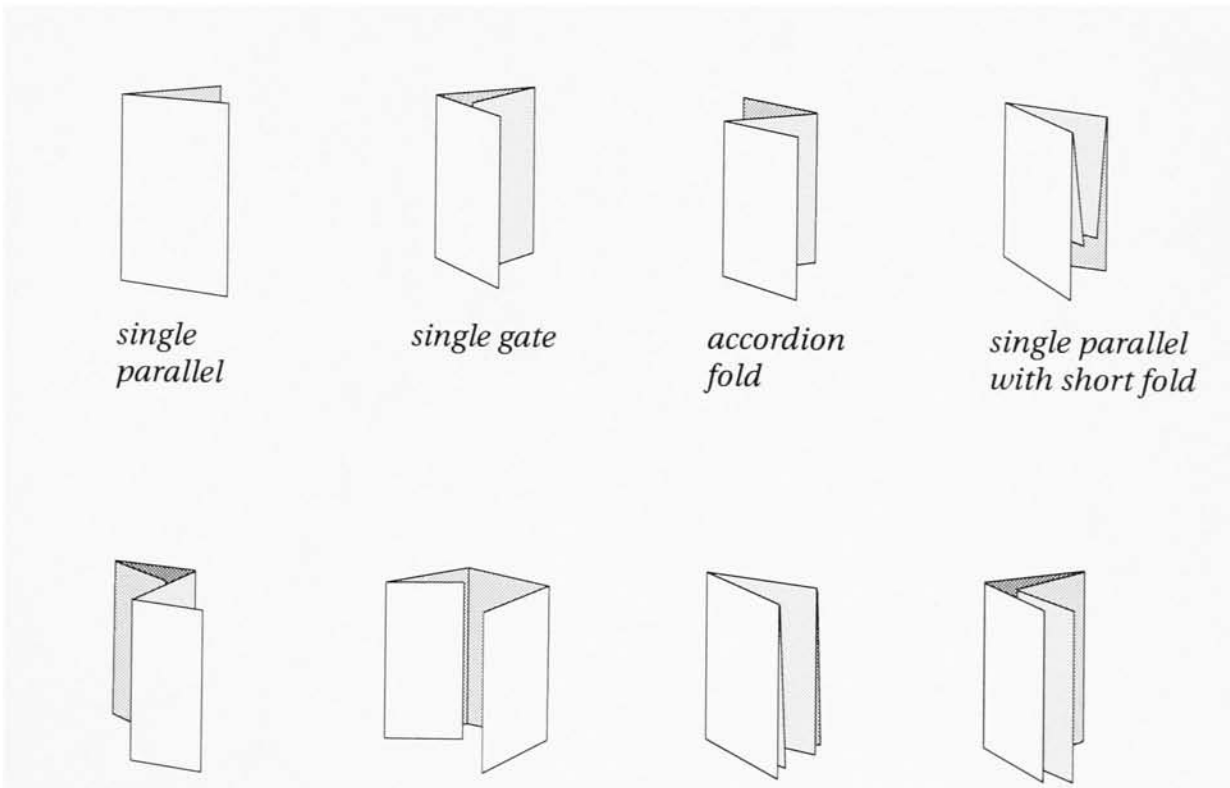
Appendix

Appendix A

Sample folding styles



single parallel

single gate

accordion fold

single parallel with short fold

map fold

double gate

single parallel broadside

double parallel

FOLD

THE DEFINITIVE GUIDE TO FOLDING FOR PRINT PUBLICATIONS

BY TRISH BOYLE

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PREFACE

In this digital age, the role of the graphic designer has changed and expanded into the areas of planning and finishing and pre-flight preparation. Though technology brings with it more design and finishing options, it also brings faster production and turn-around time, leaving designers with little time for research.

Modern designers are forced to play a large role in the production of their jobs—choosing the paper and folding style, digital document setup, pre-flight and more—and are held responsible for the technical mistakes they make.

FOLD: The Definitive Guide to Folding for Print Publications is an extensive yet organized and systematic manual for the representation of existing folding techniques. It is intended to serve as a quick reference for graphic designers and others in the graphic arts industry; as a springboard for creative ideas, as an aid for proper print production and as a means for the establishment of a folding standard.

This guide provides all of the necessary information required to make a confident and educated decision regarding folding techniques for printed matter. The *Guide* simplifies and organizes all of the existing folding options by family. It lists the advantages and disadvantages of using different folds, limitations of production, a simple affordability scale, information for proper digital document setup and labeled illustrations.

This guide is strictly for reference—diagram measurements may vary slightly from print finisher to print finisher depending upon your paper choice, or the limits of the equipment. For best results, establish good communication with your printer and discuss the folding style, diagram measurements and paper choice early on in the project.

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I would like to thank the following people who gave so generously of their time, knowledge and resources:

TECHNICAL ADVISORS

Robert Franzen, Director of Quality
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Rochester Institute of Technology

Kevin Willi, Designer
Independent

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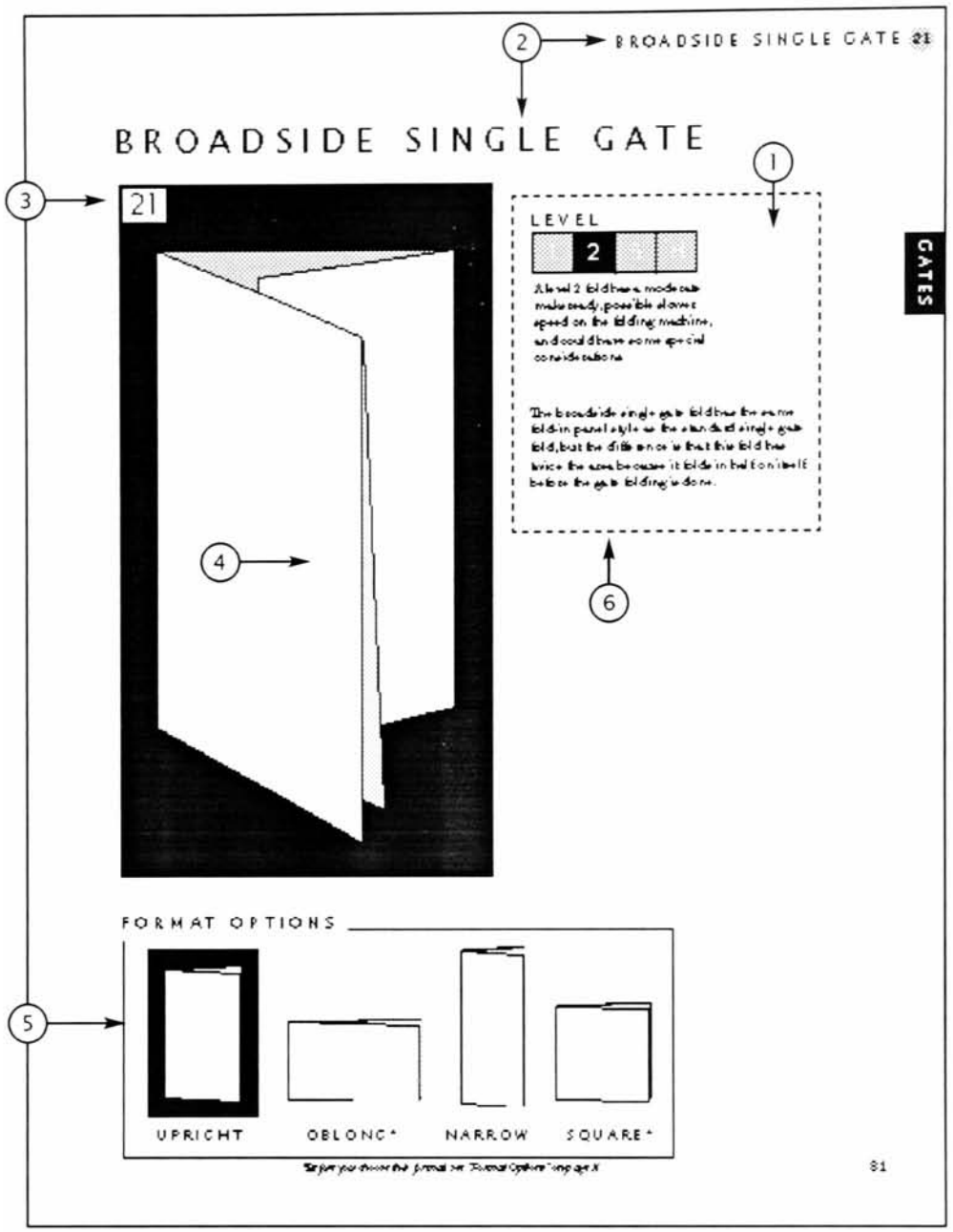
GETTING STARTED
HOW TO USE THIS GUIDE

Finding your way around this guide is easy. Just read over the page diagrams and format options on the following pages. Everything is designed to follow a logical and predictable system, and you'll find lots of other useful information in the *Getting Familiar with Folding* and *For Your Reference* sections. If you know what you're looking for or want a quick overview of all the folding styles, flip to the *Index* section.



(1) This tab indicates which family of folds you are currently in. There are six major families: accordion folds, gate folds, letter folds, map folds, parallel folds and roll folds. There is a seventh category called "folds without families" for folds which lack major folding family characteristics.

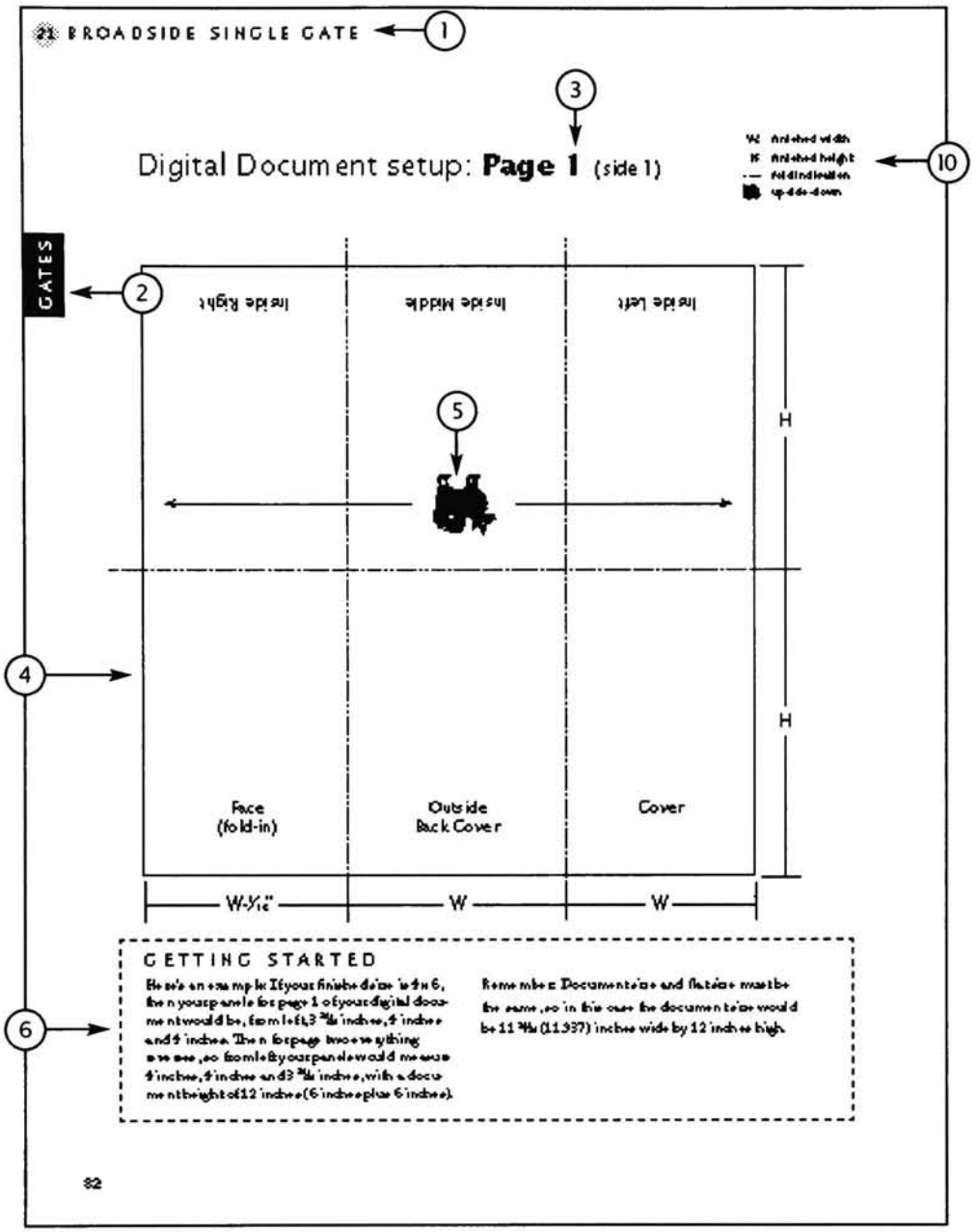
(2) This is the name and number of the fold, which will appear at the top of all pages, and twice on the first page of a new fold.

(3) This is the official number which has been applied to this specific folding style. All folds may be referred to by number or name.

(4) Here is an illustration of this specific folding style *in a specific format.* In this example, the format is upright. You'll notice that the format is identified below in the formats box.

(5) The formats box indicates which formats are optional for this particular folding style. You'll notice that there is one format highlighted on the formats box. This identifies the format of the illustrated fold above. Certain formats have other considerations, so be sure to read "formats," page 5.

(6) This is simply a description of the folding style and things to think about before you use it. Above that is the levelof complexity, which is explained in its adjacent paragraph.



① This is the name and number of the fold, which will appear at the top of all pages, and twice on the first page of a new fold.

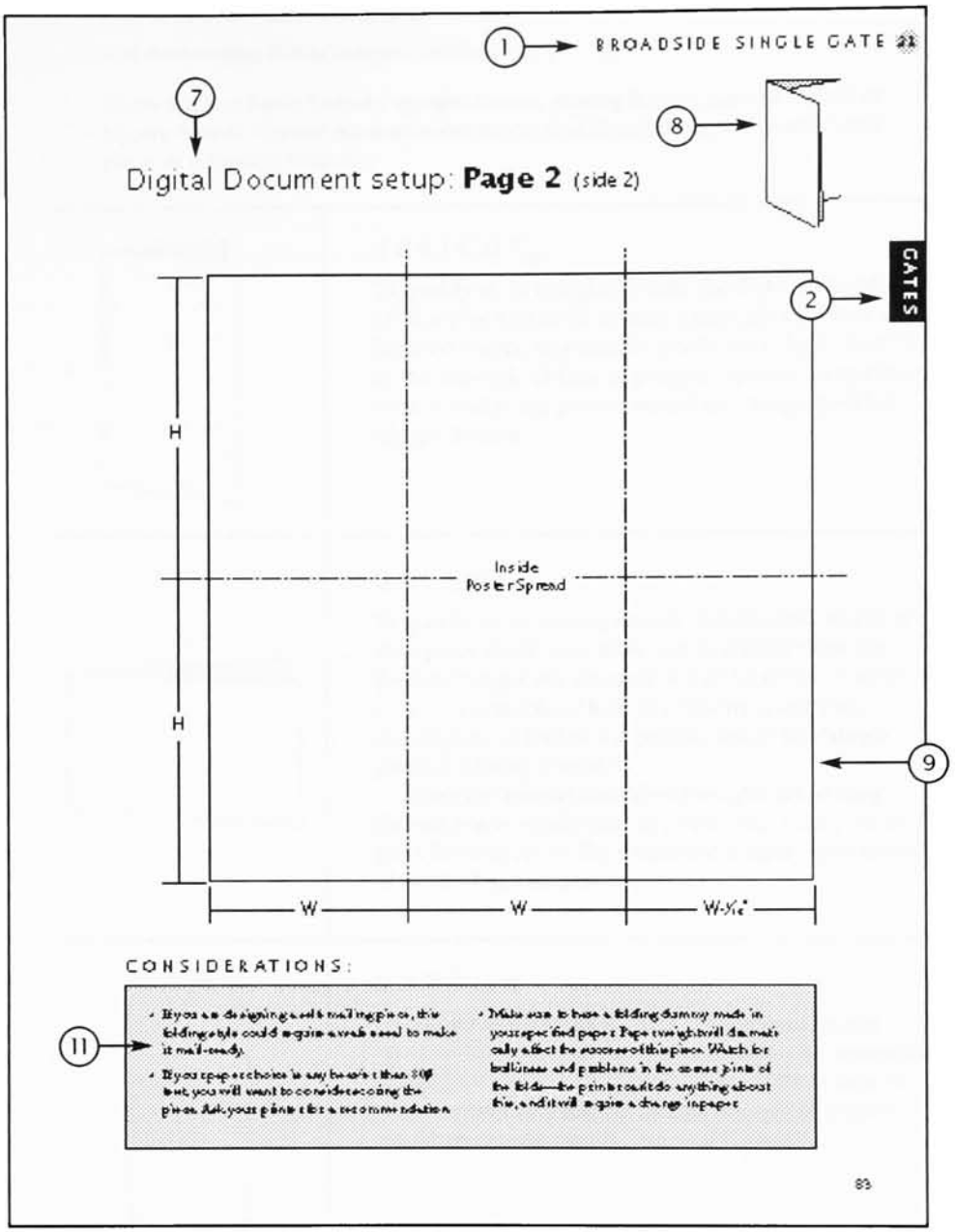
② This tab indicates which family of folds you are currently in. There are six major families: accordion folds, gate folds, letter folds, map folds, parallel folds and roll folds. There is a seventh category called "folds without families" for folds which lack major folding family characteristics.

③ This title refers to the diagram below it, and the diagram indicates exactly how the first page of your two-page digital document should be set up.

④ Here is the diagram to guide you in your document setup for page one. By following the measurements on the diagram, you will set the folds correctly for consistent results.

⑤ This is my little Pomeranian dog, Dolly. She only appears upside down, and when she does, it means that panel or panels must be upside down on the digital document.

⑥ For those who are having trouble understanding the diagram, this segment gives an example of a finished size, and then the measurements the panels would be for both pages.



(7) This title refers to the diagram below it, and the diagram indicates exactly how the second page of your two-page digital document should be set up.

(8) A small reminder illustration appears to help with visualization and for ease when flipping through the book.

(9) Here is the diagram to guide you in your document setup for page two. By following the measurements on the diagram, you will set the folds correctly for consistent results.

(10) This is the key to the diagram (previous page). For a clear definition of its contents, see *glossary*, page 25.

(11) Here is a list of considerations—things to think about before you choose this folding style, and things to think about after you choose it as well.

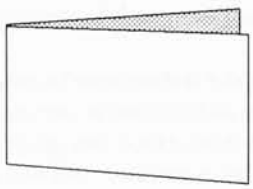
FORMAT OPTIONS

from the Heidelberg *Folding Techniques* handbook

There are four basic formats: upright format, oblong format, narrow format or square format. Certain measurement ratios, described below, will qualify your piece as a specific format.

UPRIGHT

To qualify as an upright format, the finished height of your piece must be at least ¼ inch greater than the finished width. An example would be 5" by 8" or 4" by 6." An example of how to properly specify an upright format fold to the printer would be: "single parallel, upright format."



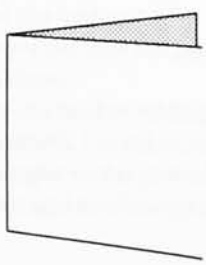
OBLONG

To qualify as an oblong format, the finished width of your piece must be at least ¼ inch greater than the finished height. An example would be 6" by 4" or 8" by 5". An example of how to properly specify an oblong format fold to the printer would be: "single parallel, oblong format."

There are special considerations for an oblong format piece—make sure to check with your printer or print finisher about the minimum height capabilities of the folding machinery.

NARROW

To qualify as a narrow format, the finished height must be at least twice the finished width. An example would be 4" by 8" or 3" by 9". An example of how to properly specify a narrow format fold to the printer would be: "single parallel, narrow format."



SQUARE

To qualify as a square format, the difference between the finished height and finished width cannot be more than (+/-) ¼ inch. An example would be 6" by 6" or 6" by 5 ½." An example of how to properly specify a square format fold to the printer would be: "single parallel, square format."

There are special considerations for a square format piece—If you intend to send the piece through the mail, square mail often requires extra postage.

FOLDING BASICS

from Stahl/Heidelberg *Folding Techniques*

What is folding?

Folding involves the use of a tool or mechanical pressure to produce a sharply defined fold. The pressure required for folding may be applied manually with the use of a bone folder, however, this folding manual will only address the mechanical aspects of folding for production.

In mechanical folding the doubled sheet is inserted between rollers and pressure appropriate to the thickness of the paper is then exerted. The end result is that the inherent tendency of the paper to revert to its original contours is largely eliminated.

In bookbinding terminology, the sharp line that is obtained is called the FOLD and the product itself is the FOLDED SHEET.

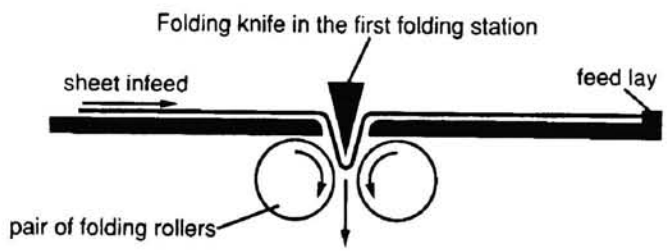
Accomodations for folding aesthetics

What looks like a folding mistake by the bindery is often designer error. Remember that if a panel is to fold into another, is must be slightly smaller or you will get what's called "telescoping," or the inability for the piece to lie flat. It will have a roundish profile because the panels are too long and push upward for lack of anywhere else to go. Your bindery will adjust the panels so there is no telescoping, but margins and color breaks will shift noticeably. As you look through the diagrams in the following folding family sections, you'll see that there are slight adjustments in panel widths where appropriate. Pay attention to the adjustments and apply them consistently for good, predictable results.

Principles of mechanical folding

In the process of mechanical folding, there are two conventional techniques in common use, knife folding and buckle plate folding. One type of folding may be used alone or both techniques can be combined in an automatic folding machine.

Knife-folding



Knife folding

In knife folding, a vertically moving knife and two contra-rotating rollers (rollers rolling in opposite directions) are necessary. The sheet is carried from the feed to the folding station until it makes contact with the sheet stop. At this point, the knife descends vertically driving the sheet between the rollers. As the sheet passes through the contra-rotating rollers, it is nipped and the fold is formed. The folding process is thus seen to be dependent on the cyclical action of the folding knife.

It is essential that the gap between the rollers is set to the thickness of the sheet passing through them.

Unlike the buckle-folding arrangement, only one folding knife is to be found in any one folding station. For every subsequent fold, it is necessary to have a further knife folding station at right angles to the preceding one.

Printers and binders specializing in folding large sheets usually use knife folders.

Buckle-folding

Fig. 1

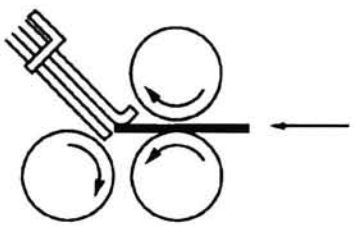


Fig. 2

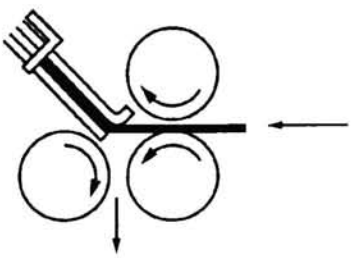


Fig. 3

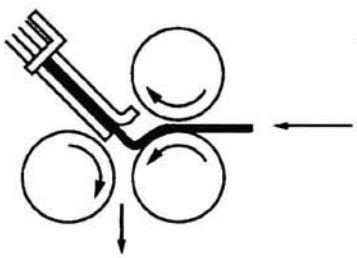


Fig. 4

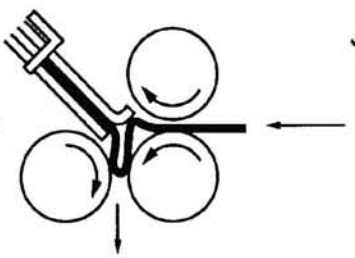
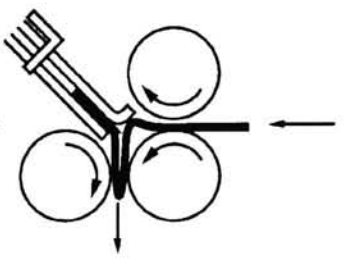


Fig. 5



Buckle folding

In buckle folding, each station consists of three rollers and a buckle plate. The first two rollers are arranged one vertically above the other and they carry the incoming sheet into the buckle plate until it reaches a feed guide stop that can be adjusted as required.

The sheet is delivered into the buckle plate at a speed determined by the characteristics of the paper. As the leading edge strikes the feed guide stop, the sheet continues to be fed into the buckle plate. A buckle thus forms in the space between the three rollers. As this sags downwards it is picked up by the contra-rotating rollers and the fold is formed as the sheet passes through them.

It can be seen that in this case the folding process is not restricted to any cyclical movement and is thus capable of a very high output.

For each folding station it is possible to fit up to six buckle plates, arranged alternately above and below. Buckle plates that are not required for a particular folding operation can be replaced by sheet deflectors, allowing one or more buckle plates in a folding station to be bypassed. It is thus possible to execute a large number of fold variations.

ABOUT PAPER

from Mohawk Paper Mills' *Paper Basics* and Stahl/Heidelberg's *Folding Techniques*

THE BASIC INGREDIENTS

Broke Paper manufactured by the mill that has been discarded at some point during the process. It is returned to a repulping unit for reprocessing.

Calcium carbonate A mineral (ground marble) alkaline filler which may act as a buffer. It also increases the brightness of a grade.

Cotton Cotton fibers, composed entirely of pure cellulose, may be used in papermaking. Paper formerly made from rags is today made from cotton fibers.

Dyes and colorings Color is added and monitored continually during the papermaking process. Sophisticated computers ensure consistency through the run and in subsequent runs.

Fillers Non fibrous, insoluble mineral materials added to the fiber furnish to impart specific properties such as opacity, improved ink receptivity, whiteness or surface smoothness. Commonly used fillers include clay, calcium carbonate and titanium dioxide.

Pulp Cellulose fibers from wood or other plant sources may be extracted chemically or mechanically. Softwood pulps are derived from conifers (evergreens). Hardwood fibers (from deciduous trees) are also a primary source of paper making pulp.

Sizing Internal sizing improves water resistance so that the paper fibers stay together in handling. It may also be surface sizing, applied to the partially dry web to increase surface strength and resistance to ink spread or feathering.

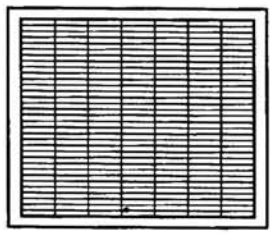
Postconsumer fiber (recycled paper) With the heightened interest in recycling, postconsumer fiber has gained new importance as a key ingredient in fine papers. One helpful solution to the large waste problem, is adding used paper from homes and offices to the paper furnish as postconsumer fiber.

THE TECHNICAL ASPECTS OF PAPER

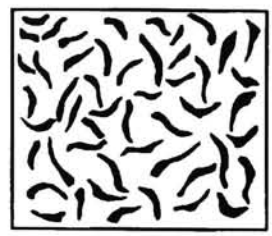
The effect of the manufacturing process on the grain direction

Paper fibers consist of tubular segments with hygroscopic characteristics that depend on the nature of the raw material and the way in which it is milled. As climatic conditions change, the fibers are capable of considerable expansion and contraction in their thickness, but, in terms of length, they remain virtually unaltered.

The way that paper fibers are laid down in sheets during the manufacturing process determines certain characteristics which may be described either in terms of expansion and contraction or grain. These characteritics vary with each of the three processes normally used in the production of paper since they differ in the way that sheets are built up.



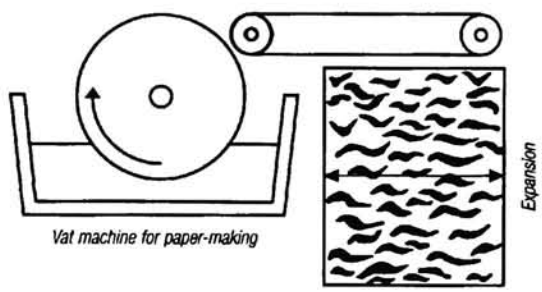
Web for handmade paper



Deposition of fibers in hand-made paper.

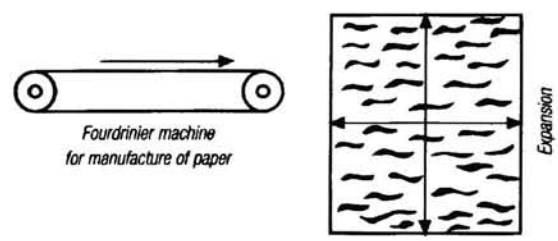
Hand-made paper

The highly diluted pulp is evenly spread over a web through manual shaking in such a way that the fibers follow a random orientation. For this reason, there is no discernible grain in hand-made paper while the effects of expansion and contraction are virtually identical both longitudinally and laterally.



Vat machine for paper-making

Grain



Fourdrinier machine for manufacture of paper

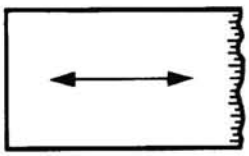
Grain

Machine-manufactured paper

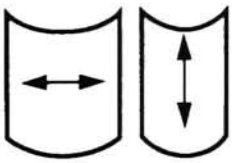
Paper produced by machinery, vat machines or long web machines, has a pronounced grain direction because the fibers align themselves parallel to the direction of movement on the machine.

GRAIN DIRECTION AND STRETCHING

The direction in which the web moves through the paper machine is said to be with the grain whereas the direction across the web is said to be against the grain. With the grain, there is greater strength, while against it, there is greater expansion and contraction. This arises from the fact that, during the manufacturing process, the fibers are stretched so that they largely lose any further capacity for expansion. The result is that longitudinally i.e., with the grain, paper displays relatively good dimensional stability.



Fingernail Test



Bending Test

Tearing Test

TESTING THE PAPER GRAIN

The following tests can be used to check the grain:

Fingernail test

The top and side edges of the test-piece are drawn between the nails of the thumb and middle finger. With the grain, there is virtually no change but, in the direction of the stretch-side, a wave is clearly visible.

Bending test

When a square test-piece is bent in both directions, it cam be seen there is less resistance parallel to the grain than against it.

Tearing test

A tear is made into the sheet both longitudinally and transversally. With the grain, the tear is relatively straight. Across the grain, there is greater resistance to tearing and the resulting line is less even.

THE EFFECT OF PAPER CHARACTERISTICS ON FOLDING

Depending on the quality of the paper, folded sheets retain a certain degree of resilience after folding so that they have a tendency to reopen. The angle of opening is least with parallel folds, slightly higher with mixed folds, and most noticeable with right angle folds.

Folding and the residual tendency to revert to the original contour are substantially affected by factors such as the ash content of the paper, the moisture content, the grain and the number of folds.

If the paper contains a high proportion of filling material, folding will lead to destruction of connections between fibers with a resulting diminution in resilience, elasticity and strength of fold. Papers with low ash content, however, experience virtually no loss of strength when subjected to the same folding process. Resilience, on the other hand, is considerably higher. The tendency of the fold to reopen can, nevertheless, be substantially reduced by passing the folded sheet through further pressure rollers.

A moisture content of 10% is favorable for the folding of paper, allowing a sharply defined fold to obtained without damage to the fiber mesh and with only limited resilience remaining.

Differences in resilience arise according to whether the fold is executed with or against the grain. Folds that lie parallel to the grain display greater resilience than those which run against it. In the latter case, the pressure exerted by the rollers must be somewhat less to avoid an excessive weakening of the paper along the fold line.

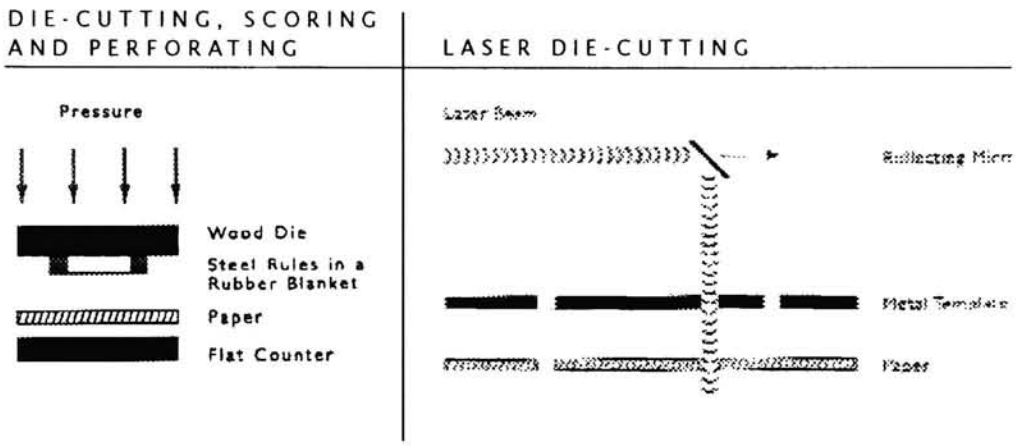
As the number of folds increases, stresses rise within the folded sheet, particularly with right angle folding. It is necessary, therefore, to increase roller pressure for higher numbers of folds so as to obtain the requisite sharp edge.

DIE-CUTTING, SCORING AND PERFORATING

from Simpson Paper Company's *Tools of the Trade* series, #3: *Special Techniques*

Die-cutting, now done mechanically and by laser, can handle nearly any type of shape, in nearly any size. Mechanical die-cuttings are made using sharp steel rules formed into the desired shape and set into a wooden die. Mounted to a letterpress, these rules are designed to cut, score, crease or perforate when pressed against paper and a flat counter. Standard dies are readily available for pocket folders and other common uses and can be produced in combination with scoring. There are also standard perforating rules to choose from—ask your printer for the available options. Custom designs are always a possibility, but require more time and expense since the dies must be created from scratch.

Laser die-cutting is technically not a die-cut, but an extension of the photographic process. A metal template made from black-and-white artwork performs the role of a film negative. Wherever there is a hole in the template, a laser beam passes through and vaporizes the exposed area of the paper. Extremely precise, lasers enable the creation of amazingly intricate patterns with ease.



Setting up a die template

From simple to elaborate die-cutting, it's important to know how to make a die template for the printer to use as a guide to make the die with. Most importantly, you don't want to create a die-line on your final electronic document, because you never want anything on the document which is not meant to be printed. So, you need to make a seperate document for the die template.

It's simple and fast. Start with your final electronic document. The first thing you want to do is to save a new version of the document as "die template." Now, your original document is intact and safe, and you have an exact duplicate called "die template" that you can work on. On the die template file, draw (with a 1pt. line) the exact areas you want to be die-cut, whether straight or curved. Be extremely careful and meticulous because this is what the printer will output as their guide to make the die.

You only need to do this for one page of your two-page document because, of course, the die will cut through the two-sided sheet. It is suggested that you choose the side with the most crucial die registration to draw your die line.

Print it out, cut along your die lines, fold it up and make sure everything is in the right place.

Once you are absolutely sure that your die-line is exactly where you want it to be, delete the extra page in the document and delete everything on the existing page except the die-line and fold marks. Save the document, include the file on your disk, laser print the page with crop marks and send it with the job.

PRODUCTION TIPS FOR SCORING AND DIE-CUTTING

from Simpson Paper Company's *Tools of the Trade* series, #3: *Special Techniques*

DIE-CUTTING

On mechanical die-cuts, ask that proofs be made on the actual stock.

Look for clean cuts with crisp, sharp edges.

Don't place cuts too close together or use too many, particularly on a lightweight paper.

Remember that die-cutting on the edge of lightweight paper may fray unless protected.

Unlike mechanical die-cutting, the amount of detail in the artwork will not affect laser cost. For text-weight stock, the laser can handle cut-in lines as small as .012," and for cover stock, as small as .024."

Laser die-cutting is not widely available, so it can be more expensive because the project may need to be shipped to the service provider. Ask your printer or bindery for the laser die-cutting facility nearest you.

Remember that envelopes are usually converted after die-cutting.

Provide your printer with a die-template document (see previous page for instructions) and laser mock-up for guidance.

Make sure that your printer shows you their die template (made from yours) overlaid on the proof or blueline. You want to be able to catch any mistakes or misunderstandings that could have happened.

SCORING

It is best to fold and score parallel to the paper grain, but when a format requires folding in both directions, make sure the primary fold is made parallel to the grain and the secondary fold against it.

Scoring produces an embossed ridge on the paper. Scores should be made so that the ridge or "bulge" is inside the fold. The width of the score should always be at least the same as the caliper of the paper. Generally, the thicker the paper, the wider the score.

To get a crisp, accurate fold on a text and cover sheet, score the paper first. Some finishers recommend scoring every text and cover paper, others only heavier stock. Covers and duplex covers should always be scored before folding.

Scores are more difficult when they run across the grain in heavily inked areas. Problems can be avoided if the score is sufficiently wide and deep and properly folded.

Letterpress scoring, with a light pressure score, is generally recommended and preferred. Most common letterpress scoring methods are rule and counter, and channel creasing matrix. A hot score will improve folding on more difficult jobs and reduce the possibility of cracking.

Because proper paper moisture is essential for successful scoring, stock should remain covered when not being processed to avoid drying out. Scoring problems caused by dried-out paper can often be corrected by running the stock through an offset press and applying fountain solution to remoisten the paper.

WAFER SEALS

On many occasions throughout this manual ther will be a reference made to the possible neccessity of a wafer seal.

Wafer seals are small adhesive discs (or other standard or custom shapes) which are applied to seal the folded piece— most commonly for mailing purposes, but for decorative and other functional purposes as well.

Wafer sealing is done mechanically, but bear in mind that most wafer sealing units have only one head, in other words, most are only capable of applying one wafer seal at a time per piece. So, if your piece requires more than one wafer seal, that means more than one pass through the machine, which adds cost. Sometimes it's better to put the piece in an envelope, both for economical and aesthetic reasons.

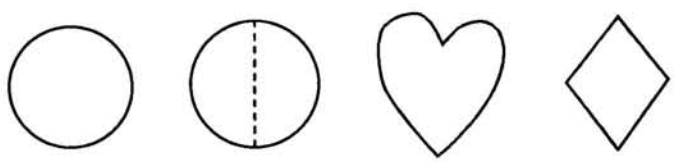
There are lots of choices when it comes to wafer seals— here are some options to consider. Ask your printer or binder for more details.

Colors

metallics, colors, standard white, clear, custom printed

Shapes

circular, diamond, square with rounded corners, thin rectangular (think tape), custom shapes



circular *perforated* *custom* *diamond*

Varieties

plain, perforated, permanent, resealable

PLANNING YOUR PIECE

Planning for your job and setting up your digital document are the most important aspects of the job, and therefore should be done first. It is much harder to work backwards at the end—that's when the mistakes are made.

Before you start the job, there are some things to consider:

What is the purpose of this piece?
Will this job be a self-mailer, mailed in an envelope, handed out, etc.? If the piece is a self-mailer, understand that there are postal regulations to think about (wafer seals, weights, sizes, standards—too many to get into here). Talk to your print buyer, or call your local post office for details.

If your piece will be mailed in an envelope and you're on a tight budget, make sure to choose a size which will fit into a standard envelope. Another good thing to know is that square format mail generally requires extra postage. Also, if the piece is on a heavy paper, or has multiple parts to it (reply envelopes, reply cards, etc.) have a paper dummy made, put it in your envelope sample and weigh it. You can always change the weight ahead of time, but there are no exceptions at the post office once the mistake has been made.

What is the budget?
Can you afford the extras, or do you have to economize? Most of the time we're not given an unlimited budget. That's why it's important to do a little research first, because it's not fair to let your client fall in love with something they can't afford.

Who can you call if you have questions?
If you don't have a good working relationship with your printers, you need to establish one. The biggest mistakes come from misunderstandings which are caused by lack of communication. Ideally, there should be communication even before the job has been awarded to the printer.

CREATING THE DIGITAL DOCUMENT

Once you've chosen a folding style, the next thing which needs to be done is to determine the finished size. Once we have the finished size (the finished dimensions of the piece once it's been trimmed and folded), then we can start to set up the digital document.

When designing for print, we design flat. In other words, take any folded brochure, unfold it, lay it out flat and see what it looks like. What it looks like is exactly how the document should be set up. If it's printed on both sides, flip it over and you have page two of your digital document. A common mistake would be to make separate documents for each side of the piece. Another common mistake is to design a piece which "floats" on a larger page with crop marks. The document should be set up to the exact dimensions of the finished size, with bleeds pulled past the document edge at least ⅛".

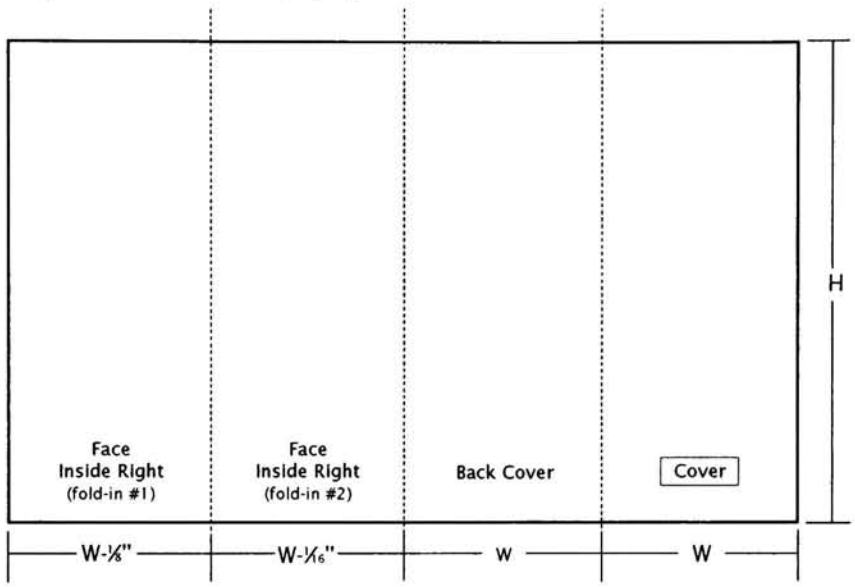
SETTING YOUR FOLDS

It's common to feel overwhelmed when it's time to calculate the document size, but there's a really easy way to do it for fast, accurate results every time. Forget the calculator or the pencil and paper, we're going to determine the size while working in the document.

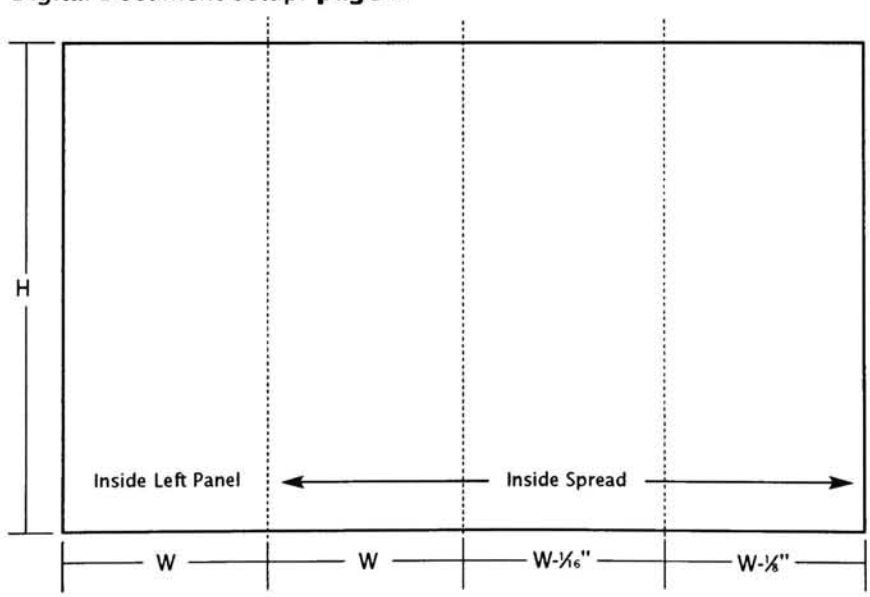
For this example we'll set up a 4-panel roll fold with a finished size of 4 x 9. Below are the diagrams from "roll fold" page x for reference.

W: finished width
H: finished height
---- fold indication

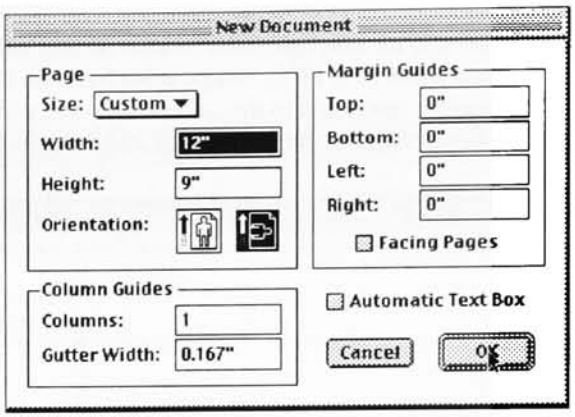
Digital Document setup: **page 1**



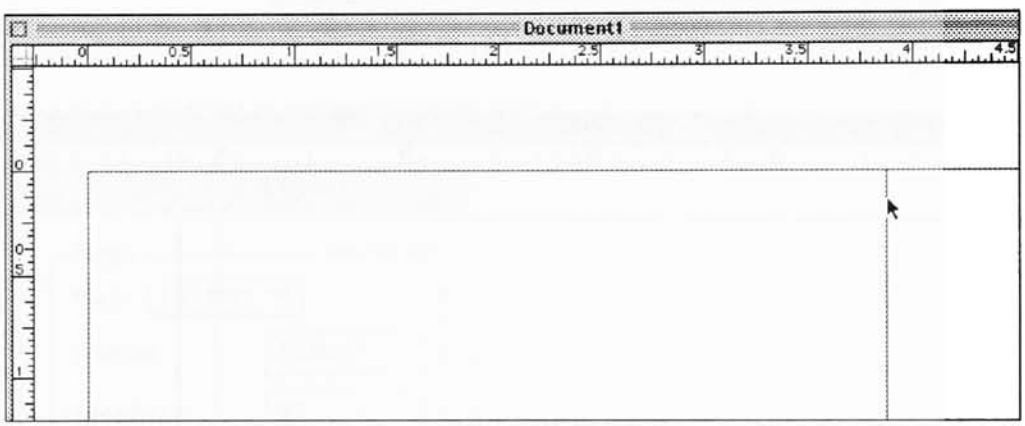
Digital Document setup: **page 2**



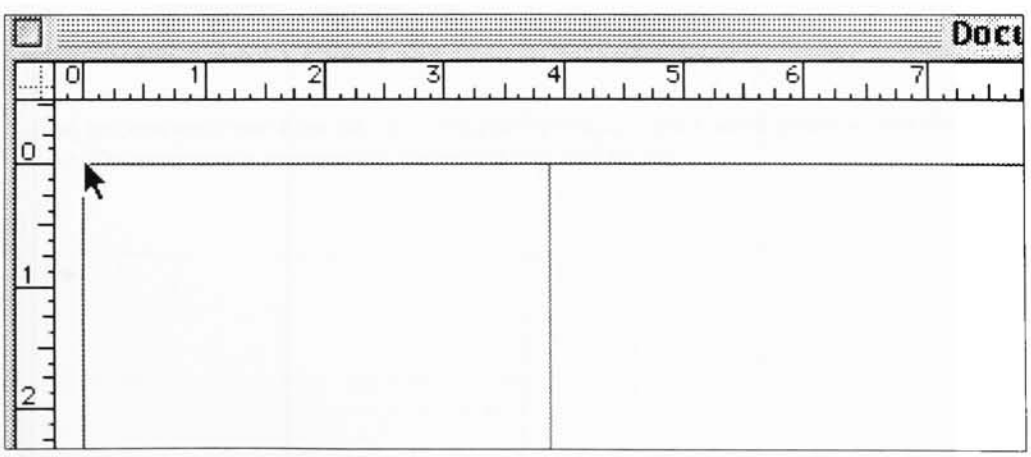
For the moment, we'll ignore the diagram and set up the document as if all panels will measure the same width. So if the finished width will be 4 x 9, set the document to 16 x 9 (4 panels times 4 inches each, with a height of 9 inches).



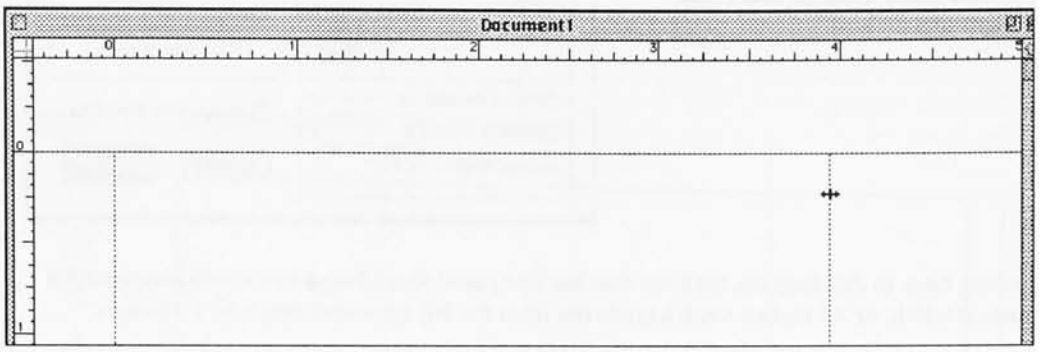
Looking back to the diagram, we'll see that the first panel should measure ¼ inch less than the finished width, or 3 ¾ inches. Grab a guide bar from the left ruler and drag it to 3 ¾ inches.



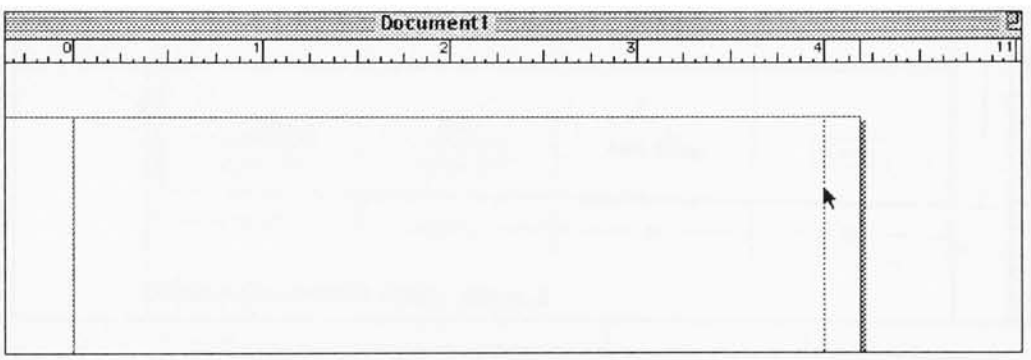
In page layout programs, there are "crosshairs" in the upper left corner of the digital document allowing you to reset the placement of the rulers to your specifications. Grab the crosshairs from the corner and drag them to the guide you just set at 3 ¾ inches. This action resets the ruler to zero, making it easier to measure the width of the next panel.



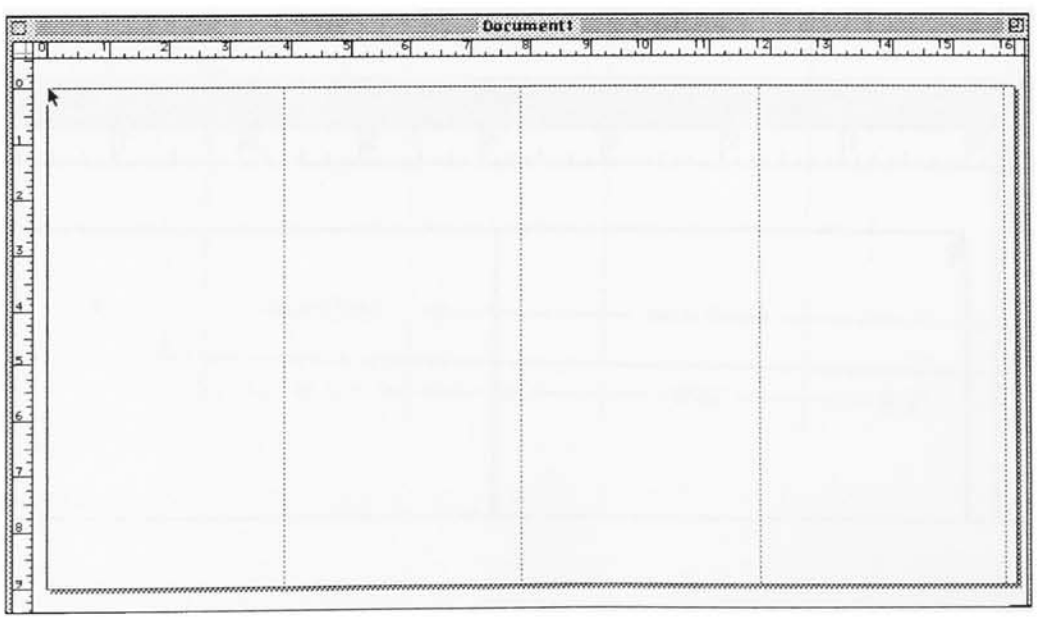
Looking back to the diagram, you'll se that the next panel should measure 1/16 inch less than the finished width, or 3 15/16. Drag a guide bar from the left ruler to 3 15/16. Now, as we did before, drag the crosshairs to the guide we just set, which gives us zero again. The remaining two panels should measure the finished width or 4 inches.



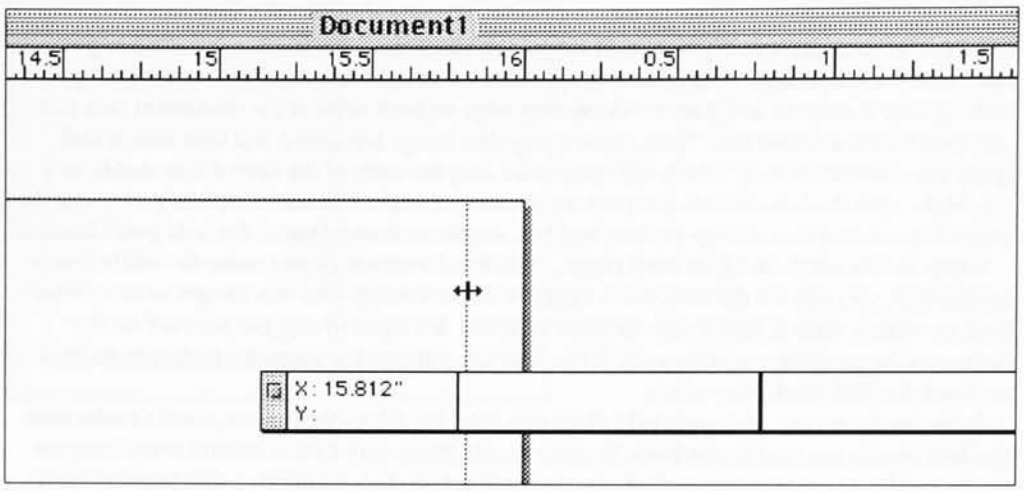
As you measure the last 4 inch panel, you'll notice that the document extends past the last guide you set.



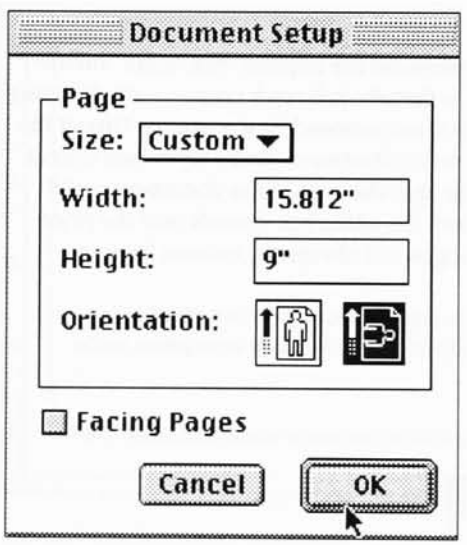
No problem. Zoom out so that you can see the entire page, set the crosshairs to the upper left corner of the document.



Now grab the last guide and read the decimal measurement (in this case, the x measurement). That is your document width!



Now, just go back and change the document size.



Good job, but we're not done yet. Your fold placements are now a set of guides on the document. The next step is to transform the guides into fold marks . . .

PLACING FOLD MARKS

There are many ways to indicate to the printer where you would like the folds to be set. I recommend one in particular:

Once you've measured your panels and set guides where the folds will be, you need to go back and place the fold marks. To do this is simple. Draw a straight line directly over the first guide, making sure it extends well past the document edge on both sides of the document (see 1a.), and turn it into a dotted line. Then, draw a very slim image box (not a text box) over it and apply the color white to it, which will then make only the ends of the dotted line visible (see 1b). Make sure the box extends just past the document edges, but not completely covering the ends of the dotted line. Group the line and box, duplicate it and drag to the next guide (see 1c).

When you've set them all for both pages, print the document (if you make the white boxes transparent, you can see the dotted line again for easier folding—but don't forget to turn boxes back to white), trim it, fold it and see what happens. If they're wrong, pat yourself on the back—you're catching a mistake early. If the folds are correct, give yourself a high-five, go back and lock the fold marks into place.

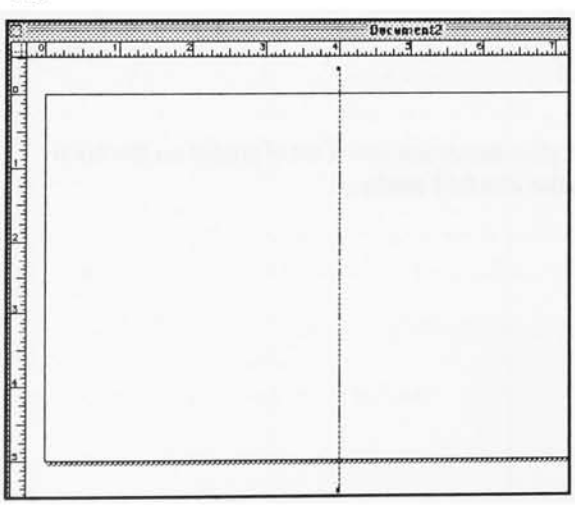
As you're designing, and especially when you send the job to the printer, always **make sure the fold marks are sent to the back**, in other words, make sure they're behind everything on the page. If they are not sent to the back, they will get printed. Remember that printers can't read our minds, so we have to be smart about what we send and how we send it. Send a set of clean laser prints with printed crop marks, bleeds and fold indications, and a folded laser mock-up and a sequenced folding dummy (see page x).

On a side note:

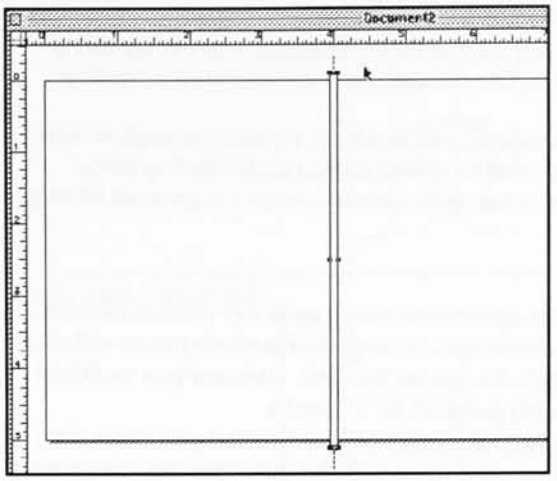
For those of you who are wondering why I don't recommend the popular "tick-mark" method of indicating folds, the reason I don't recommend it is that the tick mark crosses onto the printable area of the document, and therefore could print if not removed by the printer. One of the biggest mistakes designers make is to put elements on the document that they do not intend to be printed. So, a short, discreet black line creeping onto the edge of the document could easily be missed. With the dotted line and box method, the white box extends past the printable area, so the fold mark will never show up (as long as it is always the bottom layer on the document).

And for the others who prefer to draw their folds on tissue overlays, or on clean laser prints—you really ought to start setting them digitally. It's cleaner, more consistent and more precise than setting them by hand.

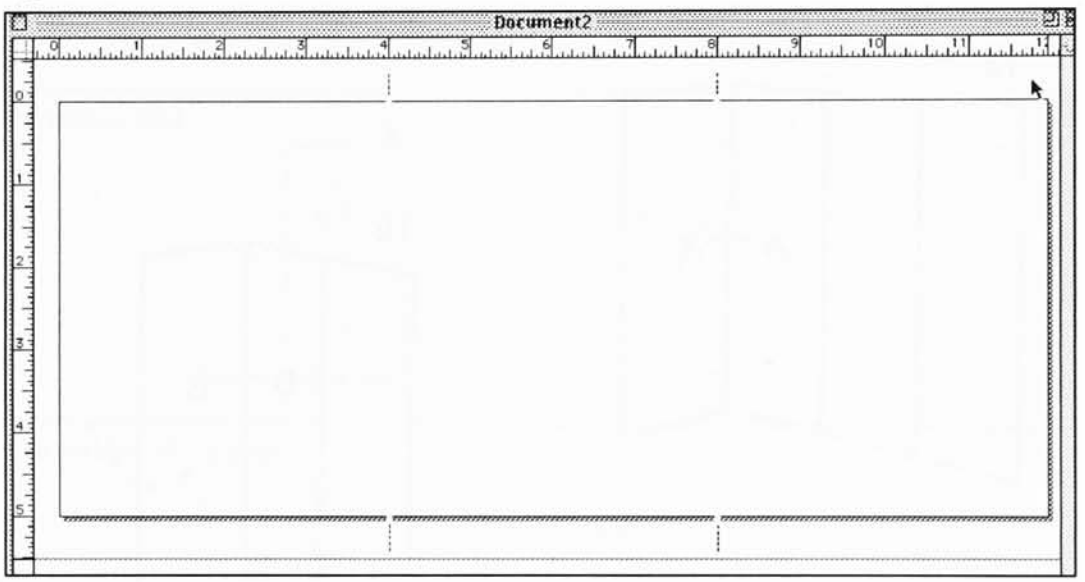
1a



1b



1c



SEQUENCED FOLDING DUMMIES

The importance of a sequenced folding dummy is often underestimated. Many think that if they send a folded laser mock-up of the job, no one should have a problem understanding how the piece is meant to fold.

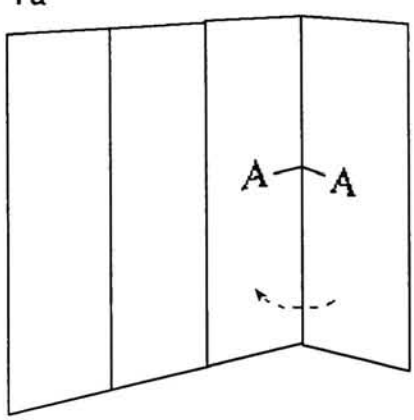
The problem is that when the printer gets your file and mock-up, it passes through several different hands for several different reasons. It will be spread out flat and folded up many times. Don't take the chance that it could be folded up incorrectly—send a sequenced folding dummy. All it takes is a moment and a pen.

To get started:

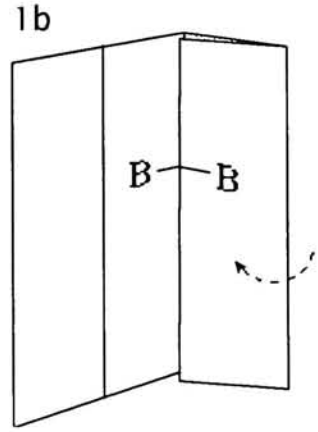
Make your folded laser mock-up, paying close attention to how it folds. Lay it out flat concentrating on the first fold. What we need to communicate to the printer is which panels will meet (or kiss), and in what order. To do this is simple. Locate the first fold, take your pen and draw a line connecting the two panels and label each panel"A", or "1"(see 1a).

Fold those two panels together and see which two panels will meet next. Again, draw the line visually connecting the two panels and then label them each "B," or "2" (see 1b). Continue to do this for the remainder of the folds (see 1c) until the piece is completely folded.

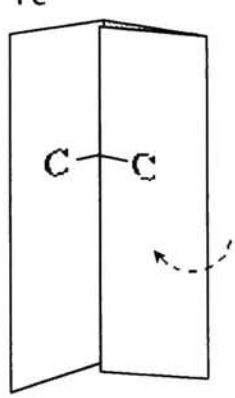
1a



1b

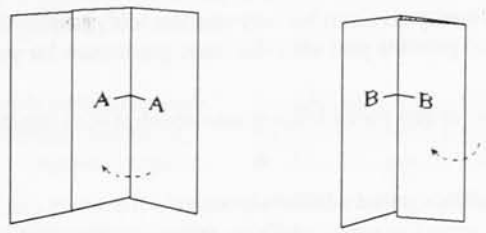


1c

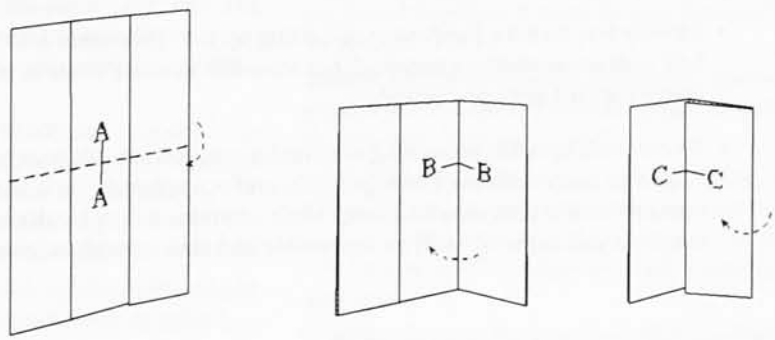


Here are different examples of sequenced folding dummies

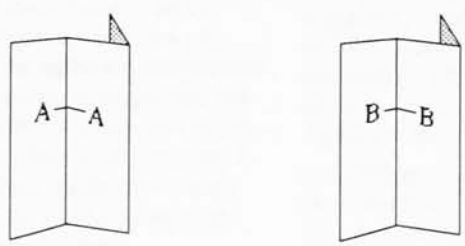
Single Gate fold



Single Gate, Broadside

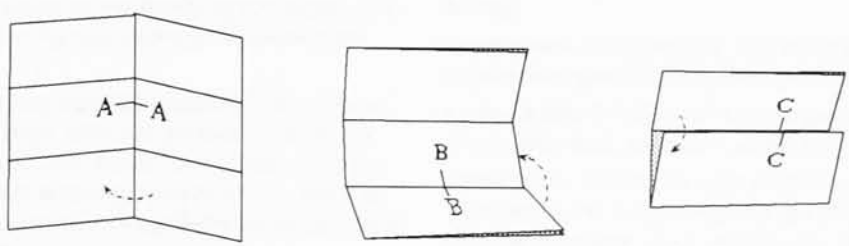


Accordion fold

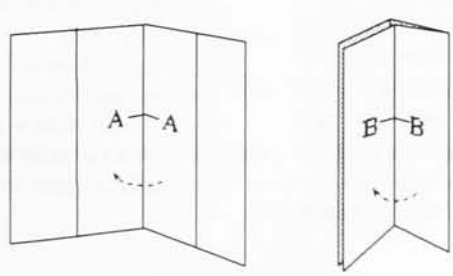


front side back side

#10 Letter fold, 12-page



Double parallel fold



MODIFYING FOLDS

Sometimes the opportunity arises to be very creative with folding solutions. In those cases, this section is meant to provide you with the basic guidelines for you to properly set up your folding ideas.

- The general rule for any panel folding into another is to shorten the fold-in panel by 1/16 inch.
- If you are folding-in a panel which is broadside (or heavy cover stock), subtract 3/32 inch from the panel width to compensate for the pushout from the underlying sheet of paper.
- An easy way to get a jump-start on setting up your document is to find a fold with some similar characteristics from this manual, study it, and set up your modified style accordingly.
- If you come up with something new, make sure you consult your printer or binder to make sure the fold is possible, and economical. You'll save time and money—and if your new fold won't work, oftentimes your binder or printer can help you come up with an acceptable and economical compromise.

GLOSSARY OF FINISHING TERMS

Most terms are from *The Glossary of Graphic Arts Terms*, by Graphic Arts Technical Foundation (GATF), and *Paper Basics*, by Mohawk Paper Mills.

accordion fold. Two or more folds parallel to each other with adjacent folds in opposite directions, resembling the bellows of an accordion. For examples, see *Accordion Folds*, page X.

acid free. Acid-free papers are manufactured in an alkaline environment, which prevents the internal chemical deterioration of the paper over time. The addition of calcium carbonate as a buffer also makes the paper resistant to the effects of an external acidic environment.

basis weight. The weight of 500 sheets (one ream) of a standard basic size. For example, the standard basic size for text papers is 25 x 38." A ream of basis 70 text sheets in that size weighs 70 lbs. The basic size for cover papers is 20 x 26."

bind. To join pages of a book together with thread, wire adhesive, crash (a coarse fabric), or other materials, or enclose them in a cover.

binder. (1) The portion of the vehicle in an ink composition that, in combination with the pigments, forms the film, or the adhesive components of an ink that hold the pigment to the printed surface. (2) In paper, an adhesive component used to cement inert filler, such as clay, to the sheet. (3) A person or machine that binds books. (4) A cover designed to hold loose pages and/or pamphlets, e.g. three-ring and post-style binders.

bindery. A facility where finishing operations suchas folding, joining signatures, and covering are performed.

bindery. A facility where finishing operations such as folding, joining signatures, and covering are performed.

bleed. A printing area that extends to the edge of the sheet or page after it is trimmed. A designer should always "pull bleeds" (manually extending imagery which is meant to bleed off the page) at least ⅛" past document edge before sending digital file to the printer.

brightness. Brightness is measured as the percentage of light in a narrow spectral range reflected from the surface of a sheet of paper. It is not necessarily related to color or whiteness. A paper with a brightness of 98 is an extremely bright sheet with almost all light being reflected back to the viewer. Bright white papers illuminate transparent printing inks, giving cleaner, crisper color and contrasty blacks.

broadside. A style of folding in which all of the pages are printed and folded, first vertically and then horizontally to produce an eight-page signature.

brochure. A pamphlet folded or bound in the form of a booklet.

bulk. The thickness of a single sheet of paper, expressed in points. A point is one thousandth of an inch.

caliper. Caliper is a measure of paper thickness expressedin thousandths of an inch. The micrometer is used to measure caliper.

coated paper. Made with a surface coating, which allows for maximum smoothness and ink holdout in the printing process. Coated papers are available in a range of finishes from dull to matte and gloss.

coating. (1) An unbroken, clear film applied to a substrate in layers to protect and seal it, or to make it glossy. (2) Applying waxes, adhesives, varnishes, or other protective or sealable chemicals to a substrate during the converting process. (3) The mineral substances (clay, blanc fixe, satin white, etc.) applied to the surface of a paper or board.

converting. Any manufacturing of finishing operation completed after printing to form the printed item into the final product. Bagmaking, coating waxing, laminating, folding, gluing, box manufacture, and diecutting are some examples. Converting units may be attached to the end of the press, or the operation may be handled by an outside facility.

cover paper. Heavyweight, coated or uncoated papers with good folding characteristics.

crease score. A fold made by pressing a groove into paper stock without cutting its fibers.

cross-grain. Folding at right angles to binding edge of a book, or at a right angle to the direction of the grain in the paper stock. Folding the stock against the grain.

cutter. (1) A machine for cutting paper stock. (2) A reciprocating or rotary blade for cutting a paper web into sheets. (3) The operator of a cutting machine.

die. (1) A pattern of sharp knives or metal tools used to stamp, cut, or emboss specific shapes, designs, and letters into a substrate. (2) A plate cut, etched, or embossed in intaglio to provide a raised impression on paper.

die, embossing. A heated or cold brass or steel tool that impresses a design in relief into a paper substrate. Unlike a cutting die, the edge is not sharp.

diecut. A printed subject cut to a specific shape with sharp steel rules on a press.

diecutting. (1) Using sharp steel rules to slice paper or board to a specific shape on a printing press or a specialized stamping press. (2) Engraving dies used in stamping or finishing.

die-line. For the diecutting process, a visual indication by the designer which communicates to the print-finisher where to place the die.

die press. (1) A manually operated press that forms steel rules. (2) A machine that cuts the shape of the die into the substrate.

digital papers. Papers designed for the specific processes of the emerging digital printing technologies.

dog-ear. An unsightly bend at the corner of a folded sheet, caused by snagging in the folding machinery or poor handling.

double score. Two parallel creases made in close proximity on a substrate.

duplex. Stiff, durable cover papers produced by laminating together two pieces of equal weight paper.

felt. Woven textile, originally wool but now usually synthetic, used to carry the web while moisture is pressed from it. While on the paper machine the felt acts as a support for the paper web.

felt side. The top side of the paper formed on the paper machine wire. It is the preferred side for printing.

finish. The surface characteristics of paper.

finished size. The *final* measurements of a printed piece after converting (folding, trimming, etc.).

finished length. The *final* length measurement of a printed piece after converting (folding, trimming, etc.).

finished width. The *final* width measurement of a printed piece after converting (folding, trimming, etc.).

finishing. All forms of completing graphic arts production, including folding, trimming, and assembling sections; binding by sewing, wire stitching, or gluing; and diecutting or gold stamping.

flat size. The exact dimensions of a finished printed piece when laid out flat.

fold. Bending and creasing a sheet of paper as required to form a printed product.

fold indication (mark). Visual guides that indicate where a printed piece will be creased.

folder. Machine that creases and scores printed sheets of paper to particular specifications during binding and finishing. The process itself is called folding.

folding dummy. A mockup which shows the print finisher exactly how your printed piece is intended to fold.

formation. Refers to the uniformity and distribution of fibers within a sheet of paper. In a well-formed sheet, solid ink coverage will go down smoothly. A poorly formed sheet will exhibit a mottled appearance when printed. formation can be checked by holding paper up to a light source.

gate fold. A folding style in which one or two panels fold into the piece from opposing sides. For examples, see *Gate Folds*, page 69.

grain. (1) The distribution, coarseness, and size of silver particles in photographic emulsions and images. (2) The roughened or irregular surface of a printing plate. (3) In papermaking, the machine direction, or the direction in which the fibers lie.

grain, with the. Binding term in which paper is folded parallel to the direction of the paper grain.

grain direction. (1) In papermaking, the alignment of fibers in the direction of web travel. (2) in printing, paper is said to be "grain-long" if the grain direction parallels the long dimension of the sheet. The paper is referred to as "grain-short" if it parallels the short dimension of the sheet. (3) In bookbinding, the grain direction of all papers used must run parallel to the book backbone.

grain direction, across. Method of printing at right angles to or opposite the paper grain direction.

grain direction, against. Folding or cutting paper at right angles to the paper grain in the direction of the sheet's fibers.

imposition. Assembling the various units of a page before printing and placing them on a form so that they will fold correctly.

imposition layout. A guide that indicates how images should be assembled on the sheet to meet press, folding, and bindery requirements.

ink holdout. a characteristic of paper related to its capacity to keep ink sitting on its surface rather than absorbing into the sheet. Better ink holdout produces sharper printed images.

in-line converting. Converting done directly from the last printing station or drying unit into the converting machinery in one continuous operation.

in-line finishing. Manufacturing operations such as numbering, addressing, sorting, folding, diecutting, and converting that are performed as part of a

continuoous operation right after the printing section on a press or on a single piece of equipment as part of the binding process.

laser paper. Very smooth, low-moisture papers manufactured in cut sizes for laser printers and office duplicating equipment.

letter fold. A relative of the gate folding family, this folding style resembles how one would fold a letter, with one panel folding up and another panel folding down over it. For examples, see *Letter Folds,* page 125.

map fold. This folding style is a hybrid of the accordion and gate folding families, combining the "zig-zag" of the accordion and the fold-in panel characteristics of the gate fold. For examples, see *Map Folds,* page 165.

off-line converting. Coating, cutting, folding, embossing, stamping, or otherwise altering newly printed sheets or rolls of material to form the final printed piece or product on a machine separate from the printing press. Printing plants may have dedicated converting equipment or they may send the work to companies that specialize in converting.

opacity. Measure of the percentage of light passage through a sheet of paper. The more opaque a paper is, the less show through there will be from printing on the sheet below. Basis weight, brightness, type of fibers, fillers coatings and formation all influence opacity. Generally, opacity and brightness are inversely related to each other: the brighter the paper, the less opaque.

page. One side of a panel.

panel. A small sheet having two pages, one on each side.

parallel fold. A single fold or sequence of folds which are parallel to the first fold. Multiple panels remain parallel and follow the same direction as merely an extension of the first two panels. For examples, see *Parallel Folds,* page 205.

perforating. Punching a row of small holes or incisions into or through a sheet of paper to permit part of it to be detached; to guide in folding; to allow air to escape from signatures; or to prevent wrinkling when folding heavy papers. A perforation may be indicated by a series of printed lines, or it may be *blind;* in other words, scored and creased without a printed indication on the cutline.

pop-ups. A sheet that is diecut, creased and folded in two directions. It is flattened for delivery and, when opened, expands to form a three-dimensional image.

ream. Five hundred sheets of paper.

recycled. Papers that contain postconsumer fiber can currently be called recycled. The Federal Executive Order calls for 20% postconsumer fiber minimum for uncoated papers; a 10% minimum for coated papers.

roll fold. When paper is folded two or more times in the same direction. For examples, see *Roll Folds,* page 317.

score. To compress or crease cardboard, pasteboard, or heavy paper along the fiber line to facilitate folding or tearing.

sheet. A large piece of unfolded paper, either printed or blank.

signature. A folded, printed sheet forming a section of a printed piece or book. The number of pages in a signature is usually a multiple of four, and more often a multiple of eight.

smoothness. A surface quality of a sheet of paper, related to the flatness of the sheet. This characteristic of smoothness affects ink receptivity.

soft fold. An additional gentle fold in-half made mechanically after a piece is saddle stitched, generally for mailing purposes.

stock. The paper or other substrate to be printed.

substrate. Any base material with a surface that can be printed or coated.

TCF. Paper that is manufactured with Totally Chlorine Free fiber.

trim. The excess area of a printed form or page in which instructions, register marks, and quality control devices are printed. The trim is cut off before binding.

uncoated. A paper stock that has received no mineral applications.

wafer seal. An adhesive seal which is meant to prevent a folded piece from opening. Wafer seals are commonly used for mailing purposes, but custom seals can be quite decorative.

waste, converting. The trimmings generated when paper is cut into various shapes and sizes.

watermarks. Designs formed in fine wire or in low relief metal castings and sewn onto the dandy roll. The resulting thick and thin areas make the watermark slightly more translucent than the rest of the sheet.

wire side. The side of a sheet of paper that was formed in contact with the wire of the paper machine during manufacturing.

CONVERSION CHART

Fraction	Decimal	Picas	Points	Millimeters
1/32	.03125	p2.25	2.25	.794
1/16	.0625	p4.5	4.5	1.588
3/32	.09375	p6.75	6.75	2.381
1/8	.125	p9	9	3.175
5/32	.15625	p11.25	11.25	3.969
3/16	.1875	1p1.5	13.5	4.762
7/32	.21875	1p3.75	15.75	5.556
1/4	.25	1p6	18	6.350
9/32	.28125	1p8.25	20.25	7.144
5/16	.3125	1p10.5	22.5	7.938
11/32	.34375	2p.75	24.75	8.731
3/8	.375	2p3	27	9.525
13/32	.40625	2p5.25	29.25	10.319
7/16	.4375	2p7.5	31.5	11.112
15/32	.46875	2p9.75	33.75	11.906
1/2	.5	3p	36	12.700
17/32	.53125	3p2.25	38.25	13.494
9/16	.5625	3p4.5	40.5	14.288
19/32	.59375	3p6.75	42.75	15.081
5/8	.625	3p9	45	15.875
21/32	.65625	3p11.25	47.25	16.669
11/16	.6875	4p1.5	49.5	17.462
23/32	.71875	4p3.75	51.75	18.256
3/4	.75	4p6	54	19.050
25/32	.78125	4p8.25	56.25	19.844
13/16	.8125	4p10.5	58.5	20.638
27/32	.84375	5p.75	60.75	21.431
7/8	.875	5p3	63	22.225
29/32	.90625	5p5.25	65.25	23.019
15/16	.9375	5p7.5	67.5	23.812
31/32	.96875	5p9.75	69.75	24.606
1.0	6p	72	25.400	25.415

REGULAR PRESS SHEET SIZES / TEXT WEIGHTS

Not all regular sizes are inventoried. Sizes in boldface type indicate the most commonly inventoried sheet sizes. Not all paper stock is available in your specified weight or sheet size. Plan ahead. Ask your printer or paper representative about available weights and sheet sizes before you settle on a certain paper. Remember that you are also limited to the maximum press sheet size that your printer's equipment can handle.

17 x 22
17½ x 22½
18 x 24
19 x 25
20 x 26
20 x 35
23 x 26½
23 x 29
23 x 35
23½ x 35
24 x 36
25 x 38
26 x 40
28 x 40
35 x 45
35 x 46
36 x 46
36 x 48
37 x 49
38 x 50
41 x 54
41 x 61
42 x 58
44 x 64
44 x 66
45 x 68
46 x 69
49 x 74
50 x 76
52 x 76

REGULAR PRESS SHEET SIZES / COVER WEIGHTS

Not all regular sizes are inventoried. Sizes in boldface type indicate the most commonly inventoried sheet sizes. Not all paper stock is available in your specified weight or sheet size. Plan ahead. Ask your printer or paper representative about available weights and sheet sizes before you settle on a certain paper. Remember that you are also limited to the maximum press sheet size that your printer's equipment can handle.

20 x 26
23 x 29
23 x 35
25 x 38
26 x 40
35 x 46

REGULAR ROLL WIDTH / WEB OFFSET

Not all regular sizes are inventoried. Sizes in boldface type indicate the most common roll widths.

17½
18
23
23½
35½

STANDARD ENVELOPE SIZES

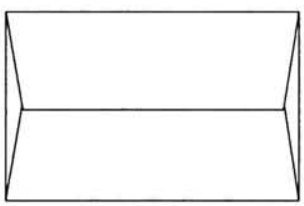
There are many styles of envelopes, each with its own purpose. Listed on the following pages are the most useful and common styles designers can specify for their jobs. Bear in mind that there are several other kinds of envelopes, for example, coin, clasp, window, air mail/first-class, expansion and seamless. Your paper representative can inform you of your other options as necessary.

Think ahead when choosing your paper and envelopes.
Just because the size you have chosen is standard, that does not mean it will be in stock in your paper of choice. Many papers and envelopes are special-order and could require up to three weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities.

If you should choose a certain style of envelope, but not in one of the standard sizes listed below, the envelope will have to be a custom order, which adds expense and takes time to be produced.

*How to use this chart: The **style** is the envelope style and number identification, the **size** is the exact dimensions of the envelope (and the size of your digital document), and the **enclosure** is the largest dimension the enclosed piece can measure to fit into the envelope. For thick contents or multiple pieces inside the envelope, slightly reduce the enclosure measurement to compensate for additional used space. **Styles featured in boldface type are the most common.***

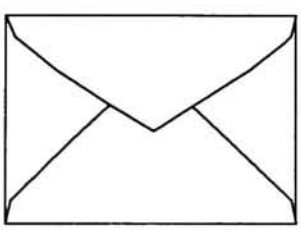
A STYLE SQUARE FLAP



This envelope style is ideal for announcements, small booklets, brochures, invitations, promo pieces and stationery, and is usually available in text and cover weights.

STYLE	SIZE	ENCLOSURE
A-2	**4⅜ x 5¾**	**4¼ x 5½**
A-6	**4¾ x 6½**	**4⅝ x 6¼**
A-7	**5¼ x 7¼**	**5⅛ x 7**
A-8	5½ x 8⅛	5⅜ x 7⅞
A-9	5¾ x 8¾	5⅝ x 8⅝
A-10	6 x 9½	5⅞ x 9¼
A-Long	3⅞ x 8⅞	3¾ x 8⅝

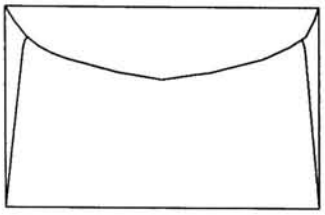
BARONIAL



This traditional envelope style is usually made of quality paper and is commonly used for greeting cards, invitations, and personal correspondence.

STYLE	SIZE	ENCLOSURE
4 Baronial	3⅝ x 5⅛	3½ x 4⅞
5 Baronial	4⅛ x 5⅝	4 x 5⅜
5½ Baronial	**4⅜ x 5¾**	**4¼ x 5½**
6 Baronial	**4¾ x 6½**	**4⅝ x 6¼**
Lee	**5¼ x 7¼**	**5⅛ x 7**

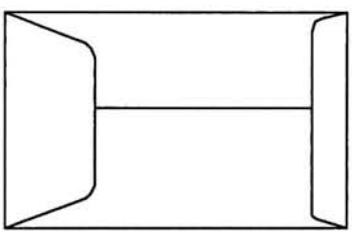
BOOKLET



This style is designed for mailing and automatic processing (inserting, sealing), lends itself to printing, and is generally used for booklets, annual reports, sales literature, etc.

STYLE	SIZE	ENCLOSURE
3 Booklet	4¾ x 6½	4½ x 6
4½ Booklet	5½ x 7½	5¼ x 7
6 Booklet	5¾ x 8⅞	5½ x 8¾
6½ Booklet	6 x 9	5¾ x 8½
6⅝ Booklet	6 x 9½	5¾ x 9
6¾ Booklet	6½ x 9½	6¼ x 9
7¼ Booklet	7 x 10	6¾ x 9½
7½ Booklet	7½ x 10½	7¼ x 10
9 Booklet	**8¾ x 11½**	**8½ x 11**
9½ Booklet	**9 x 12**	**8¾ x 11½**
10 Booklet	9½ x 12⅝	9¼ x 12⅛
13 Booklet	10 x 13	9¾ x 12½

CATALOG



This envelope style opens at the end and is generally available in manila, brown or white, but is sometimes available in text and cover weights. This style holds catalogs and other heavier materials, however, it cannot be sent through inserting equipment or laser printers.

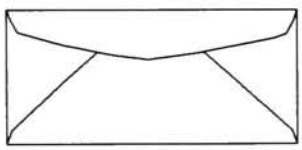
STYLE	SIZE	ENCLOSURE
7 Glove	4 x 6⅜	3¾ x 5⅞
8 Glove	3⅞ x 7½	3⅝ x 7
10 Policy	4⅛ x 9½	3⅞ x 9
11 Policy	4½ x 10⅜	4¼ x 9⅞
12 Policy	4¾ x 11	4½ x 10½
14 Policy	5 x 11½	4¾ x 11
1 Scarf	4⅝ x 6¾	4¾ x 6¼
3 Scarf	5 x 7½	4¾ x 7
4¼ Scarf	5½ x 7½	5¼ x 7
6 Scarf	5½ x 8½	5¼ x 7¾
1 Catalog	**6 x 9**	**5¾ x 8½**
1¾ Catalog	**6½ x 9½**	**6¼ x 9**
3 Catalog	7 x 10	6¾ x 9½
6 Catalog	7½ x 10½	7¼ x 10
8½ Catalog	8½ x 10½	8¼ x 10
9¾ Catalog	**8¾ x 11¼**	**8½ x 10¾**
10½ Catalog	**9 x 12**	**8¾ x 11½**
12½ Catalog	9½ x 12½	9¼ x 12
13½ Catalog	10 x 13	9¾ x 12½

(continued)

CATALOG (continued)

14½ Catalog	11½ x 14½	11¼ x 14
15 Catalog	10 x 15	9¾ x 14½
15½ Catalog	12 x 15½	11¾ x 15

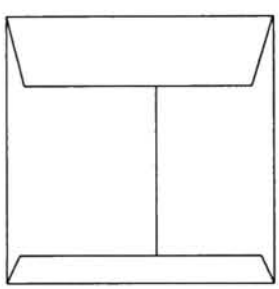
COMMERCIAL/OFFICIAL



This envelope style generally used for business and personal correspondence, and is produced in a wide variety of paper grades. This style is ideal for machine insertion, laser printing and postal applications. All sizes are standard with commercial flaps, Monarch style has a pointed flap, 7¾, 9 and 10 styles are available with square flap, 6¾, 7¾, 9 and 10 are available in side seamed styles.

STYLE	SIZE	ENCLOSURE
6¼ Commercial	3½ x 6	3¼ x 5¾
6¾ Commercial	**3⅝ x 6½**	**3½ x 6¼**
7 Official	3¾ x 6¼	3½ x 6½
7¾ Official	**3⅞ x 7½**	**3¾ x 7¼**
7¾ Monarch	**3⅞ x 7½**	**3¾ x 7¼**
9 Official	**3⅞ x 8⅞**	**3¾ x 8⅞**
10 Official	**4⅛ x 9½**	**4 x 9¼**
11 Official	4½ x 10⅜	4¼ x 10⅛
12 Official	4¾ x 11	4½ x 10¾
14 Official	5 x 11½	4¾ x 11¼

SQUARE ENVELOPES



This envelope style is great for promo pieces and booklets. Square envelopes have square flaps, and side seams allow for better printing area. Bear in mind that square mail often requires extra postage.

STYLE	SIZE	ENCLOSURE
5 Square	5 x 5	4¾ x 4¾
5½ Square	5½ x 5½	5¼ x 5¼
6 Square	6 x 6	5¾ x 5¾
6½ Square	**6½ x 6½**	**6¼ x 6¼**
7 Square	7 x 7	6¾ x 6¾
7½ Square	7½ x 7½	7¼ x 7¼
8 Square	8 x 8	7¾ x 7¾
8½ Square	**8½ x 8½**	**8¼ x 8¼**
9 Square	9 x 9	8¾ x 8¾
9½ Square	9½ x 9½	9¼ x 9¼
10 Square	10 x 10	9¾ x 9¾
13½ Square	13½ x 13½	13¼ x 13¼

FILE OUTPUT CHECKLIST

Make a copy of this, check-off items as you go along and include it when you send the job. Also, ask your printer for their specifications for job submission. You may need to add to this list.

- ❐ Make sure the printer has compatible form of storage (Jaz, Zip, Syquest, etc.).
- ❐ Make sure bleeds extend at least ⅛ inch past the edge of document, check fold placement, indicate folds (see page 16).
- ❐ Eliminate all blank pages, extras, pasteboard items. Delete all items on the document that are not meant to print.
- ❐ Make sure all images and colors are the type you need them to be (CMYK, Pantone®, etc.)
- ❐ Delete all unused colors from the palette, ungroup and unlock elements.
- ❐ Run the spell-checker!
- ❐ Check photos for proper placement/cropping and make sure they fill the picture box (you don't want a thin white line along the edge of a photo).
- ❐ Run out clean laser proofs—latest version (print colors as grays). Print with crop marks and fold indications, note if size is not 100% on print.
- ❐ Make a clean printer's paging dummy (b/w laser or color mock-up).
- ❐ Make a sequenced folding dummy (page 22) in the correct size and paper if possible.
- ❐ Make a composite mark-up—print a clean laser copy, noting special directions on the print: image scan percentages, traps, pick-ups, photo comments, etc. Print with crop marks and fold indications.
- ❐ Check font usage for unnecessary fonts.
- ❐ Delete all unused style sheets from the palette. When pre-flighted, your digital file will ask the printer for any fonts—used or unused—in your style sheets.
- ❐ It is advised that you provide only screen fonts (for identification) and not font suitcases to the printer. Supplying legal copies of digital type is the cost of doing business for a printer. Ethically and professionally, it is your decision as to whether you send the font suitacese or not. Just understand that it is against copyright laws for the printer to use that type (and for you to supply it) ***if they do not already own a legal version of that specific typeface.*** Now, if the printer does already own the typeface, you may send the suitcase for ease of production.
- ❐ Name all files appropriately, organize logically, name and label disk appropriately, print the window of file contents.
- ❐ Collect for output, print out the print report.
- ❐ Update printing specifications (see page 39), note quantities and delivery instructions.
- ❐ Lastly, grab all photos and slides, original artwork, etc. Place neatly in sleeves or envelopes and label each appropriately (ex: "lab shot," 54%).

SAMPLE SPECIFICATION SHEET

This is an example of the information your printer needs to properly quote a price and time schedule for a job. A complete spec sheet should also be sent with the job when it is turned over to the printer.

DATE: 9/15/99 DELIVERY DATE: 12/1/99 SUBMIT QUOTE BY: 9/20/99

JOB TITLE/DESCRIPTION: Fund-raising brochure

QUANTITY: 12,000 vs. 15,000

SIZE: Flat: 15.812 x 9"

Finished: 4 x 9"

BINDING/FINISHING: Folding style: 4-panel roll fold

Additional processes: score, perforate

STOCK: Fox River Sundance 80lb. cover, "warm white" vs. Mohawk Superfine 100lb. text, "eggshell"

INK: 4/4 vs. 5/5 (4-color process plus spot PMS metallic)

ART/PHOTOS: need price per 4-color seperation, 2 halftones, 3 pick-ups, 1 illustration

SPECIAL INSTRUCTIONS:

❑ Bleeds ❑ Screen tints ❑ Reverses ❑ Crucial Registration

❑ Heavy coverage ❑ Traps ❑ Crossovers

FONT USAGE: ITC Tiepolo, Adobe Bickham Script

PROOFS:

❑ Black and white or color laser proofs

❑ Drawdowns of PMS colors on specified stock

❑ Matchprints of color subjects, contact prints or digital proofs of halftones.

❑ Pre-film color proof

❑ Blueline, backed-up and trimmed to size, folded or bound to specifications

❑ On-site press approval

DELIVERY INSTRUCTIONS: 35 samples to Jane Doe ***prior*** to delivery, balance to 55 East Main Street, Anytown, USA

STARTING ON THE RIGHT FOOT

General guidelines for designers and printers

ON PRE-FLIGHTING . . .

Don't leave anything on your digital document which is not meant to print, for example, text boxes over photos which say "for position only," tick-marks (use fold indication on page x), notes to the printer, etc. They will pre-flight the job, but they can't be expected to know what you wanted them to delete.

Remember that as your panels get narrower to compensate for folding, your margins get narrower as well. Adjust them accordingly.

Make sure all text is safely within the bounds of your digital document. If the trim is a bit too generous and your type too close to the edge, it may get trimmed off or it might just be uncomfortably close to the edge.

Don't design something that "floats" on a larger page. Make sure your document dimensions measure the exact (flat) dimensions of the finished piece.

Don't create seperate documents for a 2-sided piece. Always submit one document per printed piece. Just add the second page for a 2-sided piece, and keep 1-sided pieces to one page.

Don't specify a hairline rule. A "hairline" rule setting tells the output device to print the thinnest line it can, so for a 600 dpi laser printer it would print ¹⁄₆₀₀ inch. When your document then goes to your printer's 2,400 dpi imagesetter or platesetter, the hairline translates to the thinnest line *that* device can handle, or ¹⁄₂₄₀₀ inch.

Always print updated lasers. Old lasers only confuse and complicate matters.

Plan backwards, work forward. A little planning ahead of time saves frustration in the end. Setting folds and determining document size should always be the ***first*** thing you do, not the last thing you do before you send it to the printer.

Always pull your bleeds at least ⅛ inch past the document edge. It's just plain inconsiderate and risky not to do so. Bleeds allow for the subtle variations in guillotine trimming, shifting, etc. Also make sure that photos bleed enough off the edge of the document. Printers will not adjust your crop, so it's your responsibility to make sure there is enough image extending past the document edge.

Make sure to follow the file output checklist (page x) before sending the job to your printer. Check off every item, send it with the job. Also, ask your printer for a specification sheet for proper file submission. Most printers should have one. They may have a few things to add to your checklist.

Exercise a logical file-naming system. Don't make your printer guess which version of the file to use, or what you named it. Don't throw everything together—fonts, graphics, FPOs, hi-res scans, etc. When you send your job, send a disk with only that specific job on it, and all of its necessary elements in organized folders. FPOs with FPOs, graphics in the graphics folder, fonts in a folder named "fonts," etc. When you get it all organized, print the window of file contents so your printer can quickly reference what is on that disk. Fold the printout and put it in the disk jacket.

ON COMMUNICATION .

Talk to your printer in the beginning stages of your project, and be fair about turnaround time. Complex jobs take extra time, and all jobs must be worked into a production schedule. So, having a simple job does not automatically guarantee a lightning-fast turnaround time, and jobs which seem simple are not always so.

If you don't understand the process at a printing or finishing facility, ask your print salesperson to arrange for a tour.

Don't underestimate the printer's willingness to share their knowledge. If you don't understand something, ask. Good print professionals will happily explain almost anything to you if you just ask them about it. If they don't, my suggestion would be to give someone else your business the next time around. You need to work with people who are willing to work with you toward a better result.

Leave nothing unresolved. Phrases you don't want to be saying when the job is on press: "But I meant . . .," "But I thought you would remember from the last job that I don't like . . .," "I thought I told somebody about that . . .," and the list goes on and on. Be clear about what you want each and every time you print, whether it's your first time with a certain printer or your one-hundredth time.

If something does go wrong, be openminded and fair. Reprinting the job is not always the only solution. There are usually other options. Give your printer a chance to resolve the problem.

ON MONETARY ISSUES . . .

If the cost estimate for your job is too high, ask your printer for suggestions of how to reduce the cost: comparable but cheaper paper, standard envelopes instead of custom, changing finished size to fit more pieces on a sheet, etc.

Printer's charges aren't to "get you." If they charge you, it is because they had to do something—use materials, use system time, interrupt production schedules.

Print a proof, look at it closely and don't expect your printer to know to fix it. If you want them to fix it—or to fix careless mistakes—be prepared to pay for that service.

Expect to pay more for late submission/fast turnaround projects. When *your* emergencies become *your printer's* emergencies, expect to pay for the disruption of their production schedule and possible overtime of their workers to accomplish the job. If any part of the job must be outsourced, you will have disrupted two production schedules which adds tremendous cost to your job. Plan ahead to avoid this costly predicament.

Ask your printer when they bid for the job if any part of the job will be outsourced. Outsourcing generally costs more money and can take more time than doing the job in-house. Knowing this may help you decide who to award the job to.

If you have a history with a printer and have consistent, costly problems, ask to set up an appointment with someone from the department where the charges are coming from (prepress, pressroom, etc.). Listen to their suggestions and *implement* them.

ON COLOR . .

When submitting pieces for scanning, give clear instructions as to what should be color-corrected, or to be matched, repaired, silhouetted, etc.

Always view proofs under the standard conditions of a light booth (5,000° kelvin, neutral surround). This is where the color is evaluated at all points—in the pressroom and at the press proof. Light affects how we see color, so we all have to be looking at it in the same lighting conditions.

Be consistent with how you scan your FPOs. Scan all your prints at the same percentage every time (ex: 100%), and scan your slides/transparencies at the same percentage every time (ex: 400%). You will find it a lot easier to size your images in the end if you have been consistent.

If you don't understand scanning and color correction *really well,* and if you don't have the proper high-quality equipment, leave it to the professionals. Odds are, they will have to re-scan your images or fix your scans, which could possibly cost more than if you had just let them scan your images in the first place. If you insist on using your own unaltered scans, don't be surprised if the results are disappointing.

If you work on a scan—a photo collage, for example, send both the working document (with all the layers intact, etc.) and the final scan with flattened layers. If something goes wrong, they can get into the original document, fix it, and save it in the desired format.

EXPECTATIONS . . . EXPECTATIONS

To the printers/finishers:

If a designer is doing something wrong which will prevent their job from being successful—ex: they want to emboss a design but you know that their paper choice doesn't lend itself to embossing, or that their design isn't cost-effective at their chosen finished size, etc.—call them with points of concern, questions or suggestions. Help prevent the accidents that designers can't possibly predict.

If something goes wrong with a job, understand a designer's disappointment and help them find the best way around it.

On that same note—if something does go wrong on the printing end, don't lie about it. While some designers may not ever figure out the lie, designers are realizing that they need to know more about all aspects of design, pre-flight and printing. Lie to the wrong designer and you may lose a client—permanently. Everyone knows that mistakes can happen. With all the variables that can go wrong, it's amazing that printing even happens in the first place. Tell the truth, and most things can be worked around or negotiated.

Give new clients your specification sheet for file submission. Why not nip potential mistakes in the bud? You can't expect them to do what you want them to if they don't know what it is you want.

Take designers' questions seriously, and don't talk over their heads. It has been a difficult transition for many designers in the field, and their responsibilities are growing. They need to be able to feel that they can come to you with questions, and that you will give them the answers they can understand.

To the designers/creatives:

Understand the limits of your medium. In other words, don't design something that can't be produced in a reasonably economical manner. For example, for a press run of 100,000 pieces, don't design something that must be hand-folded unless you have some serious money to burn.

Know that extras are "extra." Talk cost with your printer before you let your client fall in love with the die-cut/hand-folded/foil-stamped version of your design. Nobody likes to be told their budget won't support the design they fell in love with.

Don't cop an attitude—go in open-minded and ready to cooperate.

Be honest with your printer and expect them to be honest with you.

Stick to your document "send" date and expect your printer to stick to their delivery date. Let them know of the importance of your deadline.

If your printer is unwilling to answer your questions or talks over your head, ask them to change their ways. If they don't, take your business elsewhere next time. There are many others who will gladly help you understand this ever-changing industry.

Stop being careless. Pay attention to what is your printer expects of you when you are to send them a job, do those things, and ask how to do something if you don't understand it. Pull your bleeds, organize your electronic files, make things easier for everyone. In the end when you're getting your file ready to send to the printer, if you think you're doing too much and it's taking too long to prepare your files, you're working backwards. Lots of the items on your file output checklist (page x) can (and should) be accomplished as you go along—set your folds, pull bleeds, organize files, check font usage, edit the color list, etc. Don't save it all for the end.

ACCORDION FOLDS

1

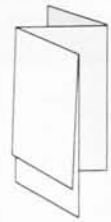
Basic Accordion, page 57

2

Broadside Accordion, page 61

3

Accordion with Short Fold (inside), page 65


4

Accordion with Short Fold (outside), page 69

5

Top-folding Accordion, page 73

6

Accordion with letter fold, page 77

7

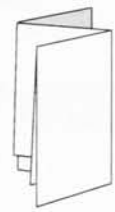
Reverse Accordion, page 81

8

Broadside Reverse Accordion, page 85

9

Reverse Accordion with Short Fold (inside), page 89


10

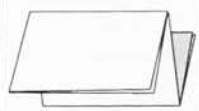
Reverse Accordion with Short Fold (outside), page 93

11

Top-folding Reverse Accordion, page 97

12

Vertical Accordion, page 101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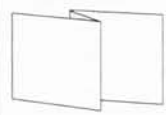
12-page Vertical Accordion, page 105


14

Half Accordion page 109

15

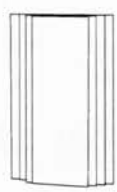
Closed Accordion, page 113

16

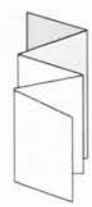
Closed Reverse Accordion, page 117

17

Stepped Accordion, page 121


18

Stepped Accordion/ Centered, page 125

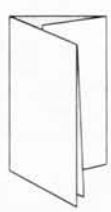

19

Angled Accordion, page 129

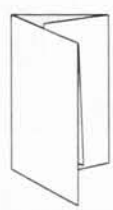
GATE FOLDS

20

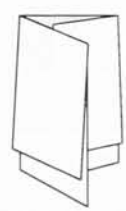
Single Gate, page 133


21

Broadside Single Gate, page 137


22

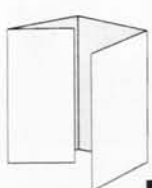
Single Gate with Short Fold (inside), page 141


23

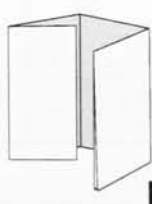
Single Gate with Short Fold (outside), page 145

24

Top-folding Single Gate, page 149


25

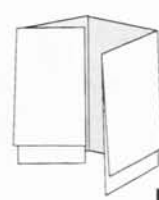
Double Gate, page 153


26

Broadside Double Gate, page 157

27

Double Gate with Short Fold (inside), page 161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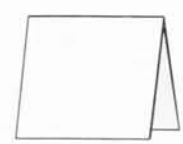
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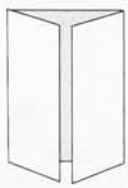
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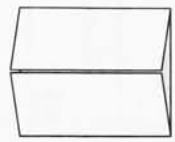
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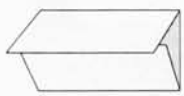
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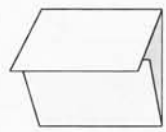
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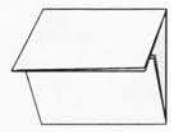
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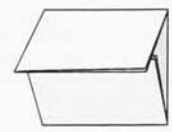
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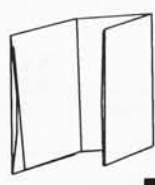
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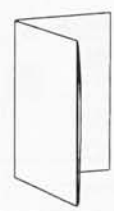
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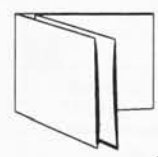
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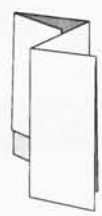
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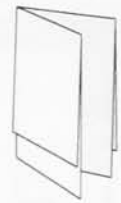
54	55	56	 57	58
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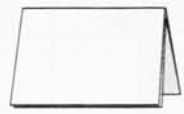
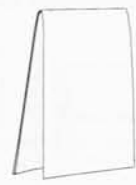
64	65	 66	 67	68
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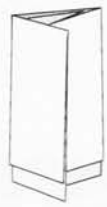
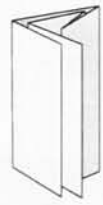
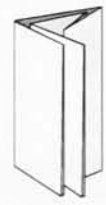
69	70	 71	 72	 73
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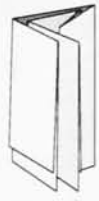
74	 75	76	77	78
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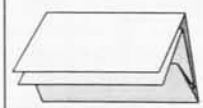
79	 80	81		
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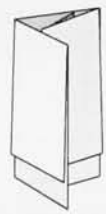
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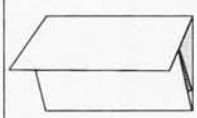
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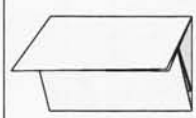
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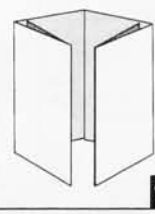
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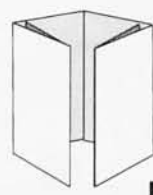
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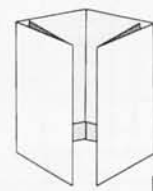
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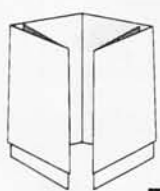
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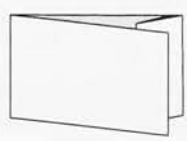
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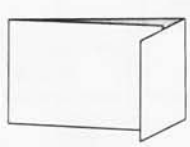
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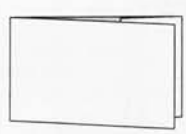
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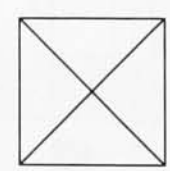
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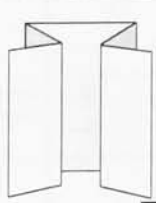
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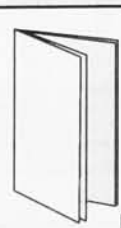
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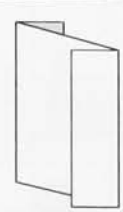
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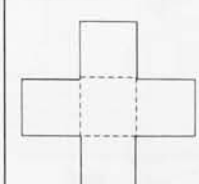
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10-page Parallel Fold (#68), *Parallel Folds*, pg. 325

12-page #10 Letter Fold (#35), *Letter Folds*, pg. 193

12-page Letter Fold (#37), *Letter folds*, pg. 201

12-page Vertical Accordion (#13), *Accordion Folds*, pg. 105

16-page Roll Down (#93), *Roll Folds*, pg 425

18-page Letter Fold (#38), *Letter Folds*, pg 205

20-page Parallel (#69), *Parallel Folds*, pg. 329

20-page Parallel with Short Fold (inside) (#70), *Parallel Folds*, pg. 333

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Accordion, Reverse (#7), *Accordion Folds*, pg. 81

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Accordion, Vertical /12-page (#13), *Accordion Folds*, pg. 105Accordion with Letter Fold (#6), *Accordion Folds*, pg. 77

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Angled Accordion (#19), *Accordion Folds*, pg. 129

"back and forth" see Basic Accordion (#1), *Accordion Folds*, pg. 57

"Barn Doors" see Semi-gate (#31)*Gate Folds*, pg. 65

"barrel fold" see Roll Fold (#82), *Roll Folds*, pg. 381

Broadside Accordion (#2), *Accordion Folds*, pg. 61

Broadside Double Gate (#26), *Gate Folds*, pg. 157

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Broadside Double Roll (#95), *Roll Folds*, pg. 433

Broadside Map Fold (#45), *Map Folds*, pg. 233

Broadside Reverse Accordion (#8), *Accordion Folds*, pg. 85

Broadside Reverse Map (#50), *Map Folds*, pg. 253

Broadside Reverse Roll Fold (#88), *Roll Folds*, pg. 405

Broadside Roll Fold (#83), *Roll Folds*, pg. 385

Broadside Single Gate (#21), *Gate Folds*, pg. 137

Broadside Single Parallel (#55), *Parallel Folds*, pg. 273

Broadside Triple Parallel (#73), *Parallel Folds*, pg. 345

Broadside Triple Parallel, Accordion Style (#77), *Parallel Folds*, pg. 361

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Closed Concertina (#105), *Folds Without Families*, pg. 473

"closed gate" see Double Gate (#25), *Gate Folds*, pg. 153

Closed Reverse Accordion (#16), *Accordion Folds*, pg. 117

Concertina (#104), *Folds Without Families*, pg. 469

Crazy Fold (#106), *Folds Without Families*, pg. 477

Double Cover (#107), *Folds Without Families*, pg. 481

Double Gate (#25), *Gate Folds*, pg. 153

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Double Gate, Top-folding (#30), *Gate Folds*, pg. 173

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Double Parallel with Short Fold (inside) (#64), *Parallel Folds*, pg. 309

Double Parallel with Short Fold (outside) (#65), *Parallel Folds*, pg. 313

Double Roll (#94), *Roll Folds*, pg. 429

Double Roll, Broadside (#95), *Roll Folds*, pg. 433

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Letter Fold, 18-page (#38), *Letter Folds*, pg 205

Letter Fold with Accordion (#39), *Letter Folds*, pg. 209

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Parallel, 20-page (#69), *Parallel Folds*, pg. 329

Parallel, 20-page with Short Fold (inside) (#70), *Parallel Folds*, pg. 333

Parallel, 20-page with Short Fold (outside) (#71), *Parallel Folds*, pg. 337

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Reverse Roll, Top-folding (#91), *Roll Folds*, pg. 417

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Reverse Roll with Short Fold (outside) (#90), *Roll Folds*, pg. 413

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Roll Down, 16-page (#93), *Roll Folds*, pg 425

Roll Fold (#82), *Roll Folds*, pg. 381

Roll Fold, Broadside (#83), *Roll Folds*, pg. 385

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"standard #10 fold" see #10 Letter Fold (#34), *Letter Folds*, pg. 189

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"tabloid fold" see Broadside Single Parallel (#55), *Parallel Folds*, pg. 273

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Top-folding Double Gate (#30), *Gate Folds*, pg. 173

Top-folding Double Parallel (#67), *Gate Folds*, pg. 321

Top-folding Map (#48), *Map Folds*, pg. 245

Top-folding Reverse Accordion (#11), *Accordion Folds*, pg. 97

Top-folding Reverse Map (#53), *Map Folds*, pg. 265

Top-folding Reverse Roll (#91), *Roll Folds*, pg. 417

Top-folding Roll (#86), *Roll Folds*, pg. 397

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Triple Parallel, Accordion Style with Short Fold (inside) (#78), *Parallel Folds*, pg. 365

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Triple Parallel, Vertical (#78), *Parallel Folds*, pg. 309

Triple Parallel with Short Fold (inside) (#74), *Parallel Folds*, pg. 349

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"two parallel folds" see Double Parallel (#62), *Parallel Folds*, pg. 301

Vertical Accordion (#12), *Accordion Folds*, pg. 101

Vertical Accordion, 12-page (#13), *Accordion Folds*, pg. 105

Vertical Double Parallel (#64), *Parallel Folds*, pg. 253

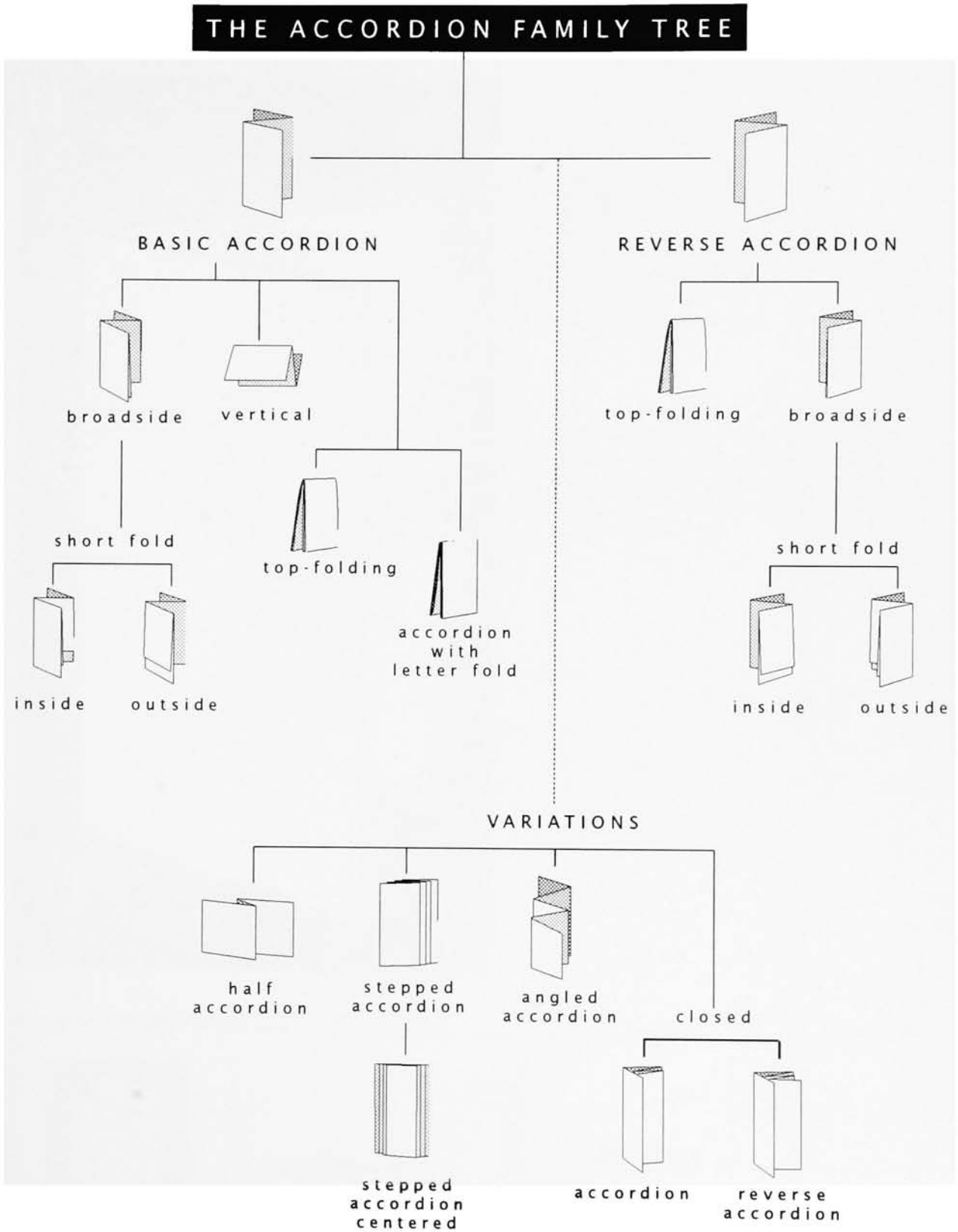
Vertical Triple Parallel (#78), *Parallel Folds*, pg. 309

Vertical Triple Parallel, Accordion Style (#79), *Parallel Folds*, pg. 313

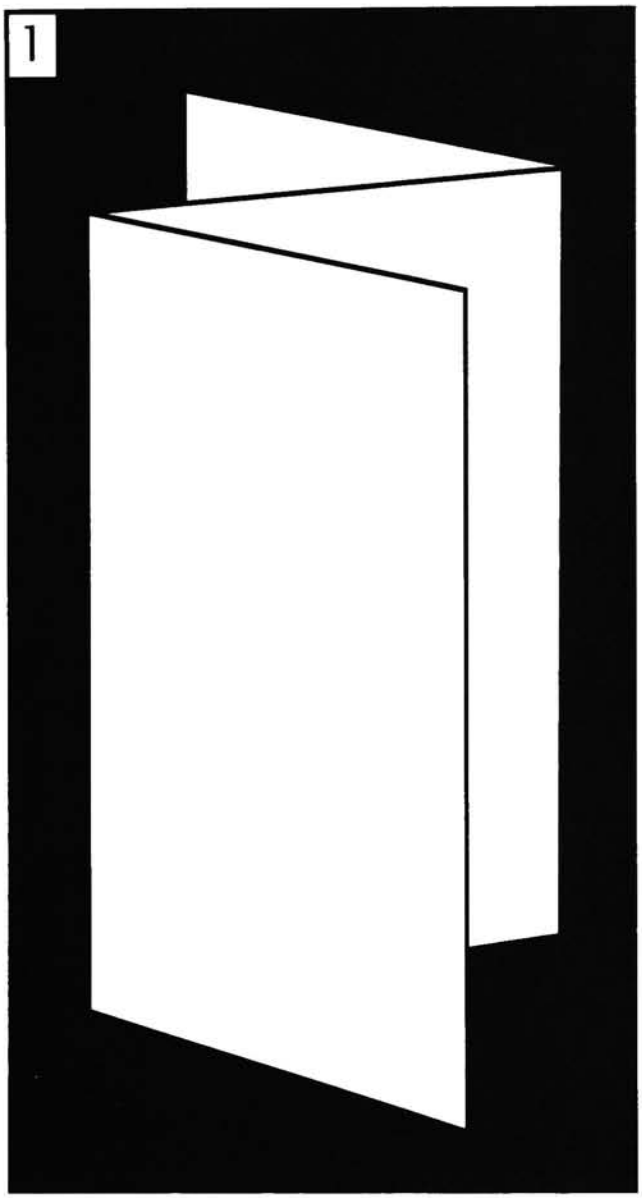
"z-fold" see Basic Accordion (#1), *Accordion Folds*, pg. 57

"zig-zag" see Basic Accordion (#1), *Accordion Folds*, pg. 57

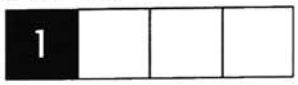
THE ACCORDION FAMILY TREE



BASIC ACCORDION



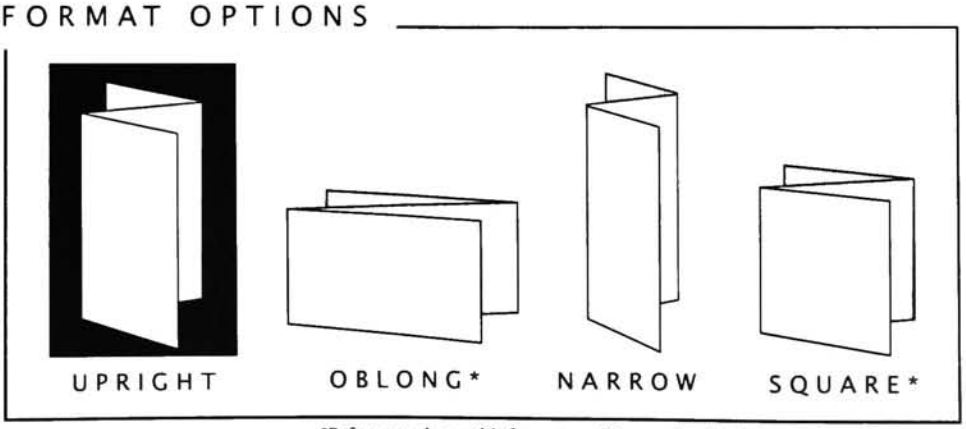
LEVEL



A level 1 fold is standard and basic, easy to set up on the folding machine and the machine can run at highest speeds.

The accordion fold is a common folding style consisting of three panels or more which "zig-zag" back and forth. There can be as many panels as you wish, but bear in mind the dimensions of the press sheet your printer is using.

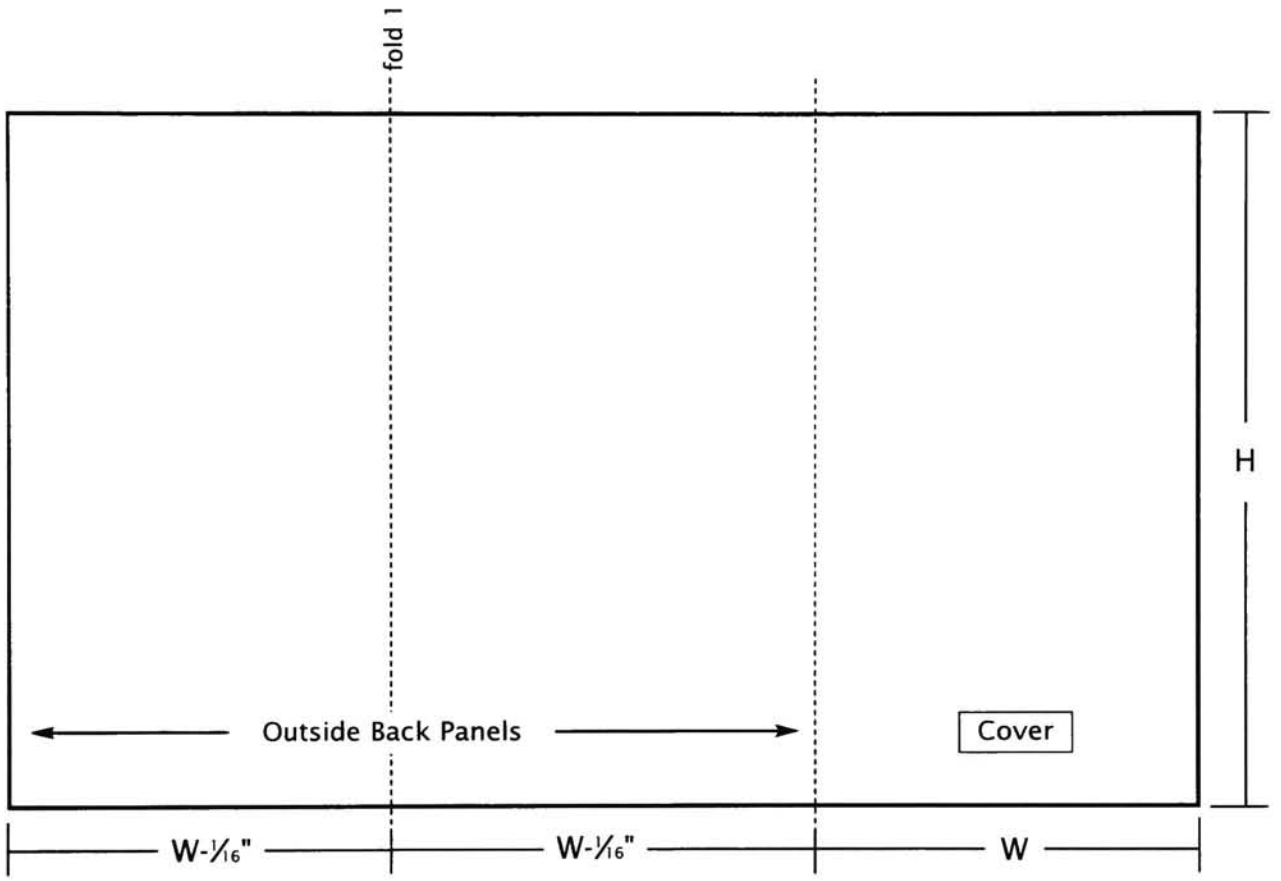
FORMAT OPTIONS



**Before you choose this format, see "Format Options" on page 5.*

Digital Document setup: **Page 1** (side 1)

W: finished width
H: finished height
--- fold indication

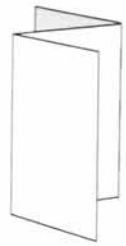


GETTING STARTED

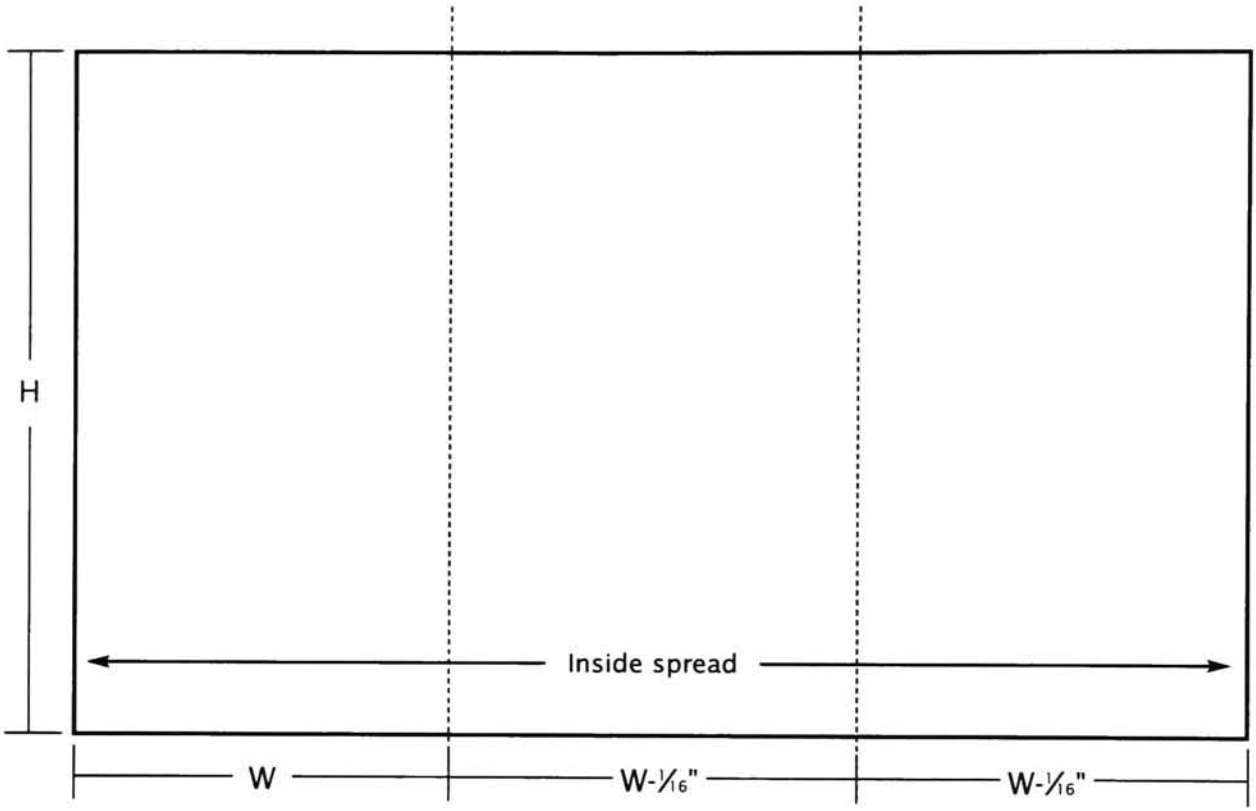
Here's an example: If your finished size is 4 x 6, then your panels for page 1 of your digital document would be, from left, 3 15/16 inches, 3 15/16 inches and 4 inches. Then for page two everything reverses, so from left your panels would measure 4 inches, 3 15/16 inches and 3 15/16 inches, with a height of 6 inches.

Remember: Document size and flat size must be the same, so in this case the document size would be 11 7/8 (11.875) inches wide by 6 inches high.

To modify this fold by adding more panels, just continue the W-1/16" measurement in the appropriate direction.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- Consult your printer about the size of the press sheet. Also ask for a diagram of how your piece will be run on the press sheet. Sometimes there is a lot of waste on the sheet, and you may be able to add another panel or two without adding to the cost of the job.
- If you are designing a long piece, make sure to have a folding sample made up from your specified paper. If the paper is too lightweight, it could turn into a sagging flimsy piece.
- For an exceptionally long piece, additional panels may be tipped-on (at an extra expense). Don't forget to consider the arm-span of your audience!
- If you are designing a self-mailing piece, this folding style could require up to 4 wafer-seals to make it mail-ready. An envelope would be more attractive and cost-effective.
- If your paper choice is any heavier than 80# text, you will want to consider scoring the piece.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document width ahead of time. Create your document as if all panels will be the same (ex: for a 3-panel accordion fold with a finished size of 4 x 6, set the document size to 12 x 6). Then set crosshairs to upper left corner of document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, $3^{15}/_{16}$ inches). Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement ($3^{15}/_{16}$). After setting the second fold, bring the crosshairs over one last time, drag a guide for your last panel width (4). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Just change your document size by entering that decimal measurement (11.875). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

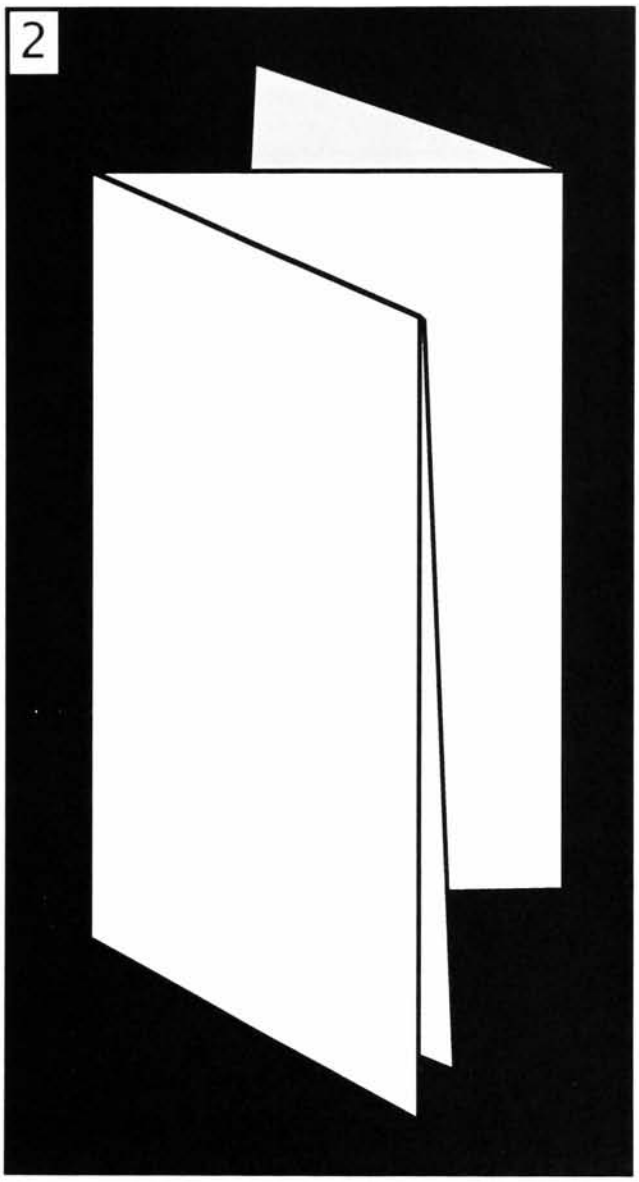
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

BROADSIDE ACCORDION

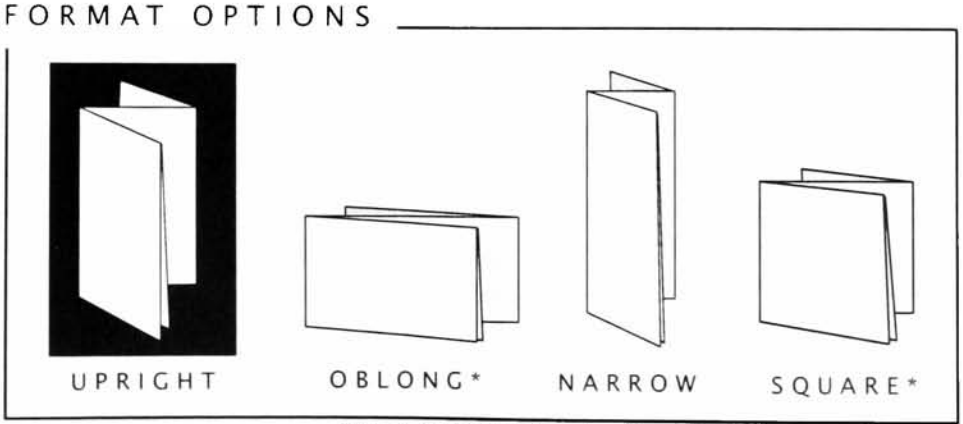


LEVEL

A level 2 fold has a moderate makeready, possible slower speed on the folding machine, and could have some special considerations.

The broadside accordion fold consists of the same "zig-zag" panel style, but the difference is that this fold has twice the area because it folds in half on itself before the accordion-style folding is done. As in the standard accordion, there can be as many panels as you wish, but bear in mind the dimensions of the press sheet your printer is using, and the bulk of the paper.

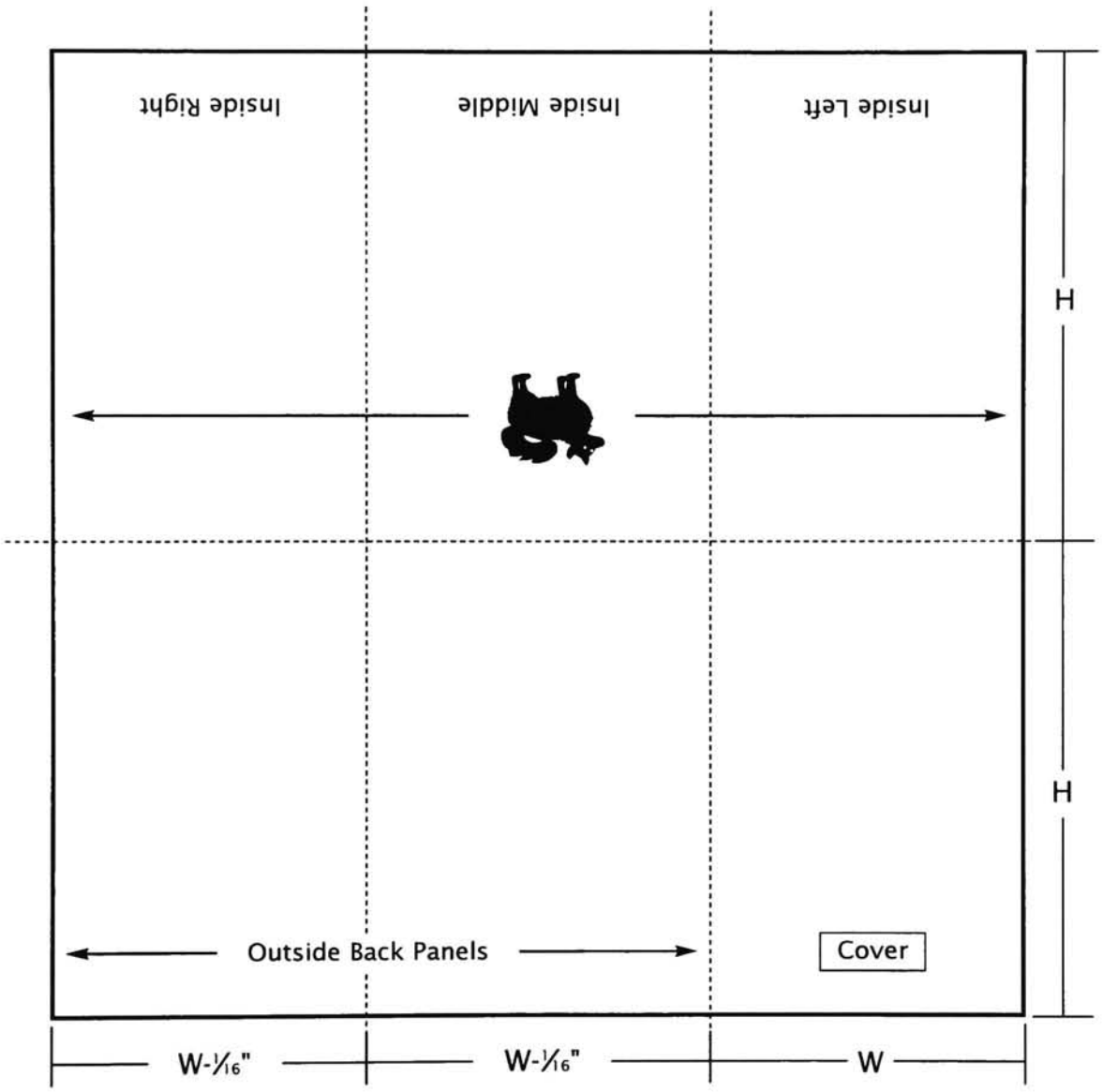
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

W: finished width
H: finished height
--- fold indication
upside-down

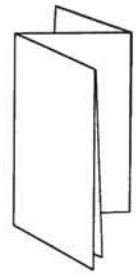


GETTING STARTED

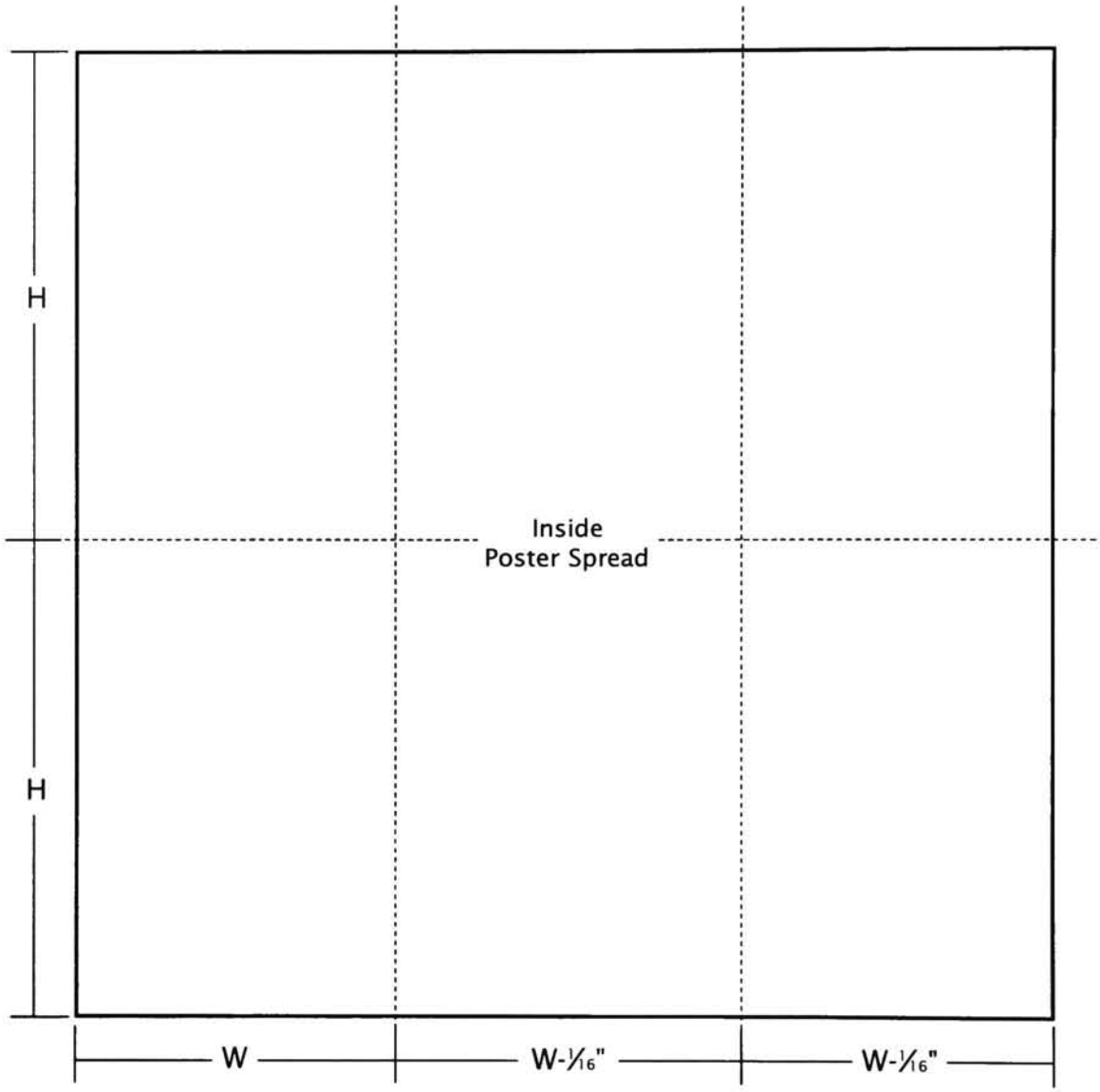
Here's an example: If your finished size is 4 x 6, then your panels for page 1 of your digital document would be, from left, 3 15/16 inches, 3 15/16 inches and 4 inches. Then for page two everything reverses, so from left your panels would measure 4 inches, 3 15/16 inches and 3 15/16 inches, with a document height of 12 inches (6 inches plus 6 inches).

Remember: Document size and flat size must be the same, so in this case the document size would be 11 7/8 (11.875) inches wide by 12 inches high.

To modify this fold by adding more panels, just continue the W-1/16 inch measurement in the appropriate direction.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- Consult your printer about the size of the press sheet. Also ask for a diagram of how your piece will be run on the press sheet. Sometimes there is a lot of waste on the sheet, and you may be able to add another panel or two without adding to the cost of the job.
- If you are designing a self-mailing piece, this folding style could require up to 4 wafer-seals to make it mail-ready. An envelope would be more attractive and cost-effective.
- Make sure to have a folding dummy made in your specified paper. Paper weight will dramatically affect the success of this piece. Watch for bulkiness and problems in the corner joints of the folds—the printer can't do anything about this, and it will require a change in paper.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document width ahead of time. Create your document as if all panels will be the same (ex: for a 3-panel broadside accordion fold with a finished size of 4 x 6, set the document size to 12 x 12). Then set crosshairs to upper left corner of document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, $3\frac{15}{16}$ inches). Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement ($3\frac{15}{16}$). After setting the second fold, bring the crosshairs over one last time, drag a guide for your last panel width (4). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Just change your document size by entering that decimal measurement (11.875). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

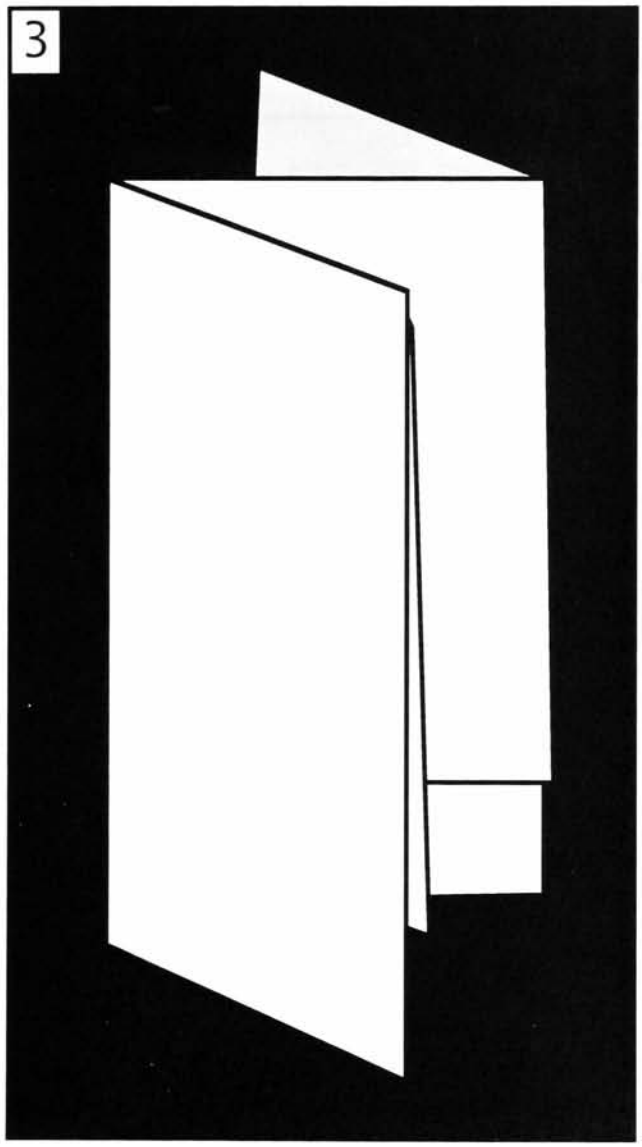
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

ACCORDION WITH SHORT FOLD (INSIDE)

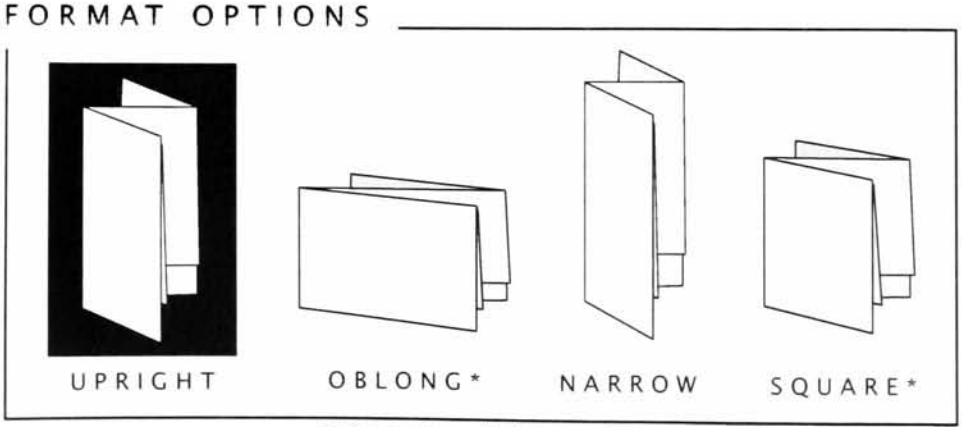


LEVEL

A level 2 fold has a moderate makeready, possible slower speed on the folding machine, and could have some special considerations.

The accordion with short fold inside consists of the same "zig-zag" panel style, and is similar to the broadside accordion fold because it folds in half on itself before the accordion-style folding is done. What makes this fold different is that unlike a broadside fold where panels are of equal length, in a short fold the fold-over panels are shorter than the finished height. There can be as many panels as you wish, but bear in mind the dimensions of the press sheet your printer is using, and the bulk of the paper.

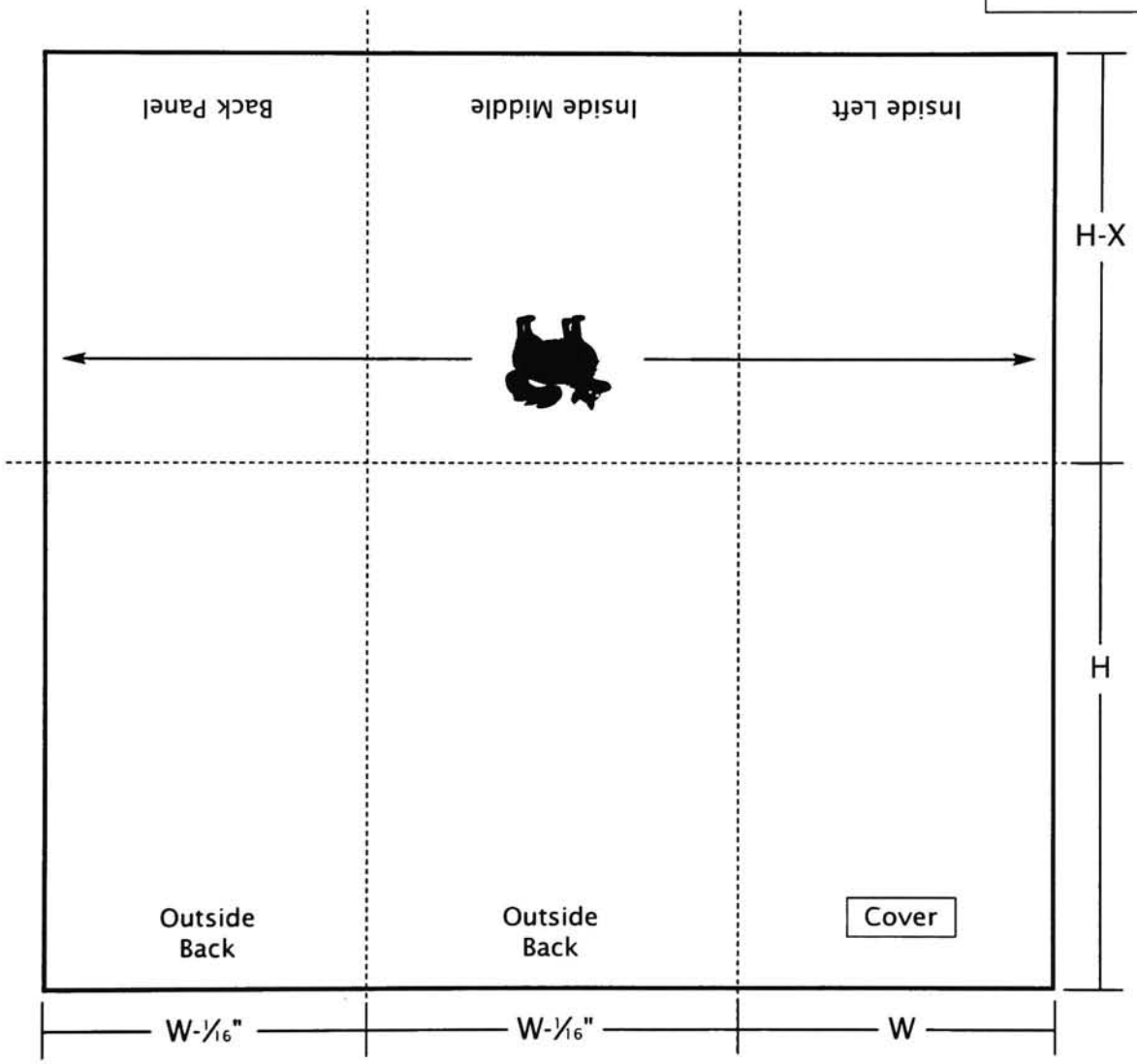
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

W: finished width
H: finished height
X: your choice
--- fold indication
upside-down

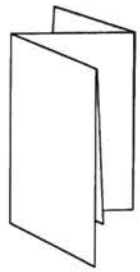


GETTING STARTED

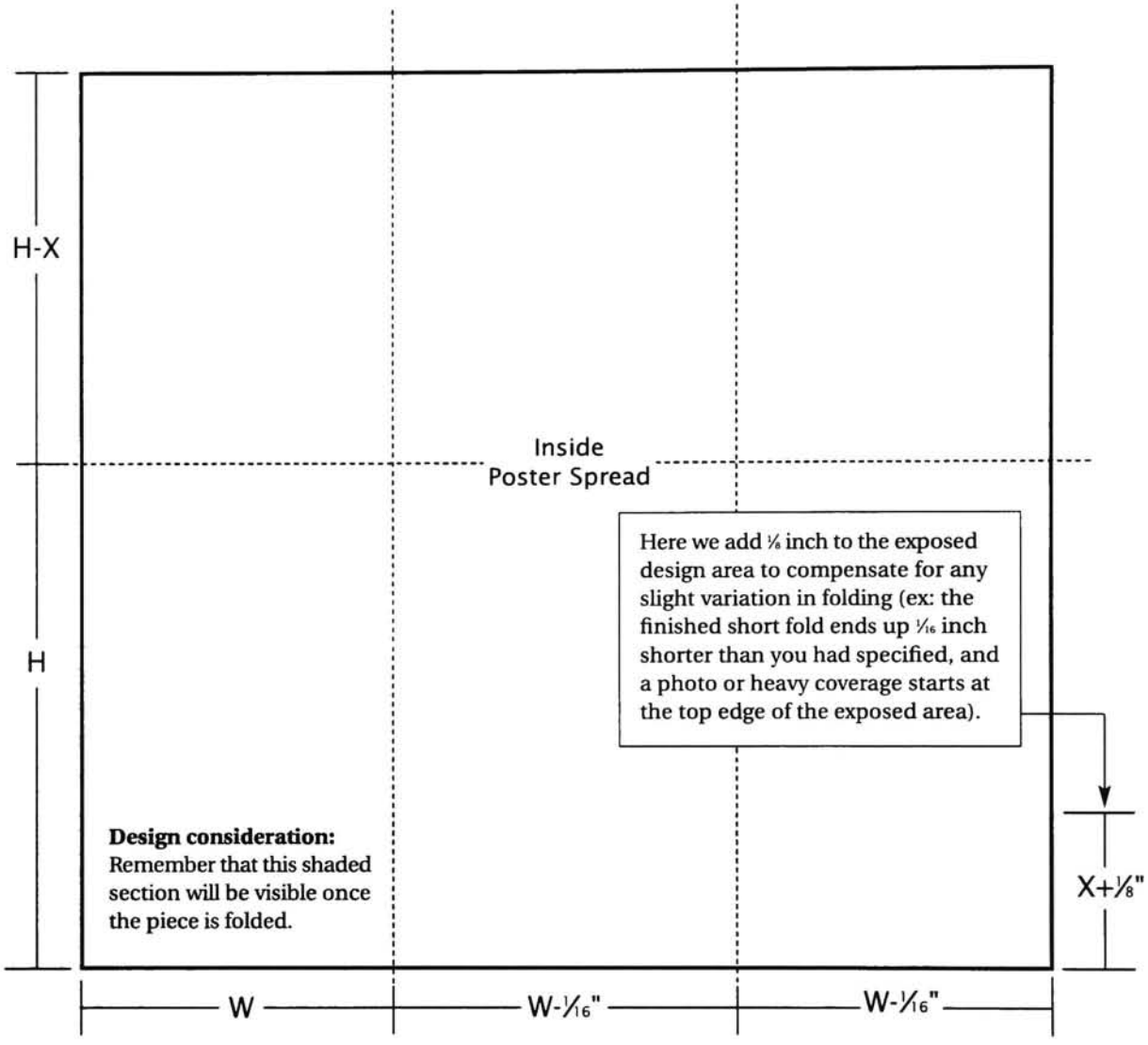
Here's an example: For a short fold, the first thing we must determine is how short the short fold will be. In this case, we'll make it 2 inches shorter than the finished height, so X=2. Now we can calculate our document height. If the finished size is 4 x 6, then 6 inches plus 4 (6-2 , or height minus X) equals a document height of ten inches. Our finished width is 4 inches, so the panels for page 1 of the digital document would be, from left, 3 15/16 inches, 3 15/16 inches and 4 inches. Then for page two everything reverses, so from left the panels would measure 4 inches, 3 15/16 inches and 3 15/16 inches.

Remember: Document size and flat size must be the same, so in this case the document size would be 11 7/8 (11.875) inches wide by 10 inches high.

To modify this fold by adding more panels, just continue the W- 1/16 inch measurement in the appropriate direction.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- Consult your printer about the size of the press sheet. Also ask for a diagram of how your piece will be run on the press sheet. Sometimes there is a lot of waste on the sheet, and you may be able to add another panel or two without adding to the cost of the job.
- If you are designing a self-mailing piece, this folding style could require up to 4 wafer-seals to make it mail-ready. An envelope would be more attractive and cost-effective.
- Make sure to have a folding dummy made in your specified paper. Paper weight will dramatically affect the success of this piece. Watch for bulkiness and problems in the corner joints of the folds—the printer can't do anything about this, and it will require a change in paper.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document width ahead of time. Create your document as if all panels will be the same (ex: for a 3-panel accordion with short fold with a finished size of 4 x 6, set the document size to 12 x 10). Then set crosshairs to upper left corner of document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, $3\frac{15}{16}$ inches). Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement ($3\frac{15}{16}$). After setting the second fold, bring the crosshairs over one last time, drag a guide for your last panel width (4). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Just change your document size by entering that decimal measurement (11.875). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

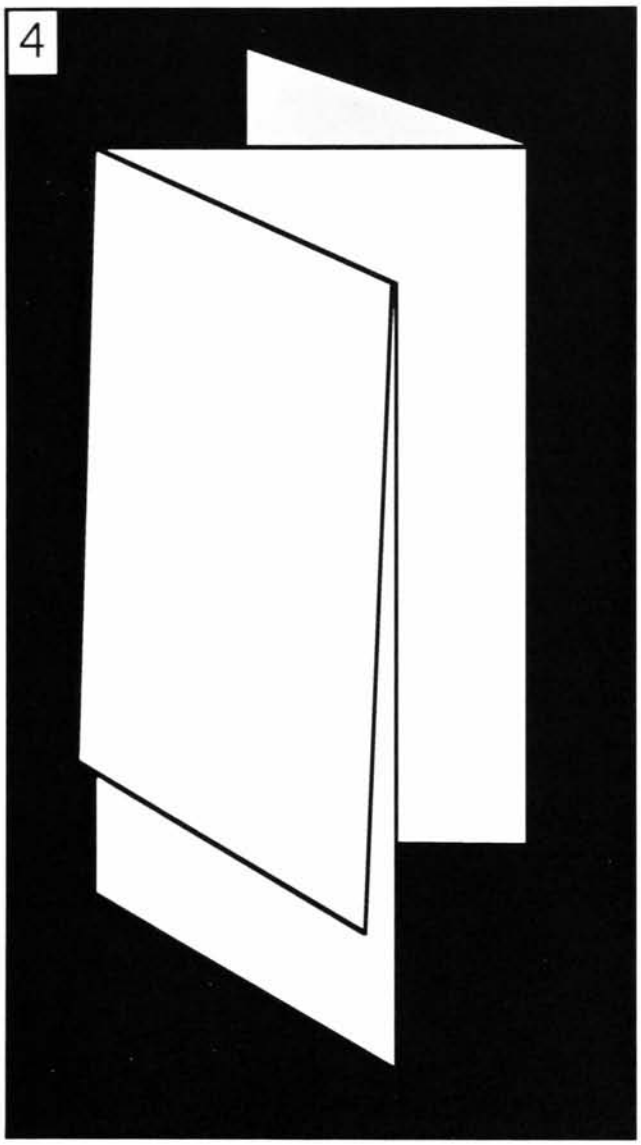
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

ACCORDION WITH SHORT FOLD (OUTSIDE)

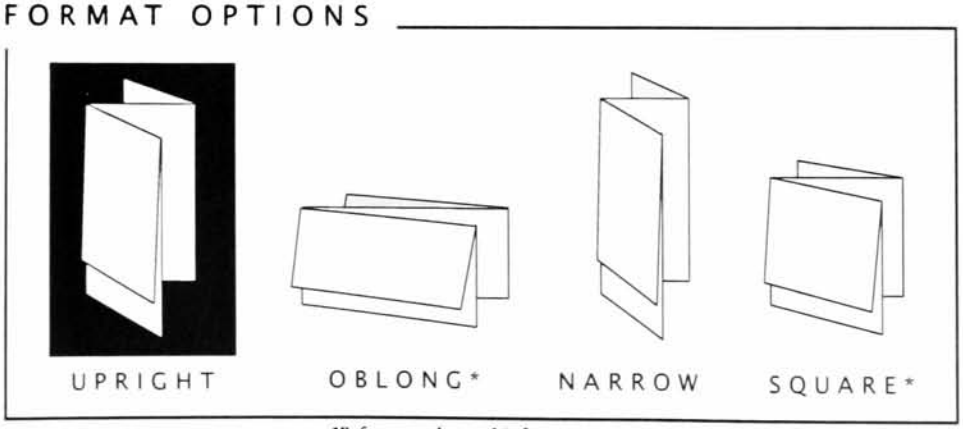


LEVEL

A level 2 fold has a moderate makeready, possible slower speed on the folding machine, and could have some special considerations.

The accordion with short fold outside consists of the same "zig-zag" panel style, and is similar to the broadside accordion fold because it folds in half on itself before the accordion-style folding is done. What makes this fold different is that unlike a broadside fold where panels are of equal length, in a short fold the fold-over panels are shorter than the finished height. As in the standard accordion, there can be as many panels as you wish, but bear in mind the dimensions of the press sheet your printer is using, and the bulk of the paper.

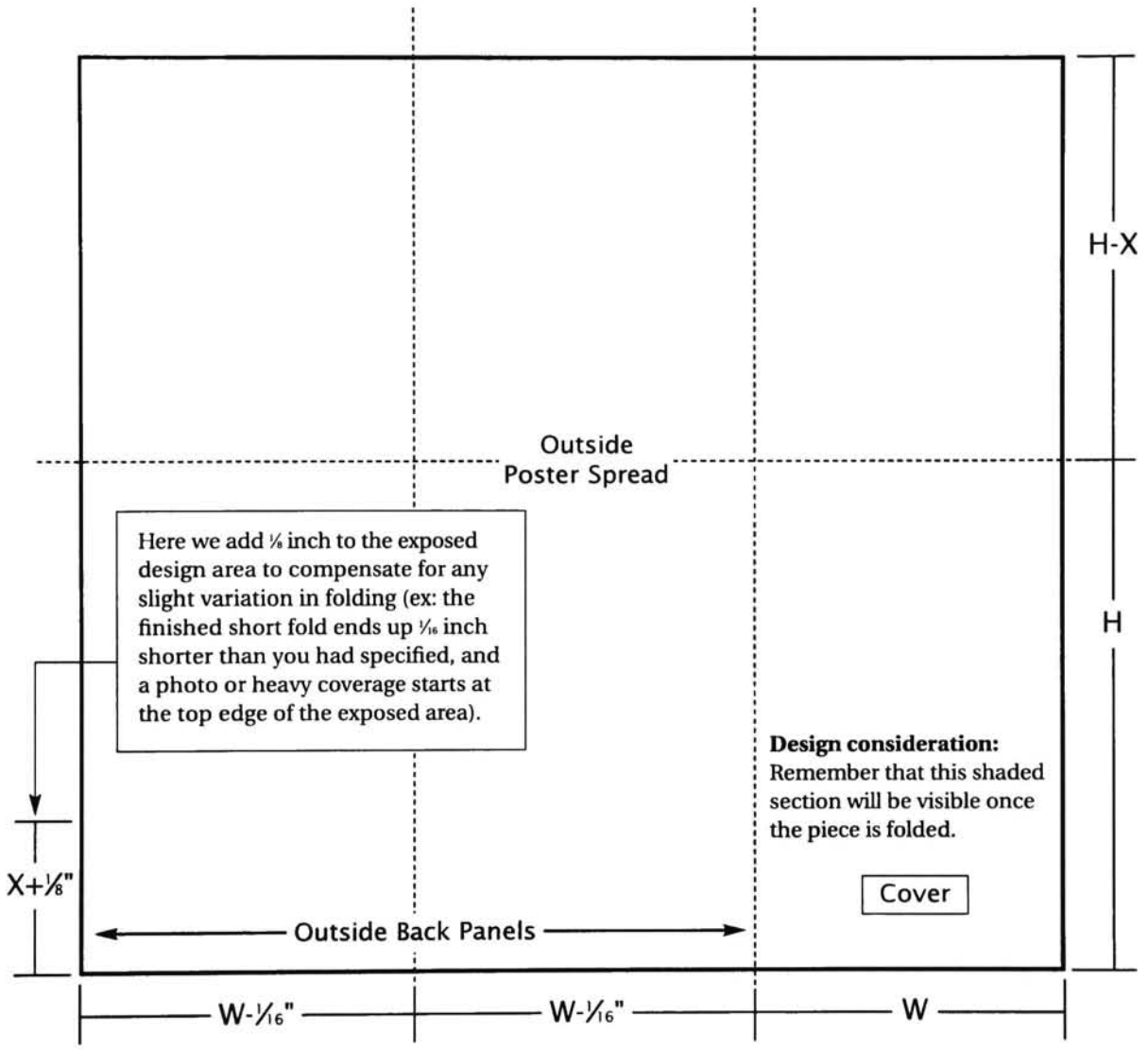
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

W: finished width
H: finished height
X: your choice
--- fold indication
upside-down

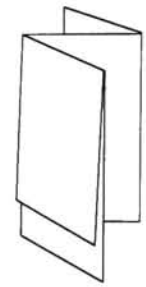


GETTING STARTED

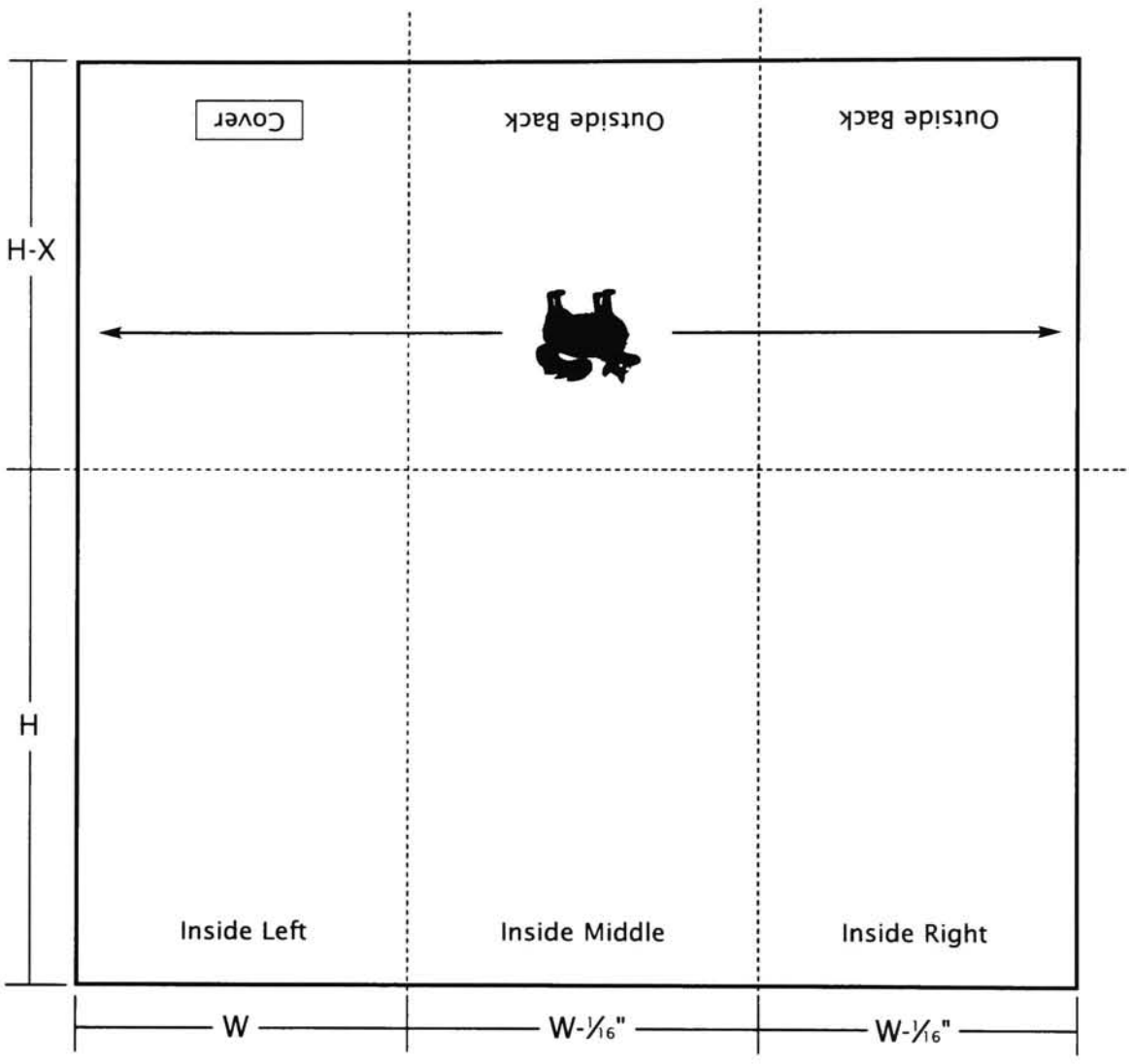
Here's an example: For a short fold, the first thing we must determine is how short the short fold will be. In this case, we'll make it 2 inches shorter than the finished height, so X=2. Now we can calculate our document height. If the finished size is 4 x 6, then 6 inches plus 4 (6-2 , or height minus X) equals a document height of ten inches. Our finished width is 4 inches, so the panels for page 1 of the digital document would be, from left, 3 15/16 inches, 3 15/16 inches and 4 inches. Then for page two everything reverses, so from left the panels would measure 4 inches, 3 15/16 inches and 3 15/16 inches.

Remember: Document size and flat size must be the same, so in this case the document size would be 11 7/8 (11.875) inches wide by 10 inches long.

To modify this fold by adding more panels, just continue the W-1/16 inch measurement in the appropriate direction.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- Consult your printer about the size of the press sheet. Also ask for a diagram of how your piece will be run on the press sheet. Sometimes there is a lot of waste on the sheet, and you may be able to add another panel or two without adding to the cost of the job.
- If you are designing a self-mailing piece, this folding style could require up to 4 wafer-seals to make it mail-ready. An envelope would be more attractive and cost-effective.
- Make sure to have a folding dummy made in your specified paper. Paper weight will dramatically affect the success of this piece. Watch for bulkiness and problems in the corner joints of the folds—the printer can't do anything about this, and it will require a change in paper.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document width ahead of time. Create your document as if all panels will be the same (ex: for a 3-panel accordion with short fold with a finished size of 4 x 6, set the document size to 12 x 10). Then set crosshairs to upper left corner of document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, $3\frac{15}{16}$ inches). Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement ($3\frac{15}{16}$). After setting the second fold, bring the crosshairs over one last time, drag a guide for your last panel width (4). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Just change your document size by entering that decimal measurement (11.875). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

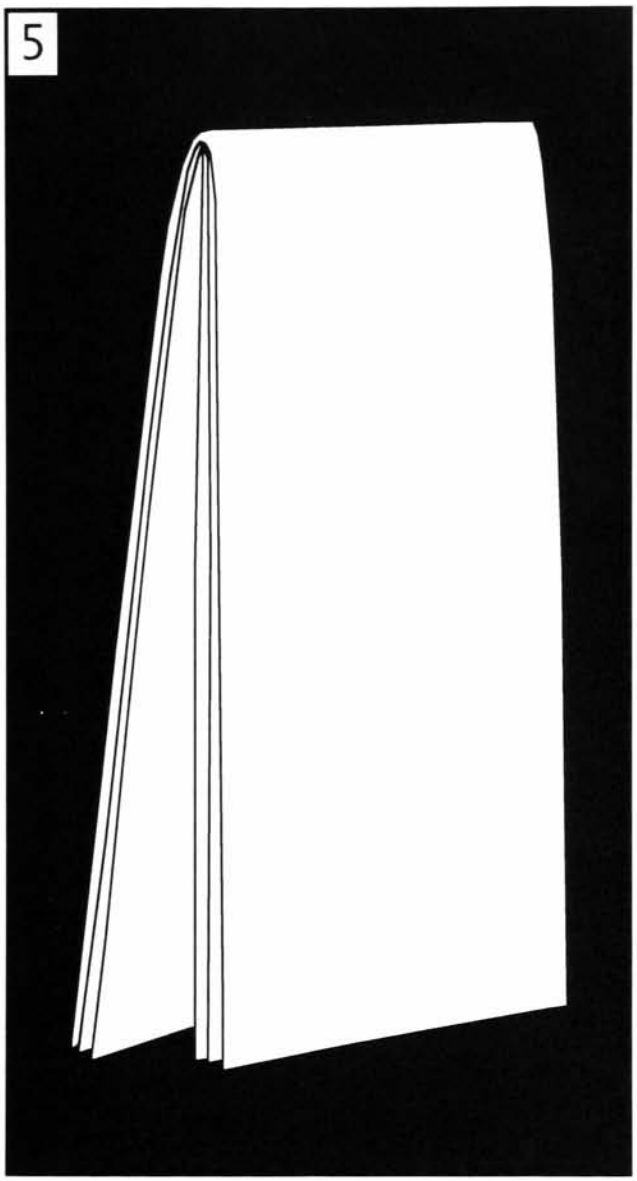
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

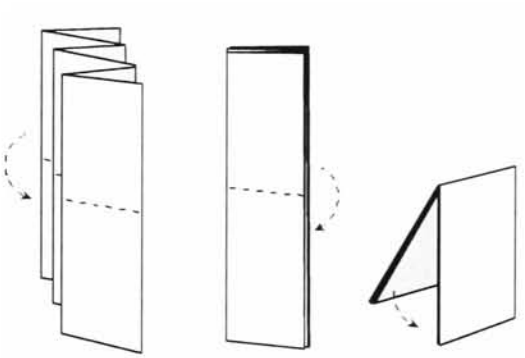
Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

TOP-FOLDING ACCORDION



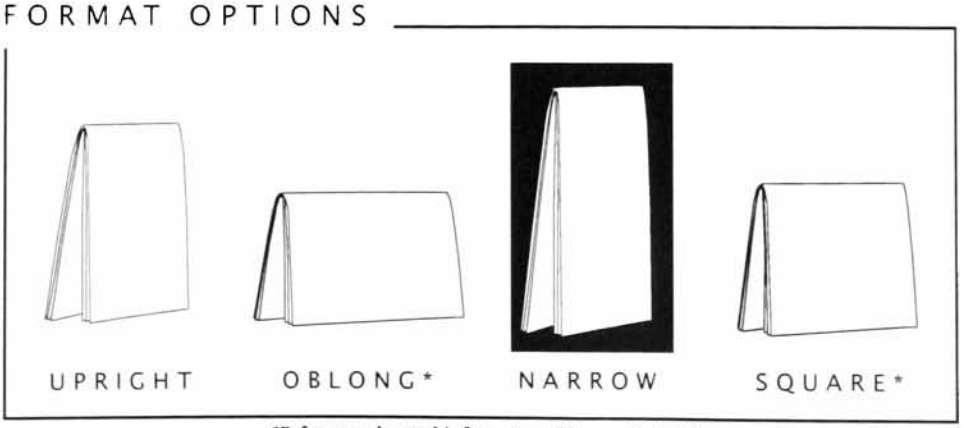


LEVEL

A level 3 fold has a long and difficult makeready, could require special machinery and low folding speed. These issues will be reflected in the cost.

The top-folding accordion consists of the same "zig-zag" panel style as the basic accordion, but in a taller format. When the accordion folding is done, this style then folds in half onto itself. There can be as many panels as you wish, but bear in mind the dimensions of the press sheet your printer is using.

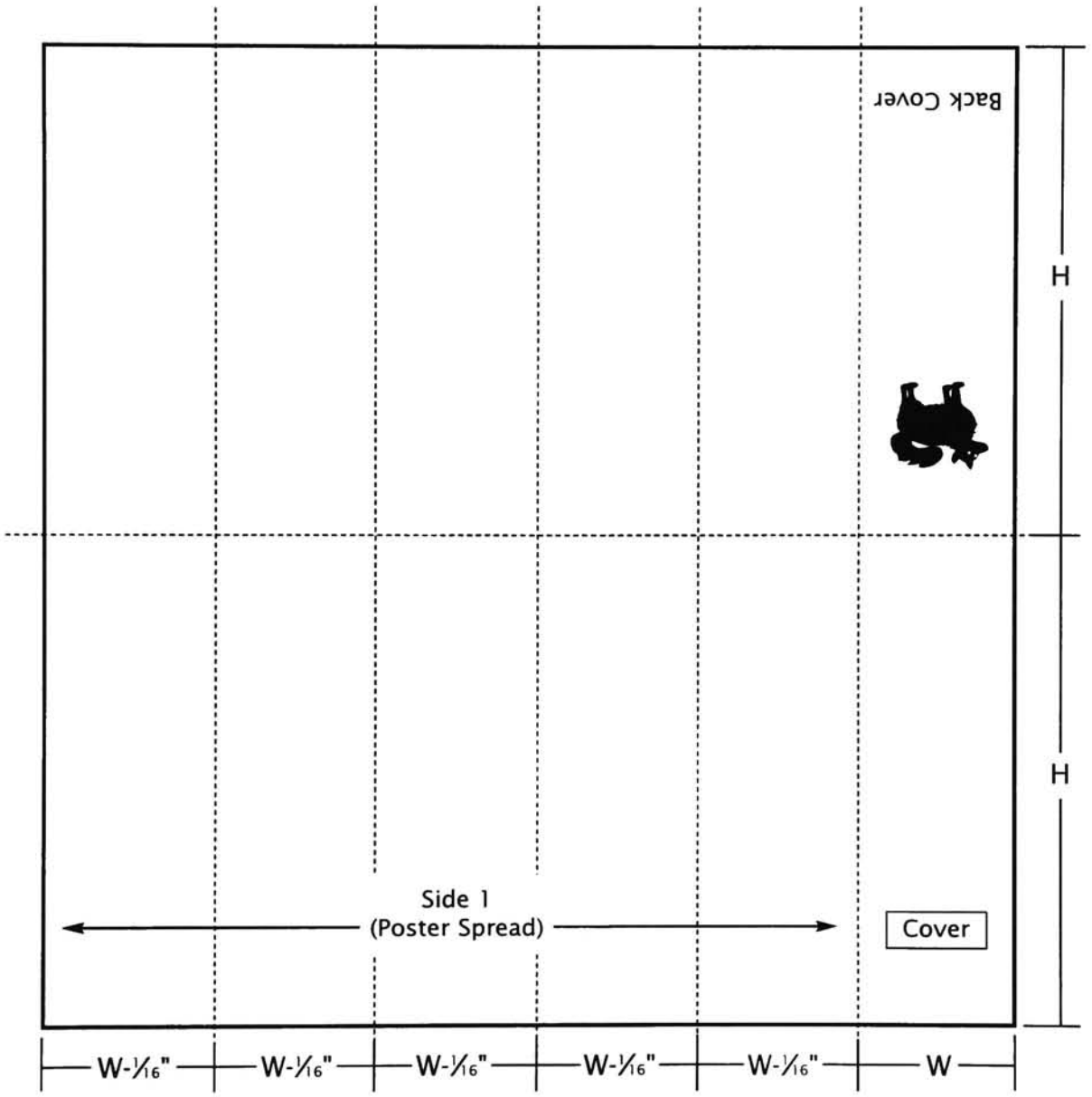
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

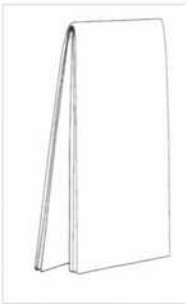
W: finished width
H: finished height
--- fold indication
upside-down



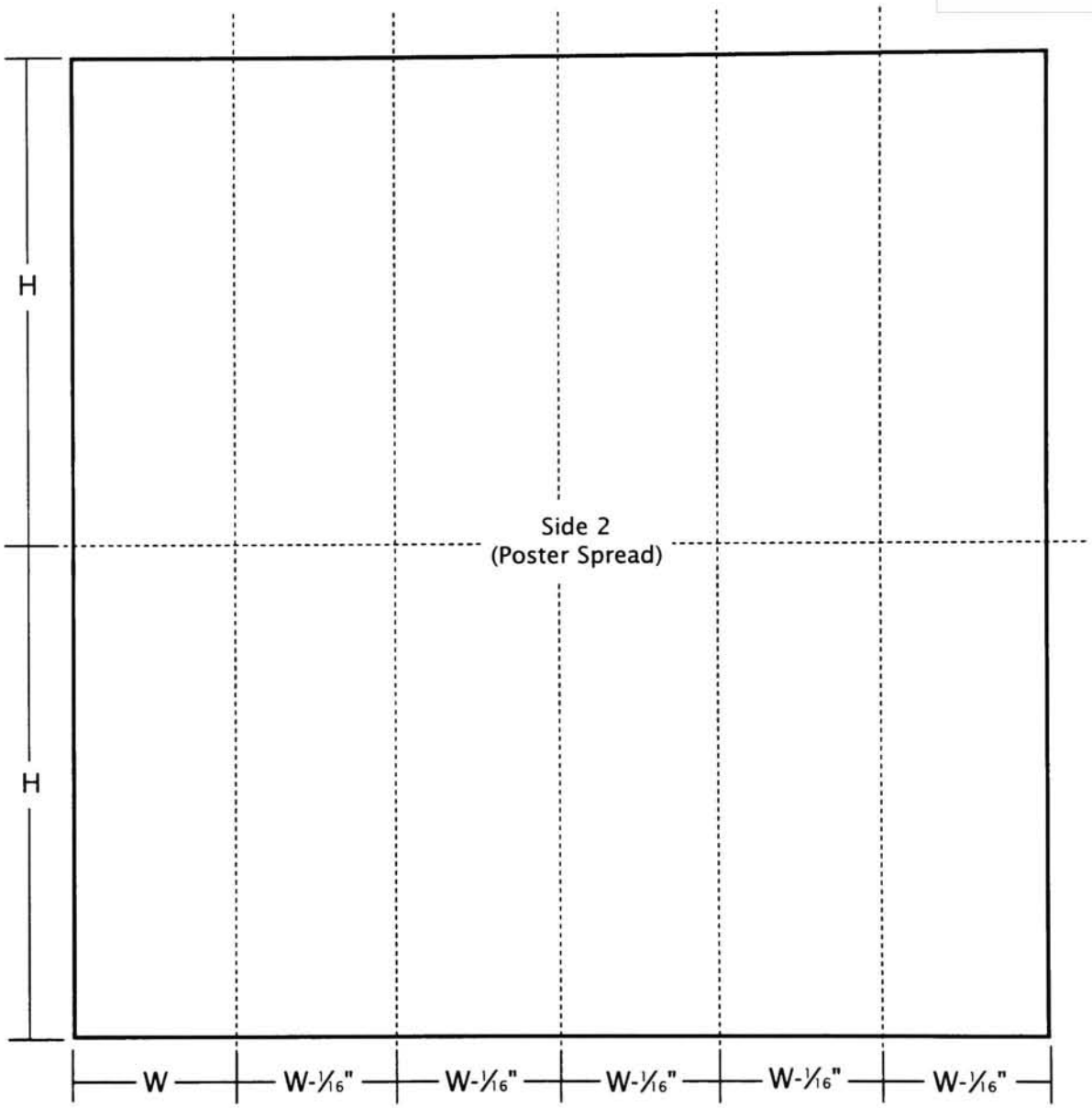
GETTING STARTED

Here's an example: If your finished size is 4 x 9, then your panels for page 1 of your digital document would be, from left, 3 15/16 inches, 3 15/16, 3 15/16, 3 15/16, 3 15/16, and 4 inches. Then for page two everything reverses, so from left the panels would measure 4 inches, 3 15/16, 3 15/16, 3 15/16, 3 15/16, 3 15/16, with a height of 18 inches.

Remember: Document size and flat size must be the same, so in this case the document size would be 23 11/16 (23.687) inches wide by 18 inches high.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- Consult your printer about the size of the press sheet. Also ask for a diagram of how your piece will be run on the press sheet. Sometimes there is a lot of waste on the sheet, and you may be able to add another panel or two without adding to the cost of the job.
- A paper choice of any heavier than 60# text is not recommended.
- Make sure to have a folding dummy made in your specified paper.
- Be aware of your printer or bindery's minimum and maximum sheet sizes for their equipment. Top-folding accordions and any other folded pieces which open out to very large dimensions generally require special large format folders.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document width ahead of time. Create your document as if all panels will be the same (ex: for a 6-panel top-folding accordion with a finished size of 4 x 9, set the document size to 24 x 18). Then set crosshairs to upper left corner of document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, 3 15/16 inches). Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement (3 15/16). Keep doing this until you measure the last panel (in this example, 4 inches). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Just change your document size by entering that decimal measurement (23.687). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

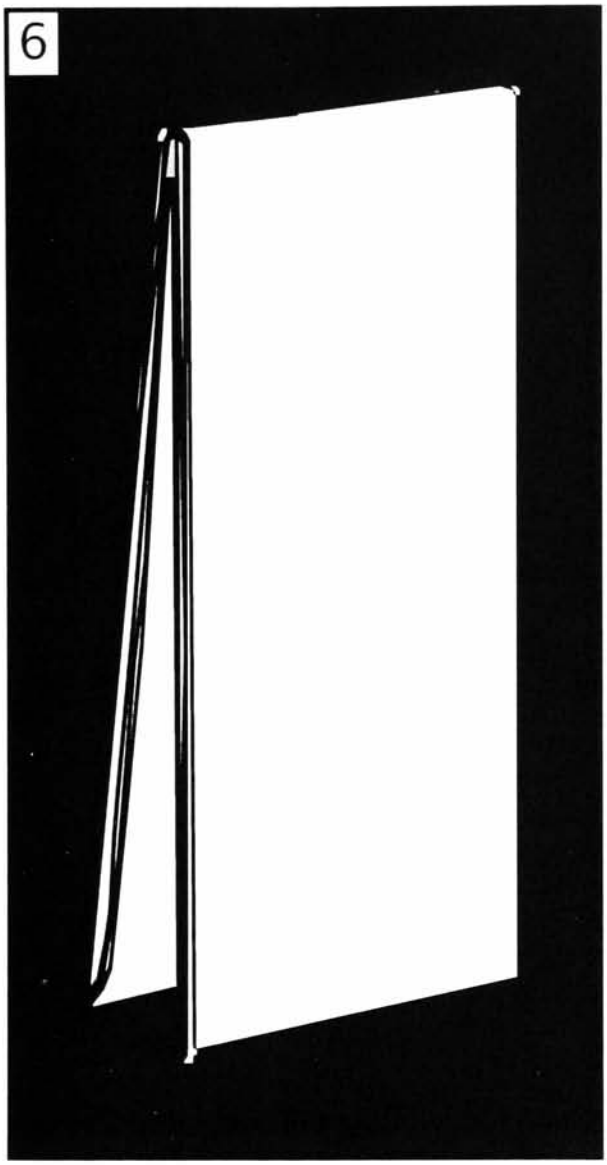
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

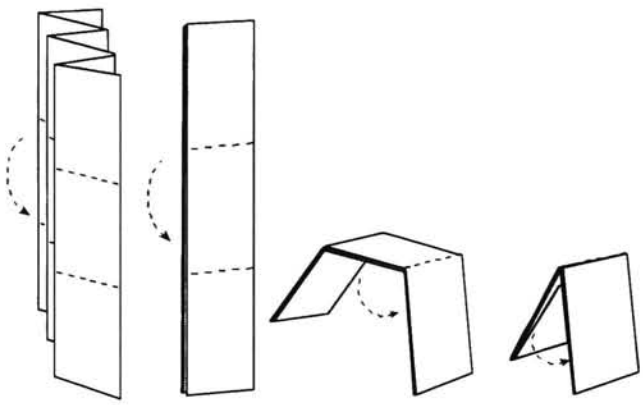
Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

ACCORDION WITH LETTER FOLD



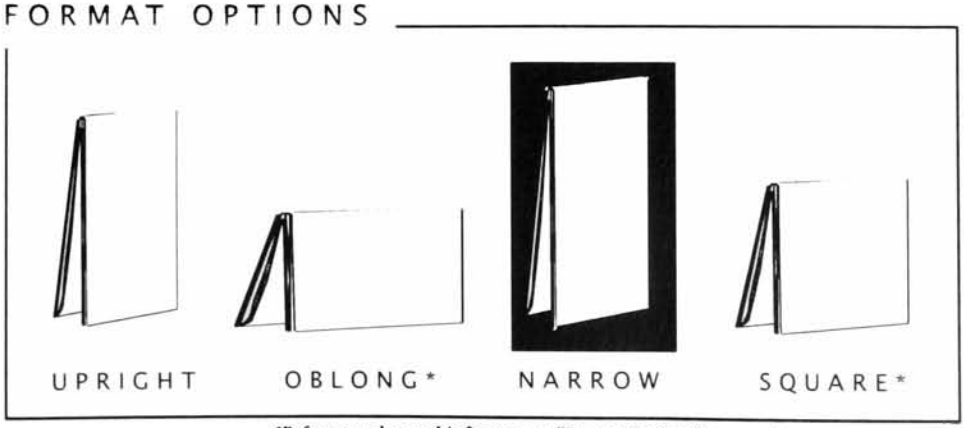


LEVEL

A level 3 fold has a long and difficult makeready, could require special machinery and low folding speed. These issues will be reflected in the cost.

The accordion with letter fold consists of the same "zig-zag" panel style as the basic accordion, but in a taller format. When the accordion folding is done, this style divides into thirds and if finished with a letter fold. There can be as many panels as you wish, but bear in mind the dimensions of the press sheet your printer is using.

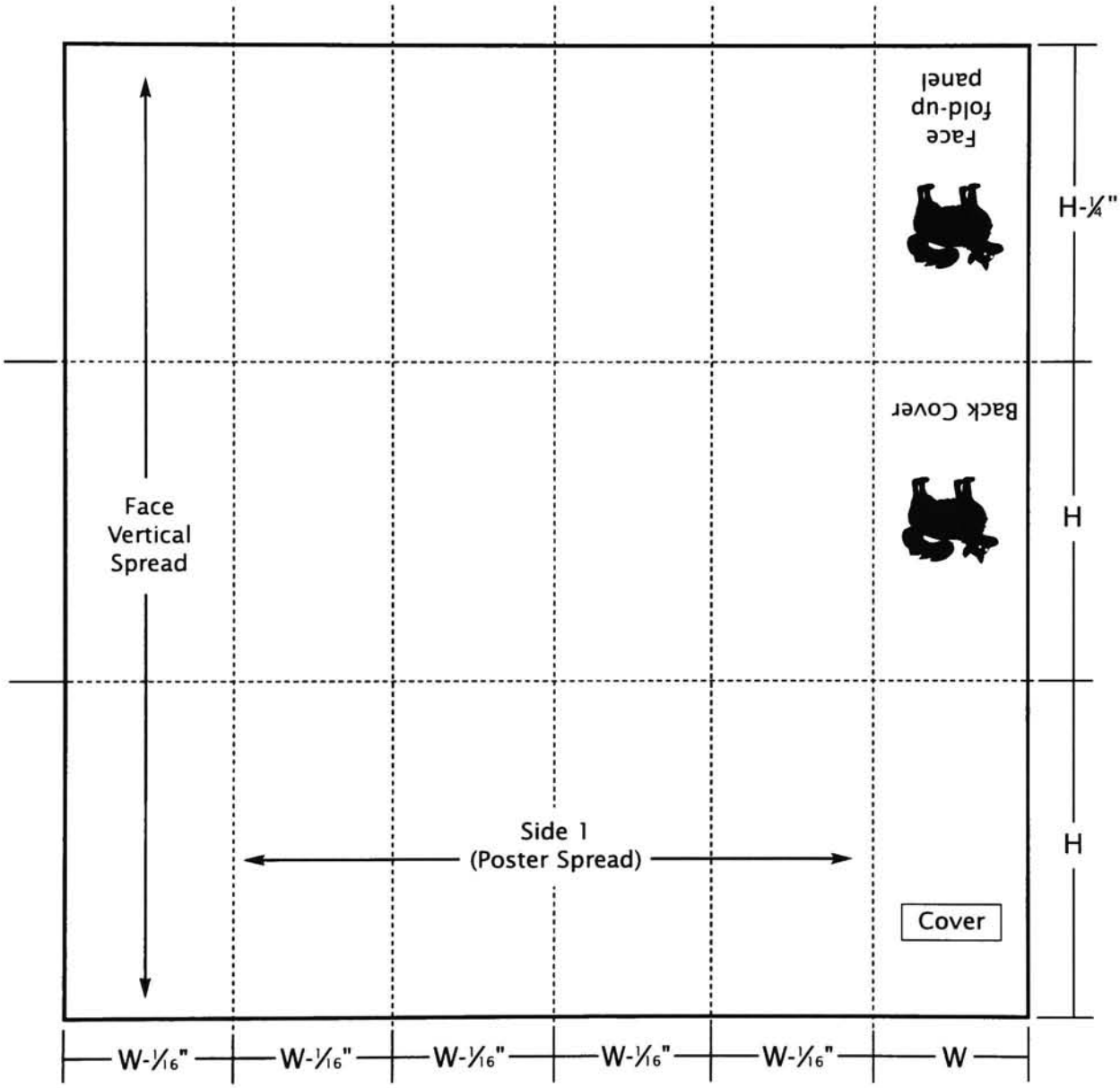
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

W: finished width
H: finished height
--- fold indication
upside-down

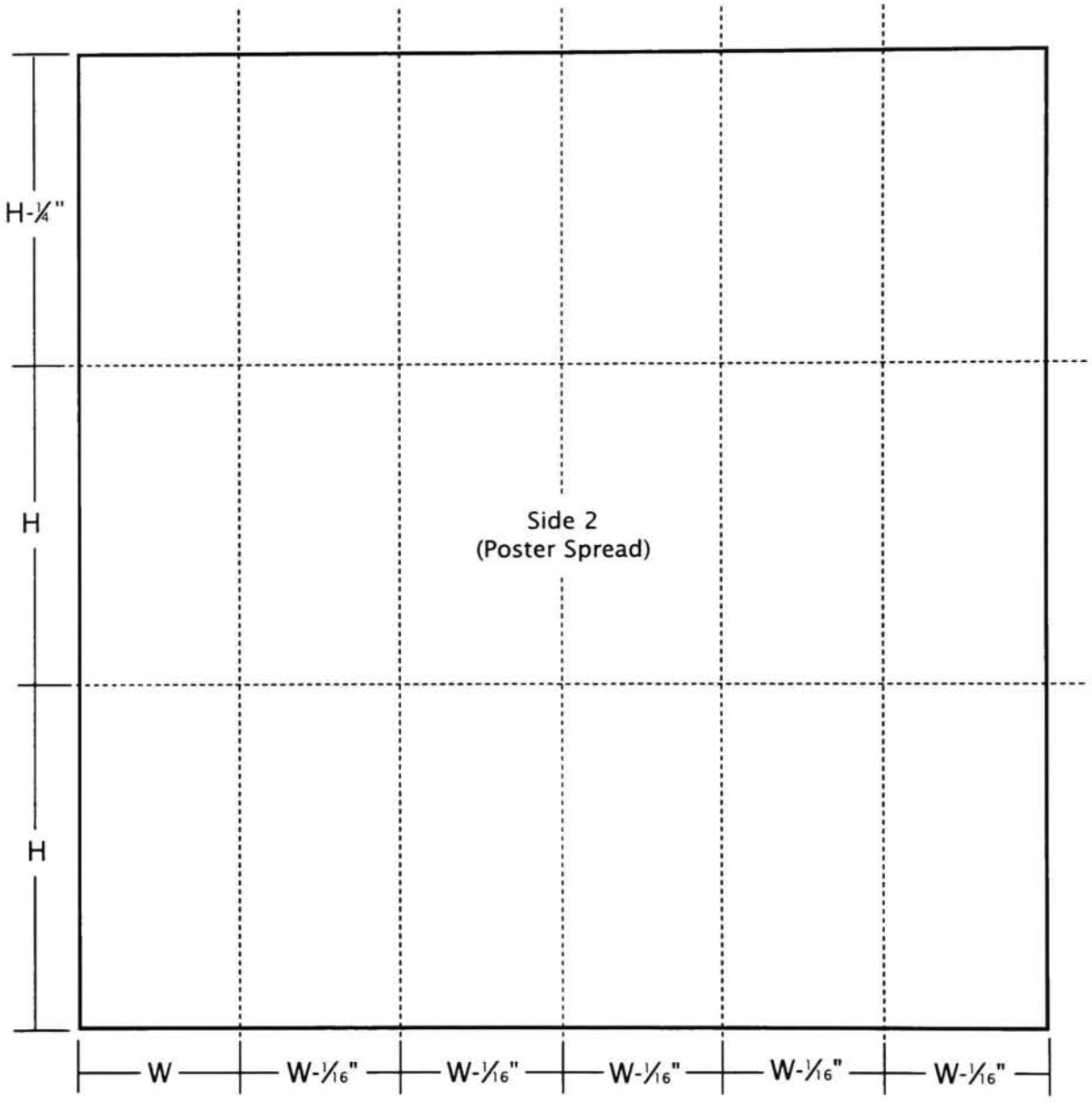


Getting started

Here's an example: If your finished size is 4 x 8, then your panels for page 1 of your digital document would be, from left, 3 15/16 inches, 3 15/16, 3 15/16, 3 15/16, 3 15/16, and 4 inches. Then for page two everything reverses, so from left the panels would measure 4 inches, 3 15/16, 3 15/16, 3 15/16, 3 15/16, 3 15/16, with a height of 23 ¾ inches.

Remember: Document size and flat size must be the same, so in this case the document size would be 23 11/16 (23.687) inches wide by 23.75 inches high.

Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- Consult your printer about the size of the press sheet. Also ask for a diagram of how your piece will be run on the press sheet. Sometimes there is a lot of waste on the sheet, and you may be able to add another panel or two without adding to the cost of the job.
- A paper choice of any heavier than 60# text is not recommended.
- Make sure to have a folding dummy made in your specified paper.
- Be aware of your printer or bindery's minimum and maximum sheet sizes for their equipment. Top-folding accordions and any other folded pieces which open out to very large dimensions generally require special large format folders.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document width ahead of time. Create your document as if all panels will be the same (ex: for a 6-panel top-folding accordion with a finished size of 4 x 9, set the document size to 24 x 18). Then set crosshairs to upper left corner of document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, 3 15/16 inches). Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement (3 15/16). Keep doing this until you measure the last panel (in this example, 4 inches). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Just change your document size by entering that decimal measurement (23.687). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

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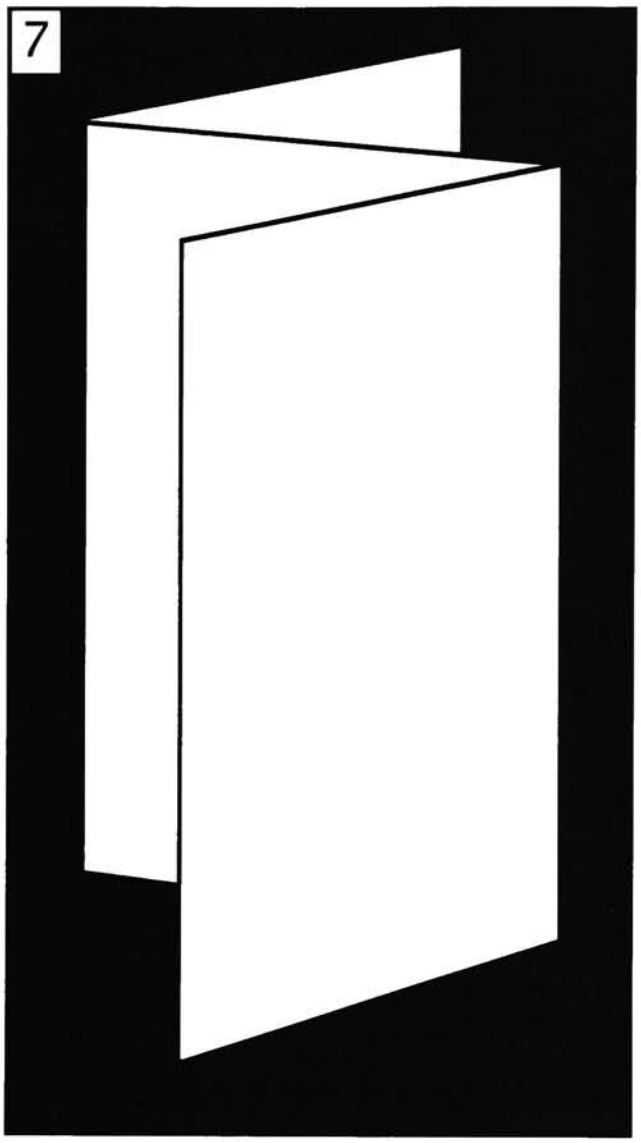
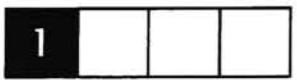
Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

REVERSE ACCORDION



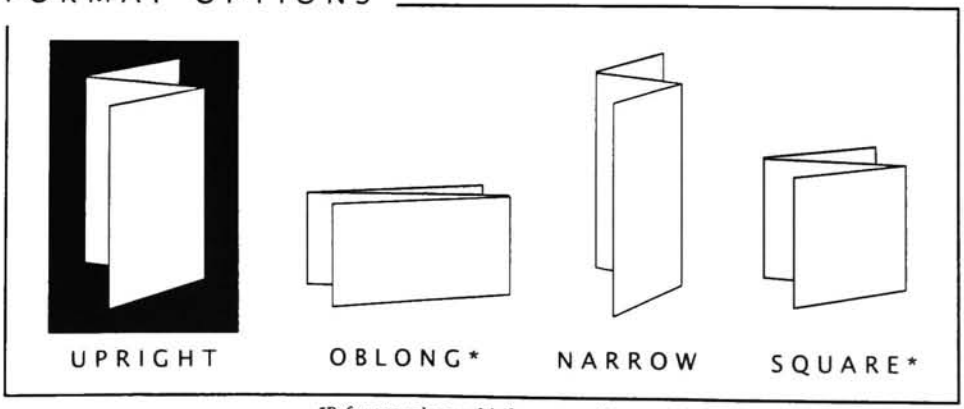
LEVEL



A level 1 fold is standard and basic, easy to set up on the folding machine and the machine can run at highest speeds.

The reverse accordion fold consists of three panels or more which "zig-zag" back and forth. The only difference between a reverse accordion and a standard accordion fold is the direction of the first panel, which sets the direction of the rest. In a standard accordion (see page 1) the lead panel opens to the left like a greeting card. The reverse accordion hinges on the right, hence the reverse. There can be as many panels as you wish, but bear in mind the dimensions of the press sheet your printer is using.

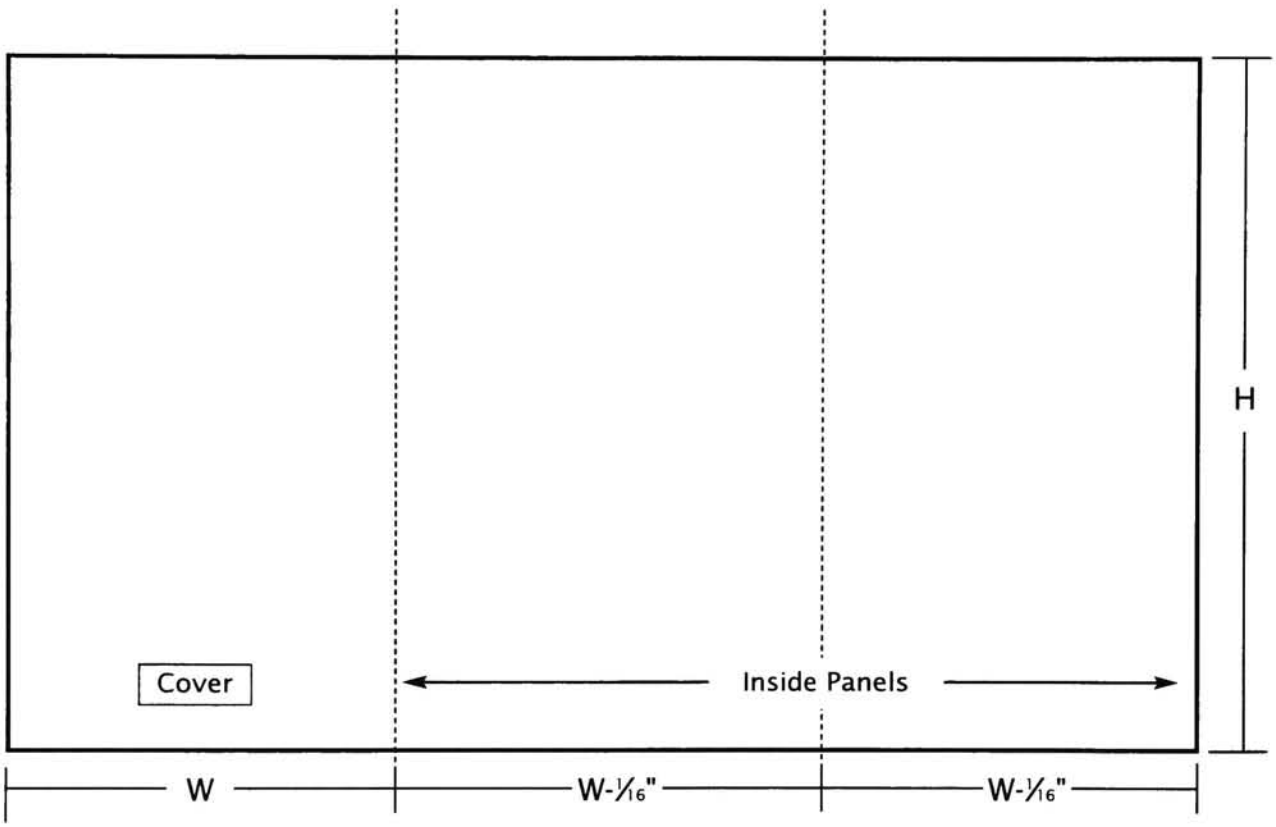
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

W: finished width
H: finished height
--- fold indication

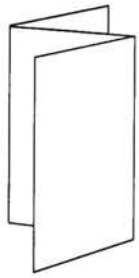


GETTING STARTED

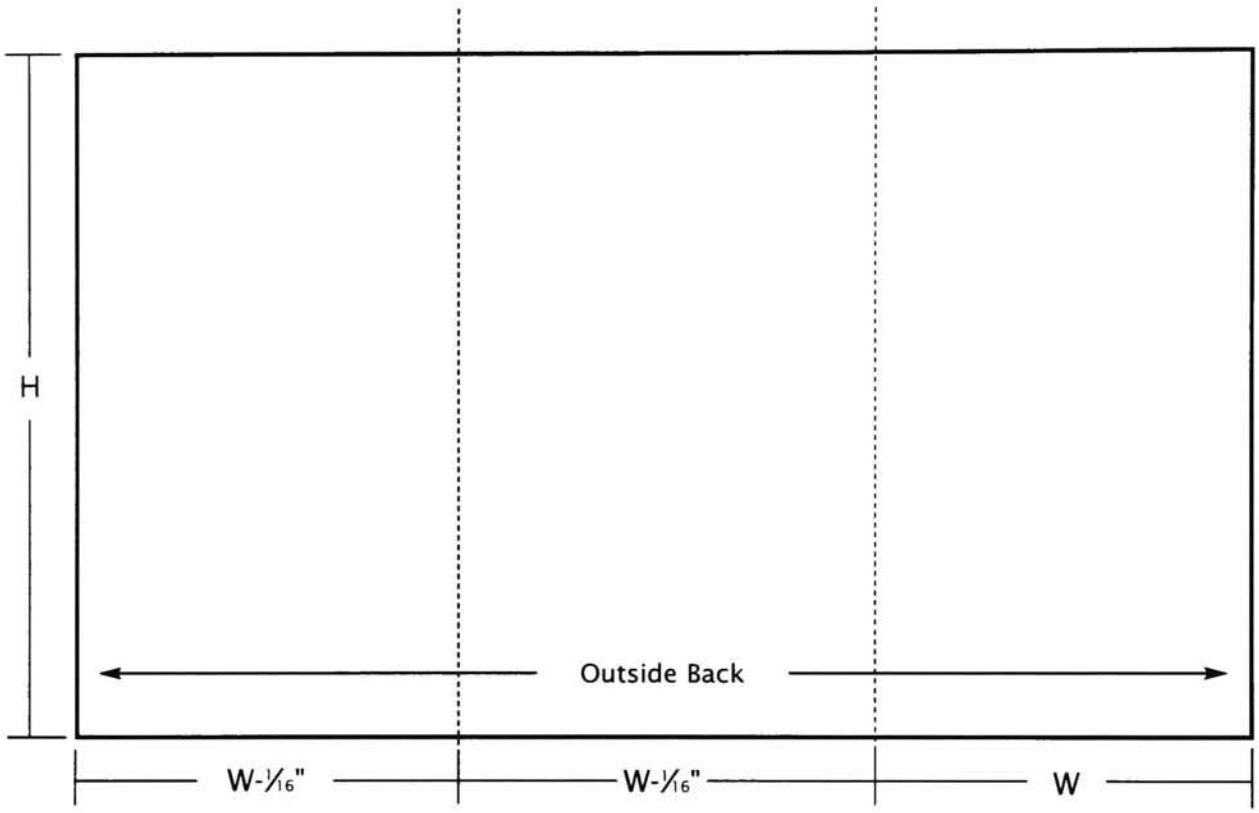
Here's an example: If your finished size is 4 x 9, then your panels for page 1 of your digital document would be, from left, 4 inches, 3 15/16 inches and 3 15/16 inches. Then for page two everything reverses, so from left your panels would measure 3 15/16 inches, 3 15/16 inches and 4 inches, with a height of 9 inches.

Remember: Document size and flat size must be the same, so in this case the document size would be 11 7/8 (11.875) inches wide by 9 inches high.

To modify this fold by adding more panels, just continue the W-1/16" measurement in the appropriate direction.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- Consult your printer about the size of the press sheet. Also ask for a diagram of how your piece will be run on the press sheet. Sometimes there is a lot of waste on the sheet, and you may be able to add another panel or two without adding to the cost of the job.
- If you are designing a long piece, make sure to have a folding sample made up from your specified paper. If the paper is too lightweight, it could turn into a sagging flimsy piece.
- For an exceptionally long piece, additional panels may be tipped-on (at an extra expense). Don't forget to consider the arm-span of your audience!
- If you are designing a self-mailing piece, this folding style could require up to 3 wafer-seals to make it mail-ready.
- If your paper choice is any heavier than 80# text, you will want to consider scoring the piece. Ask your printer for a recommendation.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document width ahead of time. Create your document as if all panels will be the same (ex: for a 3-panel reverse accordion fold with a finished size of 4 x 6, set the document size to 12 x 6). Then set crosshairs to upper left corner of document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, 4 inches). Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement ($3^{15}/_{16}$). After setting the second fold, bring the crosshairs over one last time, drag a guide for your last panel width ($3^{15}/_{16}$). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Just change your document size by entering that decimal measurement (11.875). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

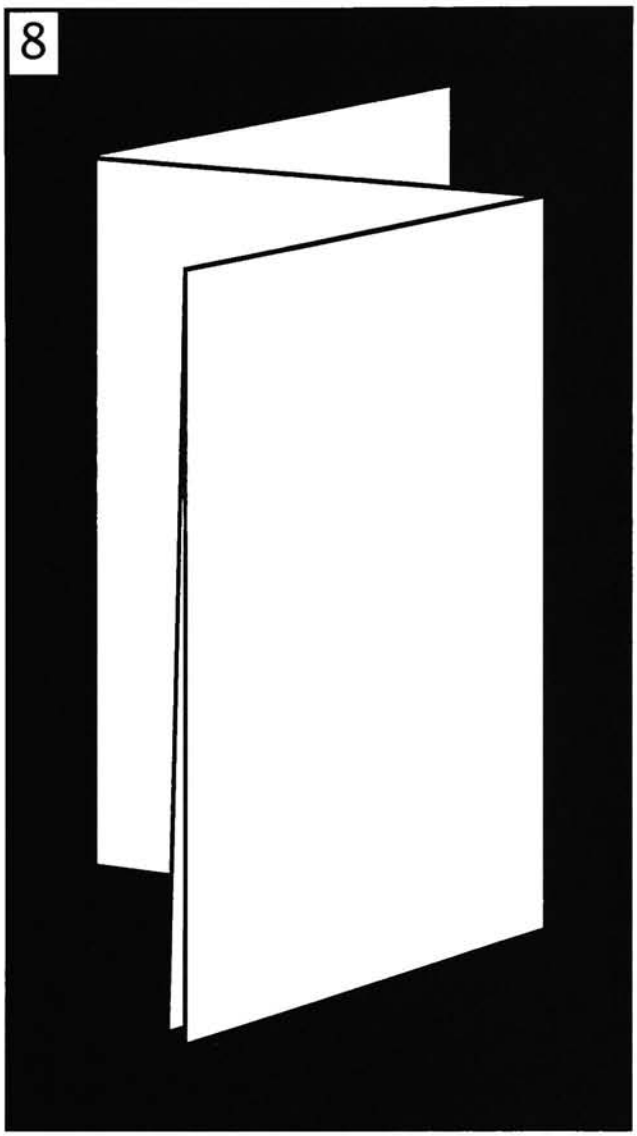
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

REVERSE ACCORDION BROADSIDE

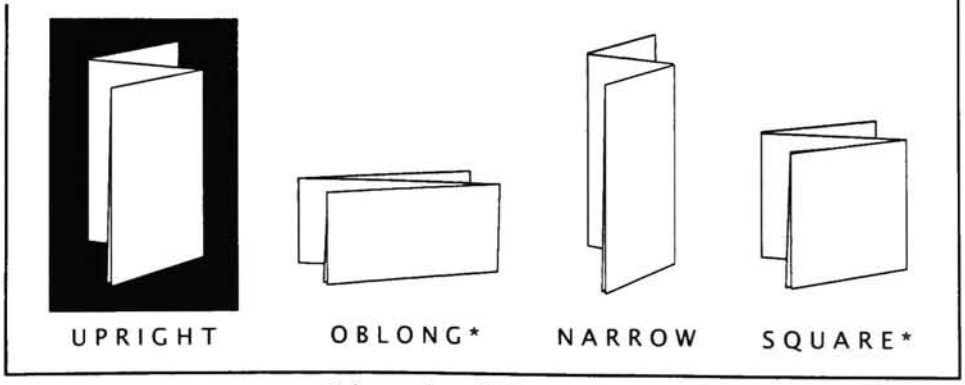


LEVEL

A level 2 fold has a moderate makeready, possible slower speed on the folding machine, and could have some special considerations.

The broadside reverse accordion fold consists of the same "zig-zag" panel style, but the difference is that this fold has twice the area because it folds in half on itself before the accordion-style folding is done. There can be as many panels as you wish, but bear in mind the dimensions of the press sheet your printer is using, and the bulk of the paper.

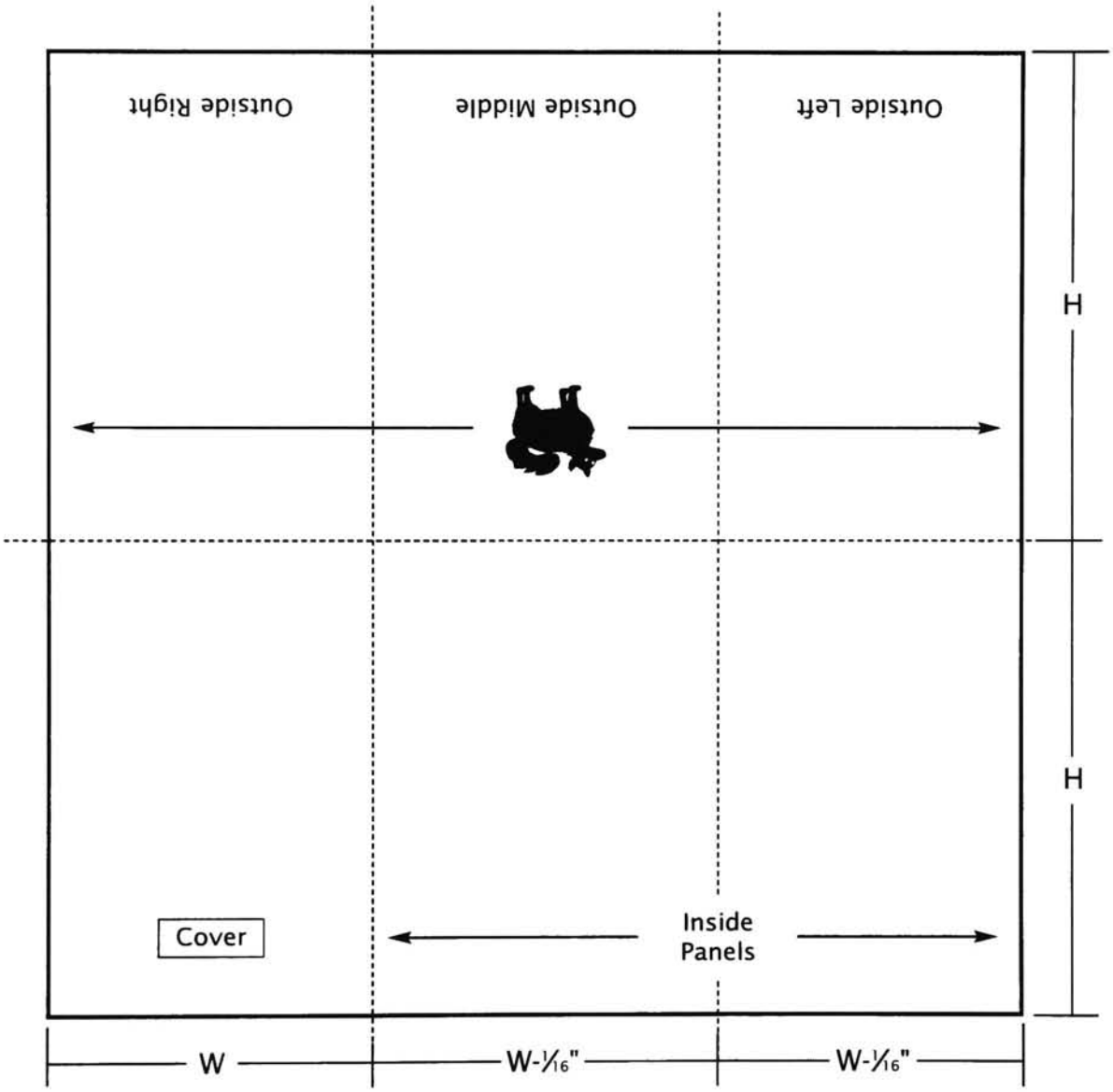
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

W: finished width
H: finished height
--- fold indication
upside-down



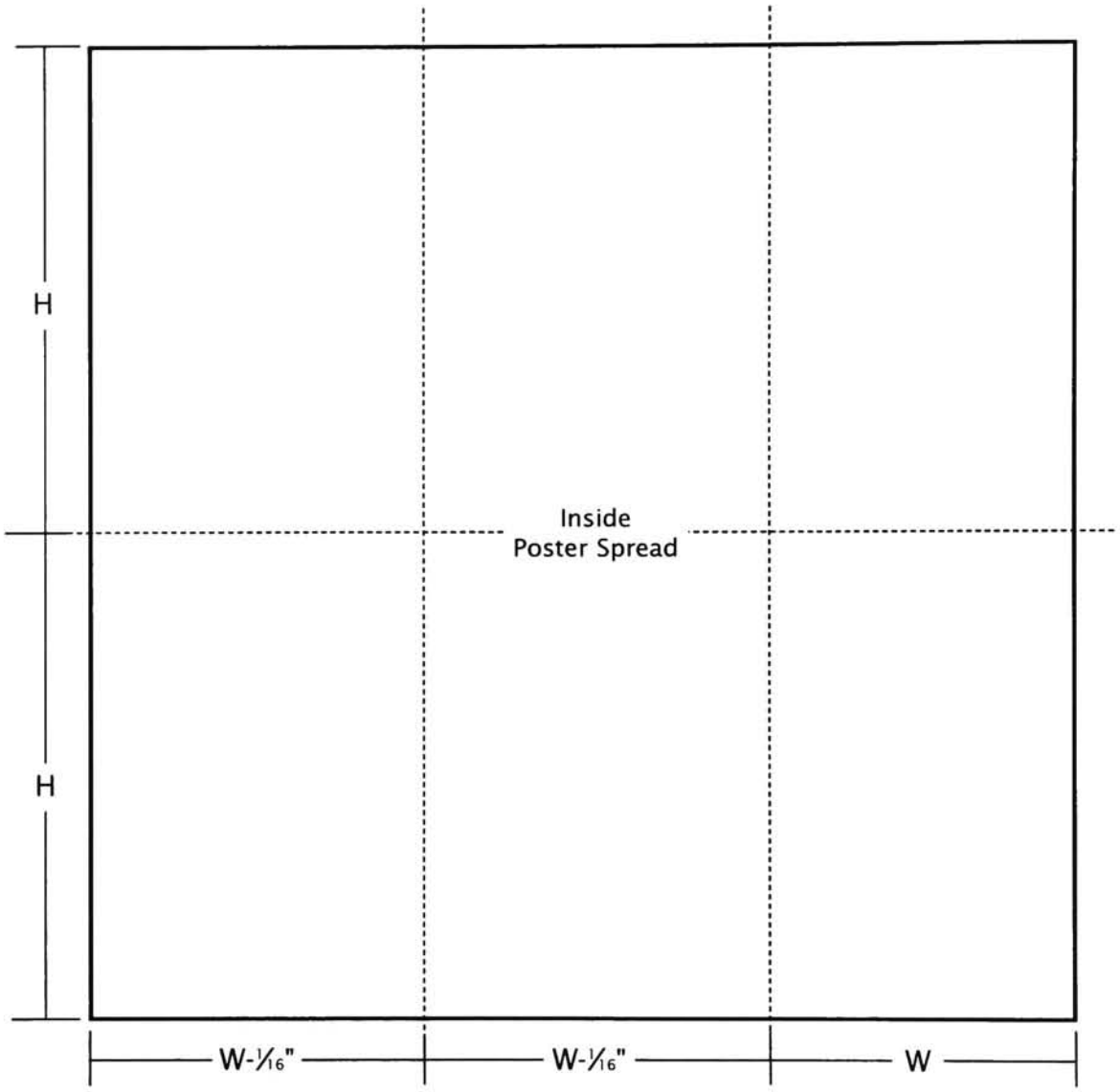
GETTING STARTED

Here's an example: If your finished size is 4 x 6, then your panels for page 1 of your digital document would be, from left, 4 inches, 3 15/16 inches and 3 15/16 inches. Then for page two everything reverses, so from left your panels would measure 3 15/16 inches, 3 15/16 inches and 4 inches, with a document height of 12 inches (6 inches plus 6 inches).

Remember: Document size and flat size must be the same, so in this case the document size would be 11 7/8 (11.875) inches wide by 12 inches high.

To modify this fold by adding more panels, just continue the W-1/16 inch measurement in the appropriate direction.

Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- Consult your printer about the size of the press sheet. Also ask for a diagram of how your piece will be run on the press sheet. Sometimes there is a lot of waste on the sheet, and you may be able to add another panel or two without adding to the cost of the job.
- If you are designing a self-mailing piece, this folding style could require up to 4 wafer-seals to make it mail-ready. An envelope would be more attractive and cost-effective.
- Make sure to have a folding dummy made in your specified paper. Paper weight will dramatically affect the success of this piece. Watch for bulkiness and problems in the corner joints of the folds—the printer can't do anything about this, and it will require a change in paper.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document width ahead of time. Create your document as if all panels will be the same (ex: for a 3-panel broadside reverse accordion fold with a finished size of 4 x 6, set the document size to 12 x 12). Then set crosshairs to upper left corner of document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, 4 inches). Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement ($3\frac{15}{16}$). After setting the second fold, bring the crosshairs over one last time, drag a guide for your last panel width ($3\frac{15}{16}$). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Just change your document size by entering that decimal measurement (11.875). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

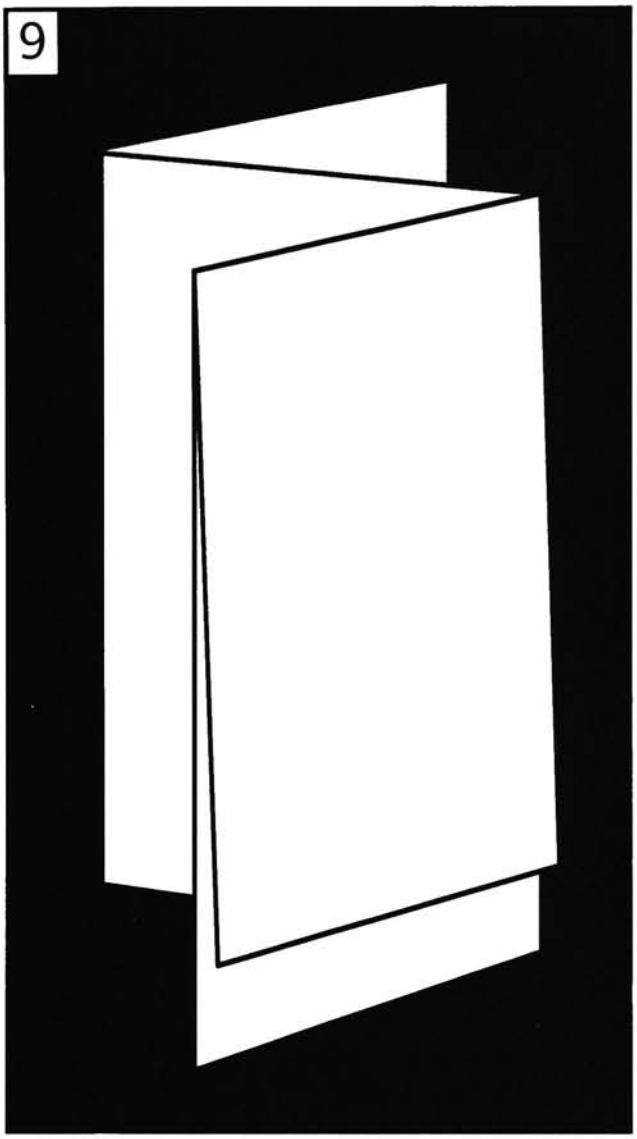
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

REVERSE ACCORDION WITH SHORT FOLD (INSIDE)

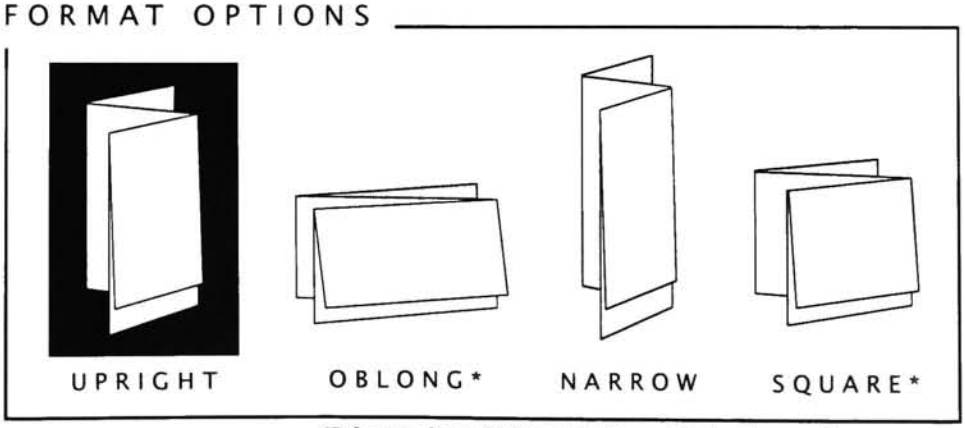


LEVEL

A level 2 fold has a moderate makeready, possible slower speed on the folding machine, and could have some special considerations.

The reverse accordion with short fold inside consists of the same "zig-zag" panel style, and is similar to the broadside reverse accordion fold because it folds in half on itself before the accordion-style folding is done. What makes this fold different is that unlike a broadside fold where panels are of equal length, in a short fold the fold-over panels are shorter than the finished height. There can be as many panels as you wish, but bear in mind the dimensions of the press sheet your printer is using, and the bulk of the paper.

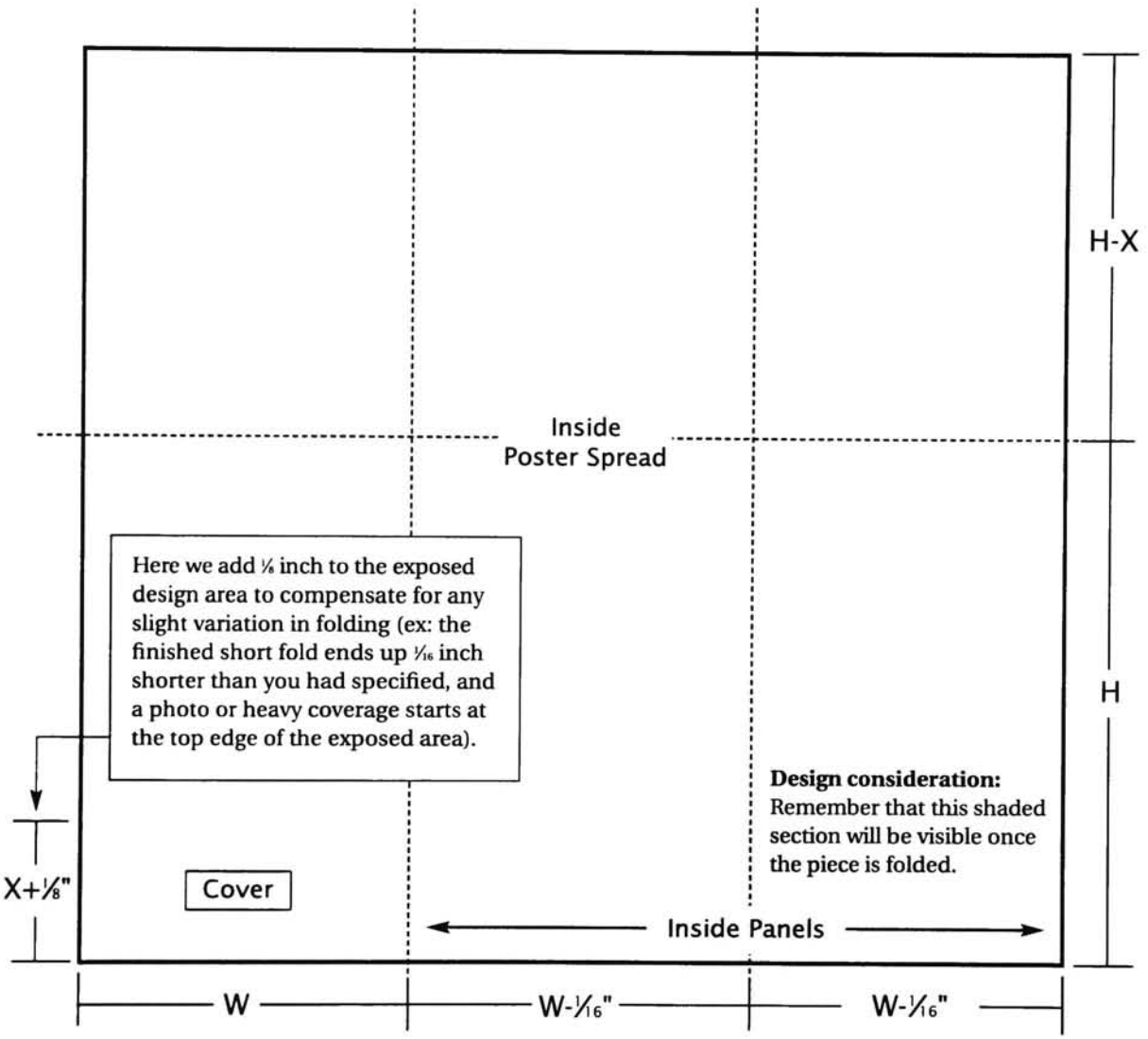
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

W: finished width
H: finished height
X: your choice
--- fold indication
upside-down

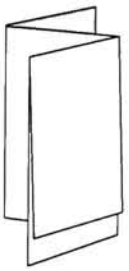


GETTING STARTED

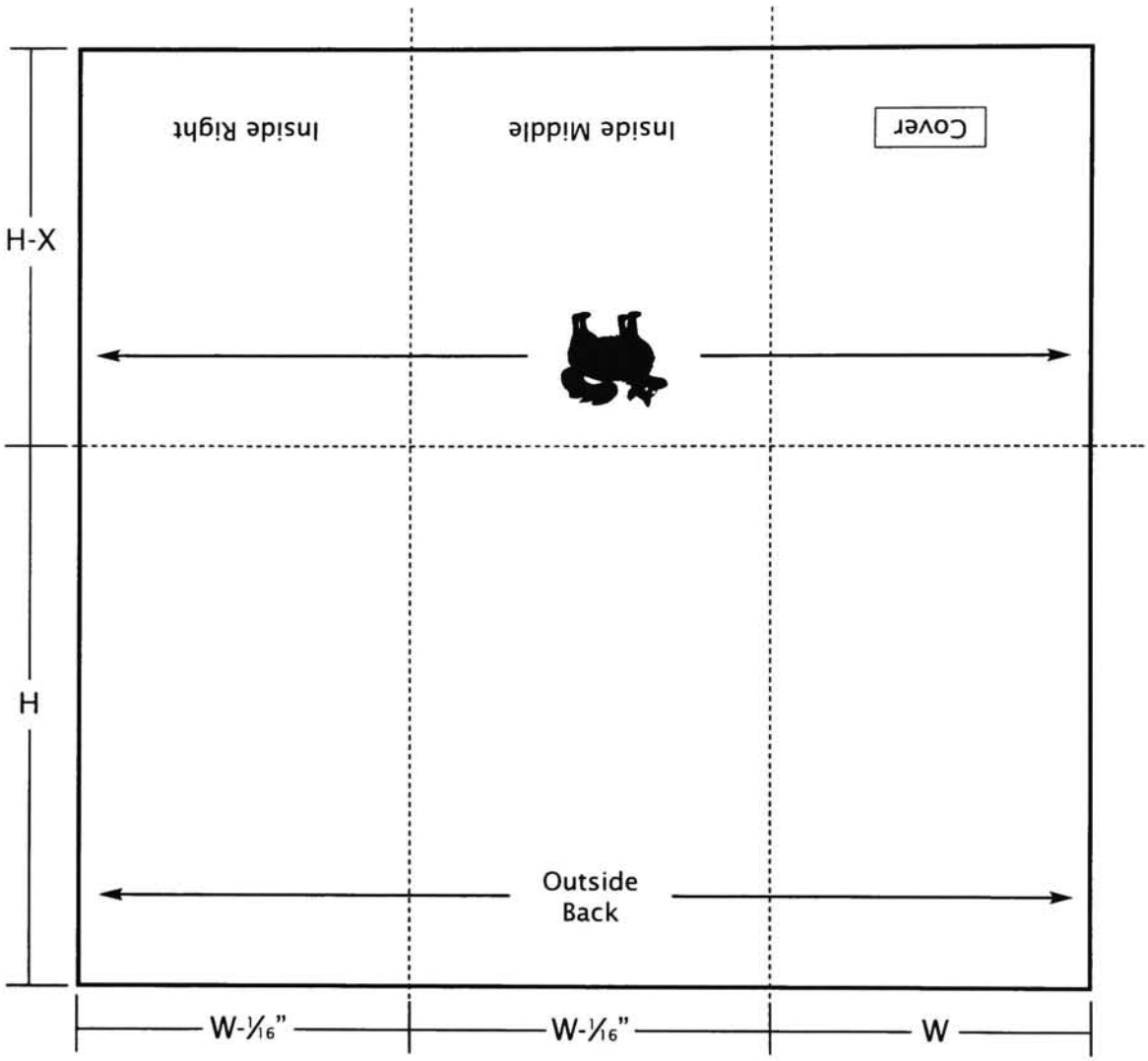
Here's an example: For a short fold, the first thing we must determine is how short the short fold will be. In this case, we'll make it 2 inches shorter than the finished height, so X=2. Now we can calculate our document height. If the finished size is 4 x 6, then 6 inches plus 4 (6-2 , or height minus X) equals a document height of ten inches. Our finished width is 4 inches, so the panels for page 1 of the digital document would be, from left, 4 inches, 3 15/16 inches and 3 15/16 inches Then for page two everything reverses, so from left the panels would measure 3 15/16 inches, 3 15/16 inches and 4 inches.

Remember: Document size and flat size must be the same, so in this case the document size would be 11 7/8 (11.875) inches wide by 10 inches high.

To modify this fold by adding more panels, just continue the W-1/16 inch measurement in the appropriate direction.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- Consult your printer about the size of the press sheet. Also ask for a diagram of how your piece will be run on the press sheet. Sometimes there is a lot of waste on the sheet, and you may be able to add another panel or two without adding to the cost of the job.
- If you are designing a self-mailing piece, this folding style could require up to 4 wafer-seals to make it mail-ready. An envelope would be more attractive and cost-effective.
- Make sure to have a folding dummy made in your specified paper. Paper weight will dramatically affect the success of this piece. Watch for bulkiness and problems in the corner joints of the folds—the printer can't do anything about this, and it will require a change in paper.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document width ahead of time. Create your document as if all panels will be the same (ex: for a 3-panel accordion with short fold with a finished size of 4 x 6, set the document size to 12 x 10). Then set crosshairs to upper left corner of document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, 4 inches). Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement ($3\frac{15}{16}$). After setting the second fold, bring the crosshairs over one last time, drag a guide for your last panel width ($3\frac{15}{16}$). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Just change your document size by entering that decimal measurement (11.875). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

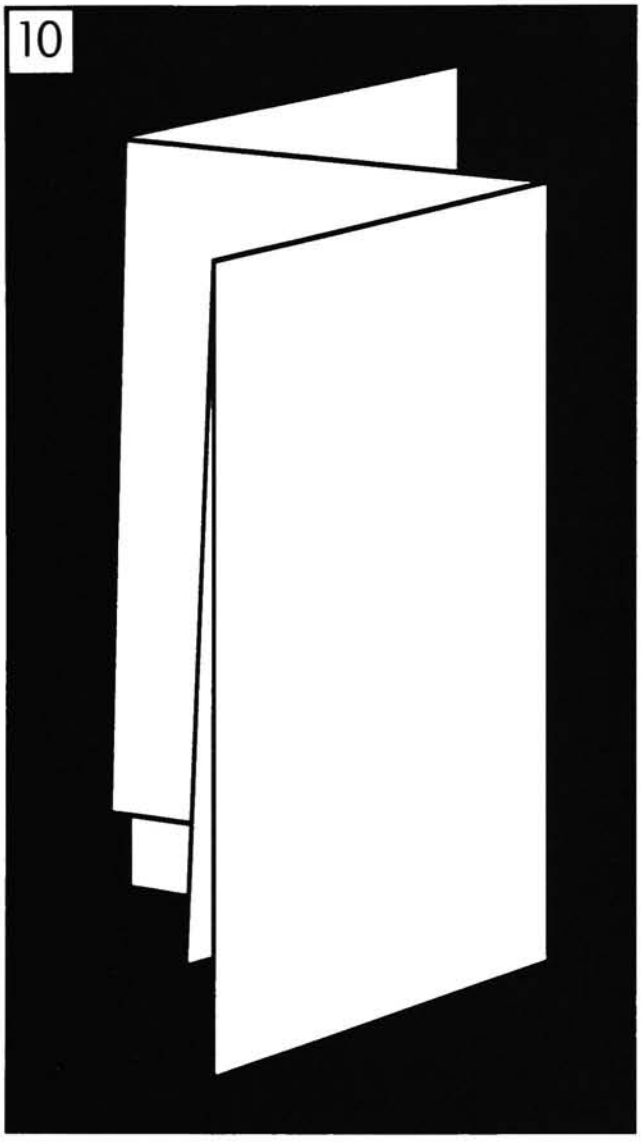
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

REVERSE ACCORDION WITH SHORT FOLD (OUTSIDE)

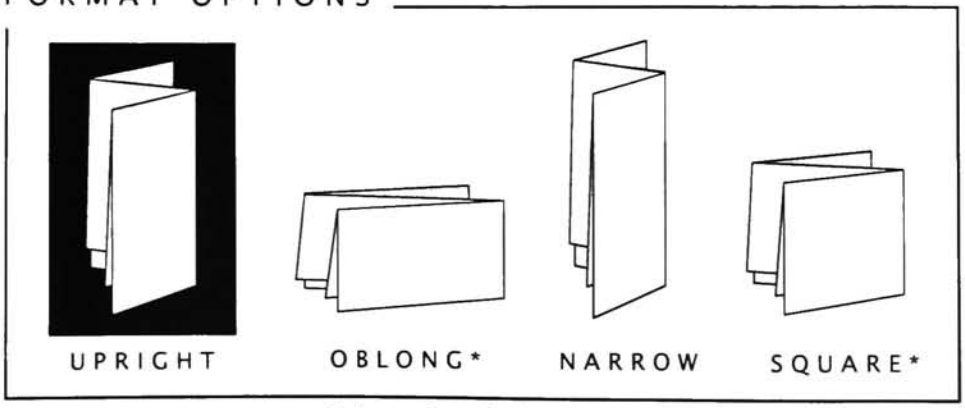


LEVEL

A level 2 fold has a moderate makeready, possible slower speed on the folding machine, and could have some special considerations.

The reverse accordion with short fold outside consists of the same "zig-zag" panel style, and is similar to the broadside reverse accordion fold because it folds in half on itself before the accordion-style folding is done. What makes this fold different is that unlike a broadside fold where panels are of equal length, in a short fold the fold-over panels are shorter than the finished height. There can be as many panels as you wish, but bear in mind the dimensions of the press sheet your printer is using, and the bulk of the paper.

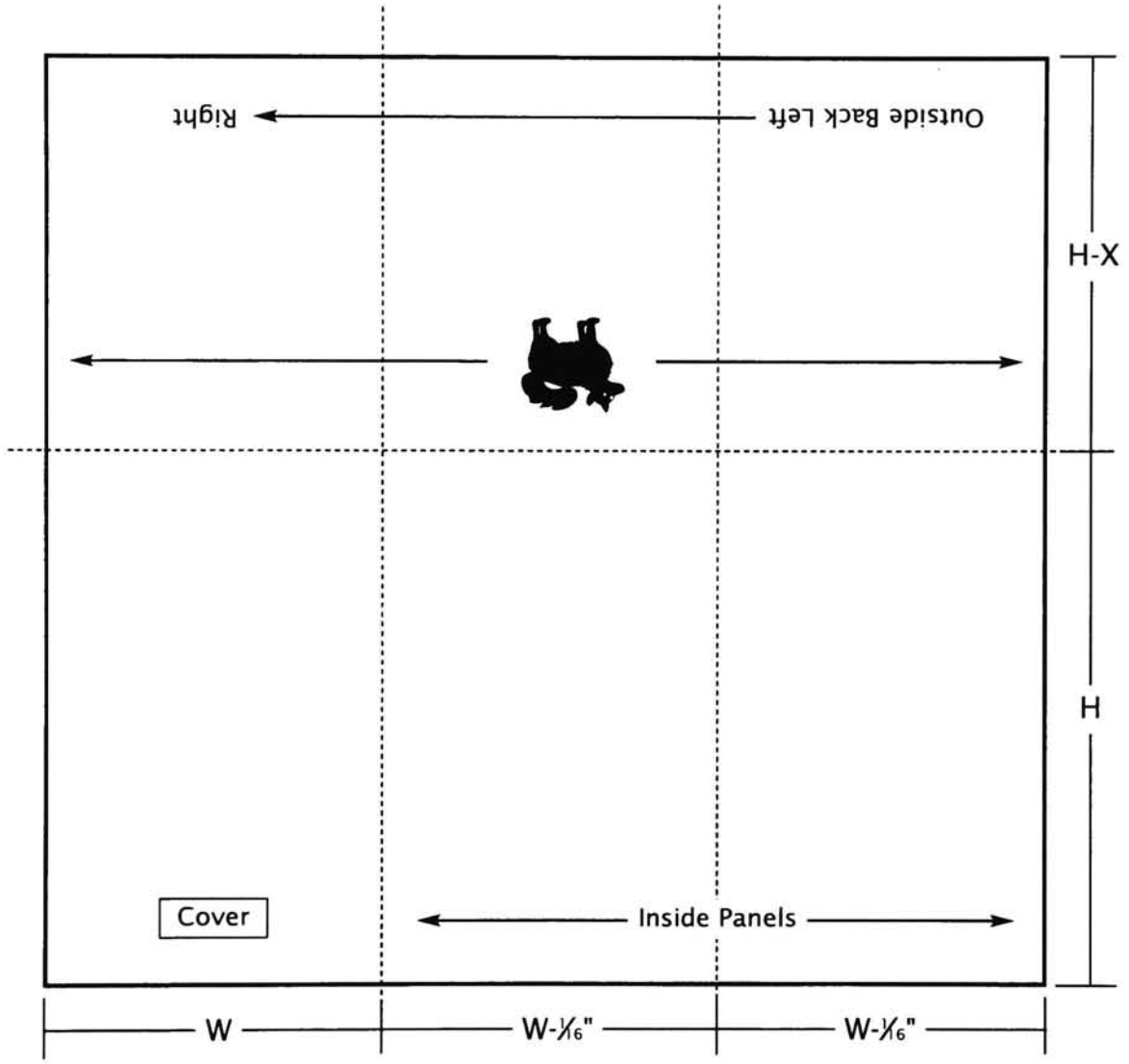
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

W: finished width
H: finished height
X: your choice
--- fold indication
upside-down

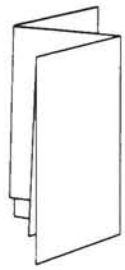


Getting started

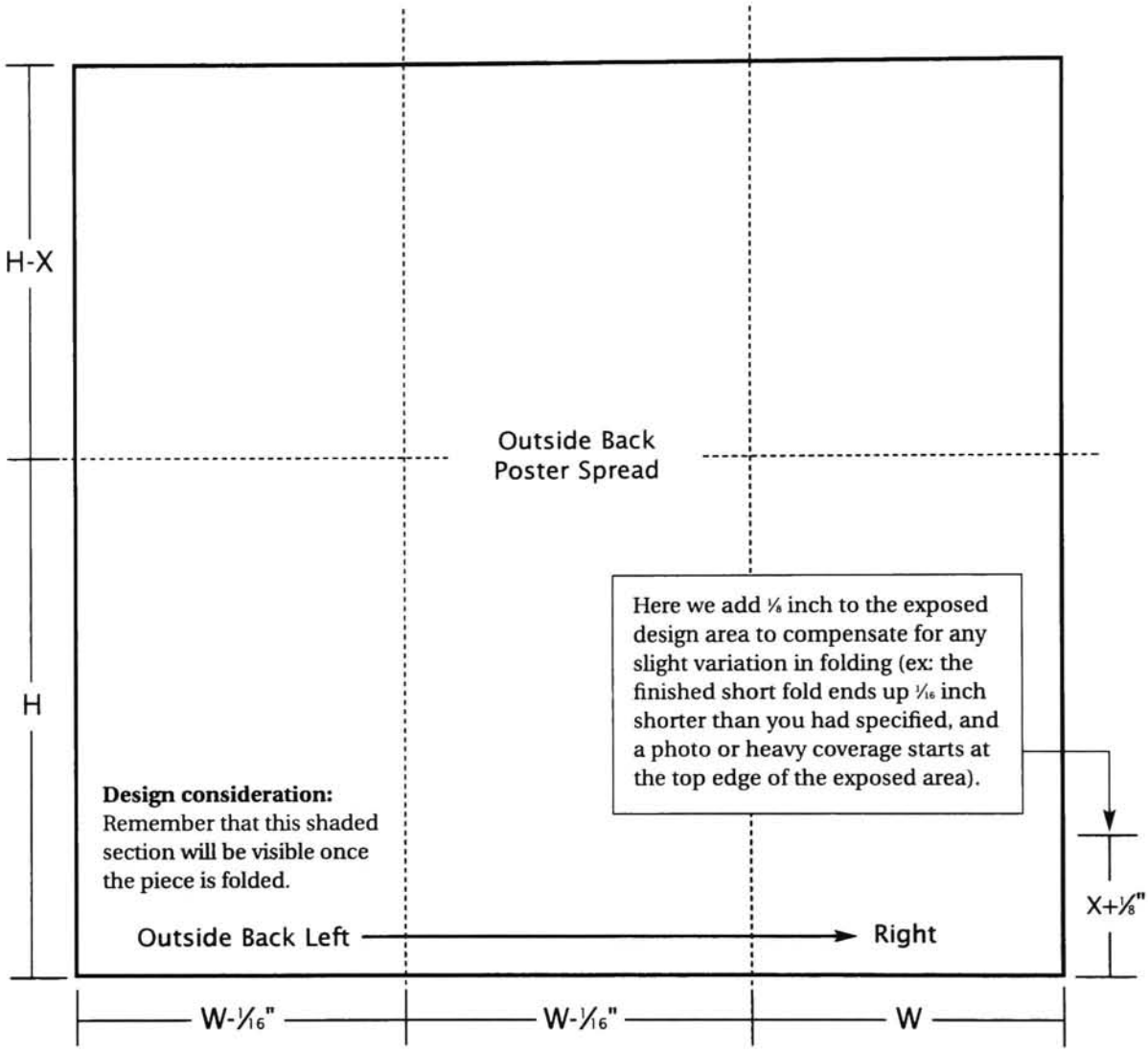
Here's an example: For a short fold, the first thing we must determine is how short the short fold will be. In this case, we'll make it 2 inches shorter than the finished height, so X=2. Now we can calculate our document height. If the finished size is 4 x 6, then 6 inches plus 4 (6-2 , or height minus X) equals a document height of ten inches. Our finished width is 4 inches, so the panels for page 1 of the digital document would be, from left, 4 inches, 3 15/16 inches and 3 15/16 inches. Then for page two everything reverses, so from left the panels would measure 3 15/16 inches, 3 15/16 inches and 4 inches.

Remember: Document size and flat size must be the same, so in this case the document size would be 11 7/8 (11.875) inches wide by 10 inches high.

To modify this fold by adding more panels, just continue the W-1/16 inch measurement in the appropriate direction.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

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A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document width ahead of time. Create your document as if all panels will be the same (ex: for a 3-panel accordion with short fold with a finished size of 4 x 6, set the document size to 12 x 10). Then set crosshairs to upper left corner of document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, 4 inches). Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement ($3\frac{15}{16}$). After setting the second fold, bring the cross-hairs over one last time, drag a guide for your last panel width ($3\frac{15}{16}$). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Just change your document size by entering that decimal measurement (11.875). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

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Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

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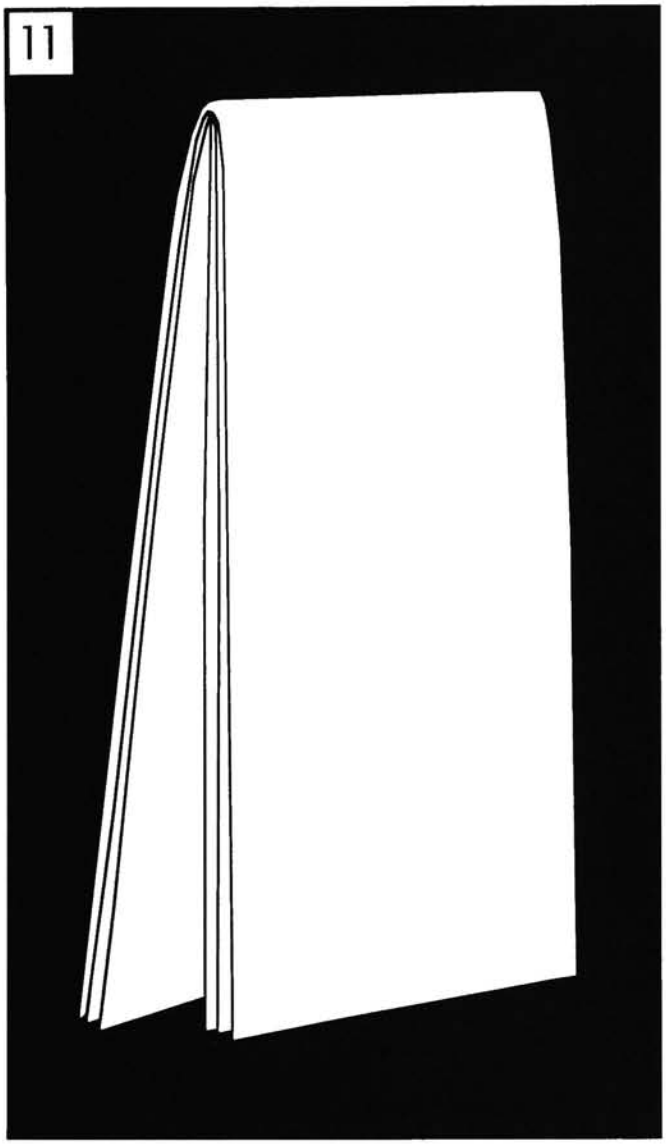
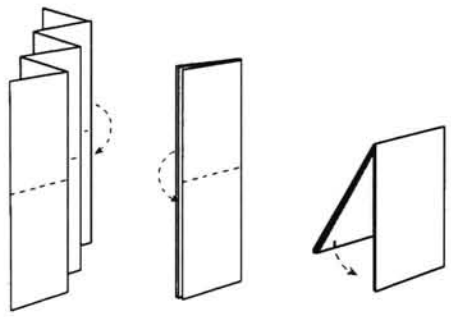
NOTES:

TOP-FOLDING REVERSE ACCORDION



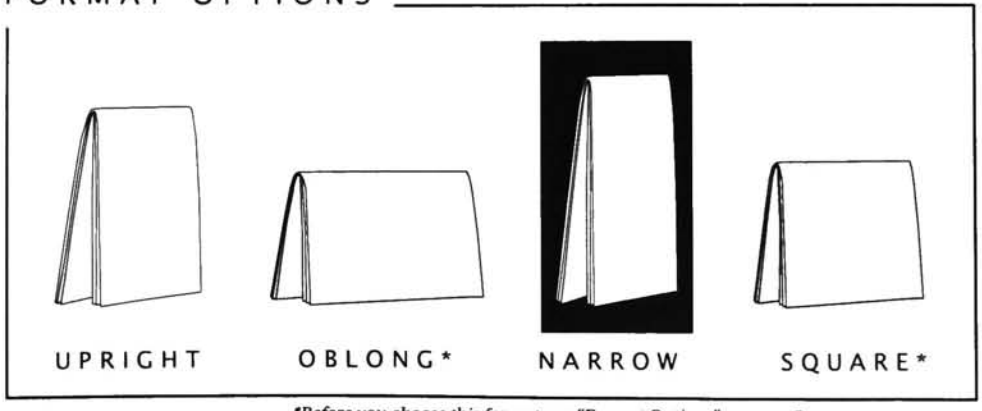


LEVEL

A level 3 fold has a long and difficult makeready, could require special machinery and low folding speed. These issues will be reflected in the cost.

The top-folding reverse accordion consists of the same "zig-zag" panel style as the standard reverse accordion, but in a taller format. When the gate folding is done, this style then folds in half onto itself. There can be as many panels as you wish, but bear in mind the dimensions of the press sheet your printer is using.

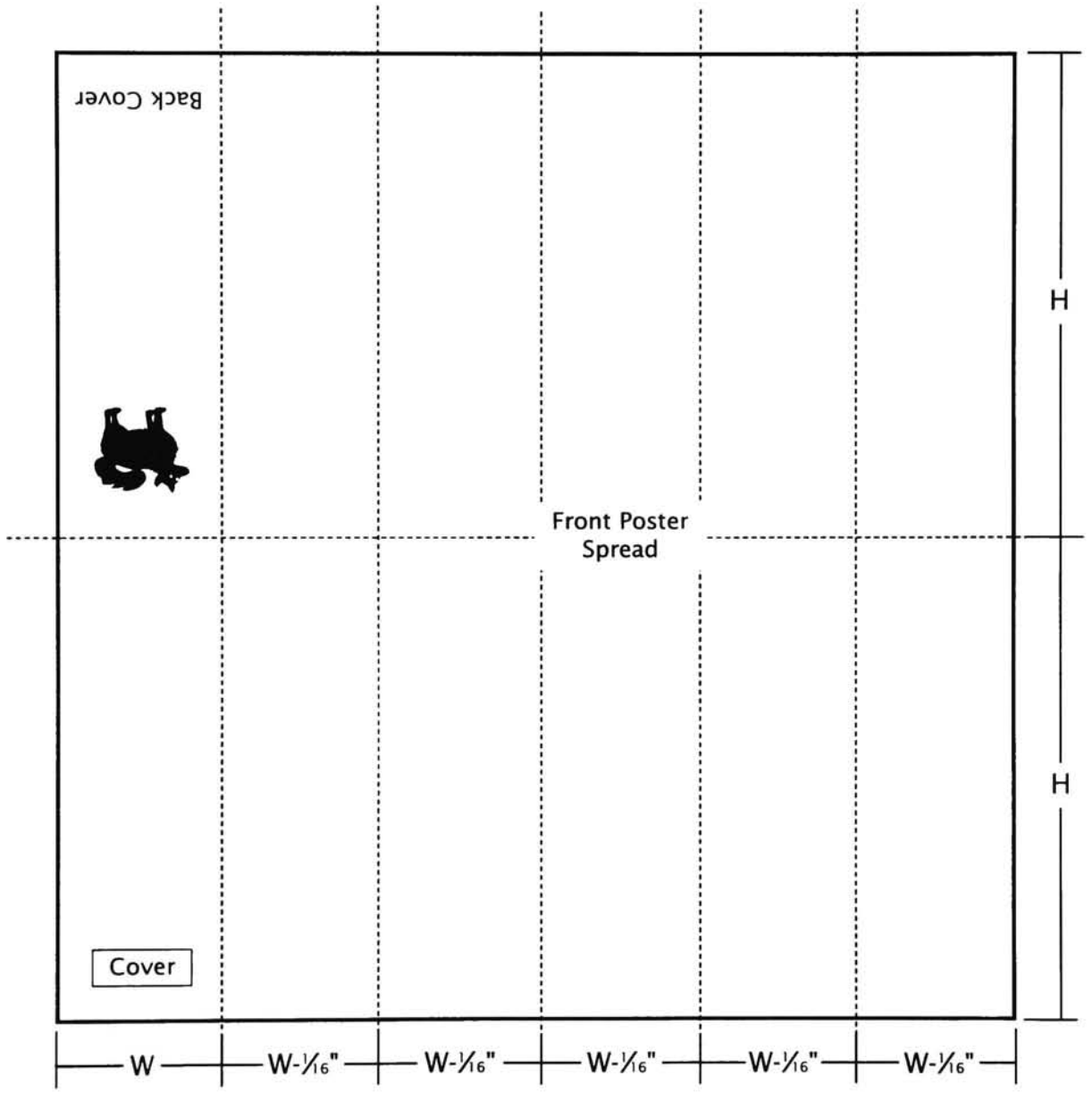
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

W: finished width
H: finished height
--- fold indication
upside-down

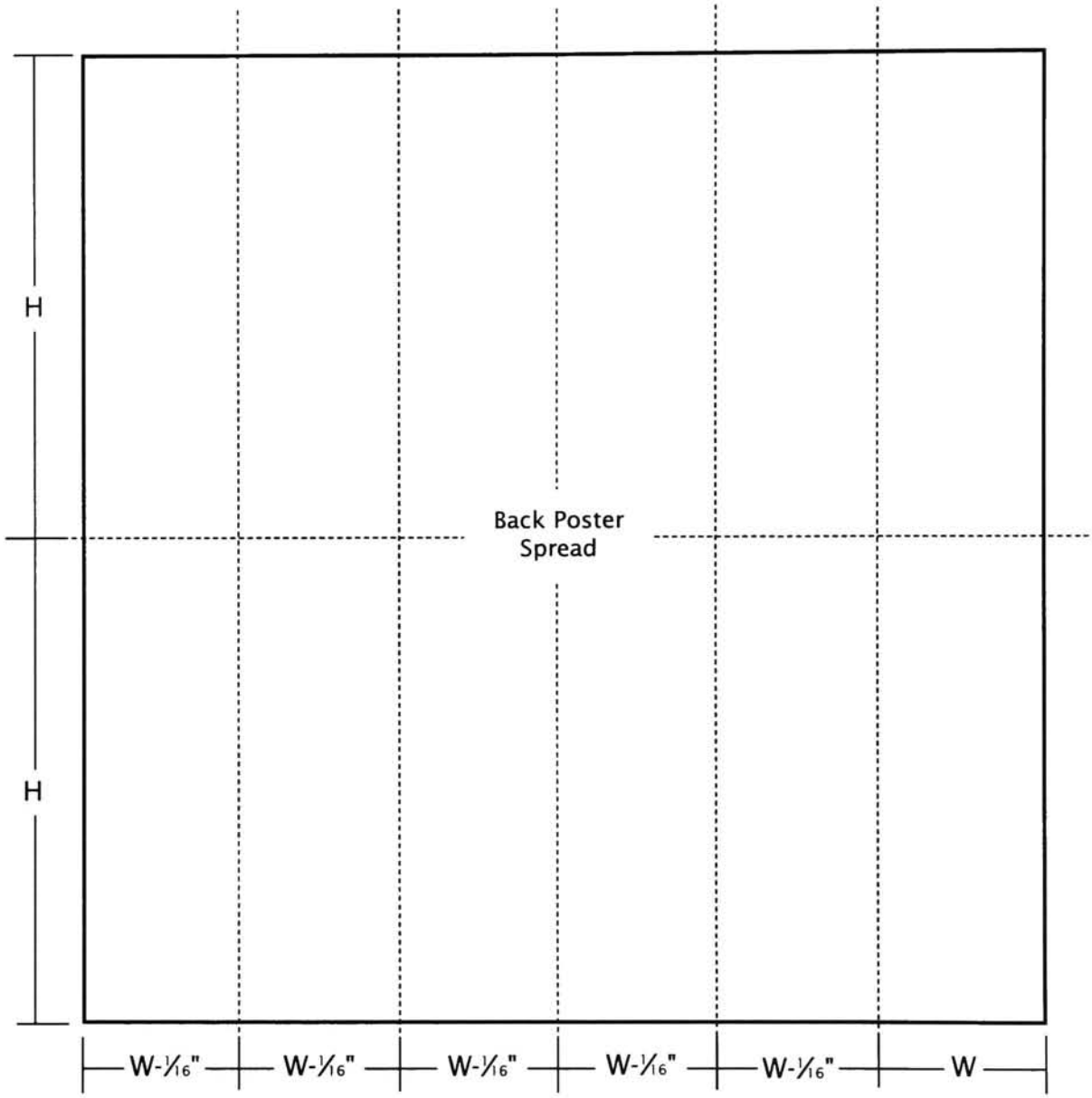


GETTING STARTED

Here's an example: If your finished size is 4 x 9, then your panels for page 1 of your digital document would be, from left, 4 inches, 3 15/16, 3 15/16, 3 15/16, 3 15/16, and 3 15/16 inches. Then for page two everything reverses, so from left the panels would measure 3 15/16 inches, 3 15/16, 3 15/16, 3 15/16, 3 15/16and 4 inches, with a height of 18 inches.

Remember: Document size and flat size must be the same, so in this case the document size would be 23 11/16 (23.687) inches wide by 18 inches high.

Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- Consult your printer about the size of the press sheet. Also ask for a diagram of how your piece will be run on the press sheet. Sometimes there is a lot of waste on the sheet, and you may be able to add another panel or two without adding to the cost of the job.
- A paper choice of any heavier than 60# text is not recommended.
- Make sure to have a folding dummy made in your specified paper.
- Be aware of your printer or bindery's minimum and maximum sheet sizes for their equipment. Top-folding accordions and any other folded pieces which open out to very large dimensions generally require special large format folders.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document width ahead of time. Create your document as if all panels will be the same (ex: for a 6-panel top-folding reverse accordion with a finished size of 4 x 9, set the document size to 24 x 18). Then set crosshairs to upper left corner of document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, 4 inches). Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement ($3^{15}/_{16}$). Keep doing this until you measure the last panel (in this example, 4 inches). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Just change your document size by entering that decimal measurement (23.687). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

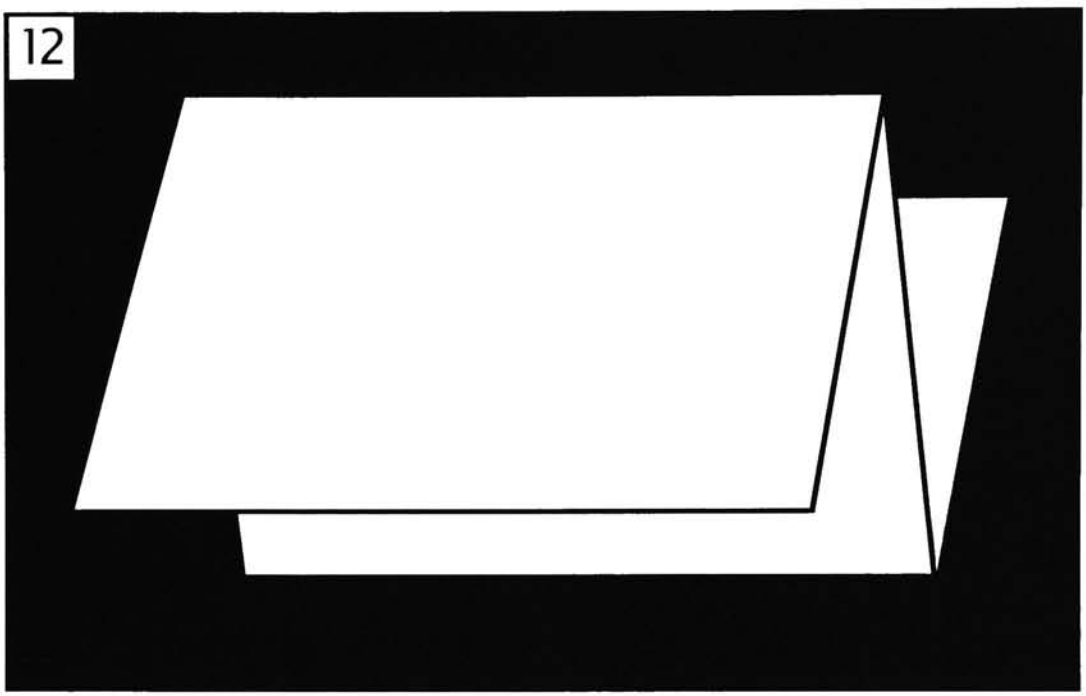
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

VERTICAL ACCORDION

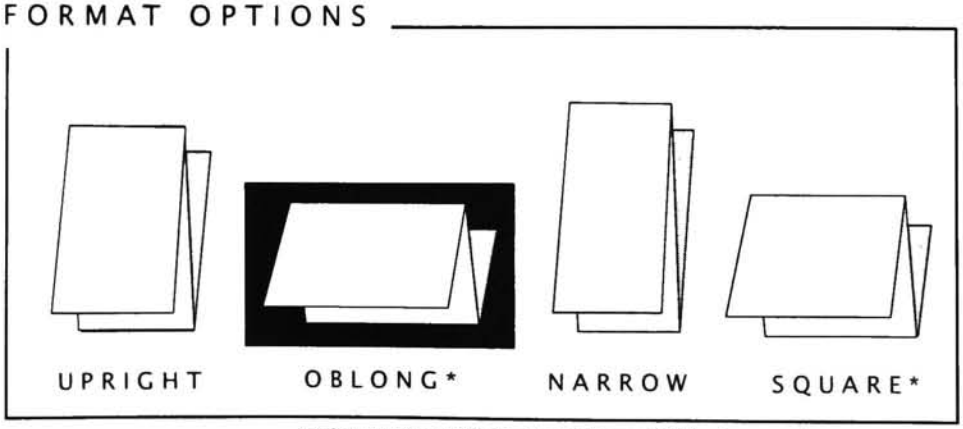


LEVEL

A level 1 fold is standard and basic, easy to set up on the folding machine and the machine can run at highest speeds.

The vertical accordion fold consists of three panels or more which "zig-zag" back and forth. In the vertical accordion fold the panels pull down instead of out to the side. As in the standard accordion, there can be as many panels as you wish, but bear in mind the dimensions of the press sheet your printer is using.

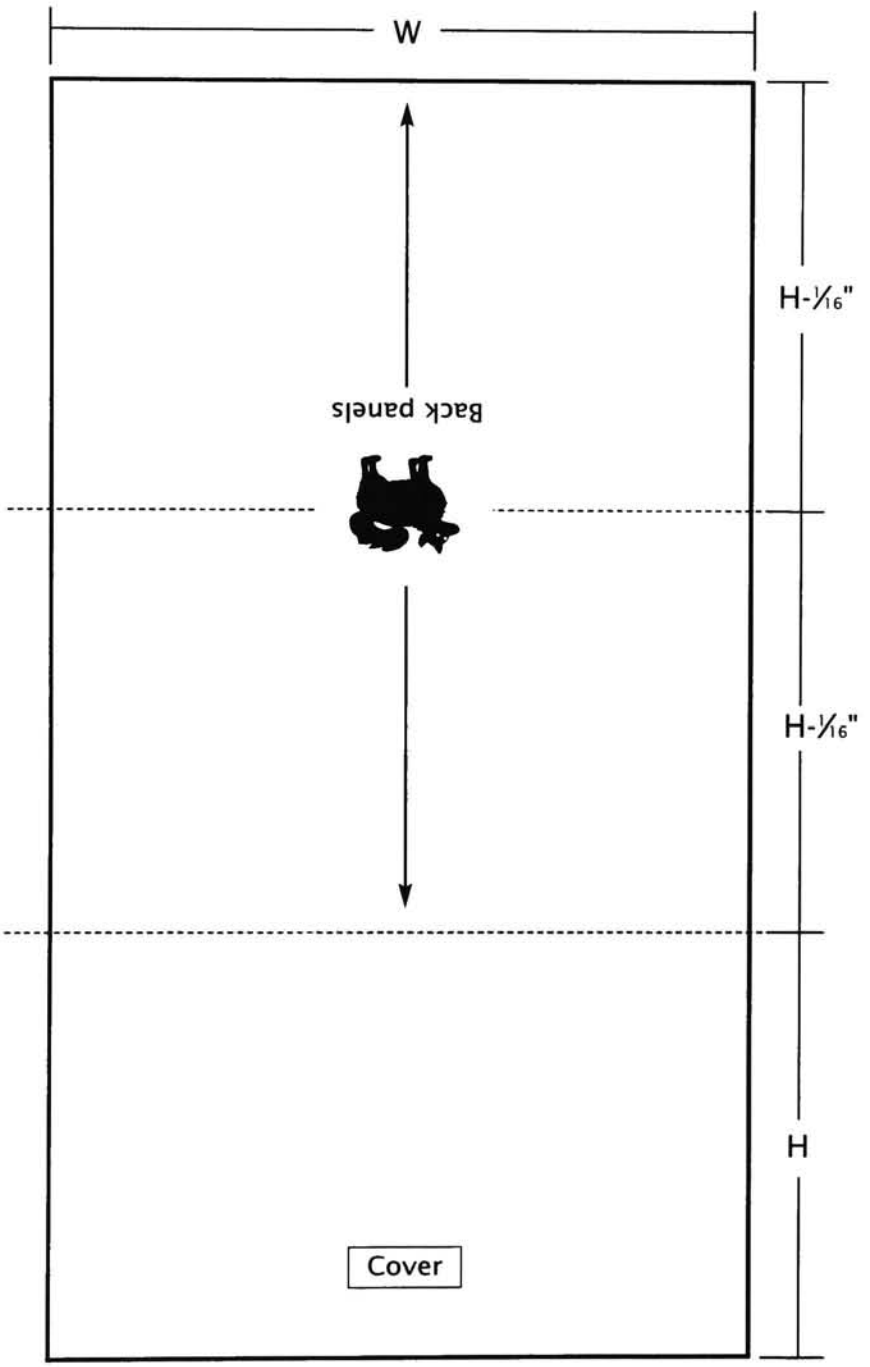
FORMAT OPTIONS



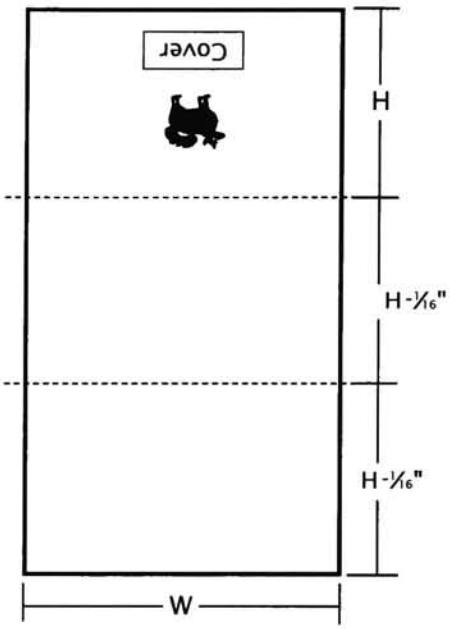
Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

Option A



Option B



There are two ways to correctly set up the first page of this document. It really just depends upon your preference. For example, if I had a really intricate cover and very little information or imagery to put on the back panels, I would set it up like option A, but if I knew that I was going to utilize the back 2 panels with a lot of imagery or text (things that I don't want to edit and change upside-down), then I would set it up like option B.

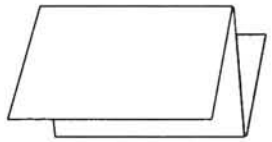
Time-saving tip for Option B: For this particular folding style, the fold placement is exactly the same for page 1 as it is for page 2. If you're creating your document in a page layout program which has a master page option, save time by setting your folds on the master page. Then, return to the document and add the second page.

GETTING STARTED

Here's an example: If your finished size is 6 x 4, then your panel height for page 1 of your digital document would be, from top (option A), 3 15/16, 3 15/16 and 4 inches. Then for page two everything flips, so from the top your panels would measure 4 inches, 3 15/16 and 3 15/16..

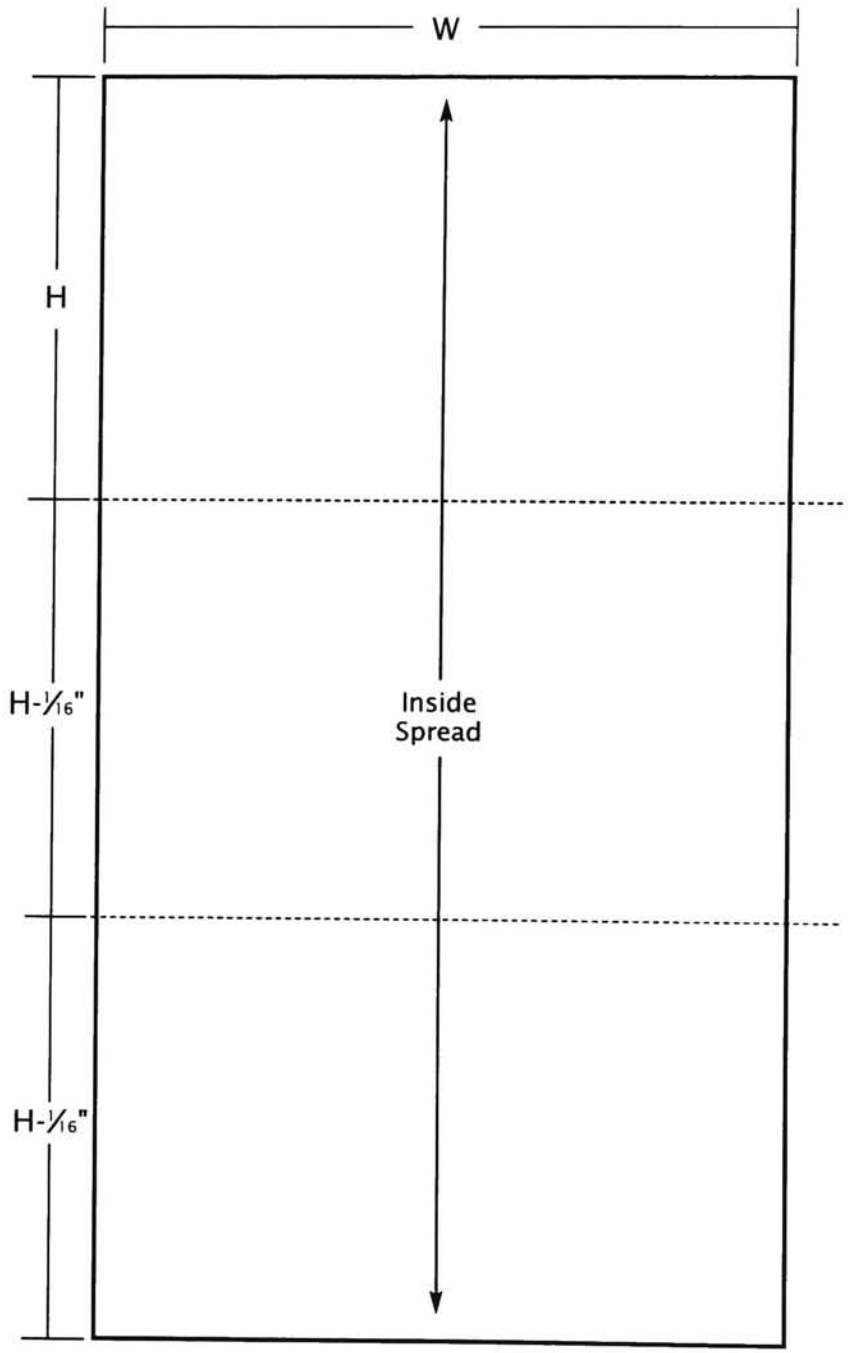
Remember: Document size and flat size must be the same so in this case the document size would be 6 wide by 11 7/8 (11.875) inches long.

To modify this fold by adding more panels, just continue the W-1/16 inch measurement in the appropriate direction.



Digital Document setup: **Page 2** (side 2)

W: finished width
H: finished height
--- fold indication



CONSIDERATIONS:

- Consult your printer about the size of the press sheet. Also ask for a diagram of how your piece will be run on the press sheet. Sometimes there is a lot of waste on the sheet, and you may be able to add another panel or two without adding to the cost of the job.
- If you are designing a long piece, make sure to have a folding sample made up from your specified paper. If the paper is too lightweight, it could turn into a sagging flimsy piece.
- For an exceptionally long piece, additional panels may be tipped-on (at an extra expense). Don't forget to consider the arm-span of your audience!
- If you are designing a self-mailing piece, this folding style could require up to 4 wafer-seals to make it mail-ready. An envelope would be more attractive and cost-effective.
- If your paper choice is any heavier than 80# text, you will want to consider scoring the piece.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document height ahead of time. Create your document as if all panels will be the same (ex: for a 3-panel vertical accordion with a finished size of 6 x 4, set the document size to 6 x 12). Then set crosshairs to upper left corner of document, pull down a guide bar from the top ruler and set it to the length of your first panel (in this example, 3 15/16 inches). Then, bring the cross-hairs down to the guide you just set (which lets you measure from zero again) and drag your guide down to the next panel measurement (3 15/16). After setting the second fold, bring the crosshairs down one last time, drag a guide for your last panel length (4). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the Y measurement, that will give you the document length you are looking for. Just change your document size by entering that decimal measurement (11.875). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

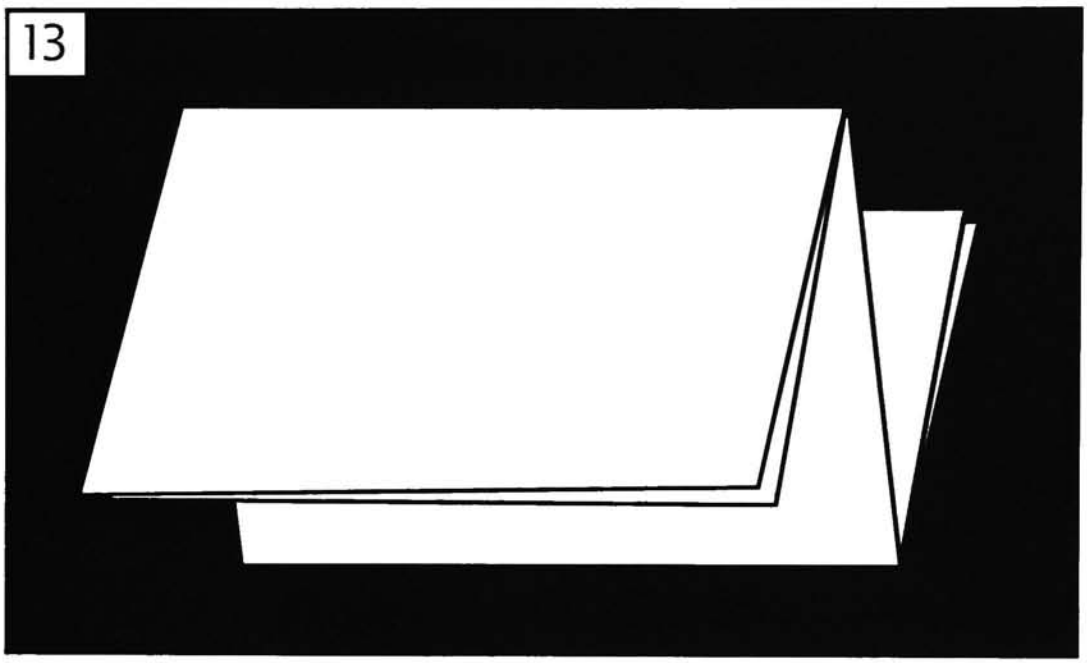
Other Related Considerations:

Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size. Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

12-PAGE VERTICAL ACCORDION

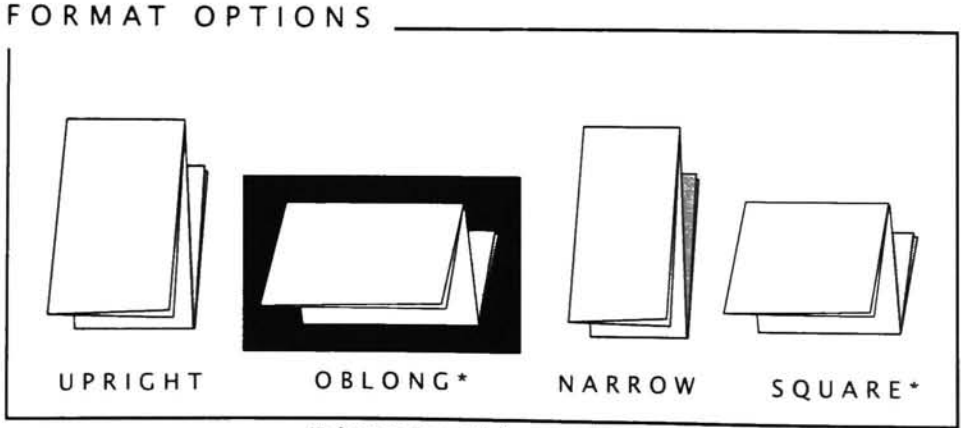


LEVEL

A level 2 fold has a moderate makeready, possible slower speed on the folding machine, and could have some special considerations.

The 12-page vertical accordion fold consists of the same "zig-zag" panel style, but the difference is that this fold has twice the area because it folds in half (vertically) on itself before the accordion-style folding is done. In the vertical accordion fold the panels pull down instead of out to the side. As in the standard vertical accordion, there can be as many panels as you wish, but bear in mind the dimensions of the press sheet your printer is using.

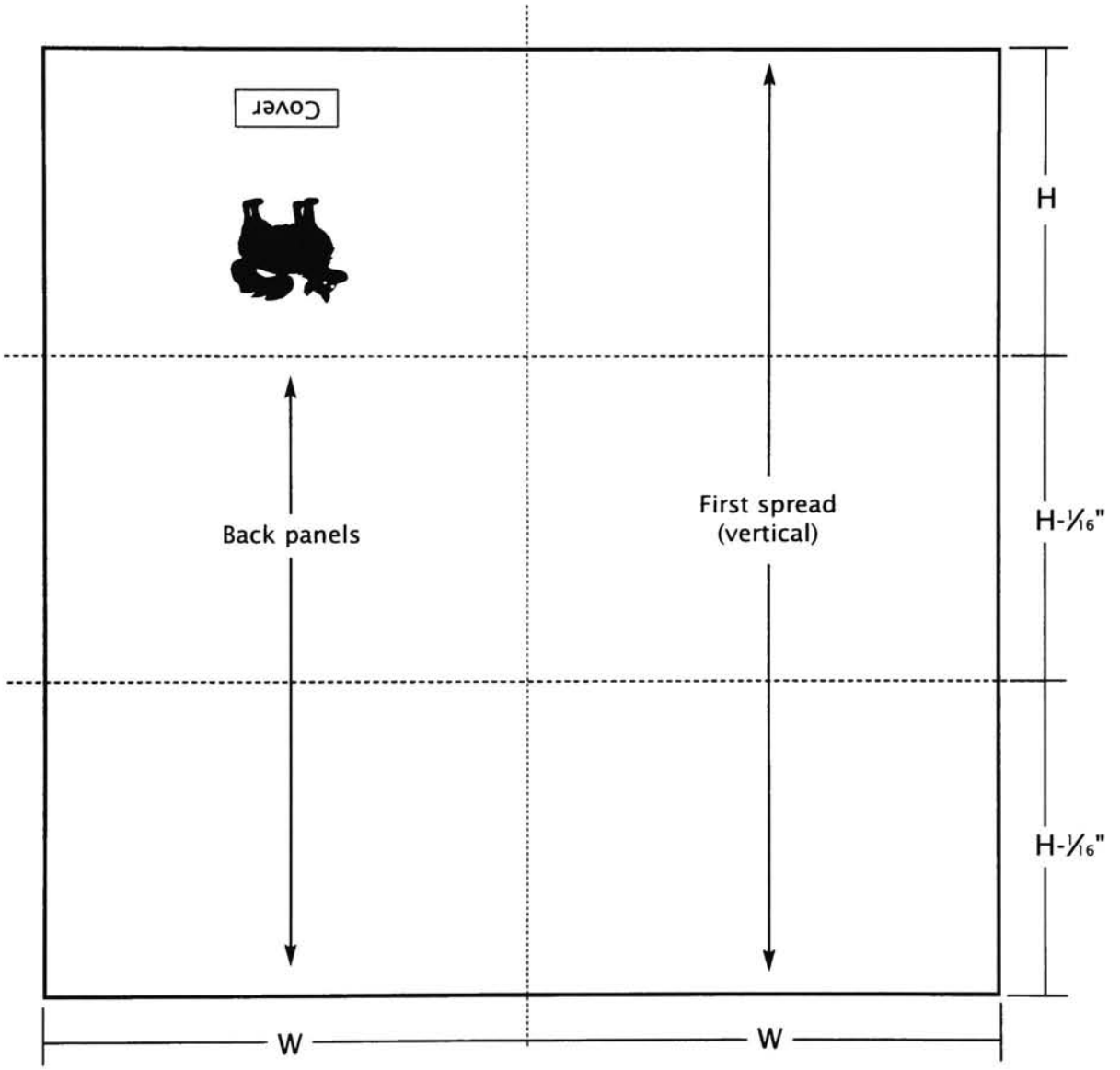
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

W: finished width
H: finished height
--- fold indication
upside-down



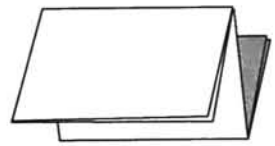
GETTING STARTED

Here's an example: If your finished size is 6 x 4, then your panel height for page 1 of your digital document would be, from top, 4 inches, 3 15/16 inches and 3 15/16 inches. Then for page two the document flips laterally and the measurements are the same as page one, 4 inches, 3 15/16 inches and 3 15/16 inches, with a document width of 12 inches (6 inches plus 6 inches).

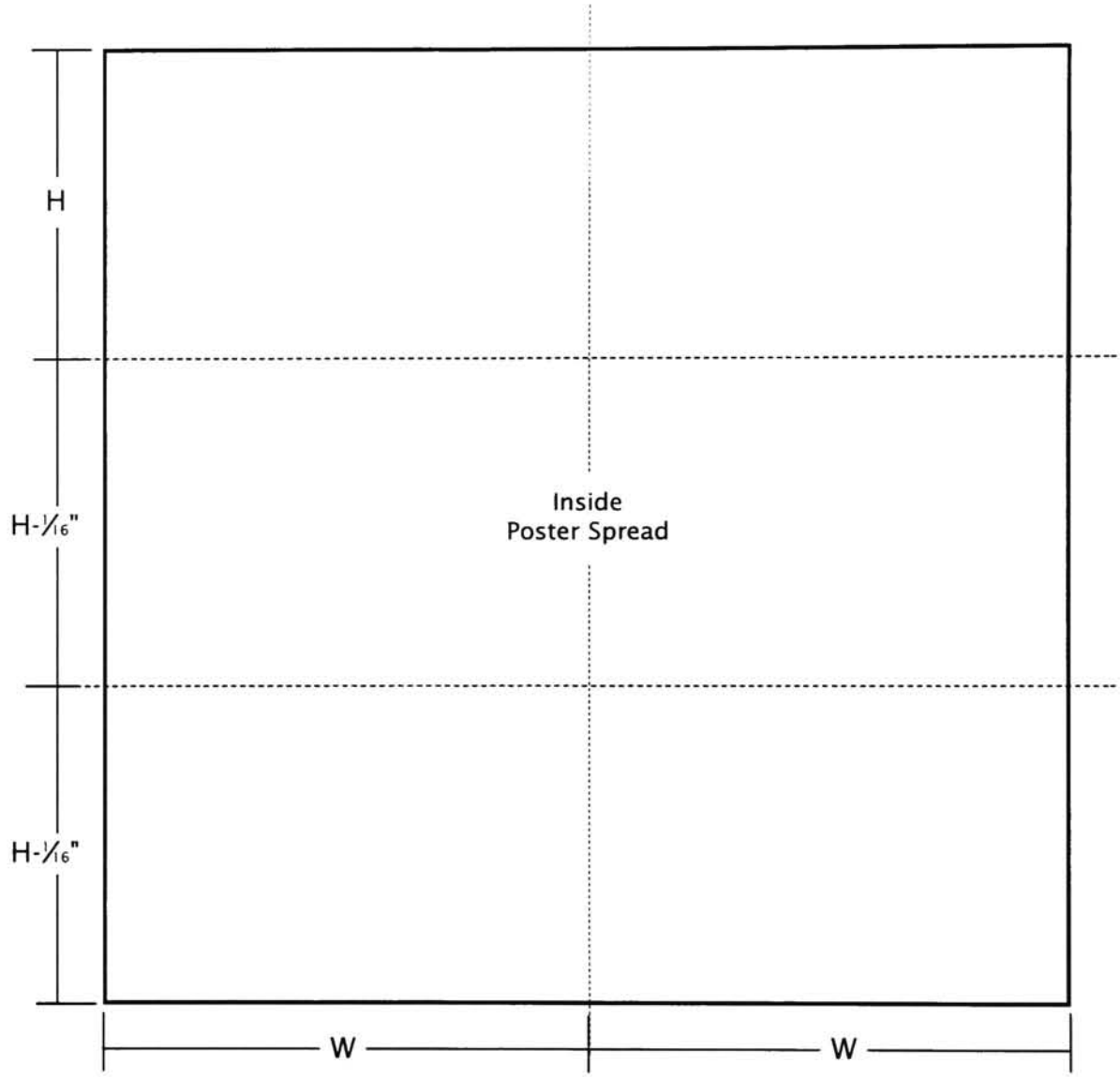
Remember: Document size and flat size must be the same, so in this case the document size would be 11 7/8 (11.875) inches wide by 12 inches high.

To modify this fold by adding more panels, just continue the H-1/16 inch measurement in the appropriate direction.

Time-saving tip: For this particular folding style, the fold placement is exactly the same for page 1 as it is for page 2. If you're creating your document in a page layout program which has a master page option, save time by setting your folds on the master page. Then, return to the document and add the second page.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- Consult your printer about the size of the press sheet. Also ask for a diagram of how your piece will be run on the press sheet. Sometimes there is a lot of waste on the sheet, and you may be able to add another panel or two without adding to the cost of the job.
- If you are designing a self-mailing piece, this folding style could require up to 4 wafer-seals to make it mail-ready. An envelope would be more attractive and cost-effective.
- Make sure to have a folding dummy made in your specified paper. Paper weight will dramatically affect the success of this piece. Watch for bulkiness and problems in the corner joints of the folds—the printer can't do anything about this, and it will require a change in paper.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document height ahead of time. Create your document as if all panels will be the same (ex: for a 12-page vertical accordion with a finished size of 6 x 4, set the document size to 12 x 12). Then set crosshairs to upper left corner of document, pull down a guide bar from the top ruler and set it to the length of your first panel (in this example, 3 15/16 inches). Then, bring the cross-hairs down to the guide you just set (which lets you measure from zero again) and drag your guide down to the next panel measurement (3 15/16). After setting the second fold, bring the crosshairs down one last time, drag a guide for your last panel length (4). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the Y measurement, that will give you the document length you are looking for. Just change your document size by entering that decimal measurement (11.875). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

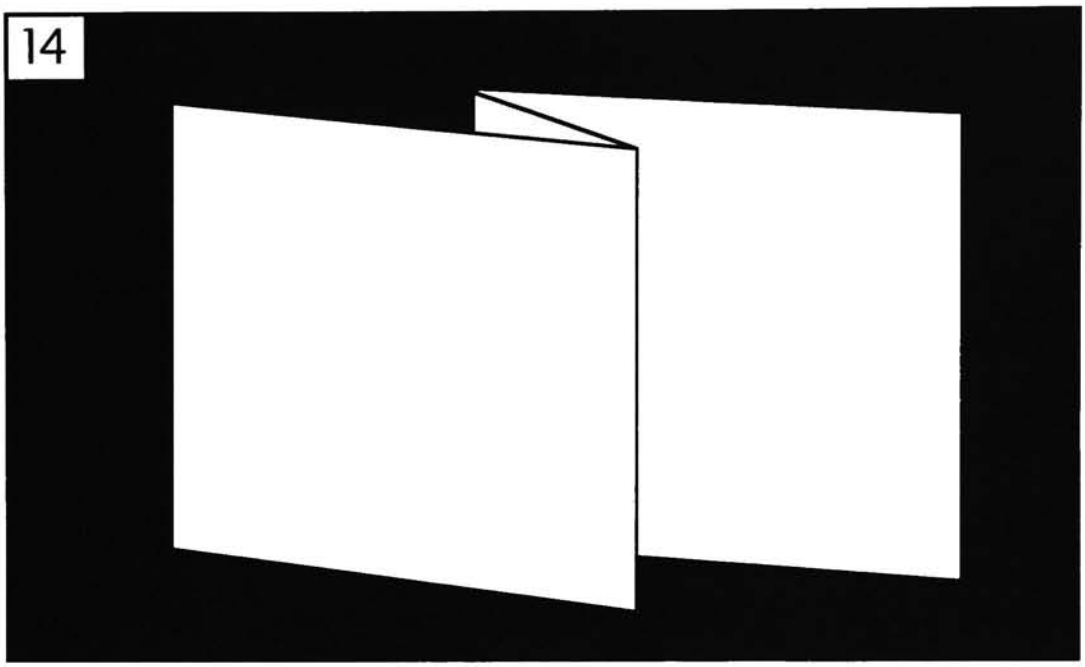
Other Related Considerations:

Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size. Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

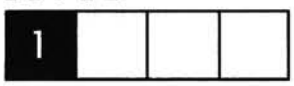
Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

HALF-ACCORDION



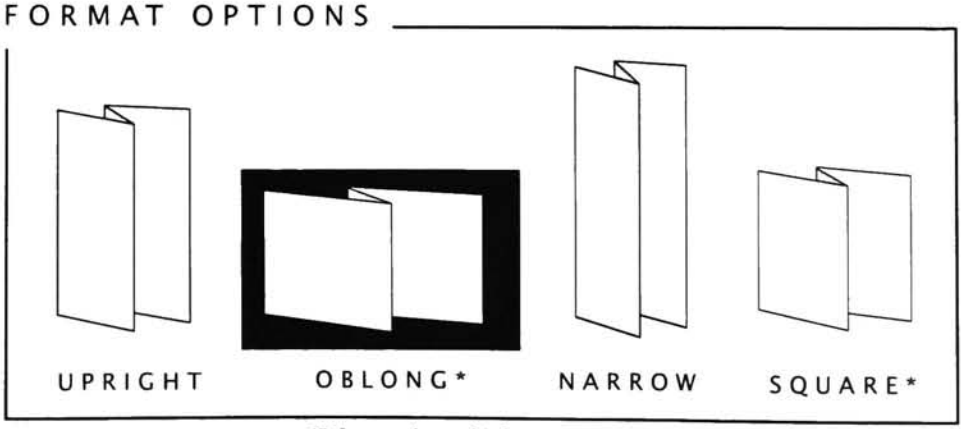
LEVEL



A level 1 fold is standard and basic, easy to set up on the folding machine and the machine can run at highest speeds.

The half-accordion fold is an uncommon folding style which "zig-zags" back and forth in the tradition of the accordion family of folds, but what makes it unique is the unequal measure of the panels. Characteristically, it has three panels— two wide, with one narrow panel in between.

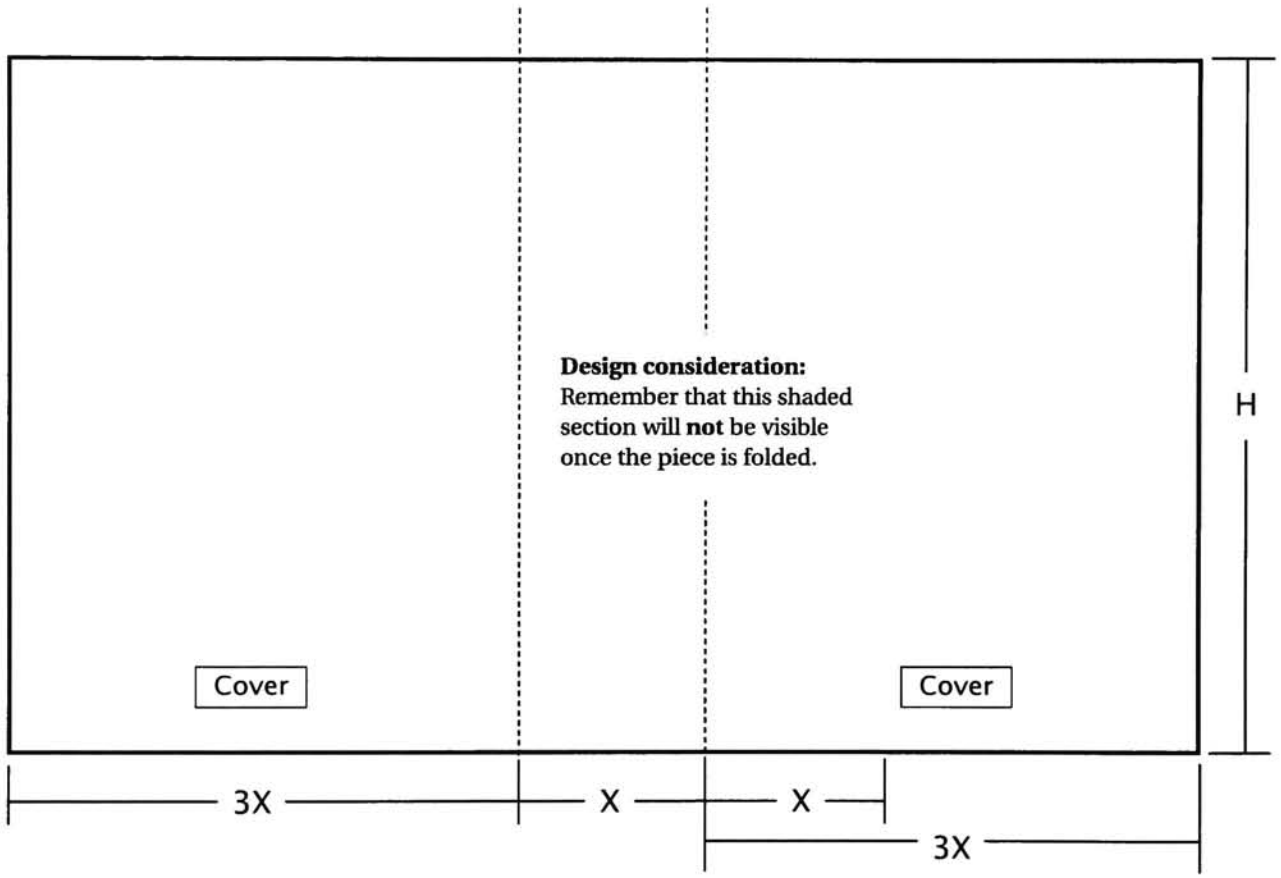
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

W:	finished width
H:	finished height
X:	your choice
---	fold indication

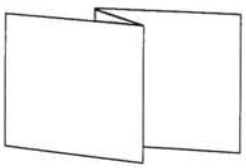


GETTING STARTED

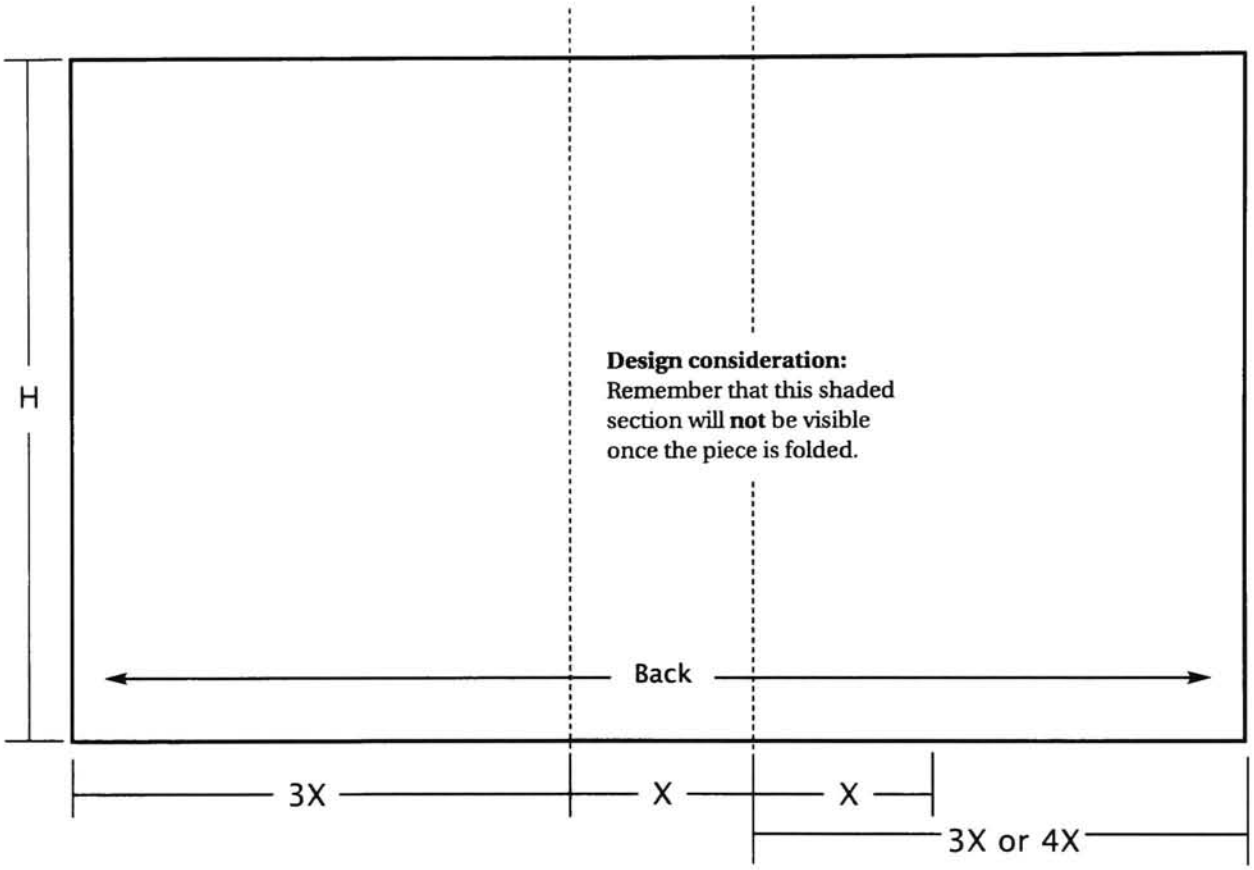
Here's an example: To understand how to set up this folding style, the easiest thing to do is to determine the width of the center panel, and work from there. Let's say X equals 1 ½ inches. So, if X equals 1 ½ inches, then 3X (X multiplied by 3) equals 4 ½ inches. Your panel width would then measure, from left, 4 ½ inches, 1 ½ inches and 4 ½ inches. Page two of your digital document would measure exactly the same. Closely examining the diagram, you'll observe that when folded, the center panel folds over onto the right panel, so to calculate the finished width, it's 3X (4 ½ inches) plus 2X (3X (4 ½ inches) minus the width of the center panel, 1 ½ inches), which equals 3 inches, for a finished width of 7 ½ inches.

Remember: Document size and flat size must be the same, so in this case the document size would be 10 ½ inches wide by 5 inches high.

Time-saving tip: For this particular folding style, the fold placement is exactly the same for page 1 as it is for page 2. If you're creating your document in a page layout program which has a master page option, save time by setting your folds on the master page. Then, return to the document and add the second page.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- This folding style does not meet postal machine standards for self-mailing. It will require an envelope.
- Ask your printer about scoring the piece for a clean, flat fold.
- The narrow, middle panel will have a minimum width. Check with your printer or bindery. Generally, printers and binderies do not like to push the limits of their equipment by running it at its minimum or maximum. If the machine's minimum is wider than you had planned, remember that anything can be hand folded, if you're willing to pay for it.
- Cover weight stock is recommended to give this fold strength and shape. When selecting a paper weight, have your paper representative or printer supply you with a dummy in the selected stock. If the paper is too rigid or thick, it may not lay flat enough when folded.
- If you are planning a wide and short piece, try to maintain a 3:1 size ratio (an example would be 12 inches wide by 4 inches high). Otherwise, a very wide and very short piece will cause problems on the folding machinery.

A Tip for Measuring Panels:

For the half-accordion style, the smartest thing to do would be to decide the dimensions of your panels ahead of time. Calculate the document width and height and create your document. Set the crosshairs to upper left corner of the document, pull a guide bar from the left ruler and set it to the measurement of your first panel. Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement . After setting the second fold, bring the crosshairs over one last time, drag a guide for your last panel width. If you've done it right, your last guide will come to the exact edge of the document. Repeat for page two. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

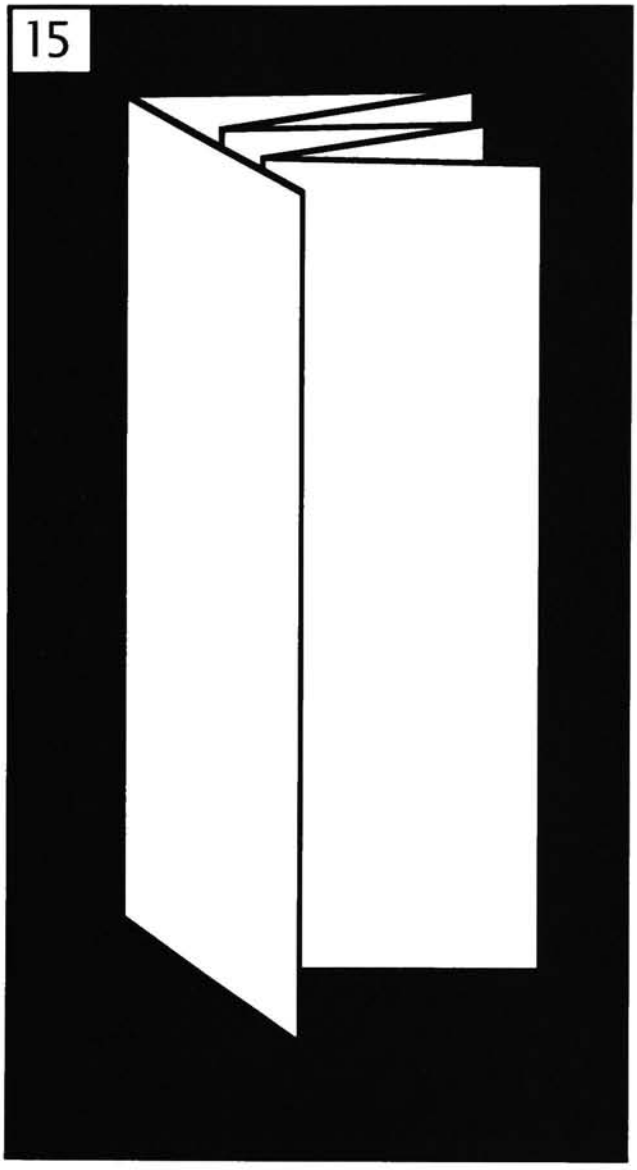
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

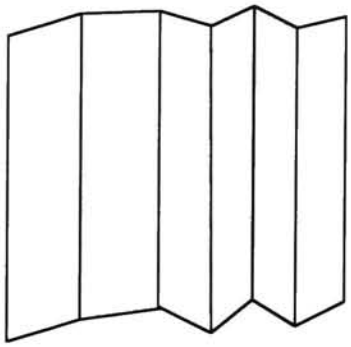
Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

CLOSED ACCORDION



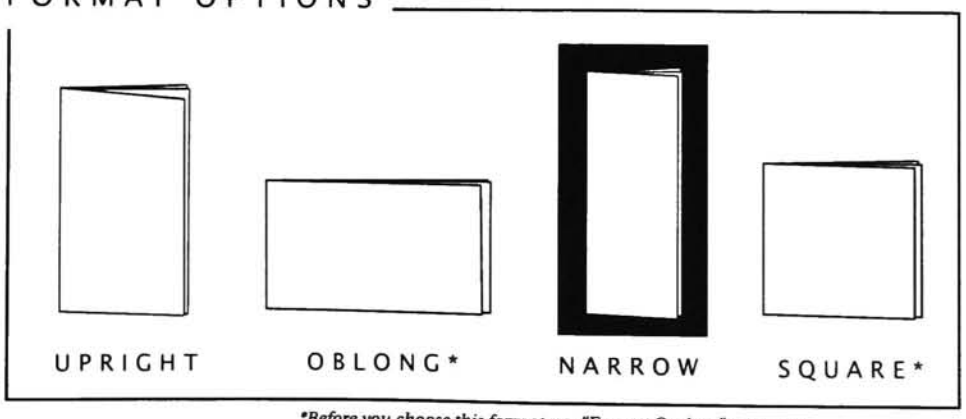


LEVEL

A level 3 fold has a long and difficult makeready, could require special machinery and low folding speed. These issues will be reflected in the cost.

The closed accordion fold is especially exciting because it combines the accordion folding style with the four page single parallel fold. Remember that the lead panel of the accordion fold opens to the left like a greeting card.

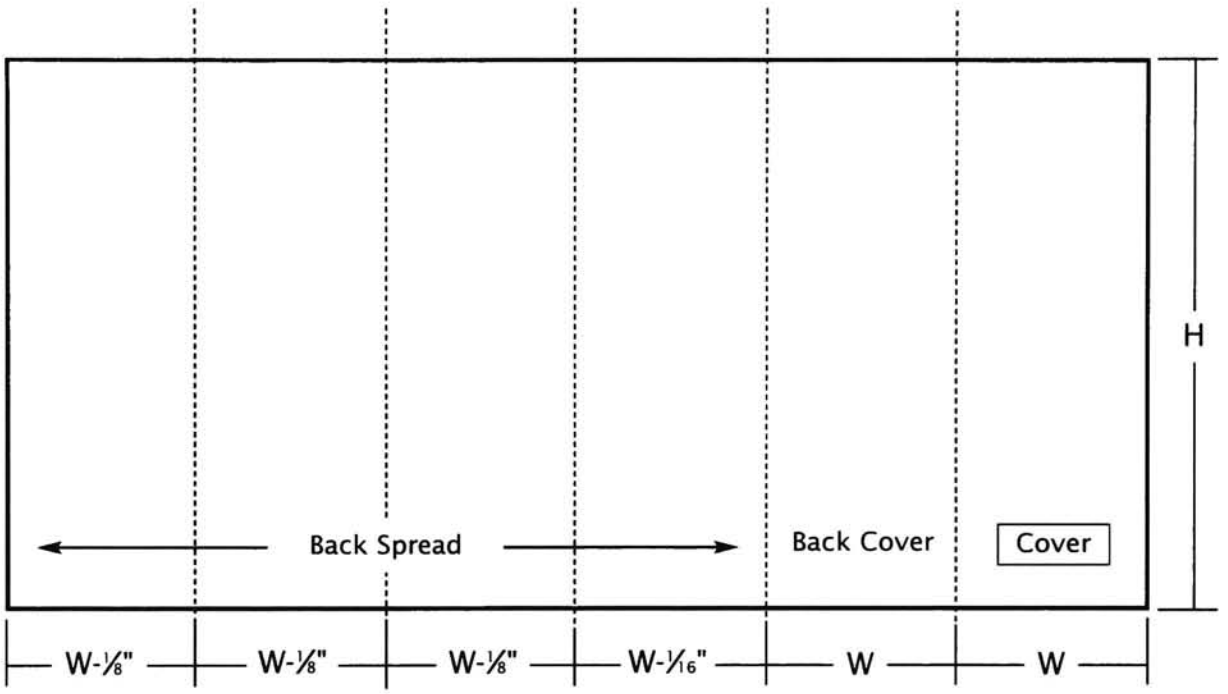
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

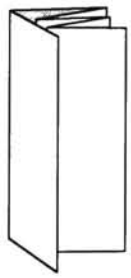
W: finished width
H: finished height
--- fold indication



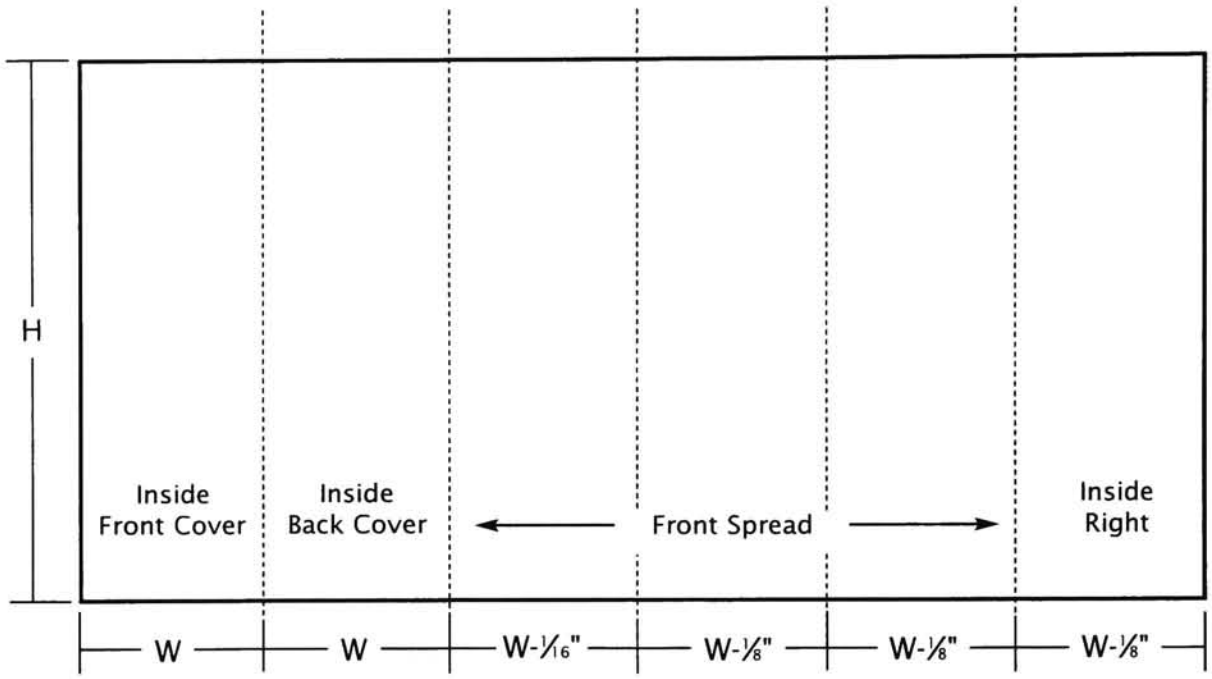
GETTING STARTED

Here's an example: If your finished size is 4 x 6, then your panel width for page 1 of your digital document would be, from left, 3 ⅞ inches, 3 ⅞, 3 ⅞, 3 15/16, 4 inches and 4 inches. Then for page two everything reverses so, from left your panels would measure 4 inches, 4, 3 15/16, 3 ⅞, 3 ⅞, and 3 ⅞, with a document height of 6 inches.

Remember: Document size and flat size must be the same, so in this case the document size would be 23 9/16 (23.562) inches wide by 6 inches high.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- This is an unusual fold, so make sure that you send a folded dummy to your printer in the beginning stages of the job so they may familiarize themselves with it.
- If you are designing for a self-mailing piece, this style will require a wafer seal.
- Be aware of your printer or bindery's minimum and maximum sheet sizes for their equipment.
- If your paper choice is any heavier than 80# text, you will want to consider scoring the piece. Ask your printer for a recommendation.
- Make sure to have a folding dummy made in your specified paper. Watch for bulkiness and consider overall weight of the piece (for postal requirements).

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document width ahead of time. Create your document as if all panels will be the same (ex: for a 6-panel closed accordion with a finished size of 4 x 6, set the document size to 24 x 6). Then set crosshairs to upper left corner of document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, 3 ⅞ inches). Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement (3 ⅞). Keep doing this until you measure the last panel (in this example, 4 inches). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your cross-hairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Just change your document size by entering that decimal measurement (23.562). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

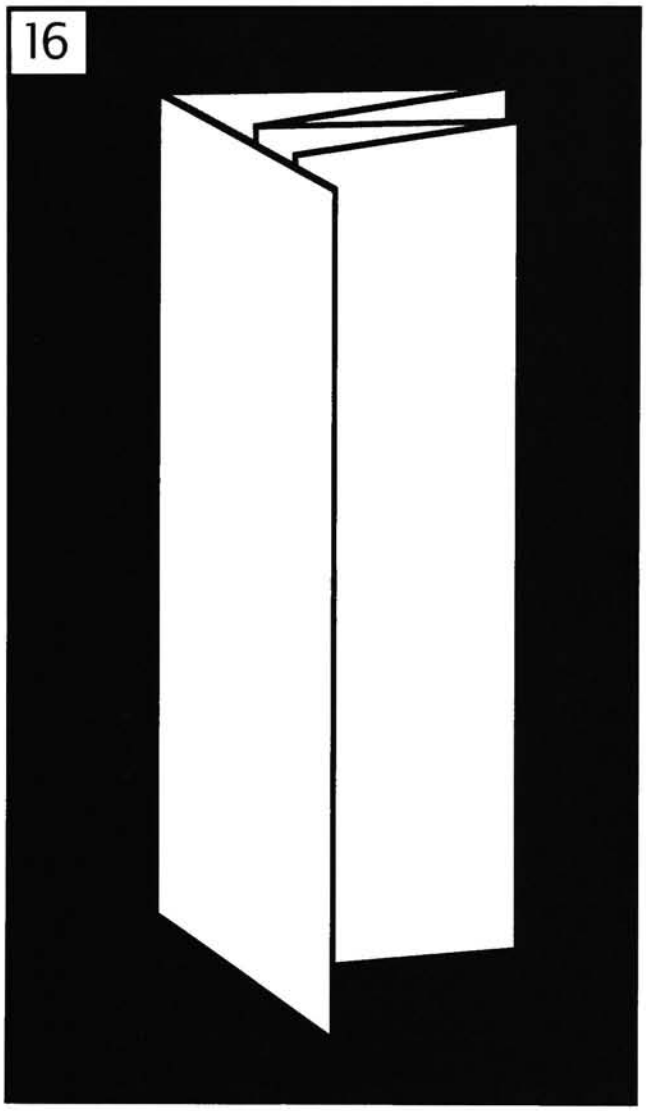
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

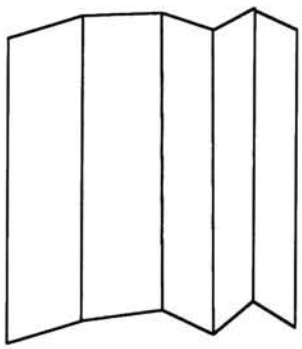
Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

CLOSED REVERSE ACCORDION



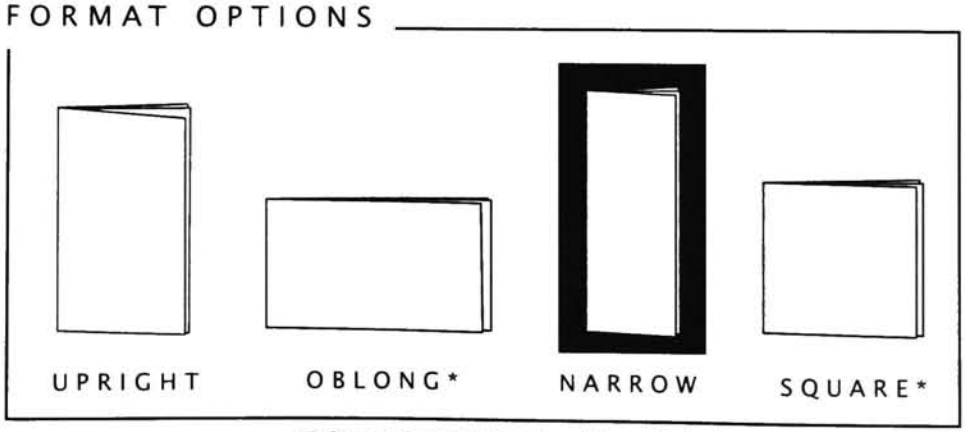


LEVEL

A level 3 fold has a long and difficult makeready, could require special machinery and low folding speed. These issues will be reflected in the cost.

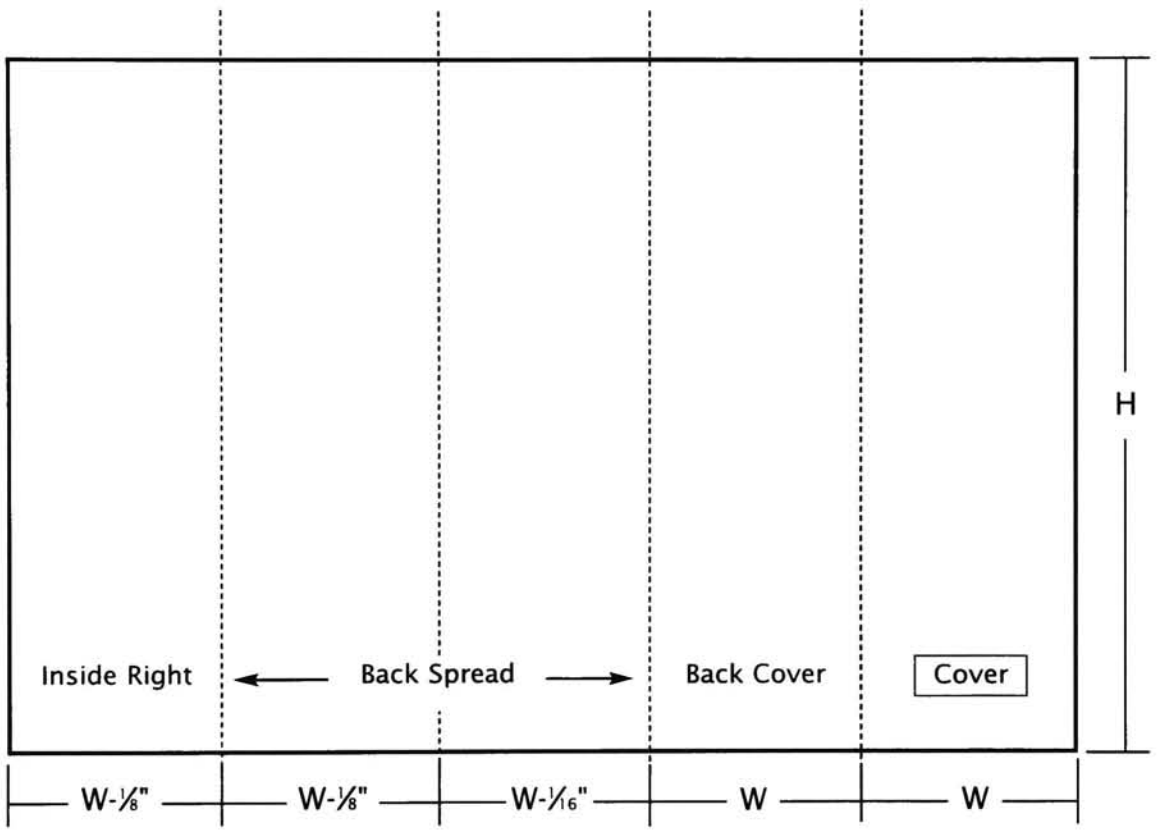
The closed reverse accordion fold is especially exciting because it combines the reverse accordion folding style with the four page single parallel fold. Remember that the lead panel of the reverse accordion hinges on the right, hence opening from the left.

FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

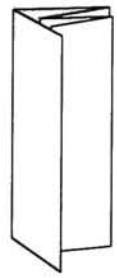


GETTING STARTED

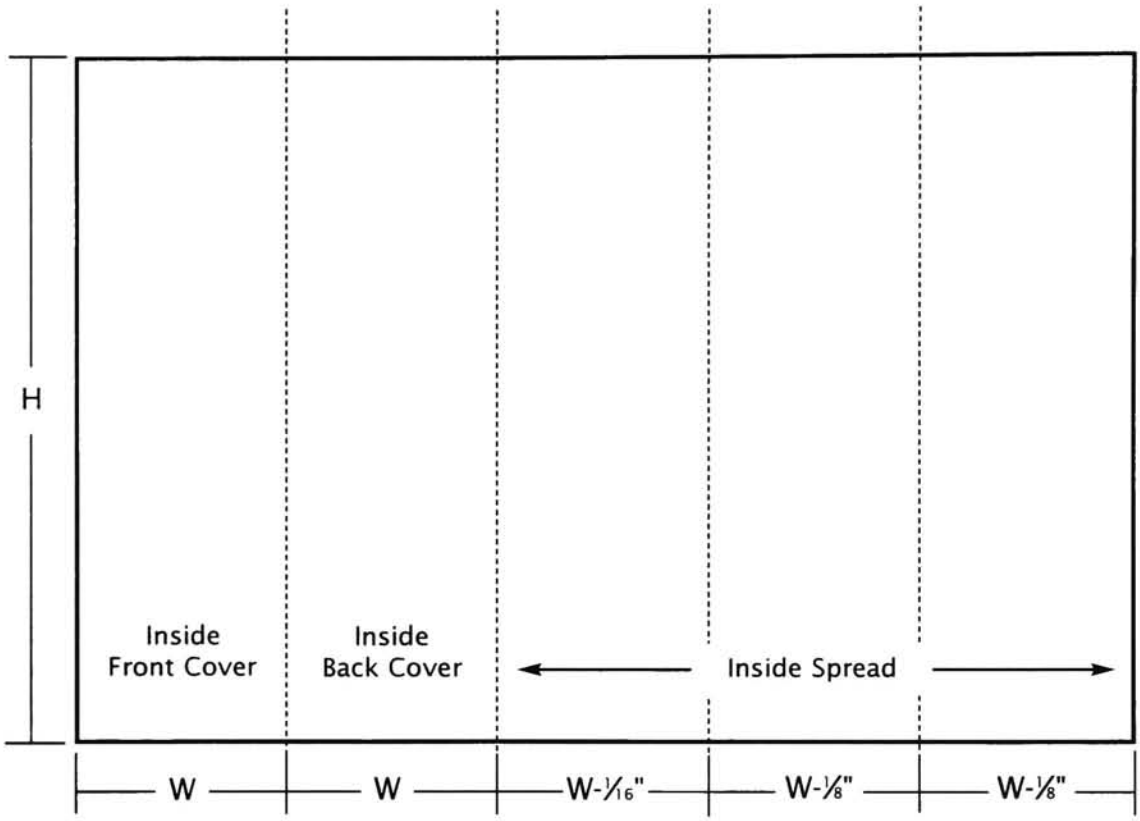
Here's an example: If your finished size is 4 x 6, then your panel width for page 1 of your digital document would be, from left, 3 ⅞ inches, 3 ⅞, 3 15/16, 4 inches and 4 inches. Then for page two everything reverses so, from left your panels would measure 4 inches, 4, 3 15/16, 3 ⅞, and 3 ⅞, with a document height of 6 inches.

Remember: Document size and flat size must be the same, so in this case the document size would be 19 11/16 (19.687) inches wide by 6 inches high.

W: finished width
H: finished height
--- fold indication



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- This is an unusual fold, so make sure that you send a folded dummy to your printer in the beginning stages of the job so they may familiarize themselves with it.
- If you are designing for a self-mailing piece, this style will require a wafer seal.
- If your paper choice is any heavier than 80# text, you will want to consider scoring the piece. Ask your printer for a recommendation.
- Make sure to have a folding dummy made in your specified paper. Watch for bulkiness and consider overall weight of the piece (for postal requirements).

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document width ahead of time. Create your document as if all panels will be the same (ex: for a 5-panel closed reverse accordion with a finished size of 4 x 6, set the document size to 20 x 6). Then set crosshairs to upper left corner of document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, 3 ⅞ inches). Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement (3 ⅞). Keep doing this until you measure the last panel (in this example, 4 inches). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Just change your document size by entering that decimal measurement (19.687). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

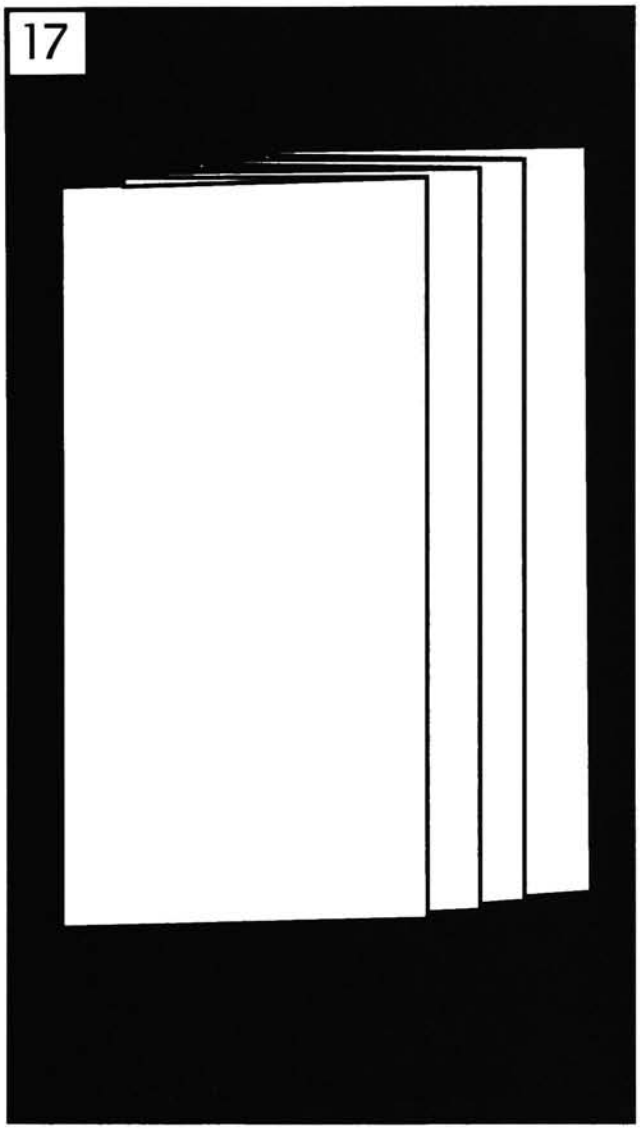
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

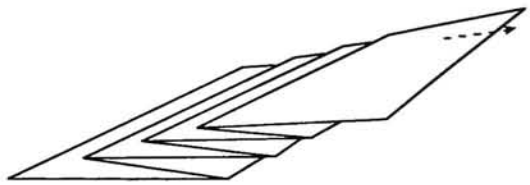
Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

STEPPED ACCORDION



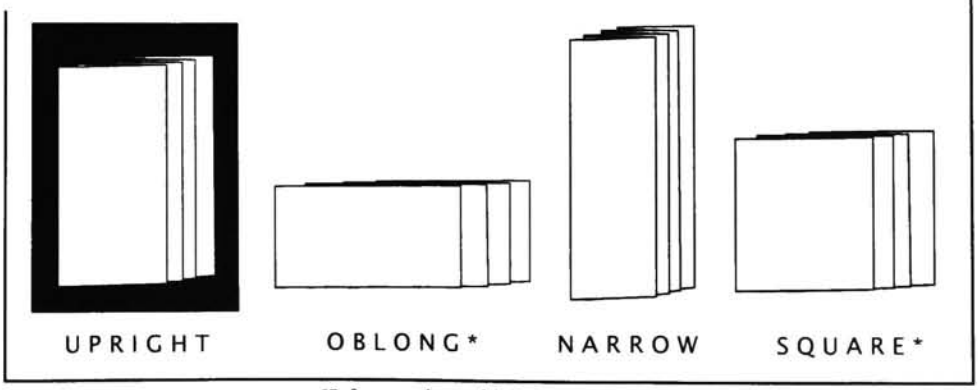


LEVEL

A level 3 fold has a long and difficult makeready, could require special machinery and low folding speed. These issues will be reflected in the cost.

The stepped accordion is an uncommon fold with lots of design potential. It has the same characteristic "zig-zag" of the accordion family of folds, but the difference is in the "stepping" effect once it is folded. There can be as many panels as you wish, but bear in mind the dimensions of the press sheet your printer is using.

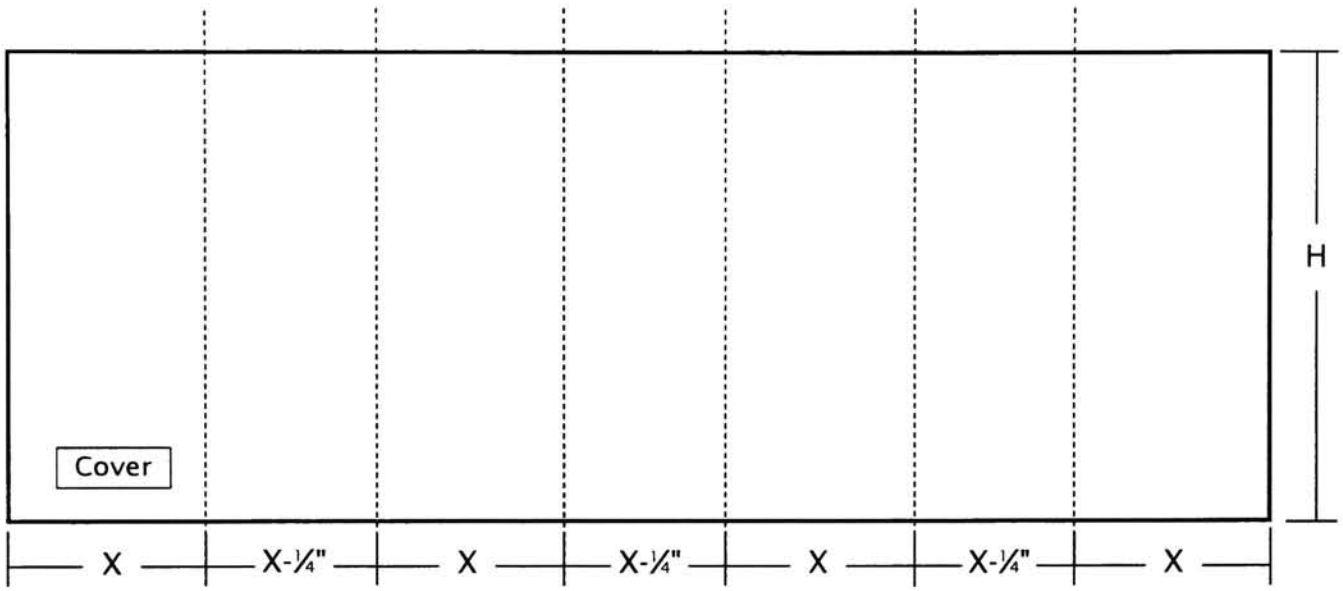
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

W: finished width
H: finished height
X: your choice
--- fold indication

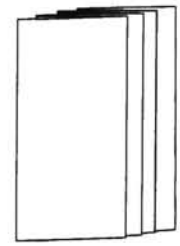


GETTING STARTED

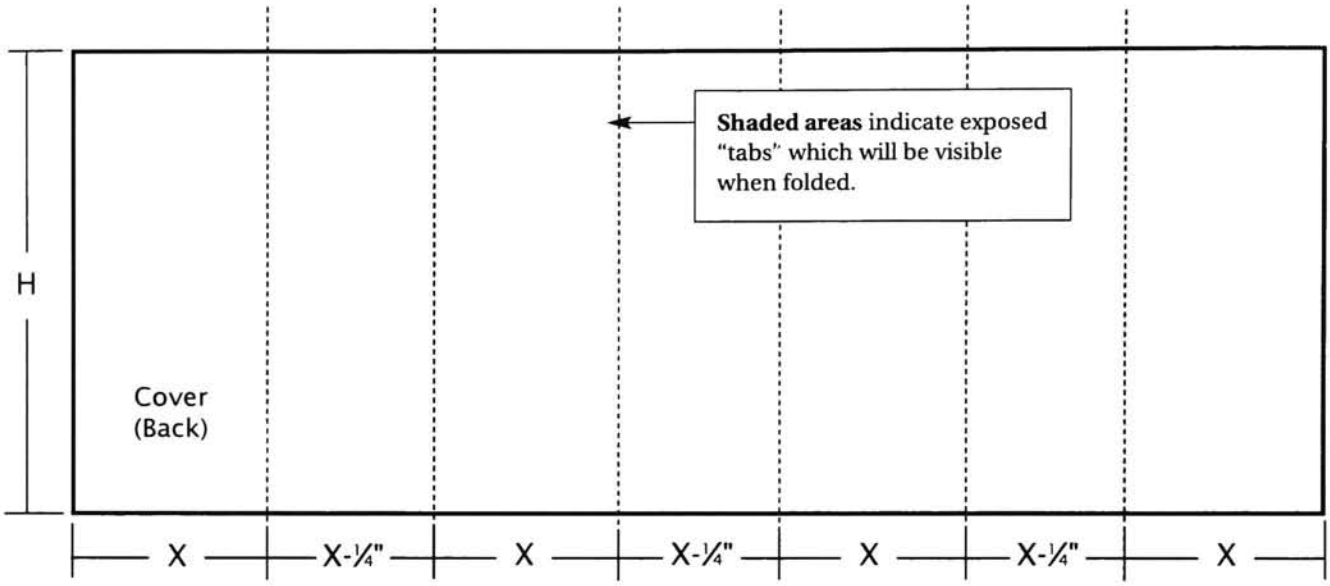
Here's an example: To better understand how to set up this folding style, the first thing we need to determine is the width of the "tabs." In the diagram, the tabs are ¼" wide (shortening the previous panel by ¼" allows for the ¼" push-out of the following panel). Now we must define X. If X=4 inches, then your panel widths for page 1 of the digital document would be, from left, 4 inches, 3 ¾", 4, 3 ¾", 4, 3 ¾" and 4 inches. Page two of your digital document would measure exactly the same. To calculate the finished width, all we have to do is figure out how many tabs there are (3, in this case) and add together their widths (3 x ¼" = ¾") and add them to X (4 inches). So, 4 inches plus ¾" equals a finished width of 4 ¾ inches.

Remember: Document size and flat size must be the same, so in this case the document size would be 27 ¼ (27.25) inches wide.

Time-saving tip: For this particular folding style, the fold placement is exactly the same for page 1 as it is for page 2. If you're creating your document in a page layout program which has a master page option, save time by setting your folds on the master page. Then, return to the document and add the second page.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- This is an unusual fold, so make sure that you send a folded dummy to your printer in the beginning stages of the job so they may familiarize themselves with it.
- This folding style does not meet postal machine standards for self-mailing. It will require an envelope.
- Ask your printer about scoring the piece for a clean, flat fold.
- If your paper choice is any heavier than 80# text, you will want to consider scoring the piece. Ask your printer for a recommendation.
- Make sure to have a folding dummy made in your specified paper. Watch for bulk and consider overall weight of the piece (for postal reasons).

DESIGN CONSIDERATIONS

- The ¼" measurement indicated above is just an **example of a measurement** which could be used to create a ¼" visible tab when folded. So, if ¼" is not the tab depth you desire, change your panels to X minus (desired tab depth)"

Side note: An interesting aspect of this folding style is that the stepped effect is the same whether you're looking at the front or the back side

A Tip for Measuring Panels:

For the stepped accordion style, the smartest thing to do would be to decide the dimensions of your panels ahead of time. Calculate the document width and height and create your document. Set the cross-hairs to upper left corner of the document, pull a guide bar from the left ruler and set it to the measurement of your first panel. Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement.Keep doing this until you measure the width of the last panel. If you've done it right, your last guide will come to the exact edge of the document. Repeat for page two. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

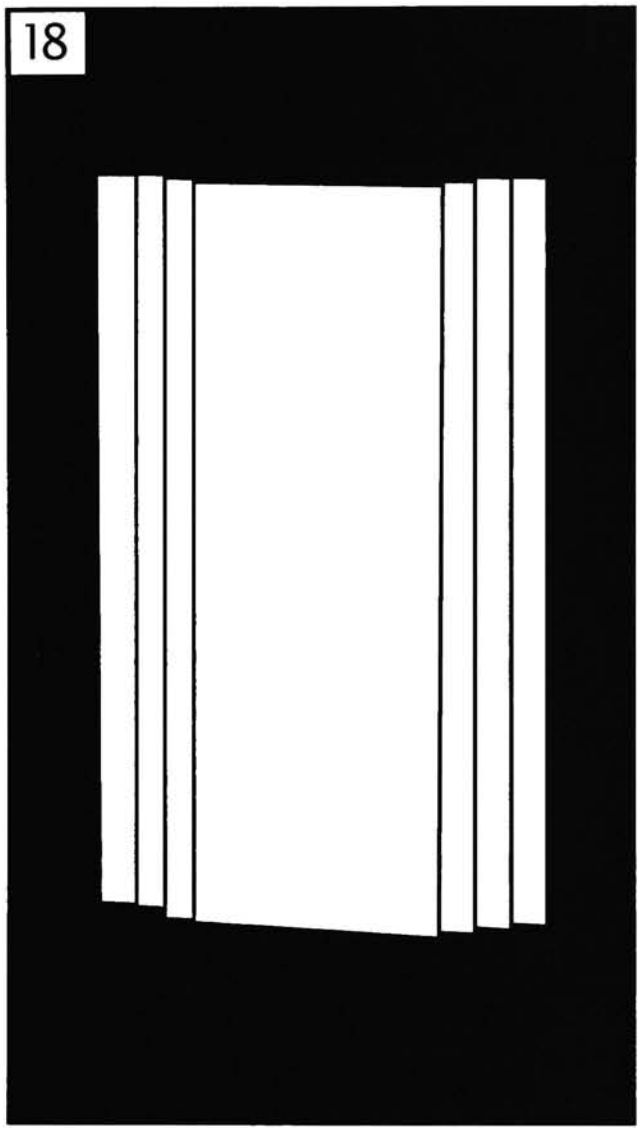
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

STEPPED ACCORDION / CENTER

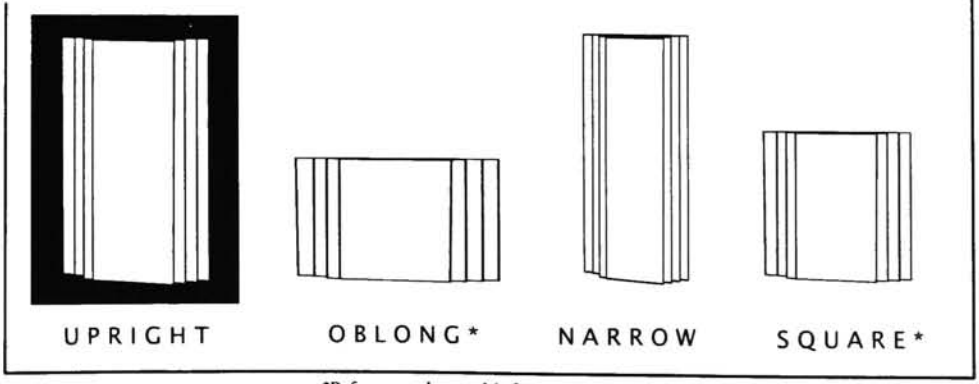


LEVEL

A level 3 fold has a long and difficult makeready, could require special machinery and low folding speed. These issues will be reflected in the cost.

The stepped accordion, centered format is an uncommon fold with lots of design potential. It has the same characteristic "zig-zag" of the accordion family of folds, but the difference is in the "stepping" effect once it is folded. There can be as many panels as you wish, but bear in mind the dimensions of the press sheet your printer is using.

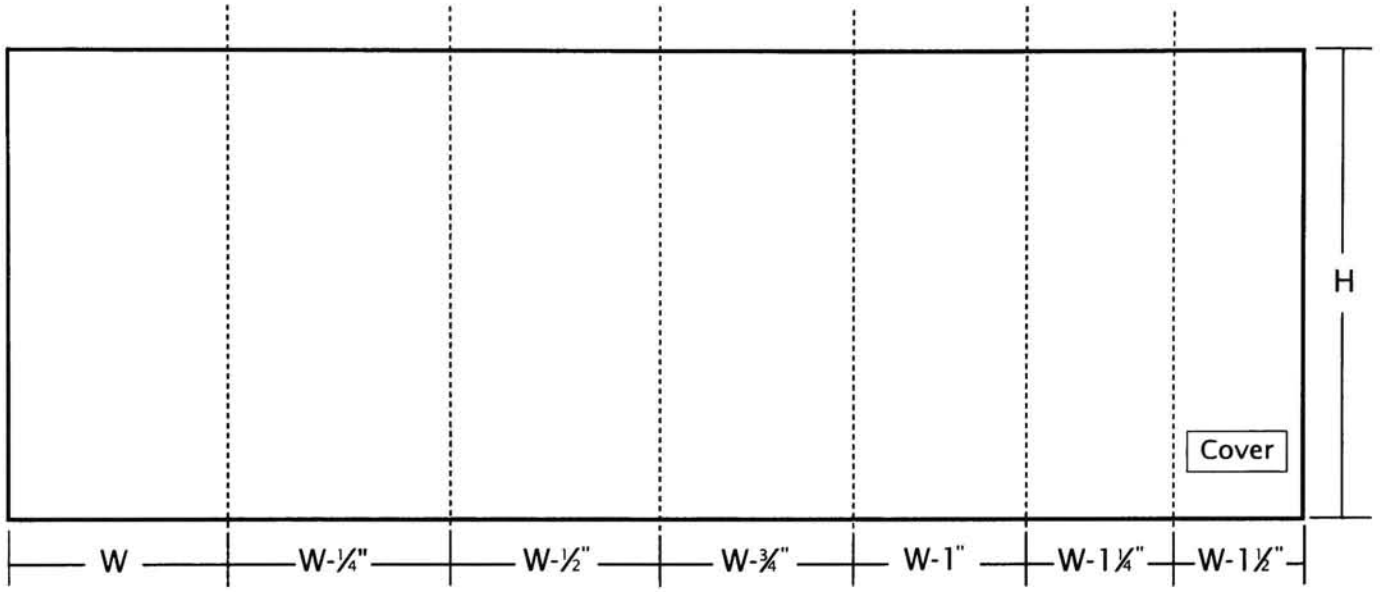
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

W: finished width
H: finished height
X: your choice
--- fold indication

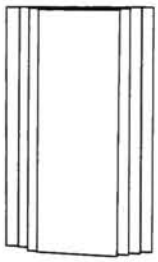


Getting started

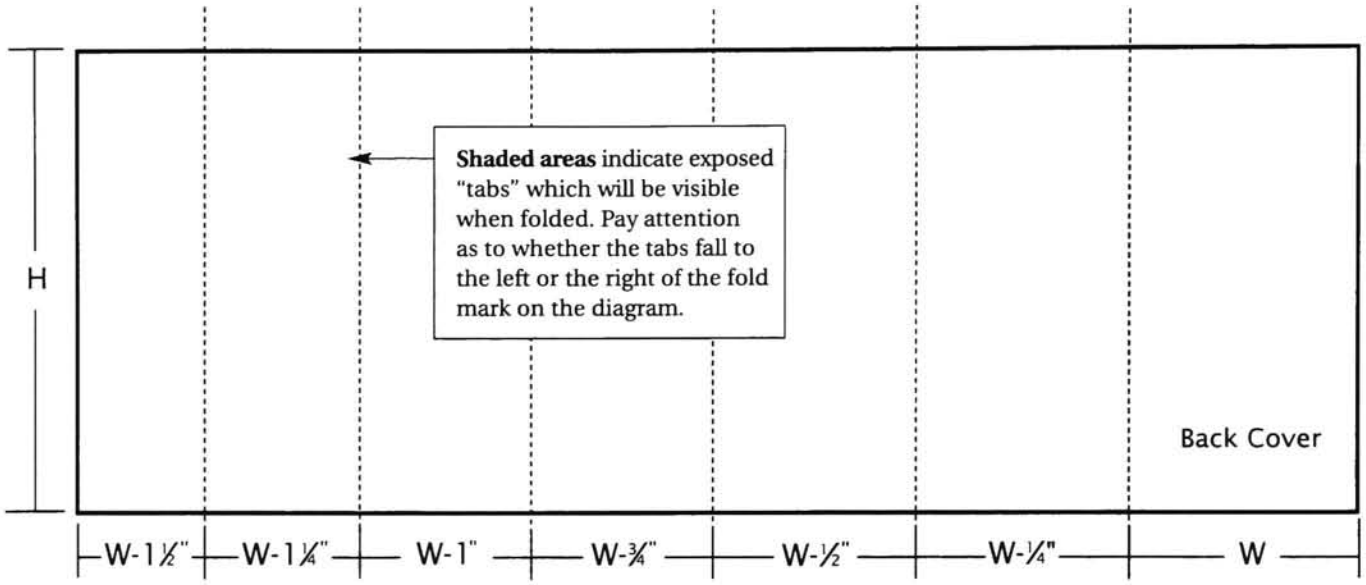
Here's an example: To better understand how to set up this folding style, the first thing we need to determine is the width of the "tabs." In the diagram, the tabs are ¼" wide (shortening the previous panel by ¼" allows for the ¼" push-out of the following panel). Now we must define X. If X=4 inches, then your panel widths for page 1 of the digital document would be, from left, 4 inches, 3 ¾", 4, 3 ¾", 4, 3 ¾" and 4 inches. Page two of your digital document would measure exactly the same. To calculate the finished width, all we have to do is figure out how many tabs there are (3, in this case) and add together their widths (3 x ¼" = ¾") and add them to X (4 inches). So, 4 inches plus ¾" equals a finished width of 4 ¾ inches.

Remember: Document size and flat size must be the same, so in this case the document size would be 27 ¼ (27.25) inches wide.

Time-saving tip: For this particular folding style, the fold placement is exactly the same for page 1 as it is for page 2. If you're creating your document in a page layout program which has a master page option, save time by setting your folds on the master page. Then, return to the document and add the second page.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- This is an unusual fold, so make sure that you send a folded dummy to your printer in the beginning stages of the job so they may familiarize themselves with it.
- This folding style does not meet postal machine standards for self-mailing. It will require an envelope.
- Ask your printer about scoring the piece for a clean, flat fold.
- If your paper choice is any heavier than 80# text, you will want to consider scoring the piece. Ask your printer for a recommendation.
- Make sure to have a folding dummy made in your specified paper. Watch for bulk and consider overall weight of the piece (for postal reasons).

DESIGN CONSIDERATIONS

- The ¼" measurement indicated above is just an **example of a measurement** which could be used to create a ¼" visible tab when folded. So, if ¼" is not the tab depth you desire, change your panels to W minus (desired tab depth)"

A Tip for Measuring Panels:

For the stepped accordion style, the smartest thing to do would be to decide the dimensions of your panels ahead of time. Calculate the document width and height and create your document. Set the cross-hairs to upper left corner of the document, pull a guide bar from the left ruler and set it to the measurement of your first panel. Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement.Keep doing this until you measure the width of the last panel. If you've done it right, your last guide will come to the exact edge of the document. Repeat for page two. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

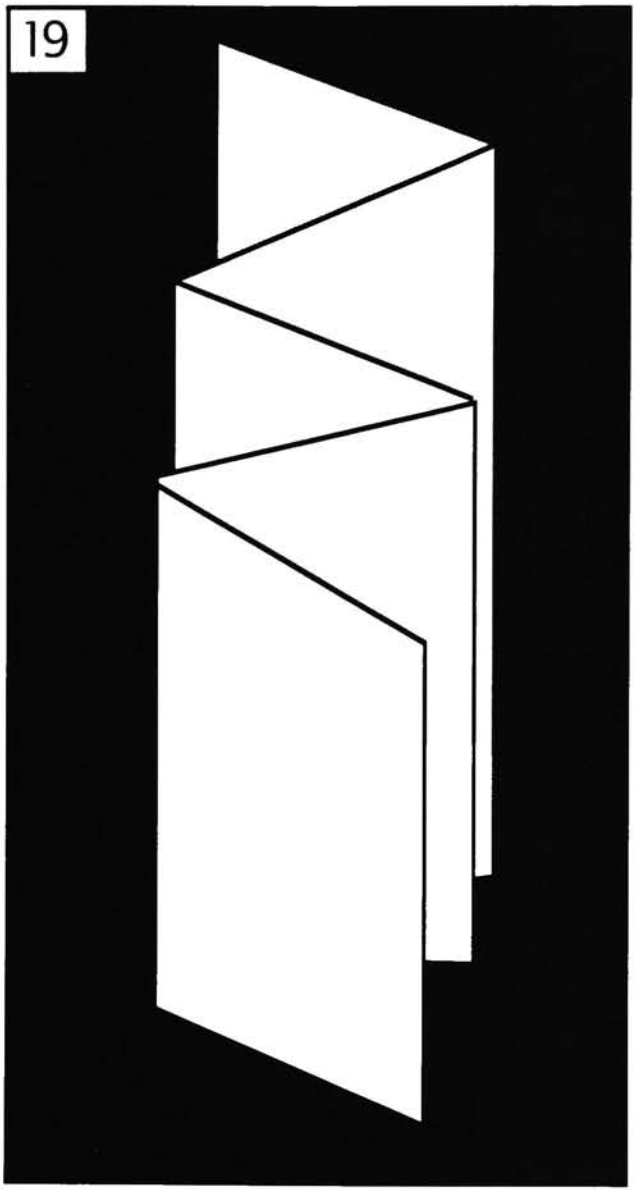
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

ANGLED ACCORDION

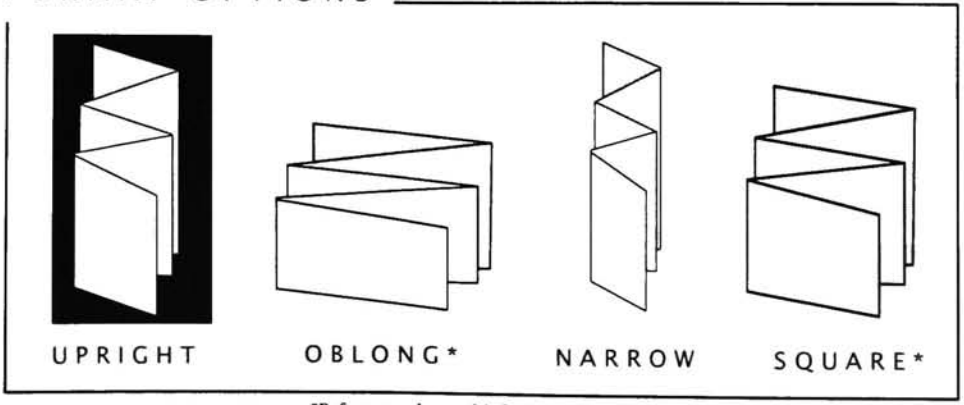


LEVEL

A level 2 fold has a moderate makeready, possible slower speed on the folding machine, and could have some special considerations.

The angled accordion fold is an interesting twist on the standard accordion fold. It has the same characteristic "zig-zag" of the accordion fold, but this folding style requires a simple die cut, which adds expense. There can be as many panels as you wish, but bear in mind the dimensions of the press sheet your printer is using.

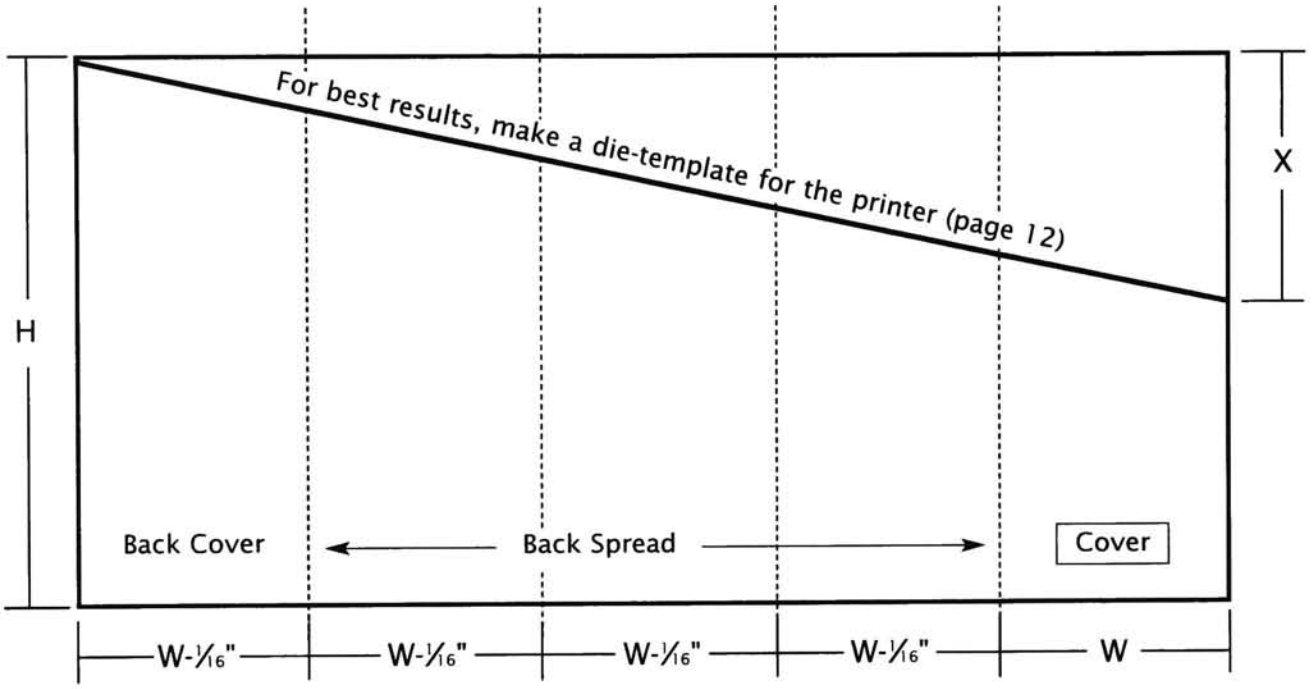
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

W:	finished width
H:	finished height
X:	your choice
---	fold indication



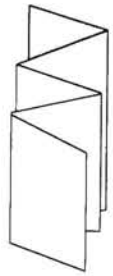
GETTING STARTED

Here's an example: If your finished size is 4 x 9, then your panels for page 1 of your digital document would be, from left, 3 15/16 inches, 3 15/16, 3 15/16, and 4 inches. Then for page two everything reverses, so from left your panels would measure 4 inches, 3 15/16 inches,3 15/16, 3 15/16 and 3 15/16 inches, with a height of 9 inches.

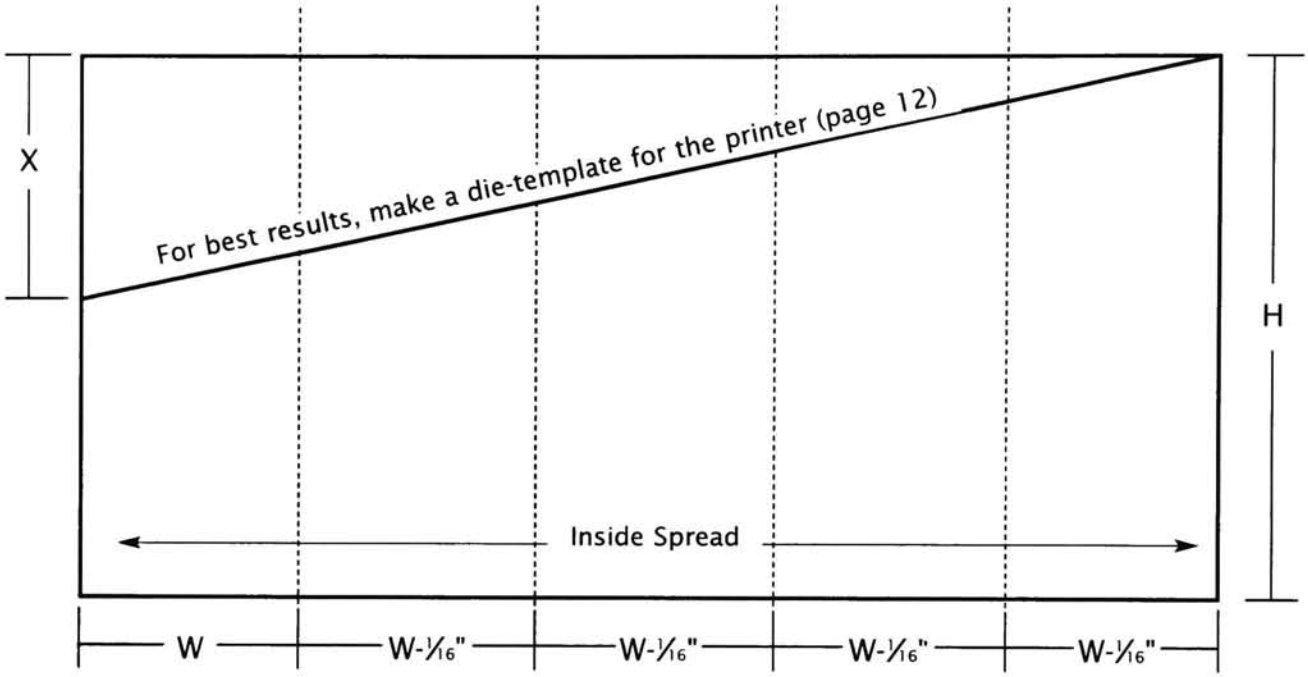
Indicating the die-line is essential in order to maintain control over the outcome of your piece. Don't let someone else make the template for you. It's easy to do. For complete instructions on how to make a die template, see page X.

Remember: Document size and flat size must be the same, so in this case the document size would be 19 3/4 (19.75) inches wide by 9 inches high.

To modify this fold by adding more panels, just continue the W-1/16" measurement in the appropriate direction.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- Remember that a die is an extra expense. If you're scoring, you can die cut and score at the same time. Ask you printer.
- Consult your printer about the size of the press sheet. Also ask for a diagram of how your piece will be run on the press sheet. Sometimes there is a lot of waste on the sheet, and you may be able to add another panel or two without adding to the cost of the job.
- This folding style does not meet postal machine standards for self-mailing. It will require an envelope.
- If your paper choice is any heavier than 80# text, you will want to consider scoring the piece. Ask your printer for a recommendation.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document width ahead of time. Create your document as if all panels will be the same (ex: for a 5-panel angled accordion with a finished size of 4 x 9, set the document size to 20 x 9). Then set crosshairs to upper left corner of document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, 3 15/16 inches). Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement (3 15/16). Keep doing this until you measure the last panel (in this example, 4 inches). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your cross-hairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Just change your document size by entering that decimal measurement (19.75). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

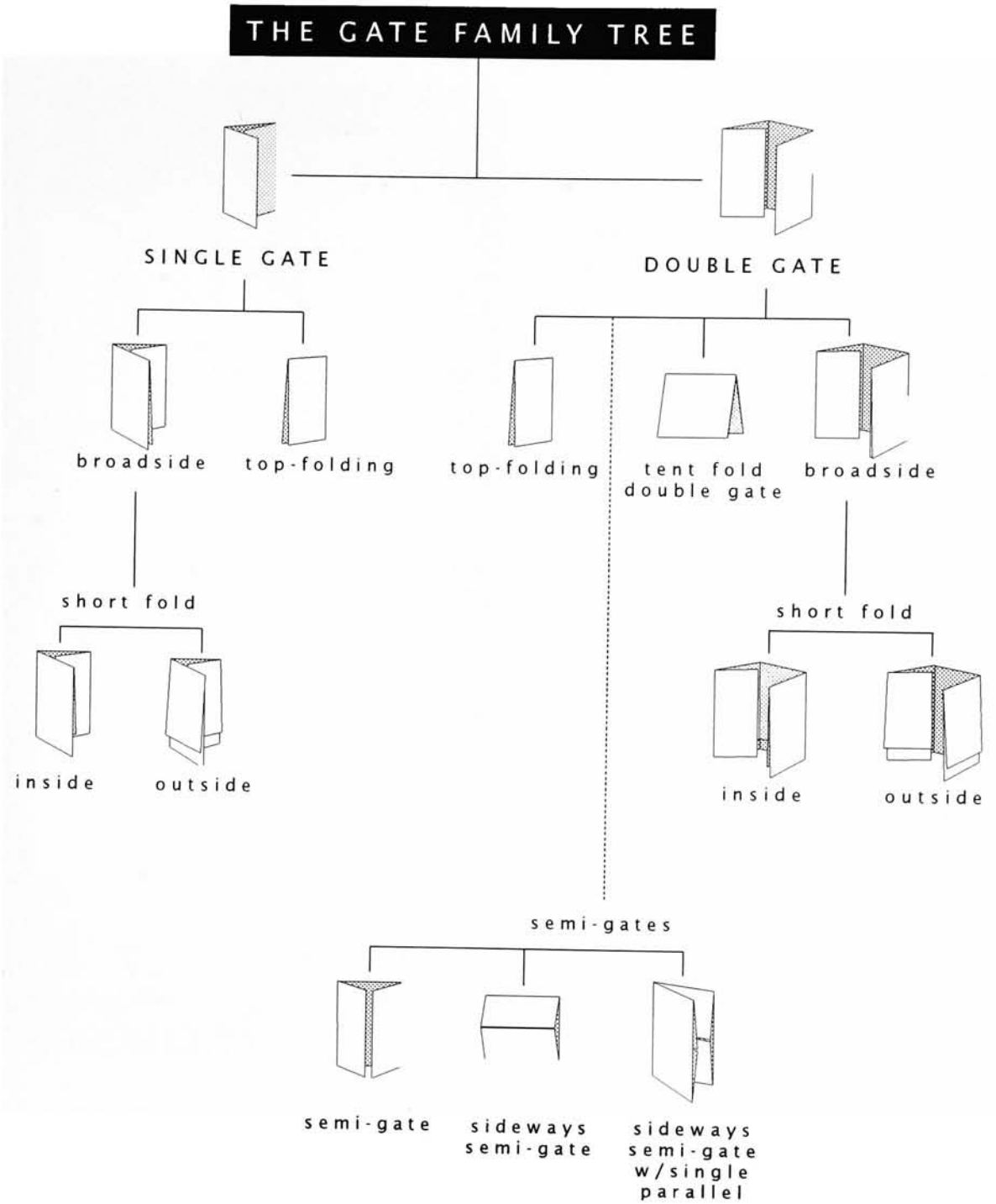
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

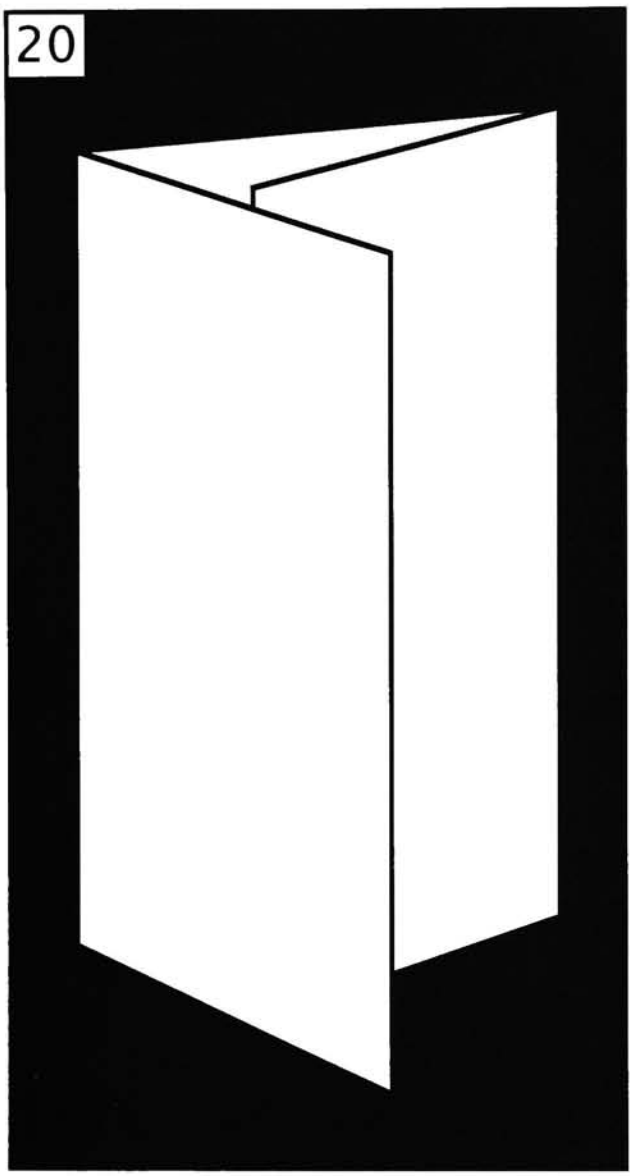
Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

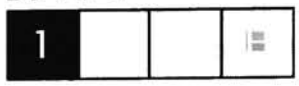
THE GATE FAMILY TREE



SINGLE GATE



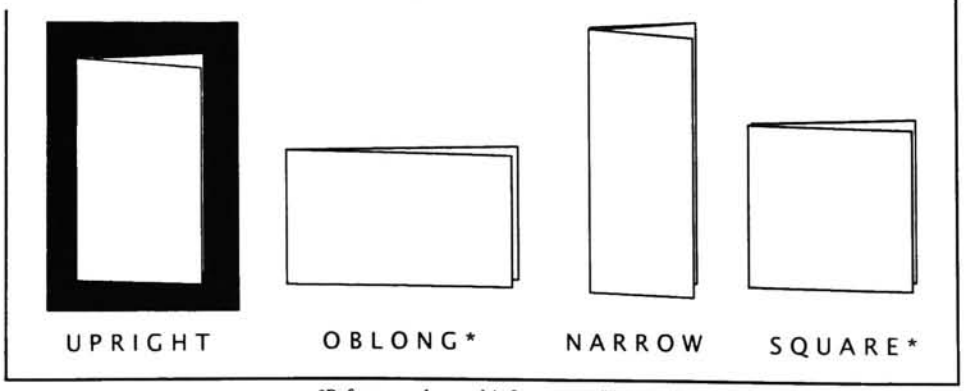
LEVEL



A level 1 fold is standard and basic, easy to set up on the folding machine and the machine can run at highest speeds.

The single gate fold is a common folding style consisting of three panels, one of which folds in.The fold-in panel(s) is a family characteristic of the gate folds.

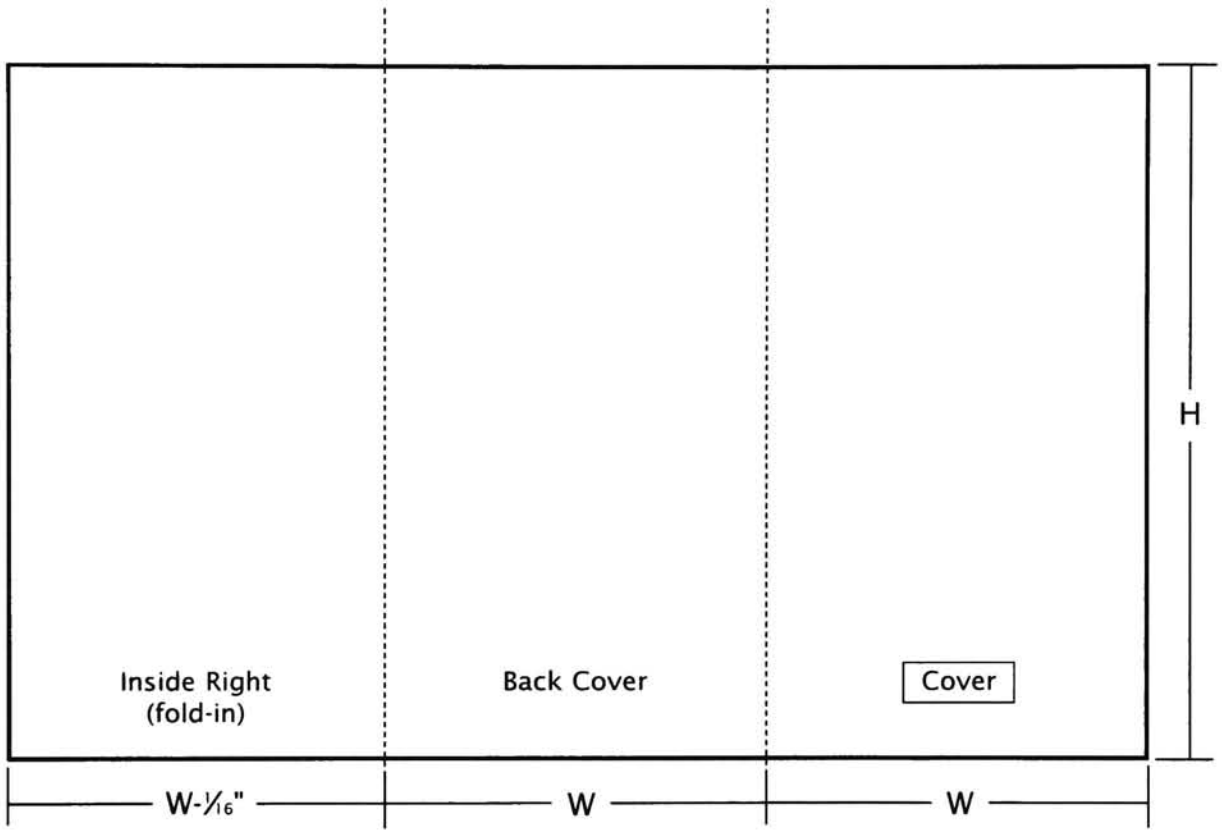
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

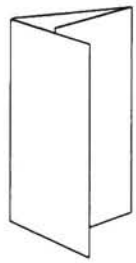
W: finished width
H: finished height
--- fold indication



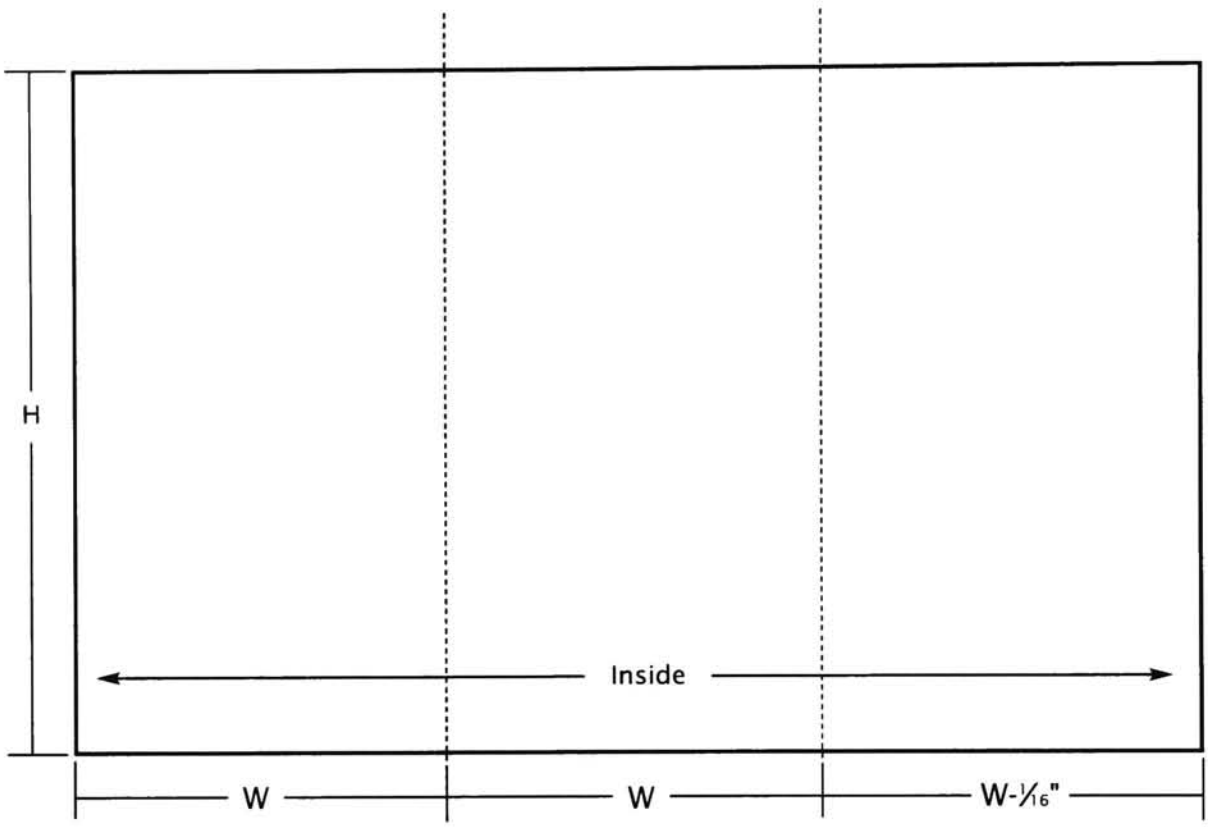
Getting started

Here's an example: If your finished size is 4 x 7, then your panels for page 1 of your digital document would be, from left, 3 1/16 inches, 4 inches and 4 inches. Then for page two everything reverses, so from left your panels would measure 4 inches, 4 inches and 3 15/16 inches, with a height of 7 inches.

Remember: Document size and flat size must be the same, so in this case the document size would be 11 15/16 (11.937) inches wide by 7 inches high.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- If you are designing a large piece, make sure to have a folding sample made up from your specified paper. If the paper is too lightweight, it could turn into a sagging, flimsy piece.
- If you are designing a self-mailing piece, this folding style could require a wafer-seal to make it mail-ready.
- If your paper choice is any heavier than 80# text, you will want to consider scoring the piece. Ask your printer for a recommendation.
- Understand your printer or binder's minimum and maximum size requirements for their equipment. Practicality is important for mechanical folding.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document width ahead of time. Create your document as if all panels will be the same (ex: for a single gate fold with a finished size of 4 x 7, set the document size to 12 x 7). Then set crosshairs to upper left corner of document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, $3^{15}/_{16}$ inches). Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement (4). After setting the second fold, bring the crosshairs over one last time, drag a guide for your last panel width (4). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Just change your document size by entering that decimal measurement (11.937). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

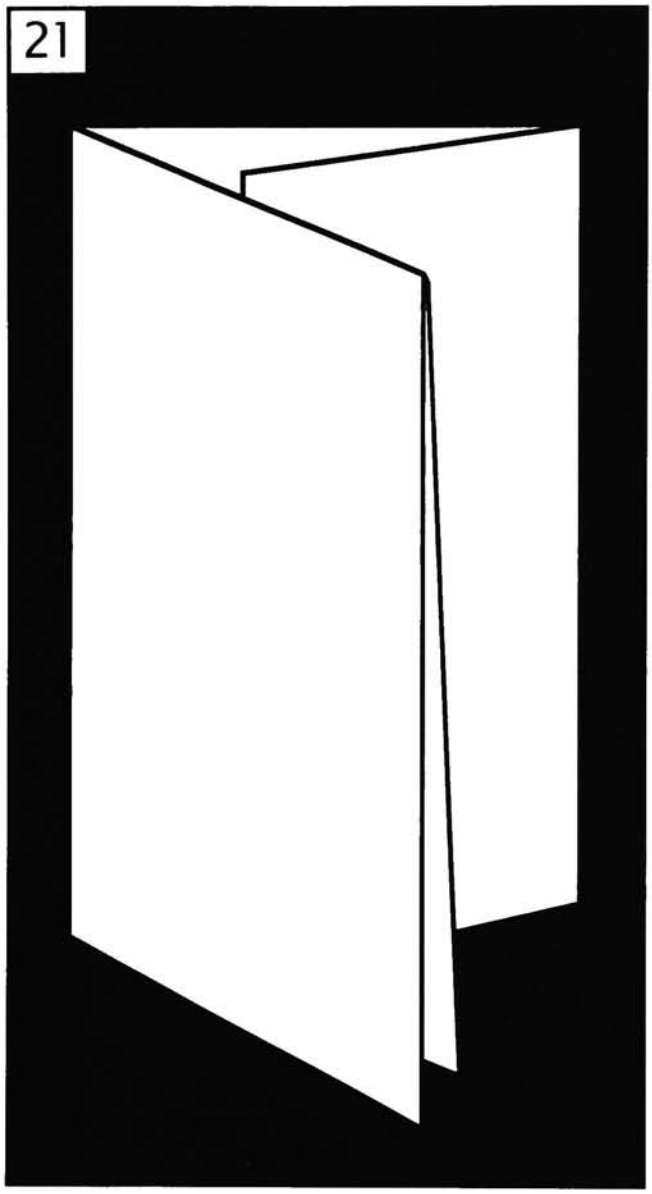
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

BROADSIDE SINGLE GATE

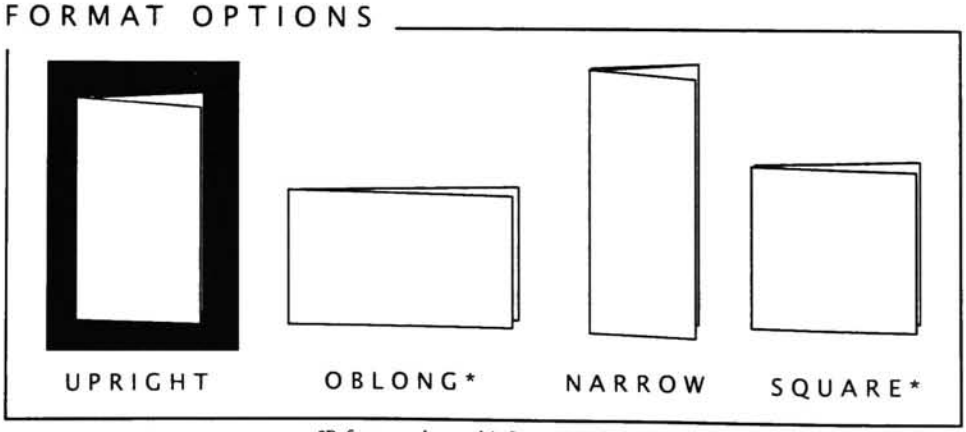


LEVEL

A level 2 fold has a moderate makeready, possible slower speed on the folding machine, and could have some special considerations.

The broadside single gate fold has the same fold-in panel style as the standard single gate fold, but the difference is that this fold has twice the area because it folds in half on itself before the gate folding is done.

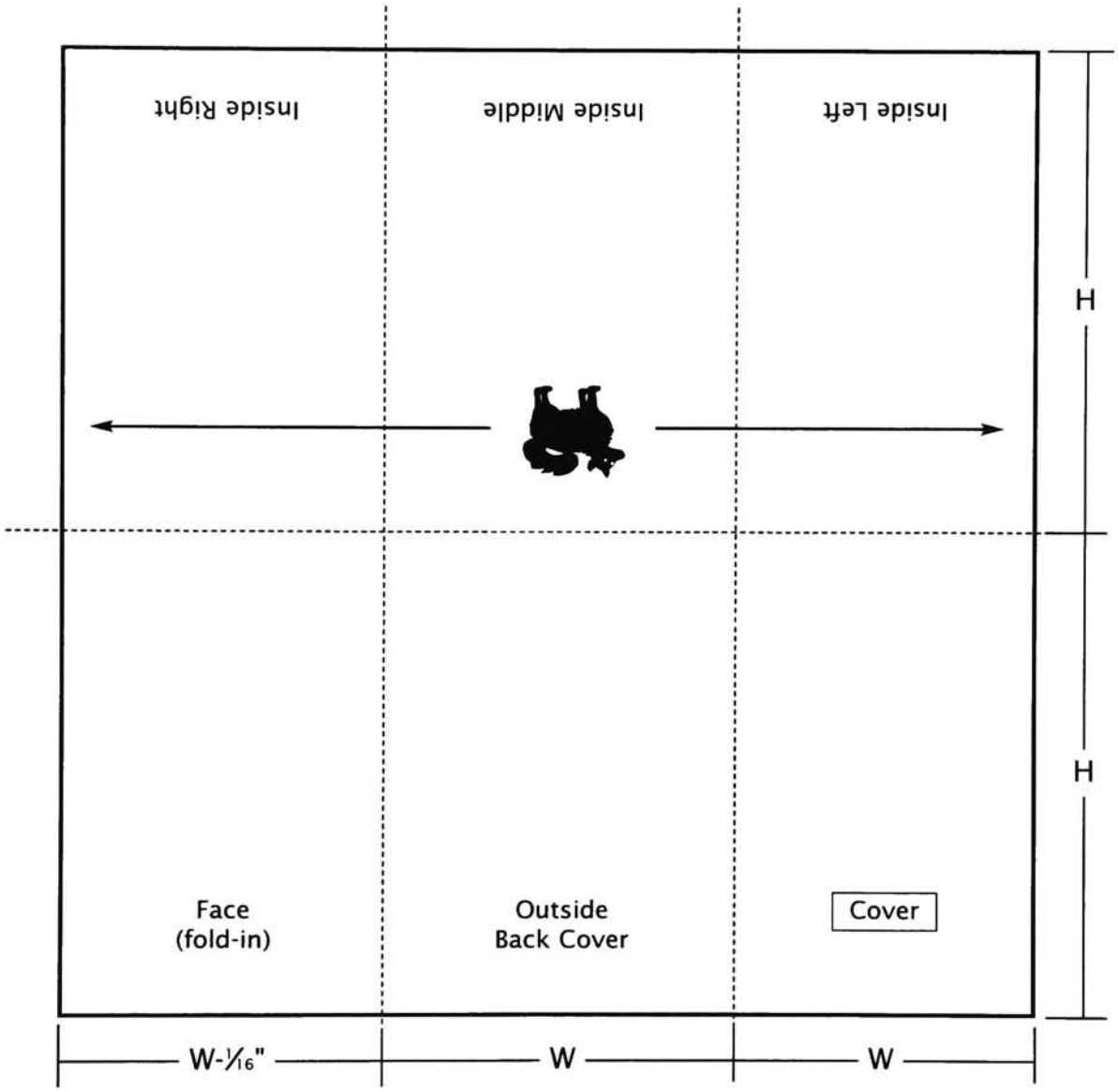
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

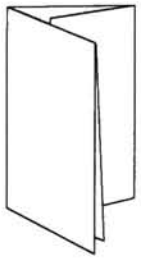
W: finished width
H: finished height
--- fold indication
upside-down



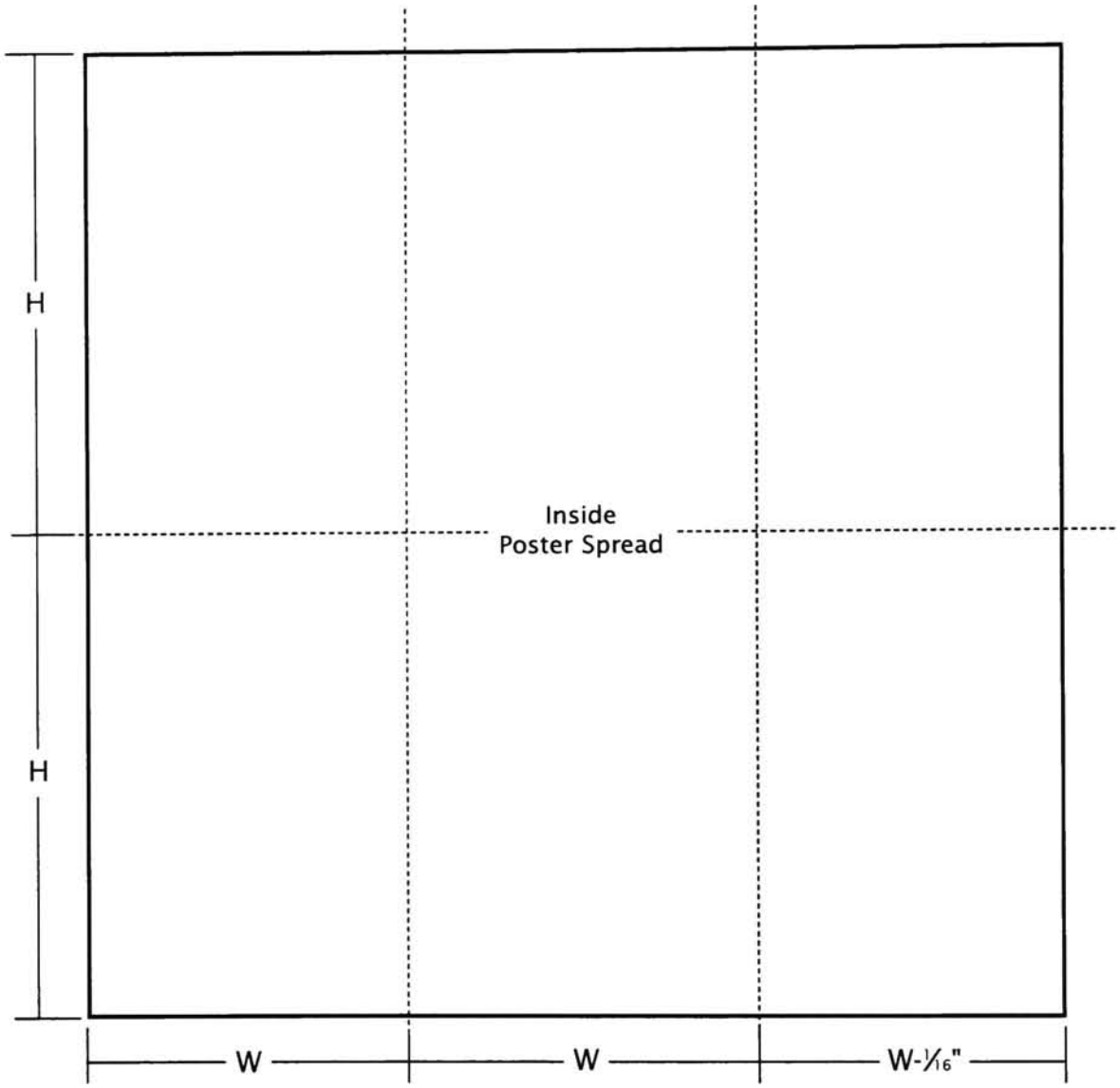
GETTING STARTED

Here's an example: If your finished size is 4 x 6, then your panels for page 1 of your digital document would be, from left, 3 15/16 inches, 4 inches and 4 inches. Then for page two everything reverses, so from left your panels would measure 4 inches, 4 inches and 3 15/16 inches, with a document height of 12 inches (6 inches plus 6 inches).

Remember: Document size and flat size must be the same, so in this case the document size would be 11 15/16 (11.937) inches wide by 12 inches high.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- If you are designing a self-mailing piece, this folding style could require a wafer-seal to make it mail-ready.
- If your paper choice is any heavier than 80# text, you will want to consider scoring the piece. Ask your printer for a recommendation.
- Make sure to have a folding dummy made in your specified paper. Paper weight will dramatically affect the success of this piece. Watch for bulkiness and problems in the corner joints of the folds—the printer can't do anything about this, and it will require a change in paper.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document width ahead of time. Create your document as if all panels will be the same (ex: for a broadside single gate fold with a finished size of 4 x 6, set the document size to 12 x 12). Then set crosshairs to upper left corner of document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, $3^{15}/_{16}$ inches). Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement (4). After setting the second fold, bring the crosshairs over one last time, drag a guide for your last panel width (4). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Just change your document size by entering that decimal measurement (11.937). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

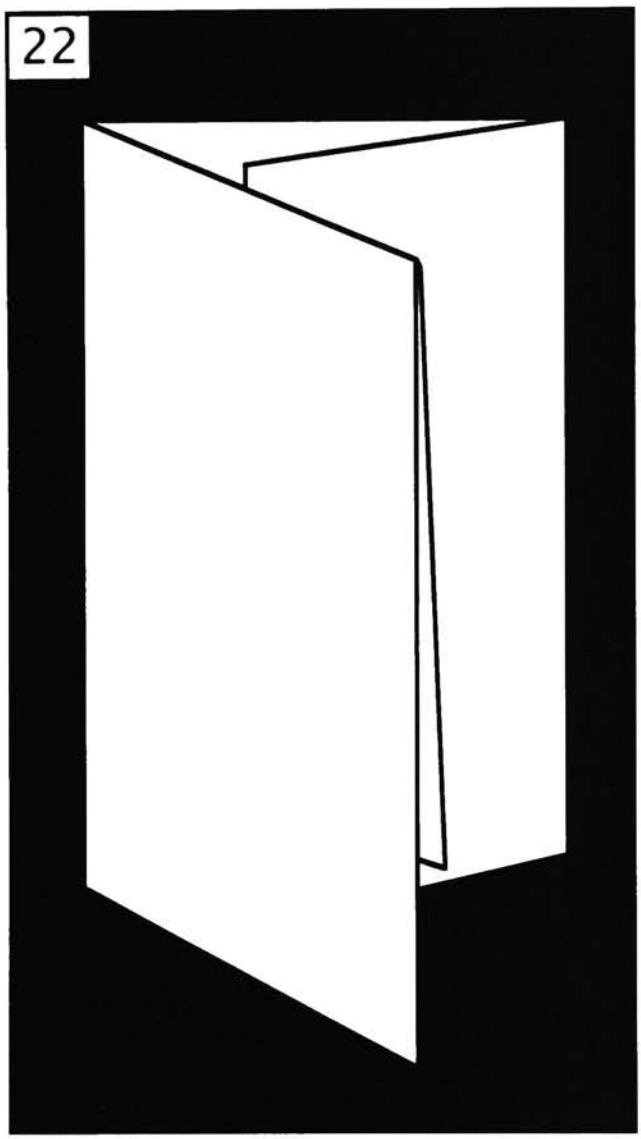
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

SINGLE GATE WITH SHORT FOLD (INSIDE)

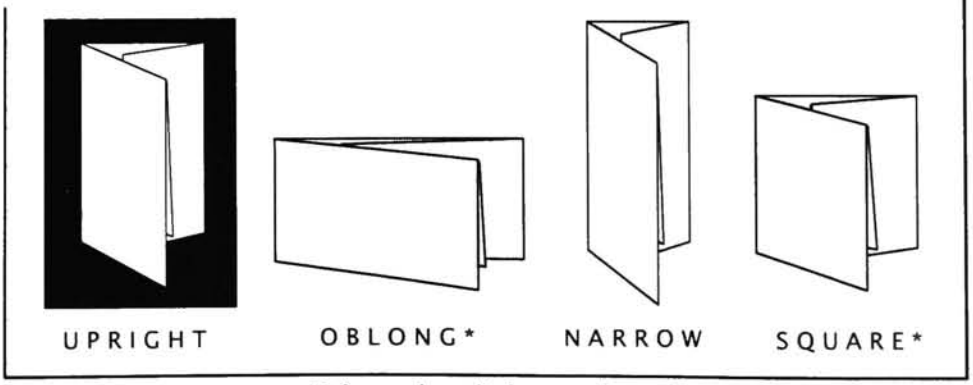


LEVEL

A level 2 fold has a moderate makeready, possible slower speed on the folding machine, and could have some special considerations.

The single gate with short fold inside has the same fold-in panel style as the standard single gate fold, and is similar to the broadside single gate fold because it folds in half on itself before the gate folding is done. What makes this fold different is that unlike a broadside fold where panels are of equal length, in a short fold the fold-over panels are shorter than the finished height.

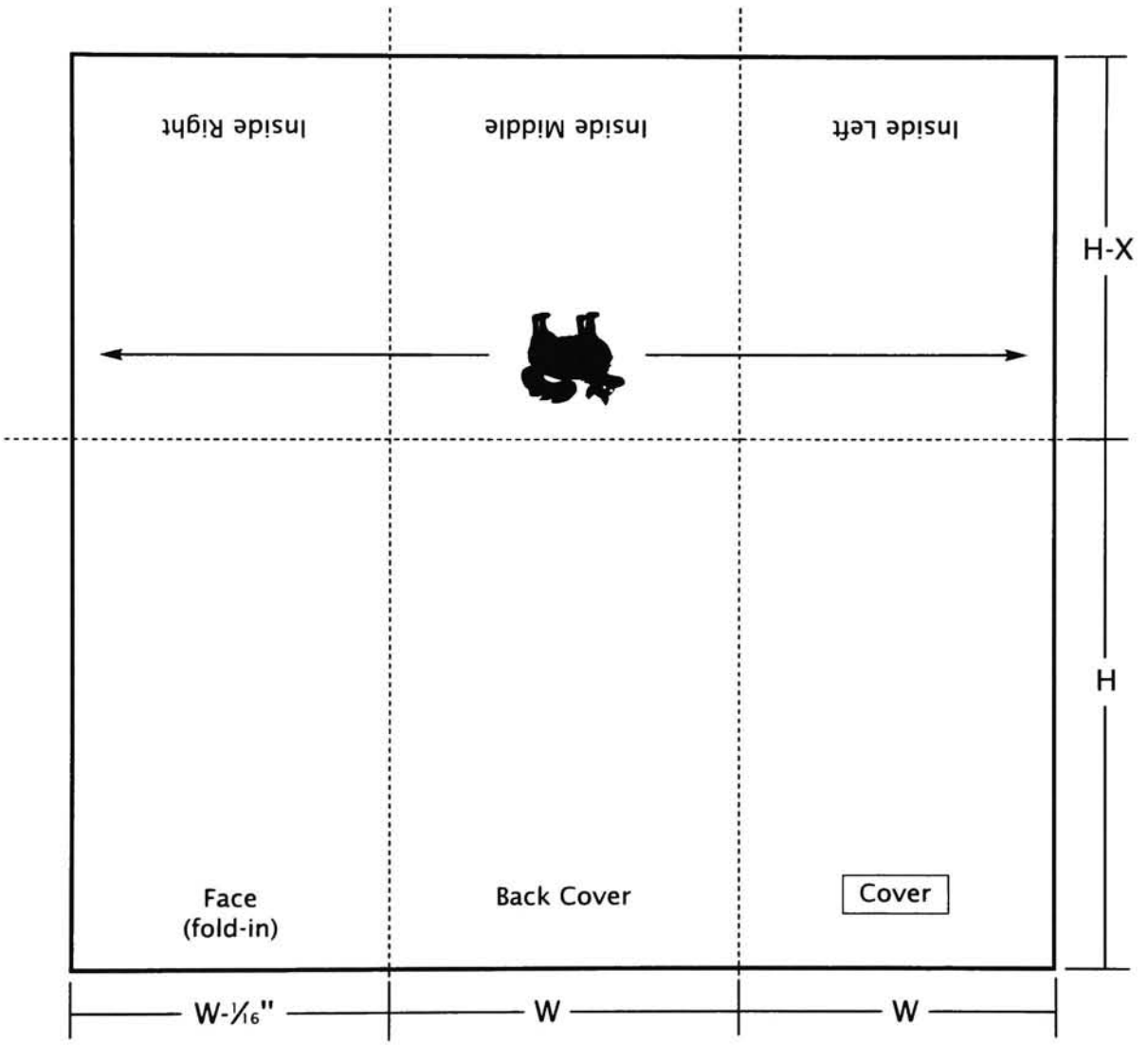
FORMAT OPTIONS



**Before you choose this format, see "Format Options" on page 5.*

Digital Document setup: **Page 1** (side 1)

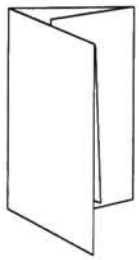
W: finished width
H: finished height
X: your choice
--- fold indication
upside-down



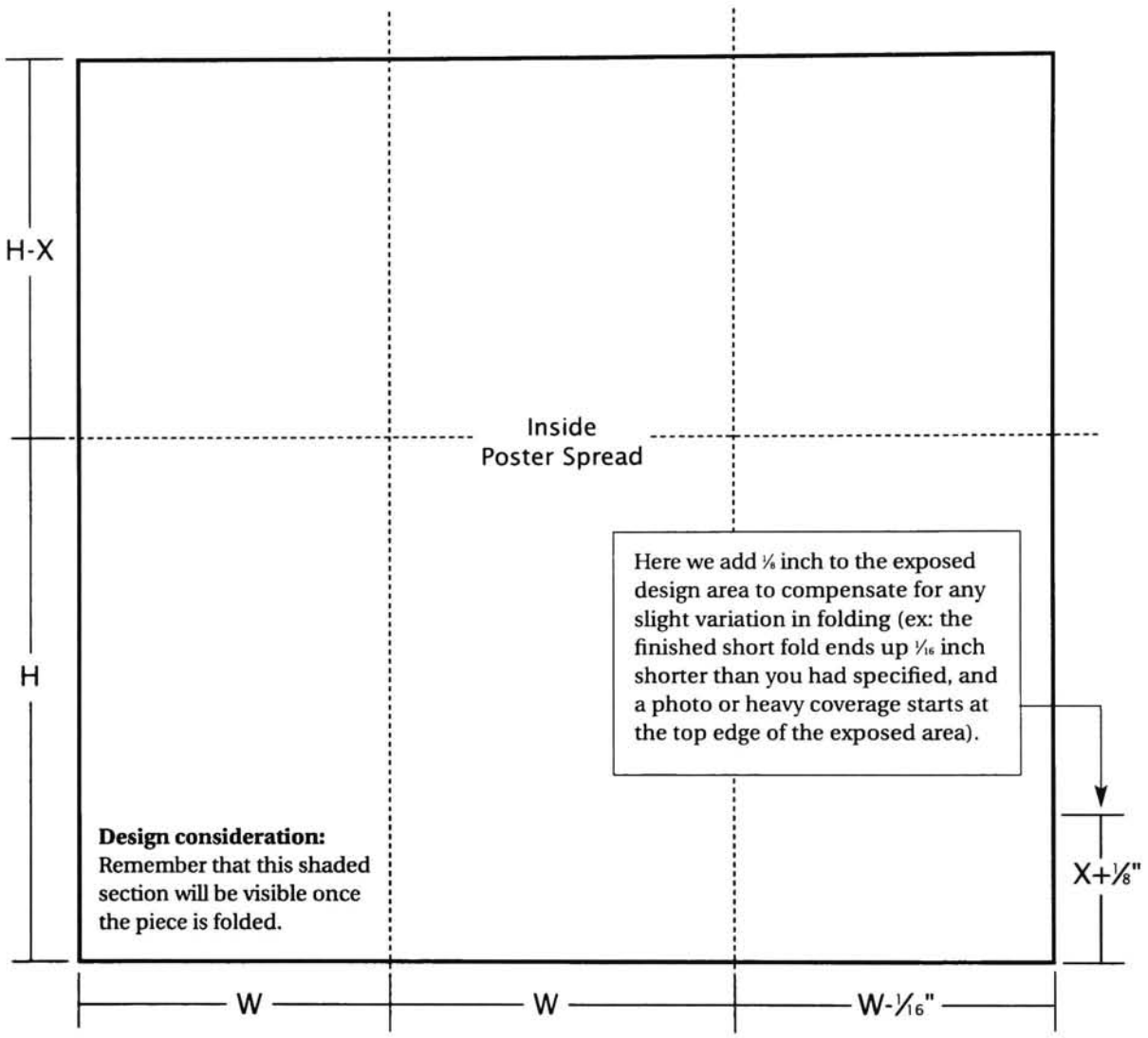
GETTING STARTED

Here's an example: For a short fold, the first thing we must determine is how short the short fold will be. In this case, we'll make it 2 inches shorter than the finished height, so X=2. Now we can calculate our document height. If the finished size is 4 x 6, then 6 inches plus 4 (6-2 , or height minus X) equals a document height of ten inches. Our finished width is 4 inches, so the panels for page 1 of the digital document would be, from left, 3 15/16 inches, 4 inches and 4 inches. Then for page two everything reverses, so from left the panels would measure 4 inches, 4 inches and 3 15/16 inches.

Remember: Document size and flat size must be the same, so in this case the document size would be 11 15/16 (11.937) inches wide by 6 inches high.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- If you are designing a self-mailing piece, this folding style could require a wafer-seal to make it mail-ready.
- If your paper choice is any heavier than 80# text, you will want to consider scoring the piece. Ask your printer for a recommendation.
- Make sure to have a folding dummy made in your specified paper. Paper weight will dramatically affect the success of this piece. Watch for bulkiness and problems in the corner joints of the folds—the printer can't do anything about this, and it will require a change in paper.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document width ahead of time. Create your document as if all panels will be the same (ex: for a single gate with short fold with a finished size of 4 x 6, set the document size to 12 x 10). Then set crosshairs to upper left corner of document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, $3\frac{15}{16}$ inches). Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement (4). After setting the second fold, bring the crosshairs over one last time, drag a guide for your last panel width (4). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Just change your document size by entering that decimal measurement (11.937). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

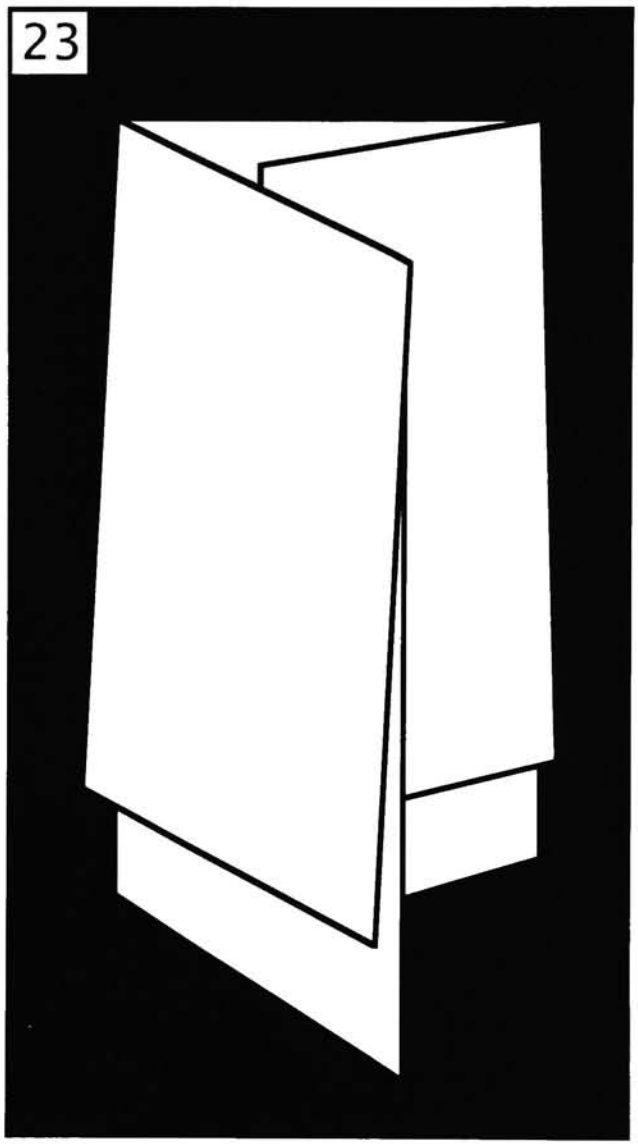
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

SINGLE GATE WITH SHORT FOLD (OUTSIDE)

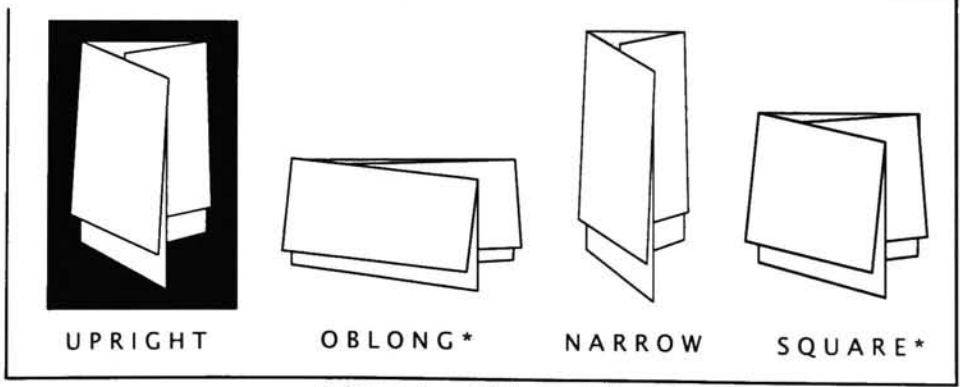


LEVEL

A level 2 fold has a moderate makeready, possible slower speed on the folding machine, and could have some special considerations.

The single gate with short fold outside has the same fold-in panel style as the standard single gate fold, and is similar to the broadside single gate fold because it folds in half on itself before the gate folding is done. What makes this fold different is that unlike a broadside fold where panels are of equal length, in a short fold the fold-over panels are shorter than the finished height.

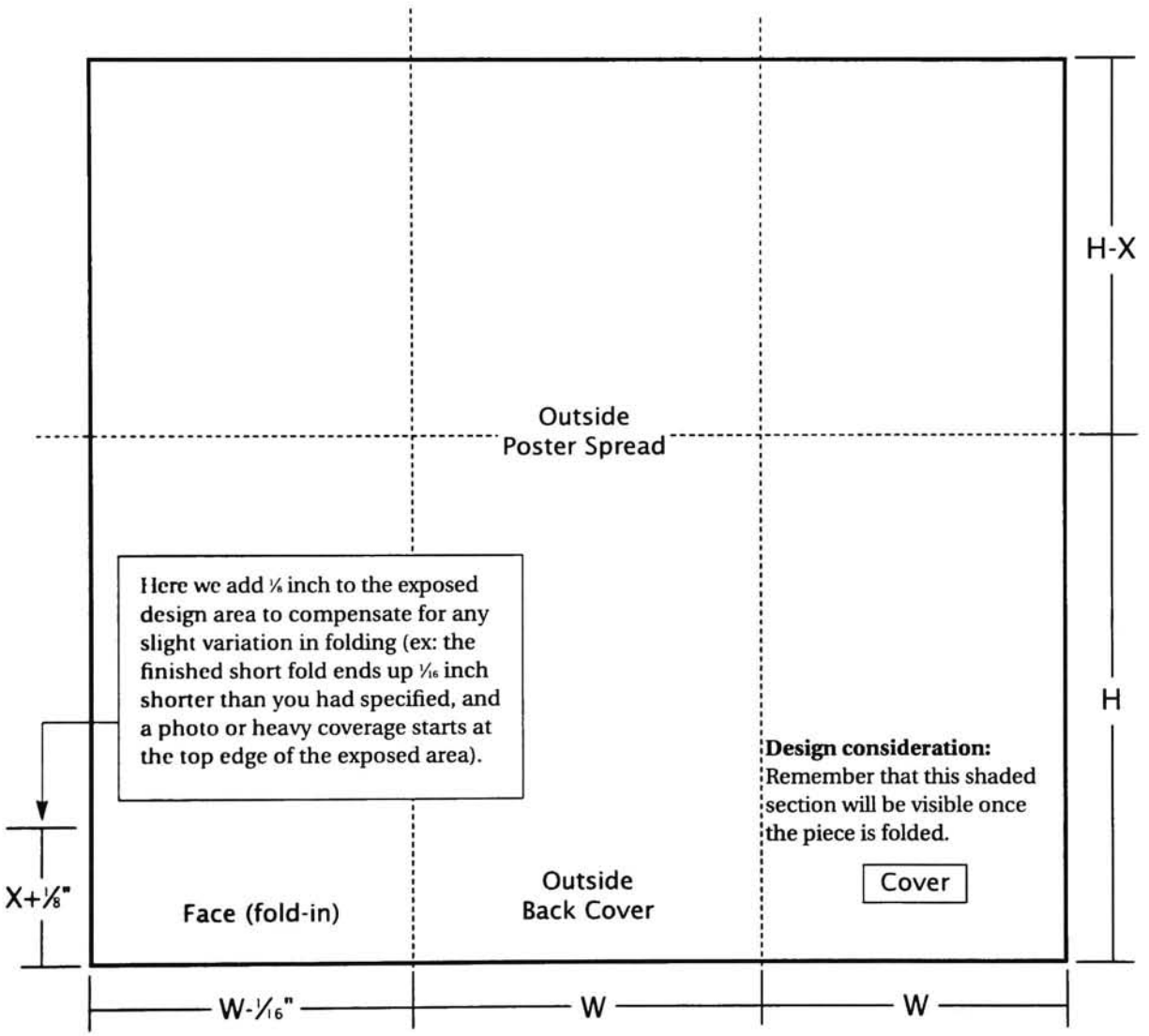
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

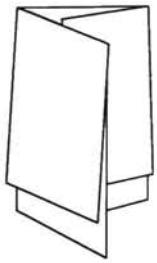
W: finished width
H: finished height
X: your choice
--- fold indication
upside-down



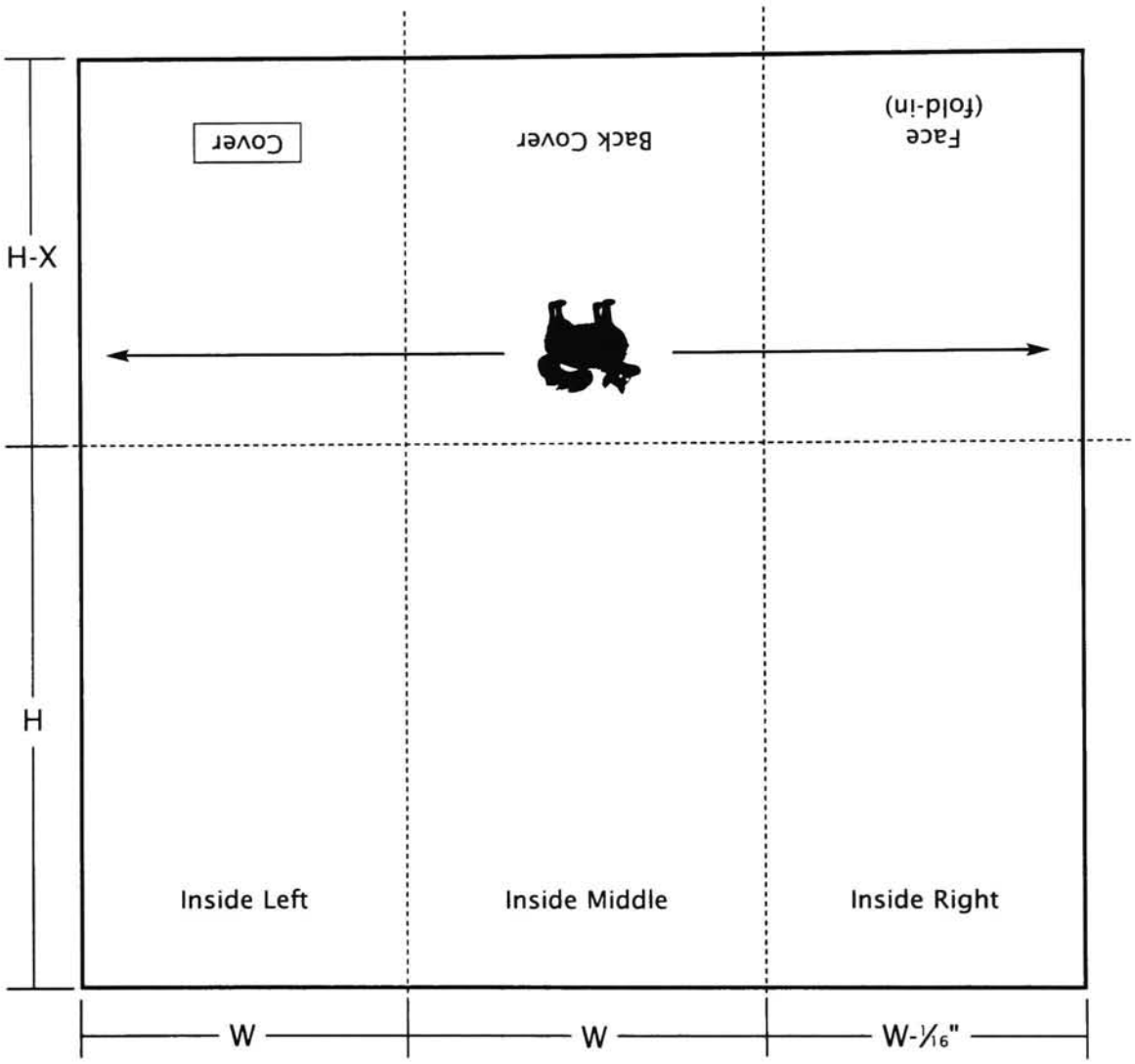
GETTING STARTED

Here's an example: For a short fold, the first thing we must determine is how short the short fold will be. In this case, we'll make it 2 inches shorter than the finished height, so X=2. Now we can calculate our document height. If the finished size is 4 x 6, then 6 inches plus 4 (6-2 , or height minus X) equals a document height of ten inches. Our finished width is 4 inches, so the panels for page 1 of the digital document would be, from left, 3 15/16 inches, 4 inches and 4 inches. Then for page two everything reverses, so from left the panels would measure 4 inches, 4 inches and 3 15/16 inches.

Remember: Document size and flat size must be the same, so in this case the document size would be 11 15/16 (11.937) inches wide by 6 inches high.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- If you are designing a self-mailing piece, this folding style could require a wafer-seal to make it mail-ready.
- If your paper choice is any heavier than 80# text, you will want to consider scoring the piece. Ask your printer for a recommendation.
- Make sure to have a folding dummy made in your specified paper. Paper weight will dramatically affect the success of this piece. Watch for bulkiness and problems in the corner joints of the folds—the printer can't do anything about this, and it will require a change in paper.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document width ahead of time. Create your document as if all panels will be the same (ex: for a single gate with short fold with a finished size of 4 x 6, set the document size to 12 x 10). Then set crosshairs to upper left corner of document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, $3\frac{15}{16}$ inches). Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement (4). After setting the second fold, bring the crosshairs over one last time, drag a guide for your last panel width (4). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Just change your document size by entering that decimal measurement (11.937). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

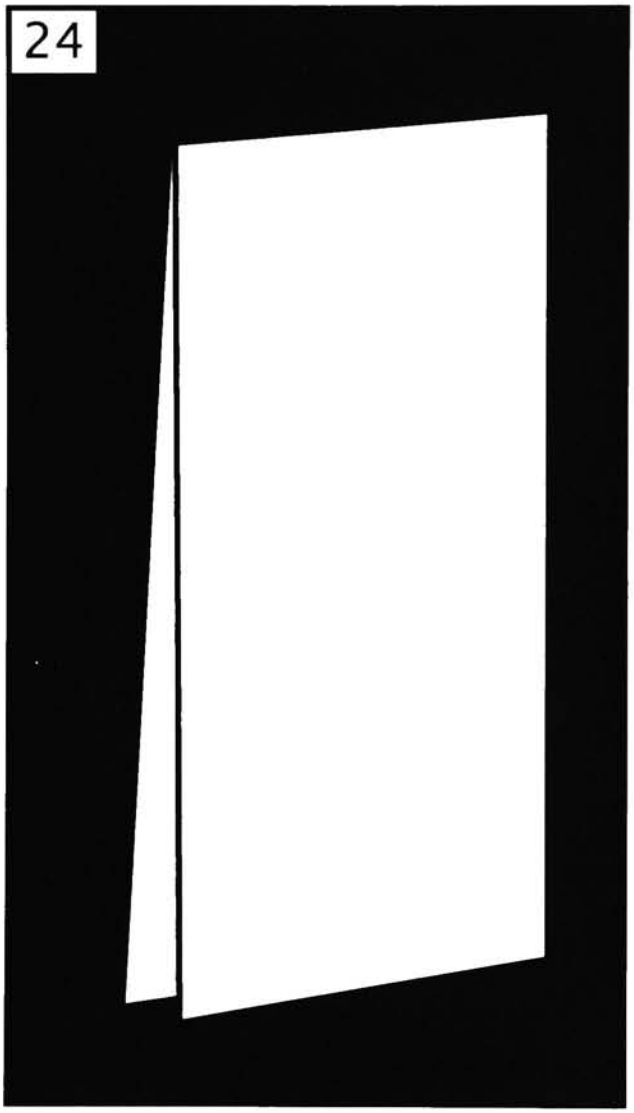
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

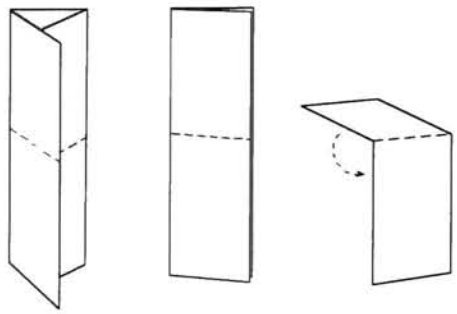
Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

TOP-FOLDING SINGLE GATE



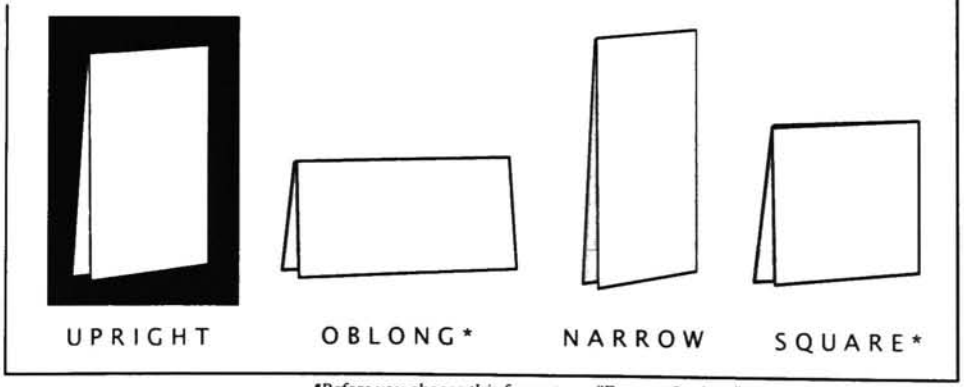


LEVEL

A level 2 fold has a moderate makeready, possible slower speed on the folding machine, and could have some special considerations.

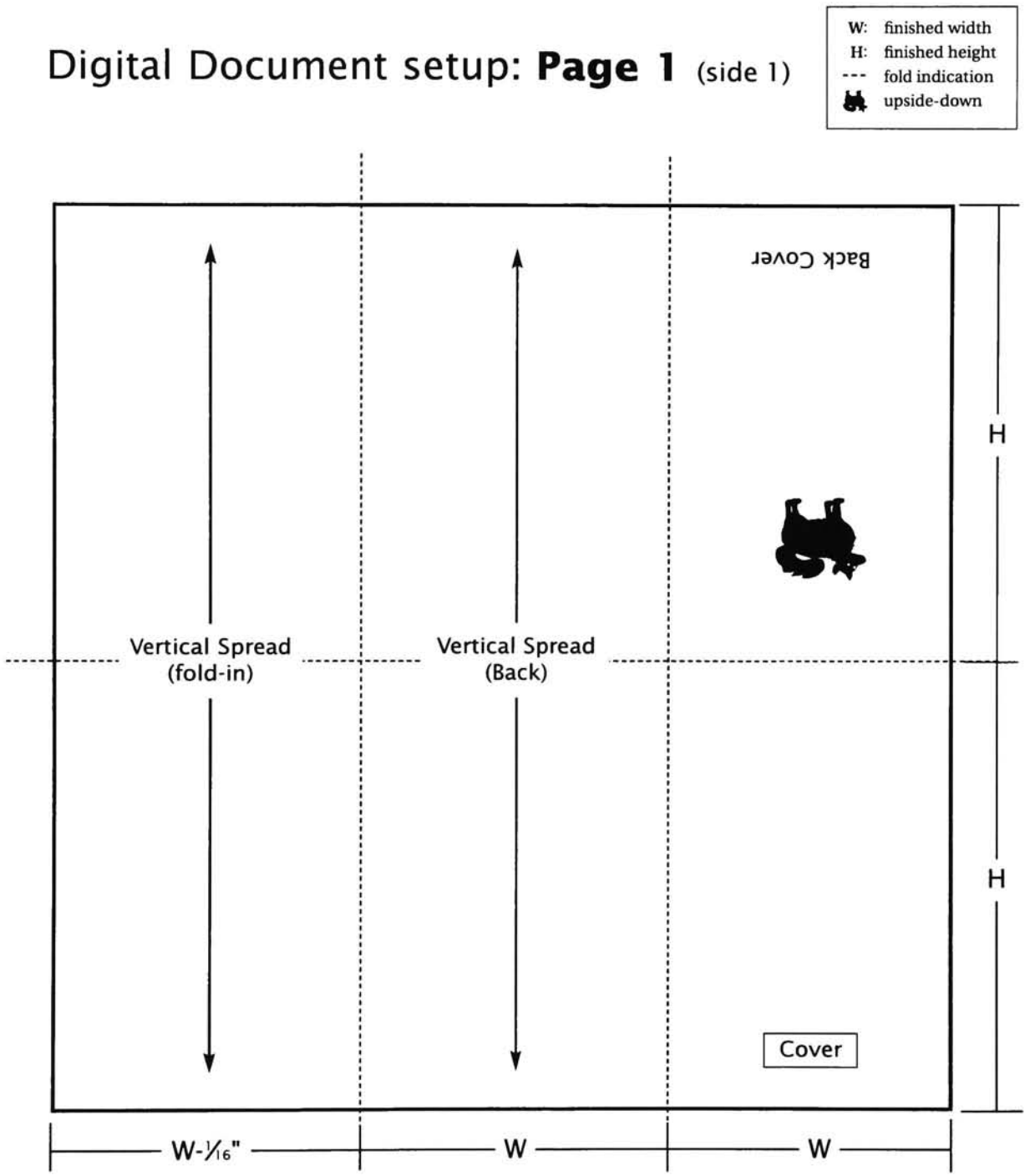
The top-folding single gate consists of the same fold-in panel style as the standard single gate fold, but in a taller format. When the gate folding is done, this style then folds in half onto itself.

FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

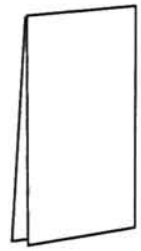
Digital Document setup: **Page 1** (side 1)



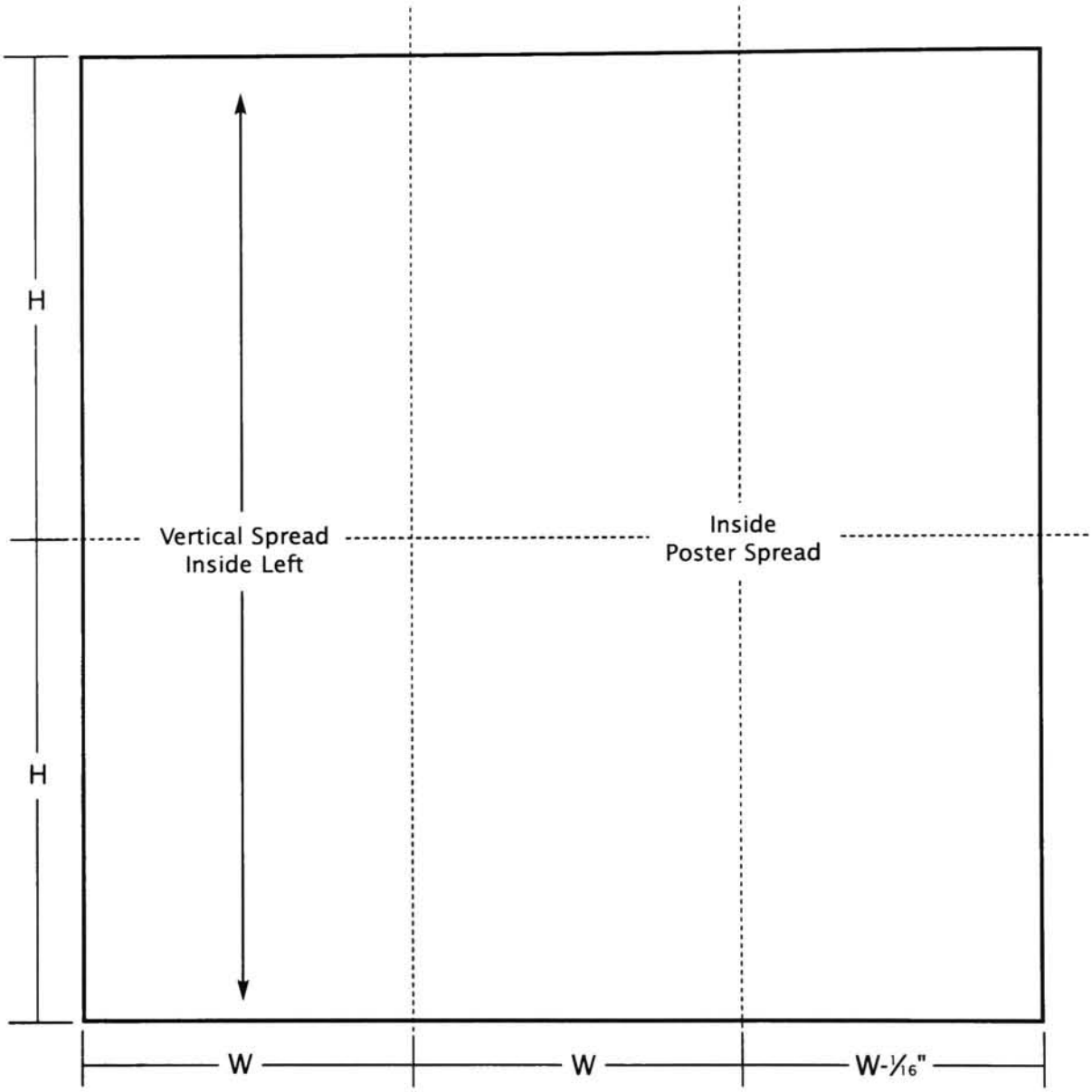
GETTING STARTED

Here's an example: If your finished size is 4 x 9, then your panels for page 1 of your digital document would be, from left, 3 15/16 inches, 4 inches, and 4 inches. Then for page two everything reverses, so from left the panels would measure 4 inches, 4 inches and 3 15/16 inches, with a height of 18 inches.

Remember: Document size and flat size must be the same, so in this case the document size would be 11 15/16 (11.937) inches wide by 18 inches high.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- Consult your printer about the size of the press sheet. Also ask for a diagram of how your piece will be run on the press sheet. Sometimes there is a lot of waste on the sheet, and you may be able to add another panel or two (which would change the folding style) without adding to the cost of the job.
- Make sure to have a folding dummy made in your specified paper.
- Be aware of your printer or bindery's minimum and maximum sheet sizes for their equipment. Top-folding single gates and any other folded pieces which open out to very large dimensions generally require special large format folders.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document width ahead of time. Create your document as if all panels will be the same (ex: for a top-folding single gate with a finished size of 4 x 9, set the document size to 12 x 18). Then set crosshairs to upper left corner of document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, $3^{15}/_{16}$ inches). Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement (4). After setting the second fold, bring the crosshairs over one last time, drag a guide for your last panel width (4). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Just change your document size by entering that decimal measurement (11.937). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

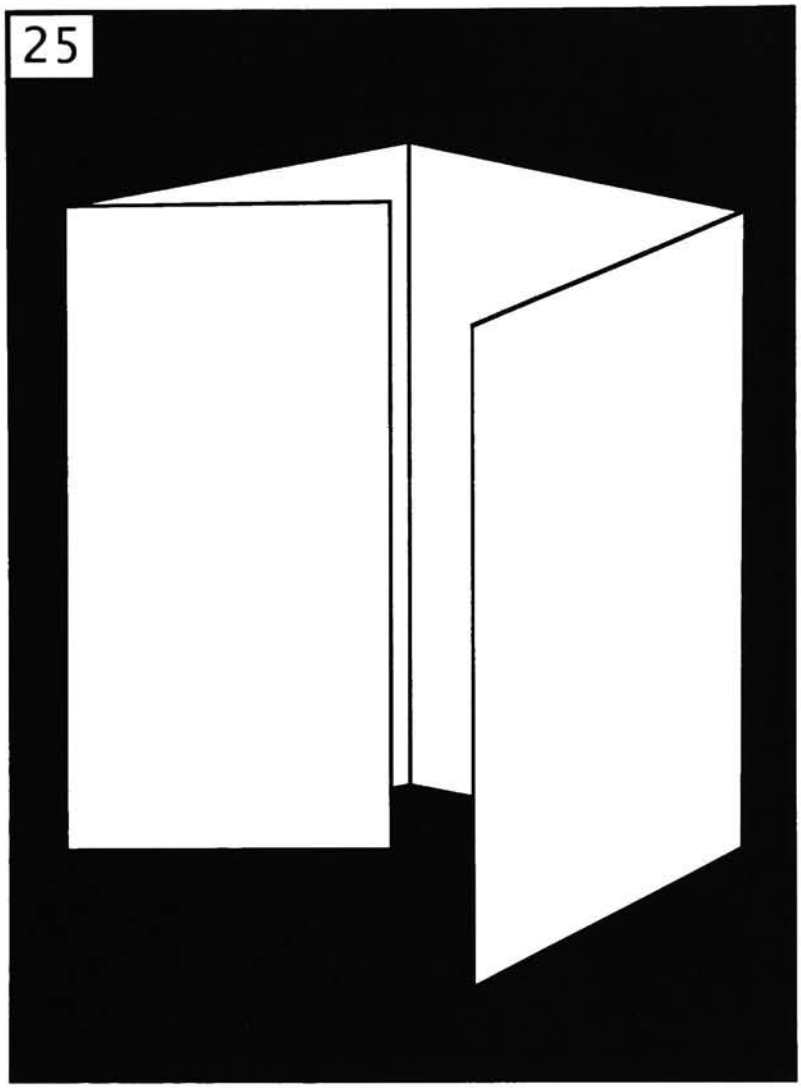
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you don not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

DOUBLE GATE

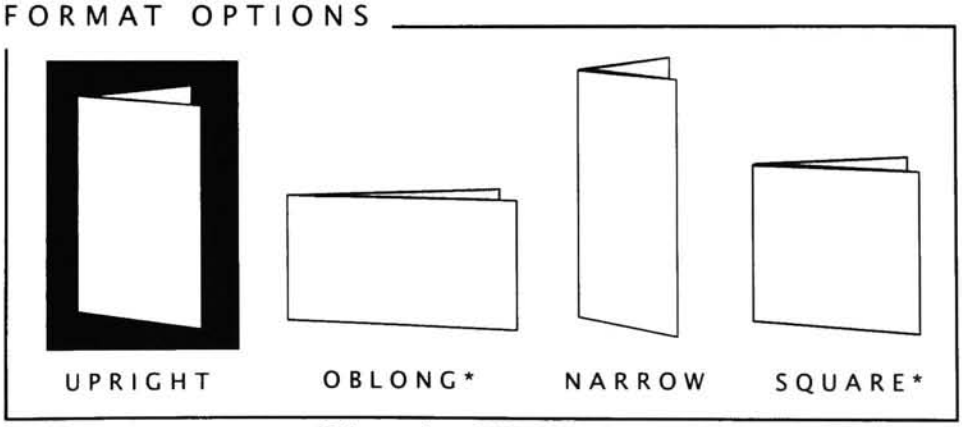


LEVEL

A level 3 fold has a long and difficult makeready, could require special machinery and low folding speed. These issues will be reflected in the cost.

The double gate fold has the same fold-in panel characteristics of the gate fold family, but the difference is that this is a symmetrical fold which has two opposing fold-in panels.

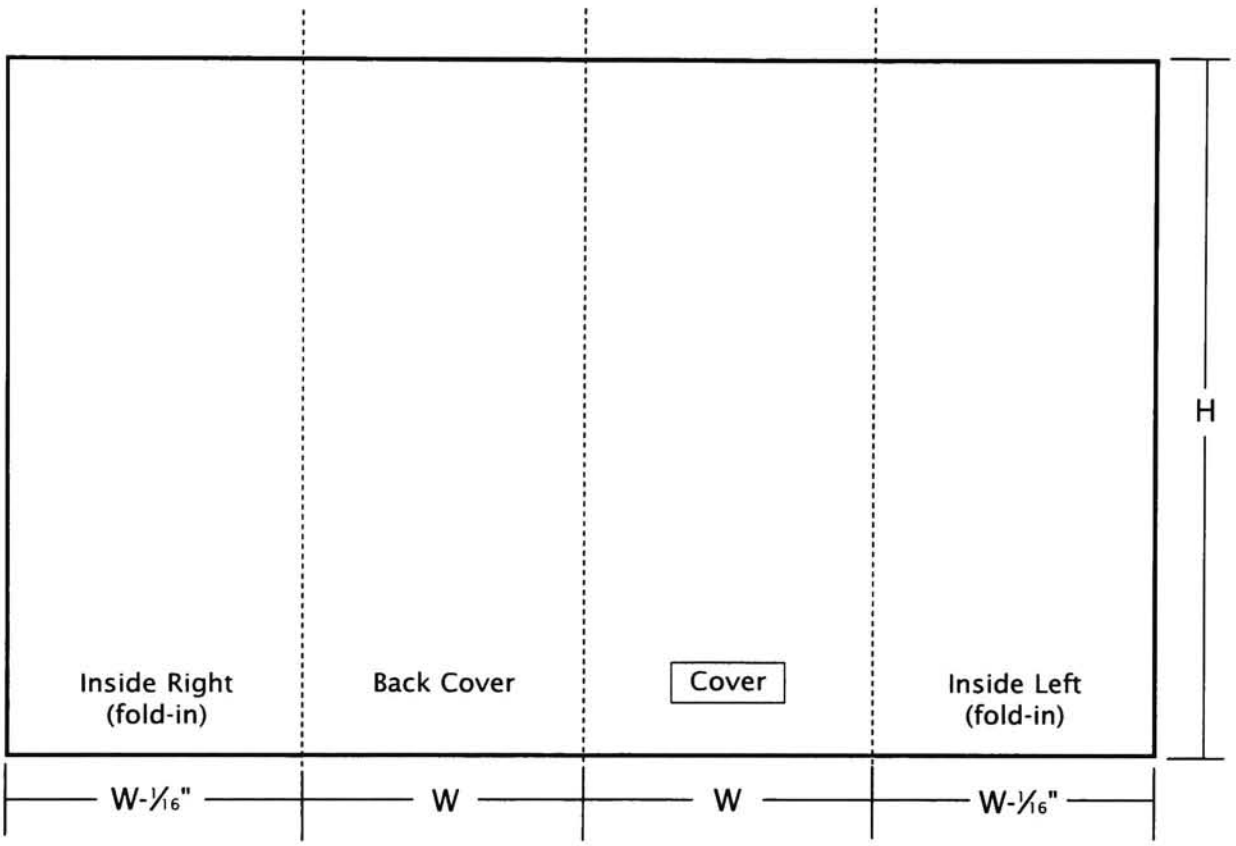
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

W: finished width
H: finished height
--- fold indication

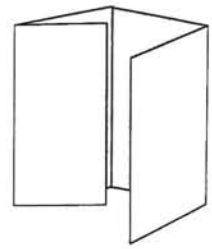


GETTING STARTED

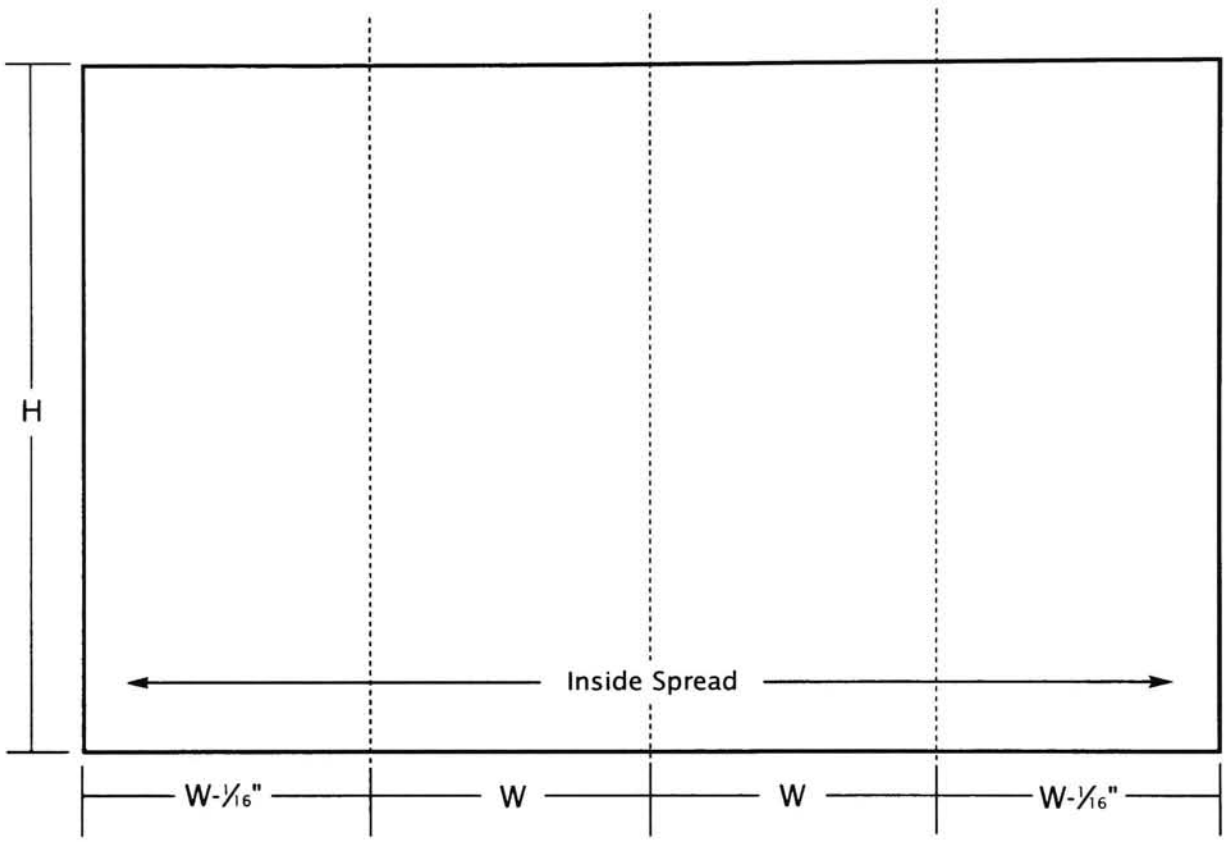
Here's an example: If your finished size is 5 x 7, then your panels for page 1 of your digital document would be, from left, 4 15/16 inches, 5 inches, 5 inches and 4 15/16 inches, with a height of 7 inches. This fold is symmetrical, so for page 2 the measurements are the same as page 1.

Remember: Document size and flat size must be the same, so in this case the document size would be 19 7/8 (19.875) inches wide by 7 inches high.

Time-saving tip: For this particular folding style, the fold placement is exactly the same for page 1 as it is for page 2. If you're creating your document in a page layout program which has a master page option, save time by setting your folds on the master page. Then, return to the document and add the second page.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- Double gate folds can be tricky, but most skilled folding operators can give you a nice close gap. A ⅛" total gap (like the diagram above) is ideal. Do not accept more than a ¼" total gap.
- If you are designing a large piece, make sure to have a folding sample made up from your specified paper. If the paper is too lightweight, it could turn into a sagging flimsy piece.
- Make sure to have a folding dummy made in your specified paper.
- If your paper choice is any heavier than 80# text, you will want to consider scoring the piece. Ask your printer for a recommendation.
- Be aware of your printer or bindery's minimum and maximum sheet sizes for their equipment.
- If you are designing a self-mailing piece, this folding style could require a wafer-seal to make it mail-ready.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document width ahead of time. Create your document as if all panels will be the same (ex: for a double gate with a finished size of 5 x 7, set the document size to 20 x 7). Then set crosshairs to upper left corner of document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, 4 15/16 inches). Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement (5). Keep doing this until you measure the last panel (in this example, 4 15/16 inches). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Just change your document size by entering that decimal measurement (19.875). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

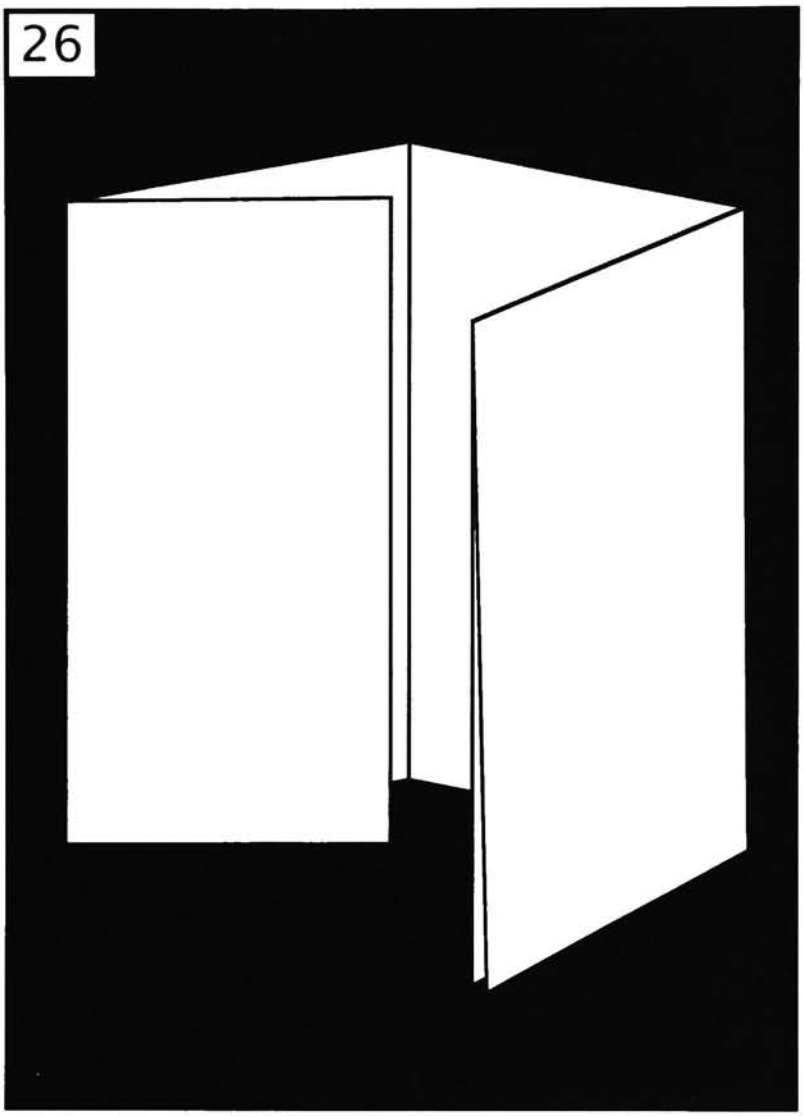
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

BROADSIDE DOUBLE GATE

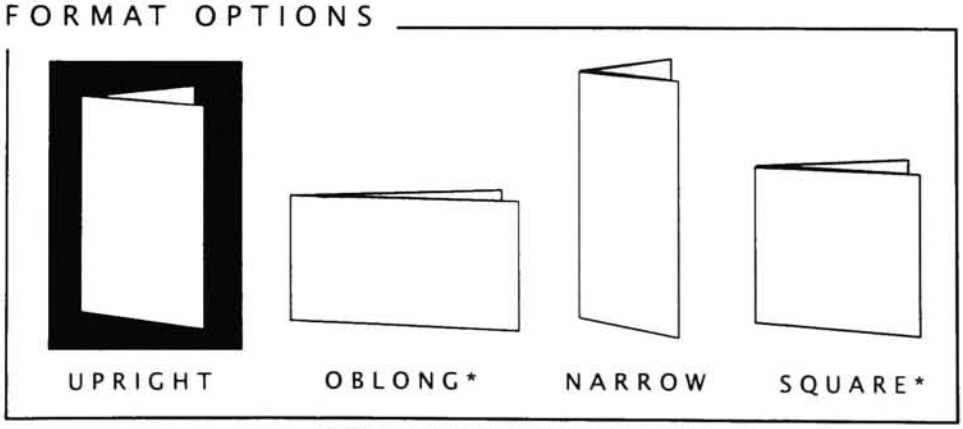


LEVEL

A level 3 fold has a long and difficult makeready, could require special machinery and low folding speed. These issues will be reflected in the cost.

The broadside double gate fold has the same fold-in panel style as the standard single gate fold, but the difference is that this fold has twice the area because it folds in half on itself before the gate folding is done.

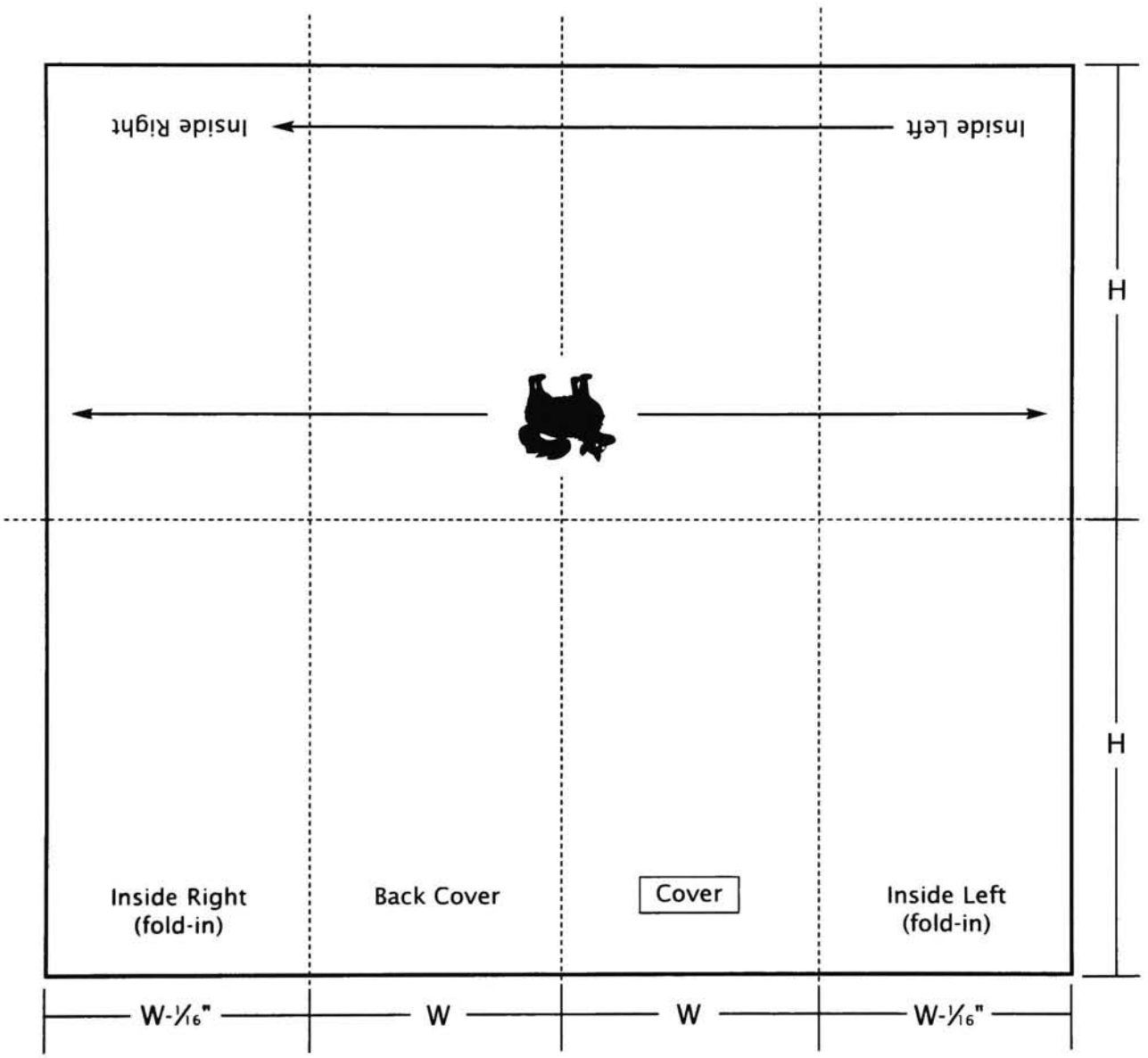
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

W: finished width
H: finished height
--- fold indication
upside-down

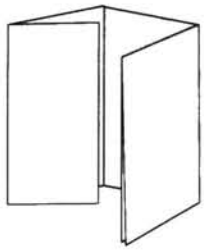


GETTING STARTED

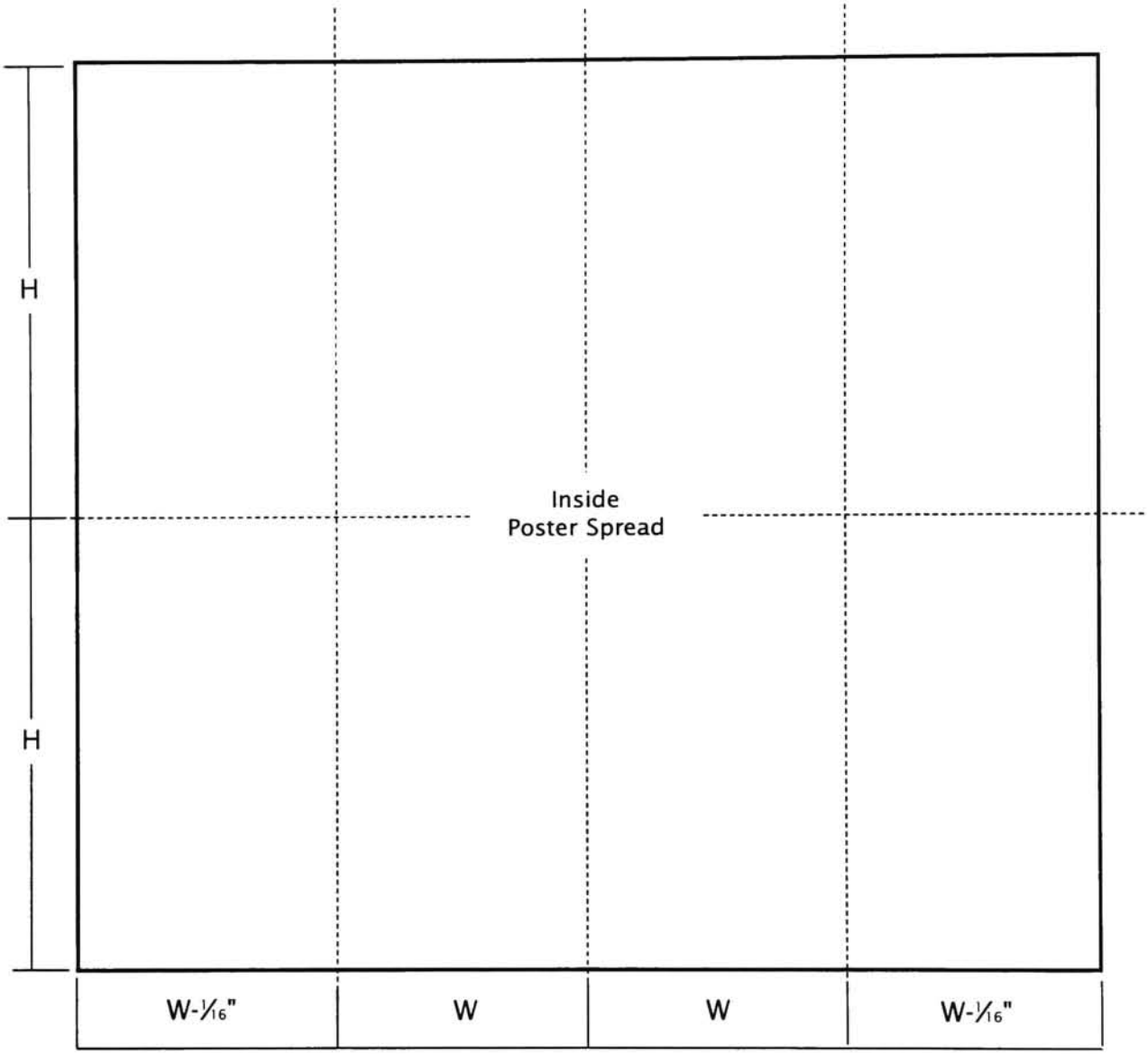
Here's an example: If your finished size is 5 x 7, then your panels for page 1 of your digital document would be, from left, 4 15/16 inches, 5 inches, 5 inches and 4 15/16 inches. This fold is symmetrical, so for page 2 the measurements are the same as page 1, with a document height of 14 inches (7 inches plus 7 inches).

Remember: Document size and flat size must be the same, so in this case the document size would be 19 7/8 (19.875) inches wide by 14 inches high.

Time-saving tip: For this particular folding style, the fold placement is exactly the same for page 1 as it is for page 2. If you're creating your document in a page layout program which has a master page option, save time by setting your folds on the master page. Then, return to the document and add the second page.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- If you are designing a self-mailing piece, this folding style could require a wafer-seal to make it mail-ready.
- Double gate folds can be tricky, but most skilled folding operators can give you a nice close gap. A ⅛" total gap (like the diagram above) is ideal. Do not accept more than a ¼" total gap.
- Make sure to have a folding dummy made in your specified paper. Paper weight will dramatically affect the success of this piece. Watch for bulkiness and problems in the corner joints of the folds—the printer can't do anything about this, and it will require a change in paper.
- Be aware of your printer or bindery's minimum and maximum sheet sizes for their equipment.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document width ahead of time. Create your document as if all panels will be the same (ex: for a broadside double gate with a finished size of 5 x 7, set the document size to 20 x 14). Then set cross-hairs to upper left corner of document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, 4 15/16 inches). Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement (4). Keep doing this until you measure the last panel (in this example, 4 15/16 inches). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Just change your document size by entering that decimal measurement (19.875). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

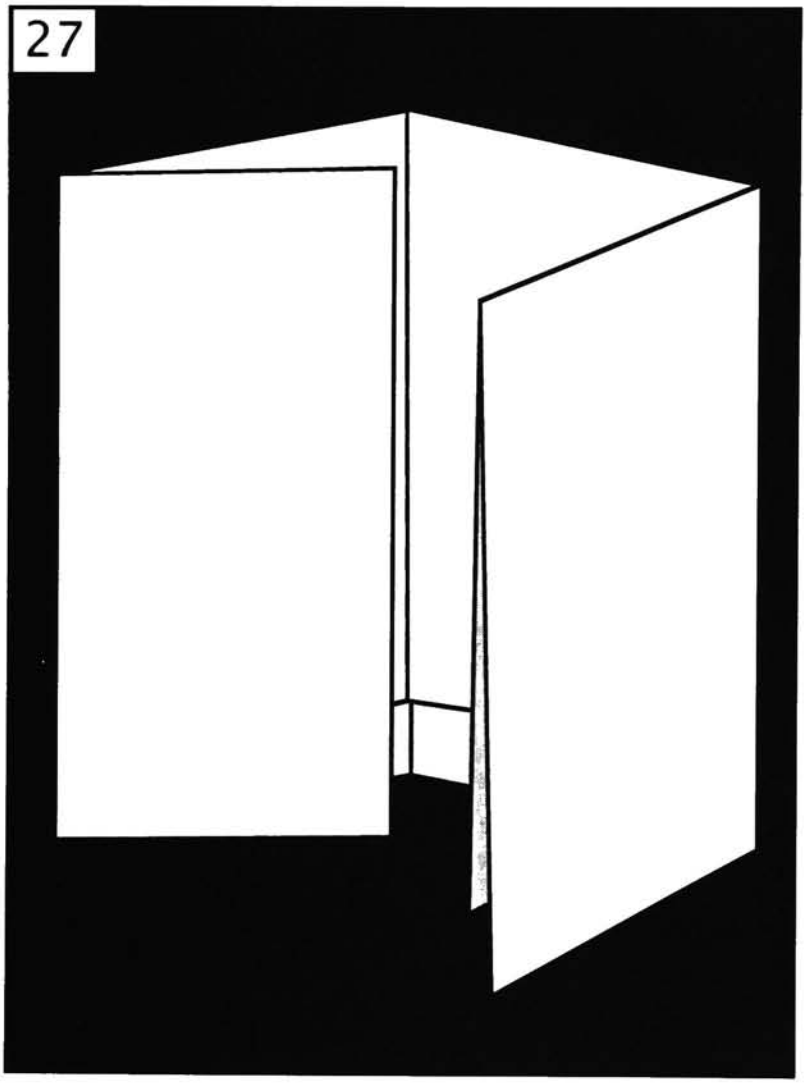
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

DOUBLE GATE WITH SHORT FOLD (INSIDE)

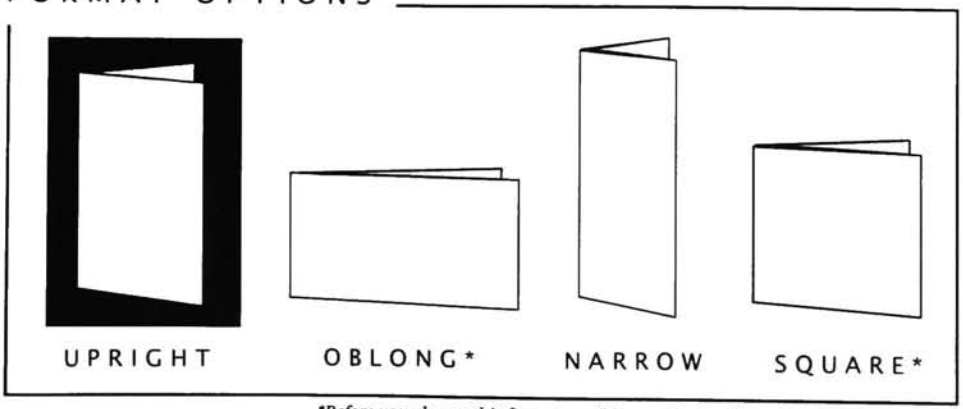


LEVEL

A level 3 fold has a long and difficult makeready, could require special machinery and low folding speed. These issues will be reflected in the cost.

The single gate with short fold inside has the same fold-in panel style as the double gate fold, and is similar to the broadside double gate fold because it folds in half on itself before the gate folding is done. What makes this fold different is that unlike a broadside fold where panels are of equal length, in a short fold the fold-over panels are shorter than the finished height.

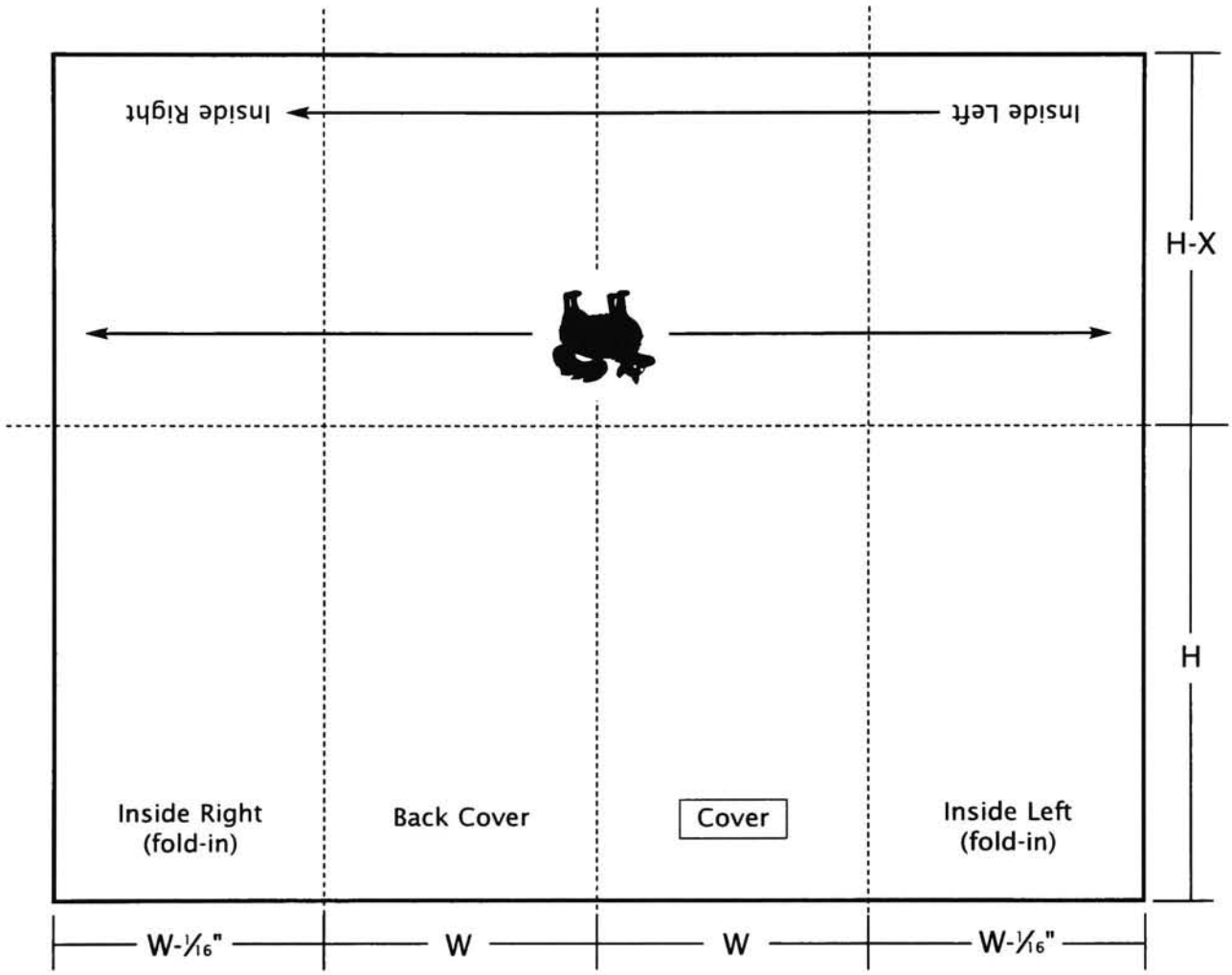
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

W: finished width
H: finished height
X: your choice
--- fold indication
upside-down

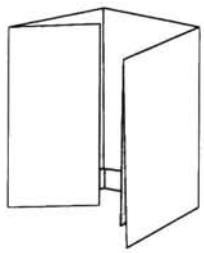


GETTING STARTED

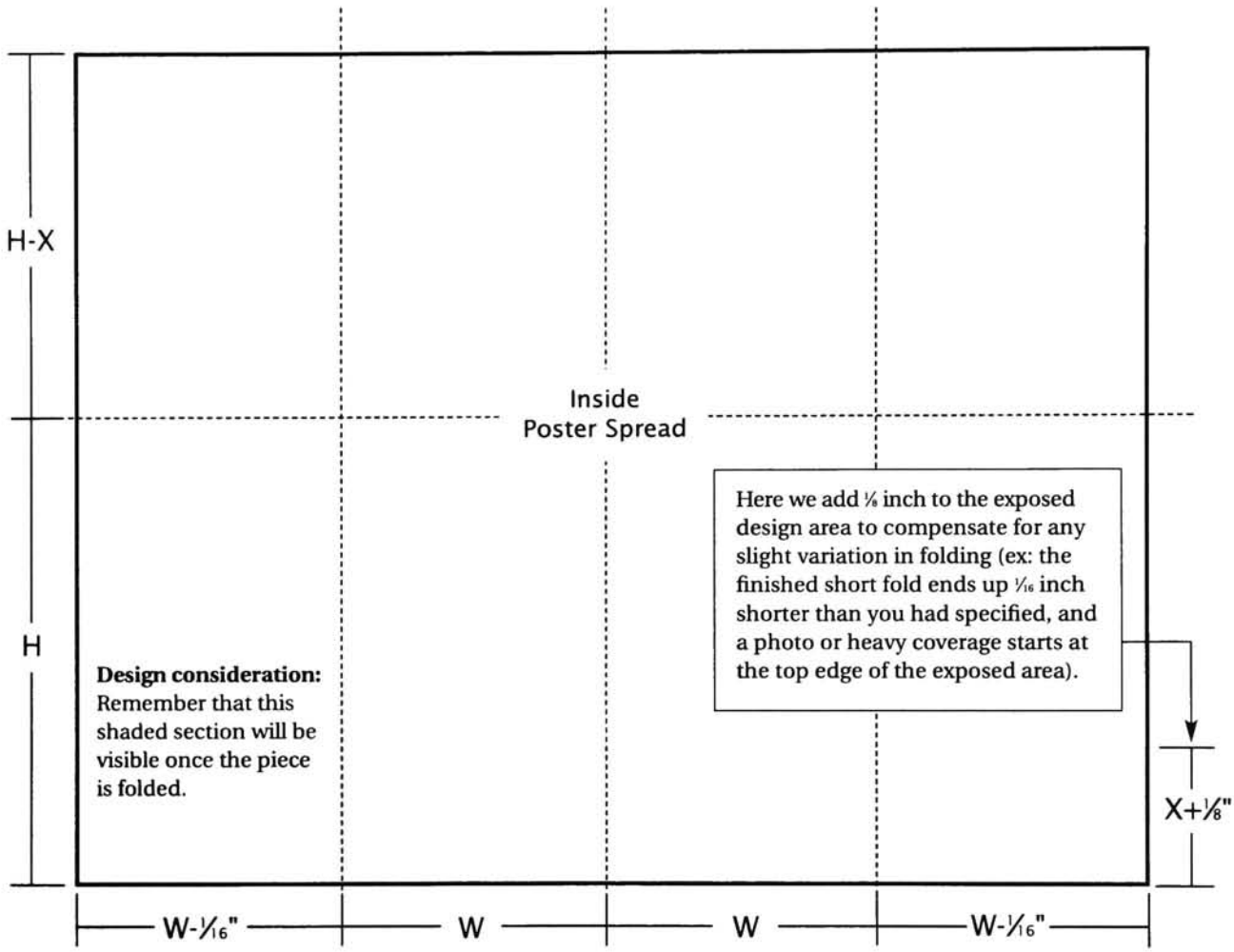
Here's an example: For a short fold, the first thing we must determine is how short the short fold will be. In this case, we'll make it 2 inches shorter than the finished height, so X=2. Now we can calculate our document height. If the finished size is 5 x 7, then 7 inches plus 5 (7-2 , or height minus X) equals a document height of 12 inches. Our finished width is 5 inches, so the panels for page 1 of the digital document would be, from left, 4 15/16 inches, 5 inches, 5 inches and 4 15/16 inches. This fold is symmetrical, so for page 2 the measurements are the same as page 1.

Remember: Document size and flat size must be the same, so in this case the document size would be 19 7/8 (19.875) inches wide by 12 inches high.

Time-saving tip: For this particular folding style, the fold placement is exactly the same for page 1 as it is for page 2. If you're creating your document in a page layout program which has a master page option, save time by setting your folds on the master page. Then, return to the document and add the second page.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- If you are designing a self-mailing piece, this folding style could require a wafer-seal to make it mail-ready.
- Double gate folds can be tricky, but most skilled folding operators can give you a nice close gap. A ⅛" total gap (like the diagram above) is ideal. Do not accept more than a ¼" total gap.
- Make sure to have a folding dummy made in your specified paper. Paper weight will dramatically affect the success of this piece. Watch for bulkiness and problems in the corner joints of the folds—the printer can't do anything about this, and it will require a change in paper.
- Be aware of your printer or bindery's minimum and maximum sheet sizes for their equipment.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document width ahead of time. Create your document as if all panels will be the same (ex: for a double gate with short fold with a finished size of 5 x 7, set the document size to 20 x 12). Then set cross-hairs to upper left corner of document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, 4 15/16 inches). Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement (4). Keep doing this until you measure the last panel (in this example, 4 15/16 inches). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Just change your document size by entering that decimal measurement (19.875). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

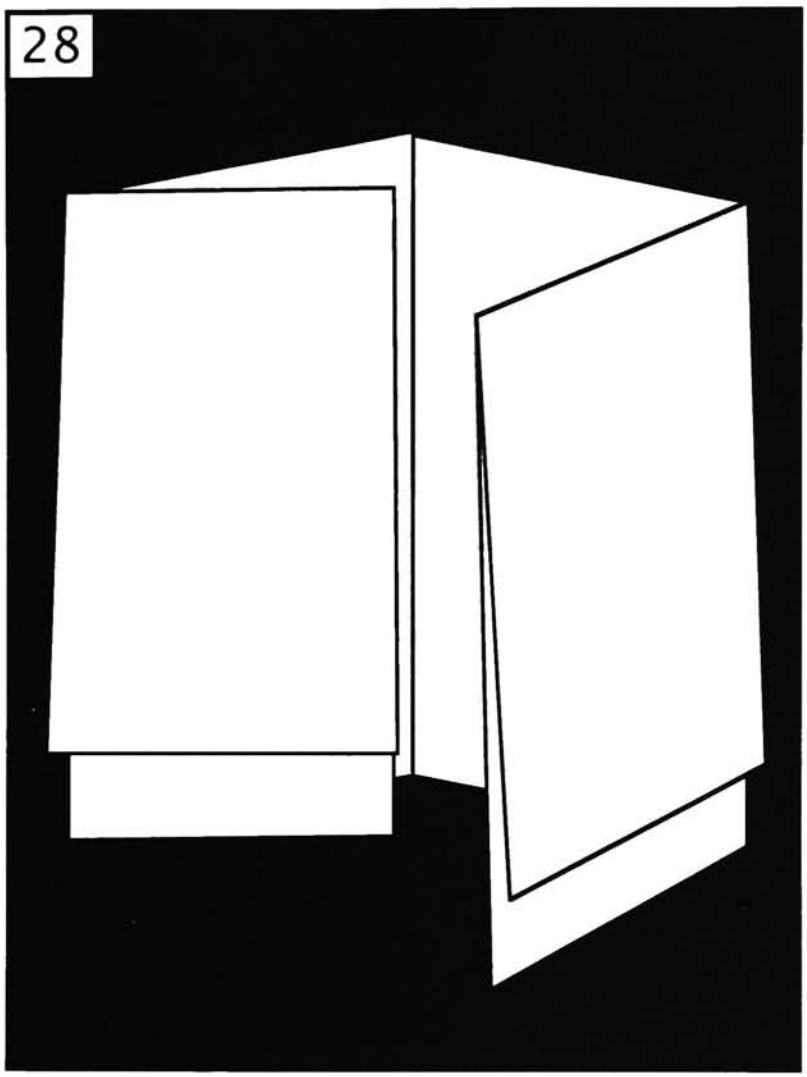
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

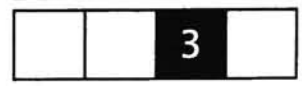
Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

DOUBLE GATE WITH SHORT FOLD (OUTSIDE)



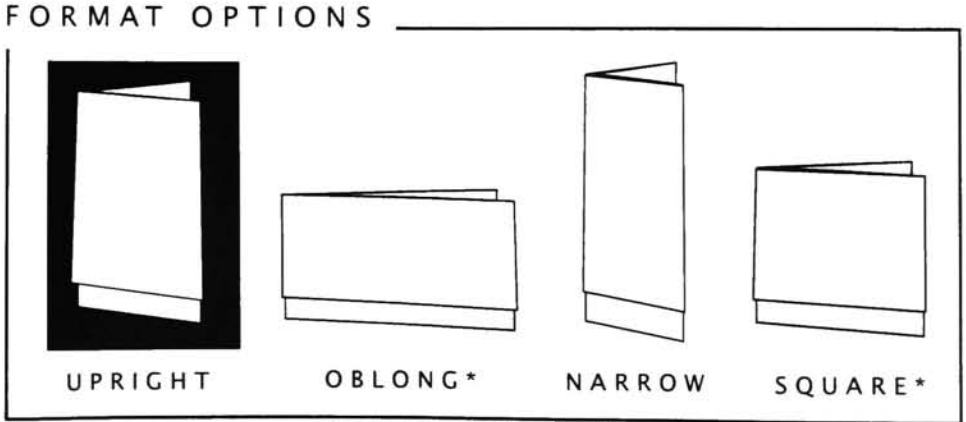
LEVEL



A level 3 fold has a long and difficult makeready, could require special machinery and low folding speed. These issues will be reflected in the cost.

The single gate with short fold outside has the same fold-in panel style as the double gate fold, and is similar to the broadside double gate fold because it folds in half on itself before the gate folding is done. What makes this fold different is that unlike a broadside fold where panels are of equal length, in a short fold the fold-over panels are shorter than the finished height.

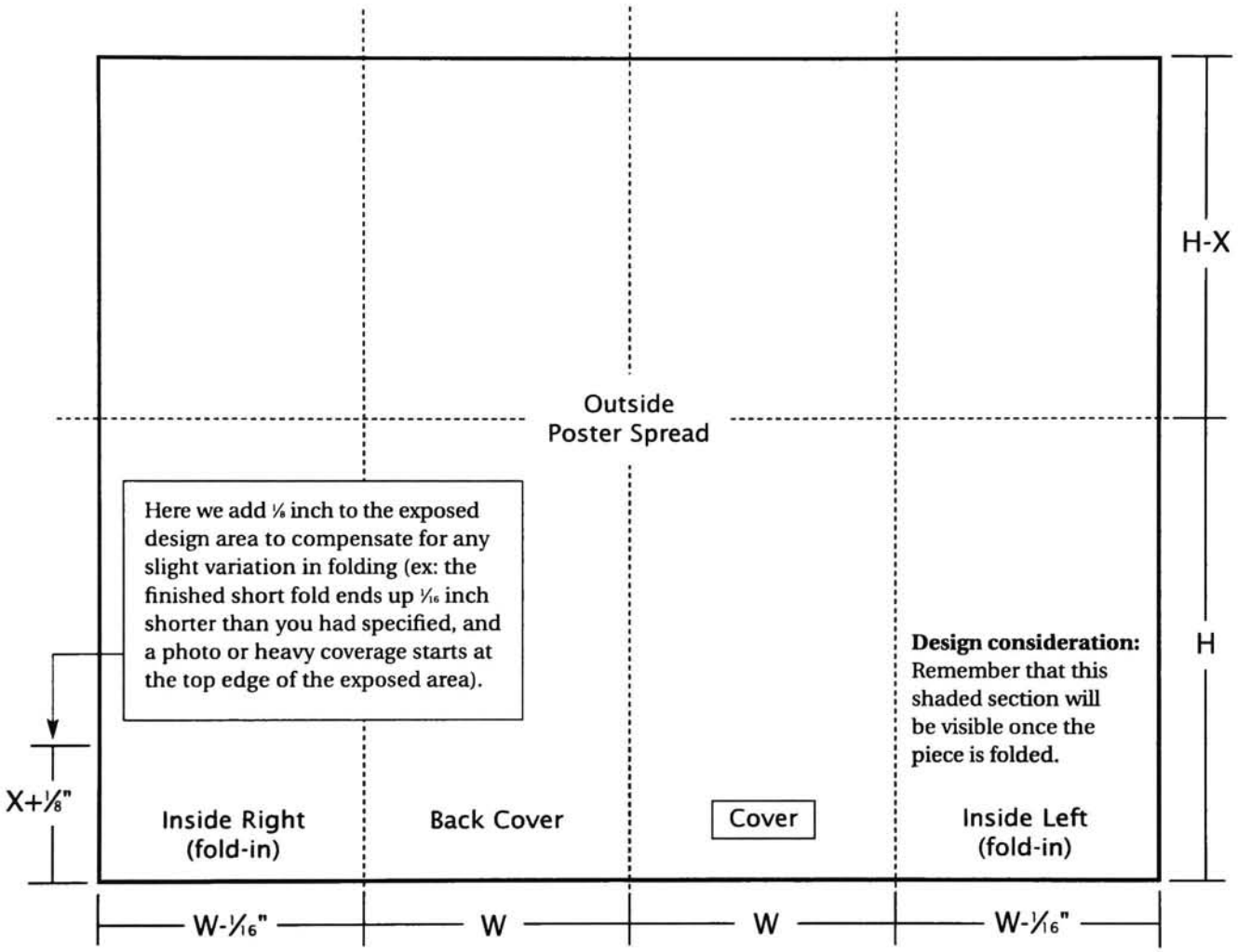
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

W: finished width
H: finished height
X: your choice
--- fold indication
upside-down

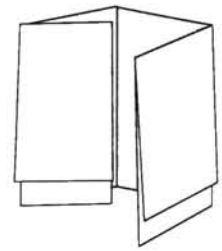


GETTING STARTED

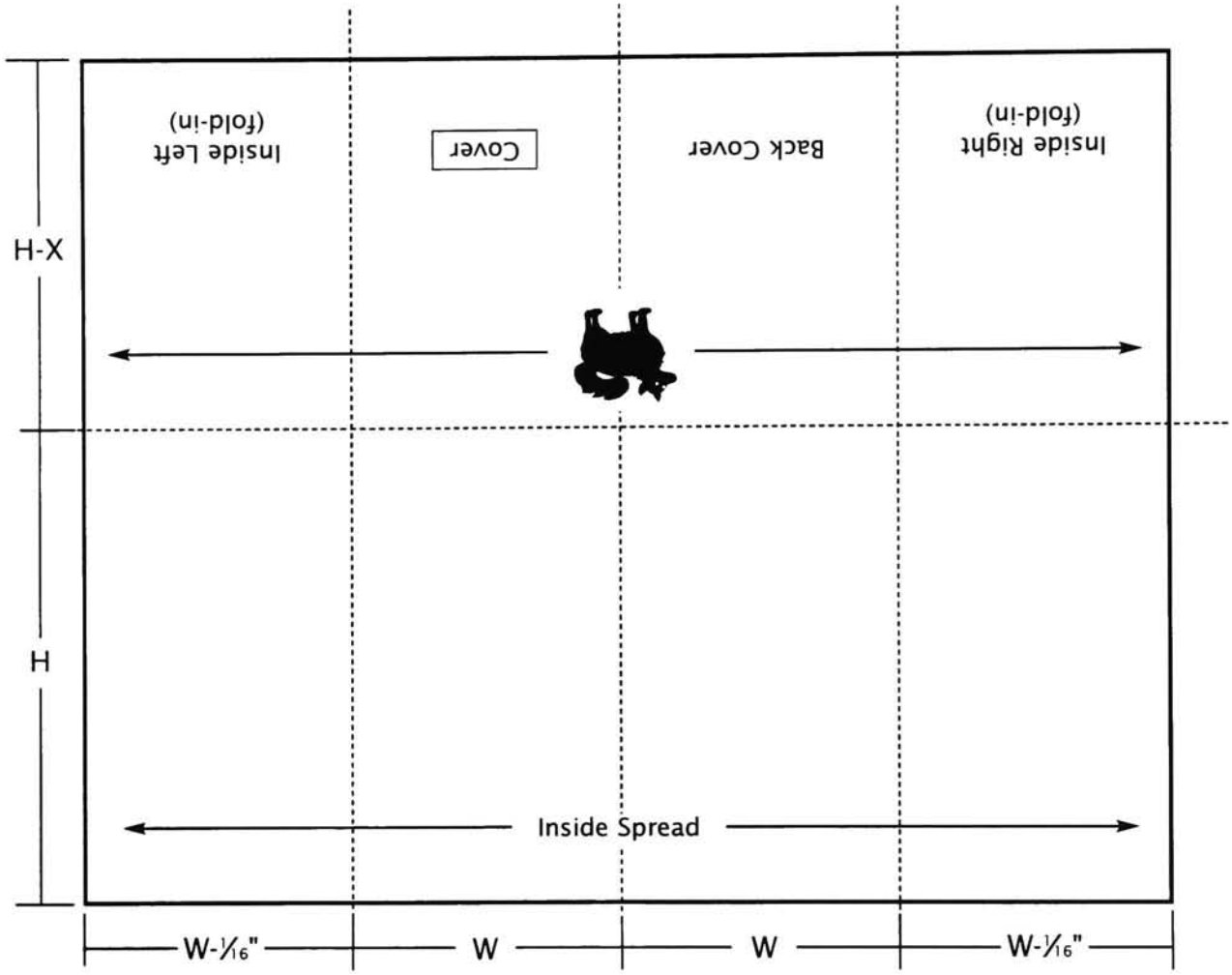
Here's an example: For a short fold, the first thing we must determine is how short the short fold will be. In this case, we'll make it 2 inches shorter than the finished height, so X=2. Now we can calculate our document height. If the finished size is 5 x 7, then 7 inches plus 5 (7-2 , or height minus X) equals a document height of 12 inches. Our finished width is 5 inches, so the panels for page 1 of the digital document would be, from left, 4 15/16 inches, 5 inches, 5 inches and 4 15/16 inches. This fold is symmetrical, so for page 2 the measurements are the same as page 1.

Remember: Document size and flat size must be the same, so in this case the document size would be 19 ⅞ (19.875) inches wide by 12 inches high.

Time-saving tip: For this particular folding style, the fold placement is exactly the same for page 1 as it is for page 2. If you're creating your document in a page layout program which has a master page option, save time by setting your folds on the master page. Then, return to the document and add the second page.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- If you are designing a self-mailing piece, this folding style could require a wafer-seal to make it mail-ready.
- Double gate folds can be tricky, but most skilled folding operators can give you a nice close gap. A ⅛" total gap (like the diagram above) is ideal. Do not accept more than a ¼" total gap.
- Make sure to have a folding dummy made in your specified paper. Paper weight will dramatically affect the success of this piece. Watch for bulkiness and problems in the corner joints of the folds—the printer can't do anything about this, and it will require a change in paper.
- Be aware of your printer or bindery's minimum and maximum sheet sizes for their equipment.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document width ahead of time. Create your document as if all panels will be the same (ex: for a double gate with short fold with a finished size of 5 x 7, set the document size to 20 x 12). Then set cross-hairs to upper left corner of document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, 4 15/16 inches). Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement (4). Keep doing this until you measure the last panel (in this example, 4 15/16 inches). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Just change your document size by entering that decimal measurement (19.875). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

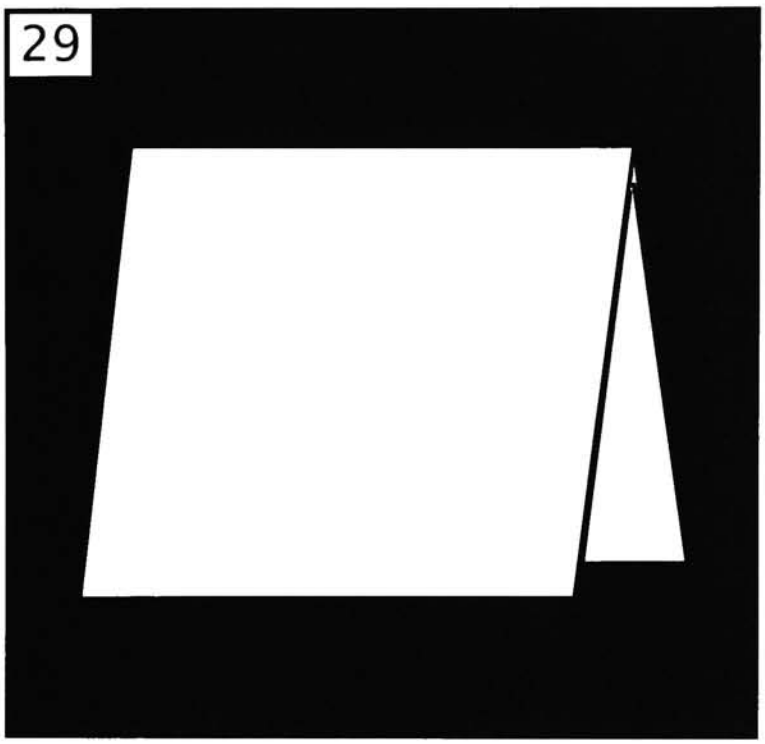
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

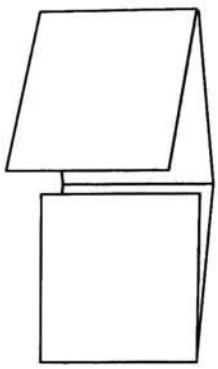
Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

TENT FOLD DOUBLE GATE



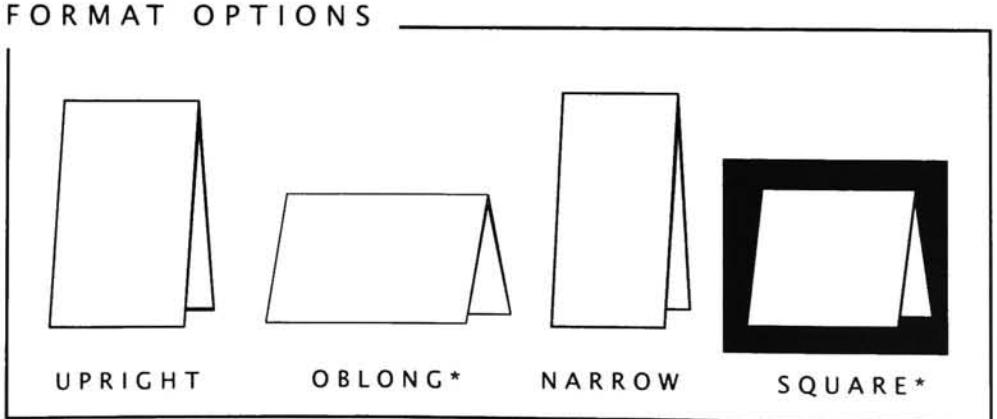


LEVEL

A level 3 fold has a long and difficult makeready, could require special machinery and low folding speed. These issues will be reflected in the cost.

The tent fold double gate has the same dual fold-in panel characteristics of the double gate fold. The difference is in the direction in which it unfolds. The double gate folds out to the sides, the tent fold double gate is a vertical format piece.

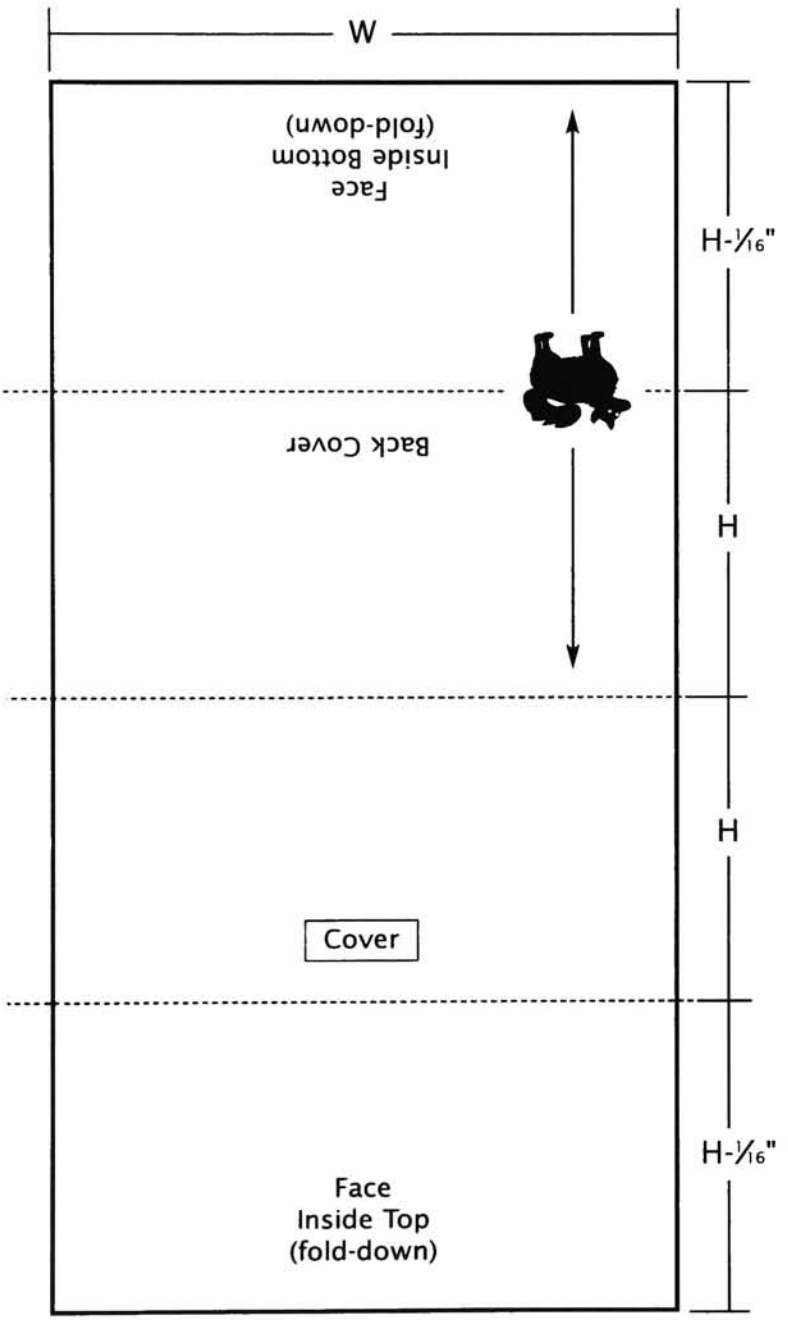
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

W:	finished width
H:	finished height
X:	your choice
---	fold indication
	upside-down

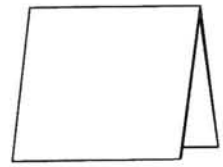


Getting started

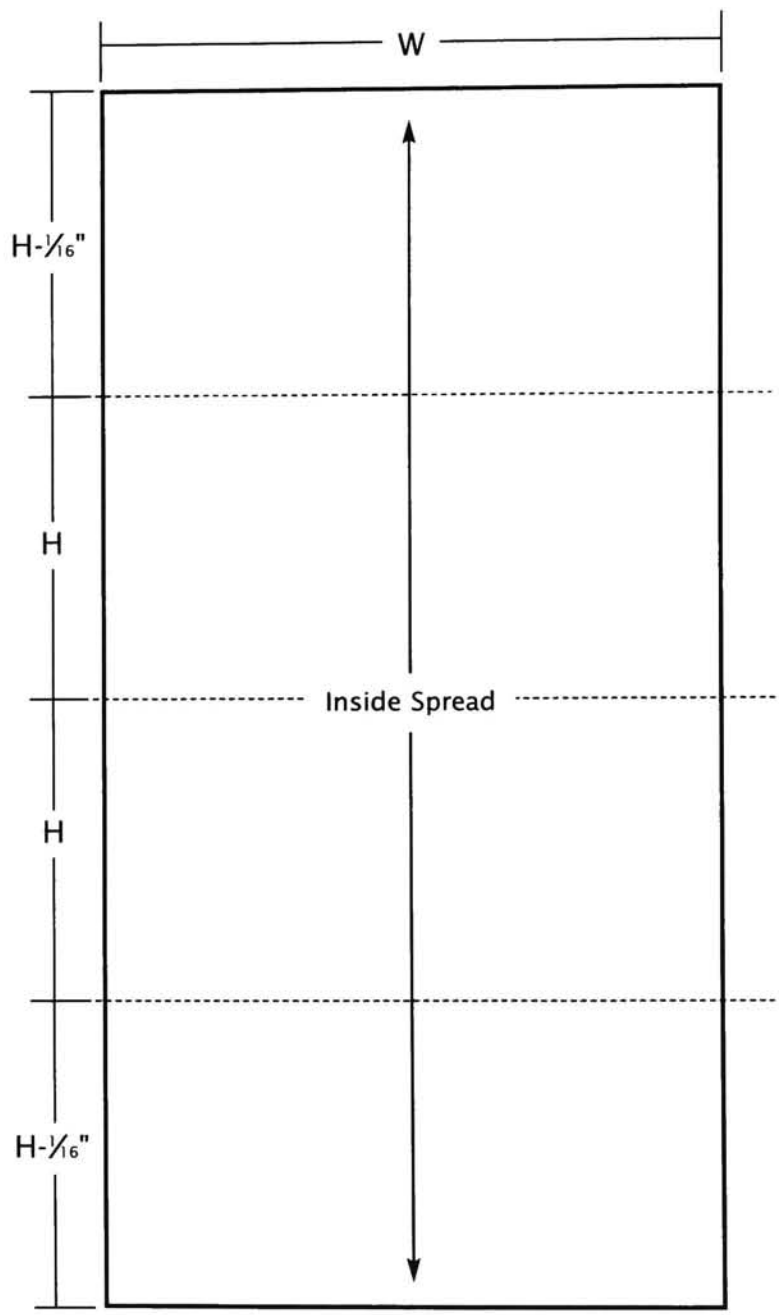
Here's an example: If your finished size is 6 x 4, then your panel height for page 1 of your digital document would be, from top, 3 15/16 inches, 4 inches, 4 inches and 3 15/16 inches, with a width of 6 inches. This fold is symmetrical, so for page 2 the measurements are the same as page 1.

Remember: Document size and flat size must be the same, so in this case the document size would be 6 inches wide by 15 7/8 (15.875) inches long.

Time-saving tip: For this particular folding style, the fold placement is exactly the same for page 1 as it is for page 2. If you're creating your document in a page layout program which has a master page option, save time by setting your folds on the master page. Then, return to the document and add the second page.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- Double gate folds can be tricky, but most skilled folding operators can give you a nice close gap. A ⅛" total gap (like the diagram above) is ideal. Do not accept more than a ¼" total gap.
- If you are designing a large piece, make sure to have a folding sample made up from your specified paper. If the paper is too lightweight, it could turn into a sagging flimsy piece.
- If you are designing a self-mailing piece, this folding style could require a wafer-seal to make it mail-ready.
- If your paper choice is any heavier than 80# text, you will want to consider scoring the piece. Ask your printer for a recommendation.
- Make sure to have a folding dummy made in your specified paper.
- Be aware of your printer or bindery's minimum and maximum sheet sizes for their equipment.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document height ahead of time. Create your document as if all panels will be the same (ex: for a tent folding double gate with a finished size of 6 x 4, set the document size to 6 x 16). Then set crosshairs to upper left corner of document, pull down a guide bar from the top ruler and set it to the length of your first panel (in this example, 3 15/16 inches). Then, bring the cross-hairs down to the guide you just set (which lets you measure from zero again) and drag your guide down to the next panel measurement (4). Keep doing this until you measure the last panel (in this example, 3 15/16 inches). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the Y measurement, that will give you the document length you are looking for. Just change your document size by entering that decimal measurement (15.875). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

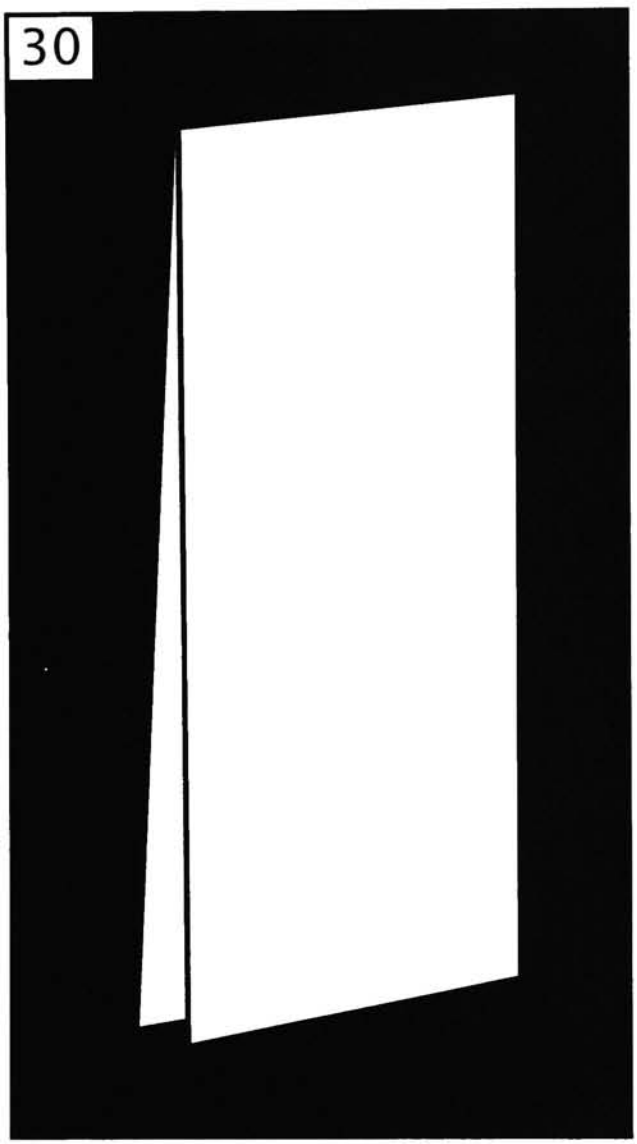
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

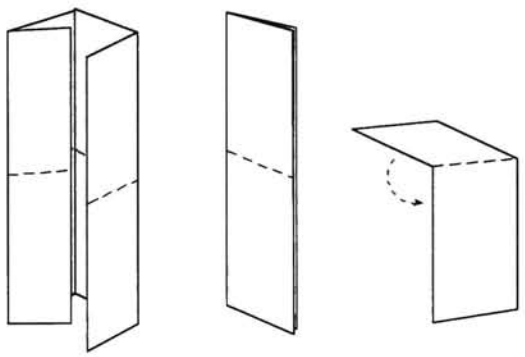
Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

TOP-FOLDING DOUBLE GATE



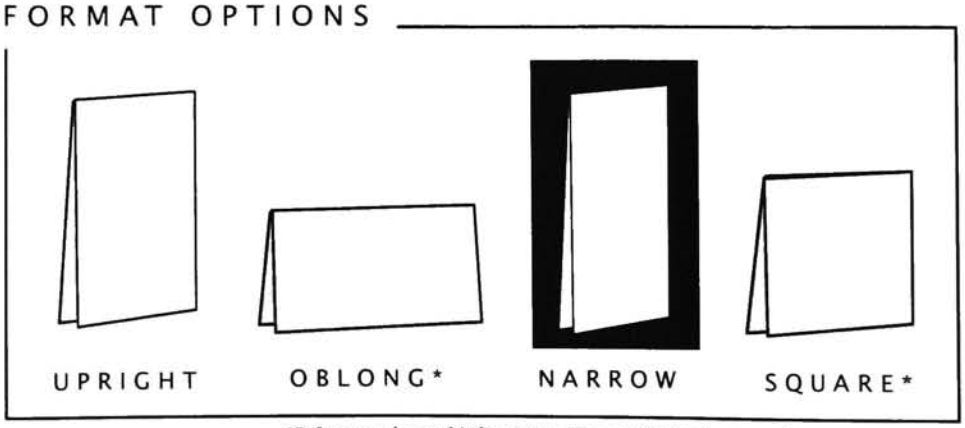


LEVEL

A level 3 fold has a long and difficult makeready, could require special machinery and low folding speed. These issues will be reflected in the cost.

The top-folding double gate consists of the same fold-in panel style as the standard double gate fold, but in a taller format. When the gate folding is done, this style then folds in half onto itself.

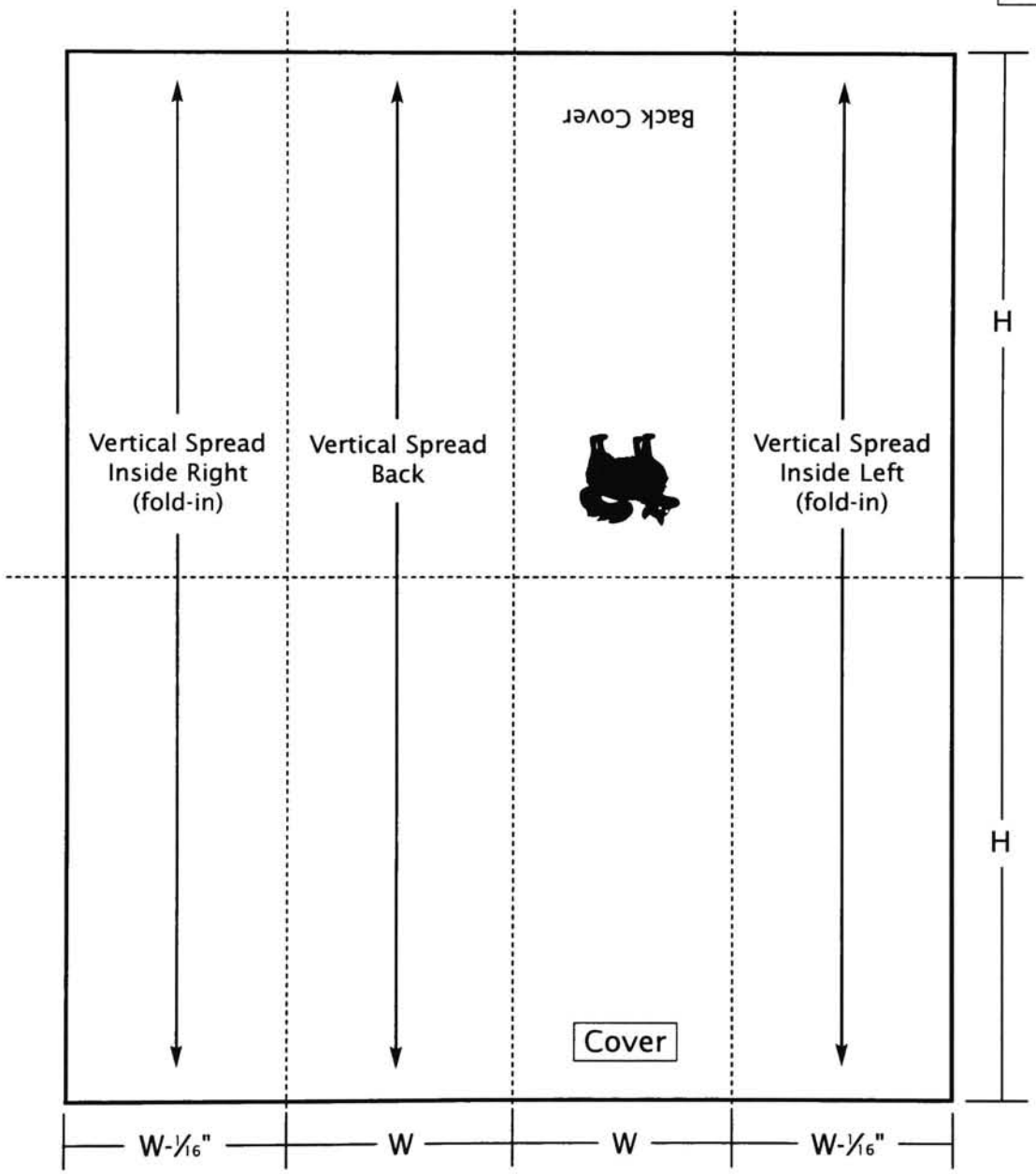
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

W: finished width
H: finished height
--- fold indication
upside-down

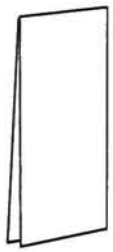


GETTING STARTED

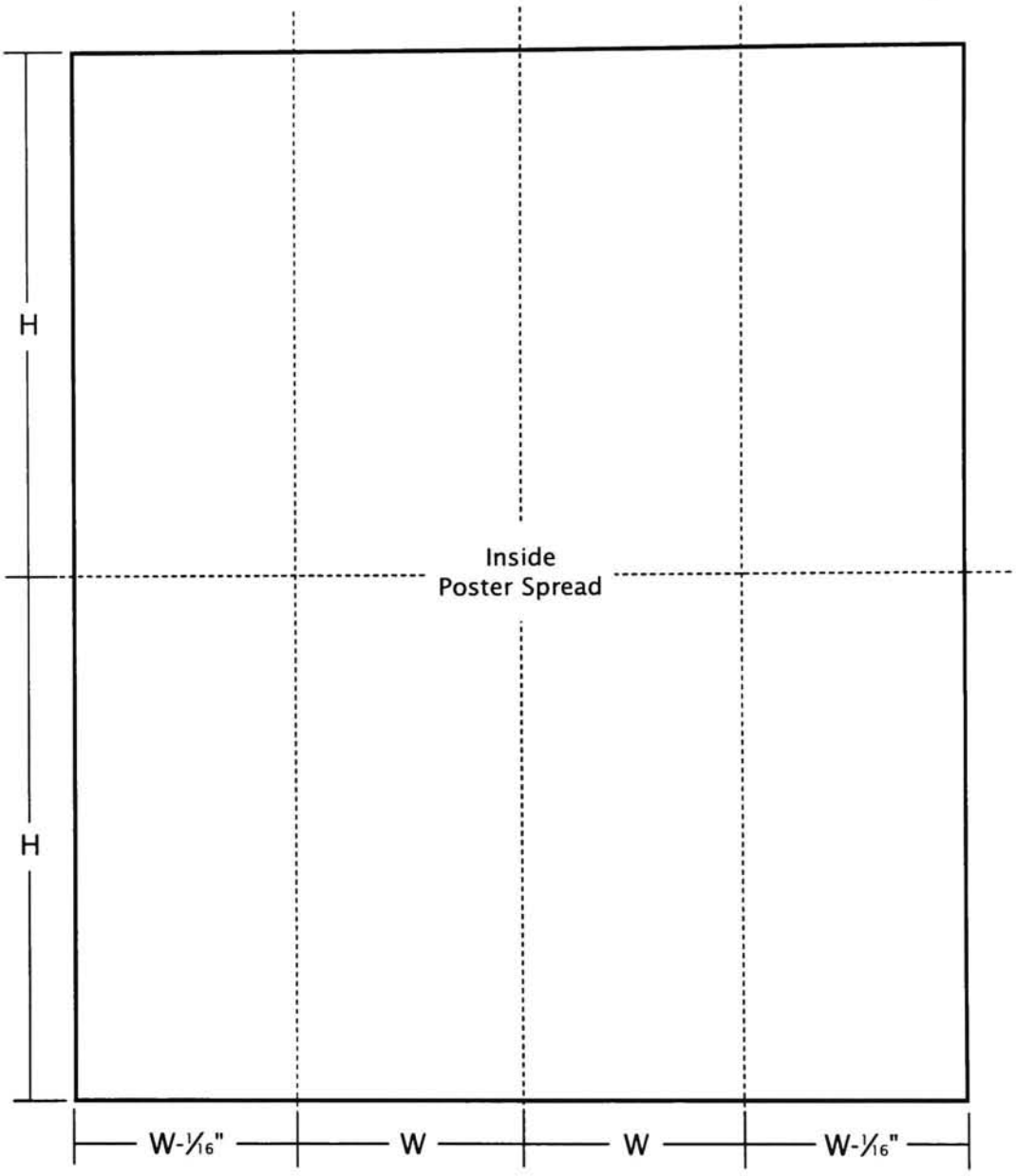
Here's an example: If your finished size is 4 x 9, then your panels for page 1 of your digital document would be, from left, 3 15/16 inches, 4 inches, 4 inches and 3 15/16 inches, with a height of 18 inches. This fold is symmetrical, so for page 2 the measurements are the same as page 1.

Remember: Document size and flat size must be the same, so in this case the document size would be 15 7/8 (15.875) inches wide by 18 inches high.

Time-saving tip: For this particular folding style, the fold placement is exactly the same for page 1 as it is for page 2. If you're creating your document in a page layout program which has a master page option, save time by setting your folds on the master page. Then, return to the document and add the second page.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- A paper choice of any heavier than 60# text is not recommended.
- Make sure to have a folding dummy made in your specified paper.
- Be aware of your printer or bindery's minimum and maximum sheet sizes for their equipment. Top-folding double gates and any other folded pieces which open out to very large dimensions generally require special large format folders.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document width ahead of time. Create your document as if all panels will be the same (ex: for a top-folding double gate with a finished size of 4 x 9, set the document size to 16 x 18). Then set crosshairs to upper left corner of document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, 3 15/16 inches). Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement (4). Keep doing this until you measure the last panel (in this example, 3 15/16 inches). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Just change your document size by entering that decimal measurement (15.875). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

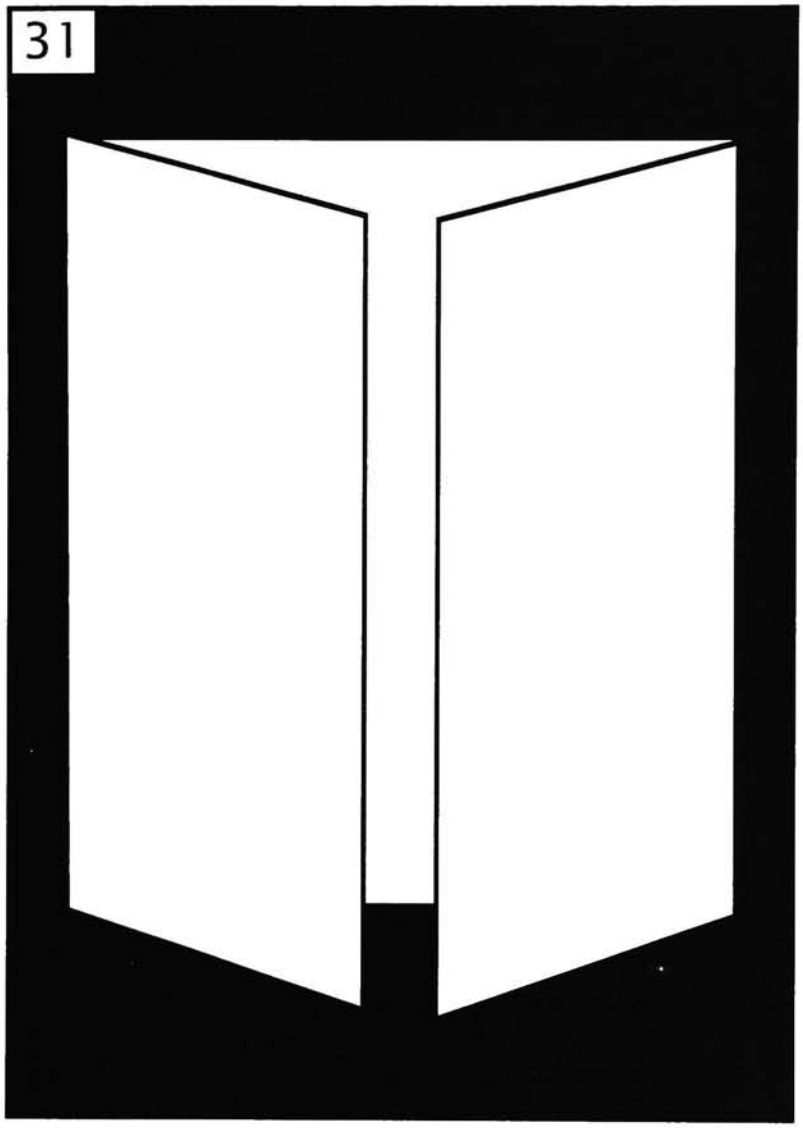
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

SEMI-GATE

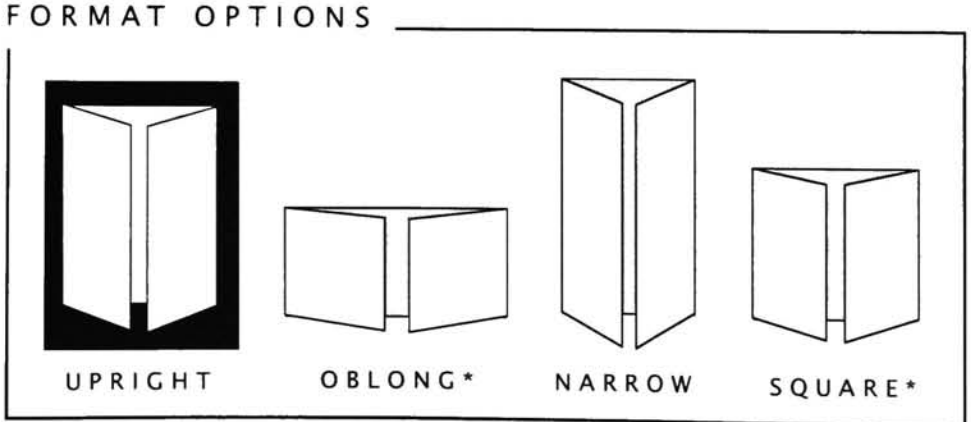


LEVEL

A level 3 fold has a long and difficult makeready, could require special machinery and low folding speed. These issues will be reflected in the cost.

The semi-gate fold has the same dual fold-in panel characteristics of the double gate fold. What sets this fold apart from the double gate fold is that it does not have a center fold which would have allowed it to fold in on itself. In this case, the two fold-in panels simply meet at the center.

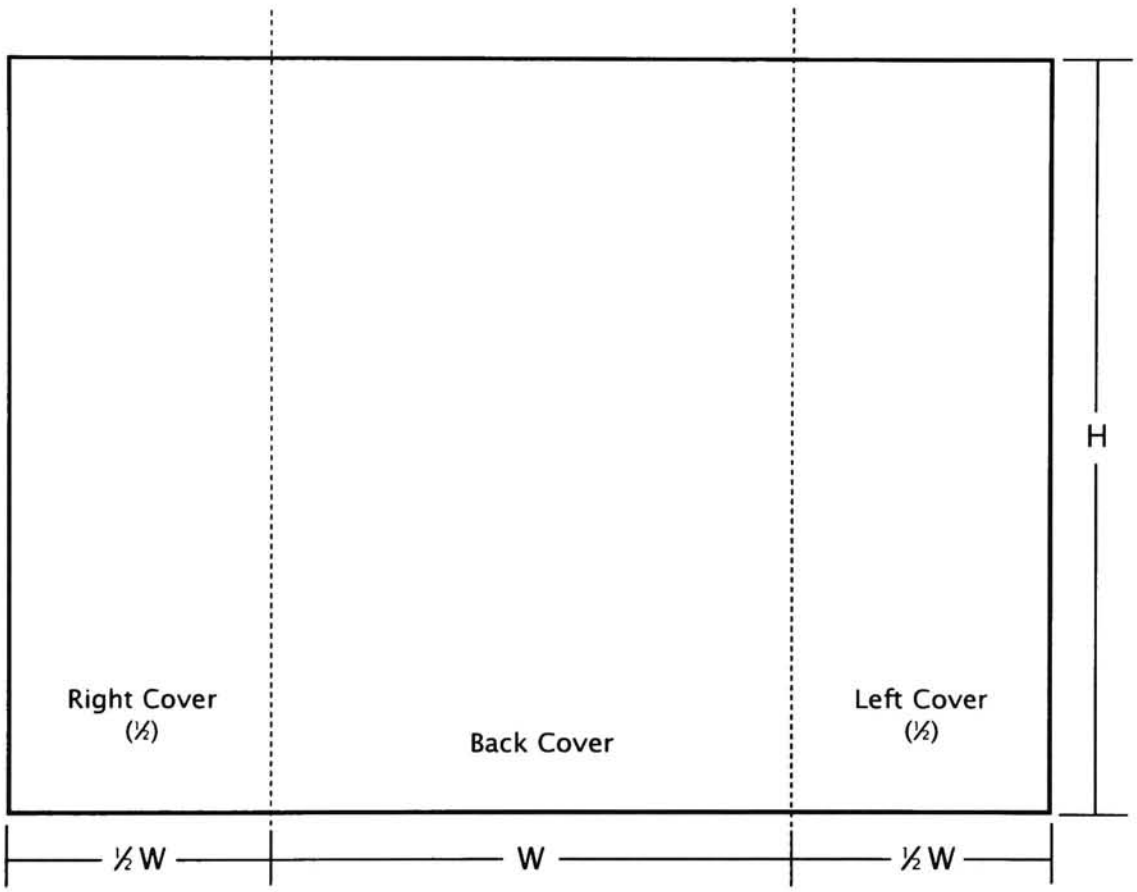
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

W: finished width
H: finished height
--- fold indication

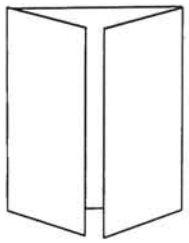


GETTING STARTED

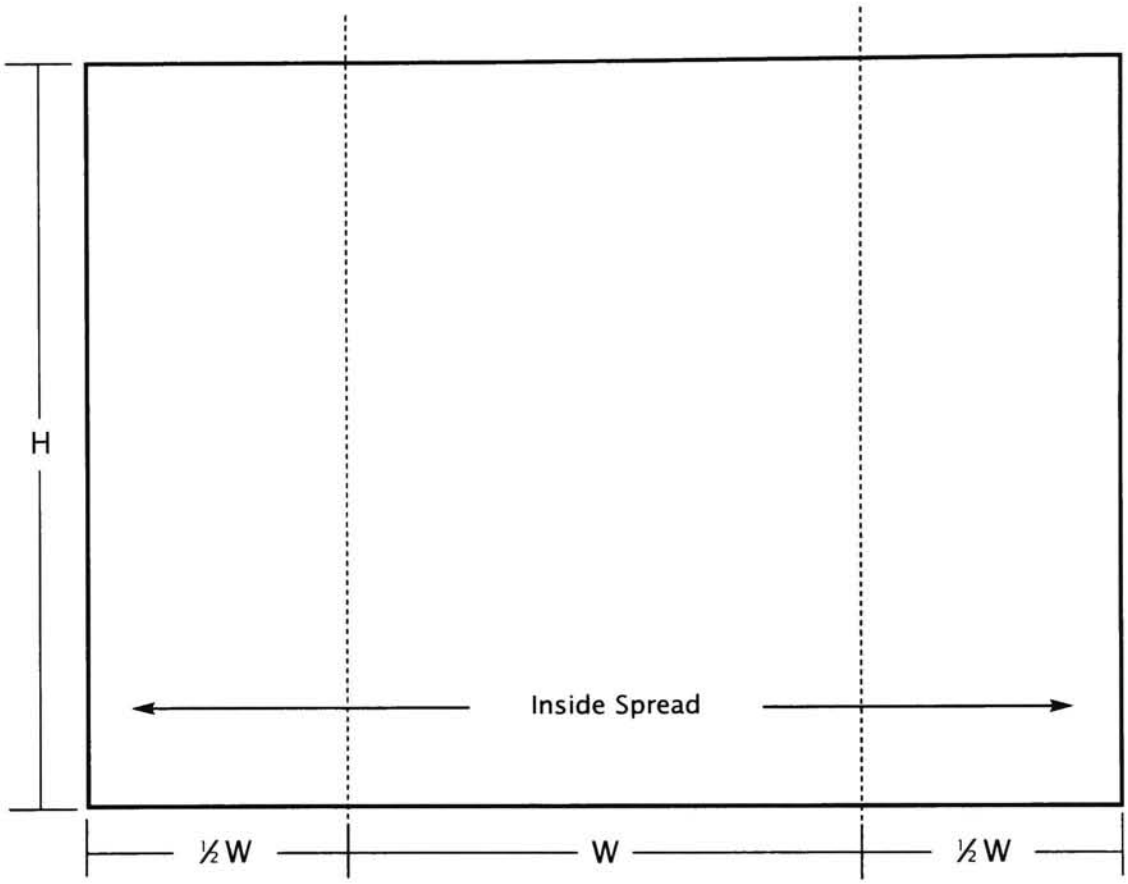
Here's an example: If your finished size is 8 ½ x 11, then your short panels must measure half your finished width, or 4 ¼ inches each. The panels for page 1 of your digital document would be, from left, 4 ¼ inches, 8 ½ inches and 4 ¼ inches, with a height of 11 inches. This fold is symmetrical, so for page 2 the measurements are the same as page 1.

Remember: Document size and flat size must be the same, so in this case the document size would be 17 inches wide by 11 inches high.

Time-saving tip: For this particular folding style, the fold placement is exactly the same for page 1 as it is for page 2. If you're creating your document in a page layout program which has a master page option, save time by setting your folds on the master page. Then, return to the document and add the second page.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- Be aware of your printer or bindery's minimum and maximum sheet sizes for their equipment.
- This folding style would most likely require a wafer seal to keep fold-in panels from lifting.
- If you are designing a large piece, make sure to have a folding sample made up from your specified paper. If the paper is too lightweight, it could turn into a sagging flimsy piece.
- If you are designing a self-mailing piece, this folding style will require a wafer-seal to make it mail-ready.
- If your paper choice is any heavier than 80# text, you will want to consider scoring the piece. Ask your printer for a recommendation.

A Tip for Measuring Panels:

For the semi-gate style, the smartest thing to do would be to decide the dimensions of your panels ahead of time. Calculate the document width and height and create your document. Set the crosshairs to upper left corner of the document, pull a guide bar from the left ruler and set it to the measurement of your first panel. Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement. After setting the second fold, bring the crosshairs over one last time, drag a guide for your last panel width. If you've done it right, your last guide will come to the exact edge of the document. Repeat for page two. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

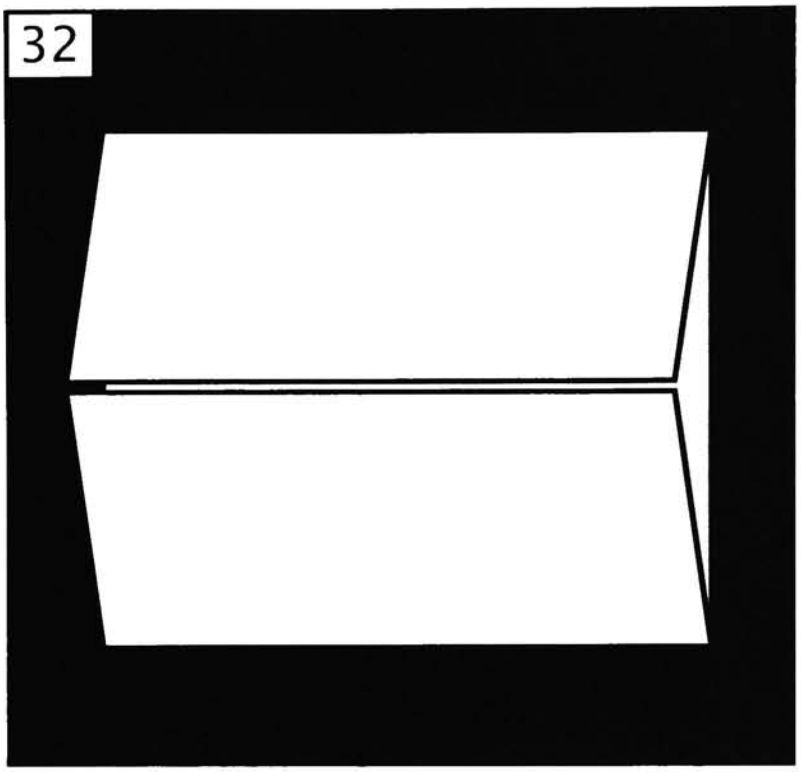
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

SIDEWAYS SEMI-GATE

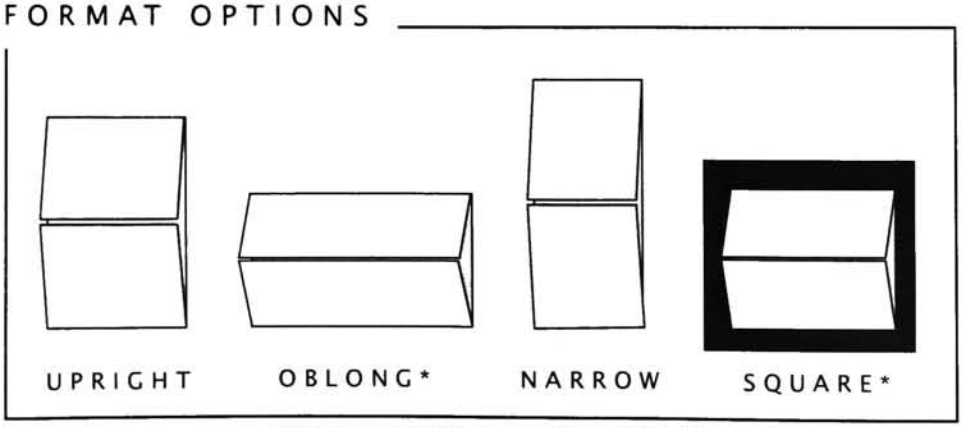


LEVEL

A level 3 fold has a long and difficult makeready, could require special machinery and low folding speed. These issues will be reflected in the cost.

The sideways semi-gate fold has the same characteristics of the standard semi-gate fold. The difference is in the direction in which it unfolds. The semi-gate folds out to the sides, the sideways semi-gate is a vertical format piece.

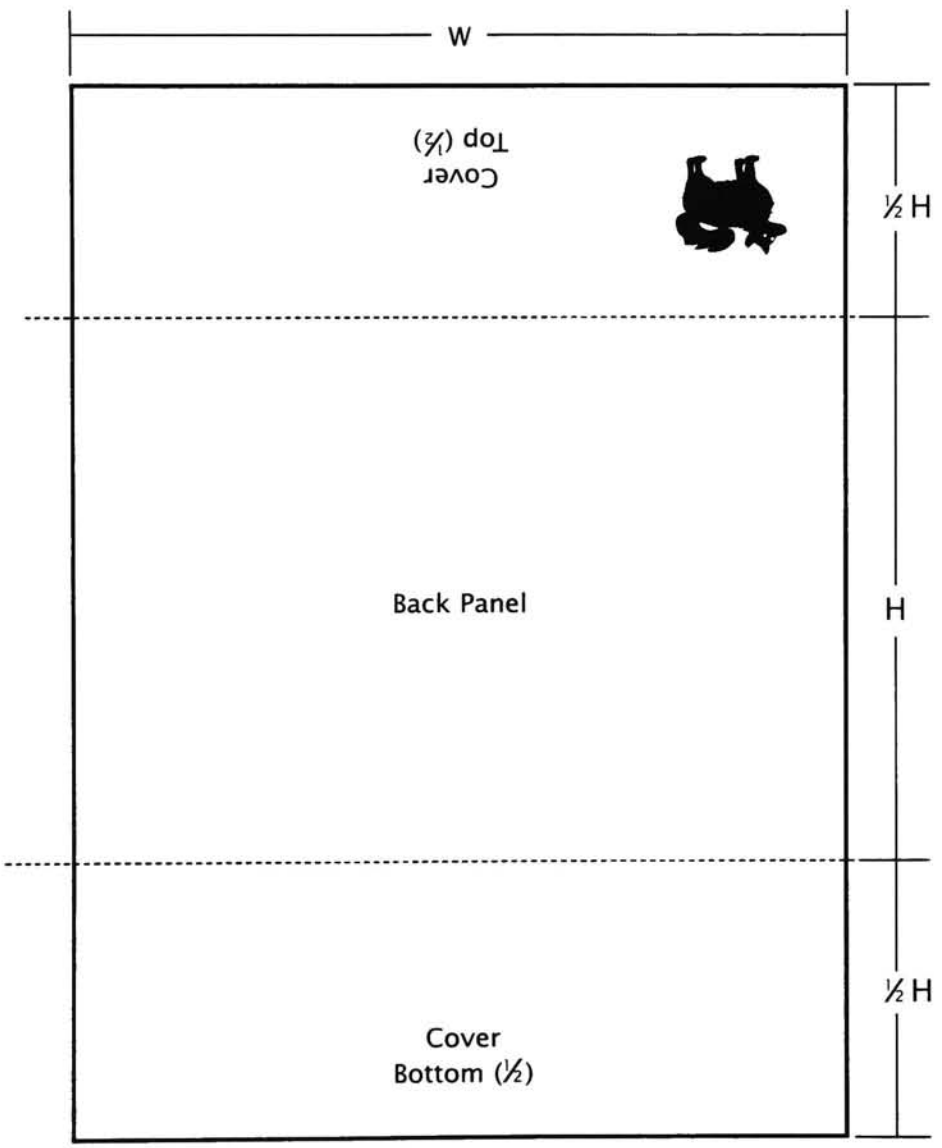
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

W: finished width
H: finished height
--- fold indication
upside-down

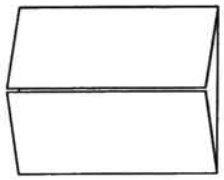


GETTING STARTED

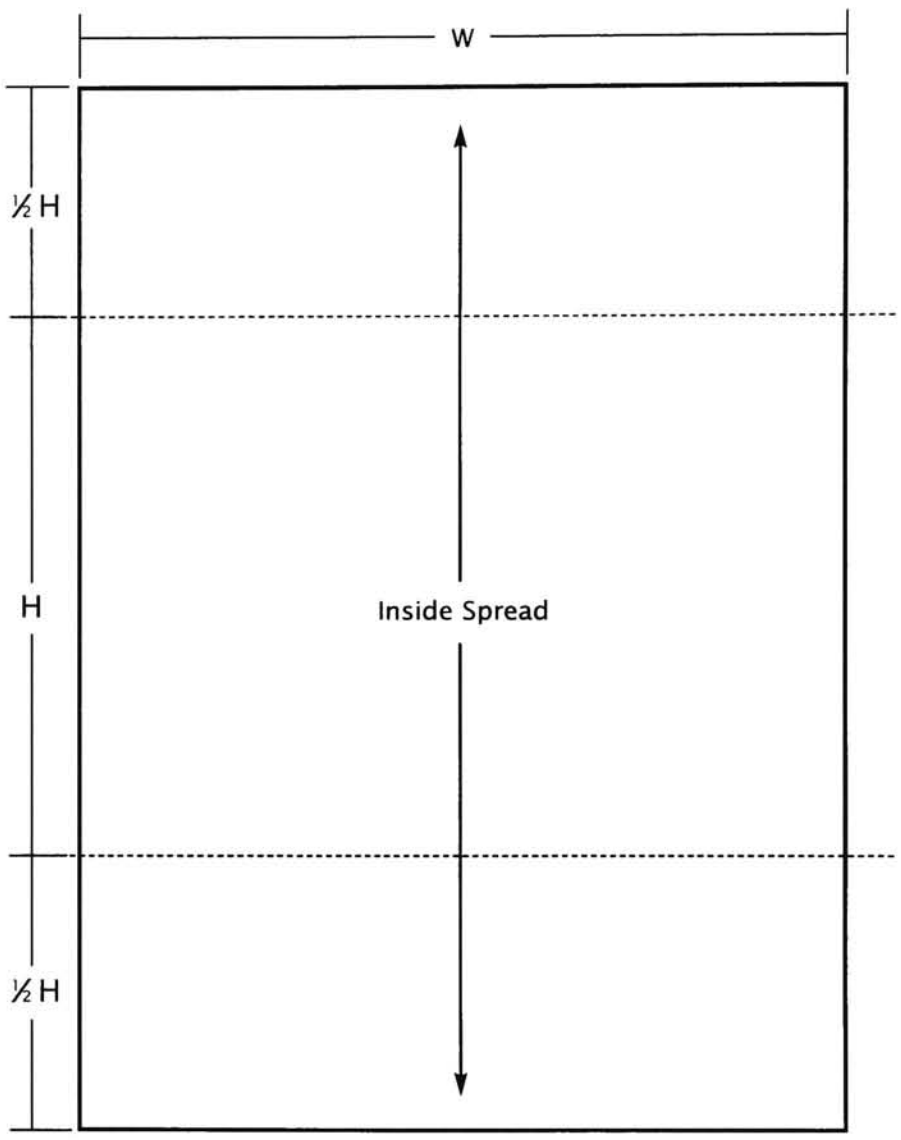
Here's an example: If your finished size is 5 x 5, then your short panels must measure half your finished height, or 2 ½ inches each. The panel height for page 1 of your digital document would be, from top, 2 ½ inches, 5 inches and 2 ½ inches, with a width of 5 inches. This fold is symmetrical, so for page 2 the measurements are the same as page 1.

Remember: Document size and flat size must be the same, so in this case the document size would be 5 inches wide by 10 inches high.

Time-saving tip: For this particular folding style, the fold placement is exactly the same for page 1 as it is for page 2. If you're creating your document in a page layout program which has a master page option, save time by setting your folds on the master page. Then, return to the document and add the second page.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- Be aware of your printer or bindery's minimum and maximum sheet sizes for their equipment.
- This folding style would most likely require a wafer seal to keep fold-in panels from lifting.
- If you are designing a large piece, make sure to have a folding sample made up from your specified paper. If the paper is too lightweight, it could turn into a sagging flimsy piece.
- If you are designing a self-mailing piece, this folding style will require a wafer-seal to make it mail-ready.
- If your paper choice is any heavier than 80# text, you will want to consider scoring the piece. Ask your printer for a recommendation.

A Tip for Measuring Panels:

For the sideways semi-gate style, the smartest thing to do would be to decide the dimensions of your panels ahead of time. Calculate the document width and height and create your document. Set the cross-hairs to upper left corner of the document, pull down a guide bar from the top ruler and set it to the length of your first panel. Then, bring the cross-hairs down to the guide you just set (which lets you measure from zero again) and drag your guide down to the next panel measurement. After setting the second fold, bring the crosshairs down one last time, and drag a guide for your last panel width. If you've done it right, your last guide will come to the exact edge of the document. Repeat for page two. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

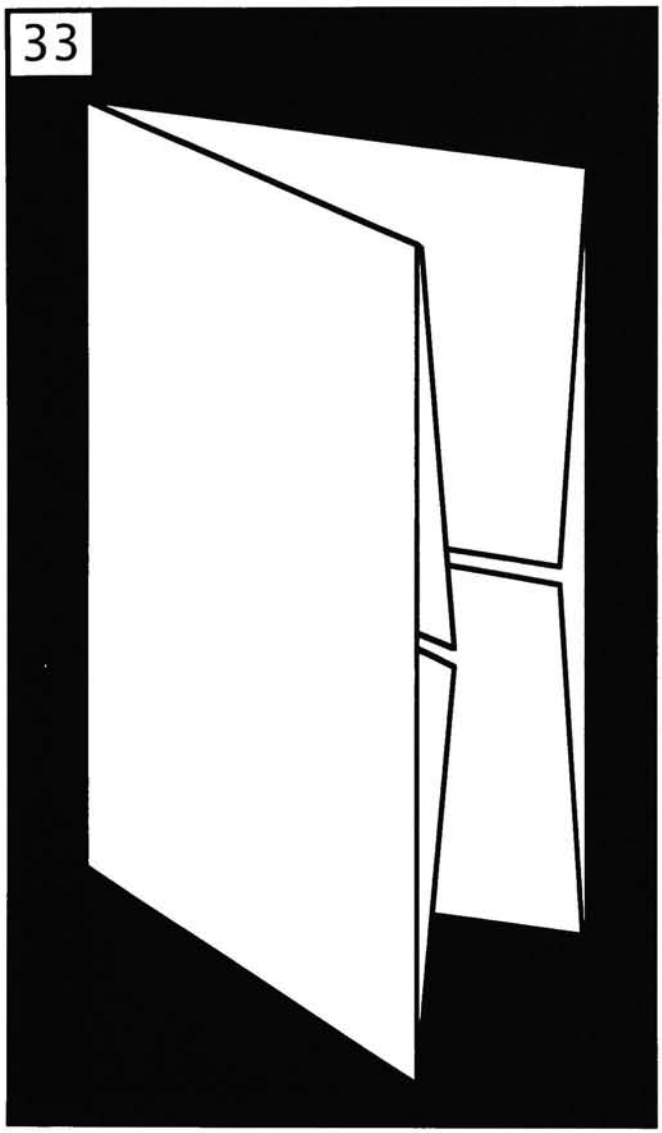
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

SIDEWAYS SEMI-GATE WITH SINGLE PARALLEL

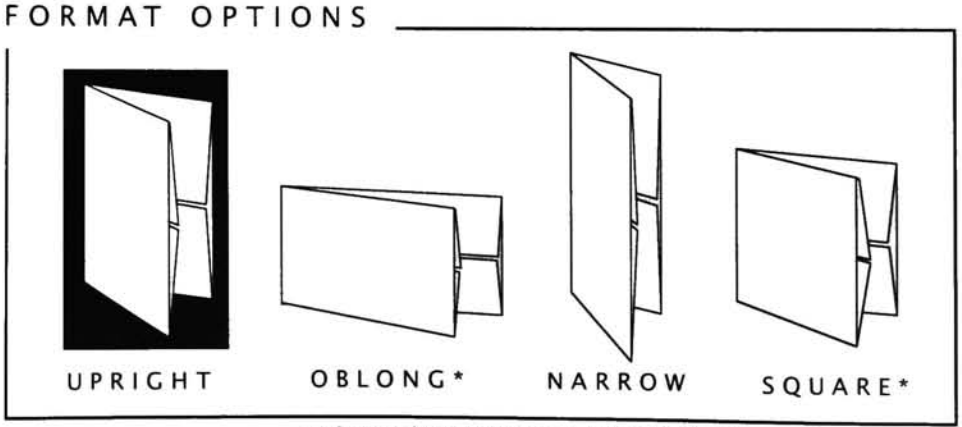


LEVEL

A level 3 fold has a long and difficult makeready, could require special machinery and low folding speed. These issues will be reflected in the cost.

The sideways semi-gate with single parallel fold has the same characteristics of the sideways semi-gate fold. The only difference is that once the short panels are folded in, there is a single parallel fold applied to the center of the piece, closing it in on itself.

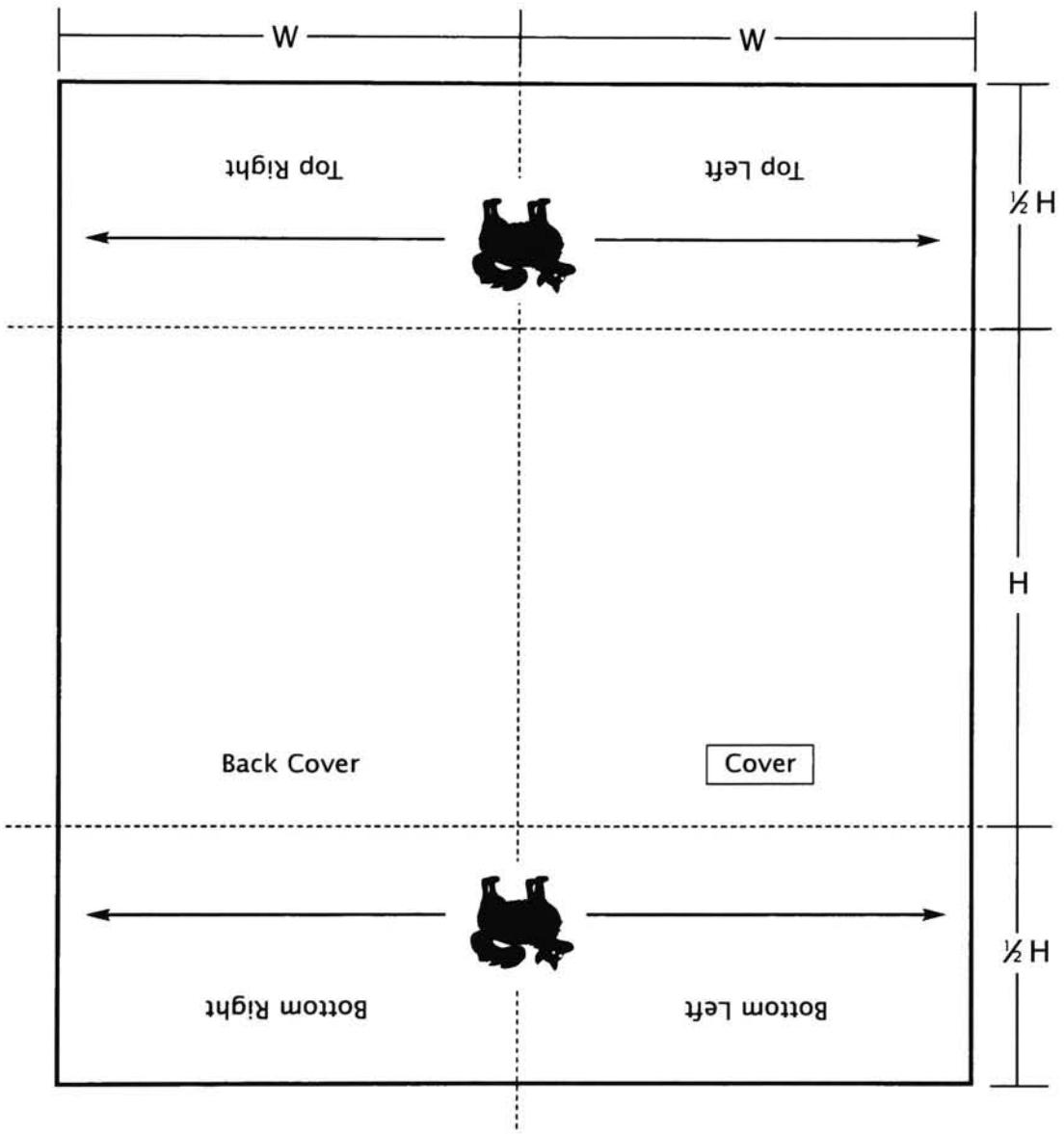
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

W: finished width
H: finished height
--- fold indication
upside-down



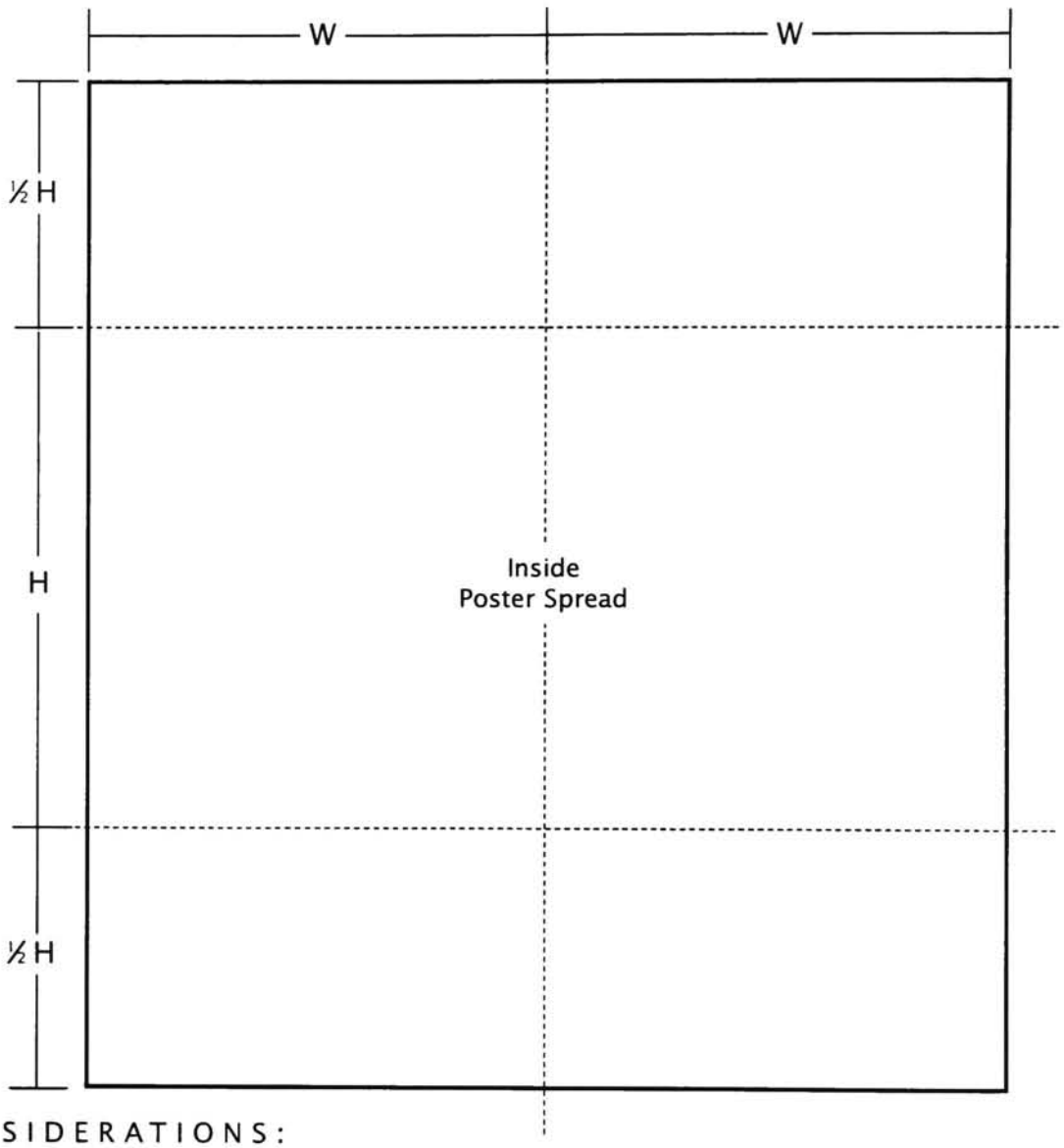
GETTING STARTED

Here's an example: If your finished size is 5 x 8, then your short panels must measure half your finished height, or 4 inches each. The panel height for page 1 of your digital document would be, from top, 4 inches, 8 inches and 4 inches, with a width of 10 inches (5 inches plus 5 inches). This fold is symmetrical, so for page 2 the measurements are the same as page 1.

Remember: Document size and flat size must be the same, so in this case the document size would be 10 inches wide by 16 inches high.

Time-saving tip: For this particular folding style, the fold placement is exactly the same for page 1 as it is for page 2. If you're creating your document in a page layout program which has a master page option, save time by setting your folds on the master page. Then, return to the document and add the second page.

Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- Be aware of your printer or bindery's minimum and maximum sheet sizes for their equipment.
- This folding style would most likely require a wafer seal to keep fold-in panels from lifting.
- If you are designing a large piece, make sure to have a folding sample made up from your specified paper. If the paper is too lightweight, it could turn into a sagging flimsy piece.
- If you are designing a self-mailing piece, this folding style will require a wafer-seal to make it mail-ready.
- If your paper choice is any heavier than 80# text, you will want to consider scoring the piece. Ask your printer for a recommendation.

A Tip for Measuring Panels:

For the sideways semi-gate with single parallel, the smartest thing to do would be to decide the dimensions of your panels ahead of time. Calculate the document width and height and create your document. Set the crosshairs to upper left corner of the document, pull down a guide bar from the top ruler and set it to the length of your first panel. Then, bring the cross-hairs down to the guide you just set (which lets you measure from zero again) and drag your guide down to the next panel measurement. After setting the second fold, bring the crosshairs down one last time, and drag a guide for your last panel width. If you've done it right, your last guide will come to the exact edge of the document. Repeat for page two. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

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Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

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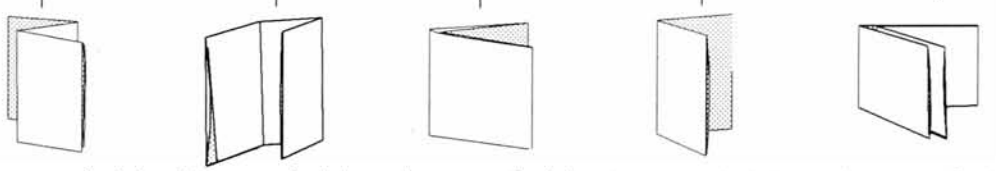
NOTES:

THE LETTER FAMILY TREE

#10 LETTER FOLD

BASIC LETTER



letter fold with accordion

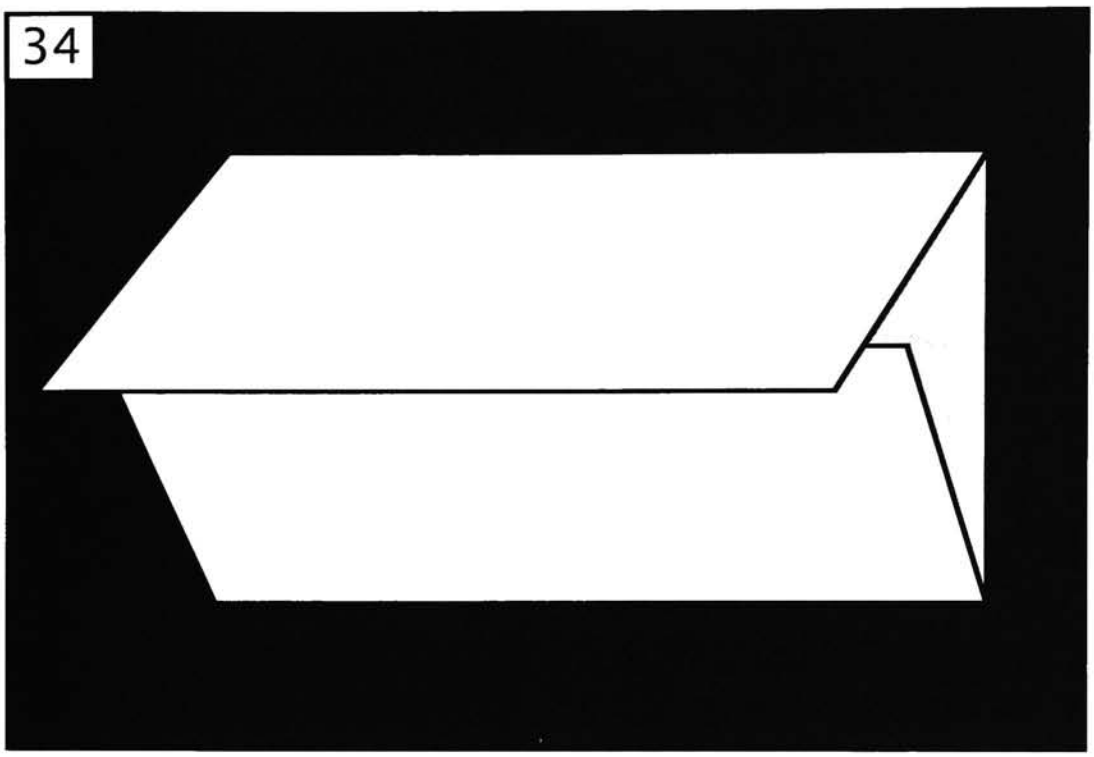
letter fold with single gate

letter fold with double gate

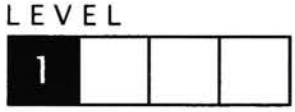
letter fold with single parallel

letter fold with double parallel

#10 LETTER FOLD



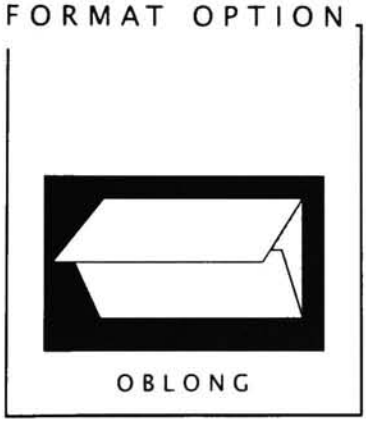
LEVEL



A level 1 fold is standard and basic, easy to set up on the folding machine and the machine can run at highest speeds.

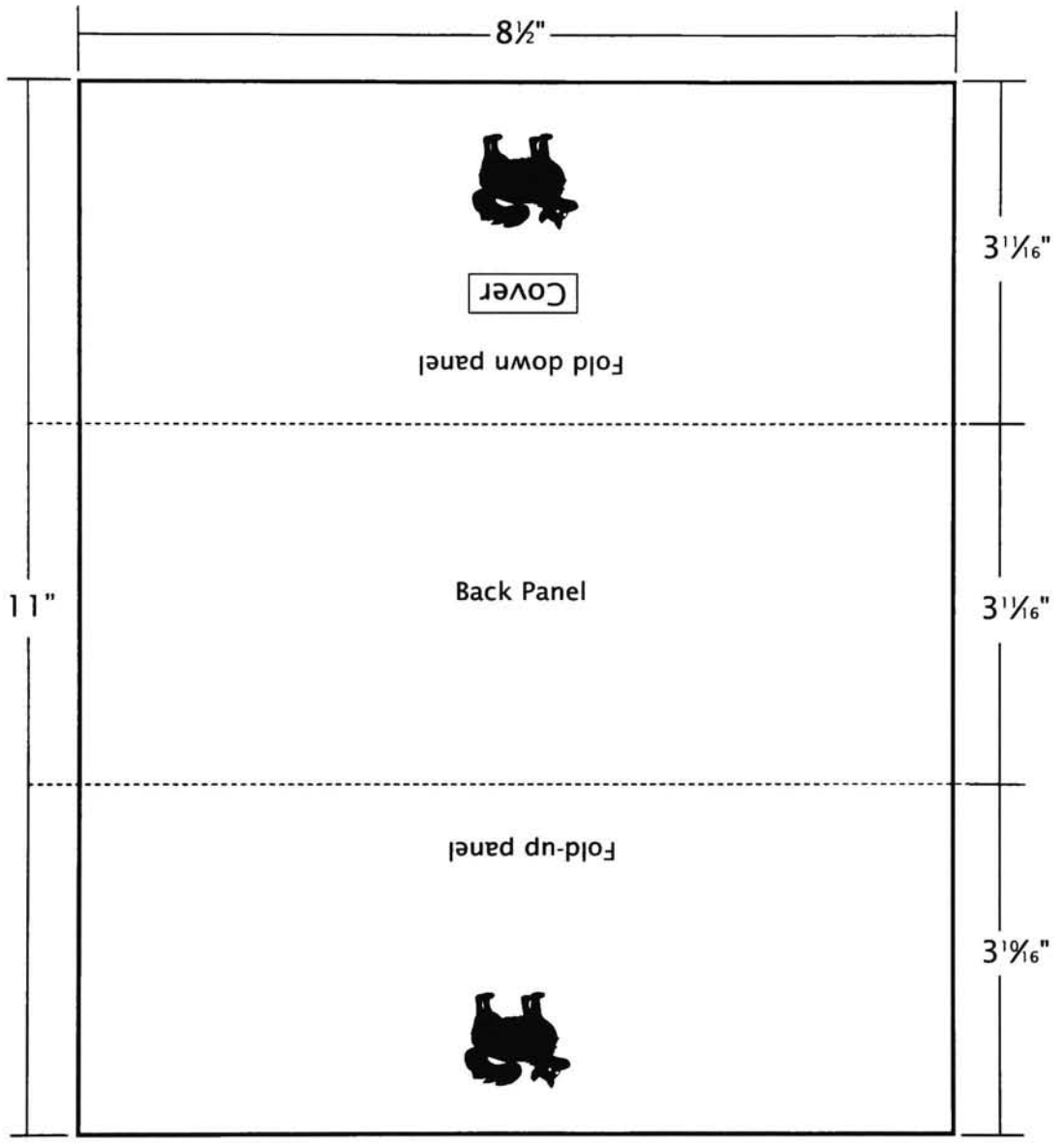
The #10 letter fold has one specific purpose—to fit into a standard #10 letter envelope. Because of this, it has only one format—oblong. Now, is this to say thet any folded piece which fits into a #10 envelope is a letter fold? Of course not. The letter fold has distinct characteristics. It has a bottom panel which folds upward, and a top panel which folds downward over it, like a letter (hence, the name). The #10 letter folding style was created to eliminate the general confusion as to whether "letter fold" means "will fit into a standard # 10 letter envelope," or if a letter fold is a ***style*** of folding with distinct characteristics (which it is).

FORMAT OPTION



Digital Document setup: **Page 1** (side 1)

W: finished width
H: finished height
--- fold indication
upside-down

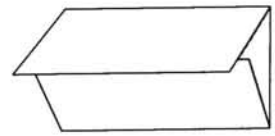


GETTING STARTED

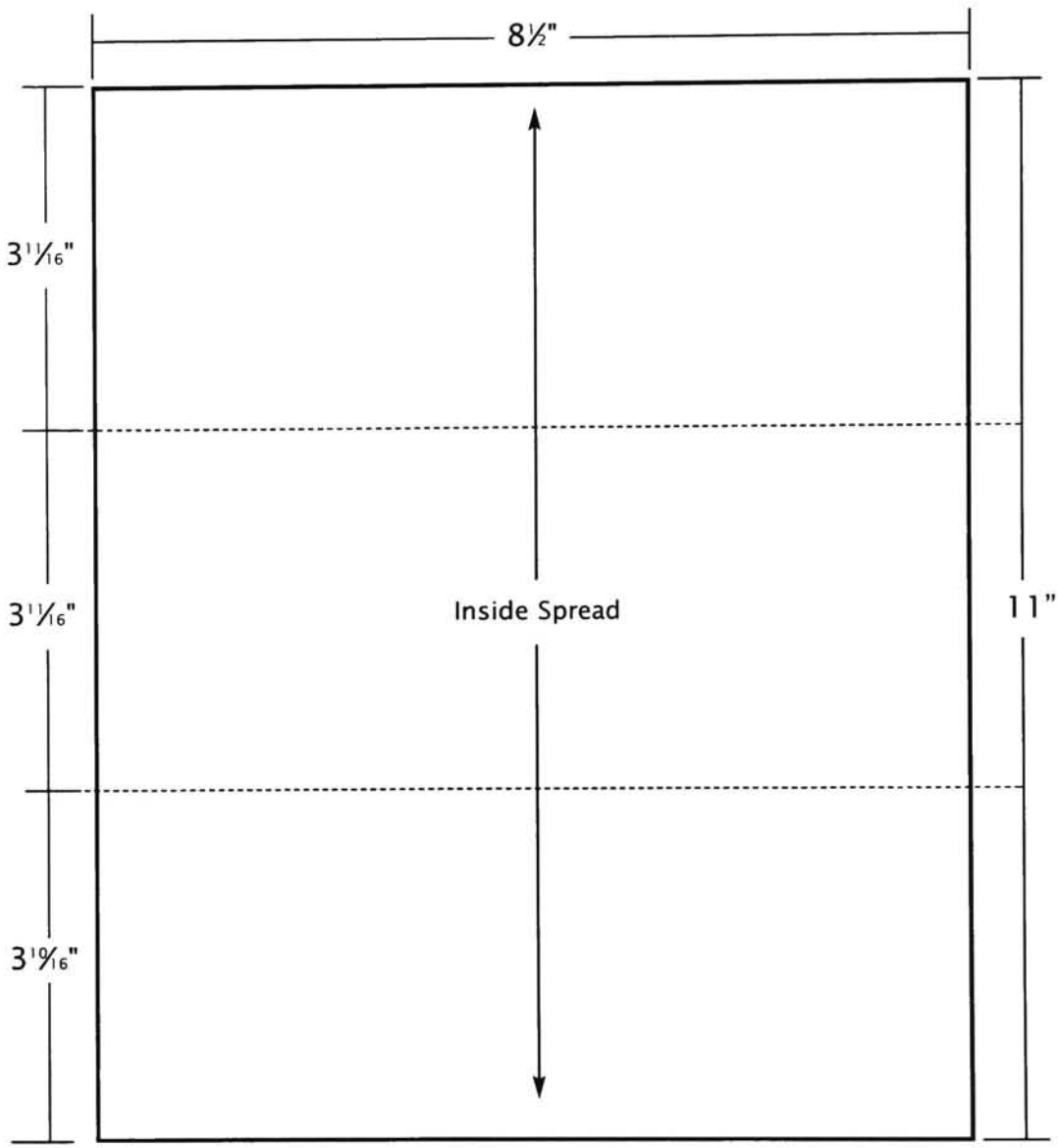
This will be an easy one. All you have to do is set up a regular 8½ by 11 inch document. Then, just set your folds to the measurements indicated above.

Remember: Document size and flat size must be the same, so in this case the document size would be 8½ inches wide by 11 inches high.

Time-saving tip: For this particular folding style, the fold placement is exactly the same for page 1 as it is for page 2. If you're creating your document in a page layout program which has a master page option, lsave time by setting your folds on the master page. Then, return to the document and add the second page.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- The #10 letter fold usually used for stationery. When selecting a paper, make sure that the paper you choose is laser compatible. If not, it still may go through your printer, but there are no guarantees.
- If the finished product will be hand-folded, try to place graphics or text in a certain way that it will indicate exactly where to fold. Otherwise, it's going to be really hard to get identical results.

A Tip for Measuring Panels:

The #10 letter fold has a defined document size of 8½ by 11 inches. Just set the crosshairs to the upper left corner of the document, pull down a guide bar from the top ruler and set it to the length of your first panel (3 11/16 inches). Then, bring the cross-hairs down to the guide you just set (which lets you measure from zero again) and drag your guide down to the next panel measurement (3 11/16). If you have set these correctly, the last panel will measure 3 10/16. Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

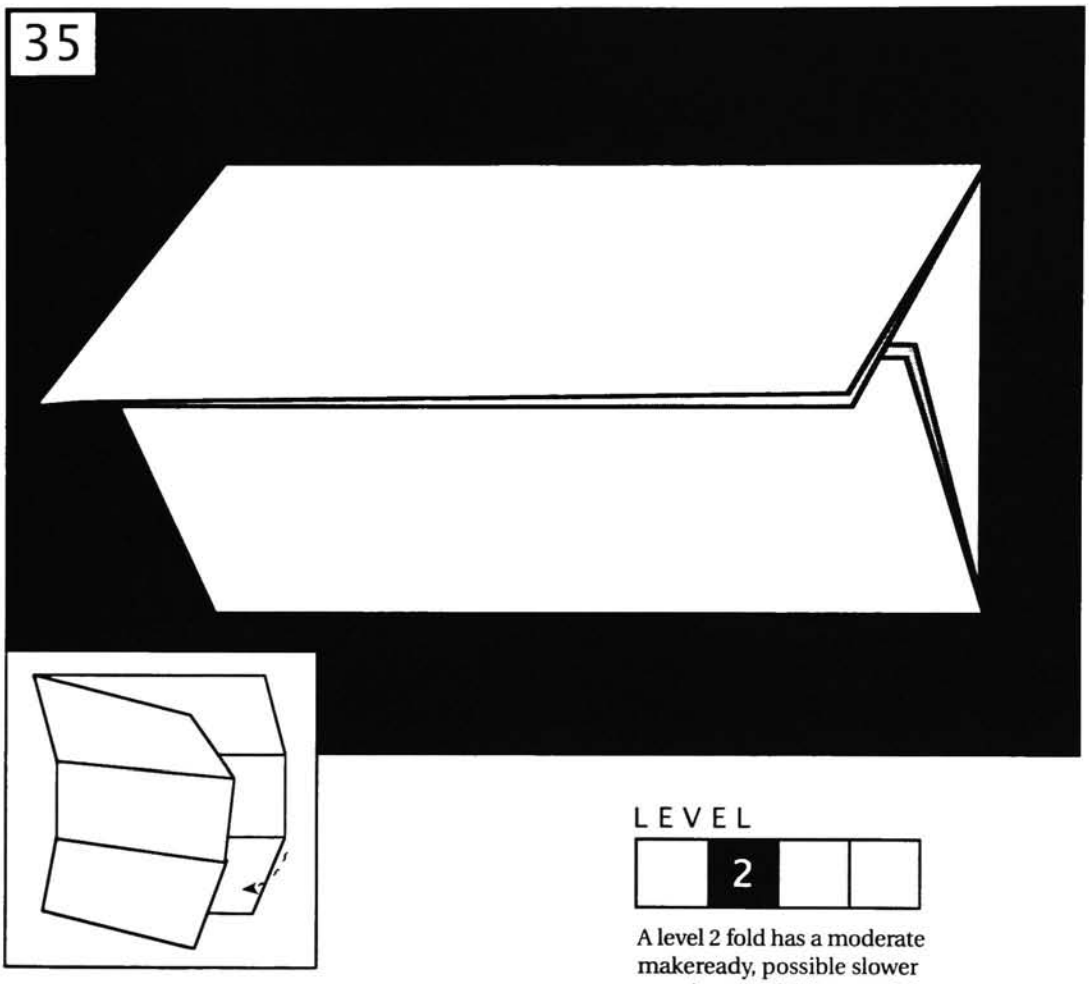
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

#10 LETTER FOLD (12-PAGE)



LEVEL

A level 2 fold has a moderate makeready, possible slower speed on the folding machine, and could have some special considerations.

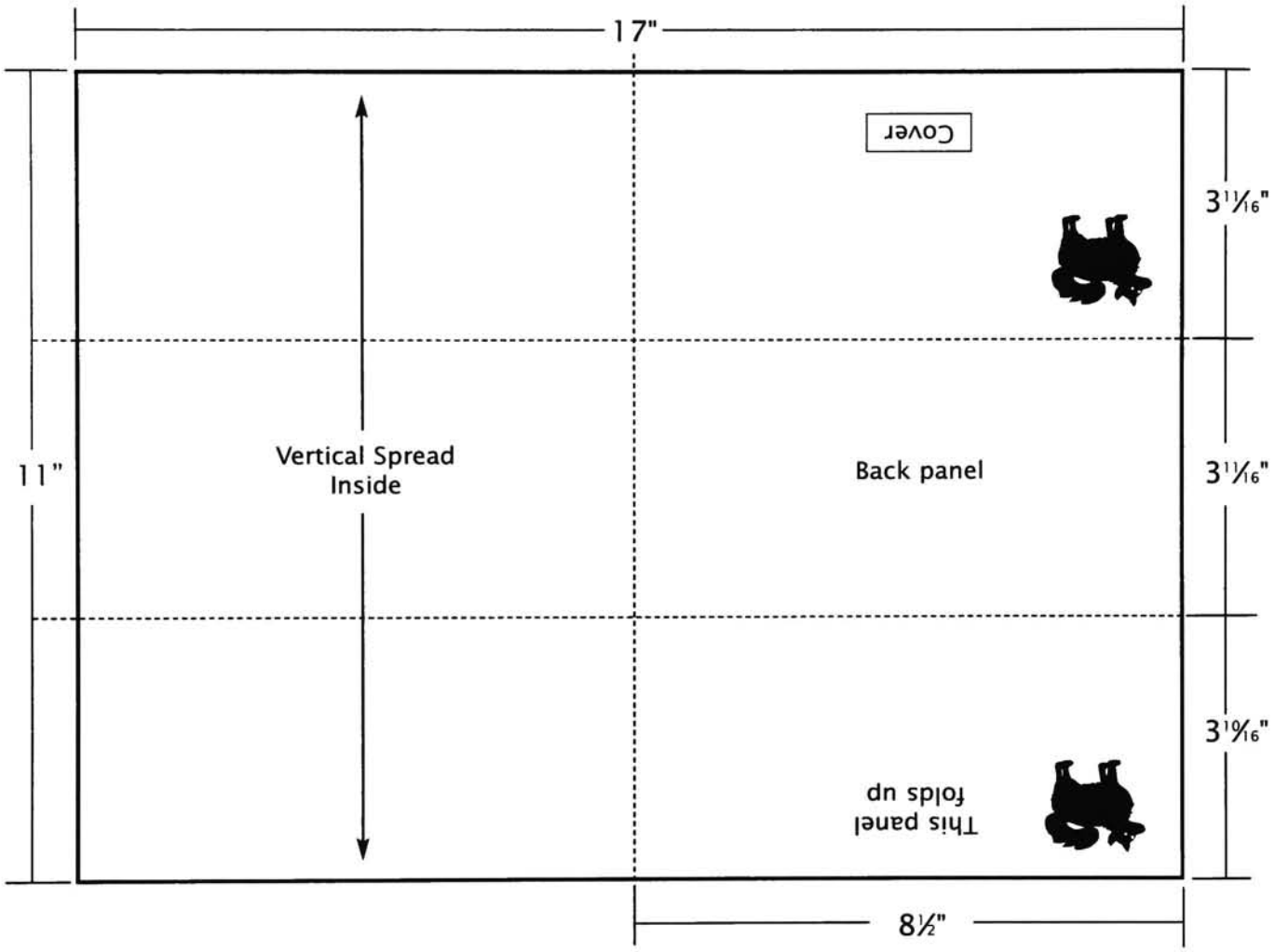
The #10 letter fold (12-page) has one specific purpose—to fit into a standard #10 letter envelope. Because of this, it has only one format—oblong. Now, is this to say thet any folded piece which fits into a #10 envelope is a letter fold? Of course not. The letter fold has distinct characteristics. It has a bottom panel which folds upward, and a top panel which folds downward over it, like a letter (hence, the name). The #10 letter folding style was created to eliminate the general confusion as to whether "letter fold" means "will fit into a standard #10 letter envelope,"or if a letter fold is a ***style*** of folding with distinct characteristics (which it is).

FORMAT OPTION

OBLONG

Digital Document setup: **Page 1** (side 1)

W: finished width
H: finished height
--- fold indication
upside-down

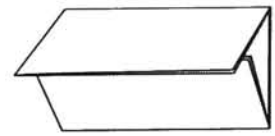


GETTING STARTED

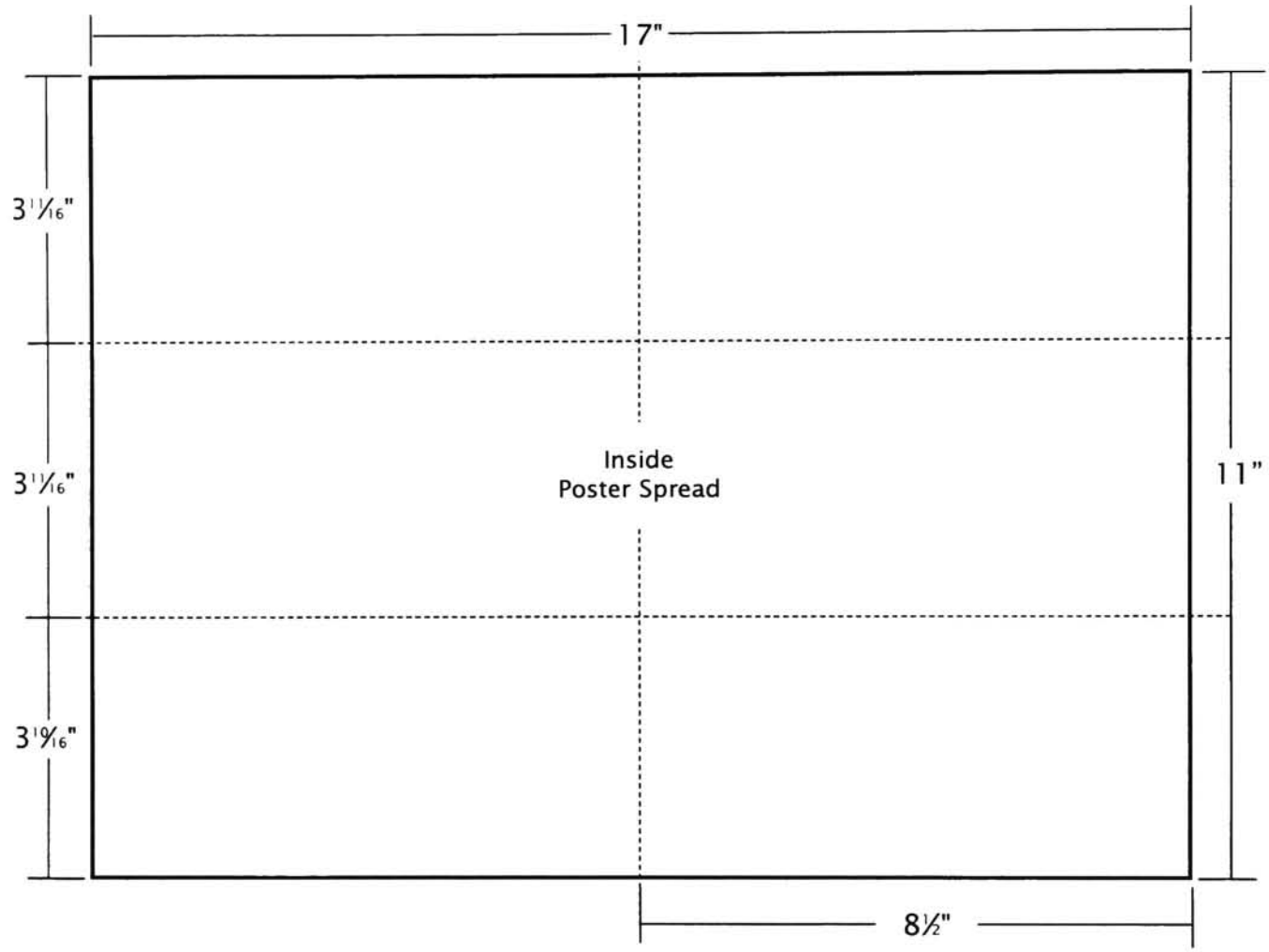
This will be an easy one. All you have to do is set up a regular 17 by 11 inch document. Then, just set your folds to the measurements indicated above.

Remember: Document size and flat size must be the same, so in this case the document size would be 17 inches wide by 11 inches high.

Time-saving tip: For this particular folding style, the fold placement is exactly the same for page 1 as it is for page 2. If you're creating your document in a page layout program which has a master page option, like QuarkXPress, save time by setting your folds on the master page. Then, return to the document and add the second page.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- If your paper choice is any heavier than 80# text, you will want to consider scoring the piece. Ask your printer for a recommendation.
- Make sure to have a folding dummy made in your specified paper. Paper weight will dramatically affect the success of this piece. Watch for bulkiness and problems in the corner joints of the folds—the printer can't do anything about this, and it will require a change in paper.

A Tip for Measuring Panels:

The #10 letter (12-page) fold has a defined document size of 17 by 11 inches. Just set the crosshairs to the upper left corner of the document, pull down a guide bar from the top ruler and set it to the length of your first panel ($3^{11}/_{16}$ inches). Then, bring the cross-hairs down to the guide you just set (which lets you measure from zero again) and drag your guide down to the next panel measurement ($3^{11}/_{16}$). If you have set these correctly, the last panel will measure $3^{10}/_{16}$. Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

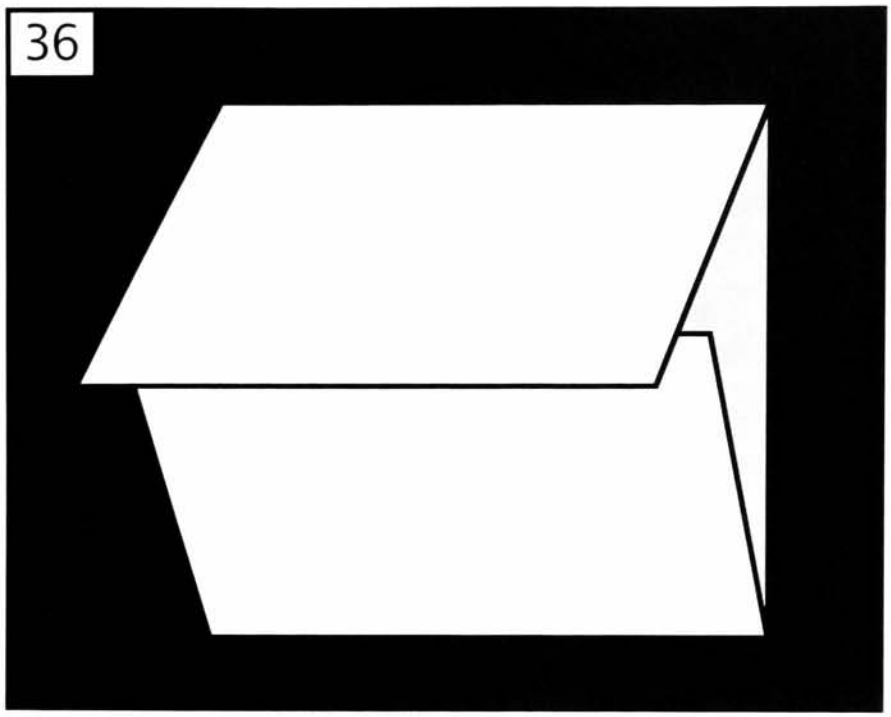
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

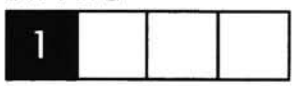
Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

BASIC LETTER FOLD



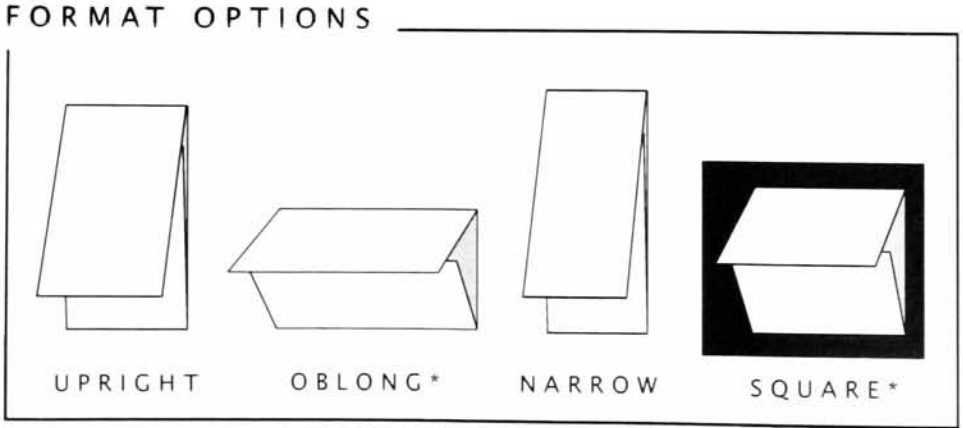
LEVEL



A level 1 fold is standard and basic, easy to set up on the folding machine and the machine can run at highest speeds.

The letter fold has distinct characteristics. It has a bottom panel which folds upward, and a top panel which folds downward over it, like a letter (hence, the name).

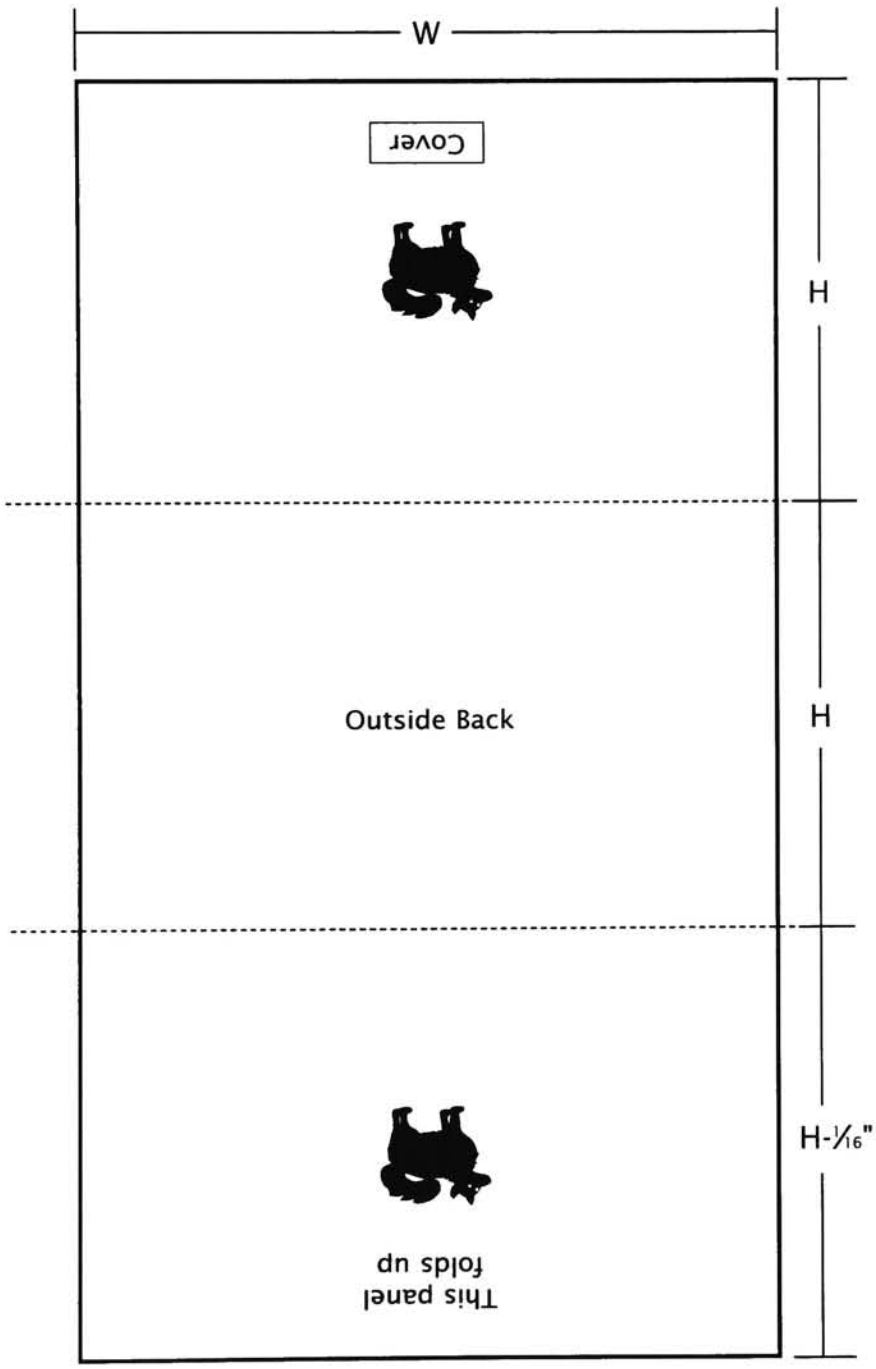
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

W: finished width
H: finished height
--- fold indication
upside-down

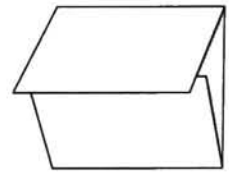


GETTING STARTED

Here's an example: If your finished size is 5 x 4, then your panels for page 1 of your digital document would be, from top, 4 inches, 4 inches and $3^{15}/_{16}$ inches, with a width of 5 inches. This fold is symmetrical, so for page 2 the measurements are the same as page 1.

Remember: Document size and flat size must be the same, so in this case the document size would be 5 inches wide by $11^{15}/_{16}$ (11.937) inches long.

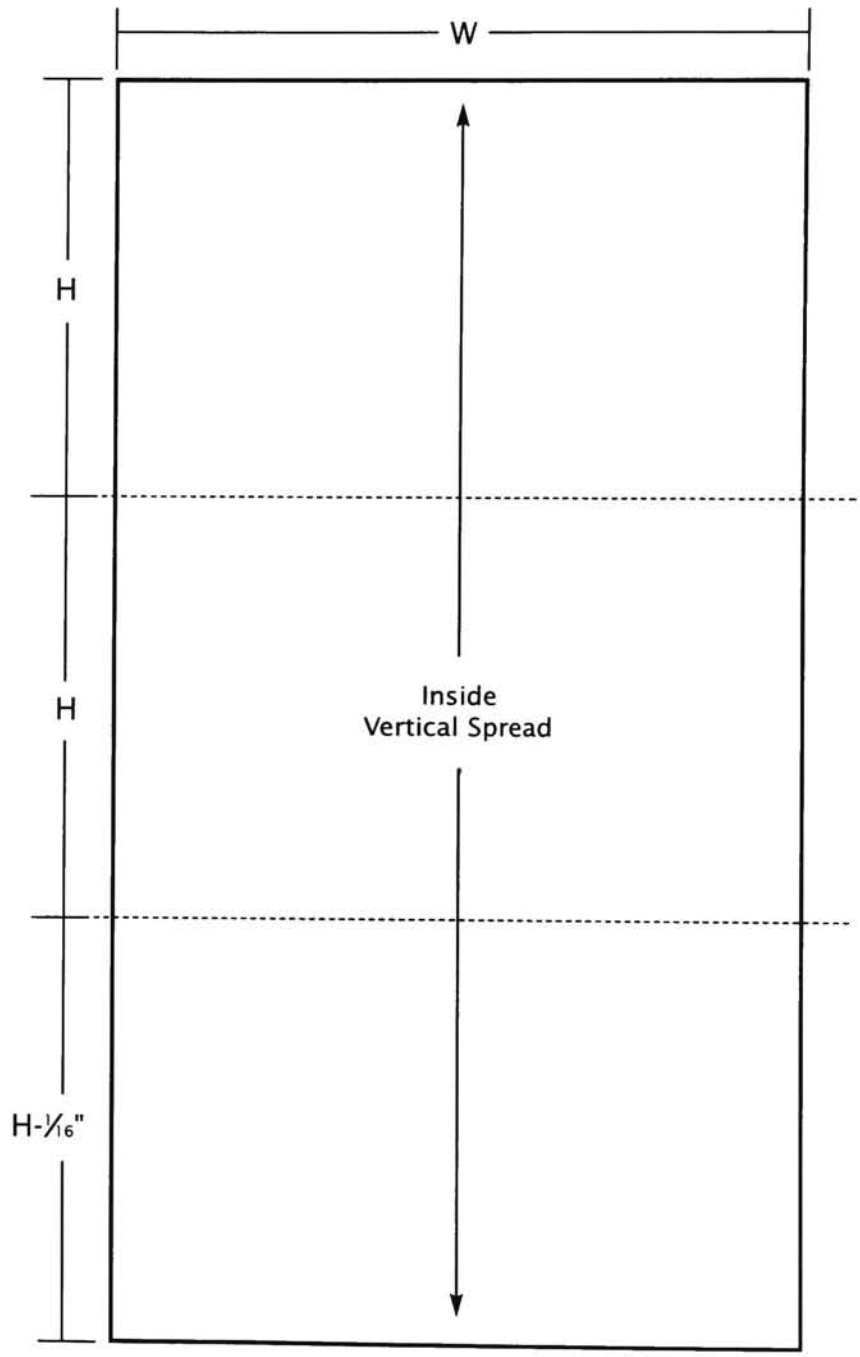
Time-saving tip: For this particular folding style, the fold placement is exactly the same for page 1 as it is for page 2. If you're creating your document in a page layout program which has a master page option, save time by setting your folds on the master page. Then, return to the document and add the second page.



Digital Document setup: **Page 2** (side 2)

CONSIDERATIONS:

- If your paper choice is any heavier than 80# text, you will want to consider scoring the piece. Ask your printer for a recommendation.
- If you are designing a large piece, make sure to have a folding sample made up from your specified paper. If the paper is too lightweight, it could turn into a sagging flimsy piece.



A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document height ahead of time. Create your document as if all panels will be the same (ex: for a letter fold with a finished size of 6 x 4, set the document size to 6 x 12). Then set crosshairs to upper left corner of document, pull down a guide bar from the top ruler and set it to the length of your first panel (in this example, 4 inches). Then, bring the crosshairs down to the guide you just set (which lets you measure from zero again) and drag your guide down to the next panel measurement (4). After setting the second fold, bring the crosshairs down one last time, drag a guide for your last panel length ($3\frac{15}{16}$) At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the Y measurement, that will give you the document length you are looking for. Just change your document length by entering that decimal measurement (11.937). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

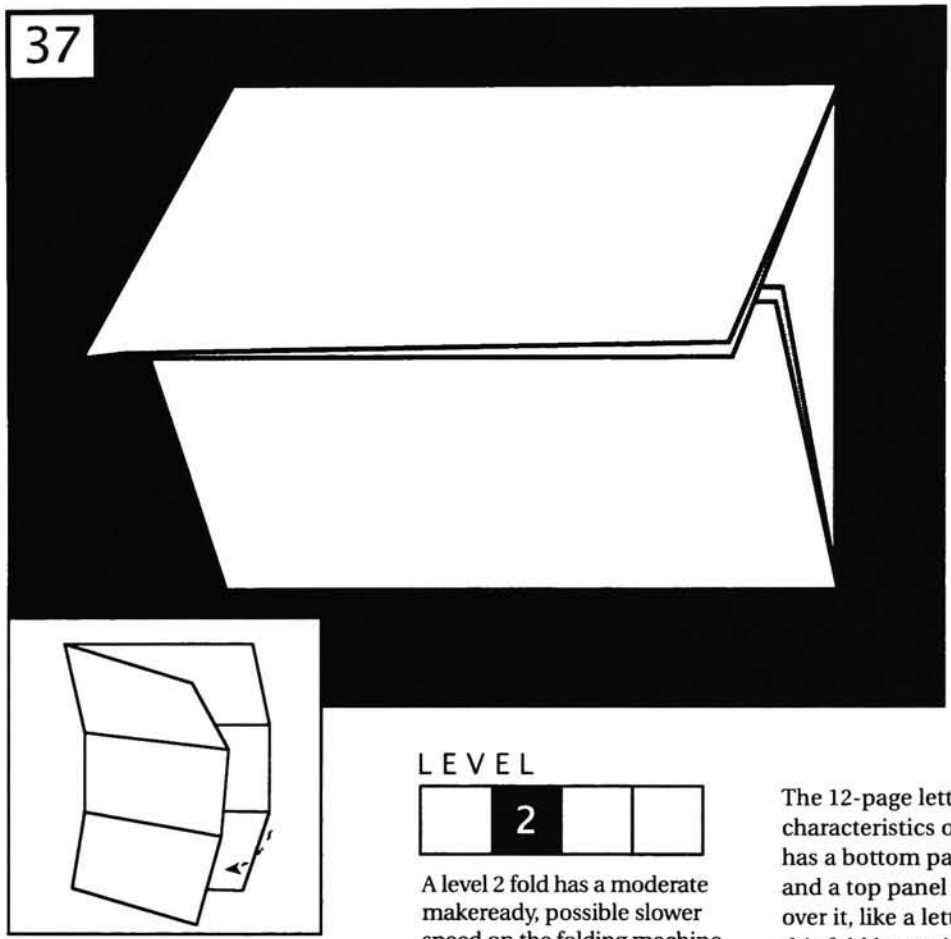
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

12-PAGE LETTER

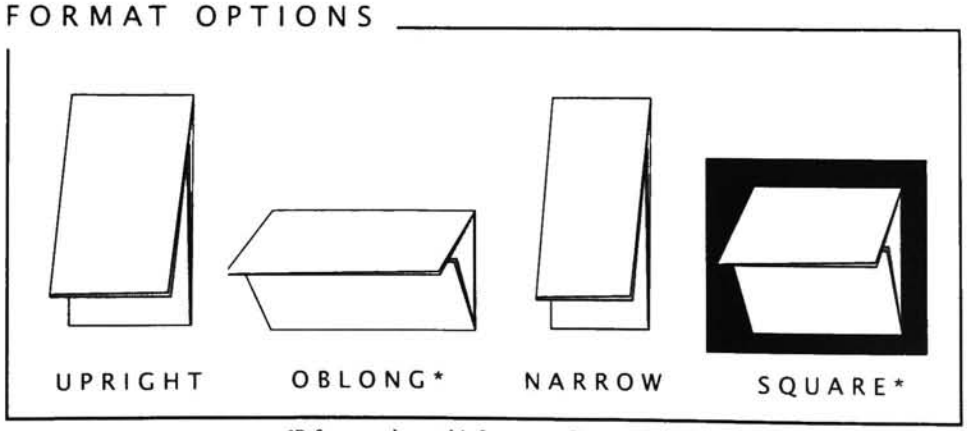


LEVEL

A level 2 fold has a moderate makeready, possible slower speed on the folding machine, and could have some special considerations.

The 12-page letter fold has the same characteristics of the basic letter fold—it has a bottom panel which folds upward, and a top panel which folds downward over it, like a letter. The difference is that this fold has twice the area because it folds in half on itself before the letter-style folding is done.

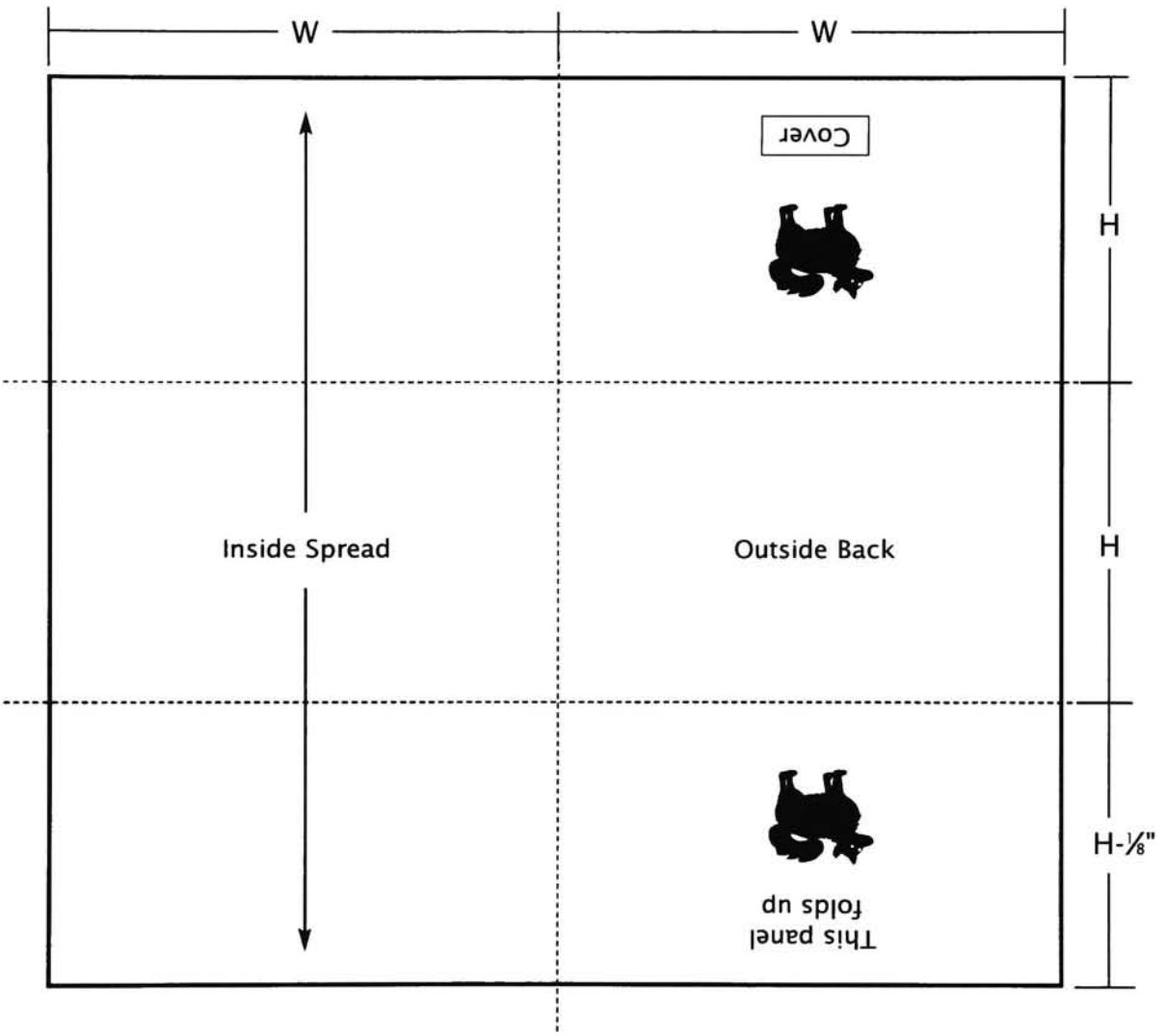
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

W: finished width
H: finished height
--- fold indication
upside-down

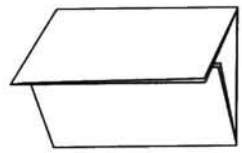


GETTING STARTED

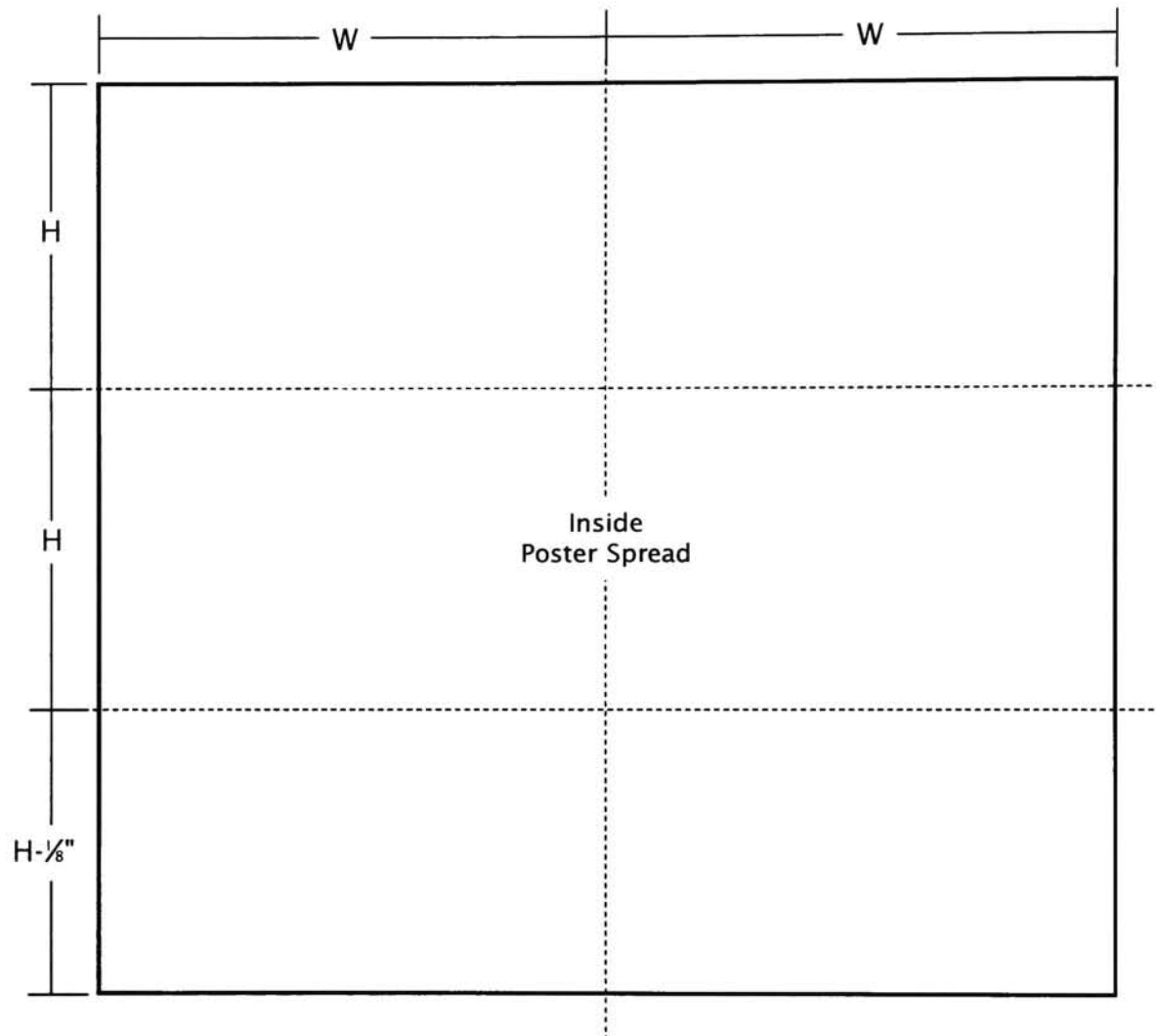
Here's an example: If your finished size is 5 x 4, then your panels for page 1 of your digital document would be, from top, 4 inches, 4 inches and 3⅞ inches, with a width of 10 inches (5 inches plus 5 inches). This fold is symmetrical, so for page 2 the measurements are the same as page 1.

Remember: Document size and flat size must be the same, so in this case the document size would be 10 inches wide by 11⅞ (11.875) inches long.

Time-saving tip: For this particular folding style, the fold placement is exactly the same for page 1 as it is for page 2. If you're creating your document in a page layout program which has a master page option, like QuarkXPress, save time by setting your folds on the master page. Then, return to the document and add the second page.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- If you are designing a self-mailing piece, this folding style could require a wafer-seal to make it mail-ready.
- Be aware of your printer or bindery's minimum and maximum sheet sizes for their equipment.
- Make sure to have a folding dummy made in your specified paper. Paper weight will dramatically affect the success of this piece. Watch for bulkiness and problems in the corner joints of the folds—the printer can't do anything about this, and it will require a change in paper.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document height ahead of time. Create your document as if all panels will be the same (ex: for a 12-page letter fold with a finished size of 5 x 4, set the document size to 10 x 12). Then set crosshairs to upper left corner of document, pull down a guide bar from the top ruler and set it to the length of your first panel (in this example, 4 inches). Then, bring the cross-hairs down to the guide you just set (which lets you measure from zero again) and drag your guide down to the next panel measurement (4). After setting the second fold, bring the crosshairs down one last time, drag a guide for your last panel length (3⅞) At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the Y measurement, that will give you the document length you are looking for. Just change your document length by entering that decimal measurement (11.875). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

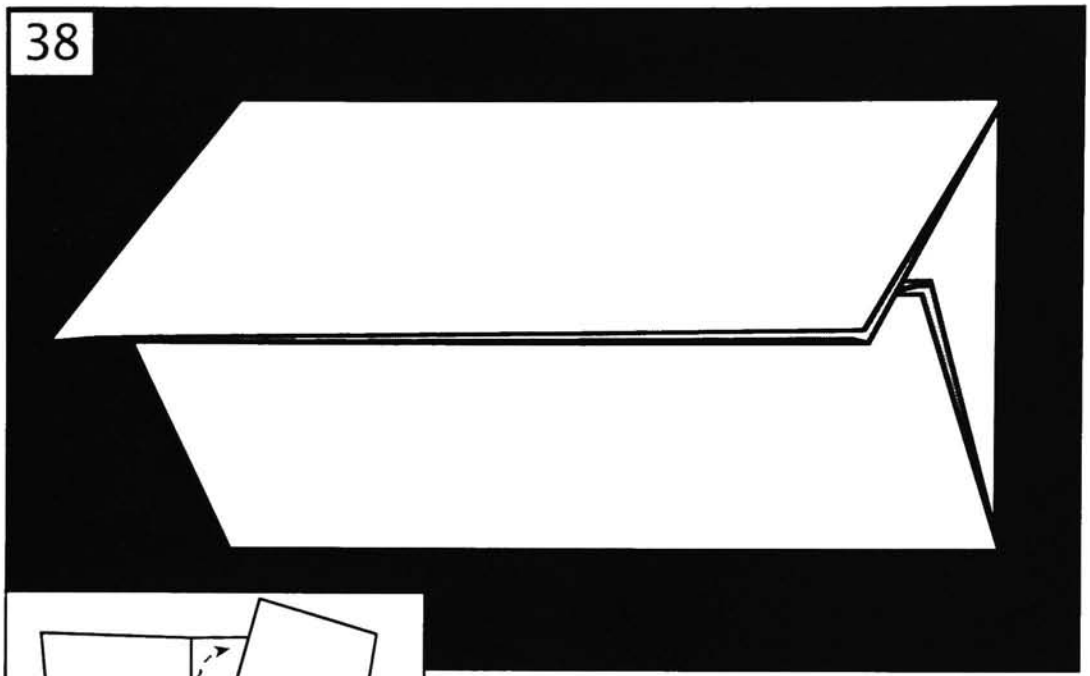
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

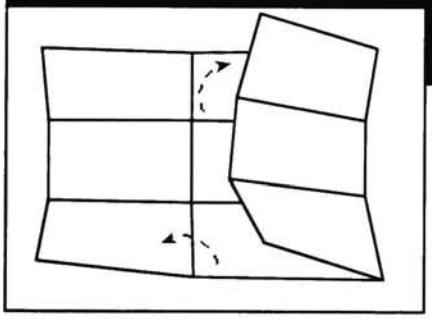
Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

18-PAGE LETTER



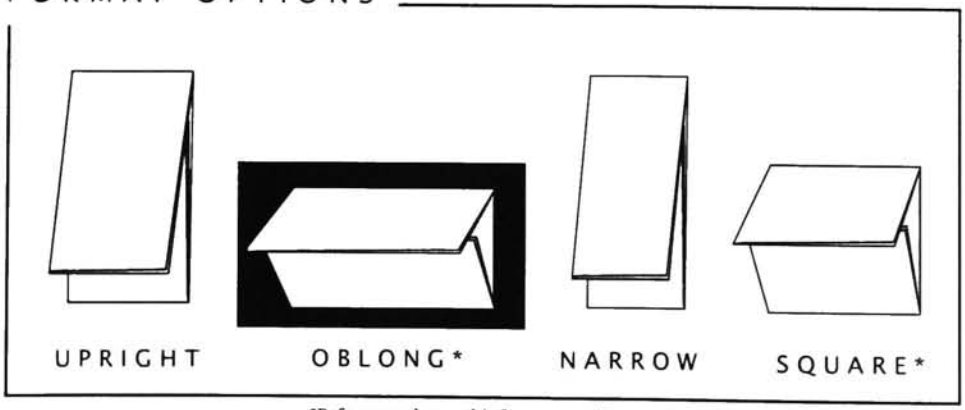


LEVEL

A level 3 fold has a long and difficult makeready, could require special machinery and low folding speed. These issues will be reflected in the cost.

The 18-page letter fold has the same characteristics of the basic letter fold—it has a bottom panel which folds upward, and a top panel which folds downward over it, like a letter. The difference is that this fold has three times the area because it folds in on itself twice before the accordion-style folding is done.

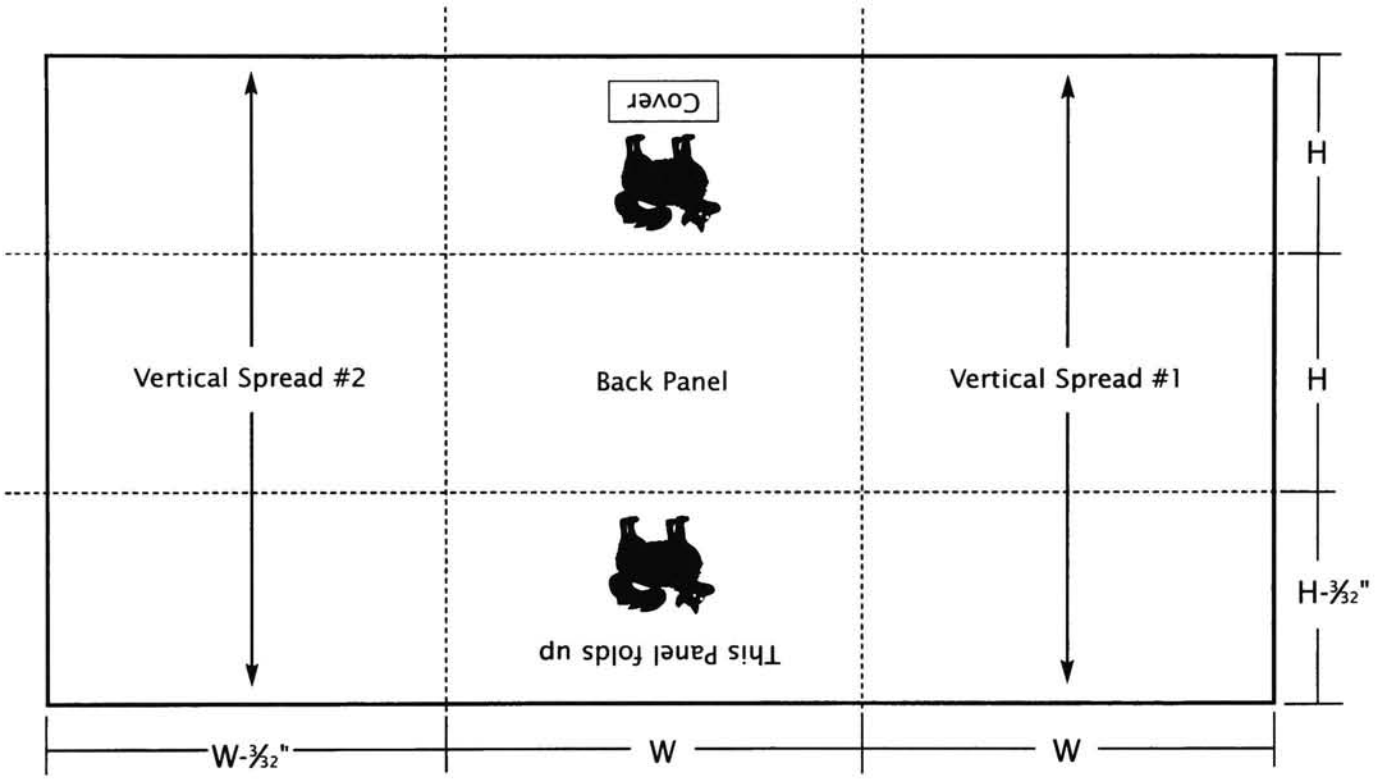
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

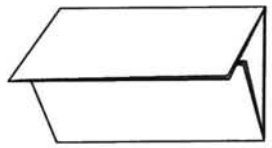
W: finished width
H: finished height
--- fold indication
upside-down



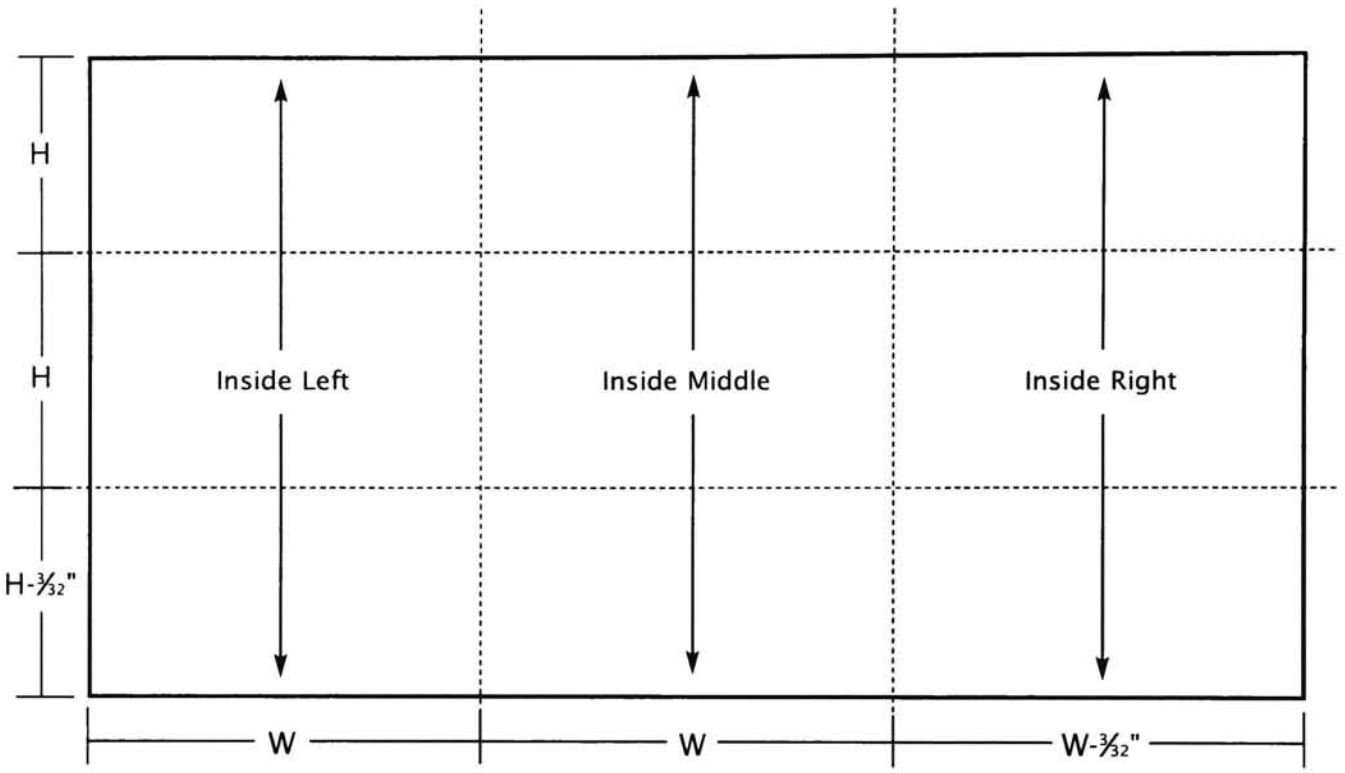
GETTING STARTED

Here's an example: If your finished size is 7 x 4, then your panels for page 1 of your digital document would be, from left, 6⅞ inches, 7 inches and 7 inches, with a height of 11⅞ inches (from top: 4 inches plus 4 inches, plus 3⅞). Then for page 2 the horizontal measurements reverse to 7 inches, 7 inches and 6⅞ inches. For page 2 the vertical measurements are the same as page 1 (from top: 4 inches plus 4 inches, plus 3⅞).

Remember: Document size and flat size must be the same, so in this case the document size would be 20⅞ (20.875) inches wide by 11⅞ (11.875) inches long.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- If you are designing a self-mailing piece, this folding style could require a wafer-seal to make it mail-ready.
- Be aware of your printer or bindery's minimum and maximum sheet sizes for their equipment.
- Make sure to have a folding dummy made in your specified paper. Paper weight will dramatically affect the success of this piece. Watch for bulkiness and problems in the corner joints of the folds—the printer can't do anything about this, and it will require a change in paper.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document height and width ahead of time. Create your document as if all panels will be the same (ex: for an 18-page letter fold with a finished size of 7 x 4, set the document size to 21 x 12). Let's calculate panel ***width*** first. Set crosshairs to upper left corner of document, pull a guide bar from the left ruler and set it to the width of your first panel (in this example, 6⅞ inches). Then, bring the crosshairs over to the guide you just set (which lets you measure from zero again) and drag your guide over to the next panel measurement (7). After setting the second fold, bring the crosshairs down one last time, drag a guide for your last panel length (7) At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the Y measurement, that will give you the document width you are looking for. Use the same method to calculate your ***vertical*** measurements. For this example the measurements would be, from top, 4 inches, 4 inches and 3⅞. Just change your document length and width by entering the decimal measurements (20.875 x 11.875).Easy! Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

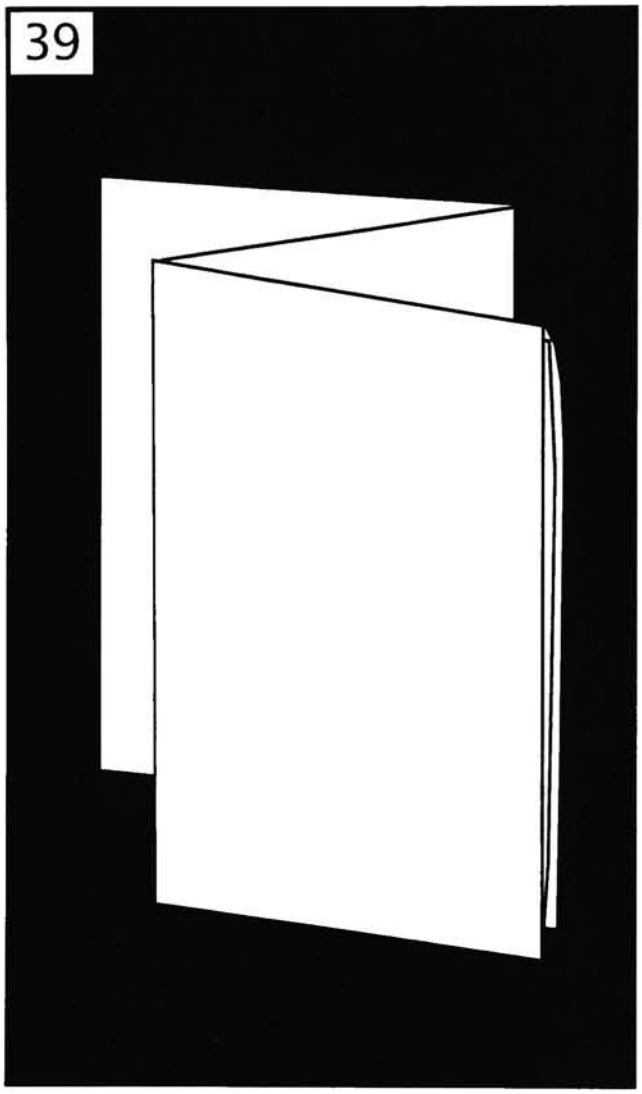
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

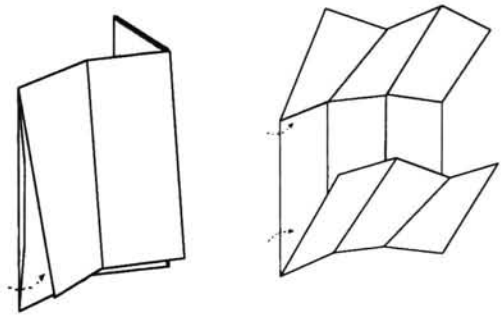
Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

LETTER FOLD WITH ACCORDION



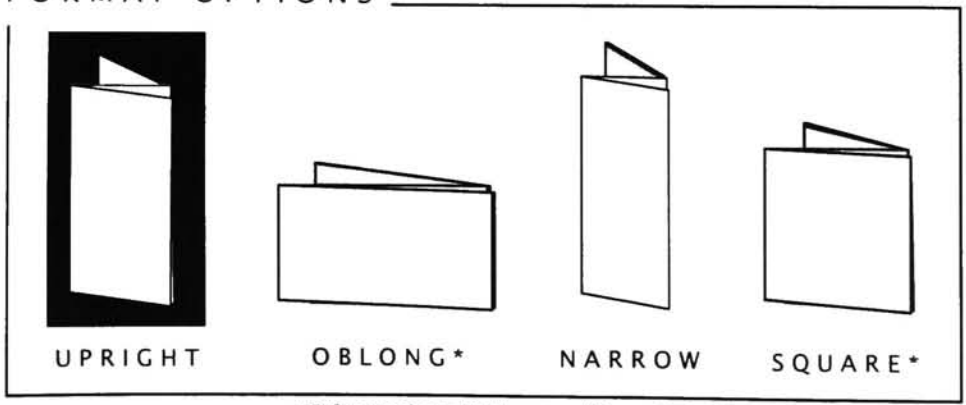


LEVEL

A level 3 fold has a long and difficult makeready, could require special machinery and low folding speed. These issues will be reflected in the cost.

The letter fold with accordion is an interesting take on the letter fold. One might say that it's a letter fold "in disguise." Like a basic letter fold, it has the same standard characteristics—the panel which folds up, and the panel which folds down over it. The difference is, after the letter fold is done, an accordion-style fold is applied to finish the piece.

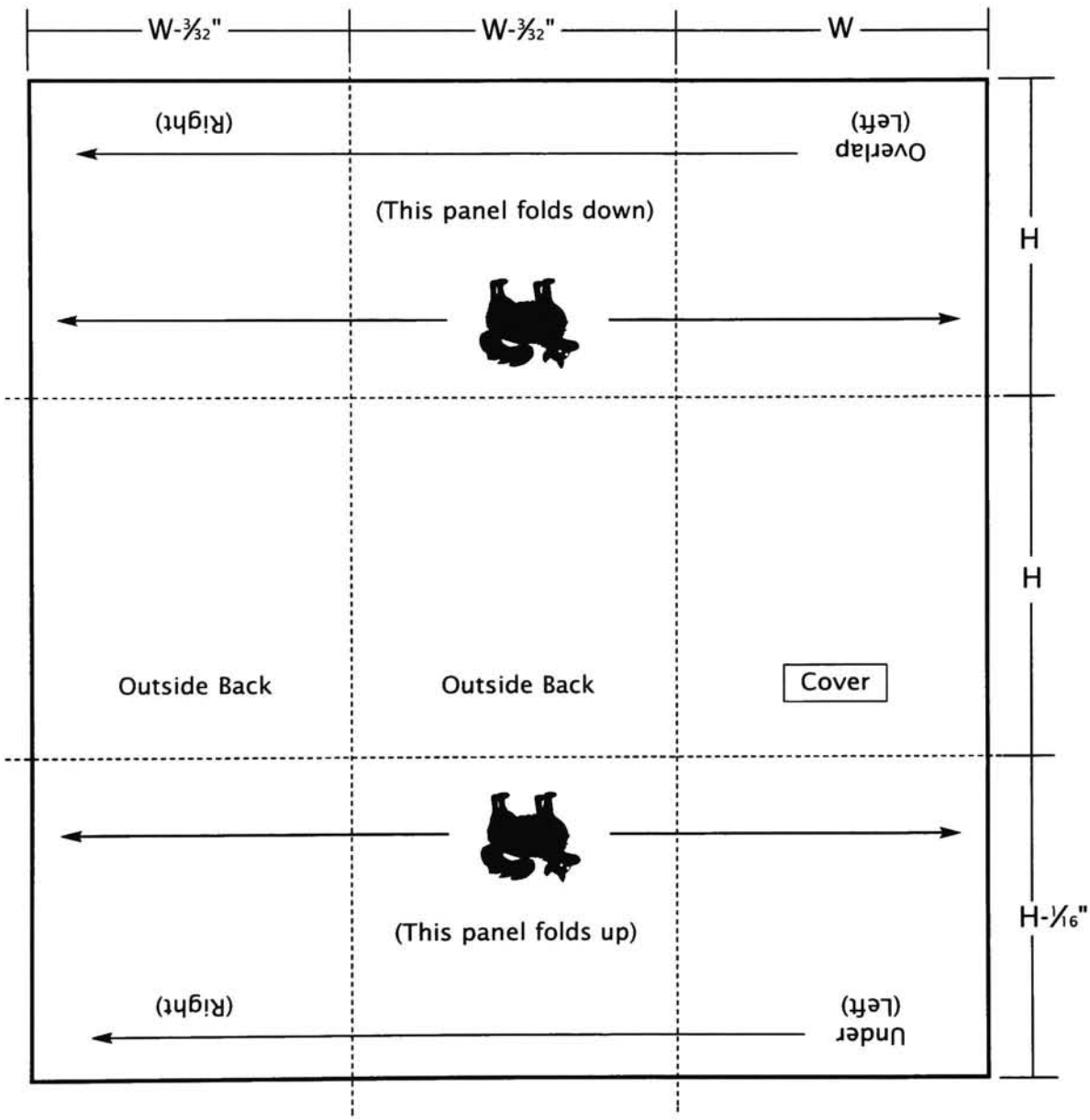
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

W: finished width
H: finished height
--- fold indication
upside-down

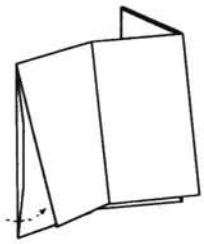
Digital Document setup: **Page 1** (side 1)



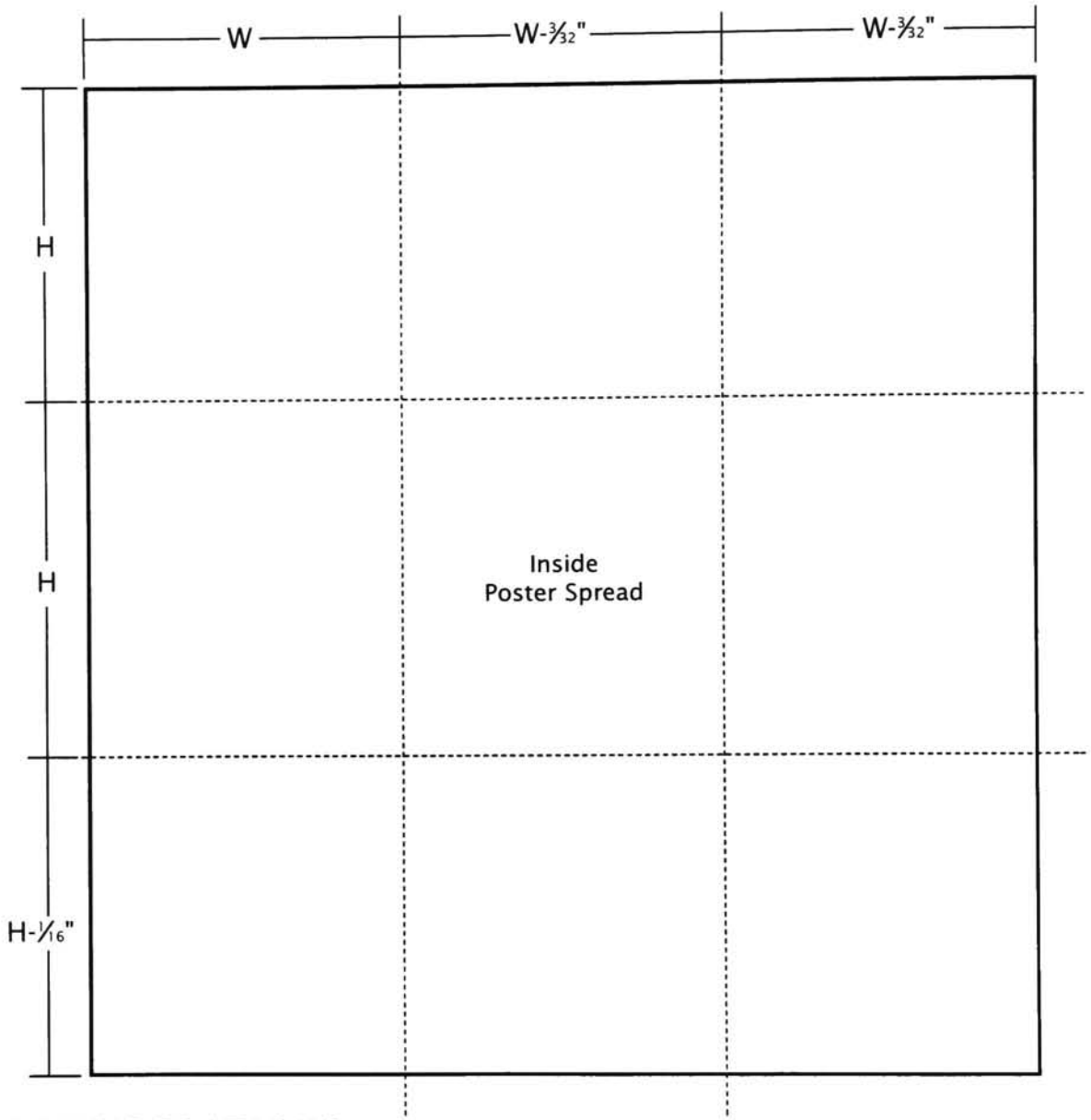
GETTING STARTED

This one looks tougher than it actually is: If your finished size is 4 x 5, then your panels for page 1 of your digital document would be, from left, $3\frac{29}{32}$ inches, $3\frac{29}{32}$ inches and 4 inches. Measurements for height would be, from top, 5 inches, 5 inches and $4\frac{15}{16}$. Then for page 2 the horizontal measurements reverse to 4 inches, $3\frac{29}{32}$ inches and $3\frac{29}{32}$ inches. For page 2 the vertical measurements are the same as page 1.

Remember: Document size and flat size must be the same, so in this case the document size would be $11\frac{13}{16}$ (11.812) inches wide by $14\frac{15}{16}$ (14.937) inches long.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- If you are designing a self-mailing piece, this folding style could require up to 4 wafer-seals to make it mail-ready. An envelope would be more attractive and cost-effective.
- A paper choice of any heavier than 60# text is not recommended.
- Make sure to have a folding dummy made in your specified paper.
- Be aware of your printer or bindery's minimum and maximum sheet sizes for their equipment. Letter fold with accordion and any other folded pieces which open out to very large dimensions generally require special large format folders.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document height and width ahead of time. Create your document as if all panels will be the same (ex: for a letter fold with accordion with a finished size of 4 x 5, set the document size to 12 x 15). Let's calculate panel ***width*** first. Set the crosshairs to the upper left corner of the document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, $3\frac{29}{32}$ inches). Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide over to the next panel measurement ($3\frac{29}{32}$). After setting the second fold, bring the crosshairs down one last time, drag a guide for your last panel length (4) At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Use the same method to calculate your ***vertical*** measurements. For this example the measurements would be, from top, 5 inches, 5 inches and $4\frac{15}{16}$. Just change your document length and width by entering the decimal measurements (11.812 x 14.937).Easy! Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

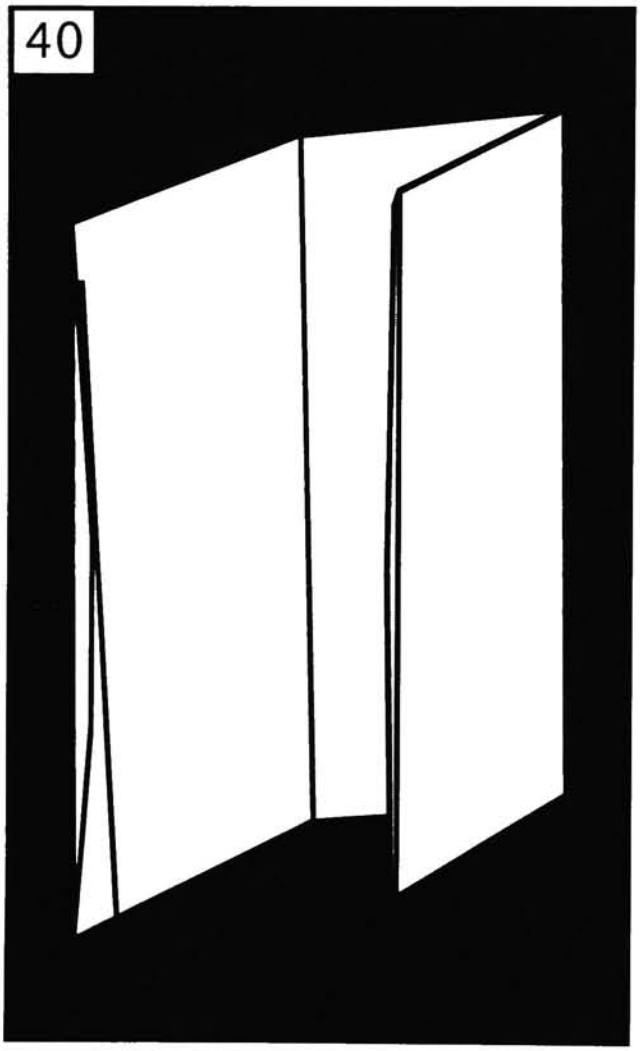
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

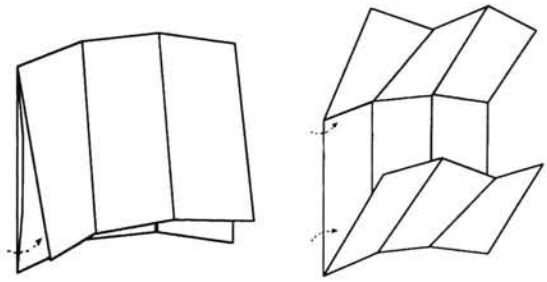
Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

LETTER FOLD WITH SINGLE GATE



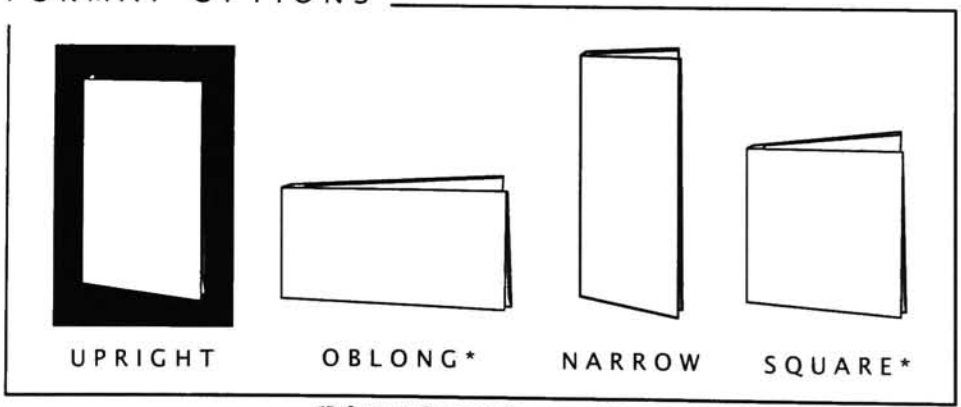


LEVEL

A level 3 fold has a long and difficult makeready, could require special machinery and low folding speed. These issues will be reflected in the cost.

The letter fold with single gate is an interesting take on the letter fold. One might say that it's a letter fold "in disguise." Like a basic letter fold, it has the same standard characteristics—the panel which folds up, and the panel which folds down over it. The difference is, after the letter fold is done, a single gate fold is applied to finish the piece.

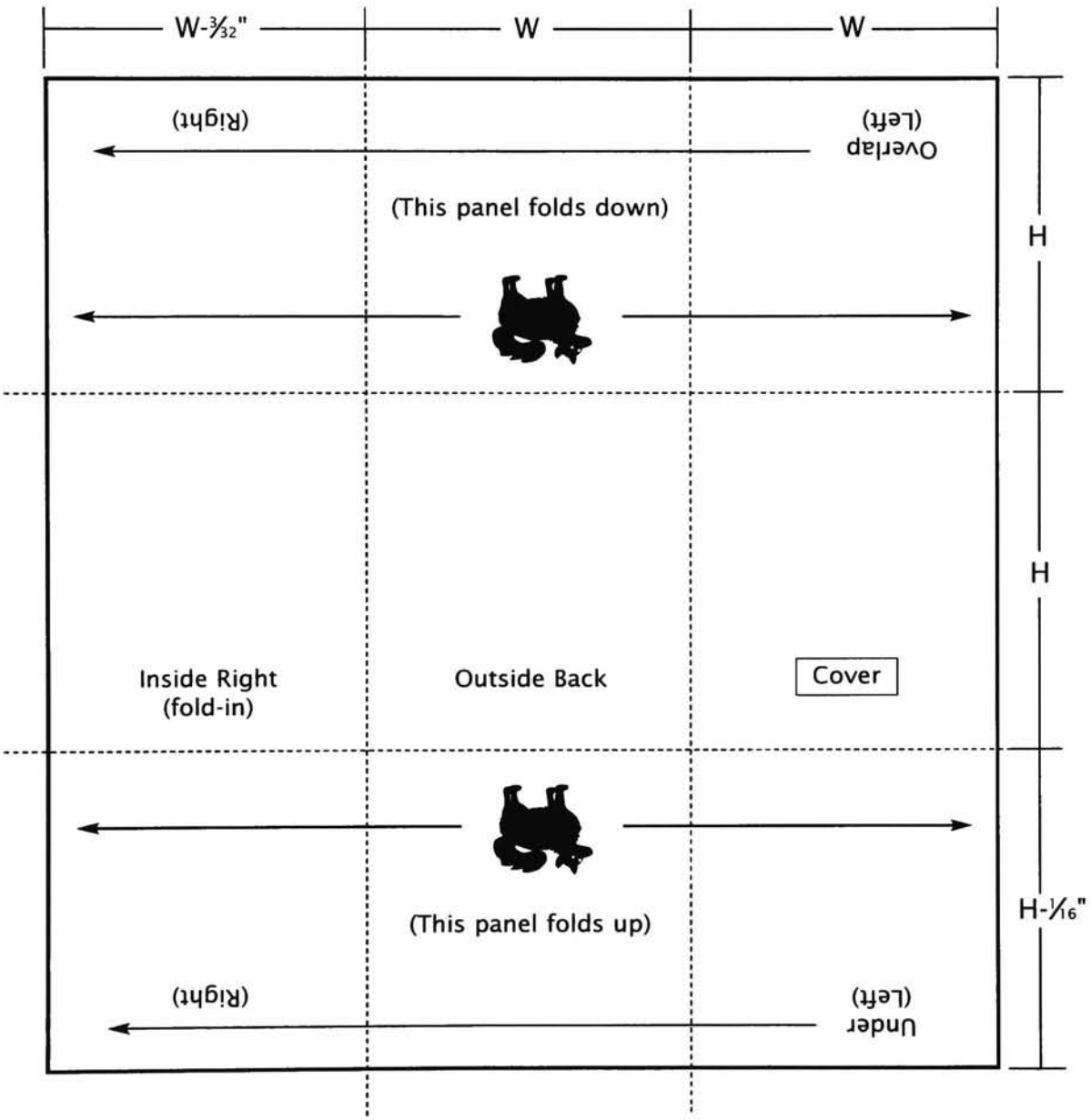
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

W: finished width
H: finished height
--- fold indication
upside-down

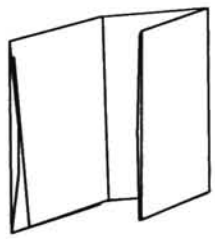
Digital Document setup: **Page 1** (side 1)



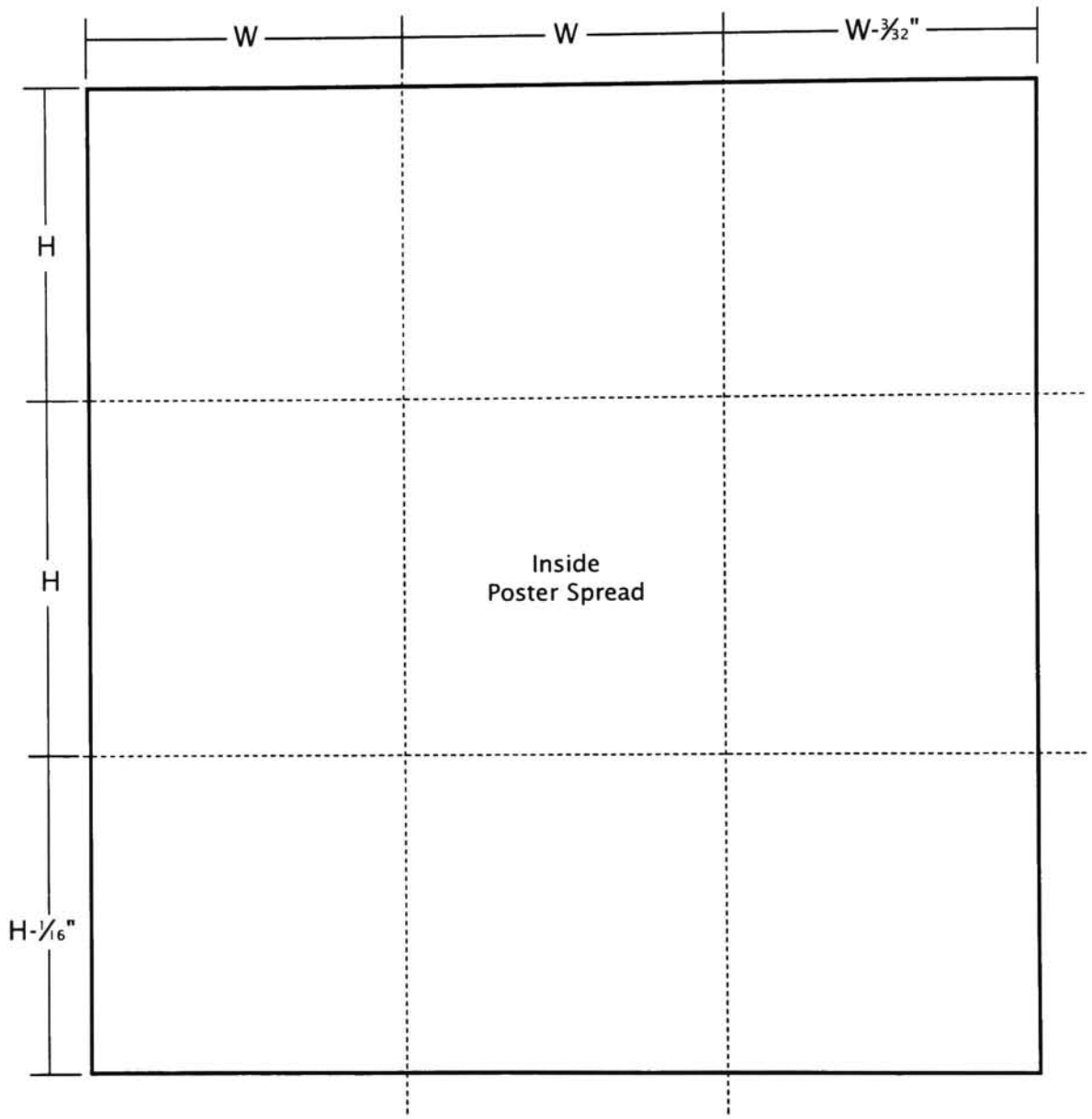
GETTING STARTED

This one looks tougher than it actually is: If your finished size is 4 x 5, then your panels for page 1 of your digital document would be, from left, $3\frac{29}{32}$ inches, 4 inches and 4 inches. Measurements for height would be, from top, 5 inches, 5 inches and $4\frac{15}{16}$. Then for page 2 the horizontal measurements reverse to 4 inches, 4 inches and $3\frac{29}{32}$ inches. For page 2 the vertical measurements are the same as page 1.

Remember: Document size and flat size must be the same, so in this case the document size would be $11\frac{29}{32}$ (11.969) inches wide by $14\frac{15}{16}$ (14.937) inches long.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- If you are designing a self-mailing piece, this folding style could require wafer-seals to make it mail-ready.
- A paper choice of any heavier than 60# text is not recommended.
- Make sure to have a folding dummy made in your specified paper.
- Be aware of your printer or bindery's minimum and maximum sheet sizes for their equipment. Letter fold with single gate and any other folded pieces which open out to very large dimensions generally require special large format folders.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document height and width ahead of time. Create your document as if all panels will be the same (ex: for a letter fold with single gate with a finished size of 4 x 5, set the document size to 12 x 15). Let's calculate panel ***width*** first. Set the crosshairs to the upper left corner of the document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, $3\frac{29}{32}$ inches). Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide over to the next panel measurement (4). After setting the second fold, bring the crosshairs down one last time, drag a guide for your last panel length (4) At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Use the same method to calculate your ***vertical*** measurements. For this example the measurements would be, from top, 5 inches, 5 inches and $4\frac{15}{16}$. Just change your document length and width by entering the decimal measurements (11.969 x 14.937).Easy! Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

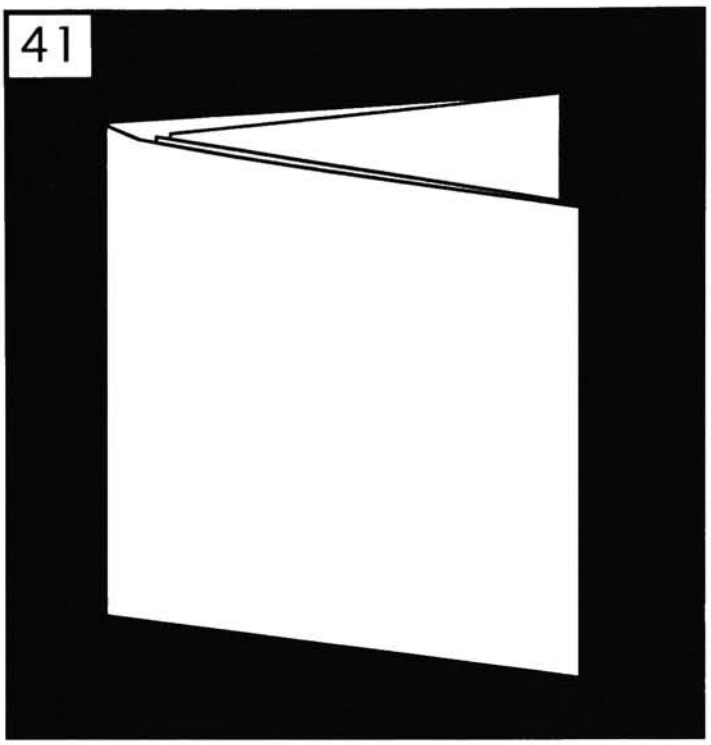
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

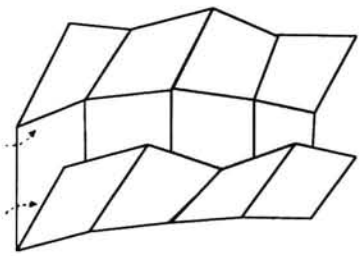
Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

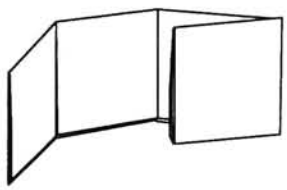
Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

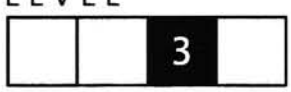
LETTER FOLD WITH DOUBLE GATE







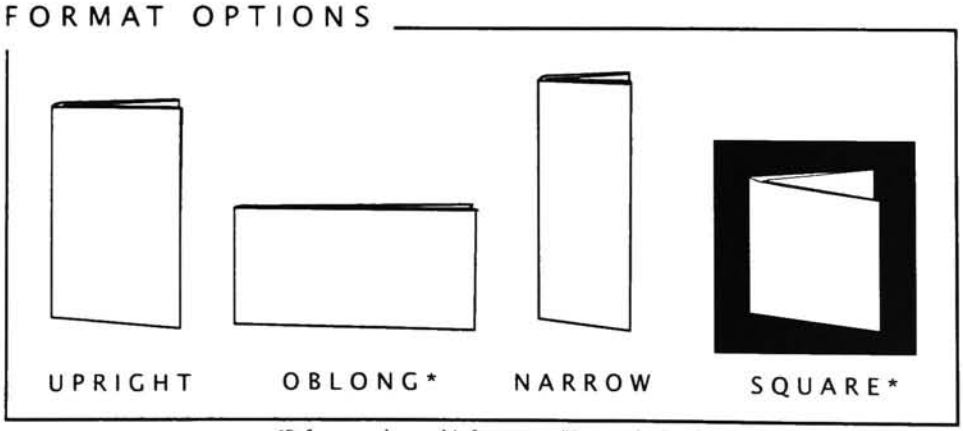
LEVEL



A level 3 fold has a long and difficult makeready, could require special machinery and low folding speed. These issues will be reflected in the cost.

The letter fold with single gate is an interesting take on the letter fold. One might say that it's a letter fold "in disguise." Like a basic letter fold, it has the same standard characteristics—the panel which folds up, and the panel which folds down over it. The difference is, after the letter fold is done, a double gate fold is applied to finish the piece.

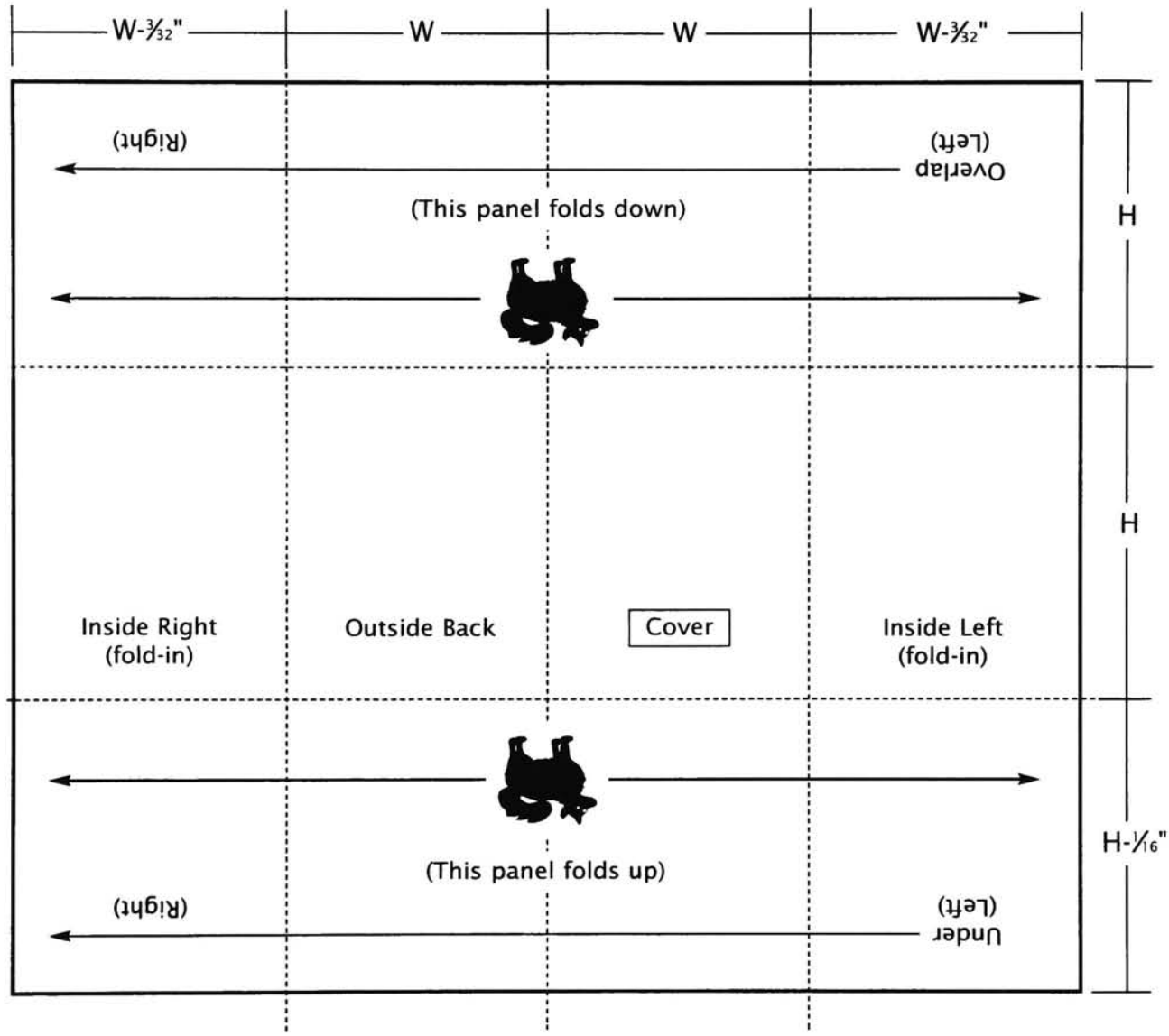
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

W: finished width
H: finished height
--- fold indication
upside-down

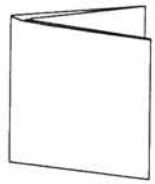


GETTING STARTED

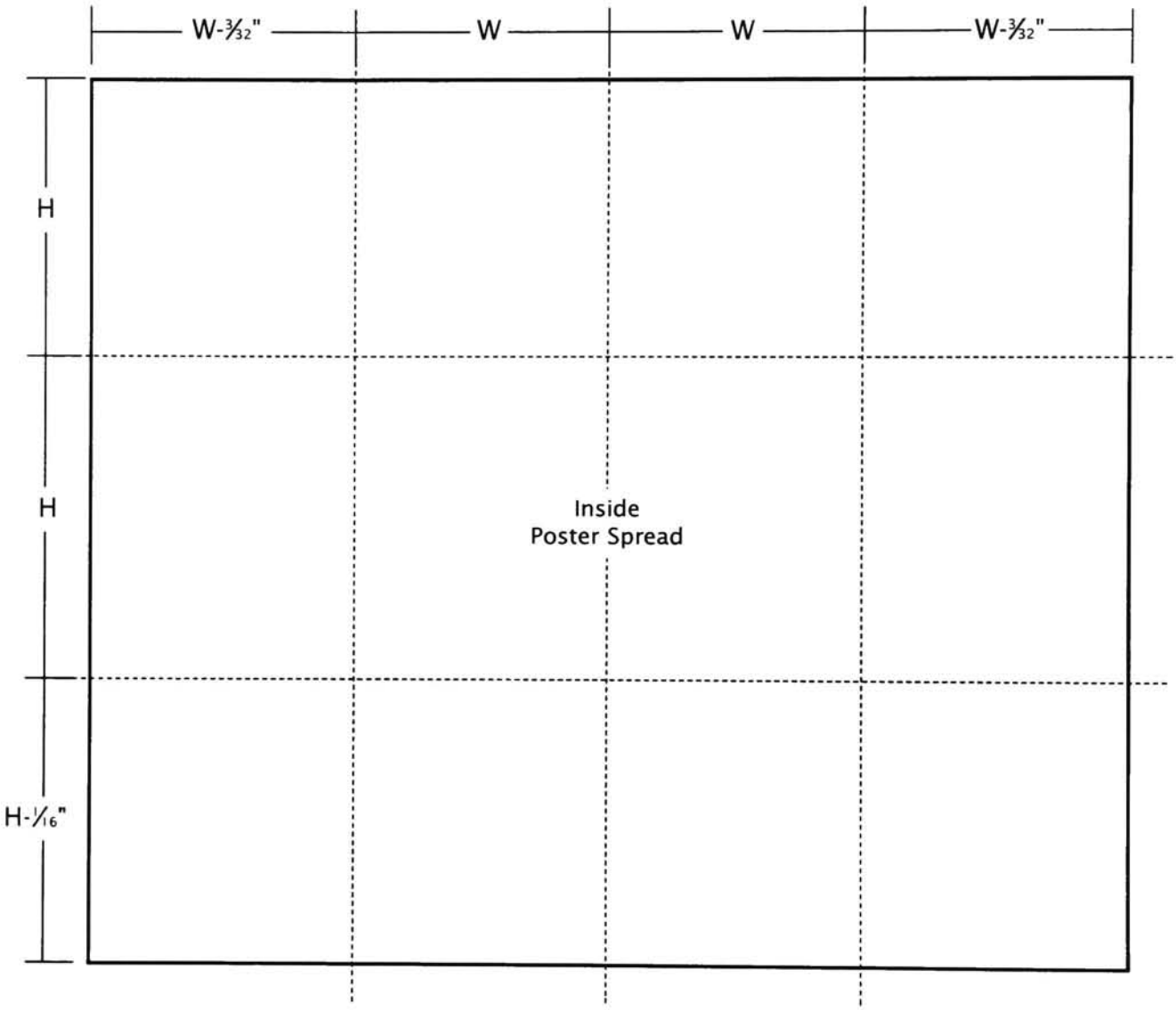
This one looks tougher than it actually is: If your finished size is 4 x 5, then your panels for page 1 of your digital document would be, from left, $3\frac{29}{32}$ inches, 4 inches, 4 inches and $3\frac{29}{32}$. Measurements for height would be, from top, 5 inches, 5 inches and $4\frac{15}{16}$. This folding style is symmetrical, so for page 2 the horizontal as well as the vertical measurements are exactly the same.

Remember: Document size and flat size must be the same, so in this case the document size would be $15\frac{13}{16}$ (15.812) inches wide by $14\frac{15}{16}$ (14.937) inches long.

Time-saving tip: For this particular folding style, the fold placement is exactly the same for page 1 as it is for page 2. If you're creating your document in a page layout program which has a master page option, save time by setting your folds on the master page. Then, return to the document and add the second page.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- If you are designing a self-mailing piece, this folding style could require wafer-seals to make it mail-ready.
- A paper choice of any heavier than 60# text is not recommended.
- Make sure to have a folding dummy made in your specified paper.
- Be aware of your printer or bindery's minimum and maximum sheet sizes for their equipment. Letter fold with double gate and any other folded pieces which open out to very large dimensions generally require special large format folders.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document height and width ahead of time. Create your document as if all panels will be the same (ex: for a letter fold with double gate with a finished size of 4 x 5, set the document size to 16 x 15). Let's calculate panel ***width*** first. Set the crosshairs to the upper left corner of the document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, $3\frac{29}{32}$ inches). Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide over to the next panel measurement (4). Repeat for the last 2 panels (4 inches and $3\frac{29}{32}$ inches). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your cross-hairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Use the same method to calculate your ***vertical*** measurements. For this example the measurements would be, from top, 5 inches, 5 inches and $4\frac{15}{16}$. Just change your document length and width by entering the decimal measurements (15.812 x 14.937).Easy! Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

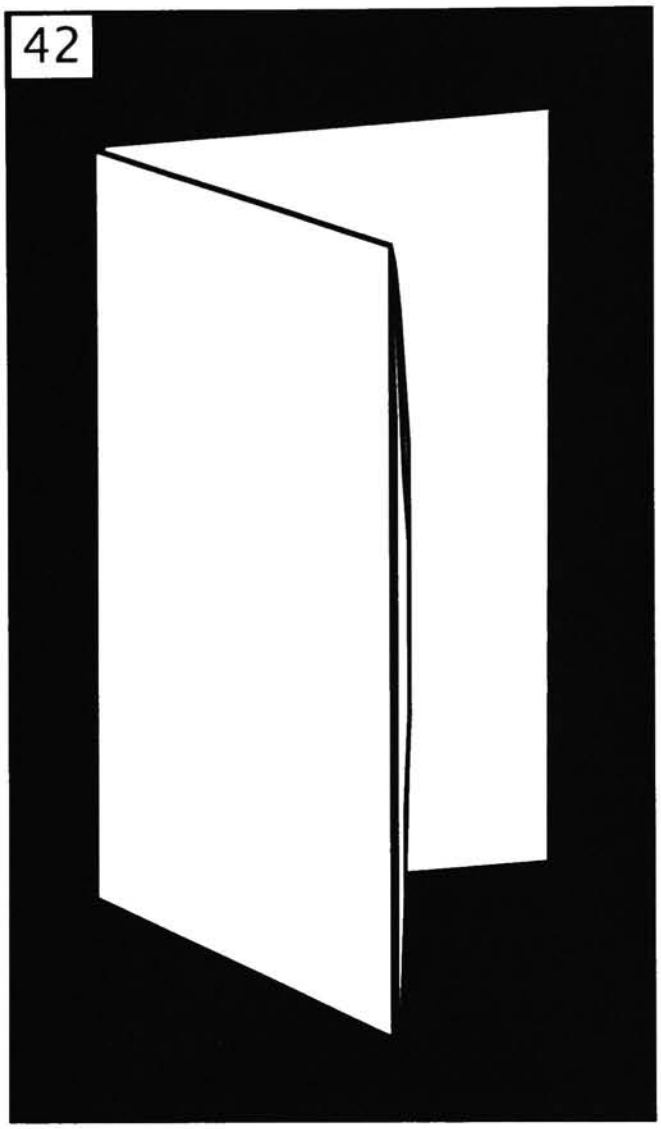
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

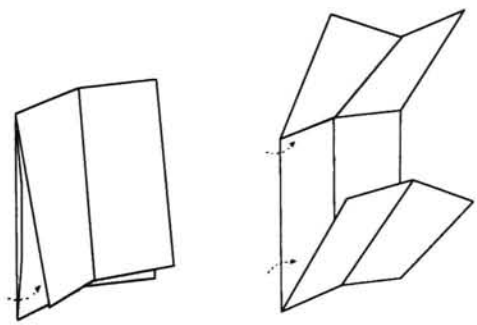
Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

LETTER FOLD WITH SINGLE PARALLEL



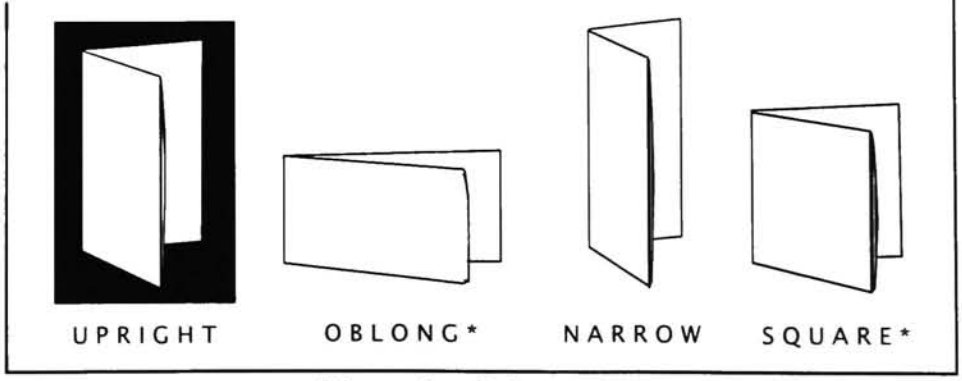


LEVEL

A level 2 fold has a moderate makeready, possible slower speed on the folding machine, and could have some special considerations.

The letter fold with single parallel is an interesting take on the letter fold. One might say that it's a letter fold "in disguise." Like a basic letter fold, it has the same standard characteristics—the panel which folds up, and the panel which folds down over it. The difference is, after the letter fold is done, a single parallel fold is applied to finish the piece.

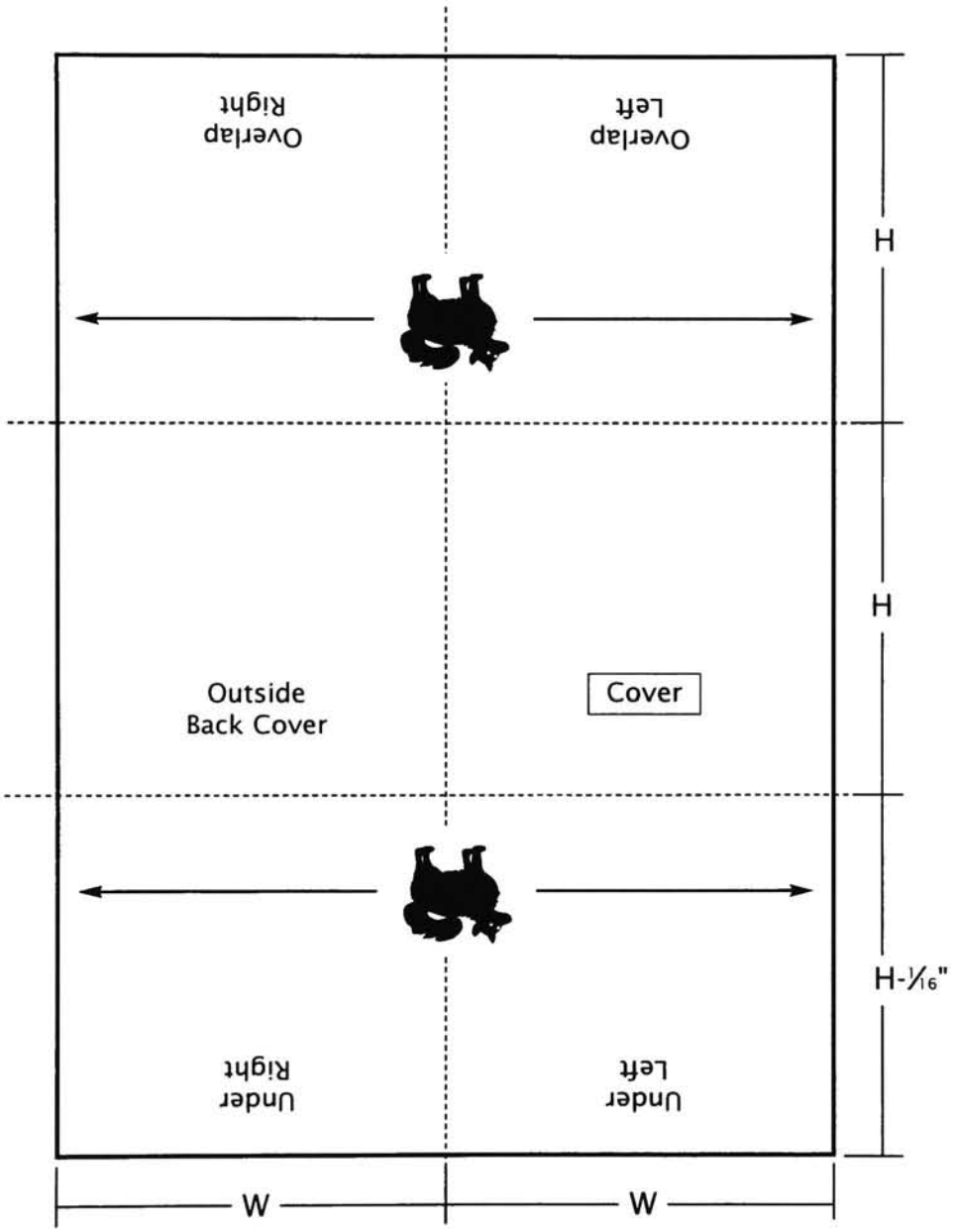
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

W: finished width
H: finished height
--- fold indication
upside-down

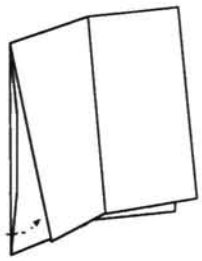


GETTING STARTED

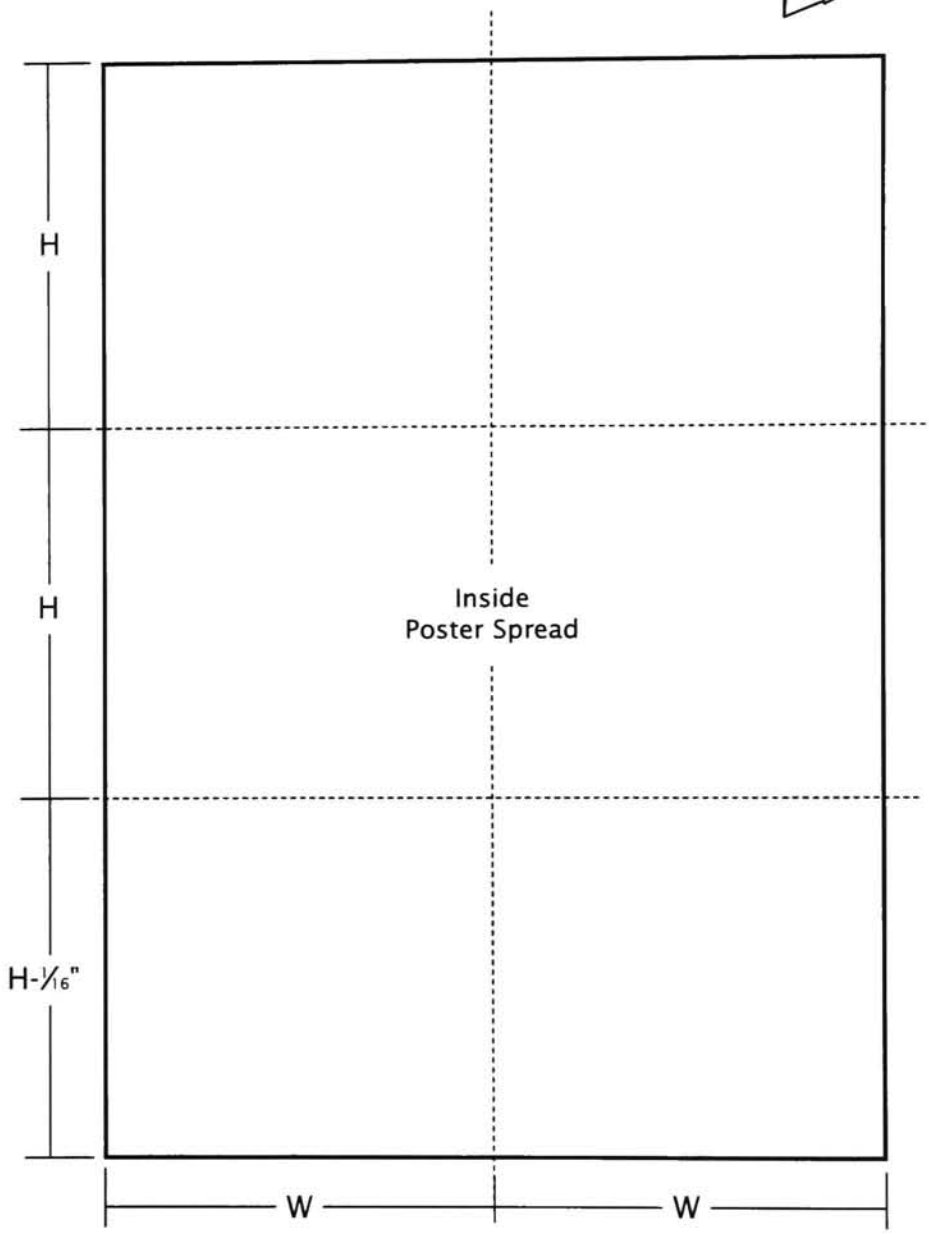
This one looks tougher than it actually is: If your finished size is 4 x 5, then your panels for page 1 of your digital document would be, from left, 4 inches and 4 inches. Measurements for height would be, from top, 5 inches, 5 inches and 4 15/16. This folding style is symmetrical, so for page 2 the horizontal as well as the vertical measurements are exactly the same.

Remember: Document size and flat size must be the same, so in this case the document size would be 8 inches wide by 14 15/16 (14.937) inches long.

Time-saving tip: For this particular folding style, the fold placement is exactly the same for page 1 as it is for page 2. If you're creating your document in a page layout program which has a master page option, save time by setting your folds on the master page. Then, return to the document and add the second page.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- If you are designing a self-mailing piece, this folding style could require wafer-seals to make it mail-ready.
- Make sure to have a folding dummy made in your specified paper. Paper weight will dramatically affect the success of this piece. Watch for bulkiness and problems in the corner joints of the folds—the printer can't do anything about this, and it will require a change in paper.
- Be aware of your printer or bindery's minimum and maximum sheet sizes for their equipment. Letter fold with single parallel and any other folded pieces which open out to very large dimensions generally require special large format folders.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document height ahead of time. Create your document as if all panels will be the same (ex: for a letter fold with single parallel with a finished size of 4 x 5, set the document size to 8 x 15). Set the crosshairs to the upper left corner of the document, pull down a guide bar from the top ruler and set it to the measurement of your first panel (in this example, 5 inches). Then, bring the cross-hairs down to the guide you just set (which lets you measure from zero again) and drag your guide down to the next panel measurement (5). After setting the second fold, bring the crosshairs down one last time, drag a guide for your last panel length (4 15/16) At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the Y measurement, that will give you the document length you are looking for. If you've done it right, your last guide will come to the exact edge of the document. Easy! Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

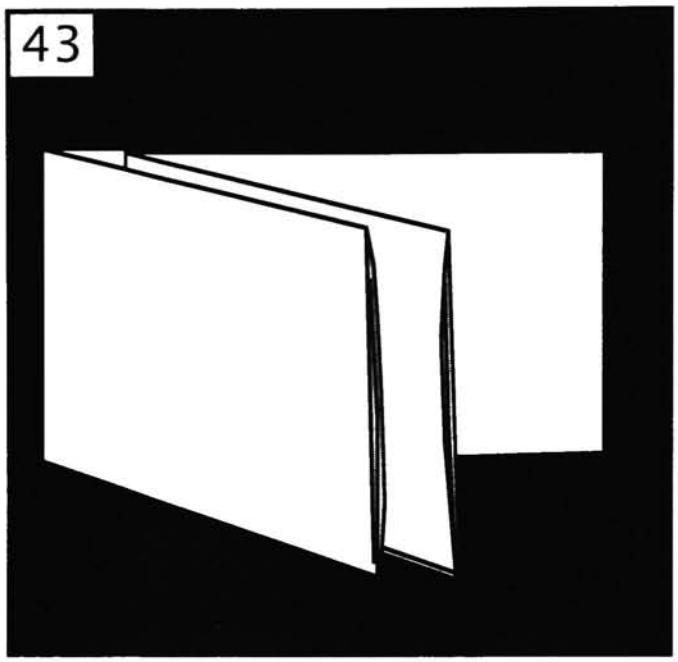
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

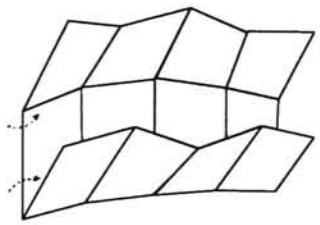
Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

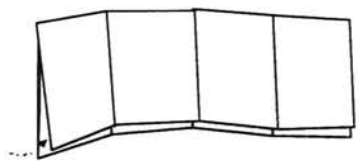
Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

LETTER FOLD WITH DOUBLE PARALLEL





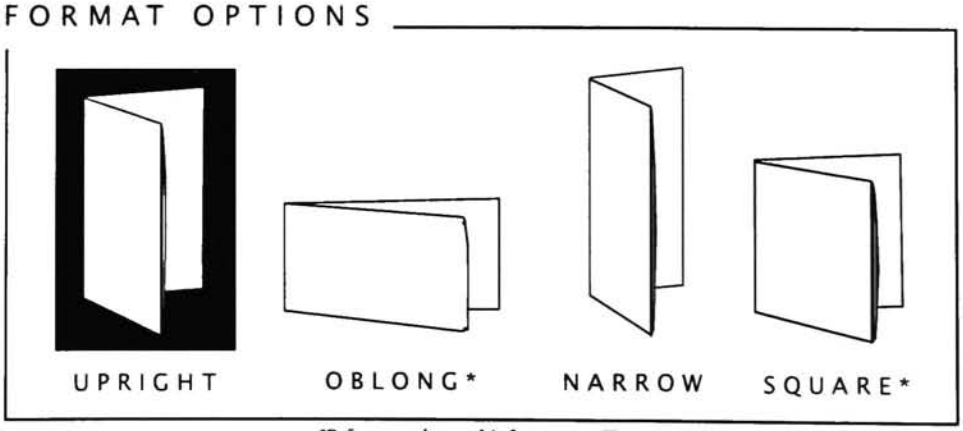


LEVEL

A level 3 fold has a long and difficult makeready, could require special machinery and low folding speed. These issues will be reflected in the cost.

The letter fold with double parallel is an interesting take on the letter fold. One might say that it's a letter fold "in disguise." Like a basic letter fold, it has the same standard characteristics—the panel which folds up, and the panel which folds down over it. The difference is, after the letter fold is done, a double parallel fold is applied to finish the piece.

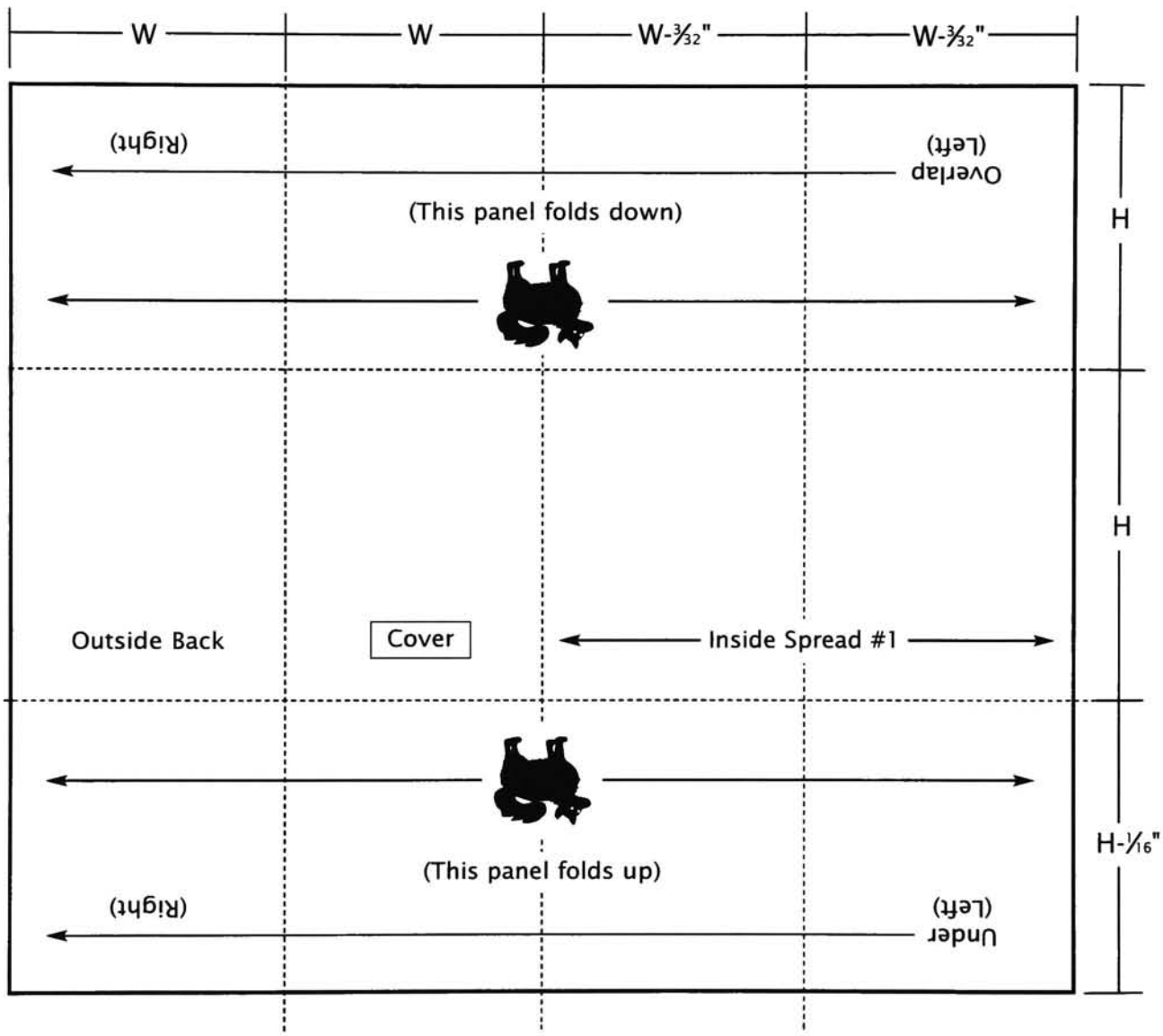
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

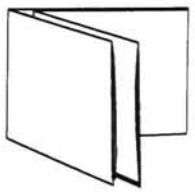
W: finished width
H: finished height
--- fold indication
upside-down



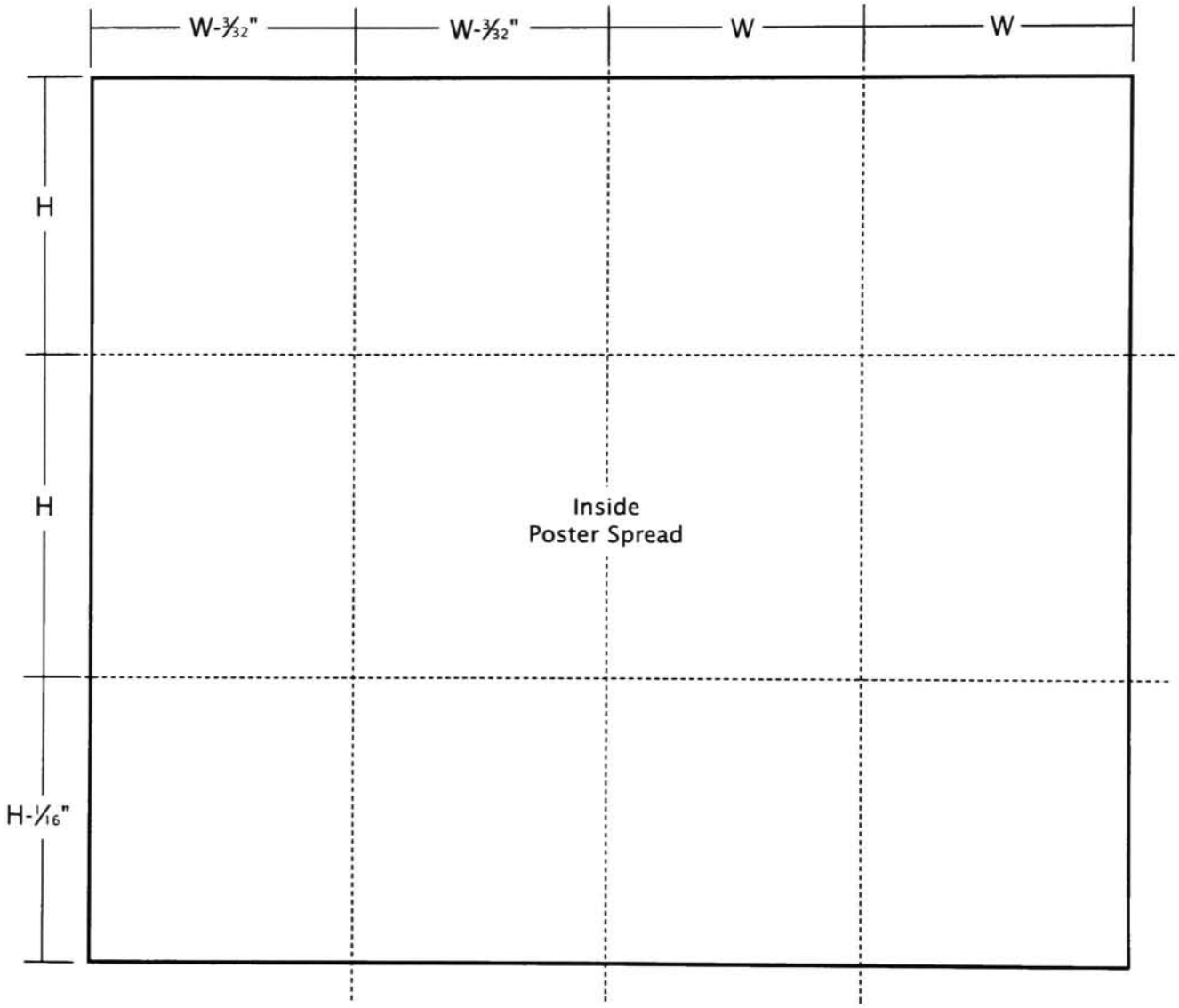
GETTING STARTED

This one looks tougher than it actually is: If your finished size is 4 x 5, then your panels for page 1 of your digital document would be, from left, 4 inches, 4 inches, $3\frac{29}{32}$, and $3\frac{29}{32}$. Measurements for height would be, from top, 5 inches, 5 inches and $4\frac{15}{16}$. Then for page 2 the horizontal measurements reverse to $3\frac{29}{32}$, $3\frac{29}{32}$, 4 inches and 4 inches. For page 2 the vertical measurements are the same as page 1.

Remember: Document size and flat size must be the same, so in this case the document size would be $15\frac{13}{16}$ (15.812) inches wide by $14\frac{15}{16}$ (14.937) inches long.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- If you are designing a self-mailing piece, this folding style could require wafer-seals to make it mail-ready.
- Make sure to have a folding dummy made in your specified paper. Paper weight will dramatically affect the success of this piece. Watch for bulkiness and problems in the corner joints of the folds—the printer can't do anything about this, and it will require a change in paper (60# text recommended).
- Be aware of your printer or bindery's minimum and maximum sheet sizes for their equipment. Letter fold with double parallel and any other folded pieces which open out to very large dimensions generally require special large format folders.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document height and width ahead of time. Create your document as if all panels will be the same (ex: for a letter fold with double parallel with a finished size of 4 x 5, set the document size to 16 x 15). Let's calculate panel ***width*** first. Set the crosshairs to the upper left corner of the document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, 4 inches). Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide over to the next panel measurement (4). Repeat for the last 2 panels ($3\frac{29}{32}$ and $3\frac{29}{32}$ inches). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Use the same method to calculate your ***vertical*** measurements. For this example the measurements would be, from top, 5 inches, 5 inches and $4\frac{15}{16}$. Just change your document length and width by entering the decimal measurements (15.812 x 14.937).Easy! Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

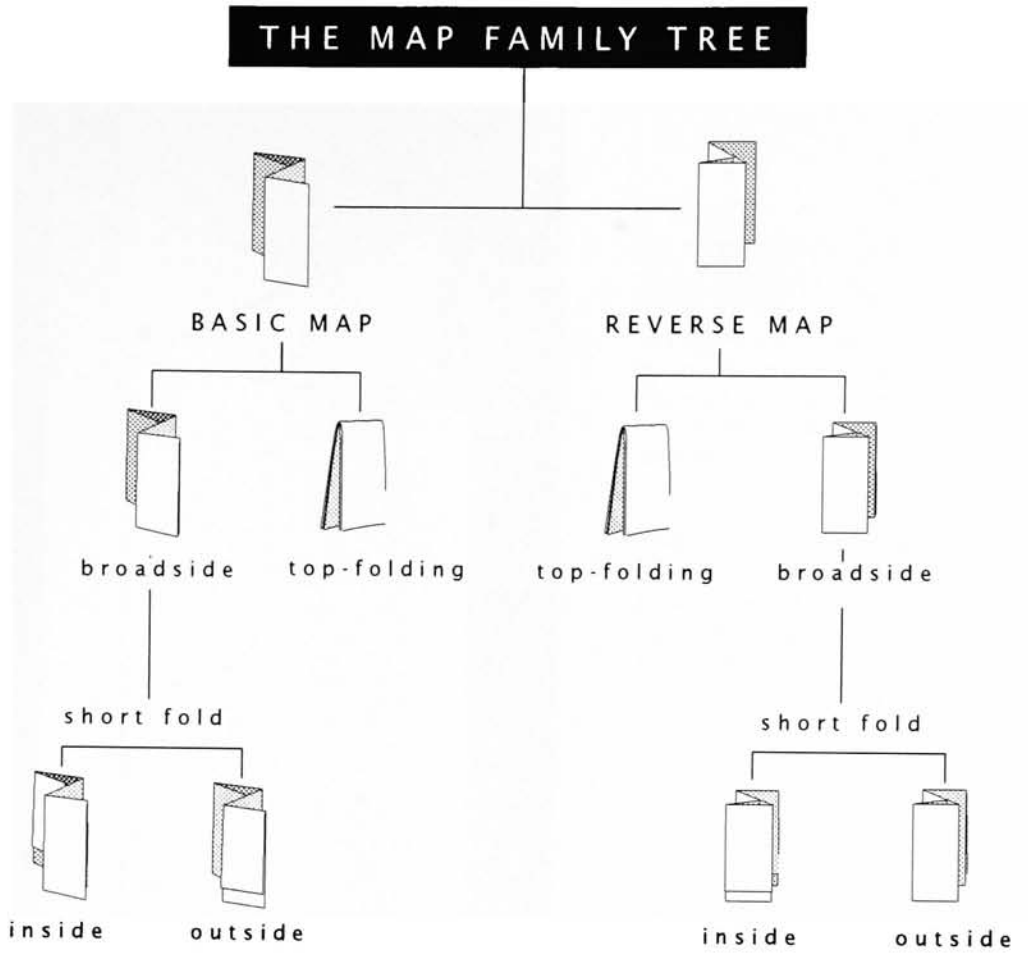
Other Related Considerations:

Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

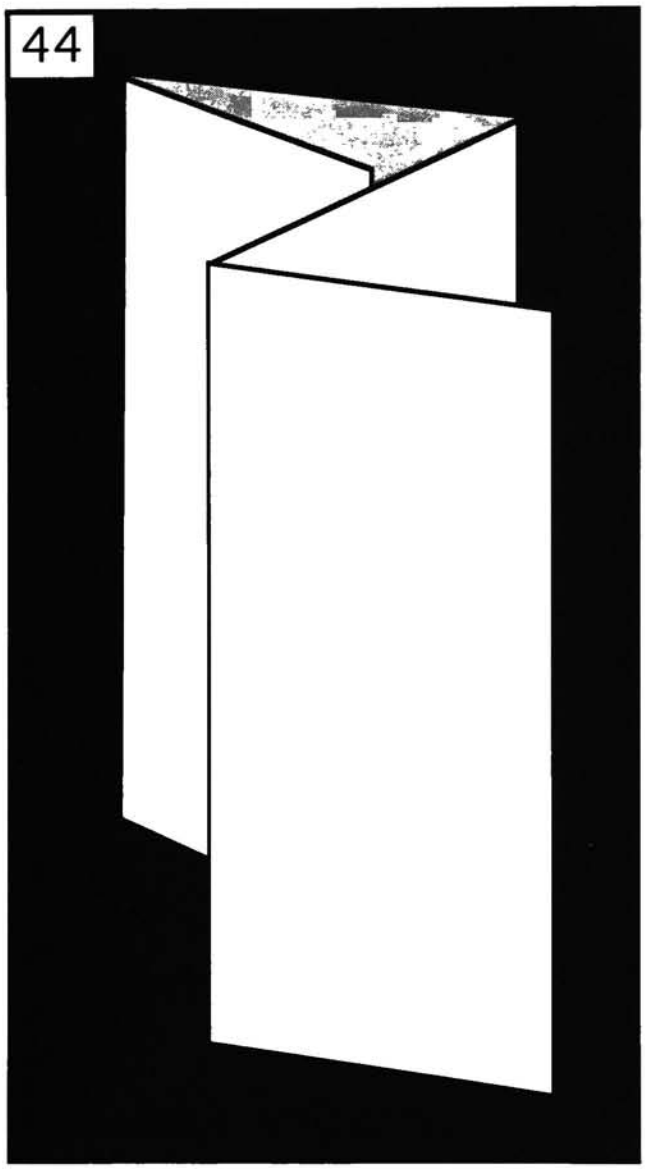
Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:


THE MAP FAMILY TREE
BASIC MAP
REVERSE MAP
broadside
top-folding
top-folding
broadside
short fold
short fold
inside
outside
inside
outside

BASIC MAP FOLD

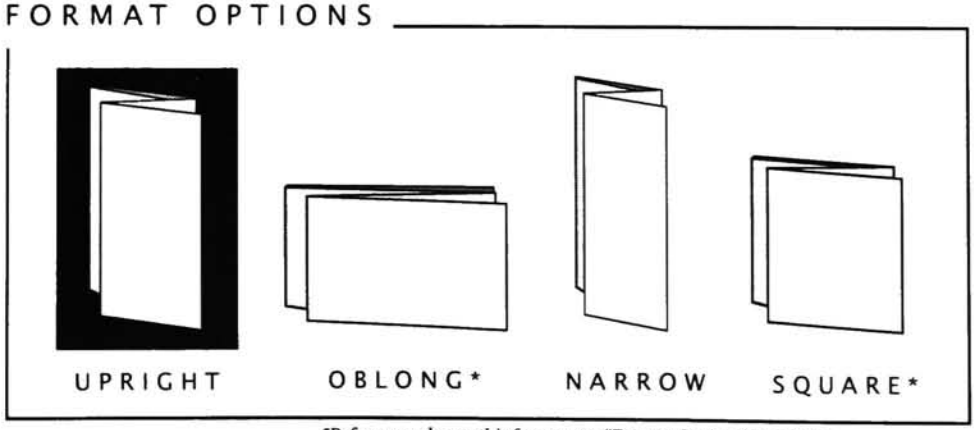


LEVEL

A level 2 fold has a moderate makeready, possible slower speed on the folding machine, and could have some special considerations.

The map fold is somewhat unusual, and often misidentified. To describe it is difficult—a marriage of the accordion fold and the gate fold creates an interesting end result.

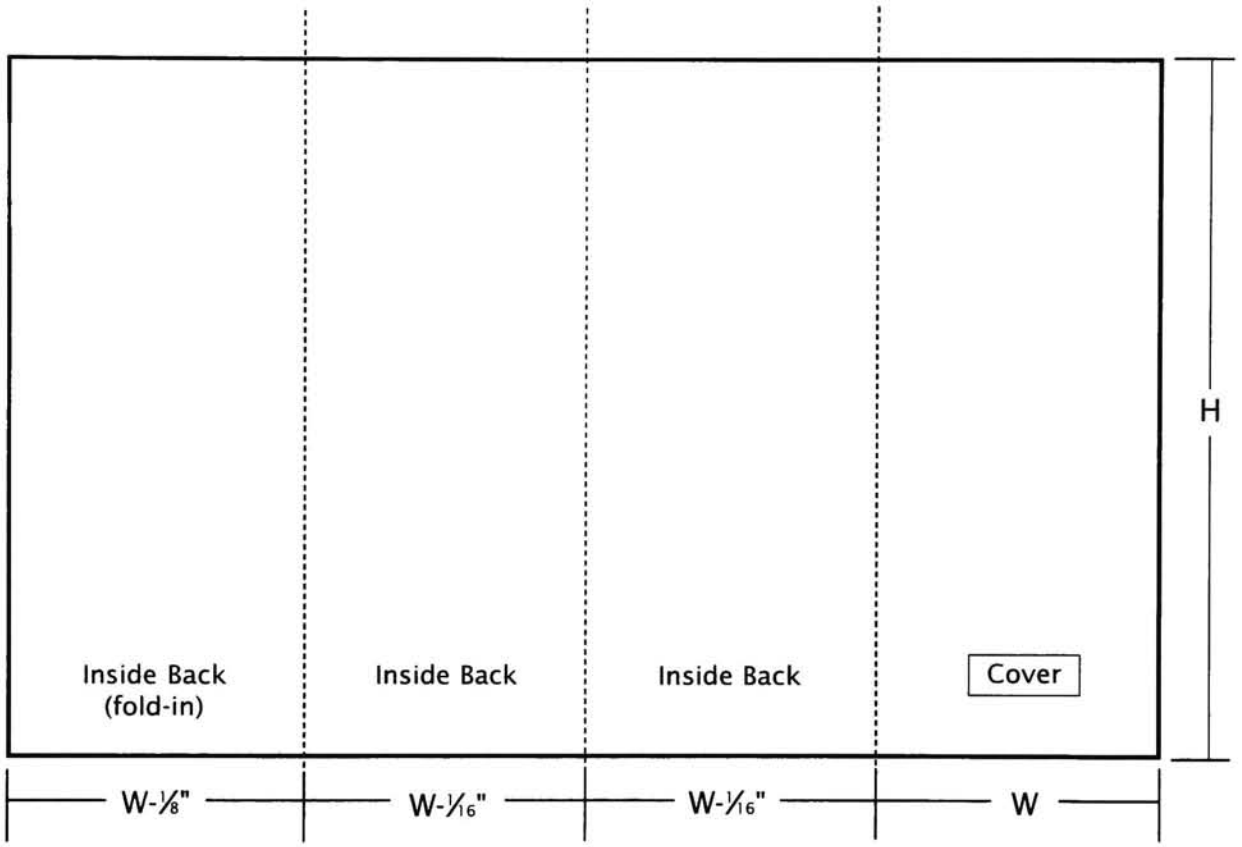
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

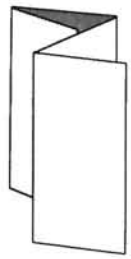
W: finished width
H: finished height
--- fold indication



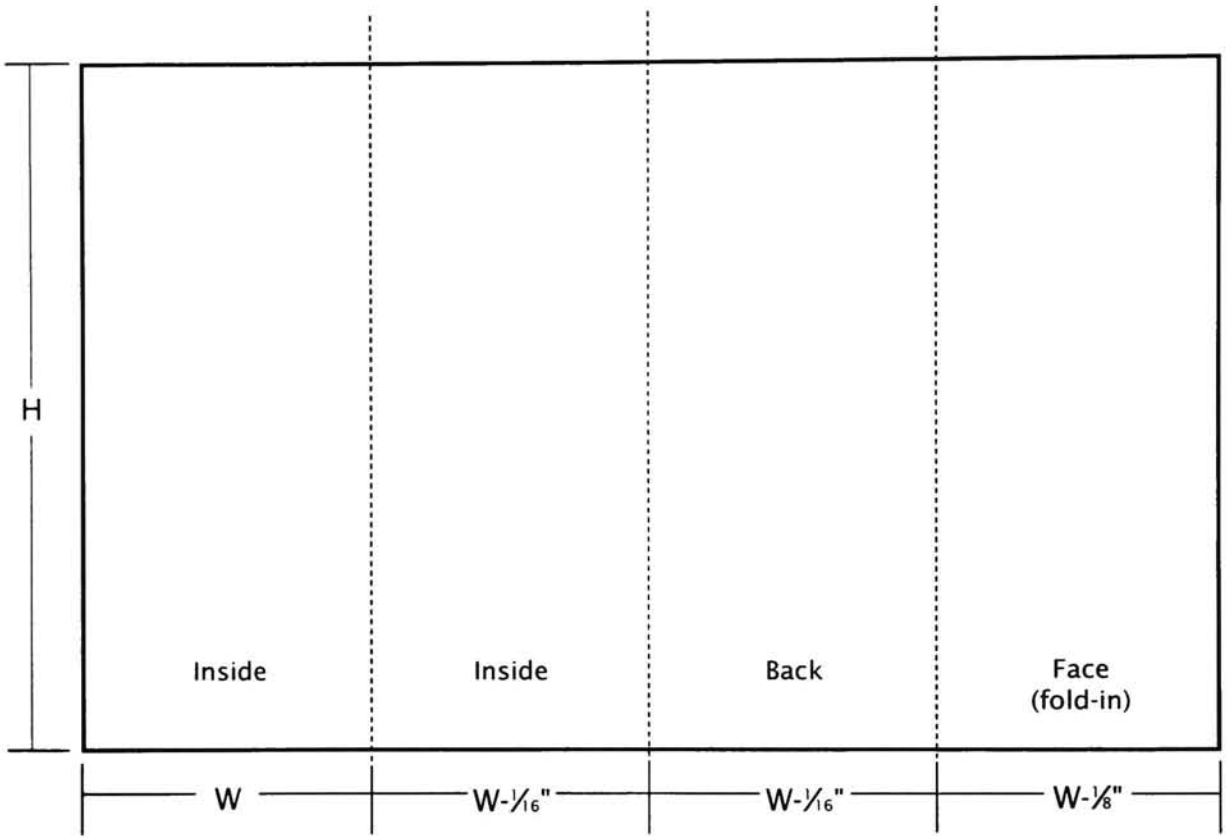
GETTING STARTED

Here's an example: If your finished size is 4 x 9, then your panels for page 1 of your digital document would be, from left, 3 ⅞ inches, 3 15/16 inches, 3 15/16 inches and 4 inches. Then for page two everything reverses, so from left your panels would measure 4 inches, 3 15/16 inches, 3 15/16 inches and 3 ⅞ inches, with a height of 9 inches.

Remember: Document size and flat size must be the same, so in this case the document size would be 15 ¾ (15.75) inches wide by 9 inches high.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- If you are designing a large piece, make sure to have a folding sample made up from your specified paper. If the paper is too lightweight, it could turn into a sagging flimsy piece.
- If you are designing a self-mailing piece, this folding style could require wafer-seals to make it mail-ready.
- If your paper choice is any heavier than 80# text, you will want to consider scoring the piece. Ask your printer for a recommendation.
- Be aware of your printer or bindery's minimum and maximum sheet sizes for their equipment.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document width ahead of time. Create your document as if all panels will be the same (ex: for a map fold with a finished size of 4 x 9, set the document size to 16 x 9). Then set crosshairs to upper left corner of document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example,3 7/8 inches). Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement (3 15/16). Repeat for the last 2 panels (3 15/16 inches and 4 inches). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Just change your document size by entering that decimal measurement (15.75). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

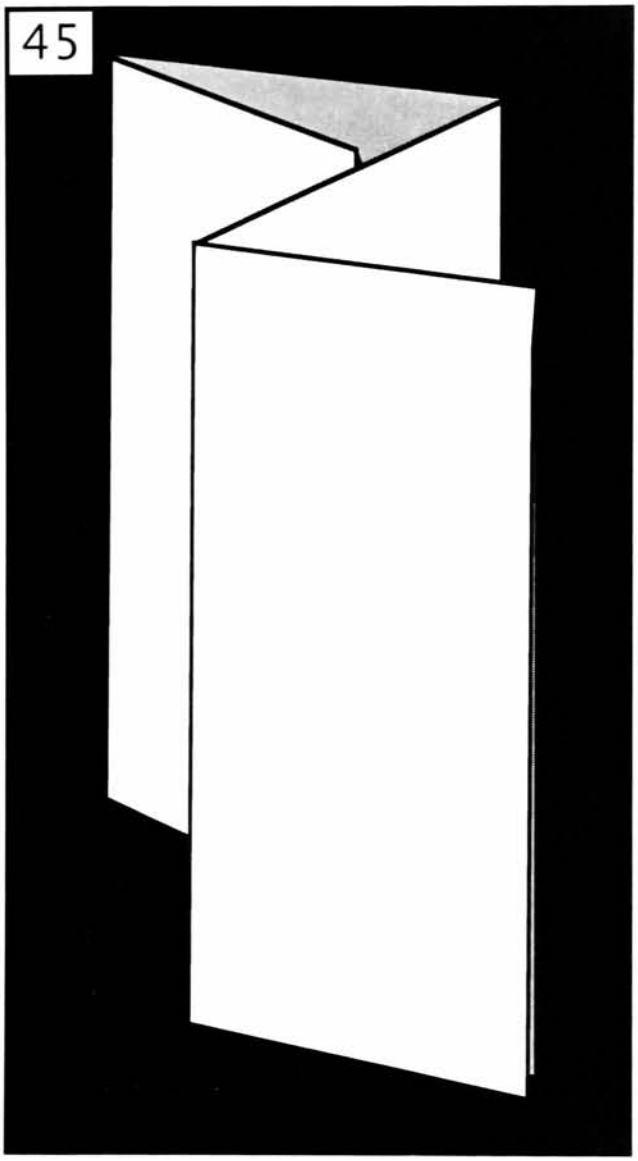
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

MAP FOLD / BROADSIDE

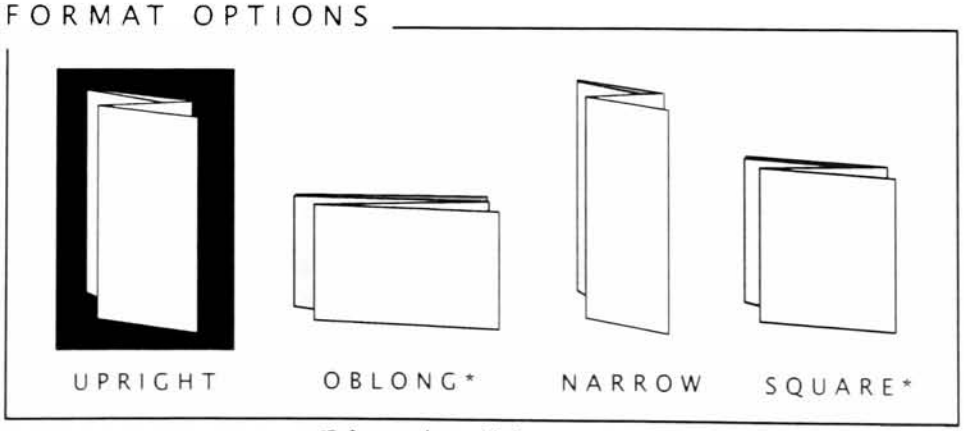


LEVEL

A level 2 fold has a moderate makeready, possible slower speed on the folding machine, and could have some special considerations.

The map fold is somewhat unusual, and often misidentified. To describe it is difficult—a marriage of the accordion fold and the gate fold creates an interesting end result. The broadside map fold consists of the same characteristic folding style, but the difference is that this fold has twice the area because it folds in half on itself before the map-style folding is done.

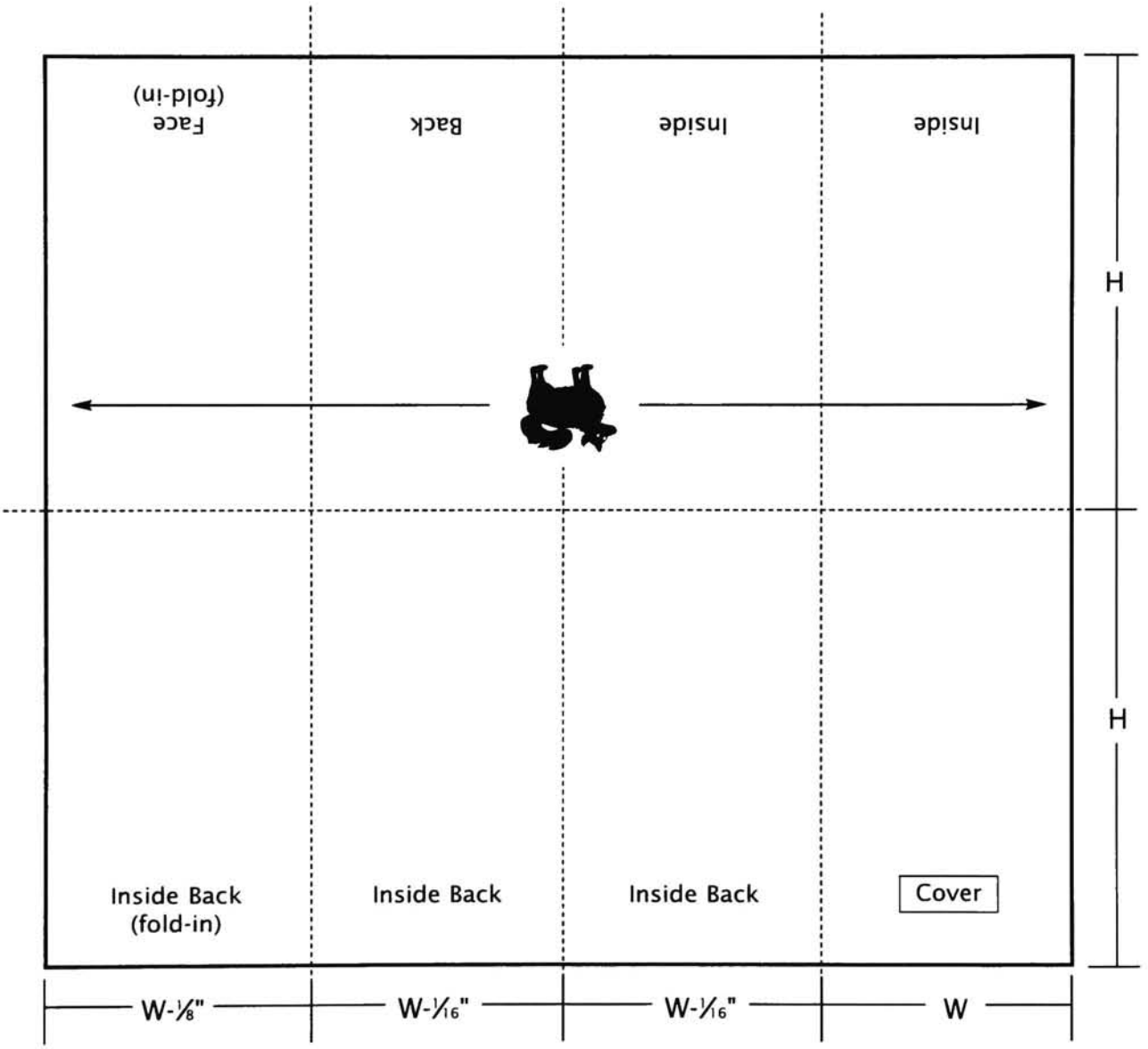
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

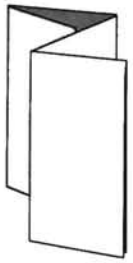
W: finished width
H: finished height
--- fold indication
upside-down



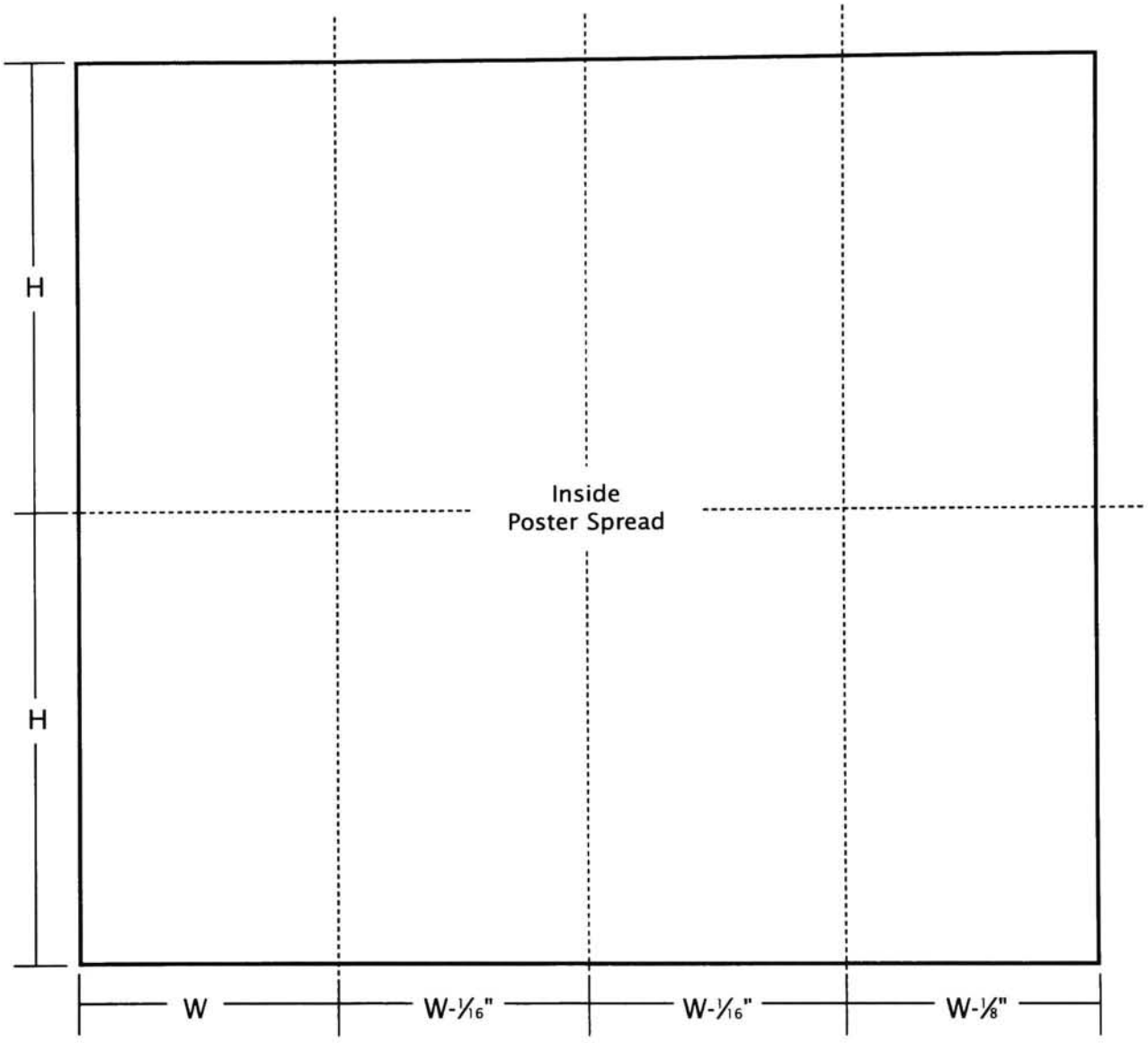
GETTING STARTED

Here's an example: If your finished size is 4 x 9, then your panels for page 1 of your digital document would be, from left, 3 ⅞ inches, 3 15/16 inches, 3 15/16 inches and 4 inches. Then for page two everything reverses, so from left your panels would measure 4 inches, 3 15/16 inches, 3 15/16 inches and 3 ⅞ inches, with a height of 18 inches (9 inches plus 9 inches).

Remember: Document size and flat size must be the same, so in this case the document size would be 15 ¾ (15.75) inches wide by 18 inches high.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- Be aware of your printer or bindery's minimum and maximum sheet sizes for their equipment.
- If you are designing a self-mailing piece, this folding style could require wafer-seals to make it mail-ready.
- Make sure to have a folding dummy made in your specified paper. Paper weight will dramatically affect the success of this piece. Watch for bulkiness and problems in the corner joints of the folds—the printer can't do anything about this, and it will require a change in paper.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document width ahead of time. Create your document as if all panels will be the same (ex: for a broadside map fold with a finished size of 4 x 9, set the document size to 16 x 18). Then set crosshairs to upper left corner of document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example,3 ⅞ inches). Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement (3 15/16). Repeat for the last 2 panels (3 15/16 inches and 4 inches). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Just change your document size by entering that decimal measurement (15.75). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

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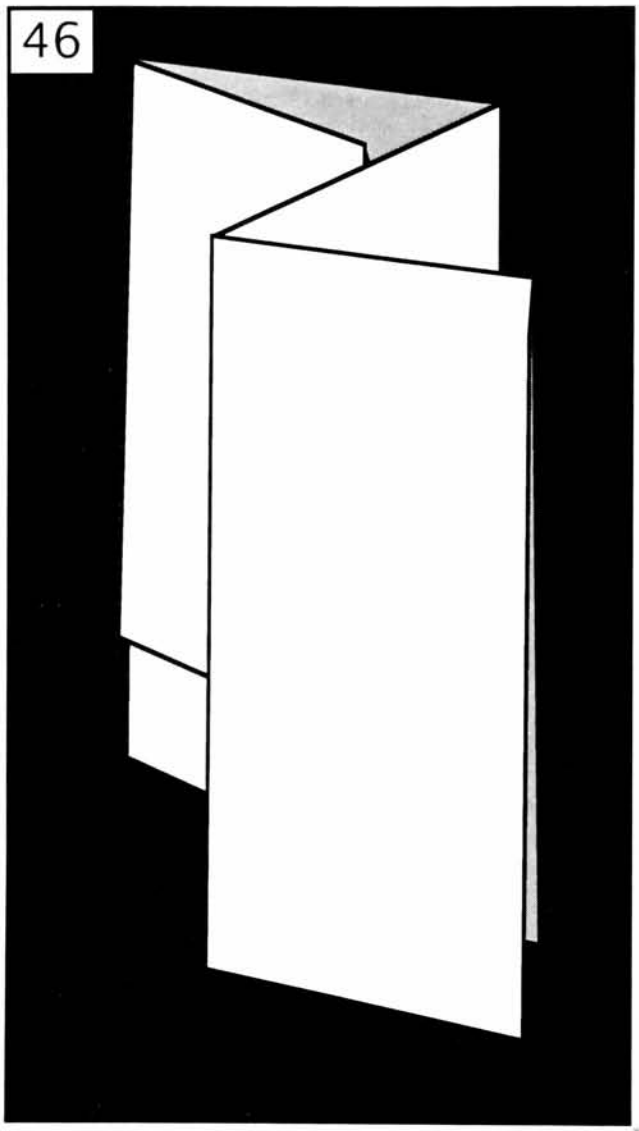
Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

BASIC MAP WITH SHORT FOLD (INSIDE)



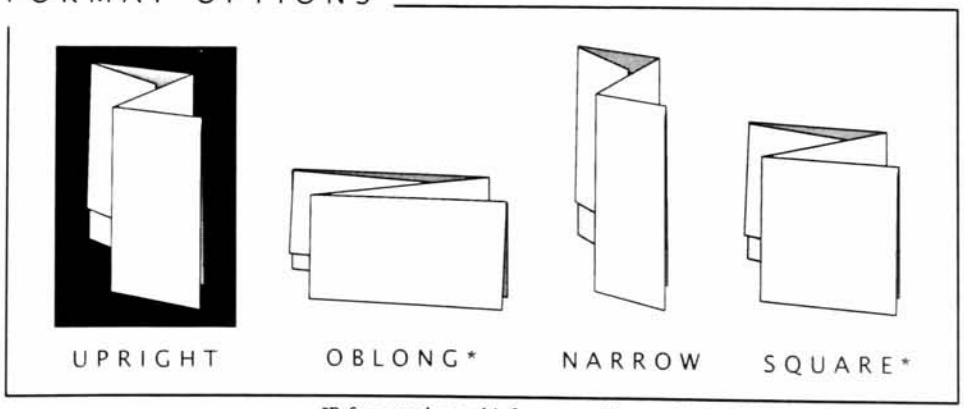
LEVEL

A level 2 fold has a moderate makeready, possible slower speed on the folding machine, and could have some special considerations.

The basic map with short fold inside has the same characteristic folding style as the standard map fold, and is similar to the broadside map fold because it folds in half on itself before the map folding is done. What makes this fold different is that unlike a broadside fold where panels are of equal length, in a short fold the fold-over panels are shorter than the finished height.

MAPS

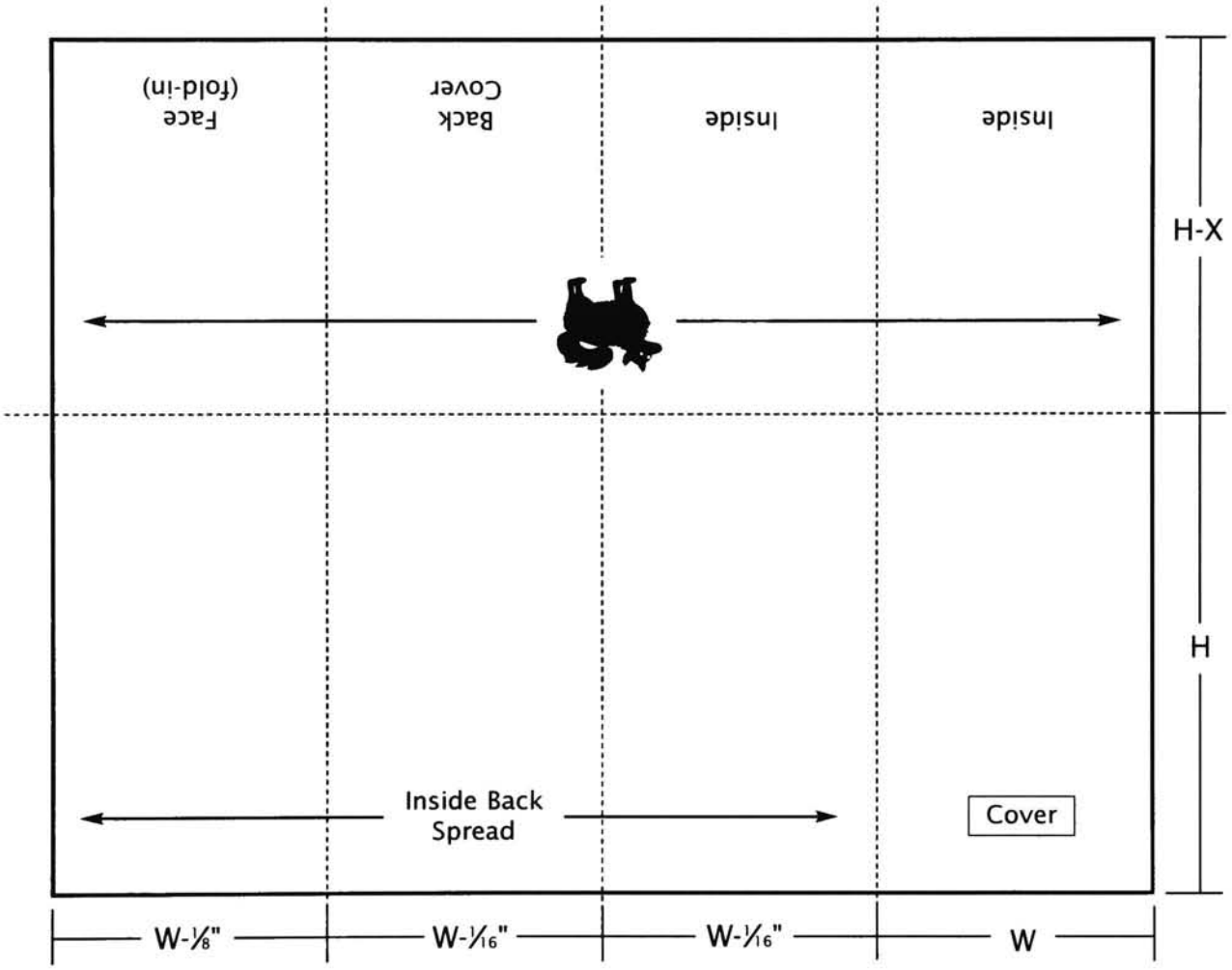
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

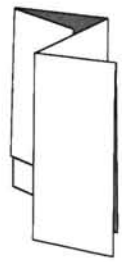
W: finished width
H: finished height
X: your choice
--- fold indication
upside-down



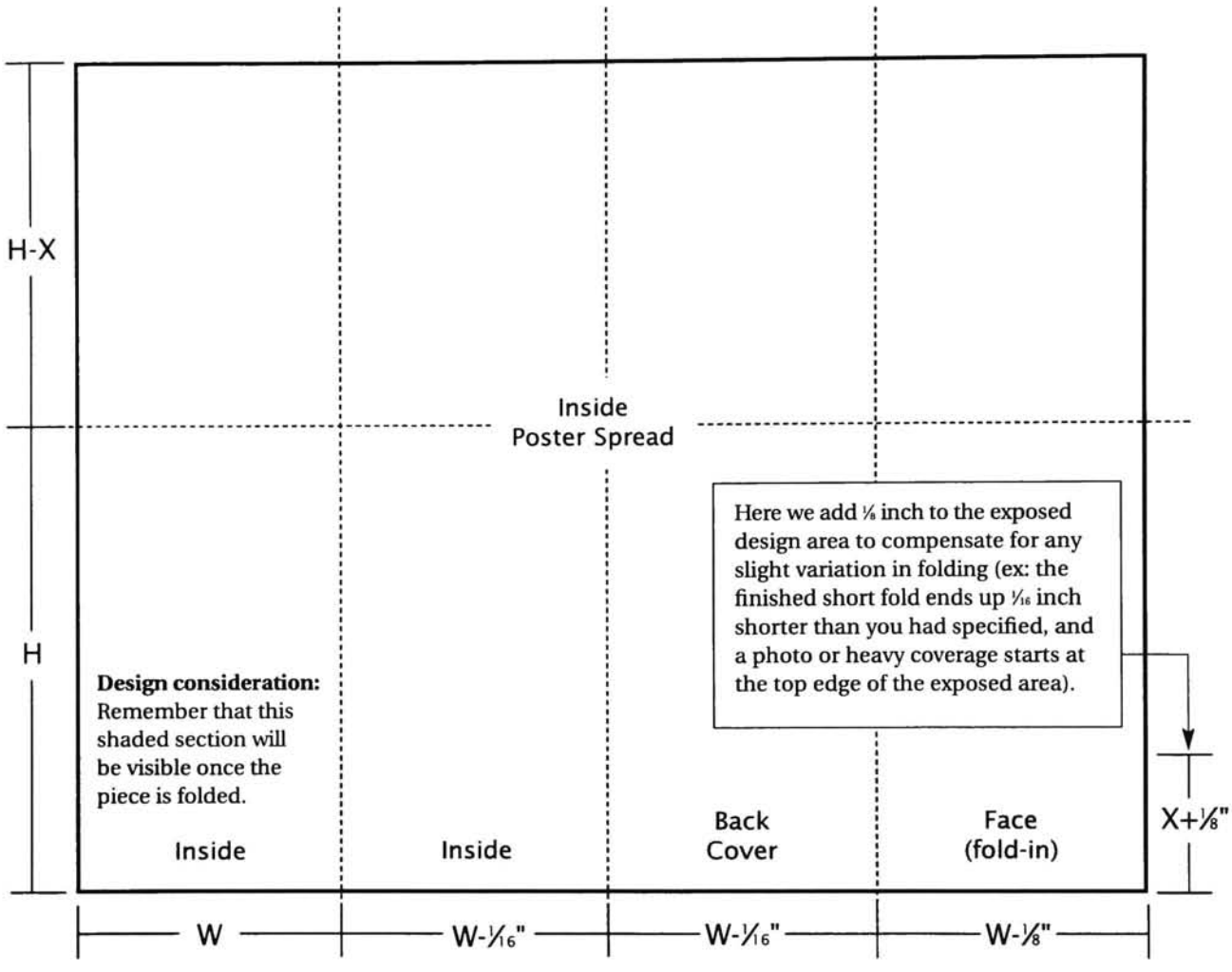
GETTING STARTED

Here's an example: For a short fold, the first thing we must determine is how short the short fold will be. In this case, we'll make it 2 inches shorter than the finished height, so X=2. Now we can calculate our document height. If the finished size is 4 x 9, then 9 inches plus 7 (9-2 , or height minus X) equals a document height of sixteen inches. Our finished width is 4 inches, so the panels for page 1 of the digital document would be, from left, 3 ⅞ inches, 3 15/16 inches, 3 15/16 inches and 4 inches. Then for page two everything reverses, so from left the panels would measure 4 inches, 3 15/16 inches, 3 15/16 inches, and 3 ⅞ inches.

Remember: Document size and flat size must be the same, so in this case the document size would be 15¾ (15.75) inches wide by 16 inches high.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- Be aware of your printer or bindery's minimum and maximum sheet sizes for their equipment.
- If you are designing a self-mailing piece, this folding style could require wafer-seals to make it mail-ready.
- Make sure to have a folding dummy made in your specified paper. Paper weight will dramatically affect the success of this piece. Watch for bulkiness and problems in the corner joints of the folds—the printer can't do anything about this, and it will require a change in paper.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document width ahead of time. Create your document as if all panels will be the same (ex: for a map with short fold with a finished size of 4 x 9, set the document size to 16 x 16). Then set crosshairs to upper left corner of document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, 3 ⅞ inches). Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement (3 15/16). Repeat for the last 2 panels (3 15/16 inches and 4 inches). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Just change your document size by entering that decimal measurement (15.75). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

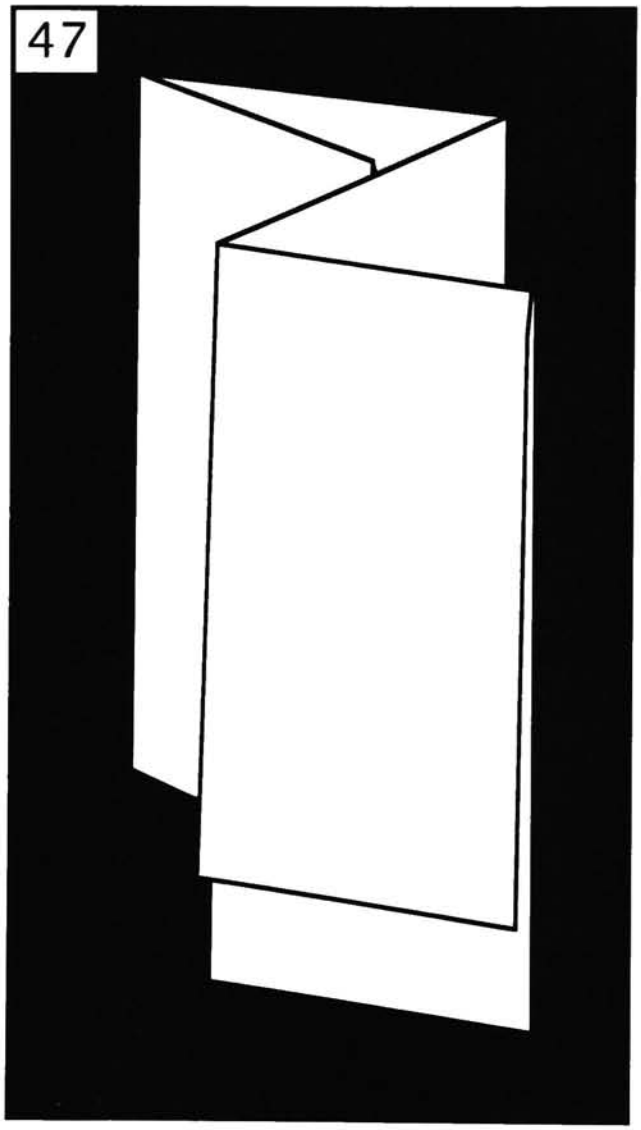
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

BASIC MAP WITH SHORT FOLD (OUTSIDE)

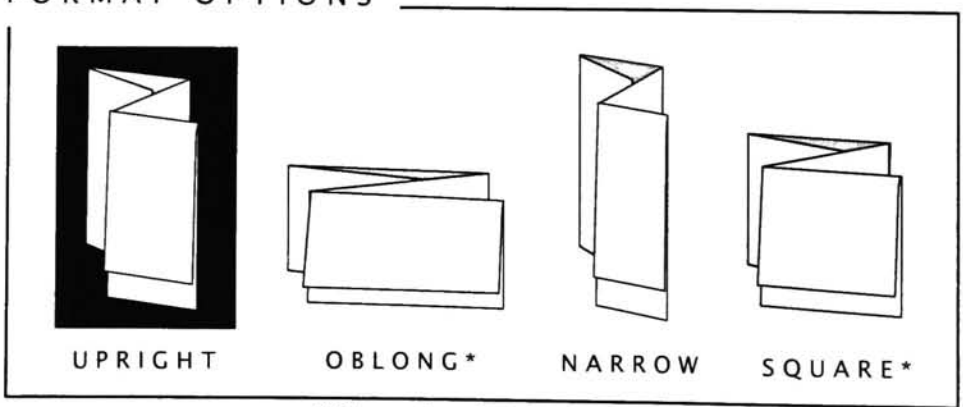


LEVEL

A level 2 fold has a moderate makeready, possible slower speed on the folding machine, and could have some special considerations.

The basic map with short fold outside has the same characteristic folding style as the standard map fold, and is similar to the broadside map fold because it folds in half on itself before the map folding is done. What makes this fold different is that unlike a broadside fold where panels are of equal length, in a short fold the fold-over panels are shorter than the finished height.

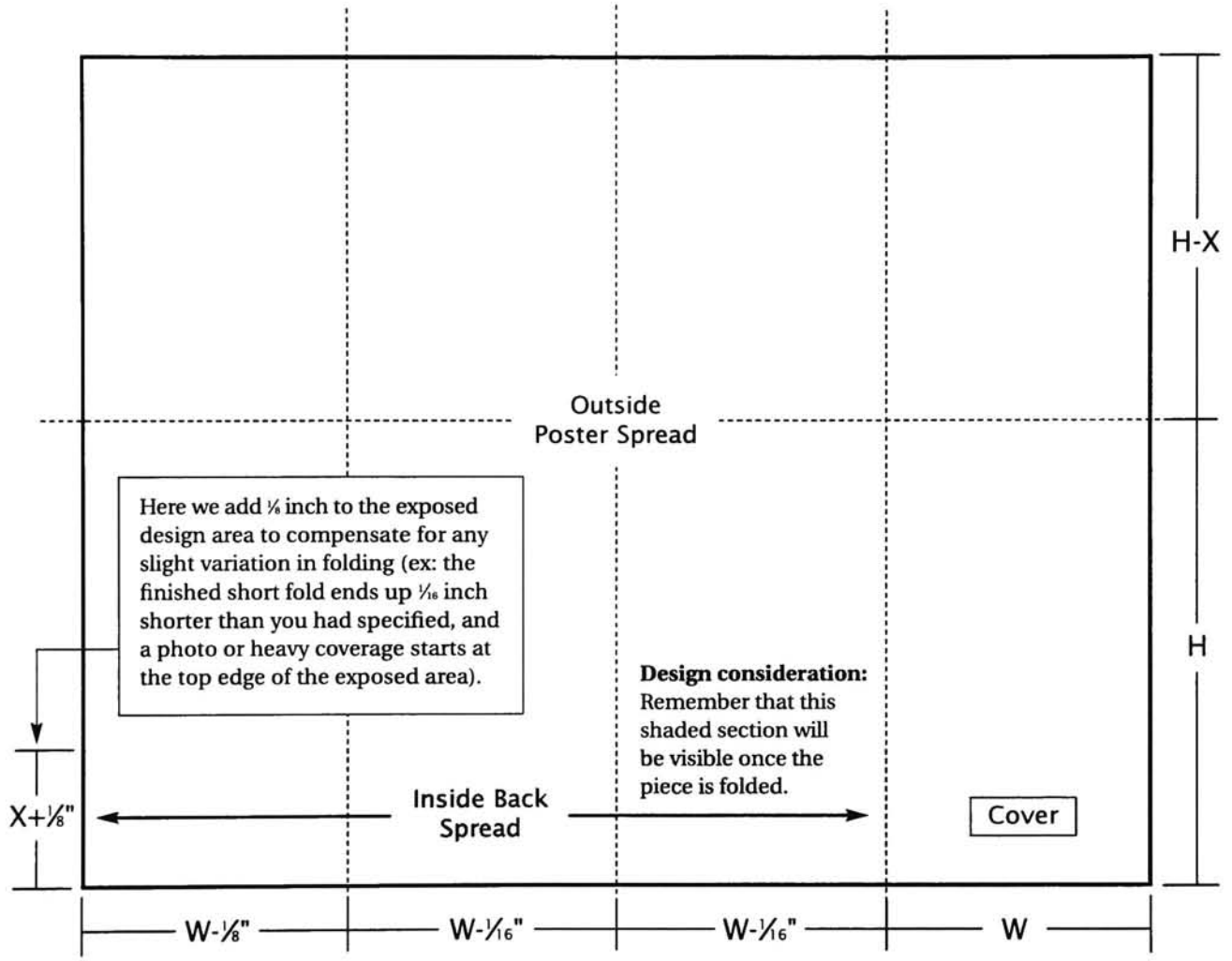
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

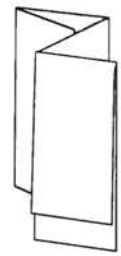
W: finished width
H: finished height
X: your choice
--- fold indication
upside-down



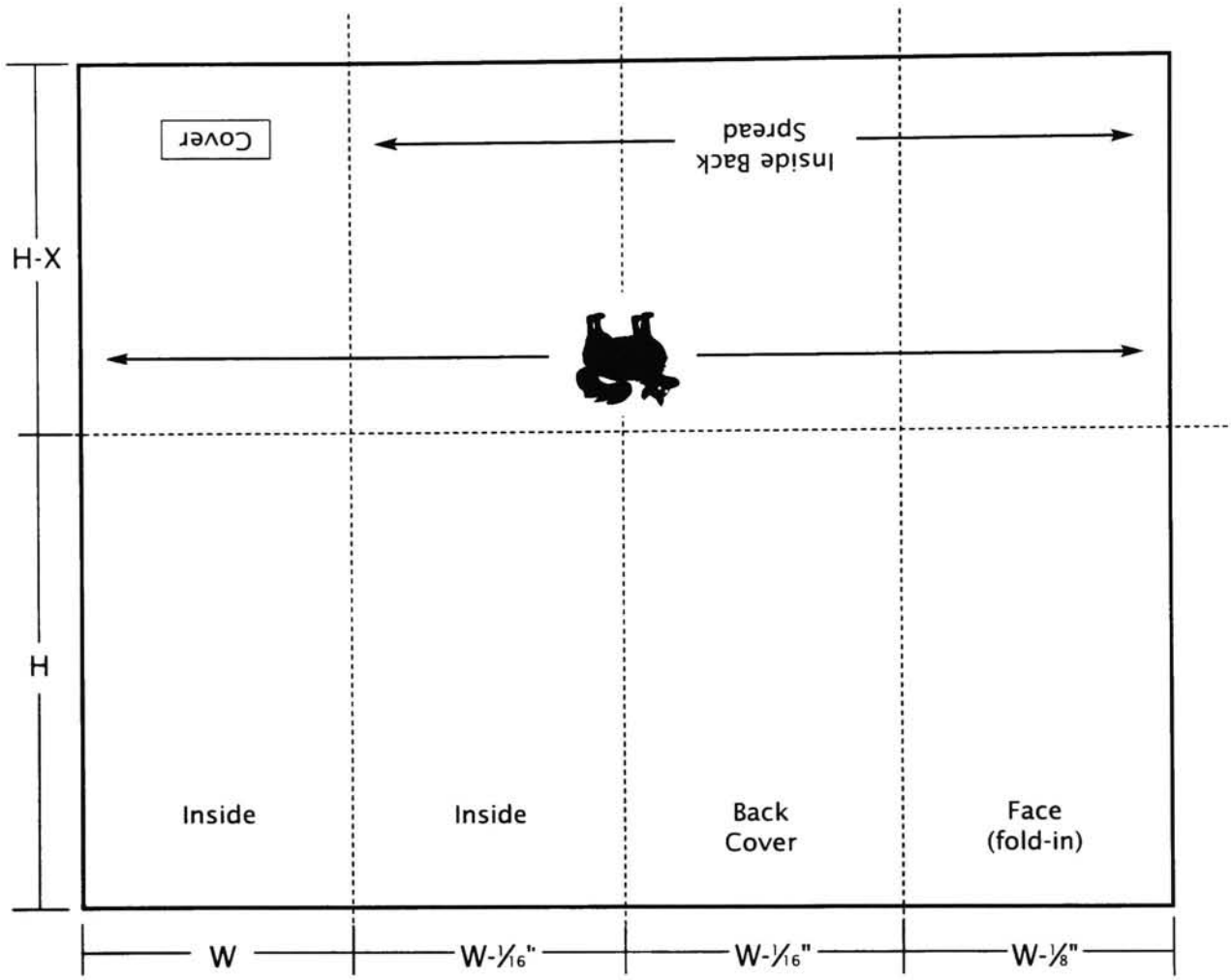
GETTING STARTED

Here's an example: For a short fold, the first thing we must determine is how short the short fold will be. In this case, we'll make it 2 inches shorter than the finished height, so X=2. Now we can calculate our document height. If the finished size is 4 x 9, then 9 inches plus 7 (9-2 , or height minus X) equals a document height of sixteen inches. Our finished width is 4 inches, so the panels for page 1 of the digital document would be, from left, 3 ⅞ inches, 3 15/16 inches, 3 15/16 inches and 4 inches. Then for page two everything reverses, so from left the panels would measure 4 inches, 3 15/16 inches, 3 15/16 inches, and 3 ⅞ inches.

Remember: Document size and flat size must be the same, so in this case the document size would be 15¾ (15.75) inches wide by 16 inches high.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- Be aware of your printer or bindery's minimum and maximum sheet sizes for their equipment.
- If you are designing a self-mailing piece, this folding style could require wafer-seals to make it mail-ready.
- Make sure to have a folding dummy made in your specified paper. Paper weight will dramatically affect the success of this piece. Watch for bulkiness and problems in the corner joints of the folds—the printer can't do anything about this, and it will require a change in paper.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document width ahead of time. Create your document as if all panels will be the same (ex: for a map with short fold with a finished size of 4 x 9, set the document size to 16 x 16). Then set crosshairs to upper left corner of document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, 3 ⅞ inches). Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement (3 15/16). Repeat for the last 2 panels (3 15/16 inches and 4 inches). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Just change your document size by entering that decimal measurement (15.75). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

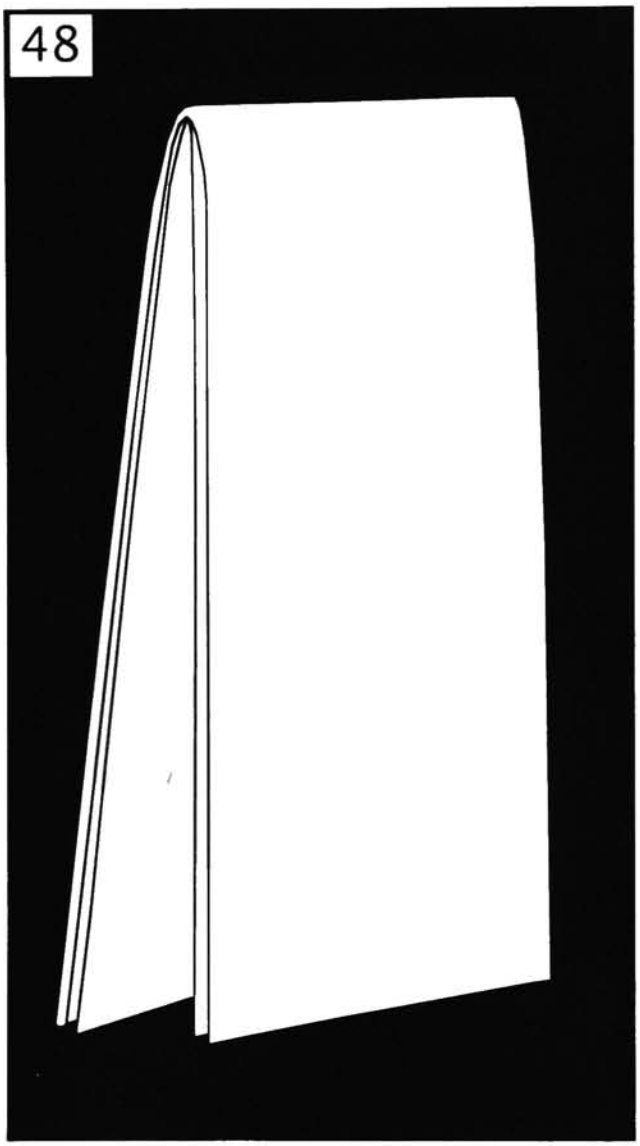
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

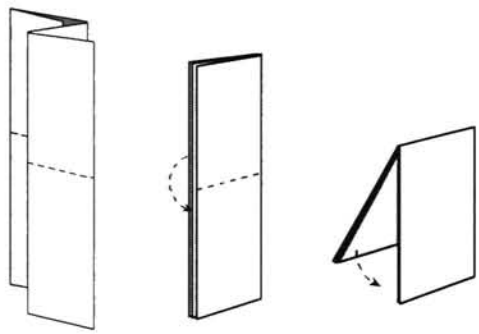
Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

TOP-FOLDING MAP





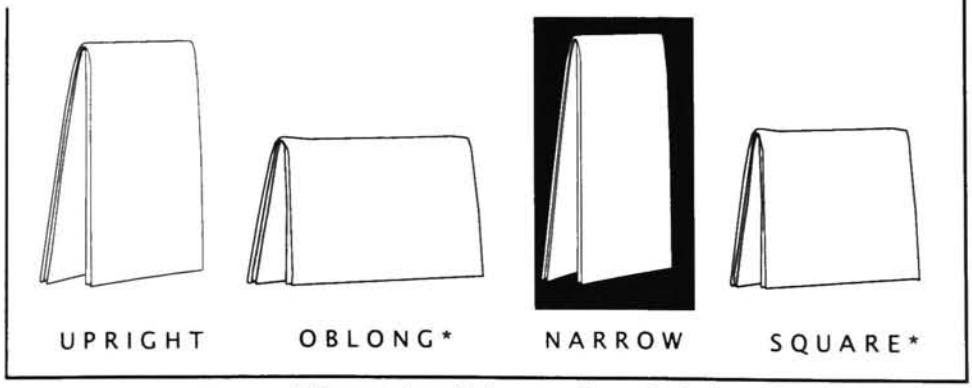
LEVEL

A level 3 fold has a long and difficult makeready, could require special machinery and low folding speed. These issues will be reflected in the cost.

The top-folding map consists of the same characteristic folding style as the basic map fold, but in a taller format. When the map folding is done, this style then folds in half onto itself.

MAPS

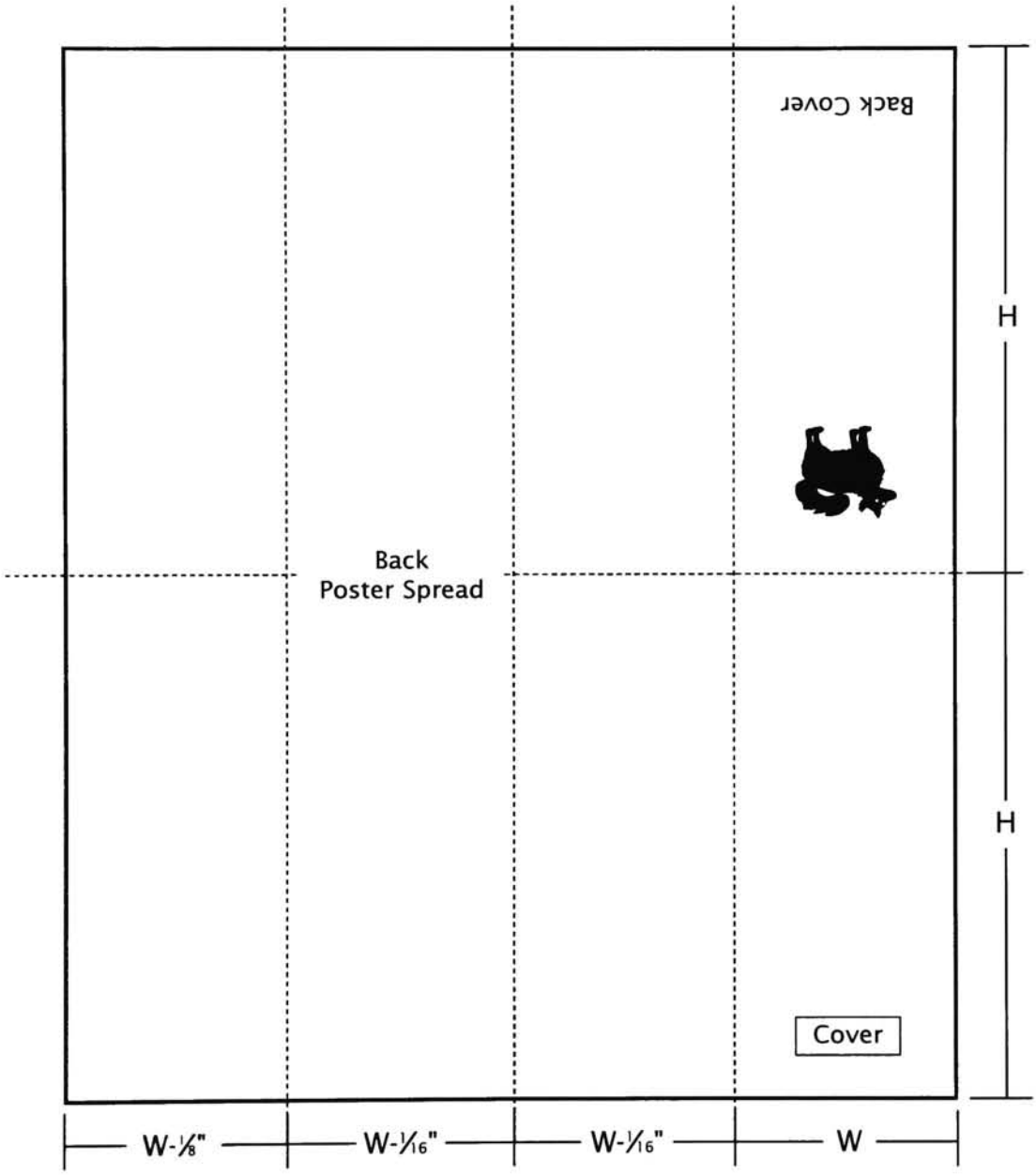
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

W: finished width
H: finished height
--- fold indication
upside-down

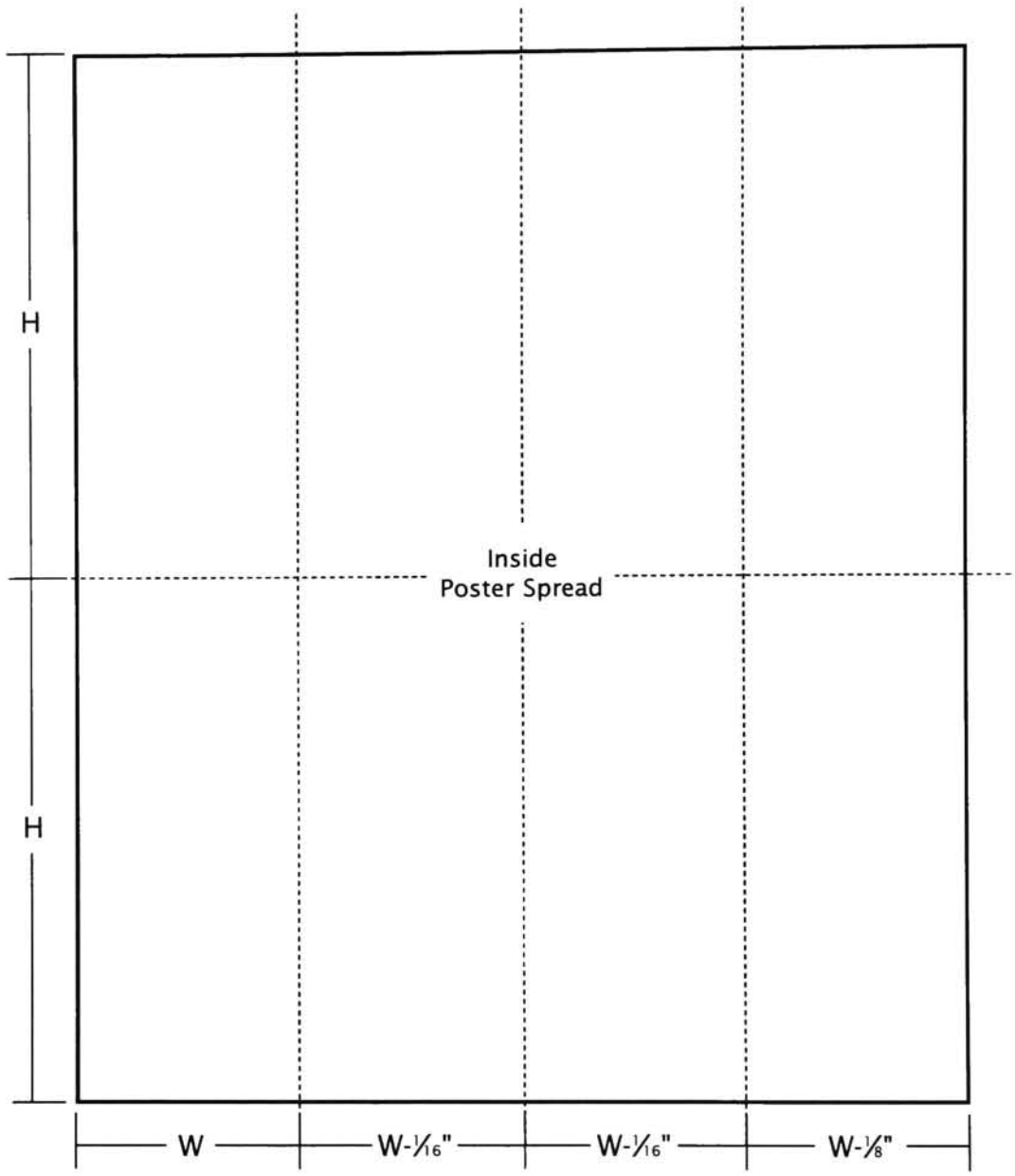


GETTING STARTED

Here's an example: If your finished size is 4 x 9, then your panels for page 1 of your digital document would be, from left, 3 ⅞ inches, 3 15/16 inches, 3 15/16 inches and 4 inches. Then for page two everything reverses, so from left your panels would measure 4 inches, 3 15/16 inches, 3 15/16 inches and 3 ⅞ inches, with a height of 18 inches (9 inches plus 9 inches).

Remember: Document size and flat size must be the same, so in this case the document size would be 15 ¾ (15.75) inches wide by 18 inches high.

Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- A paper choice of any heavier than 60# text is not recommended.
- Make sure to have a folding dummy made in your specified paper.
- Be aware of your printer or bindery's minimum and maximum sheet sizes for their equipment. Top-folding maps and any other folded pieces which open out to very large dimensions generally require special large format folders.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document width ahead of time. Create your document as if all panels will be the same (ex: for a map with short fold with a finished size of 4 x 9, set the document size to 16 x 18). Then set crosshairs to upper left corner of document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, 3 ⅞ inches). Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement (3 15/16). Repeat for the last 2 panels (3 15/16 inches and 4 inches). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Just change your document size by entering that decimal measurement (15.75). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

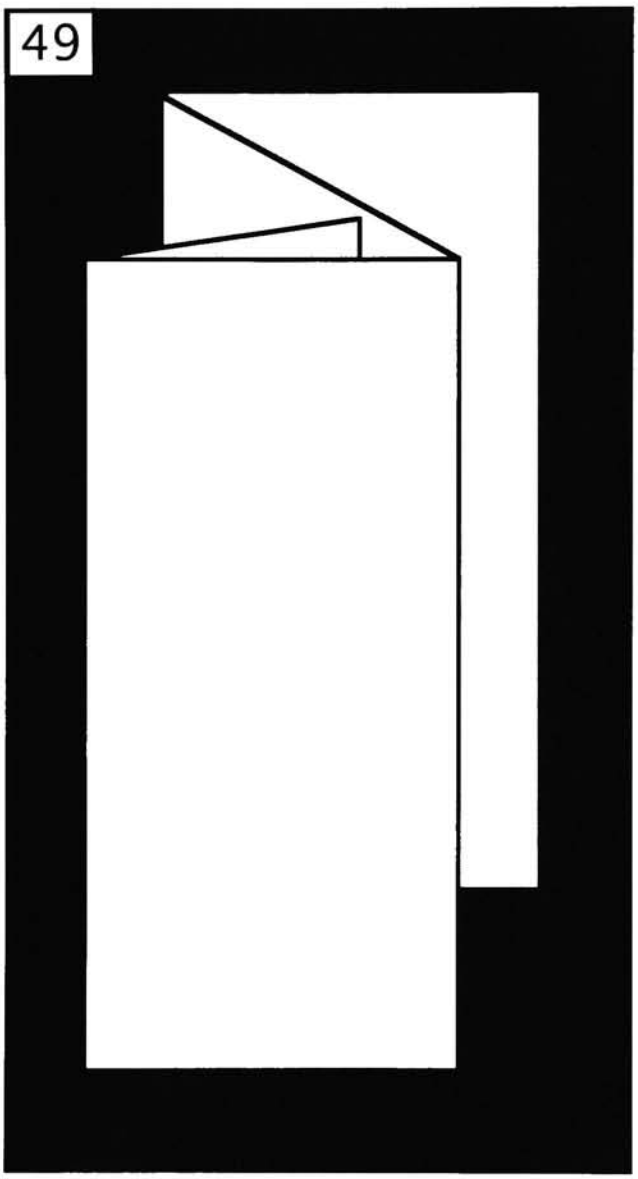
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

REVERSE MAP

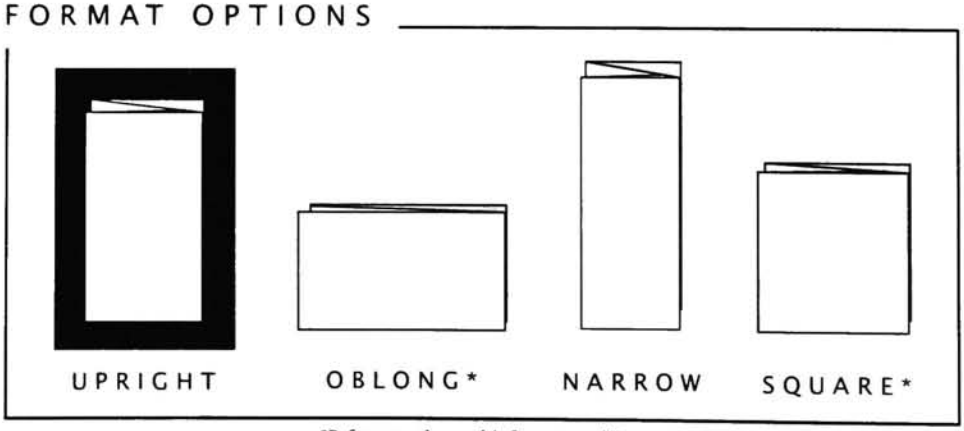


LEVEL

A level 2 fold has a moderate makeready, possible slower speed on the folding machine, and could have some special considerations.

The reverse map fold, like the basic map fold, is somewhat unusual, and often misidentified. To describe it is difficult—a marriage of the reverse accordion fold and the gate fold creates an interesting end result.

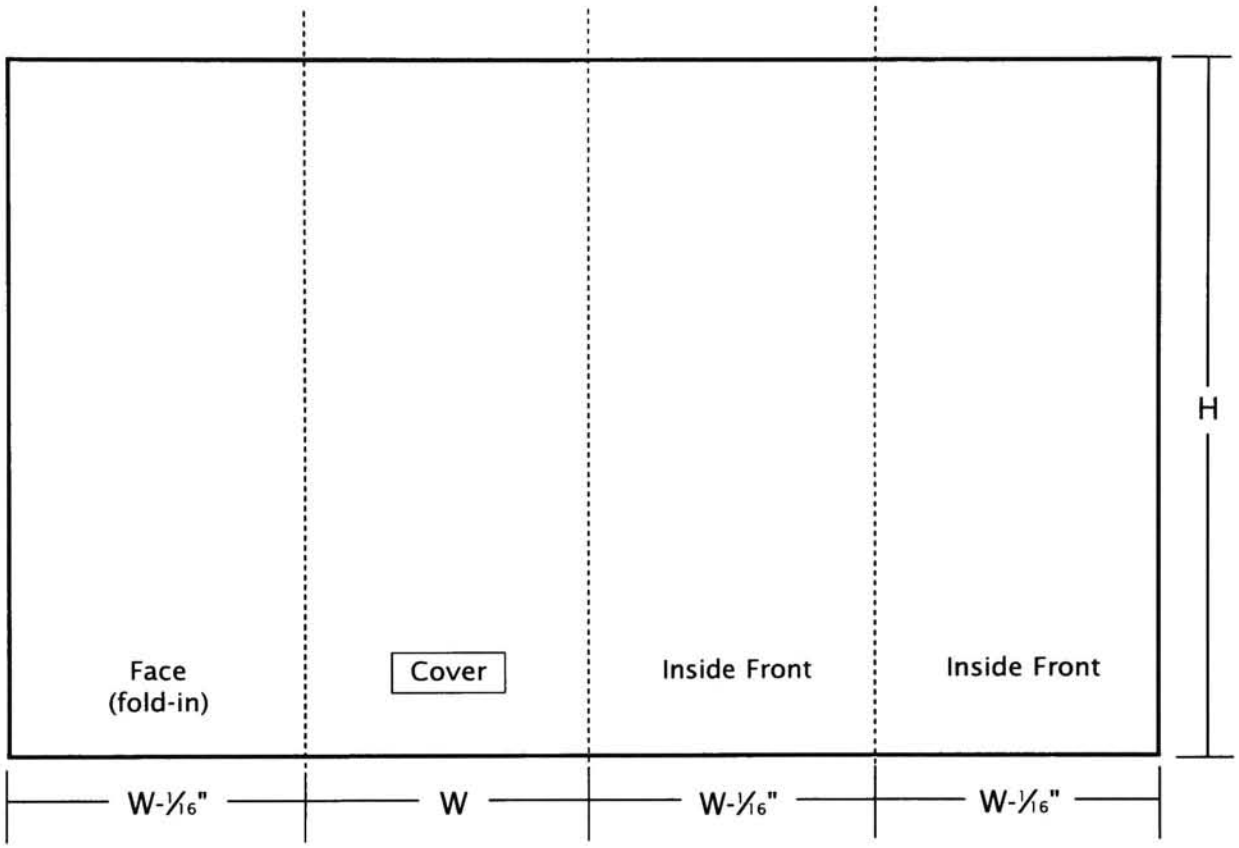
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

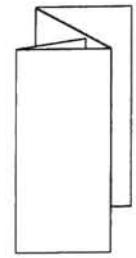
W: finished width
H: finished height
--- fold indication



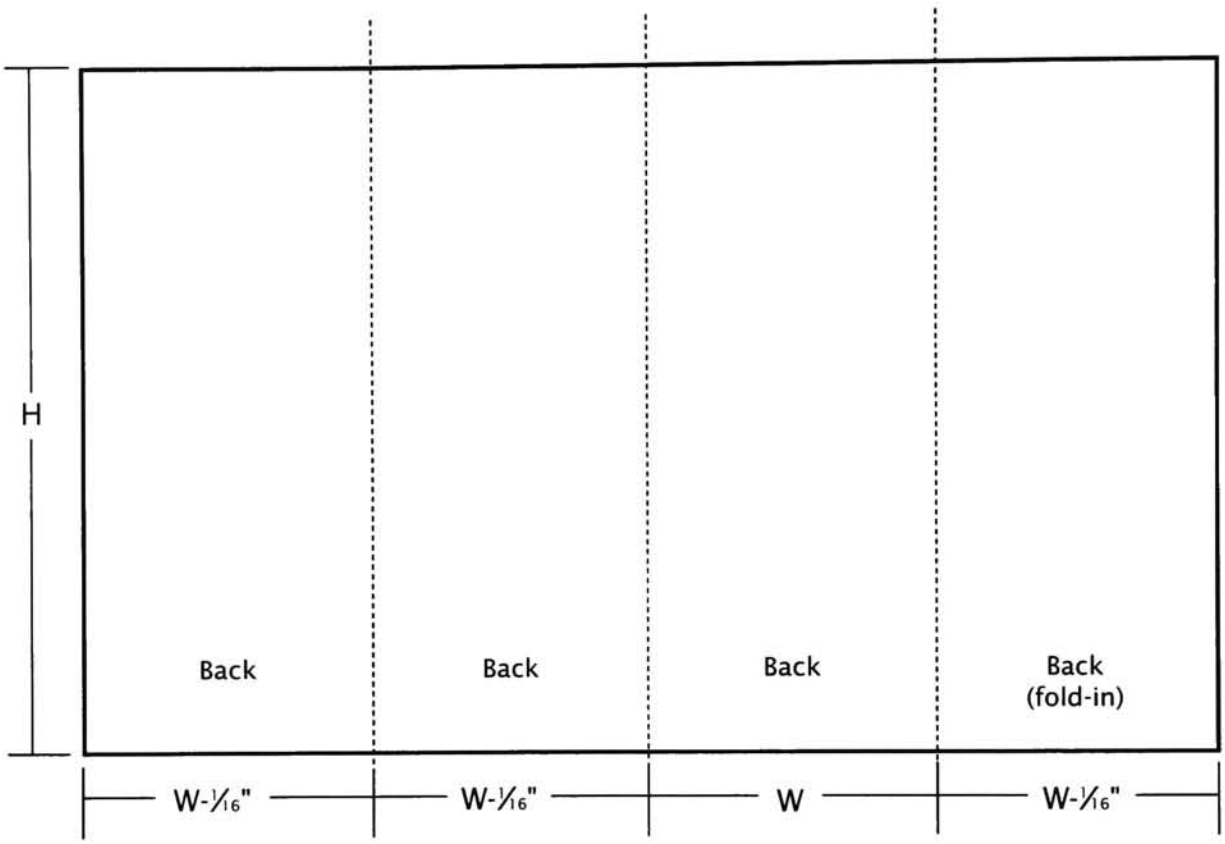
GETTING STARTED

Here's an example: If your finished size is 4 x 9, then your panels for page 1 of your digital document would be, from left, 3 15/16 inches, 4 inches, 3 15/16 inches and 3 15/16 inches. Then for page two everything reverses, so from left your panels would measure 3 15/16 inches, 3 15/16 inches, 4 inches and 3 15/16 inches, with a height of 9 inches.

Remember: Document size and flat size must be the same, so in this case the document size would be 15 13/16 (15.812) inches wide by 9 inches high.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- If you are designing a large piece, make sure to have a folding sample made up from your specified paper. If the paper is too lightweight, it could turn into a sagging flimsy piece.
- If you are designing a self-mailing piece, this folding style could require wafer-seals to make it mail-ready.
- If your paper choice is any heavier than 80# text, you will want to consider scoring the piece. Ask your printer for a recommendation.
- Be aware of your printer or bindery's minimum and maximum sheet sizes for their equipment.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document width ahead of time. Create your document as if all panels will be the same (ex: for a reverse map with a finished size of 4 x 9, set the document size to 16 x 9). Then set crosshairs to upper left corner of document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, 3 15/16 inches). Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement (4). Repeat for the last 2 panels (3 15/16 inches and 3 15/16 inches). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Just change your document size by entering that decimal measurement (15.812). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

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Other Related Considerations:

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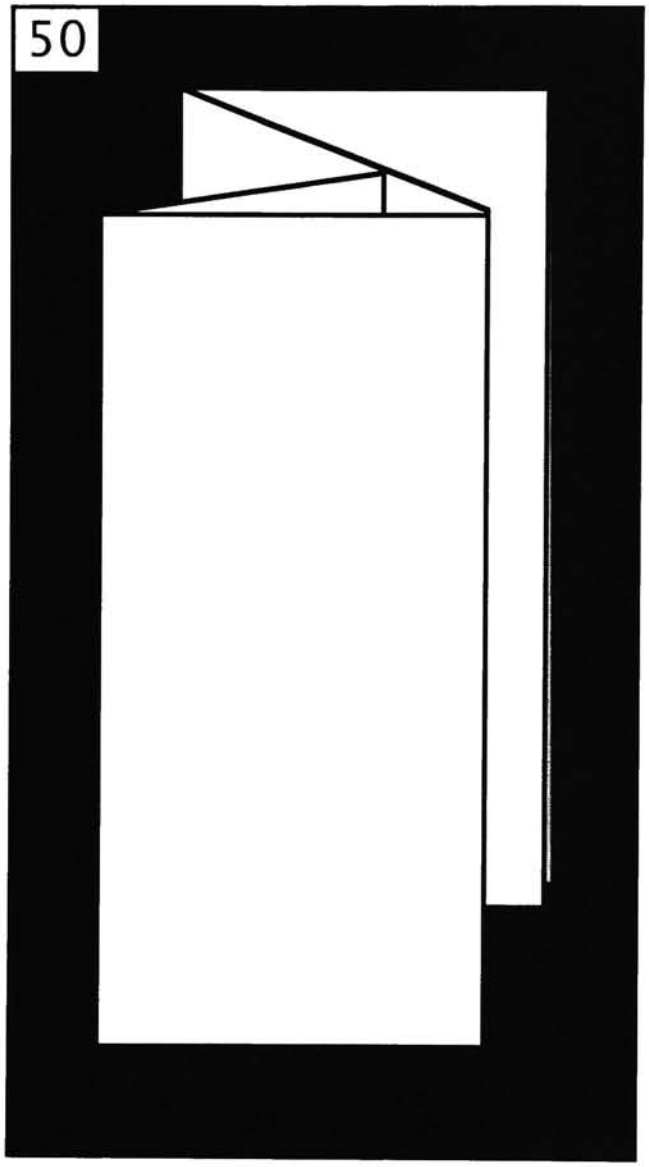
Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

REVERSE MAP / BROADSIDE

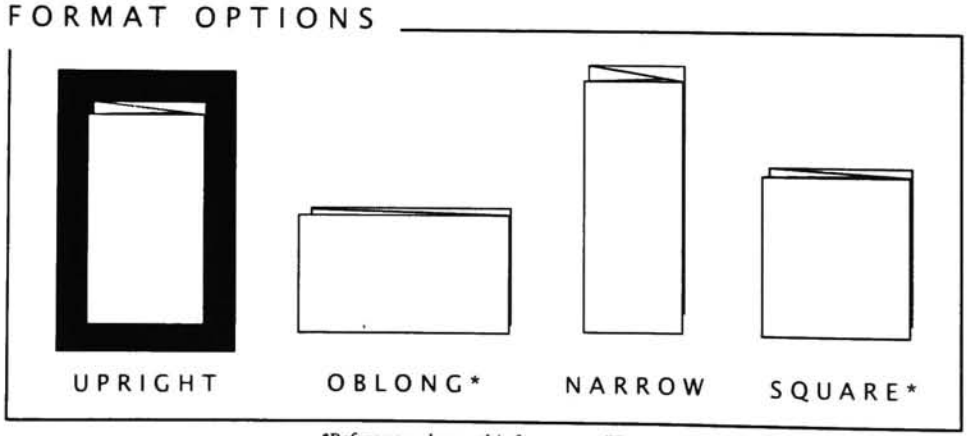


LEVEL

A level 2 fold has a moderate makeready, possible slower speed on the folding machine, and could have some special considerations.

The reverse map fold is somewhat unusual, and often misidentified. To describe it is difficult—a marriage of the reverse accordion fold and the gate fold creates an interesting end result. The broadside reverse map fold consists of the same characteristic folding style, but the difference is that this fold has twice the area because it folds in half on itself before the map-style folding is done.

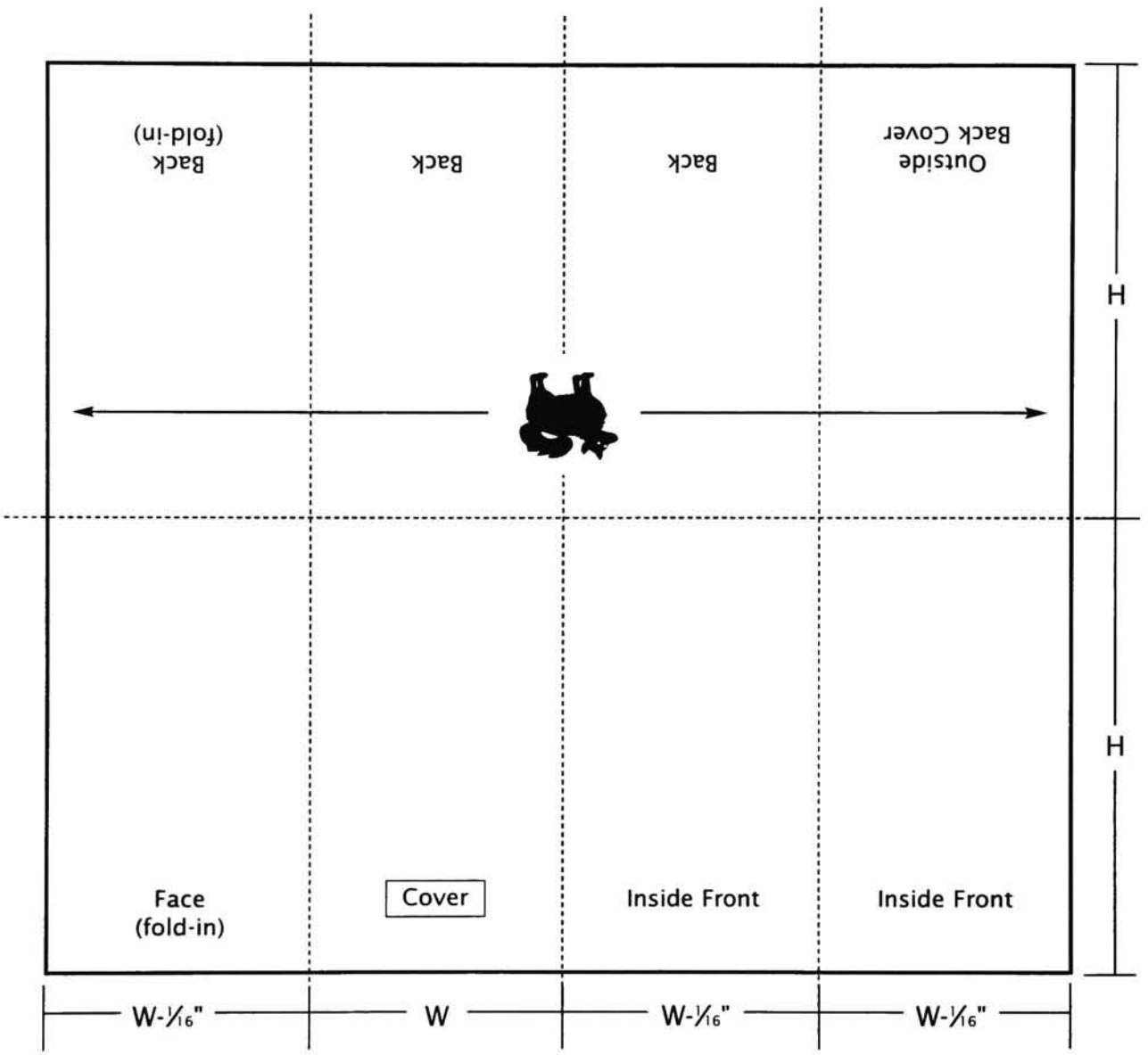
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

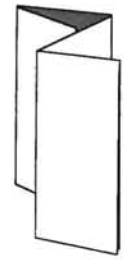
W: finished width
H: finished height
--- fold indication
upside-down



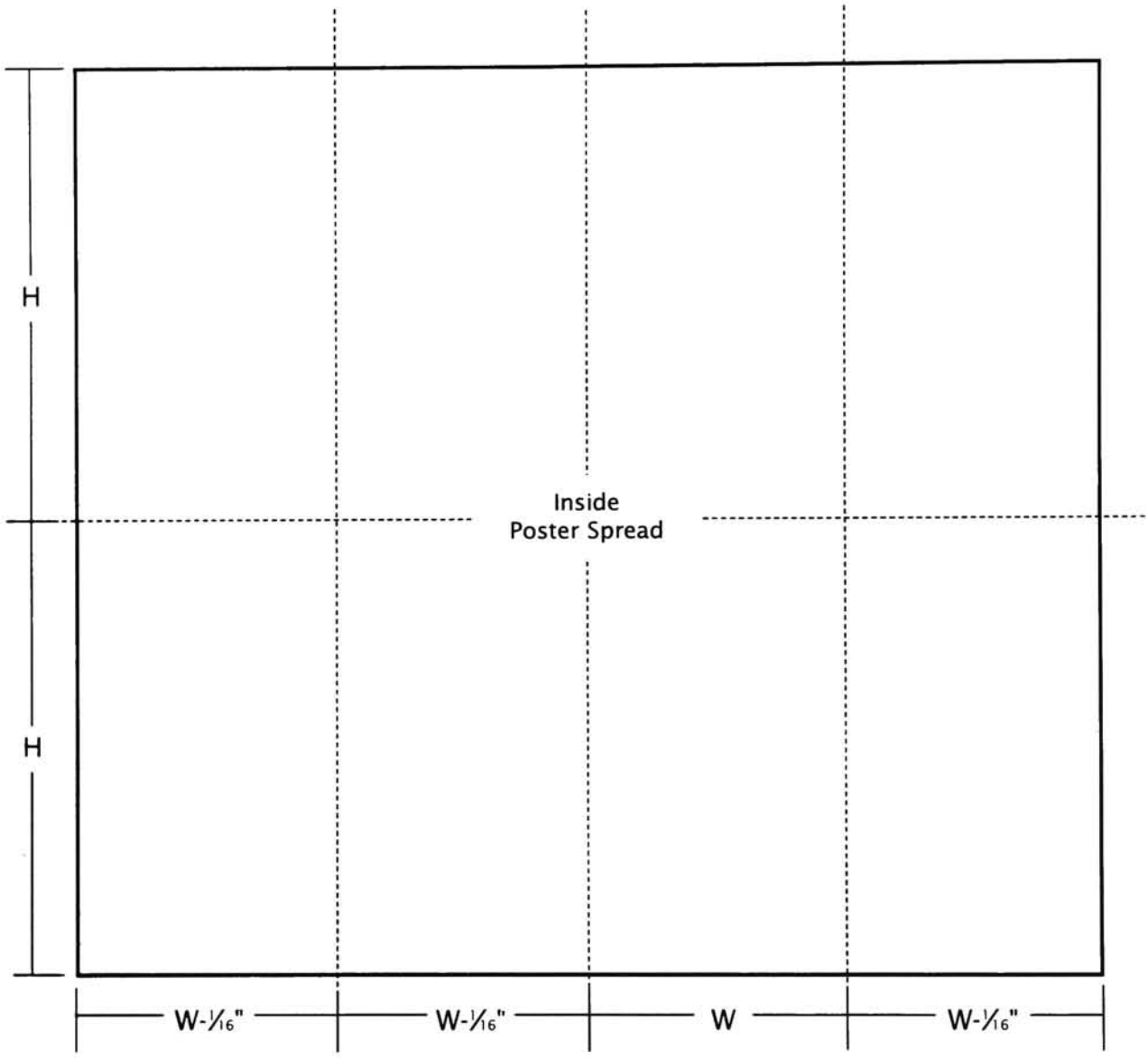
GETTING STARTED

Here's an example: If your finished size is 4 x 9, then your panels for page 1 of your digital document would be, from left, 3 15/16 inches, 4 inches, 3 15/16 inches and 3 15/16 inches. Then for page two everything reverses, so from left your panels would measure 3 15/16 inches, 3 15/16 inches 4 inches and 3 15/16 inches, with a height of 18 inches (9 inches plus 9 inches).

Remember: Document size and flat size must be the same, so in this case the document size would be 15 13/16 (15.812) inches wide by 18 inches high.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- Be aware of your printer or bindery's minimum and maximum sheet sizes for their equipment.
- If you are designing a self-mailing piece, this folding style could require wafer-seals to make it mail-ready.
- Make sure to have a folding dummy made in your specified paper. Paper weight will dramatically affect the success of this piece. Watch for bulkiness and problems in the corner joints of the folds—the printer can't do anything about this, and it will require a change in paper.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document width ahead of time. Create your document as if all panels will be the same (ex: for a broadside reverse map with a finished size of 4 x 9, set the document size to 16 x 18). Then set cross-hairs to upper left corner of document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, 3 15/16 inches). Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement (4). Repeat for the last 2 panels (3 15/16 inches and 3 15/16 inches). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Just change your document size by entering that decimal measurement (15.812). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

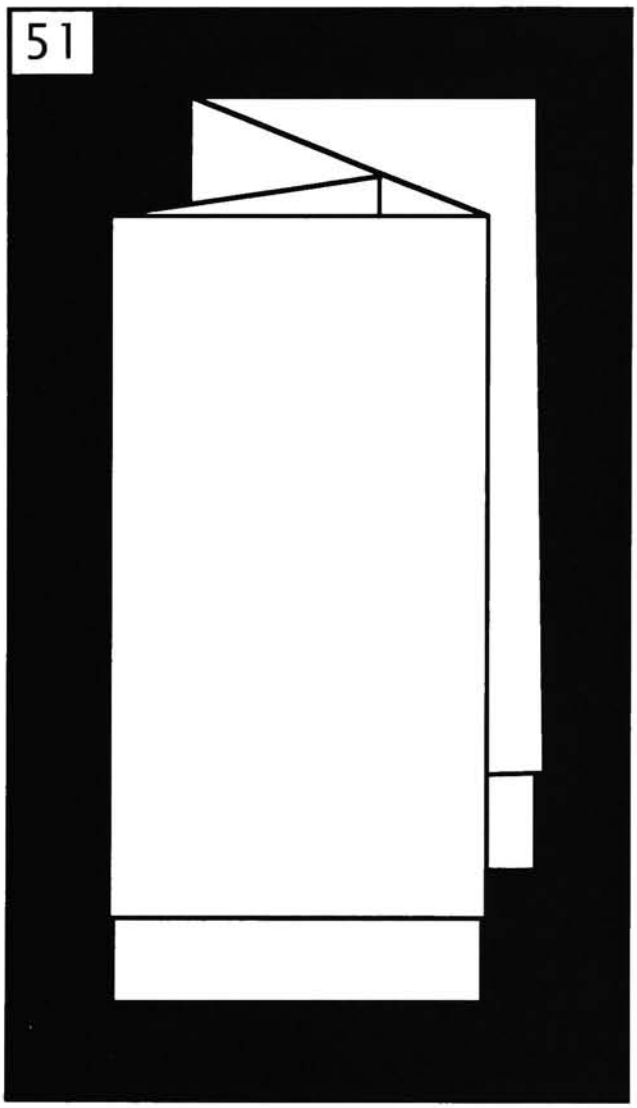
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

REVERSE MAP WITH SHORT FOLD (INSIDE)



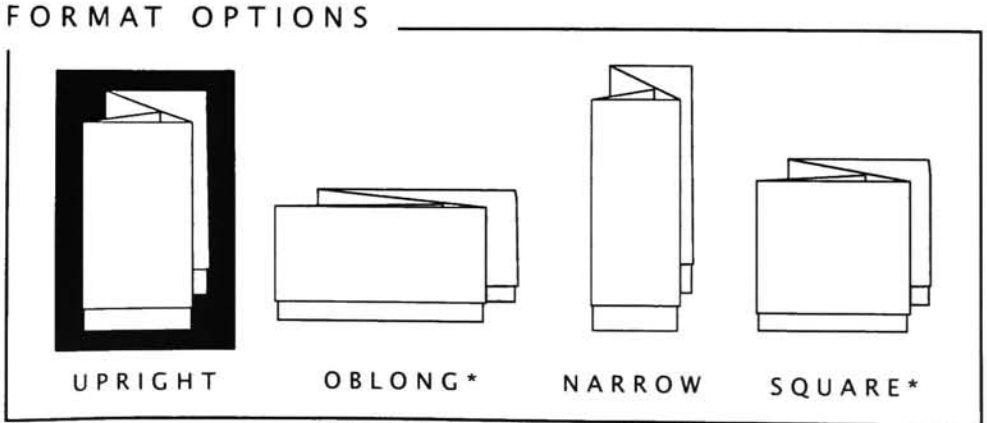
LEVEL

A level 2 fold has a moderate makeready, possible slower speed on the folding machine, and could have some special considerations.

The reverse map with short fold inside has the same characteristic folding style as the reverse map fold, and is similar to the broadside reverse map because it folds in half on itself before the reverse map folding is done. What makes this fold different is that unlike a broadside fold where panels are of equal length, in a short fold the fold-over panels are shorter than the finished height.

MAPS

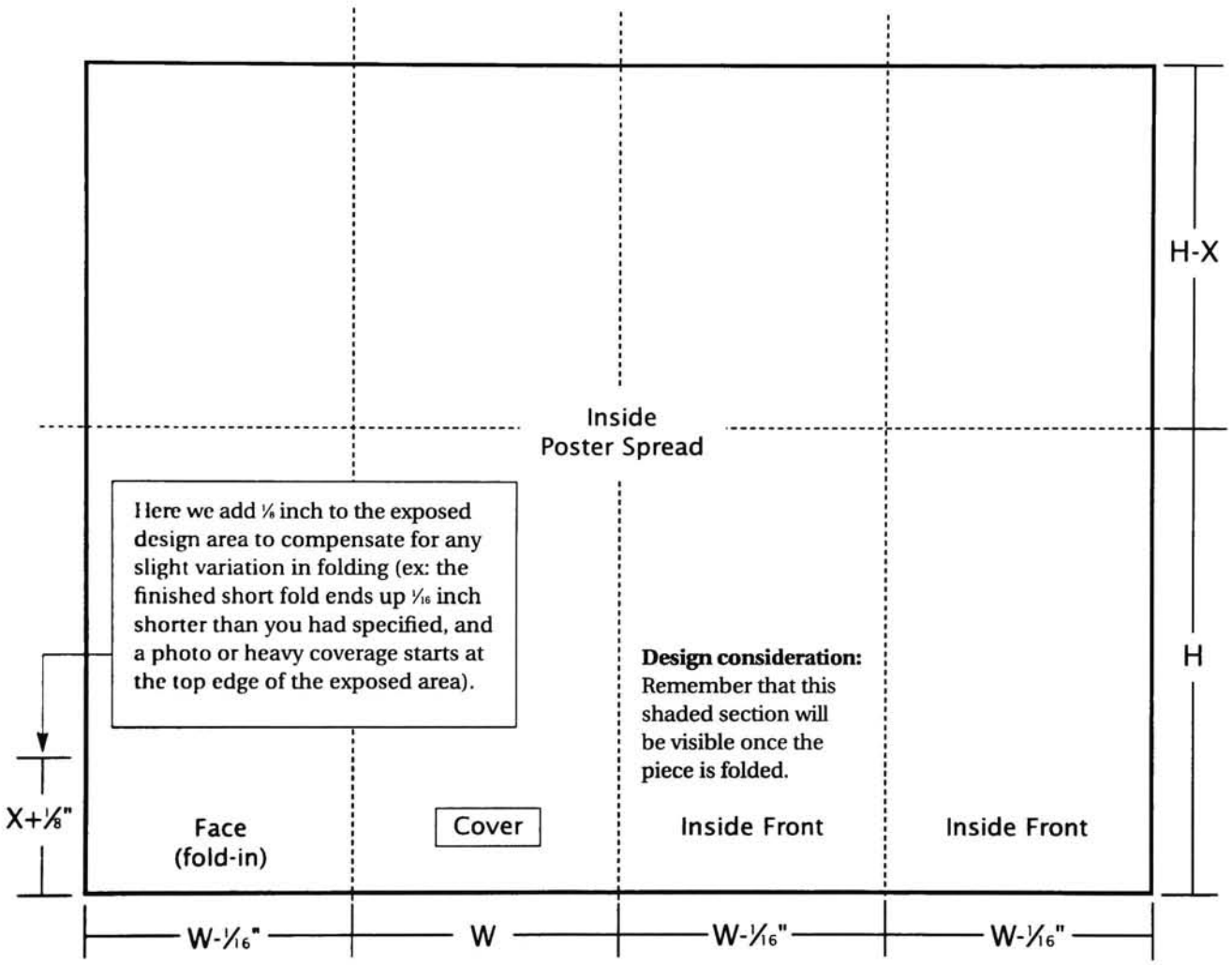
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

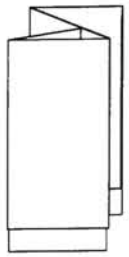
W: finished width
H: finished height
X: your choice
--- fold indication
upside-down



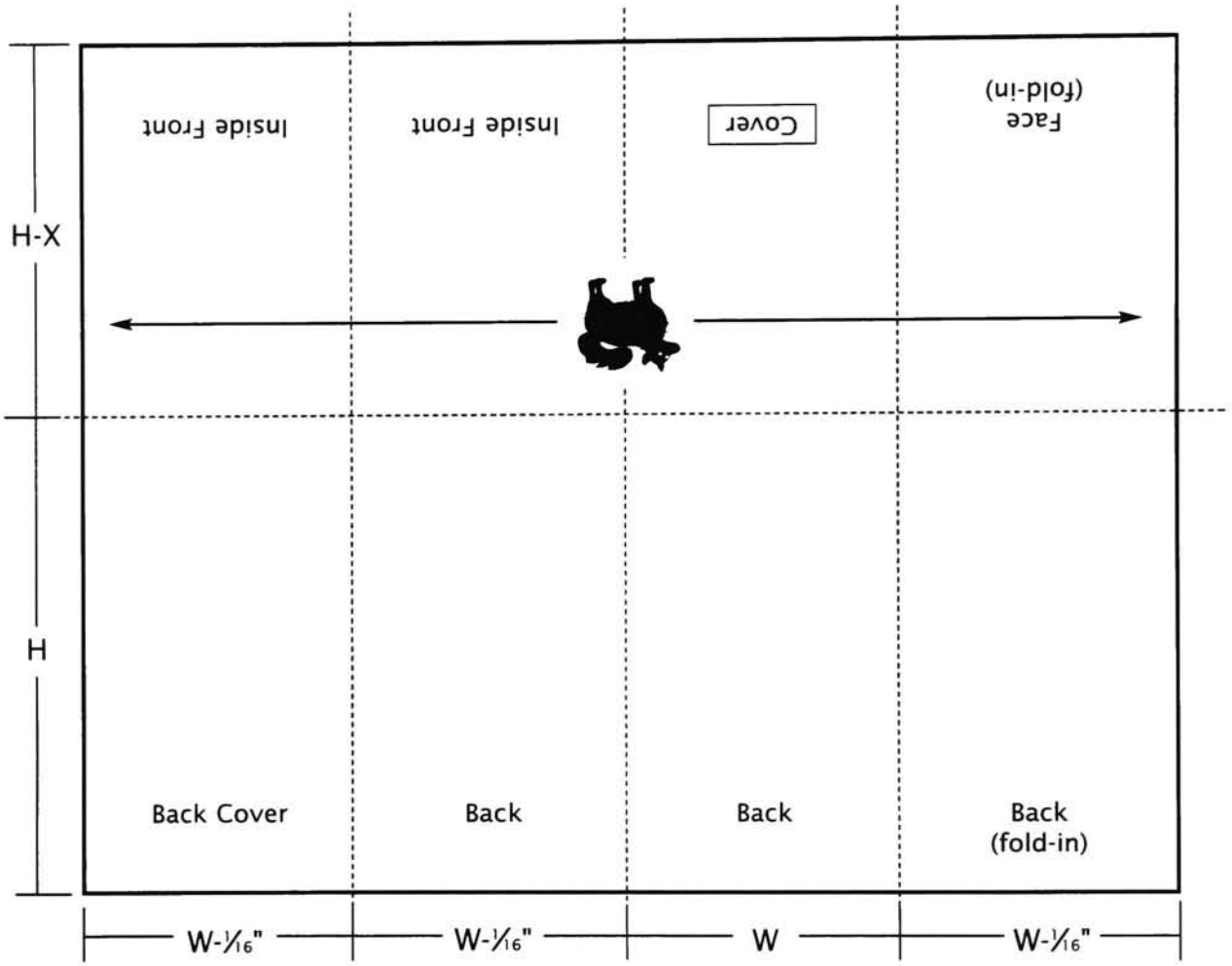
GETTING STARTED

Here's an example: For a short fold, the first thing we must determine is how short the short fold will be. In this case, we'll make it 2 inches shorter than the finished height, so X=2. Now we can calculate our document height. If the finished size is 4 x 9, then 9 inches plus 7 (9-2 , or height minus X) equals a document height of sixteen inches. Our finished width is 4 inches, so the panels for page 1 of the digital document would be, from left, 3 15/16 inches, 4 inches, 3 15/16 inches and 3 15/16 inches. Then for page two everything reverses, so from left the panels would measure 3 15/16 inches, 3 15/16 inches, 4 inches and 3 15/16 inches.

Remember: Document size and flat size must be the same, so in this case the document size would be 15 13/16 (15.812) inches wide by 16 inches high.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- Be aware of your printer or bindery's minimum and maximum sheet sizes for their equipment.
- If you are designing a self-mailing piece, this folding style could require wafer-seals to make it mail-ready.
- Make sure to have a folding dummy made in your specified paper. Paper weight will dramatically affect the success of this piece. Watch for bulkiness and problems in the corner joints of the folds—the printer can't do anything about this, and it will require a change in paper.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document width ahead of time. Create your document as if all panels will be the same (ex: for a reverse map with short fold with a finished size of 4 x 9, set the document size to 16 x 16). Then set crosshairs to upper left corner of document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, 3 15/16 inches). Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement (4). Repeat for the last 2 panels (3 15/16 inches and 3 15/16 inches). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Just change your document size by entering that decimal measurement (15.812). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

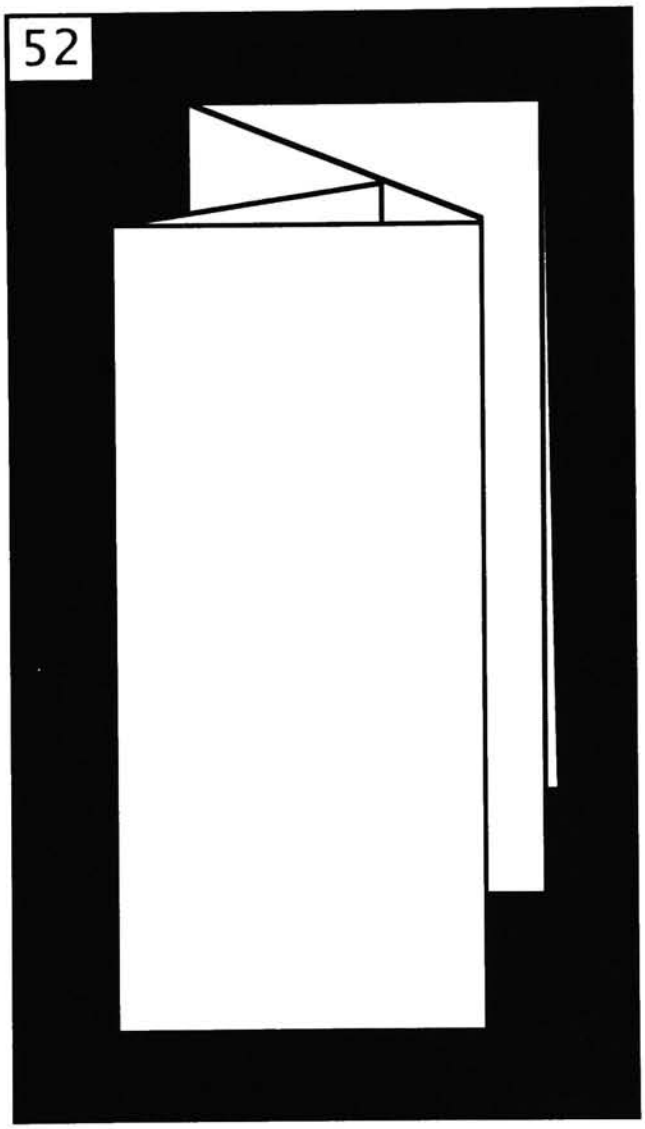
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

REVERSE MAP WITH SHORT FOLD (OUTSIDE)



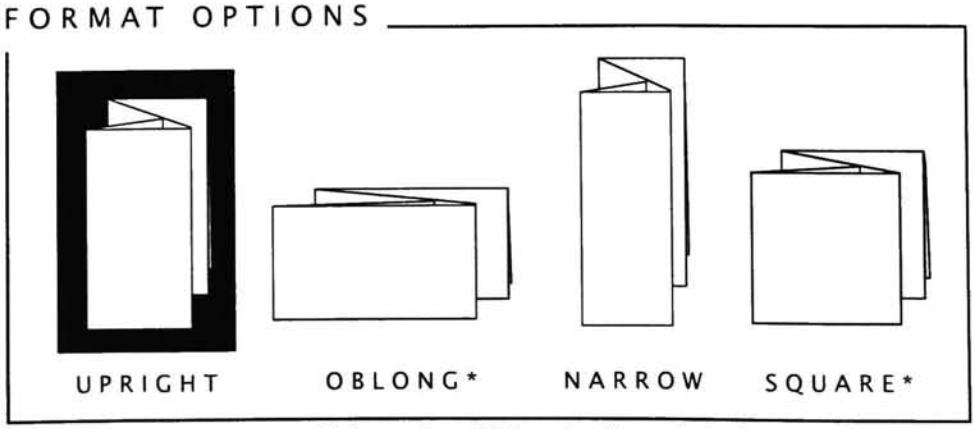
LEVEL

A level 2 fold has a moderate makeready, possible slower speed on the folding machine, and could have some special considerations.

The reverse map with short fold outside has the same characteristic folding style as the reverse map fold, and is similar to the broadside reverse map because it folds in half on itself before the reverse map folding is done. What makes this fold different is that unlike a broadside fold where panels are of equal length, in a short fold the fold-over panels are shorter than the finished height.

MAPS

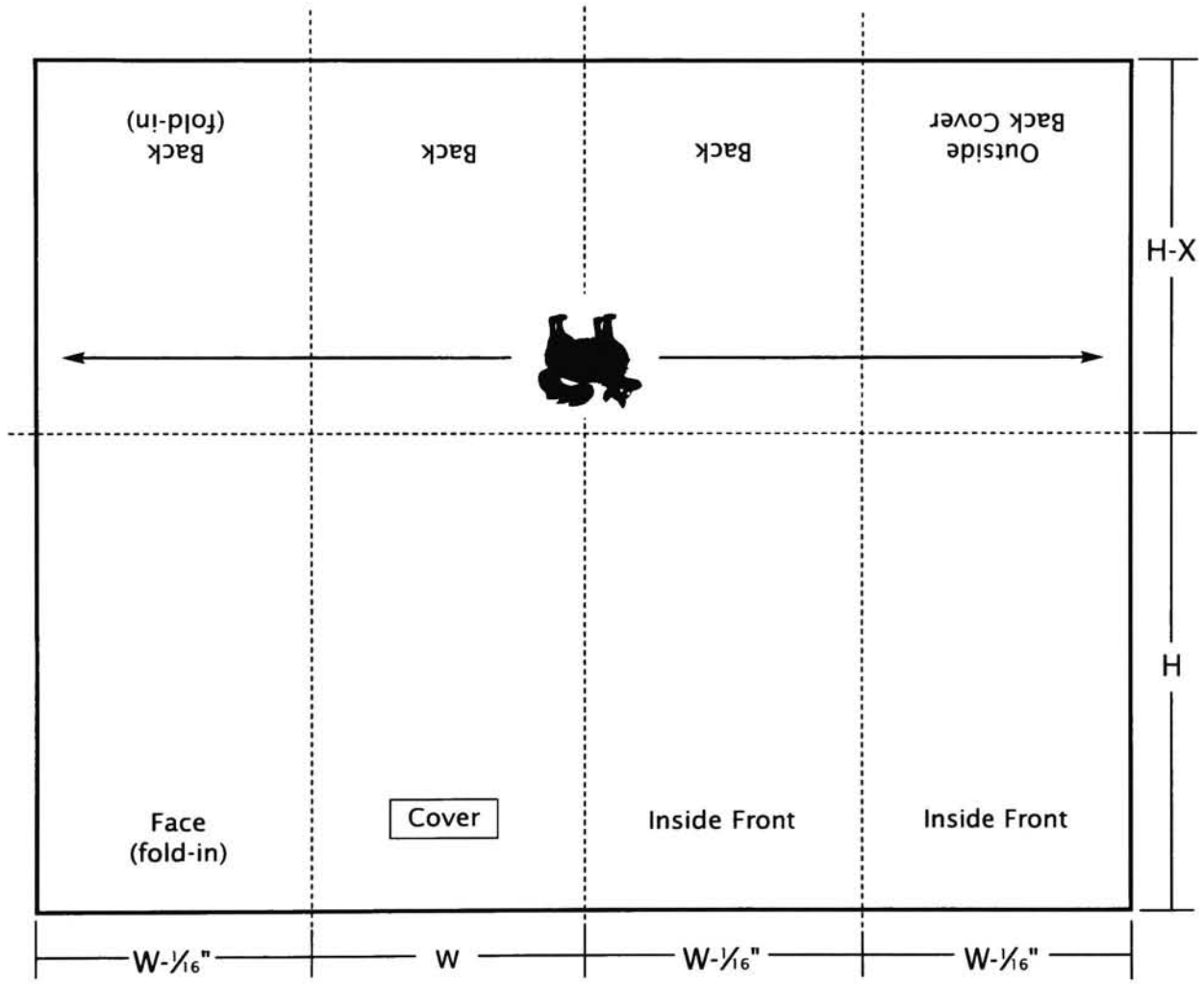
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

W: finished width
H: finished height
X: your choice
--- fold indication
upside-down

Digital Document setup: **Page 1** (side 1)

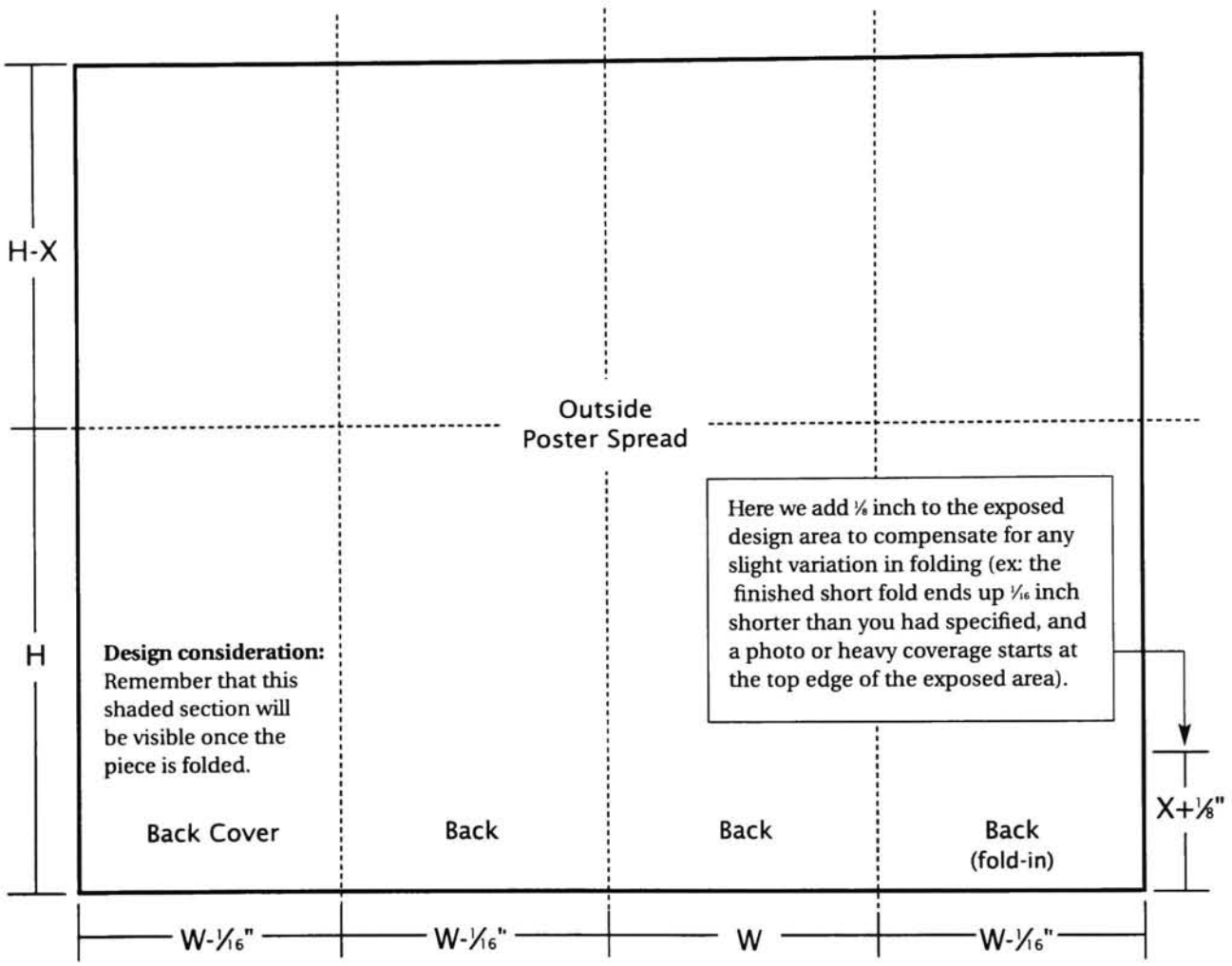


GETTING STARTED

Here's an example: For a short fold, the first thing we must determine is how short the short fold will be. In this case, we'll make it 2 inches shorter than the finished height, so X=2. Now we can calculate our document height. If the finished size is 4 x 9, then 9 inches plus 7 (9-2 , or height minus X) equals a document height of sixteen inches. Our finished width is 4 inches, so the panels for page 1 of the digital document would be, from left, 3 15/16 inches, 4 inches, 3 15/16 inches and 3 15/16 inches. Then for page two everything reverses, so from left the panels would measure 3 15/16 inches, 3 15/16 inches, 4 inches and 3 15/16 inches.

Remember: Document size and flat size must be the same, so in this case the document size would be 15 13/16 (15.812) inches wide by 16 inches high.

Digital Document setup: **Page 2** (side 2)



MAPS

CONSIDERATIONS:

- Be aware of your printer or bindery's minimum and maximum sheet sizes for their equipment.
- If you are designing a self-mailing piece, this folding style could require wafer-seals to make it mail-ready.
- Make sure to have a folding dummy made in your specified paper. Paper weight will dramatically affect the success of this piece. Watch for bulkiness and problems in the corner joints of the folds—the printer can't do anything about this, and it will require a change in paper.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document width ahead of time. Create your document as if all panels will be the same (ex: for a reverse map with short fold with a finished size of 4 x 9, set the document size to 16 x 16). Then set crosshairs to upper left corner of document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, 3 15/16 inches). Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement (4). Repeat for the last 2 panels (3 15/16 inches and 3 15/16 inches). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Just change your document size by entering that decimal measurement (15.812). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

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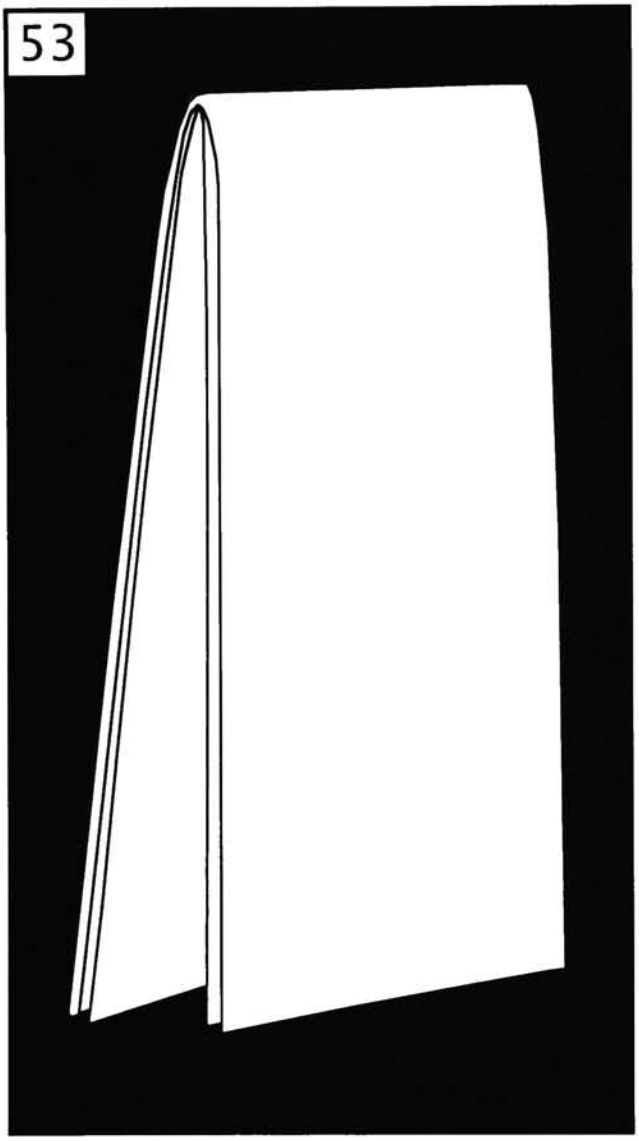
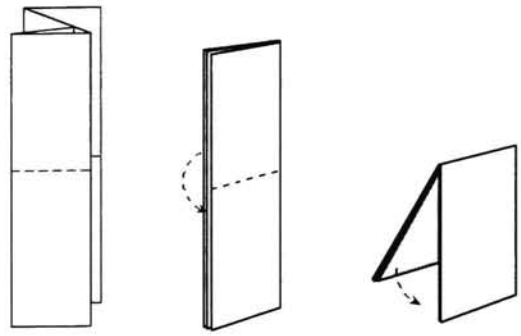
Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

TOP-FOLDING REVERSE MAP





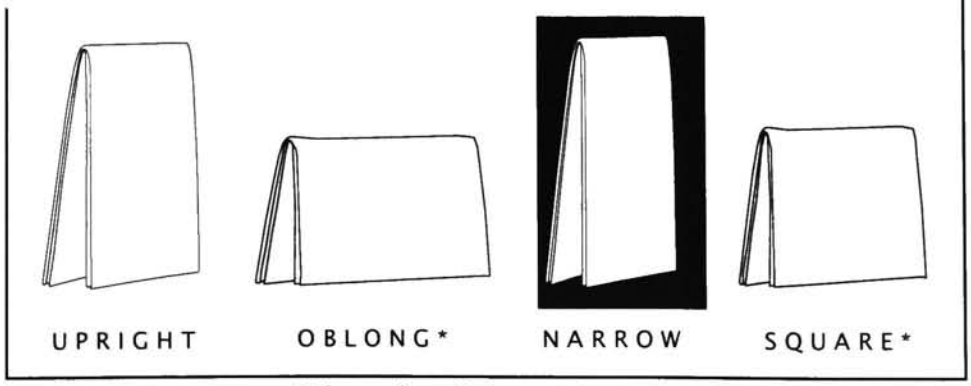
LEVEL

A level 3 fold has a long and difficult makeready, could require special machinery and low folding speed. These issues will be reflected in the cost.

The top-folding reverse map consists of the same characteristic folding style as the reverse map fold, but in a taller format. When the map folding is done, this style then folds in half onto itself.

MAPS

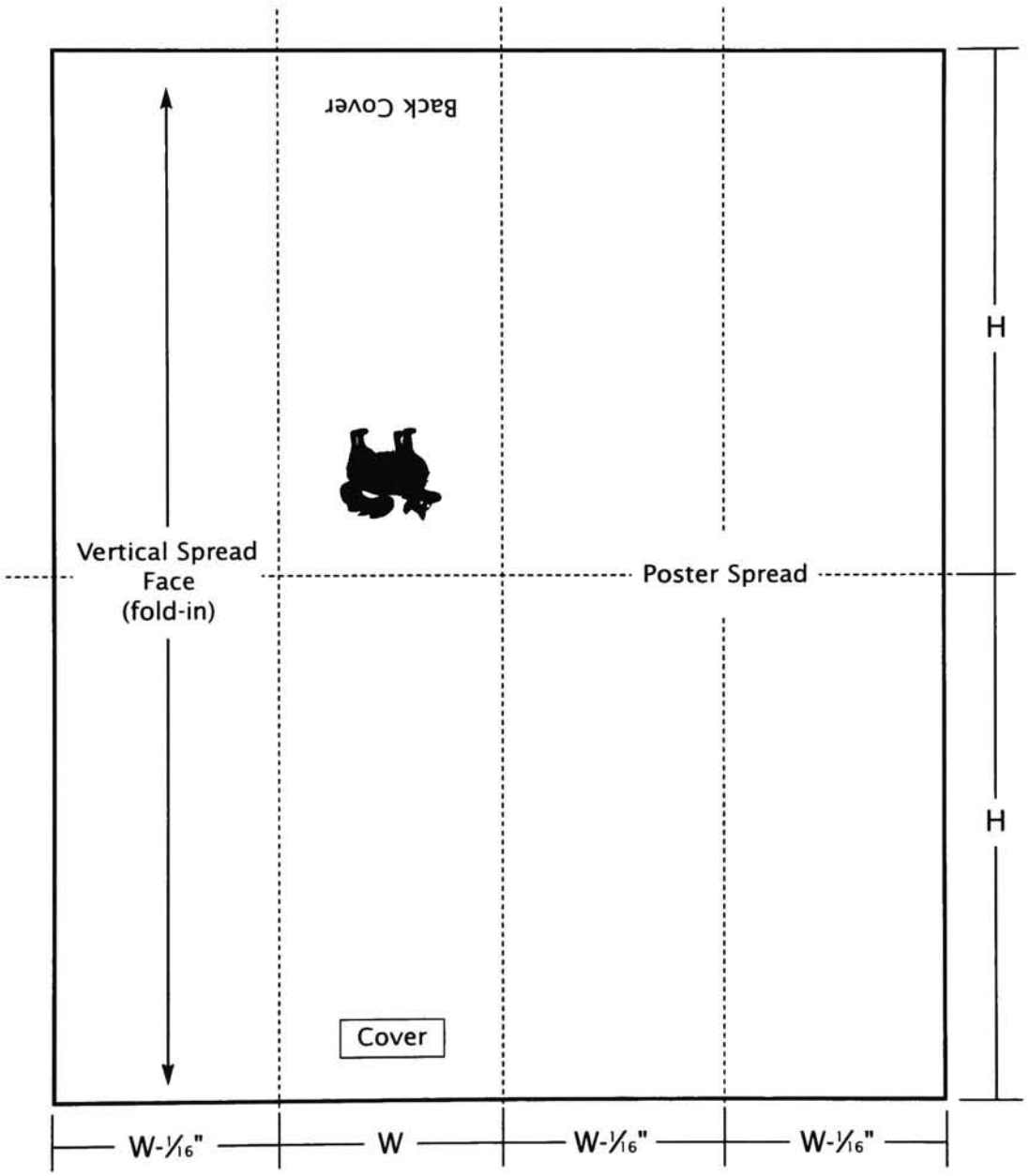
FORMAT OPTIONS



**Before you choose this format, see "Format Options" on page 5.*

Digital Document setup: **Page 1** (side 1)

W: finished width
H: finished height
--- fold indication
upside-down

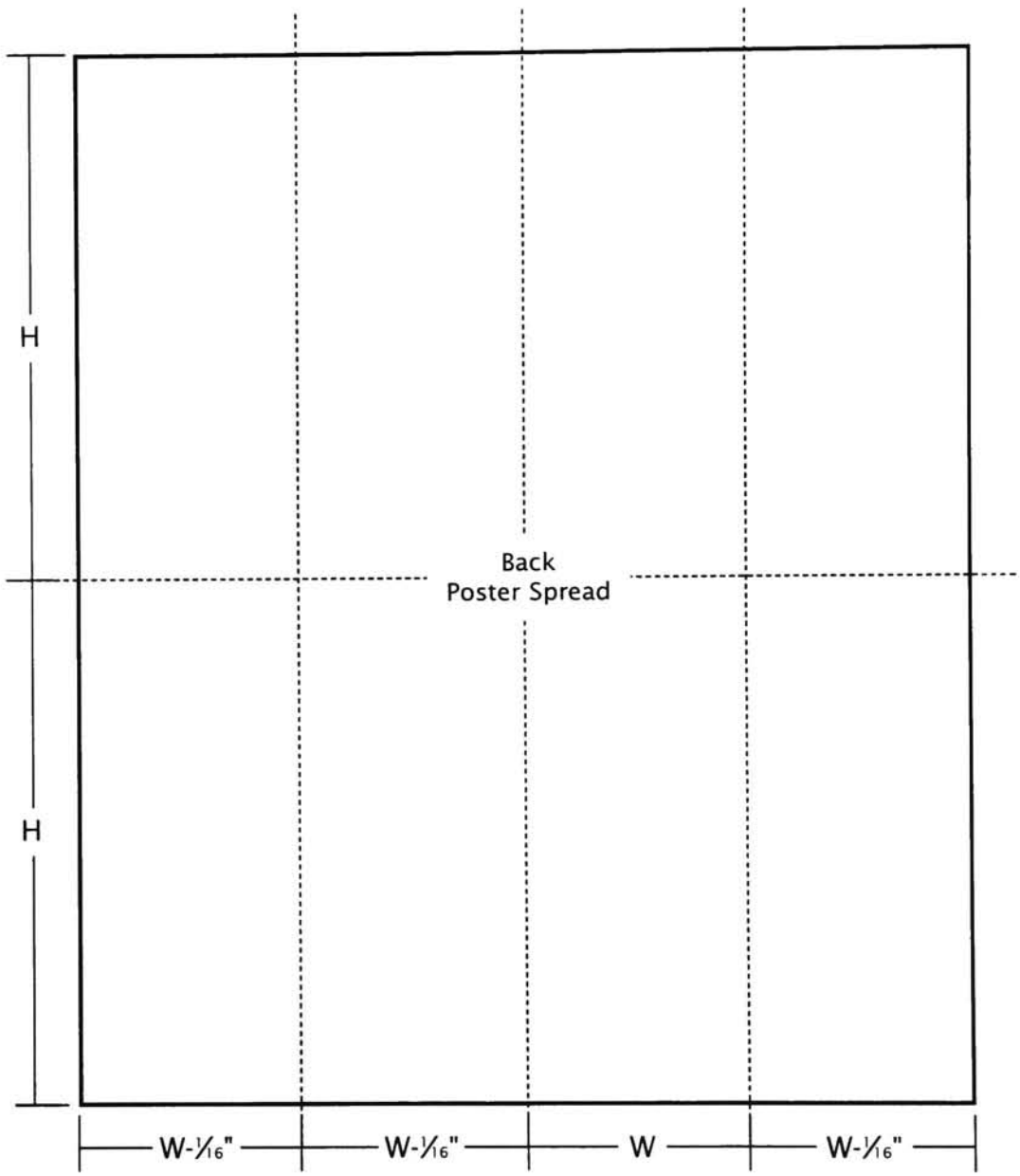


GETTING STARTED

Here's an example: If your finished size is 4 x 9, then your panels for page 1 of your digital document would be, from left, 3 15/16 inches, 4 inches, 3 15/16 inches and 3 15/16 inches. Then for page two everything reverses, so from left your panels would measure 3 15/16 inches, 3 15/16 inches 4 inches and 3 15/16inches, with a height of 18 inches (9 inches plus 9 inches).

Remember: Document size and flat size must be the same, so in this case the document size would be 15 13/16 (15.812) inches wide by 18 inches high.

Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- A paper choice of any heavier than 60# text is not recommended.
- Make sure to have a folding dummy made in your specified paper.
- Be aware of your printer or bindery's minimum and maximum sheet sizes for their equipment. Top-folding reverse maps and any other folded pieces which open out to very large dimensions generally require special large format folders.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document width ahead of time. Create your document as if all panels will be the same (ex: for a top-folding reverse map with a finished size of 4 x 9, set the document size to 16 x 18). Then set crosshairs to upper left corner of document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, 3 15/16 inches). Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement (4). Repeat for the last 2 panels (3 15/16 inches and 3 15/16 inches). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Just change your document size by entering that decimal measurement (15.812). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

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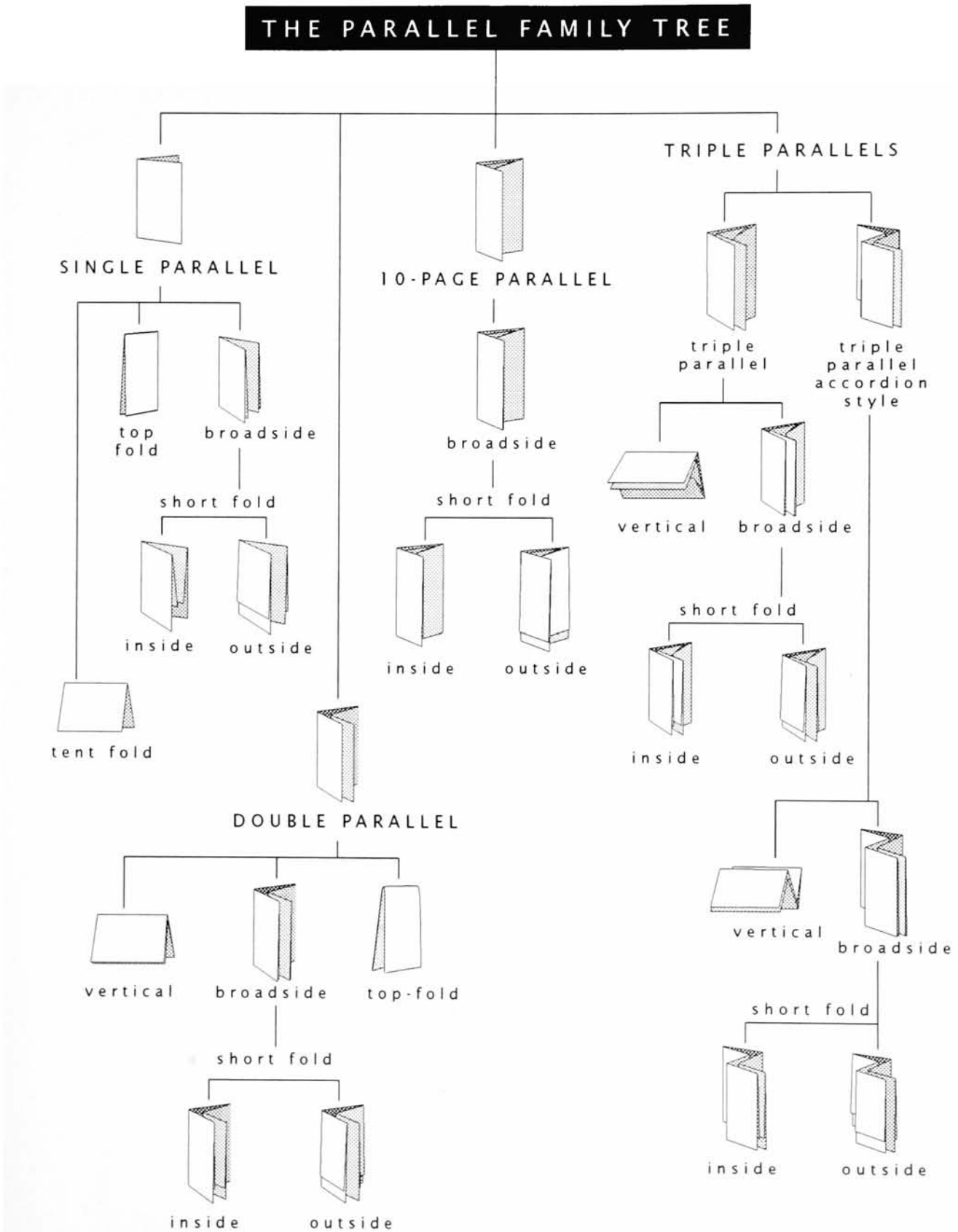
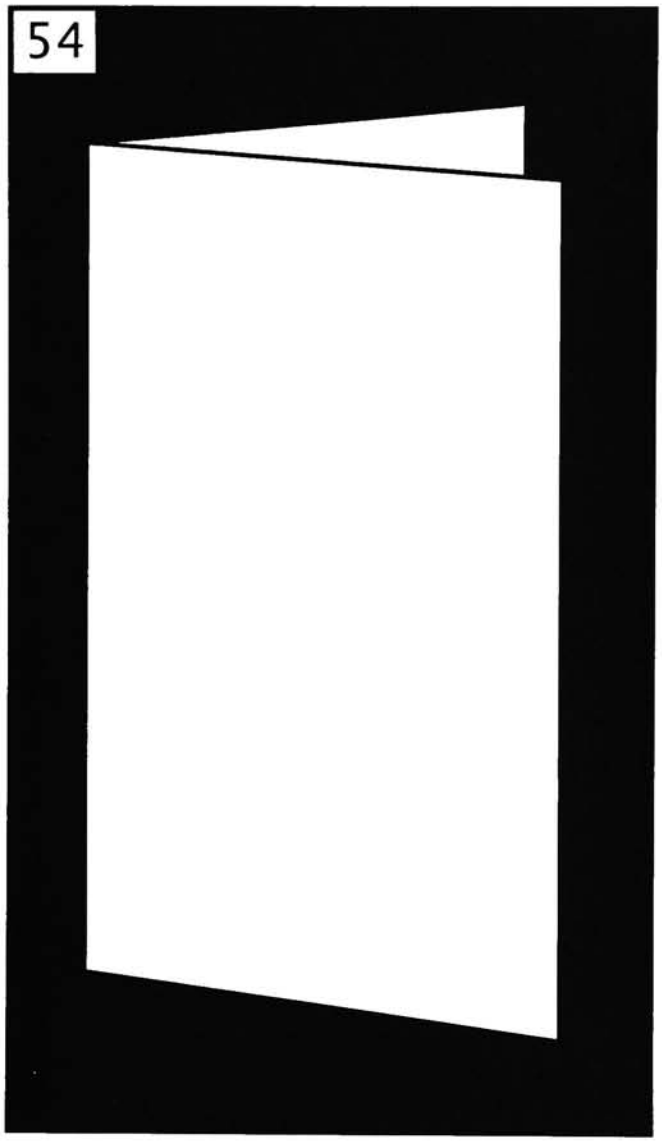
Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

THE PARALLEL FAMILY TREE



SINGLE PARALLEL

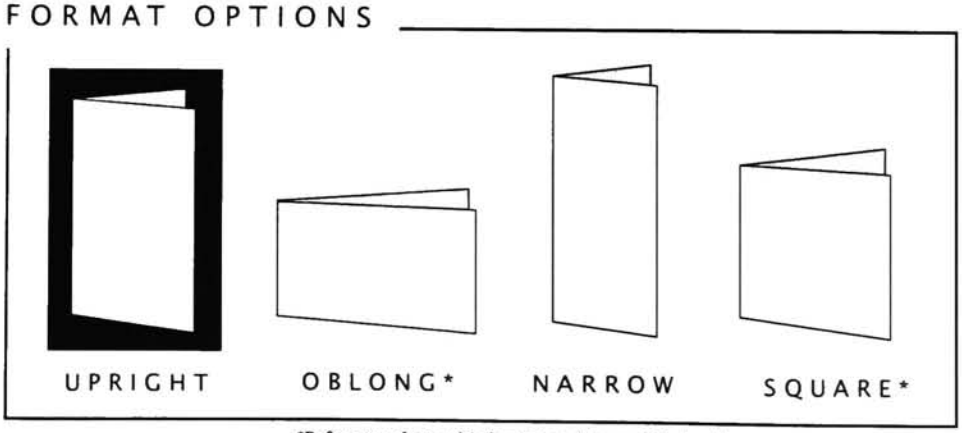


LEVEL

A level 1 fold is standard and basic, easy to set up on the folding machine and the machine can run at highest speeds.

The single parallel fold is a very common folding style and, in essence, the simplest of folds. The basic characteristic of the parallel fold is that the panels always remain parallel to each other no matter how many times the piece is folded. The single parallel consists of a single fold and two panels which are parallel to each other.

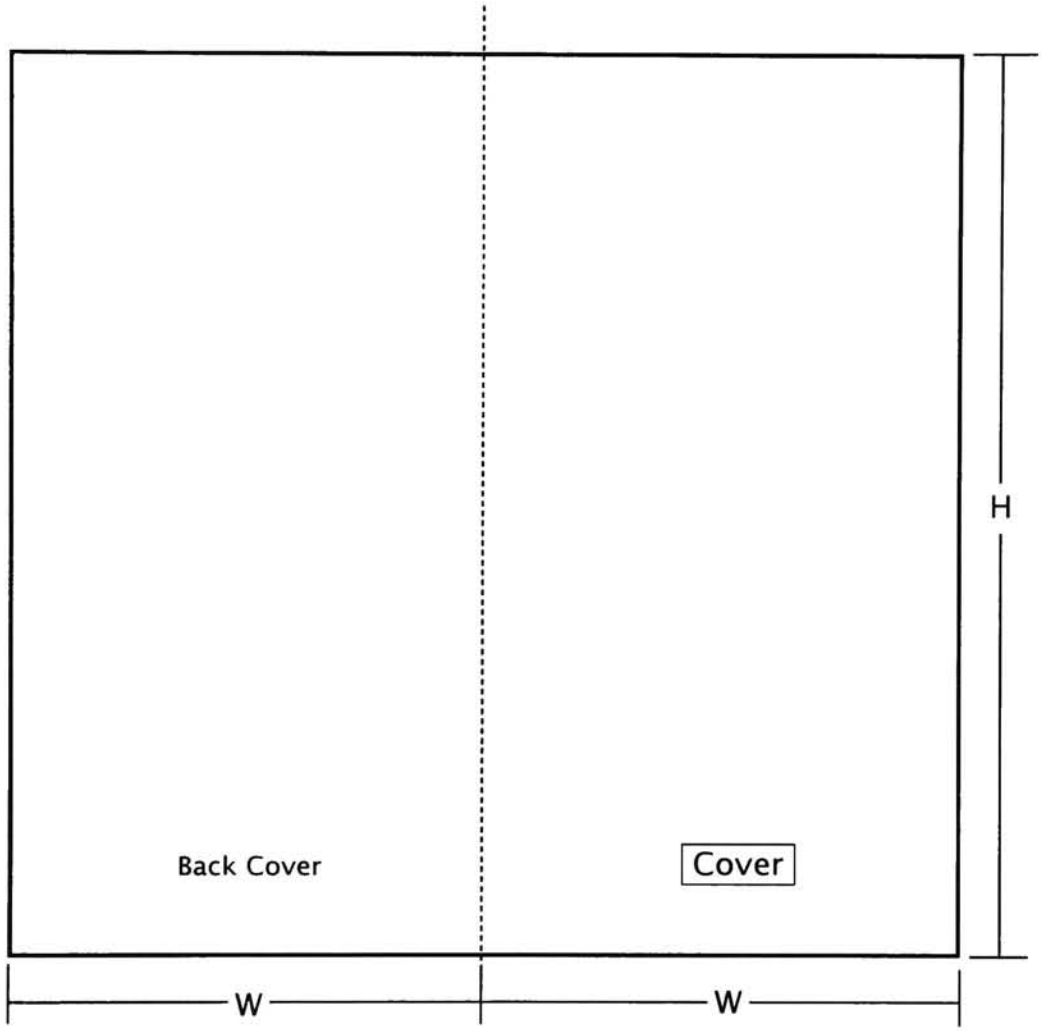
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

W: finished width
H: finished height
--- fold indication

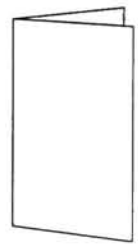


GETTING STARTED

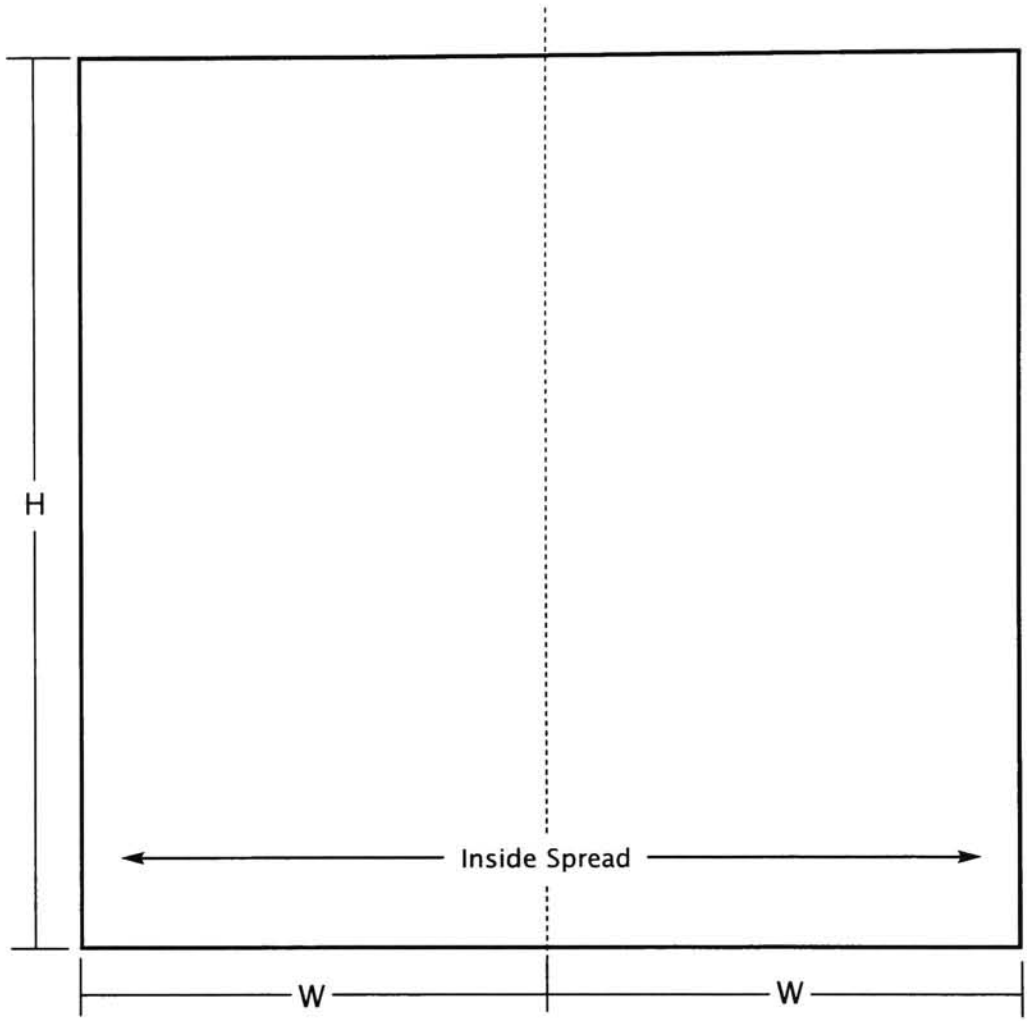
Here's an example: If your finished size is 5 x 8, then your panels for page 1 of your digital document would be, from left, 5 inches and 5 inches, with a document height of 8 inches. This fold is symmetrical, so for page 2 the measurements are the same as page 1.

Remember: Document size and flat size must be the same, so in this case the document size would be 10 inches wide by 8 inches high.

Time-saving tip: For this particular folding style, the fold placement is exactly the same for page 1 as it is for page 2. If you're creating your document in a page layout program which has a master page option, like QuarkXPress, save time by setting your folds on the master page. Then, return to the document and add the second page.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- If you are designing a large piece, or a piece which is meant to be self-standing, make sure to have a folding sample made up from your specified paper. If the paper is too lightweight, it could turn into a sagging flimsy piece.
- If your paper choice is any heavier than 80# text, you will want to consider scoring the piece. Ask your printer for a recommendation.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

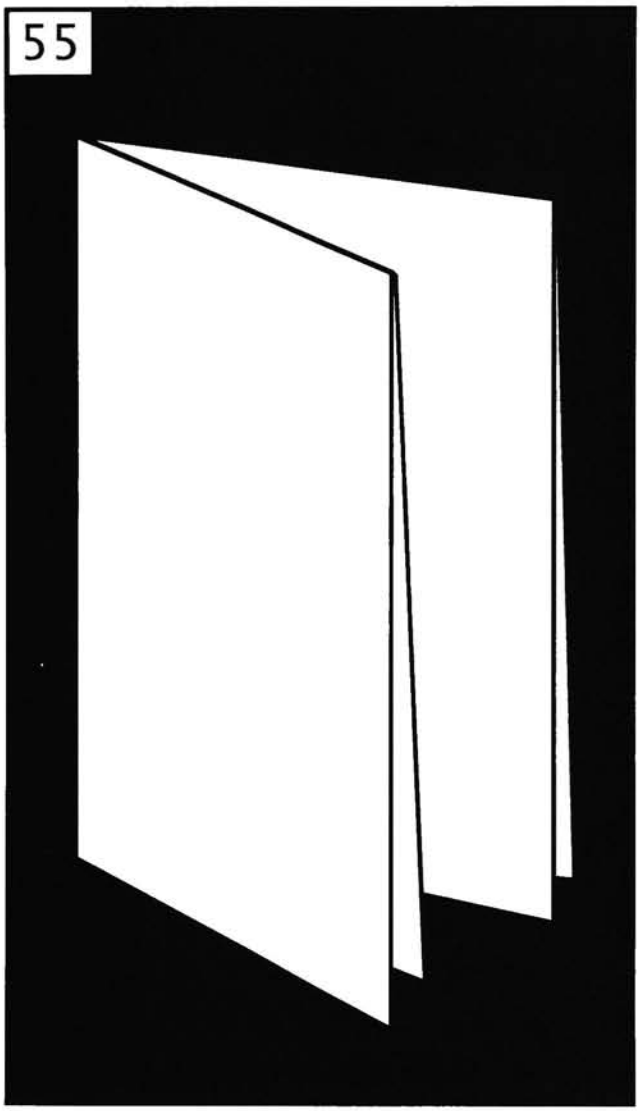
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

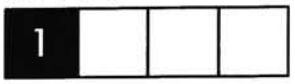
Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

BROADSIDE SINGLE PARALLEL



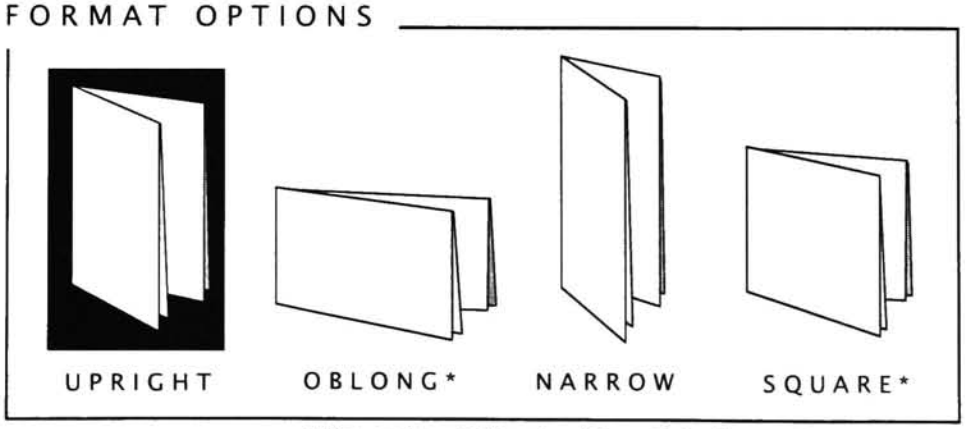
LEVEL



A level 1 fold is standard and basic, easy to set up on the folding machine and the machine can run at highest speeds.

The broadside single parallel fold has the same characteristics as the standard single parallel fold, but the difference is that this fold has twice the area because it folds in half on itself before the parallel folding is done.

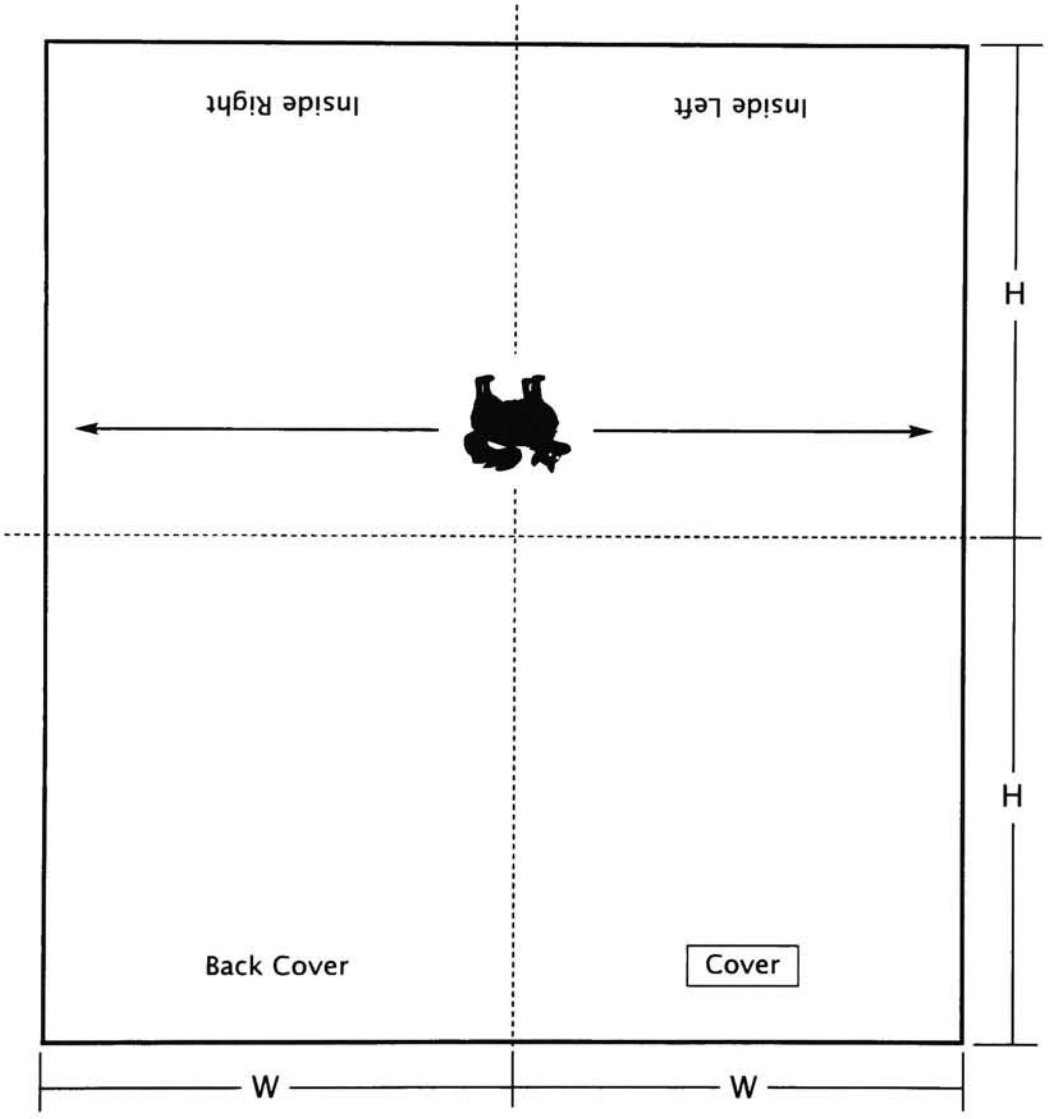
FORMAT OPTIONS



**Before you choose this format, see "Format Options" on page 5.*

Digital Document setup: **Page 1** (side 1)

W: finished width
H: finished height
--- fold indication
upside-down

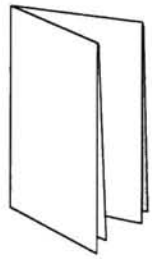


GETTING STARTED

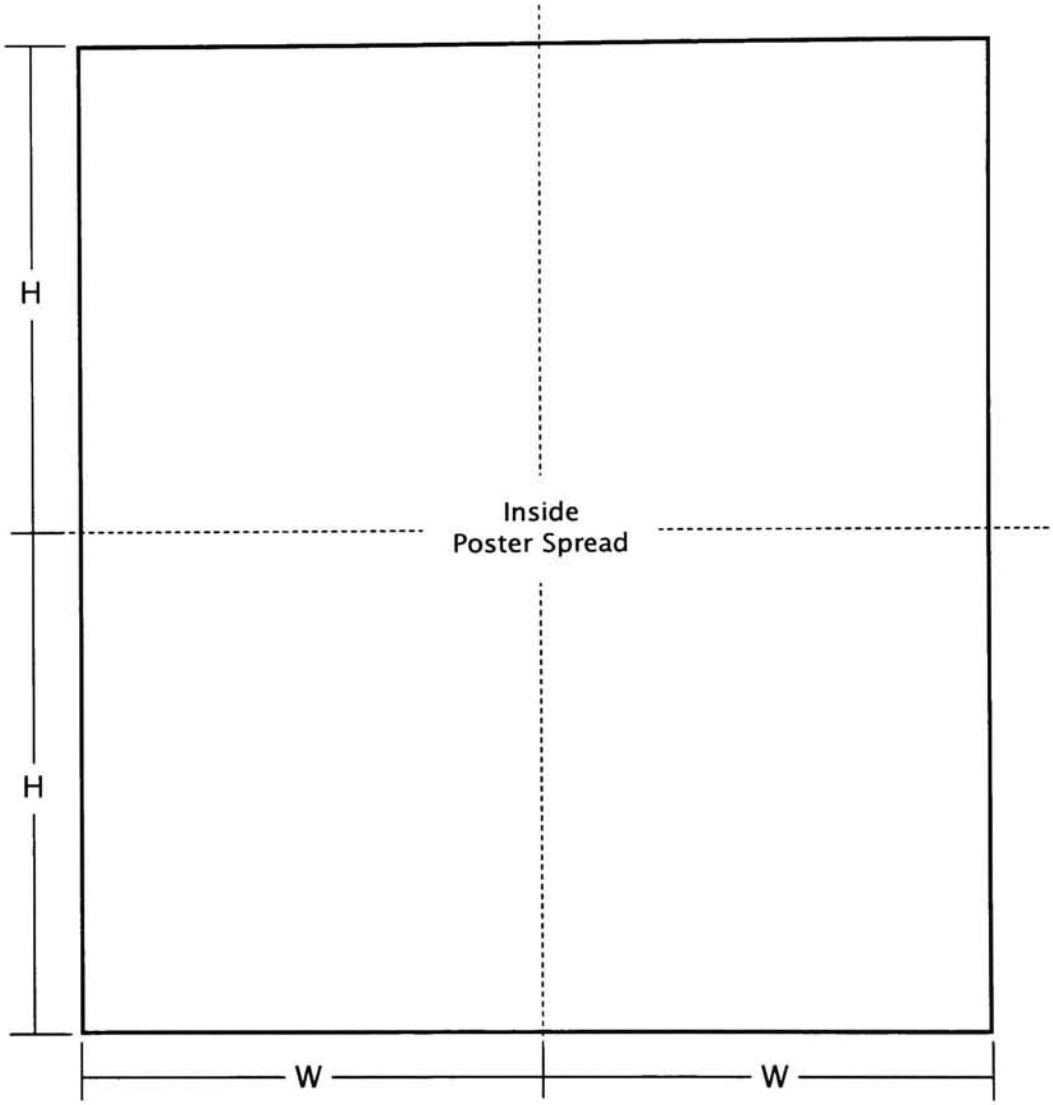
Here's an example: If your finished size is 5 x 8, then your panels for page 1 of your digital document would be, from left, 5 inches and 5 inches, with a document height of 16 inches (8 inches plus 8 inches). This fold is symmetrical, so for page 2 the measurements are the same as page 1.

Remember: Document size and flat size must be the same, so in this case the document size would be 10 inches wide by 16 inches high.

Time-saving tip: For this particular folding style, the fold placement is exactly the same for page 1 as it is for page 2. If you're creating your document in a page layout program which has a master page option, save time by setting your folds on the master page. Then, return to the document and add the second page.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- If you are designing a self-mailing piece, this folding style could require wafer-seals to make it mail-ready. An envelope would be more attractive and cost-effective.
- Make sure to have a folding dummy made in your specified paper. Paper weight will dramatically affect the success of this piece. Watch for bulkiness and problems in the corner joints of the folds—the printer can't do anything about this, and it will require a change in paper.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

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Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

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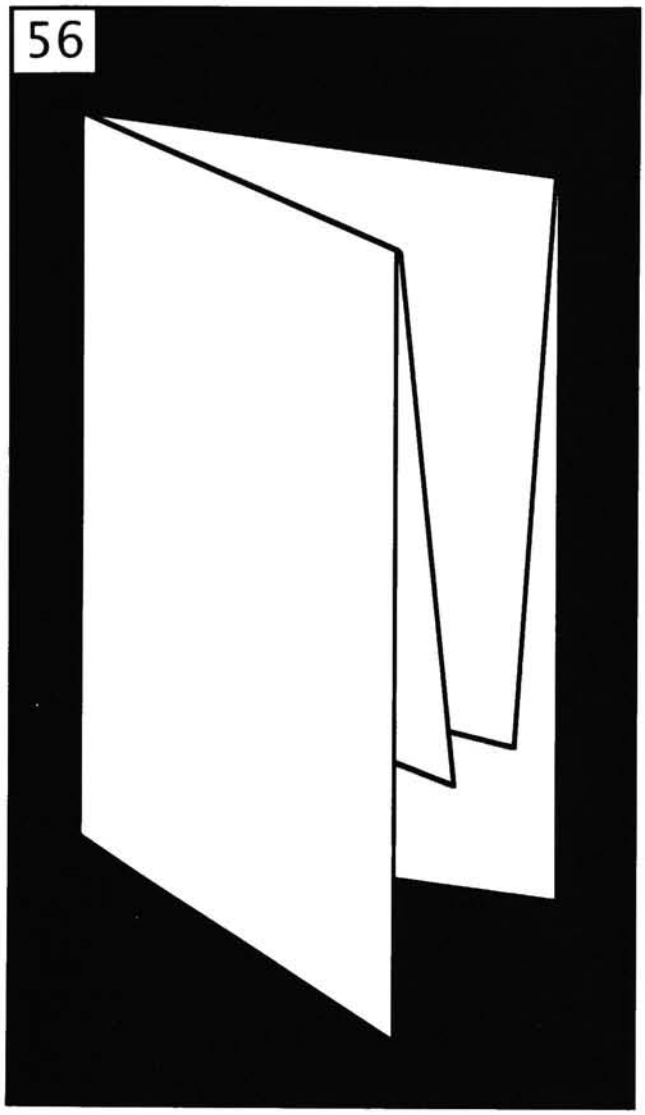
NOTES:

SINGLE PARALLEL WITH SHORT FOLD (INSIDE)

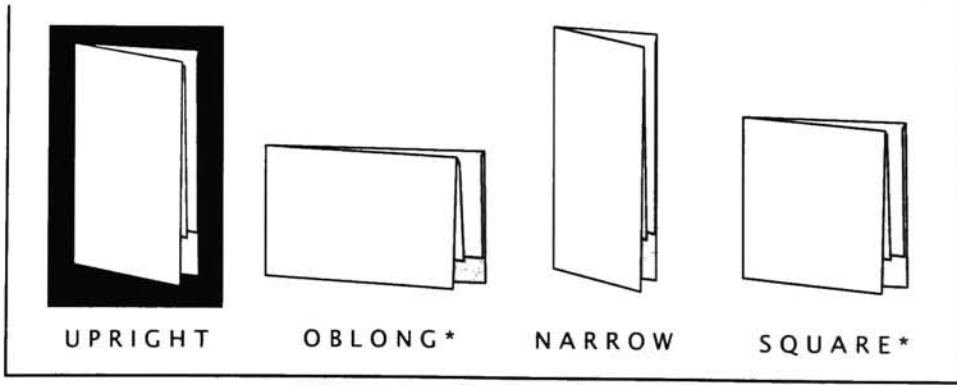


LEVEL

A level 1 fold is standard and basic, easy to set up on the folding machine and the machine can run at highest speeds.

The single parallel with short fold inside has the same characteristic folding style as the single parallel fold, and is similar to the broadside single parallel fold because it folds in half on itself before the parallel folding is done. What makes this fold different is that unlike a broadside fold where panels are of equal length, in a short fold the fold-over panels are shorter than the finished height.

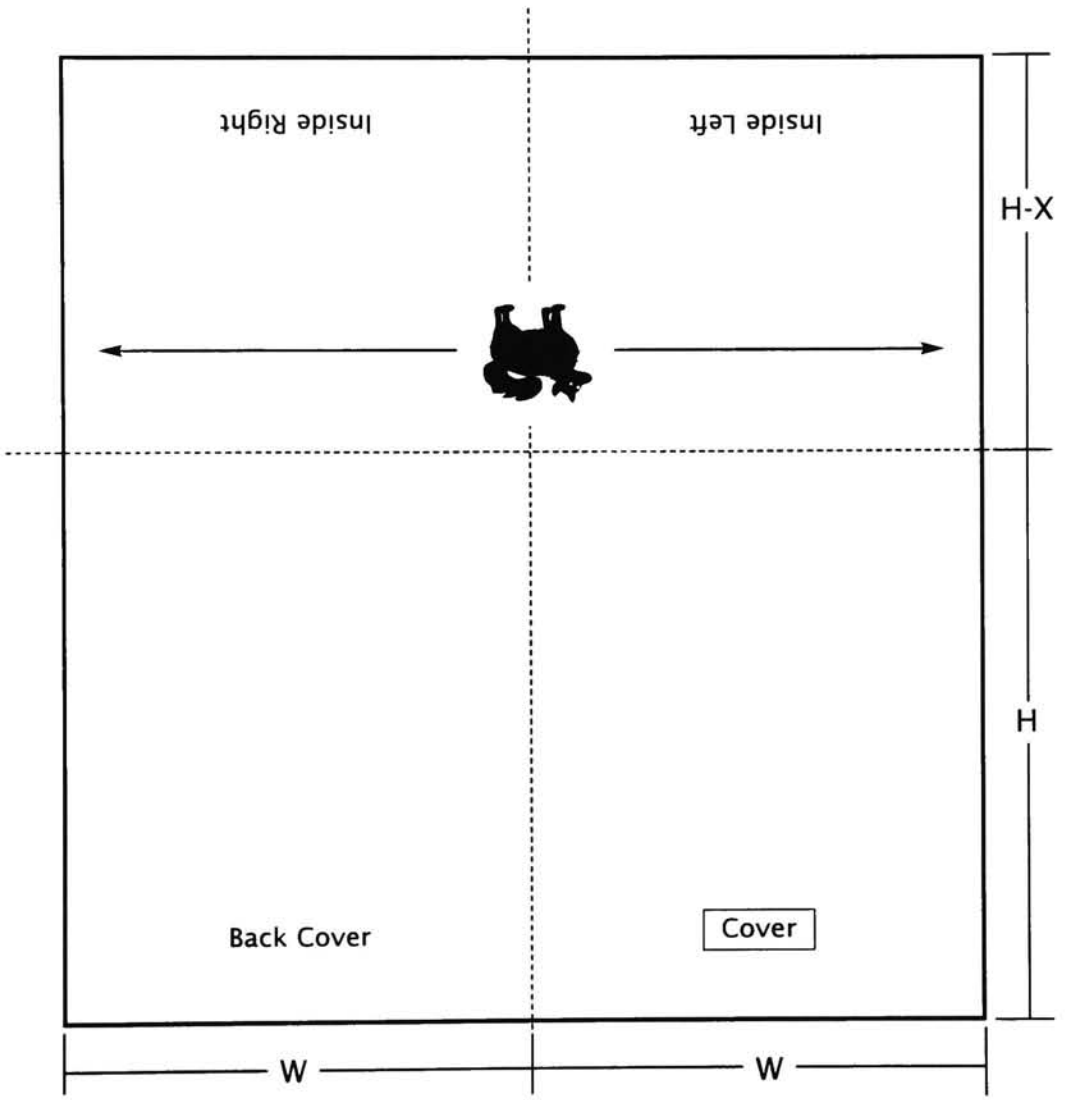
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

W:	finished width
H:	finished height
X:	your choice
---	fold indication
	upside-down



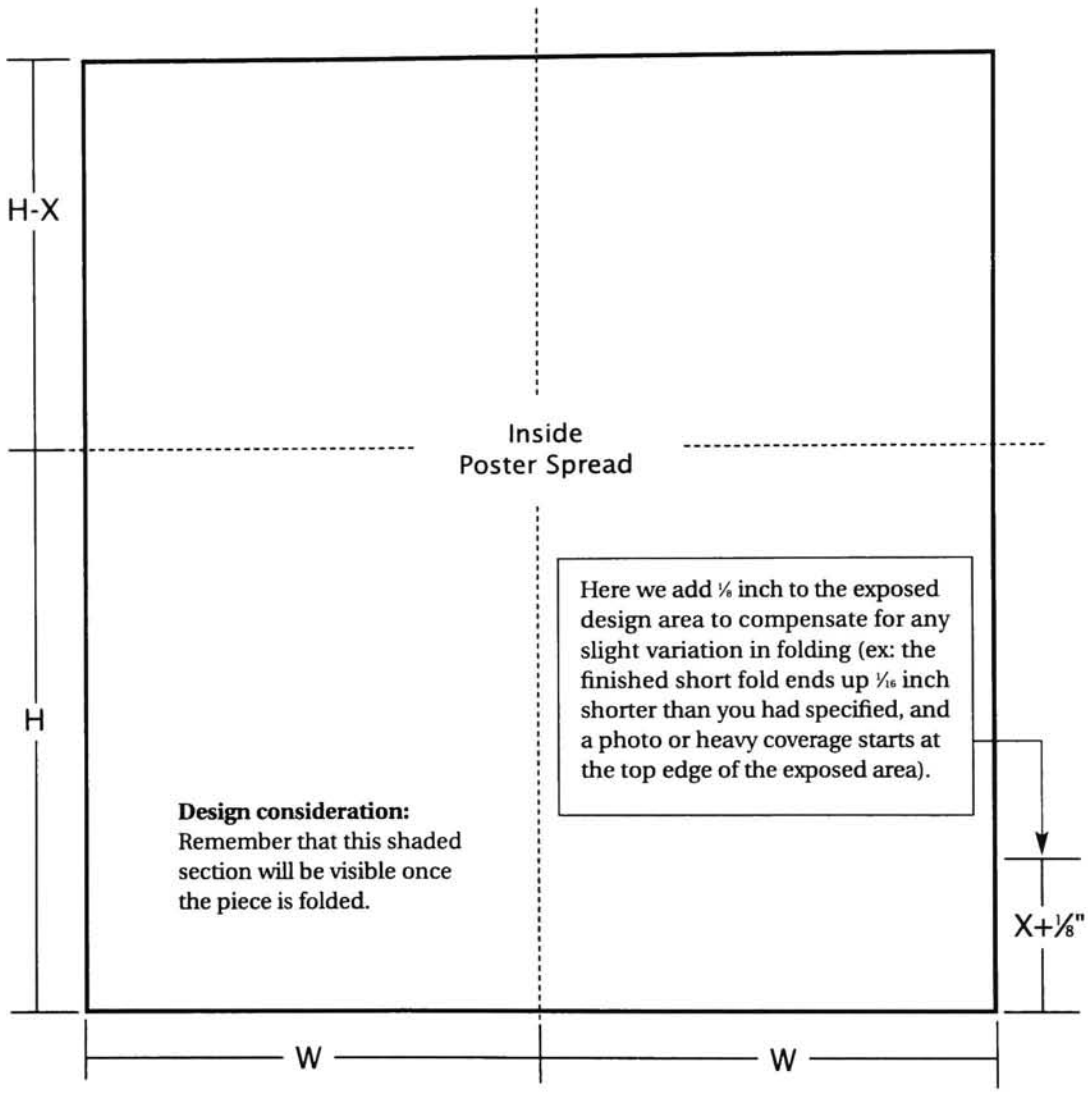
GETTING STARTED

Here's an example: For a short fold, the first thing we must determine is how short the short fold will be. In this case, we'll make it 2 inches shorter than the finished height, so X=2. Now we can calculate our document height. If the finished size is 5 x 8, then 8 inches plus 6 (8-2 , or height minus X) equals a document height of 14 inches. Our finished width is 5 inches, so the panels for page 1 of the digital document would be, from left, 5 inches and 5 inches. This fold is symmetrical, so for page 2 the measurements are the same as page 1.

Remember: Document size and flat size must be the same, so in this case the document size would be 10 inches wide by 14 inches high.

Time-saving tip: For this particular folding style, the fold placement is exactly the same for page 1 as it is for page 2. If you're creating your document in a page layout program which has a master page option, save time by setting your folds on the master page. Then, return to the document and add the second page.

Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- If you are designing a self-mailing piece, this folding style could require wafer-seals to make it mail-ready. An envelope would be more attractive and cost-effective.
- Make sure to have a folding dummy made in your specified paper. Paper weight will dramatically affect the success of this piece. Watch for bulkiness and problems in the corner joints of the folds—the printer can't do anything about this, and it will require a change in paper.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

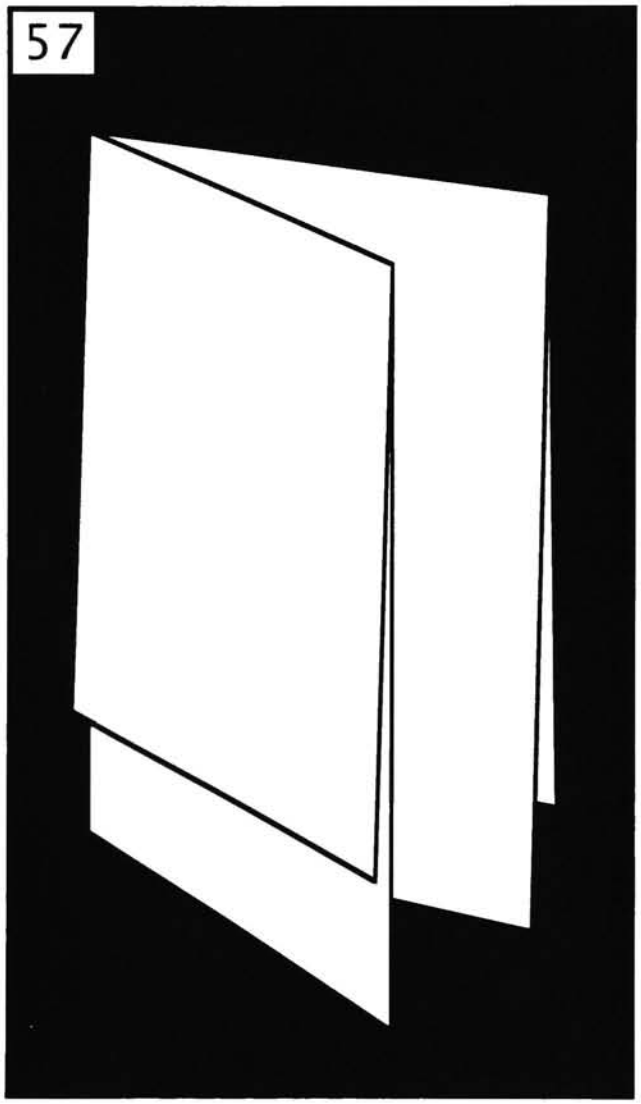
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

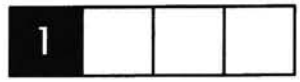
Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

SINGLE PARALLEL WITH SHORT FOLD (OUTSIDE)



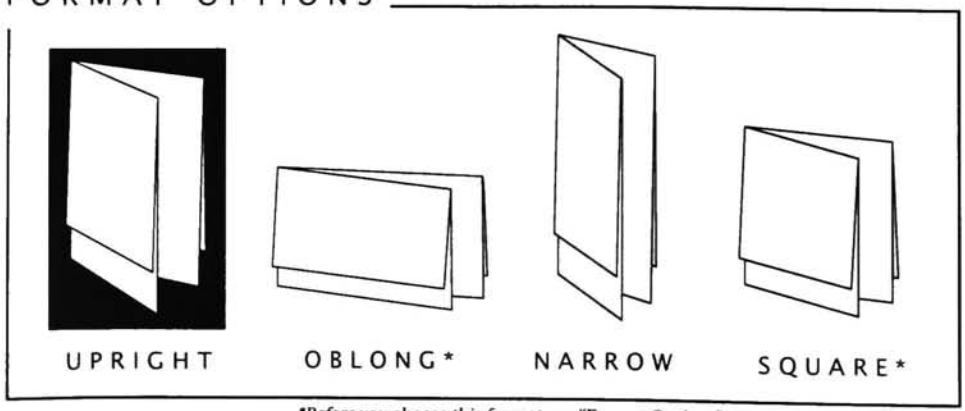
LEVEL



A level 1 fold is standard and basic, easy to set up on the folding machine and the machine can run at highest speeds.

The single parallel with short fold outside has the same characteristic folding style as the single parallel fold, and is similar to the broadside single parallel fold because it folds in half on itself before the parallel folding is done. What makes this fold different is that unlike a broadside fold where panels are of equal length, in a short fold the fold-over panels are shorter than the finished height.

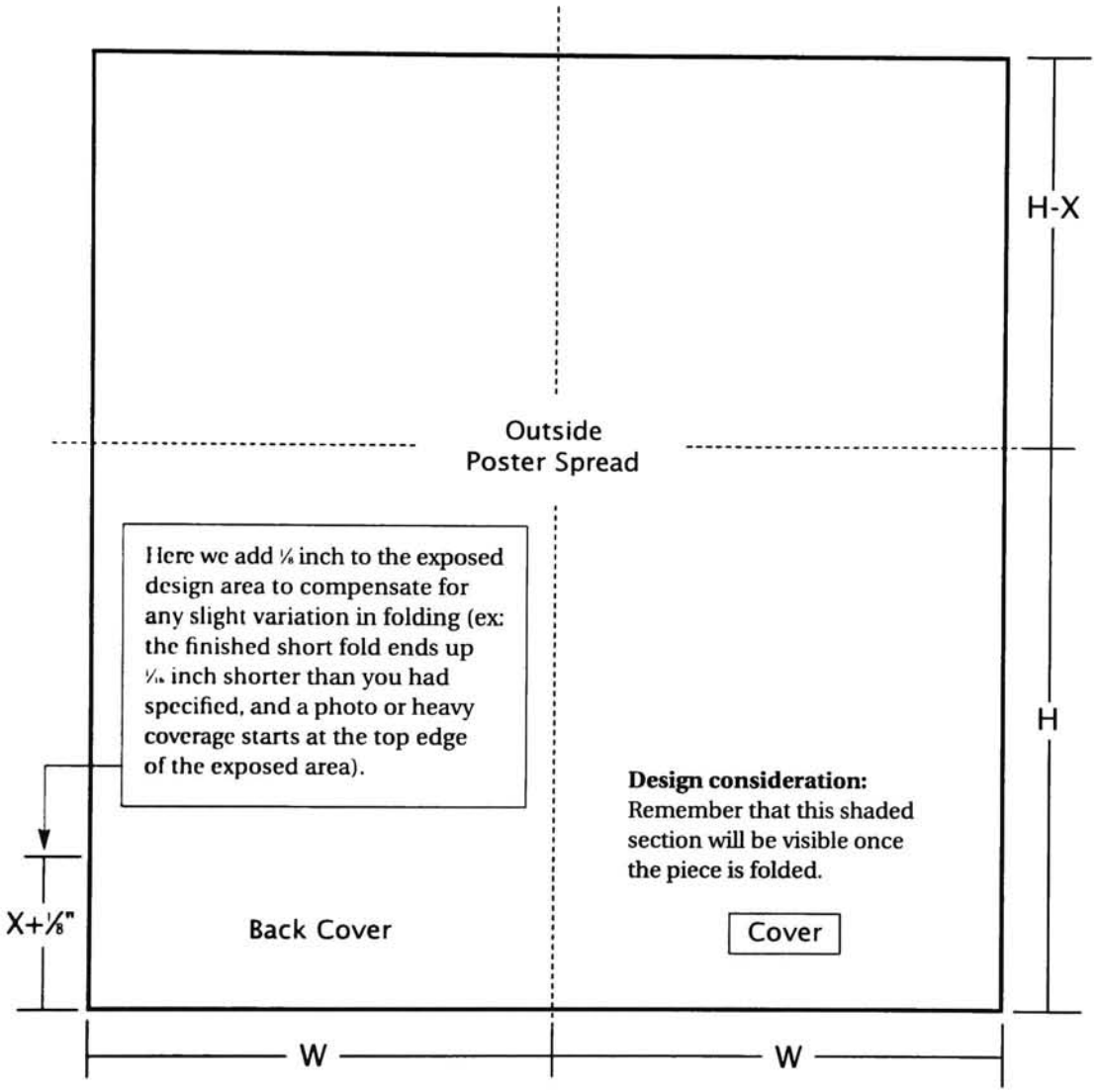
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

W: finished width
H: finished height
X: your choice
--- fold indication
upside-down

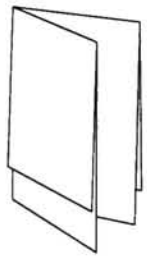


GETTING STARTED

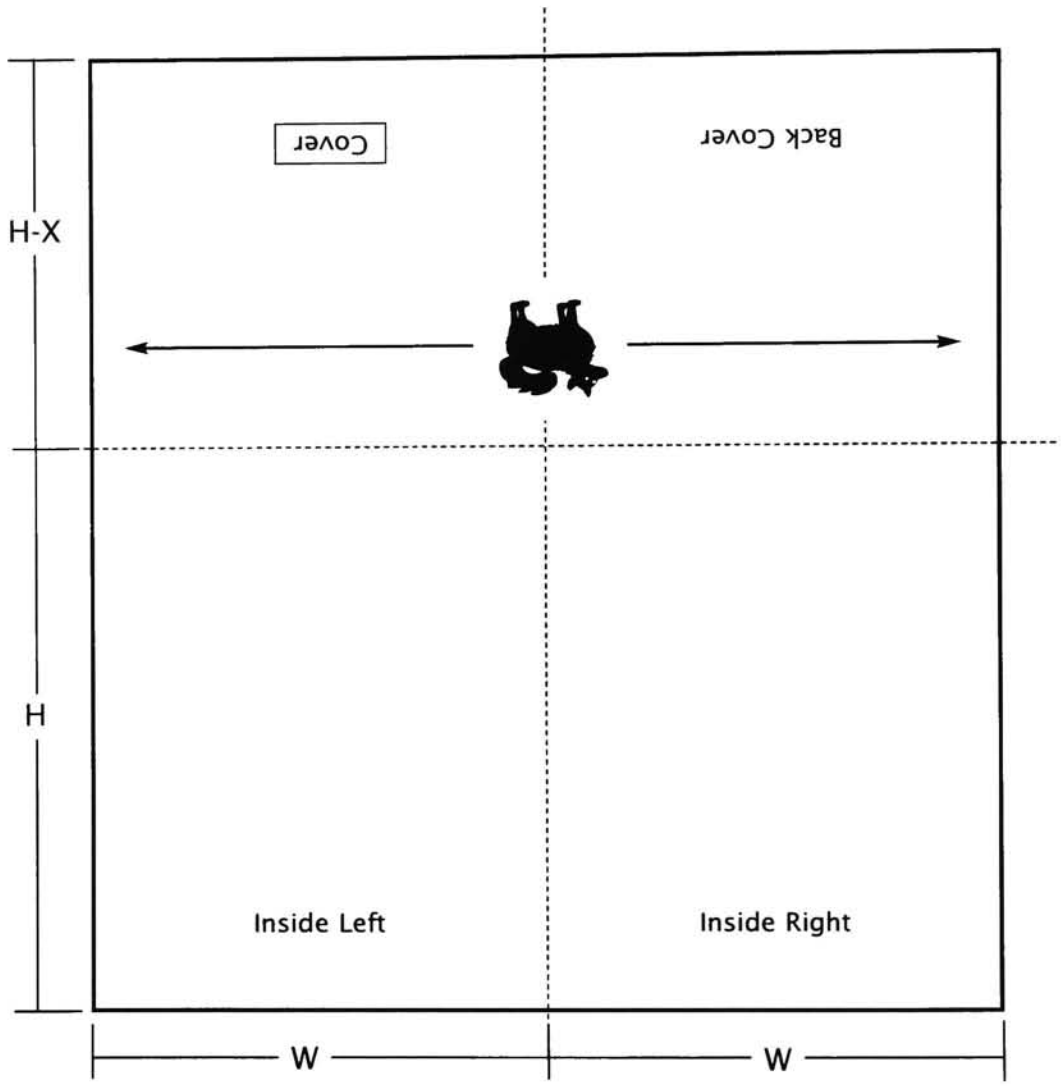
Here's an example: For a short fold, the first thing we must determine is how short the short fold will be. In this case, we'll make it 2 inches shorter than the finished height, so X=2. Now we can calculate our document height. If the finished size is 5 x 8, then 8 inches plus 6 (8-2 , or height minus X) equals a document height of 14 inches. Our finished width is 5 inches, so the panels for page 1 of the digital document would be, from left, 5 inches and 5 inches. This fold is symmetrical, so for page 2 the measurements are the same as page 1.

Remember: Document size and flat size must be the same, so in this case the document size would be 10 inches wide by 14 inches high.

Time-saving tip: For this particular folding style, the fold placement is exactly the same for page 1 as it is for page 2. If you're creating your document in a page layout program which has a master page option, like QuarkXPress, save time by setting your folds on the master page. Then, return to the document and add the second page.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- If you are designing a self-mailing piece, this folding style could require wafer-seals to make it mail-ready. An envelope would be more attractive and cost-effective.
- Make sure to have a folding dummy made in your specified paper. Paper weight will dramatically affect the success of this piece. Watch for bulkiness and problems in the corner joints of the folds—the printer can't do anything about this, and it will require a change in paper.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

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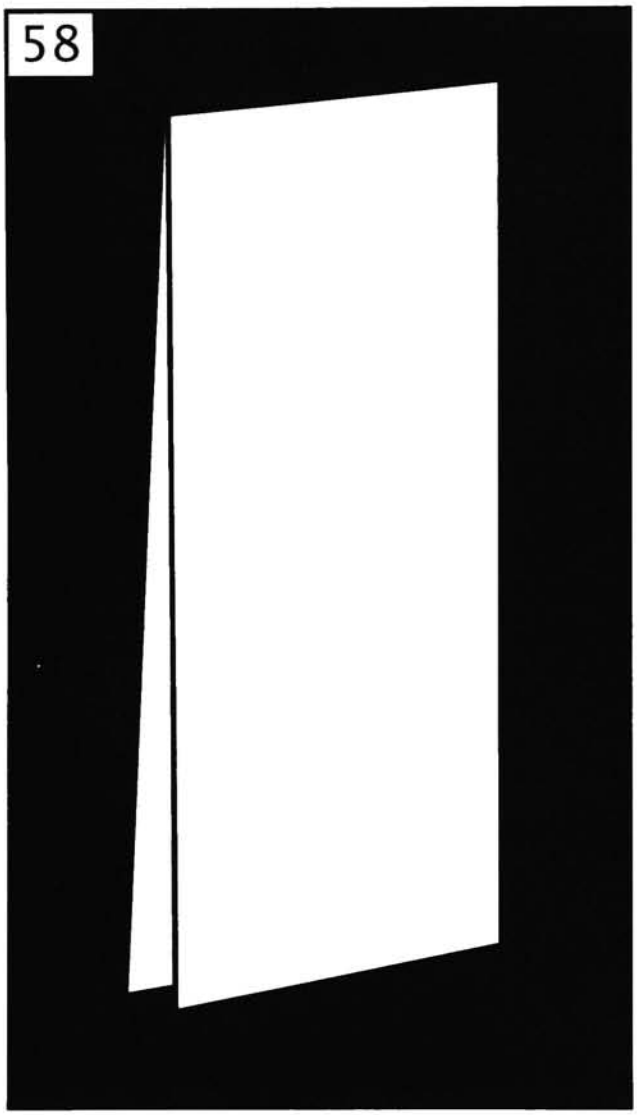
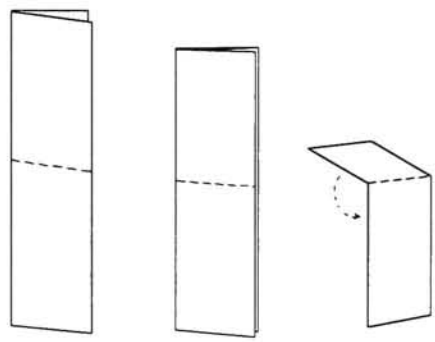
NOTES:

TOP-FOLDING SINGLE PARALLEL





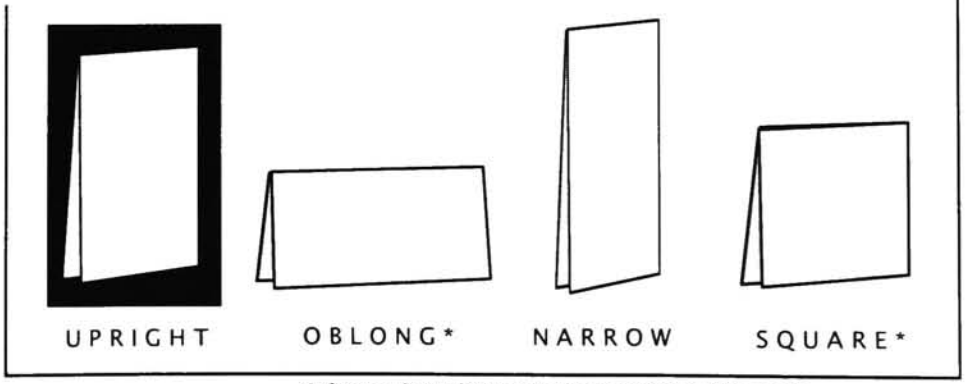
LEVEL

A level 2 fold has a moderate makeready, possible slower speed on the folding machine, and could have some special considerations.

The top-folding single parallel fold consists of the same characteristic folding style as the single parallel fold, but in a taller format. When the parallel folding is done, this style then folds in half onto itself.

PARALLELS

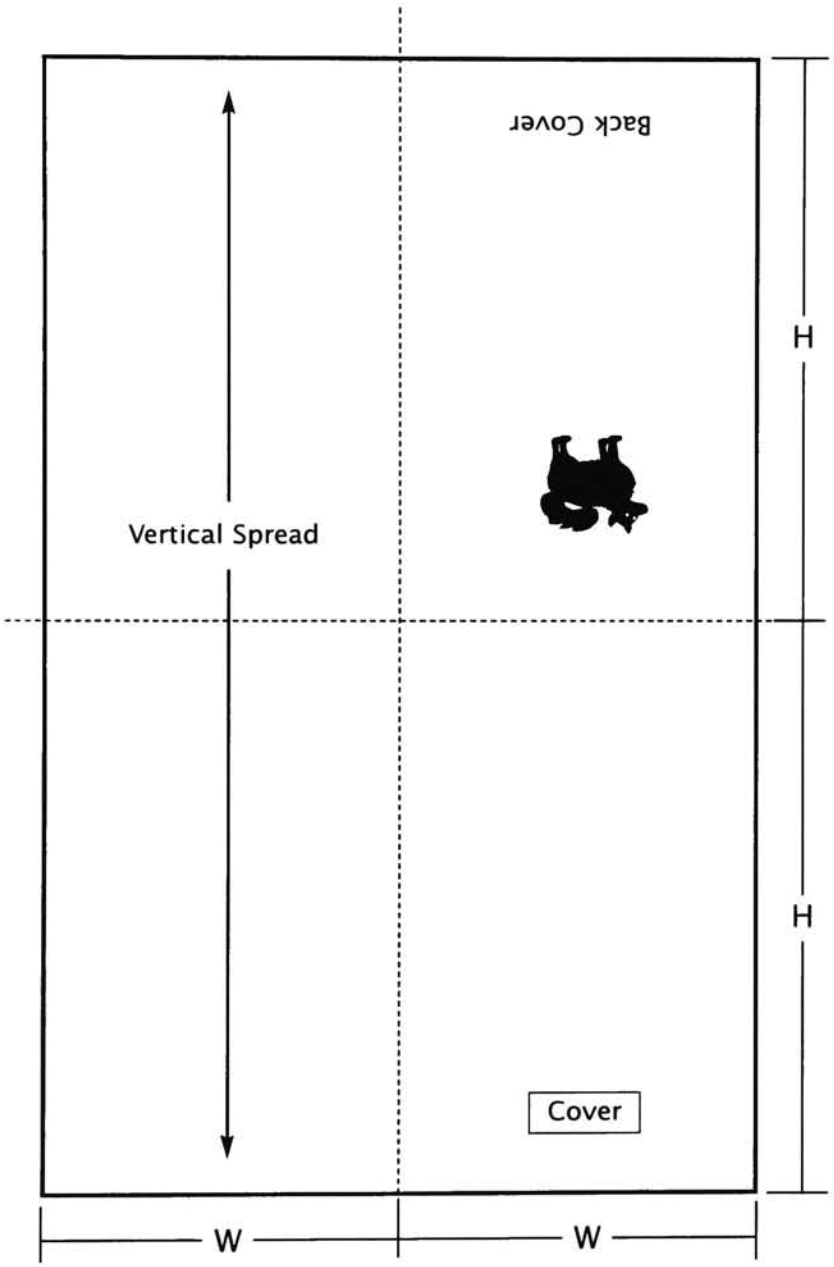
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

W: finished width
H: finished height
--- fold indication
upside-down



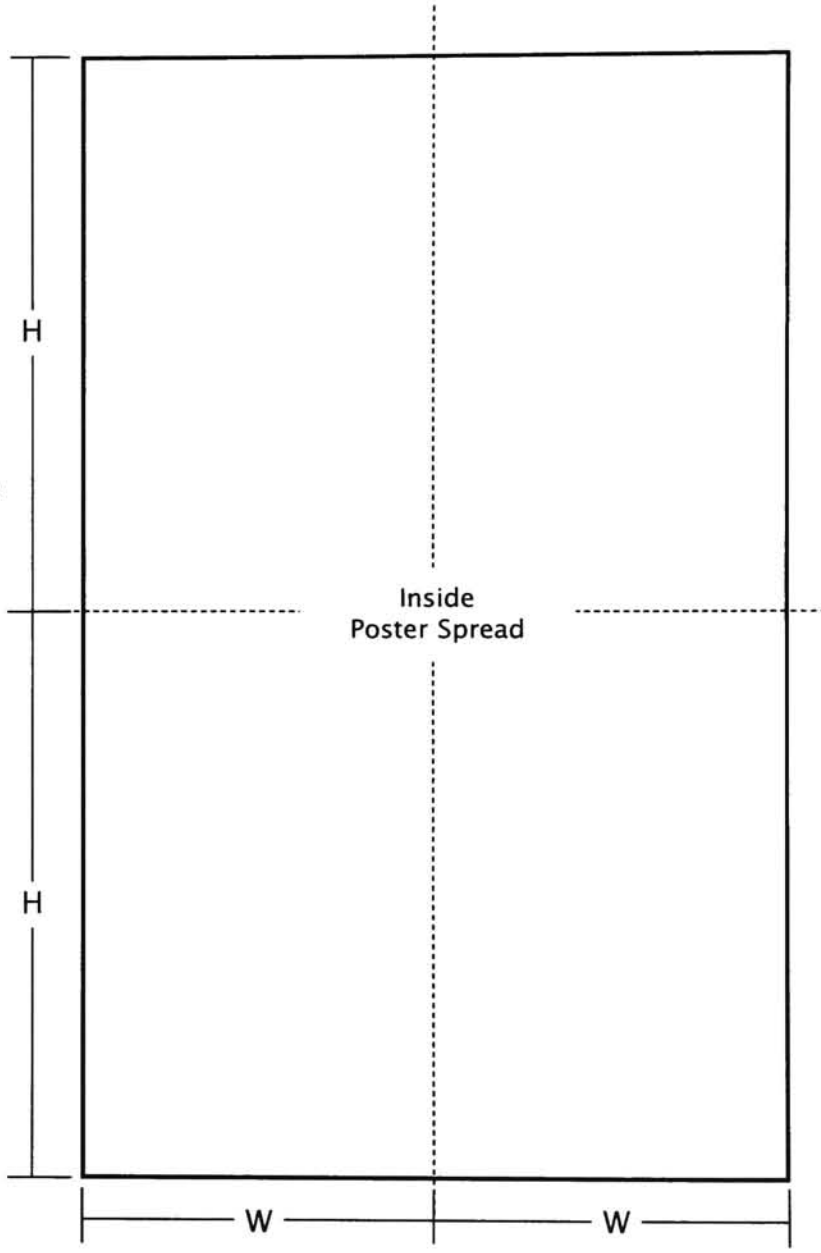
GETTING STARTED

Here's an example: If your finished size is 5 x 8, then your panels for page 1 of your digital document would be, from left, 5 inches and 5 inches, with a document height of 16 inches (8 inches plus 8 inches). This fold is symmetrical, so for page 2 the measurements are the same as page 1.

Remember: Document size and flat size must be the same, so in this case the document size would be 10 inches wide by 16 inches high.

Time-saving tip: For this particular folding style, the fold placement is exactly the same for page 1 as it is for page 2. If you're creating your document in a page layout program which has a master page option, save time by setting your folds on the master page. Then, return to the document and add the second page.

Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- If you are designing a self-mailing piece, this folding style could require wafer-seals to make it mail-ready. An envelope would be more attractive and cost-effective.
- Make sure to have a folding dummy made in your specified paper. Paper weight will dramatically affect the success of this piece. Watch for bulkiness and problems in the corner joints of the folds—the printer can't do anything about this, and it will require a change in paper.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

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Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

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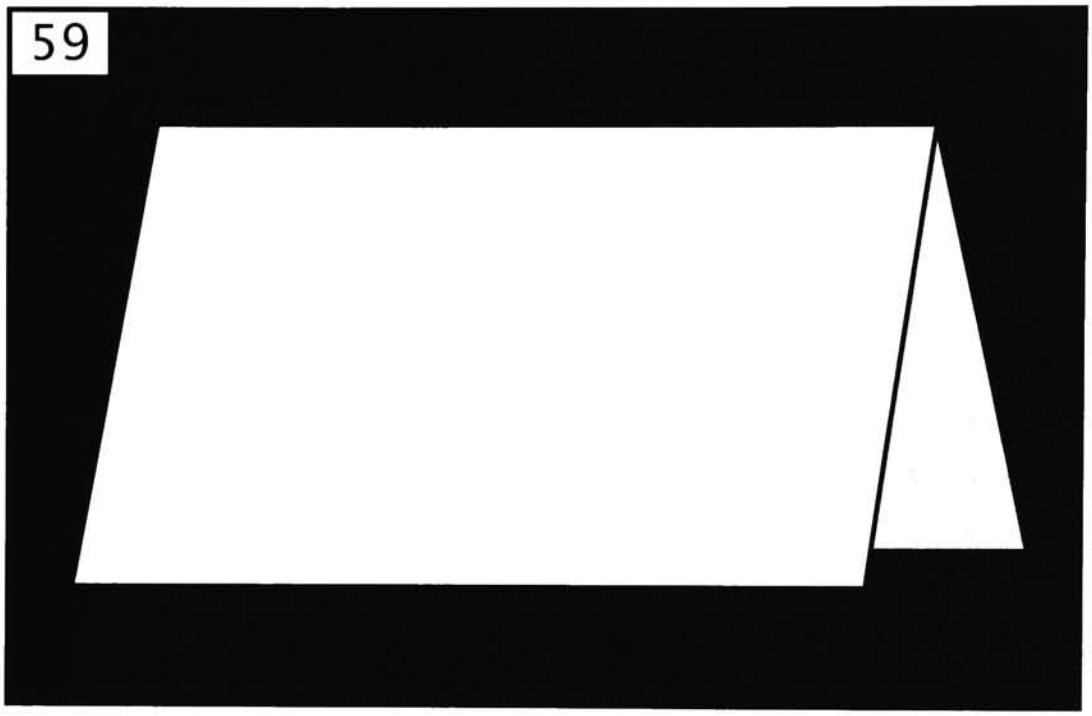
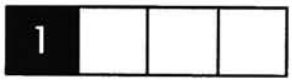
NOTES:

TENT FOLD



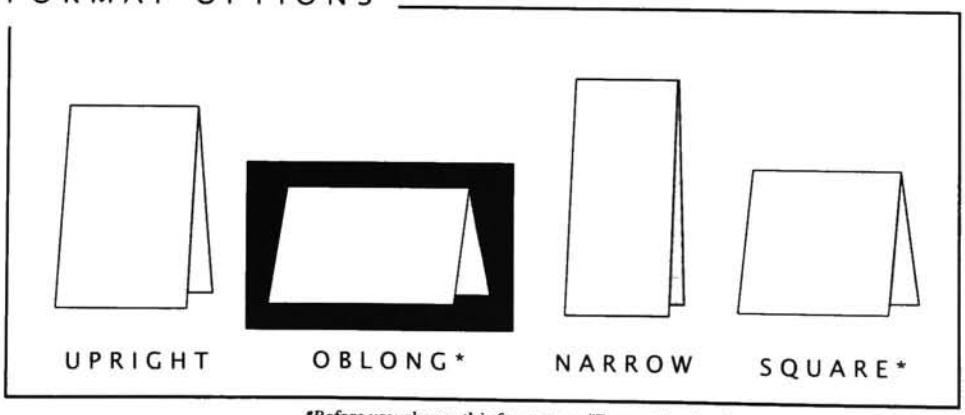
LEVEL



A level 1 fold is standard and basic, easy to set up on the folding machine and the machine can run at highest speeds.

The tent fold is a variation of the single parallel fold. What makes it different is that the single fold is horizontal instead of vertical.

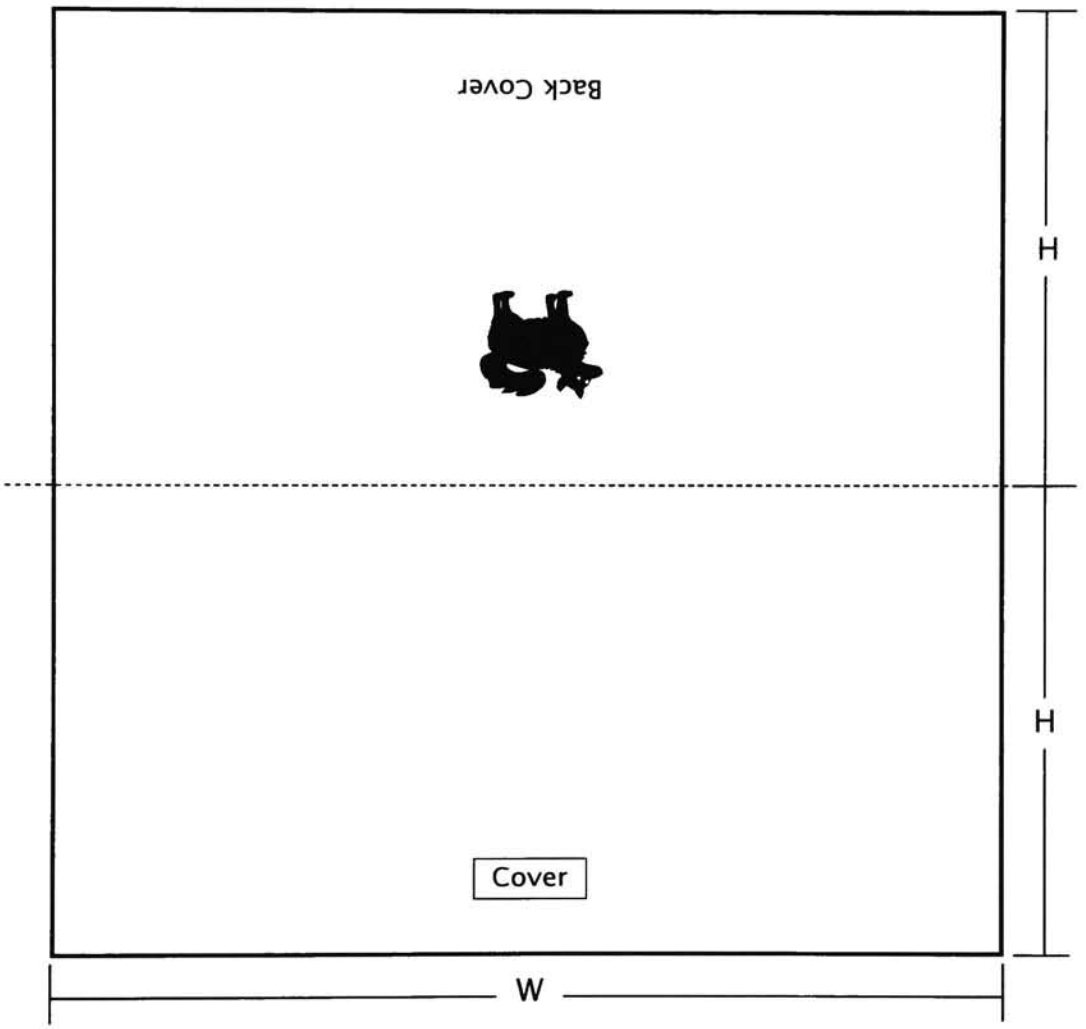
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

W: finished width
H: finished height
--- fold indication
upside-down



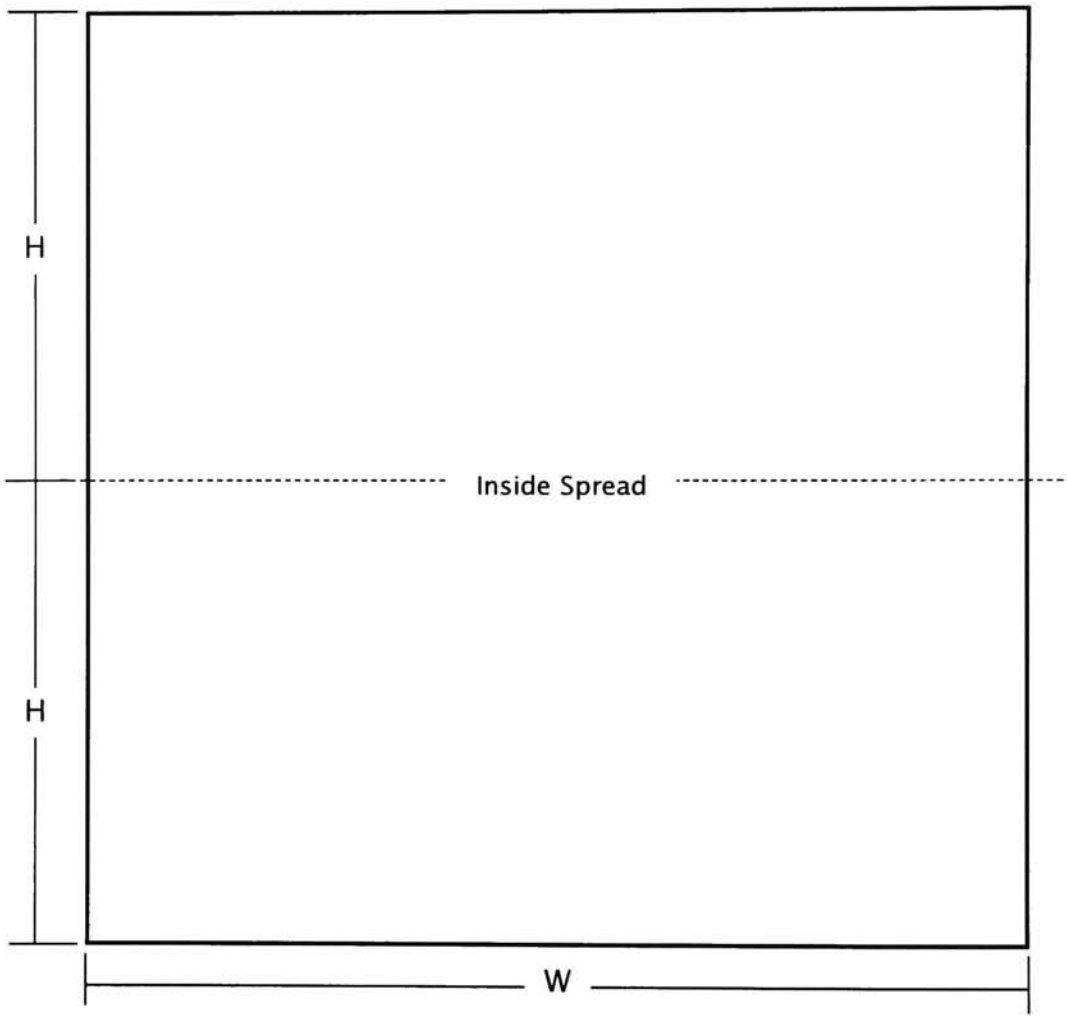
GETTING STARTED

Here's an example: If your finished size is 5 x 4, then your panels for page 1 of your digital document would be, from top, 4 inches and 4 inches, with a document width of 5 inches. This fold is symmetrical, so for page 2 the measurements are the same as page 1.

Remember: Document size and flat size must be the same, so in this case the document size would be 5 inches wide by 8 inches high.

Time-saving tip: For this particular folding style, the fold placement is exactly the same for page 1 as it is for page 2. If you're creating your document in a page layout program which has a master page option, save time by setting your folds on the master page. Then, return to the document and add the second page.

Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- If you are designing a large piece, or a piece which is meant to be self-standing, make sure to have a folding sample made up from your specified paper. If the paper is too lightweight, it could turn into a sagging flimsy piece.
- If your paper choice is any heavier than 80# text, you will want to consider scoring the piece. Ask your printer for a recommendation.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

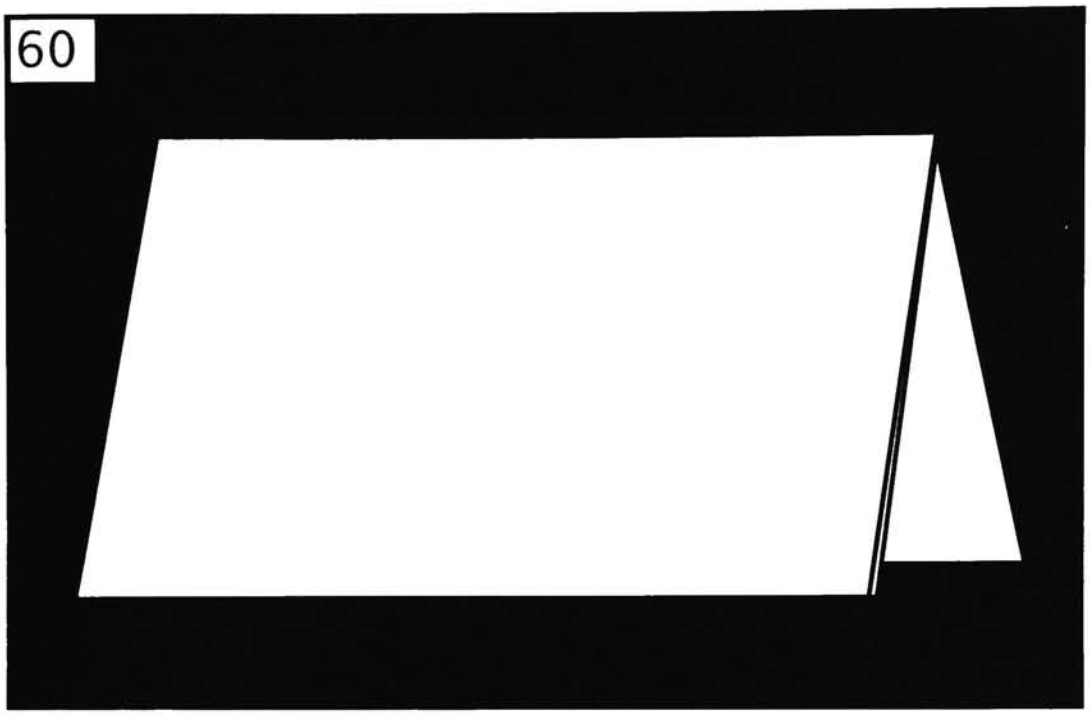
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

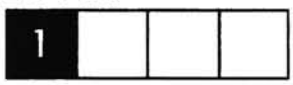
Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

8-PAGE TENT FOLD



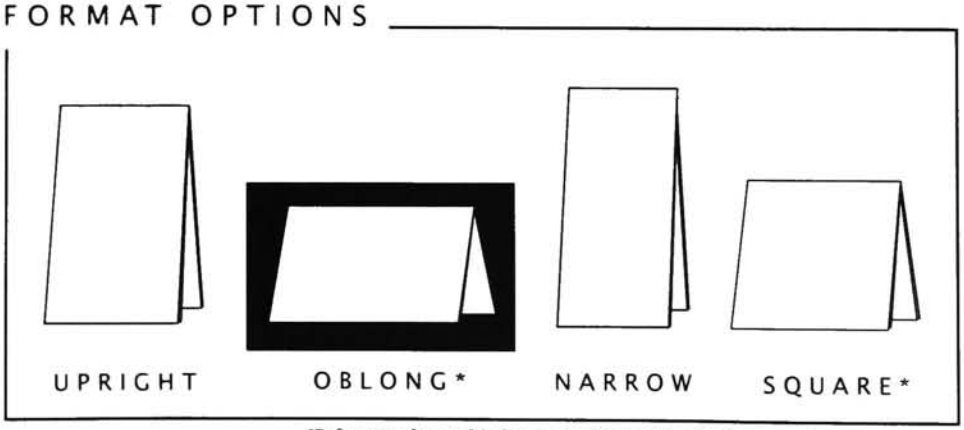
LEVEL



A level 1 fold is standard and basic, easy to set up on the folding machine and the machine can run at highest speeds.

The 8-page tent fold has the same characteristics as the standard tent fold, but the difference is that this fold has twice the area because it folds in half on itself before the tent folding is done.

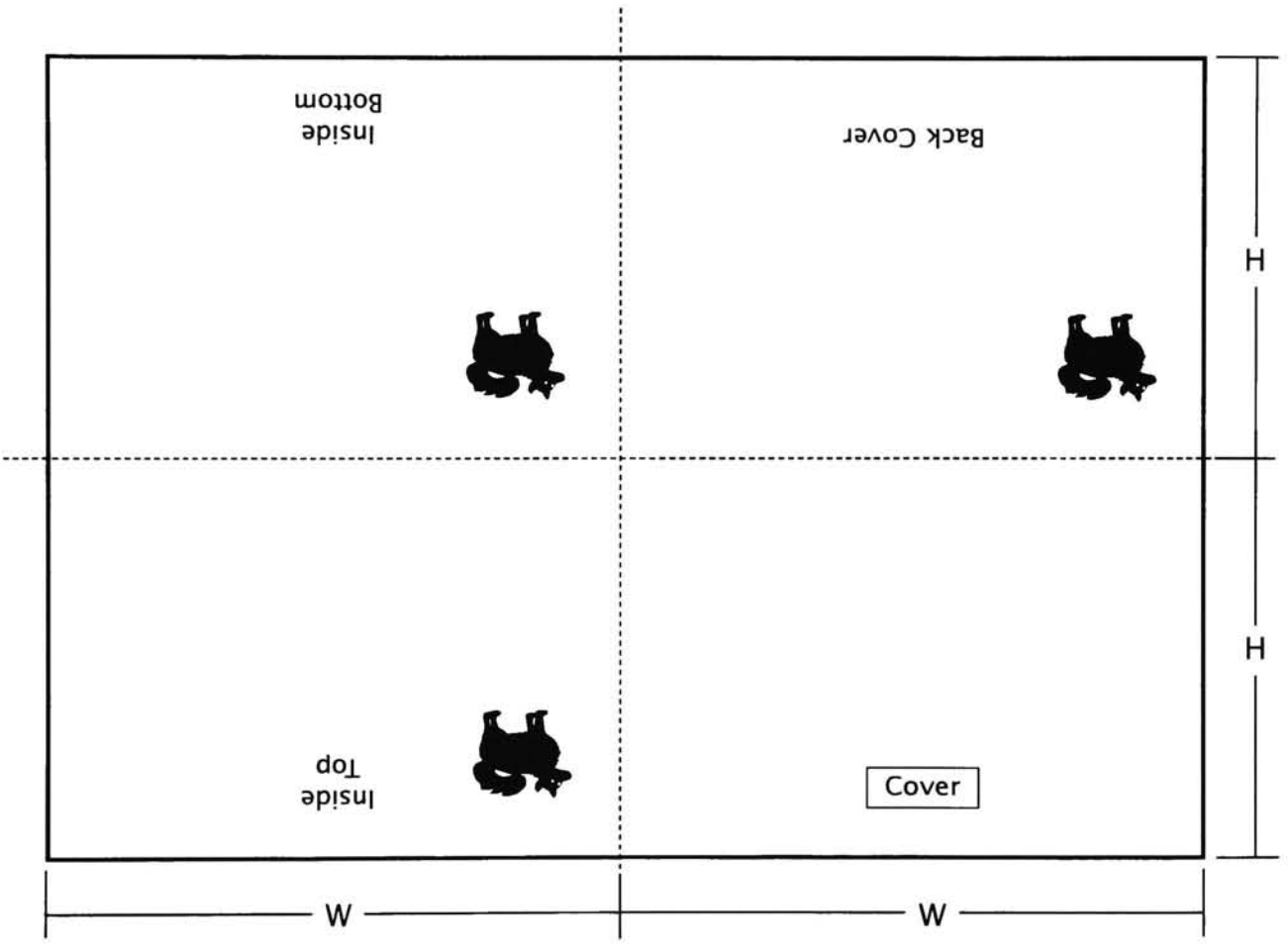
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

W: finished width
H: finished height
--- fold indication
upside-down

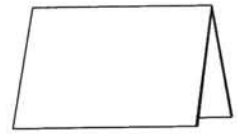


GETTING STARTED

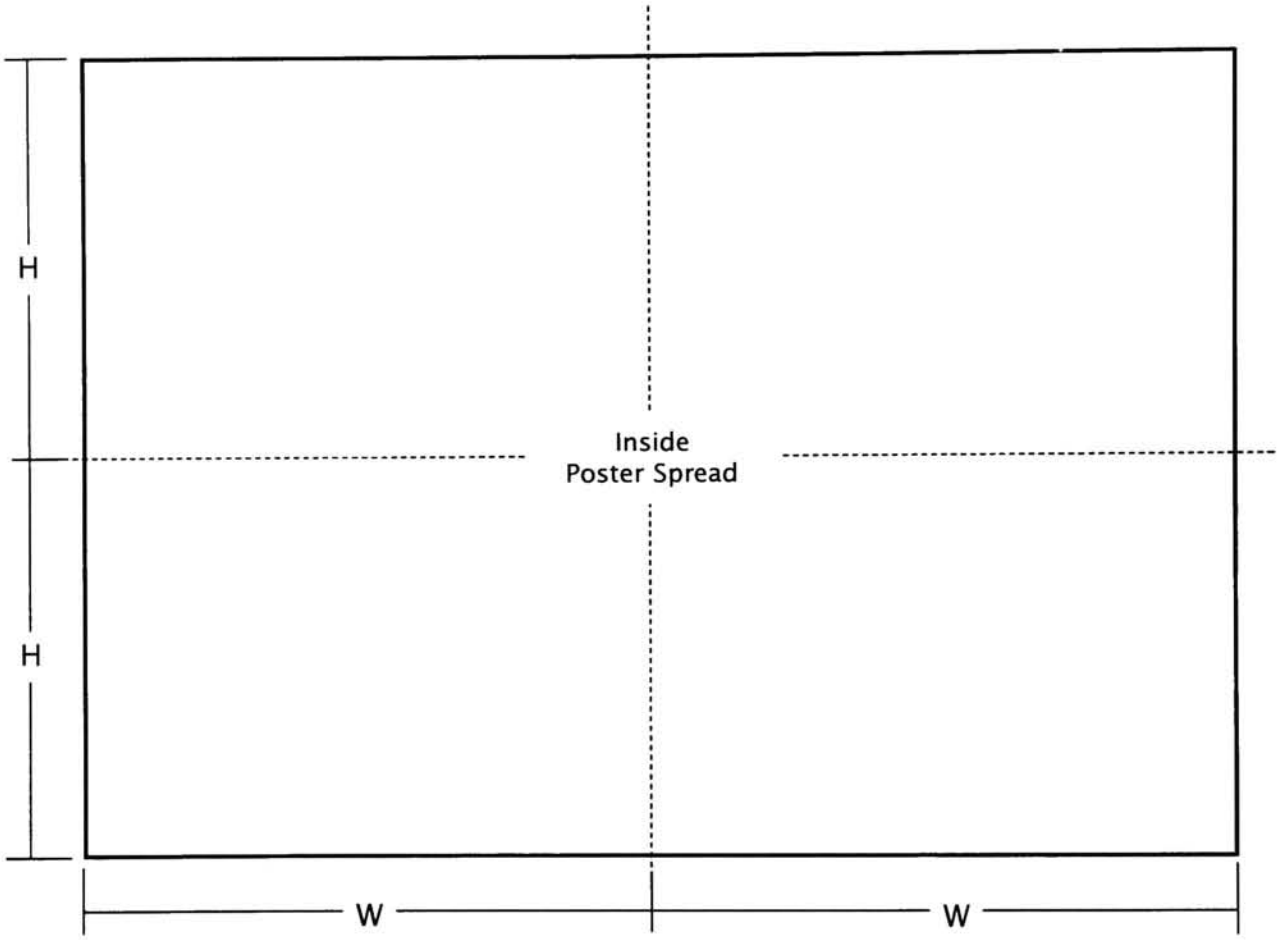
Here's an example: If your finished size is 5 x 4, then your panels for page 1 of your digital document would be, from left, 5 inches and 5 inches, with a document height of 8 inches (4 inches plus 4 inches). This fold is symmetrical, so for page 2 the measurements are the same as page 1.

Remember: Document size and flat size must be the same, so in this case the document size would be 10 inches wide by 8 inches high.

Time-saving tip: For this particular folding style, the fold placement is exactly the same for page 1 as it is for page 2. If you're creating your document in a page layout program which has a master page option, like QuarkXPress, save time by setting your folds on the master page. Then, return to the document and add the second page.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- If you are designing a self-mailing piece, this folding style could require wafer-seals to make it mail-ready. An envelope would be more attractive and cost-effective.
- Make sure to have a folding dummy made in your specified paper. Paper weight will dramatically affect the success of this piece. Watch for bulkiness and problems in the corner joints of the folds—the printer can't do anything about this, and it will require a change in paper.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

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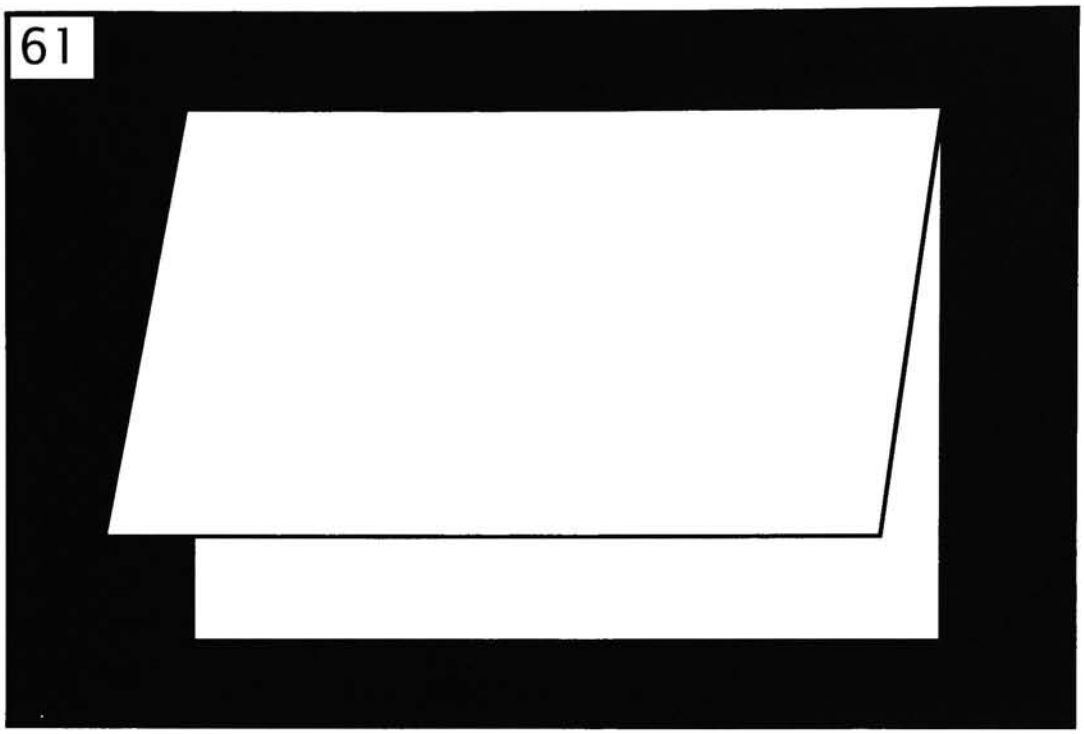
Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

TENT WITH SHORT FOLD

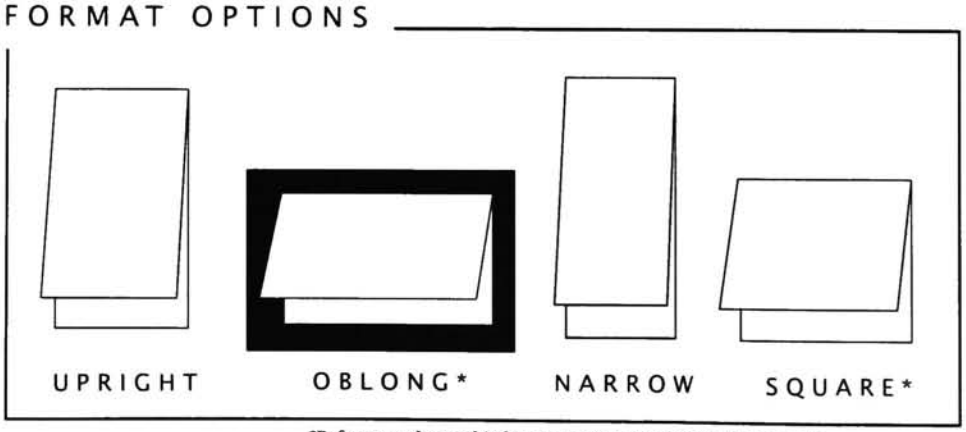


LEVEL

A level 1 fold is standard and basic, easy to set up on the folding machine and the machine can run at highest speeds.

The tent with short fold has the same characteristic folding style as the standard tent fold. What makes this fold different is that unlike a standard tent fold where panels are of equal length, in a "short tent" the front panel is shorter than the finished height.

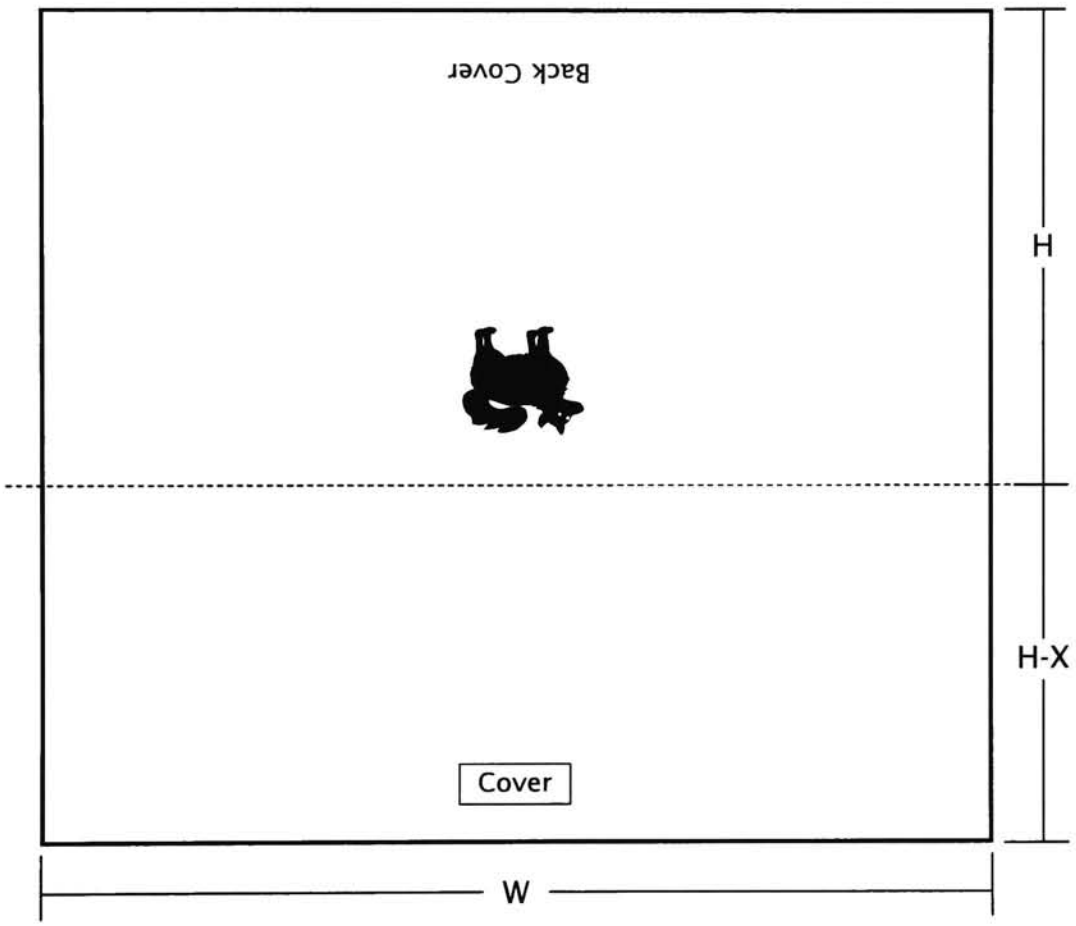
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

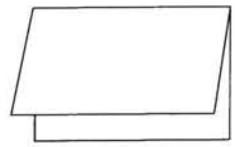
W: finished width
H: finished height
X: your choice
--- fold indication
upside-down



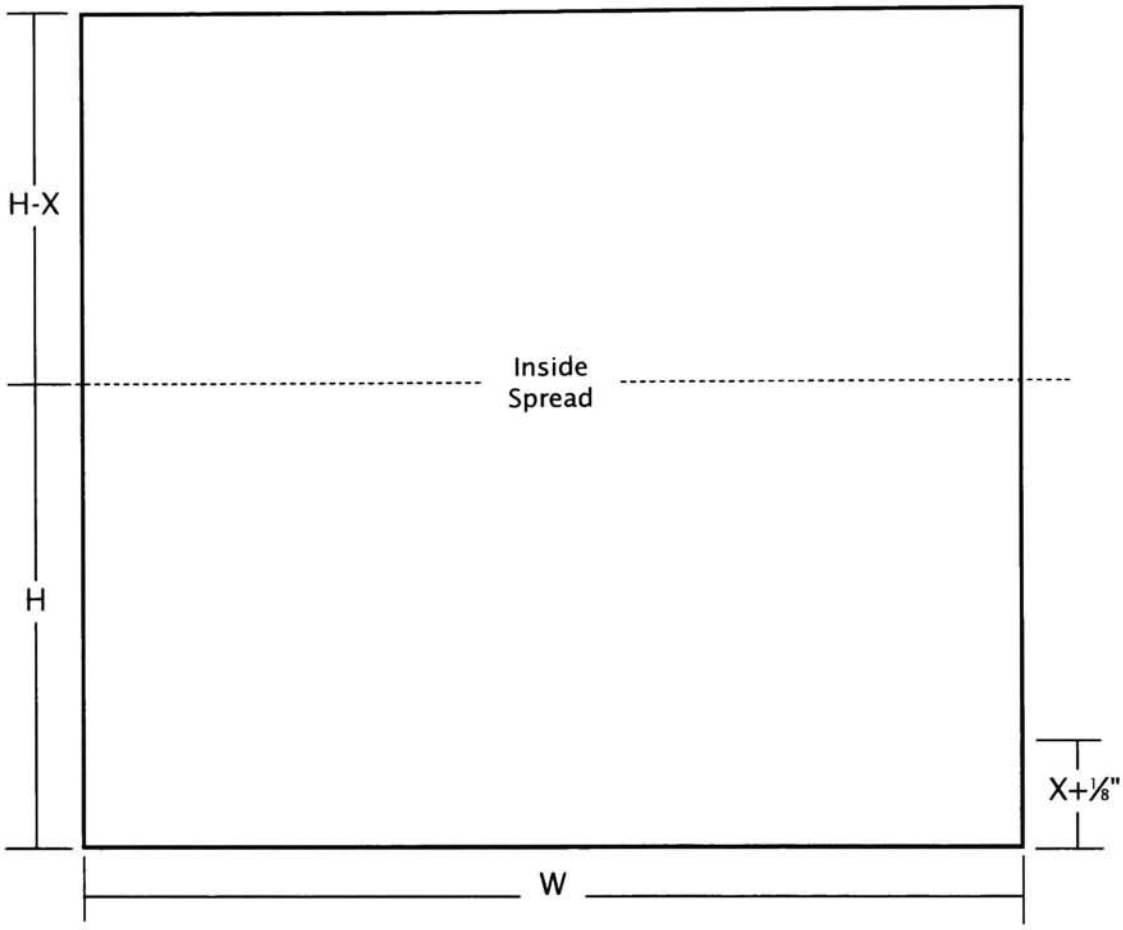
GETTING STARTED

Here's an example: For a short fold, the first thing we must determine is how short the short fold will be. In this case, we'll make it 1 inch shorter than the finished height, so X=1. Now we can calculate our document height. If the finished size is 6 x 4, then 4 inches plus 3 (4-1 , or height minus X) equals a document height of 7 inches. Our finished width is 6 inches, so the panels for page 1 of the digital document would be, from top, 4 inches and 3 inches. This fold is symmetrical, so for page 2 the measurements are the same as page 1.

Remember: Document size and flat size must be the same, so in this case the document size would be 6 inches wide by 7 inches high.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- If you are designing a large piece, or a piece which is meant to be self-standing, make sure to have a folding sample made up from your specified paper. If the paper is too lightweight, it could turn into a sagging flimsy piece.
- If your paper choice is any heavier than 80# text, you will want to consider scoring the piece. Ask your printer for a recommendation.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

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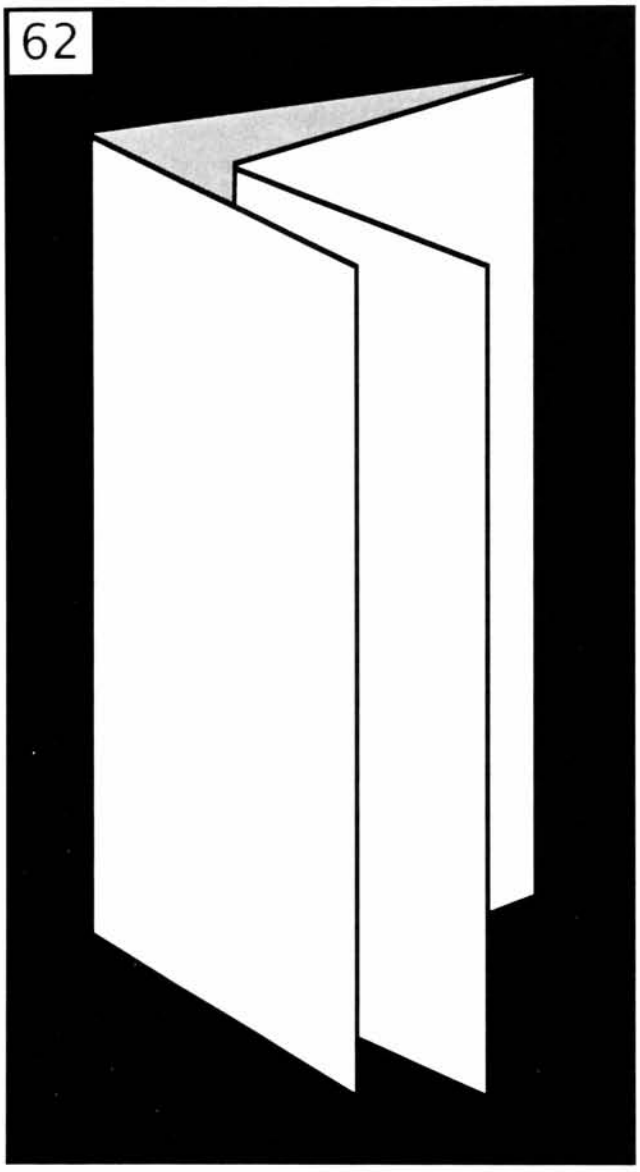
Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

DOUBLE PARALLEL



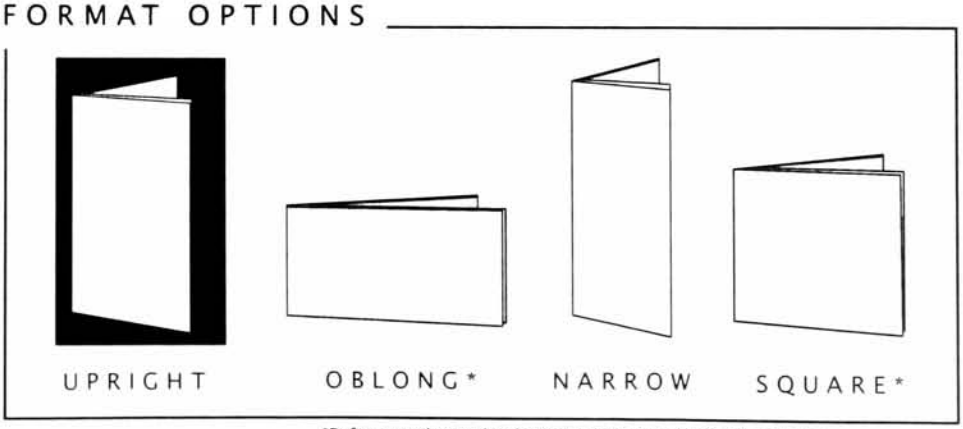
LEVEL

1

A level 1 fold is standard and basic, easy to set up on the folding machine and the machine can run at highest speeds.

There are many members of the parallel folding family, the next of which is the double parallel fold. The basic characteristic of the parallel fold is that the panels always remain parallel to each other no matter how many times the piece is folded. In this case, the double parallel consists two main folds and four panels which are parallel to each other.

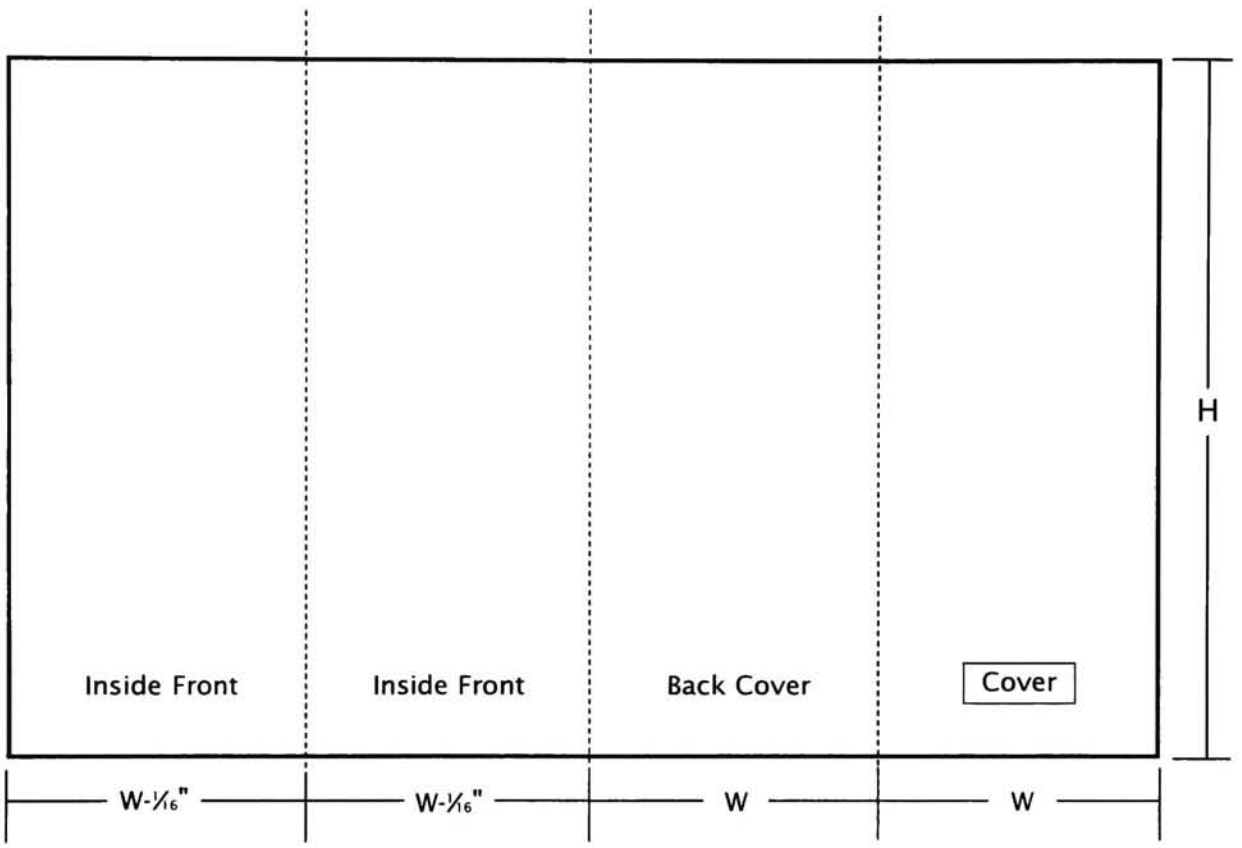
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

W: finished width
H: finished height
--- fold indication

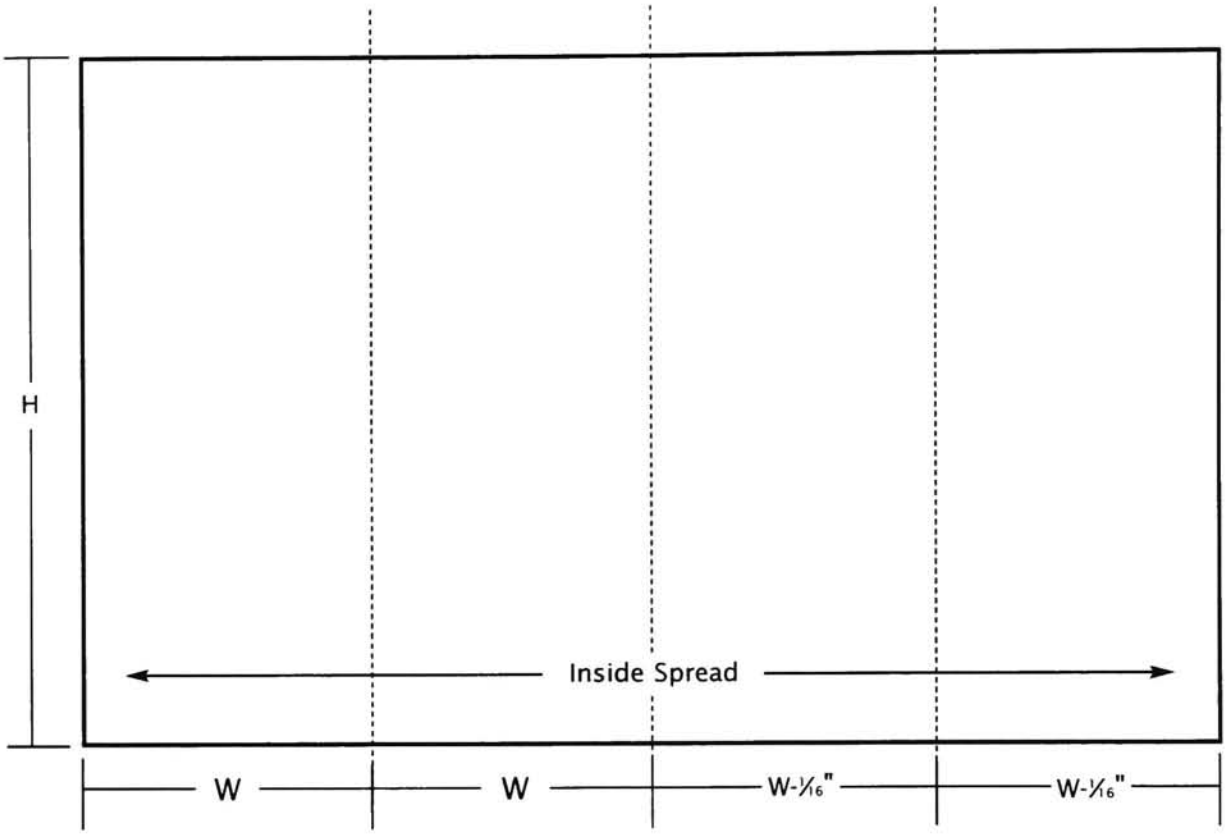


GETTING STARTED

Here's an example: If your finished size is 5 x 8, then your panels for page 1 of your digital document would be, from left, 4 15/16 inches, 4 15/16 inches, 5 inches and 5 inches. Then for page two everything reverses, so from left your panels would measure 5 inches, 5 inches, 4 15/16 inches and 4 15/16 inches, with a height of 8 inches.

Remember: Document size and flat size must be the same, so in this case the document size would be 19 7/8 (19.875) inches wide by 8 inches high.

Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- If you are designing a large piece, or a piece which is meant to be self-standing, make sure to have a folding sample made up from your specified paper. If the paper is too lightweight, it could turn into a sagging flimsy piece.
- If your paper choice is any heavier than 80# text, you will want to consider scoring the piece. Ask your printer for a recommendation.
- If you are designing a self-mailing piece, this folding style could require a wafer-seal to make it mail-ready.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document width ahead of time. Create your document as if all panels will be the same (ex: for a double parallel with a finished size of 5 x 8, set the document size to 20 x 8). Then set crosshairs to upper left corner of document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, 4 15/16 inches). Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement (4 15/16). Repeat for the last 2 panels (5 inches and 5 inches). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Just change your document size by entering that decimal measurement (19.875). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

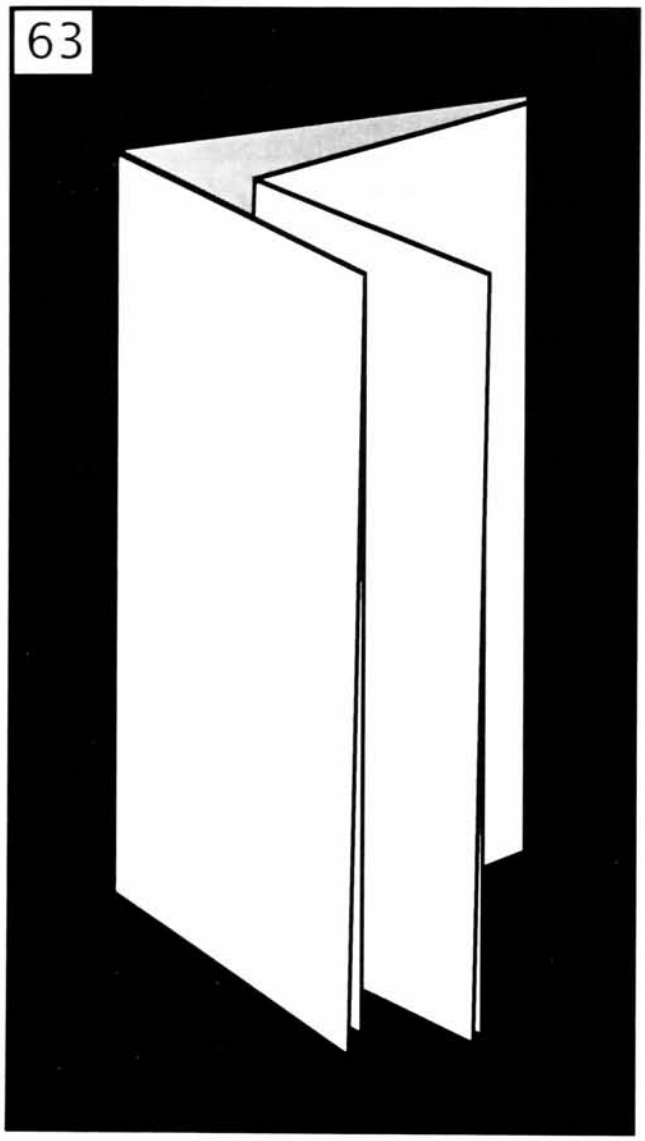
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

BROADSIDE DOUBLE PARALLEL

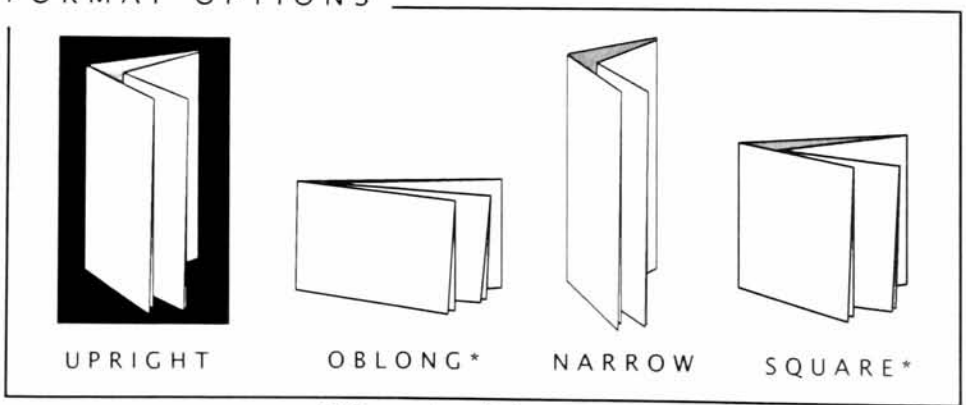


LEVEL

A level 2 fold has a moderate makeready, possible slower speed on the folding machine, and could have some special considerations.

The broadside double parallel fold has the same characteristics as the standard double parallel fold, but the difference is that this fold has twice the area because it folds in half on itself before the parallel folding is done.

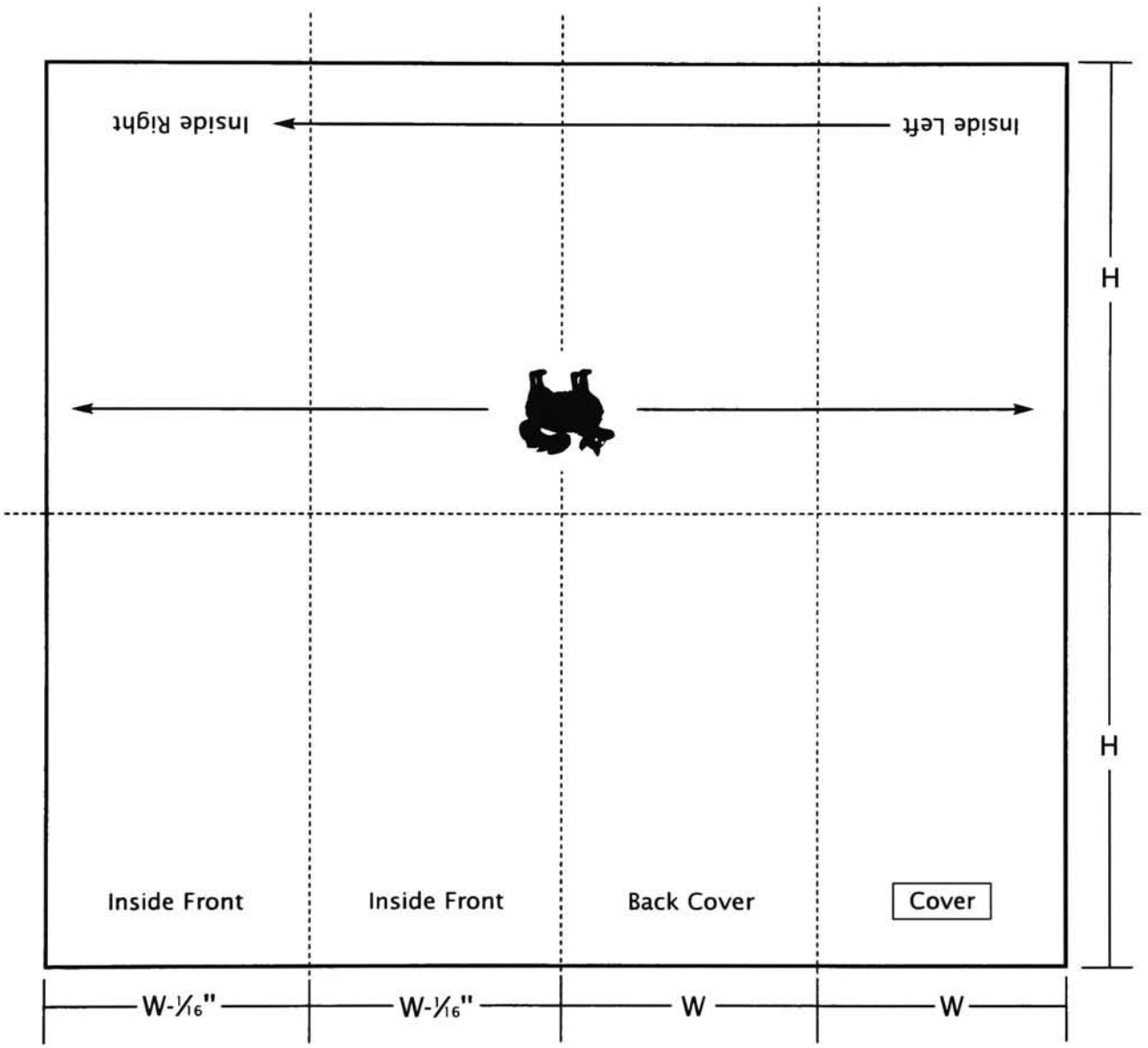
FORMAT OPTIONS



*Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

W: finished width
H: finished height
--- fold indication
upside-down

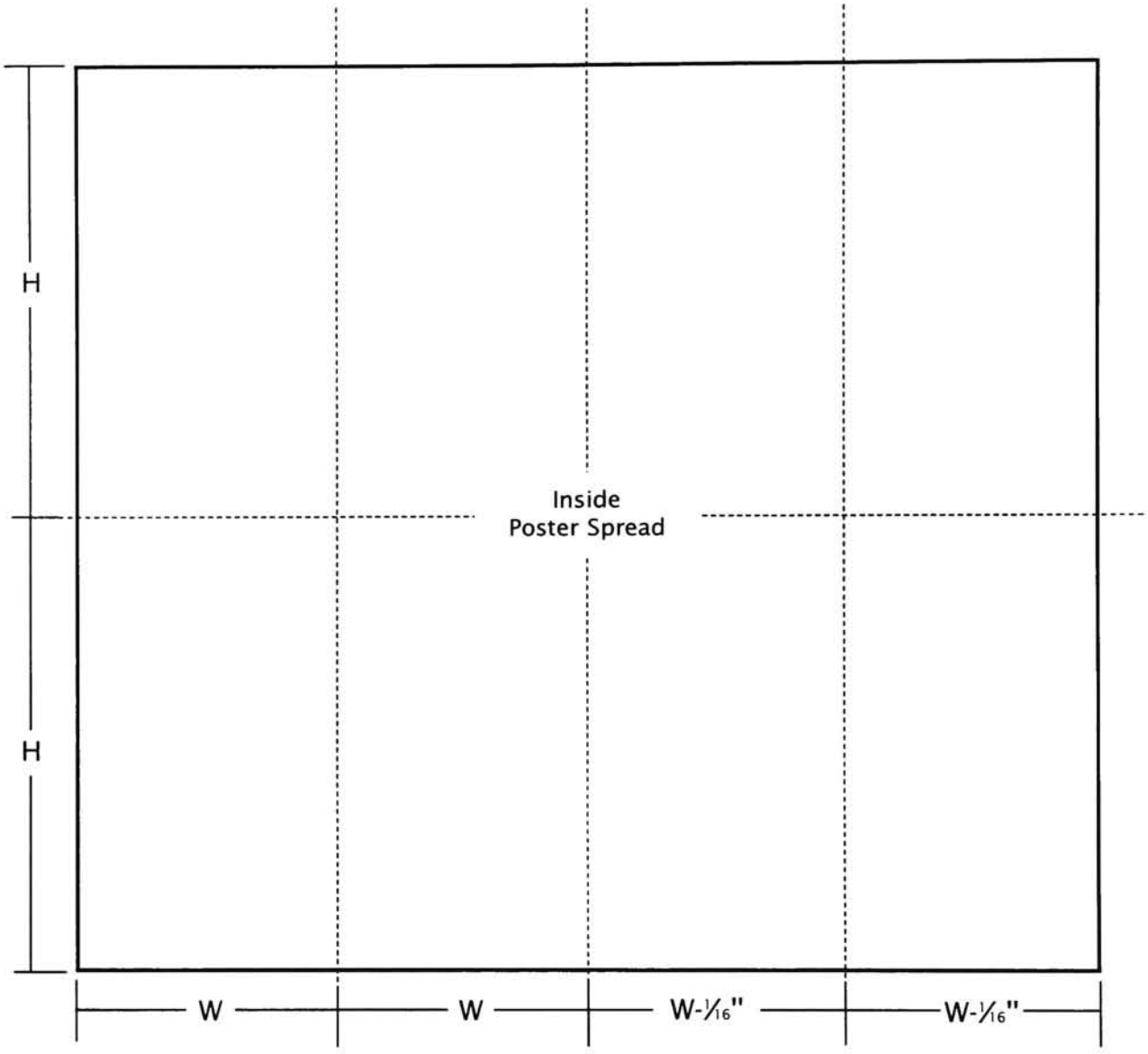


GETTING STARTED

Here's an example: If your finished size is 5 x 8, then your panels for page 1 of your digital document would be, from left, 4 15/16 inches, 4 15/16 inches, 5 inches and 5 inches. Then for page two everything reverses, so from left your panels would measure 5 inches, 5 inches, 4 15/16 inches and 4 15/16 inches, with a height of 16 inches (8 inches plus 8 inches).

Remember: Document size and flat size must be the same, so in this case the document size would be 19 7/8 (19.875) wide by 16 inches high.

Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- If you are designing a self-mailing piece, this folding style could require wafer-seals to make it mail-ready. An envelope would be more attractive and cost-effective.
- Make sure to have a folding dummy made in your specified paper. Paper weight will dramatically affect the success of this piece. Watch for bulkiness and problems in the corner joints of the folds—the printer can't do anything about this, and it will require a change in paper.

A Tip for Measuring Panels:

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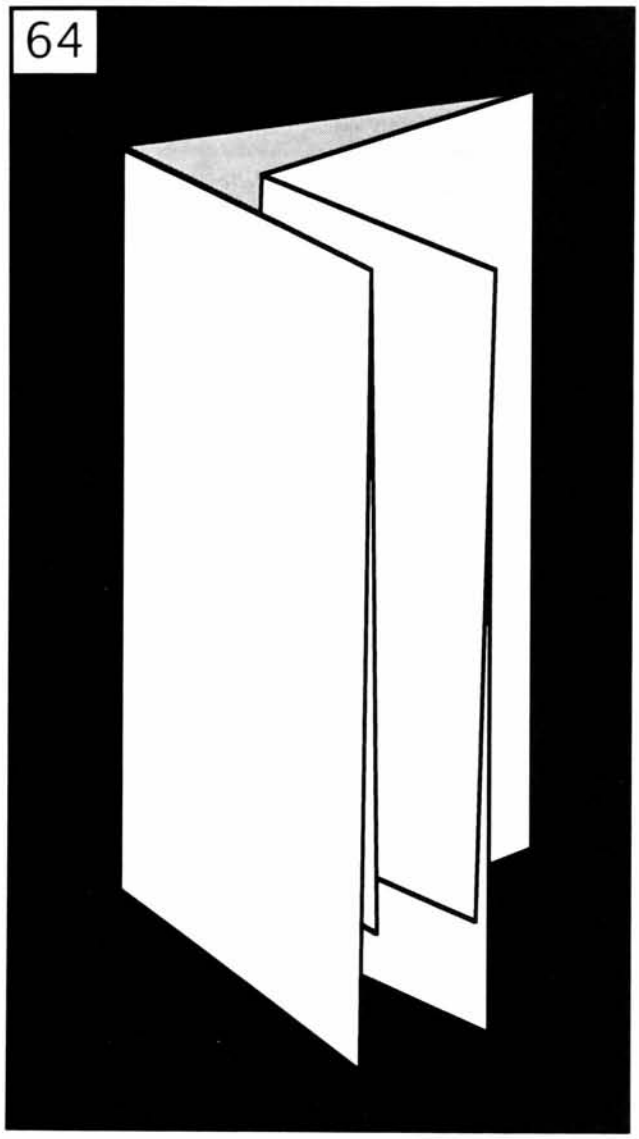
NOTES:

DOUBLE PARALLEL WITH SHORT FOLD (INSIDE)

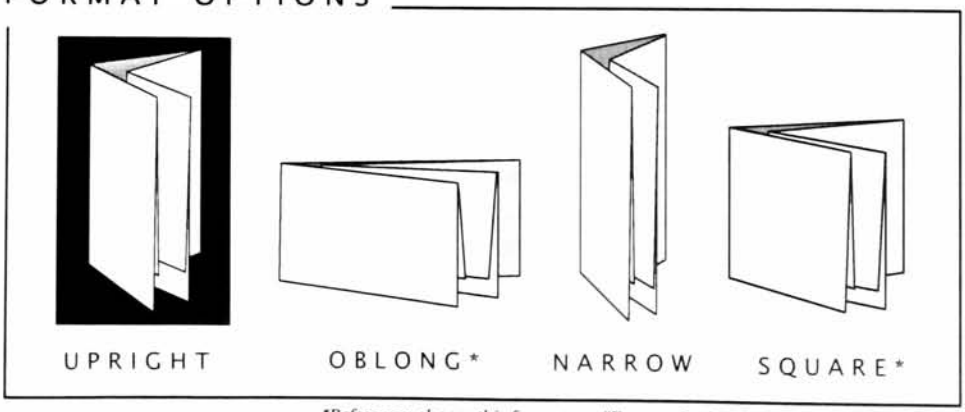


LEVEL

A level 2 fold has a moderate makeready, possible slower speed on the folding machine, and could have some special considerations.

The double parallel with short fold inside has the same characteristic folding style as the double parallel fold, and is similar to the broadside double parallel fold because it folds in half on itself before the parallel folding is done. What makes this fold different is that unlike a broadside fold where panels are of equal length, in a short fold the fold-over panels are shorter than the finished height.

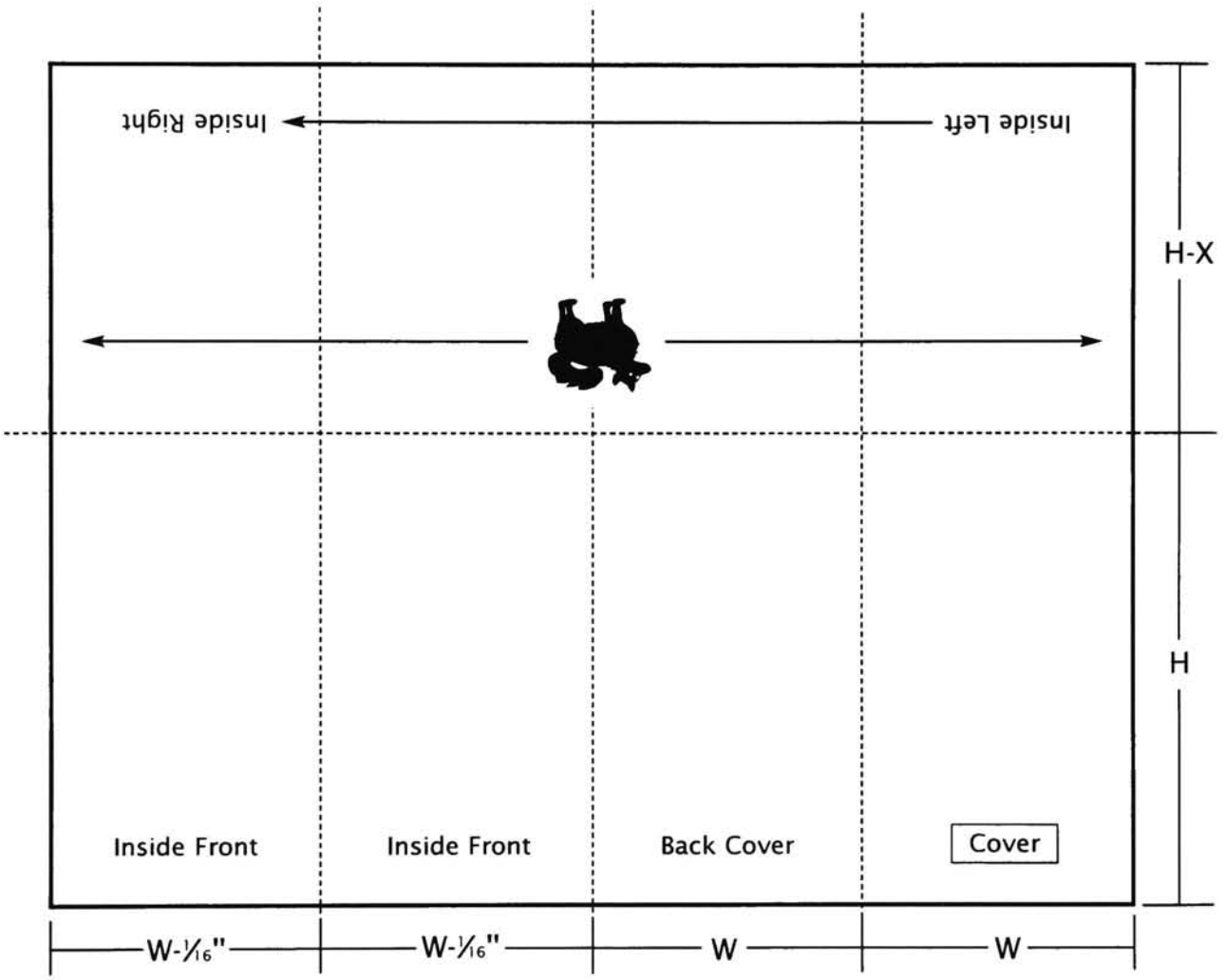
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

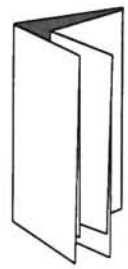
W: finished width
H: finished height
X: your choice
--- fold indication
upside-down



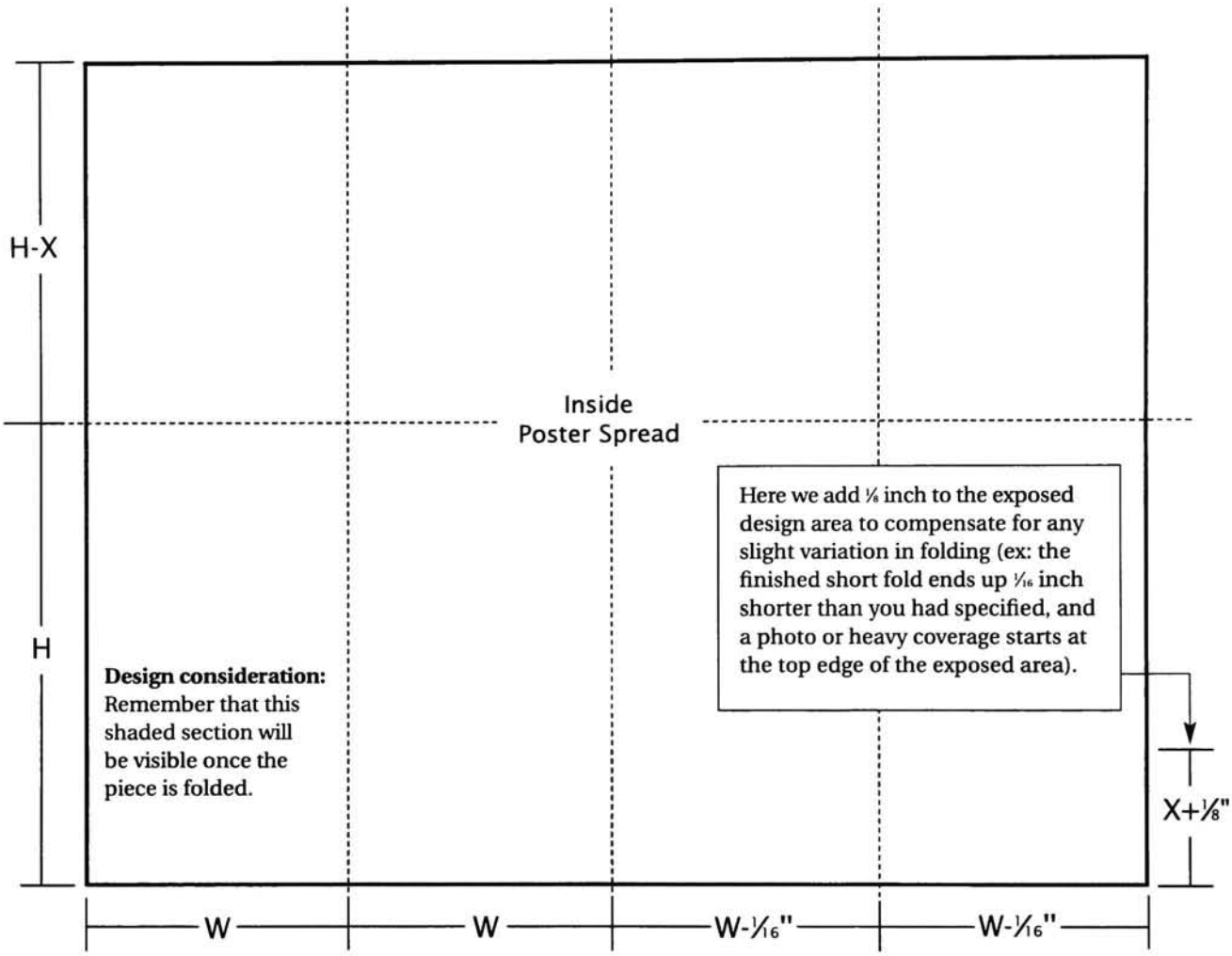
GETTING STARTED

Here's an example: For a short fold, the first thing we must determine is how short the short fold will be. In this case, we'll make it 2 inches shorter than the finished height, so X=2. Now we can calculate our document height. If the finished size is 5 x 8, then 8 inches plus 6 (8-2 , or height minus X) equals a document height of 14 inches. Our finished width is 5 inches, so the panels for page 1 of the digital document would be, from left, 4 15/16 inches, 4 15/16 inches, 5 inches and 5 inches. Then for page two everything reverses, so from left your panels would measure 5 inches, 5 inches, 4 15/16 inches and 4 15/16 inches.

Remember: Document size and flat size must be the same, so in this case the document size would be 19 7/8 (19.875) inches wide by 14 inches high.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- If you are designing a self-mailing piece, this folding style could require wafer-seals to make it mail-ready. An envelope would be more attractive and cost-effective.
- Make sure to have a folding dummy made in your specified paper. Paper weight will dramatically affect the success of this piece. Watch for bulkiness and problems in the corner joints of the folds—the printer can't do anything about this, and it will require a change in paper.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document width ahead of time. Create your document as if all panels will be the same (ex: for a double parallel with short fold with a finished size of 5 x 8, set the document size to 20 x 14). Then set crosshairs to upper left corner of document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, 4 15/16 inches). Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement (4 15/16). Repeat for the last 2 panels (5 inches and 5 inches). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Just change your document size by entering that decimal measurement (19.875). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

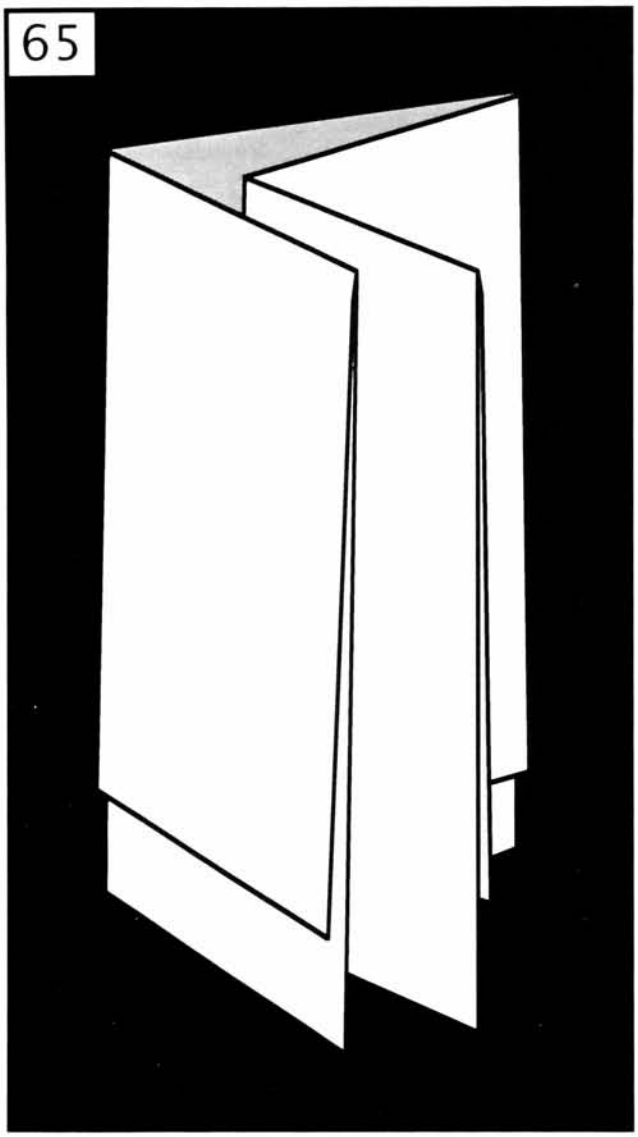
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

DOUBLE PARALLEL WITH SHORT FOLD (OUTSIDE)

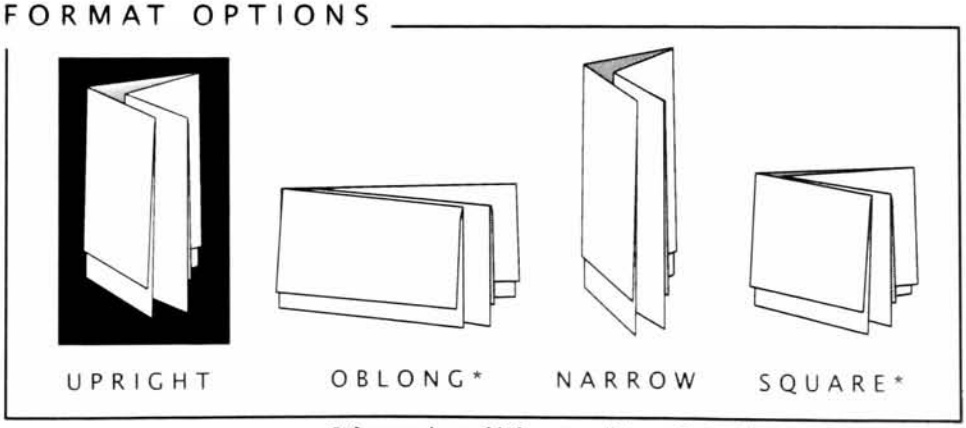


LEVEL

A level 2 fold has a moderate makeready, possible slower speed on the folding machine, and could have some special considerations.

The double parallel with short fold outside has the same characteristic folding style as the double parallel fold, and is similar to the broadside double parallel fold because it folds in half on itself before the parallel folding is done. What makes this fold different is that unlike a broadside fold where panels are of equal length, in a short fold the fold-over panels are shorter than the finished height.

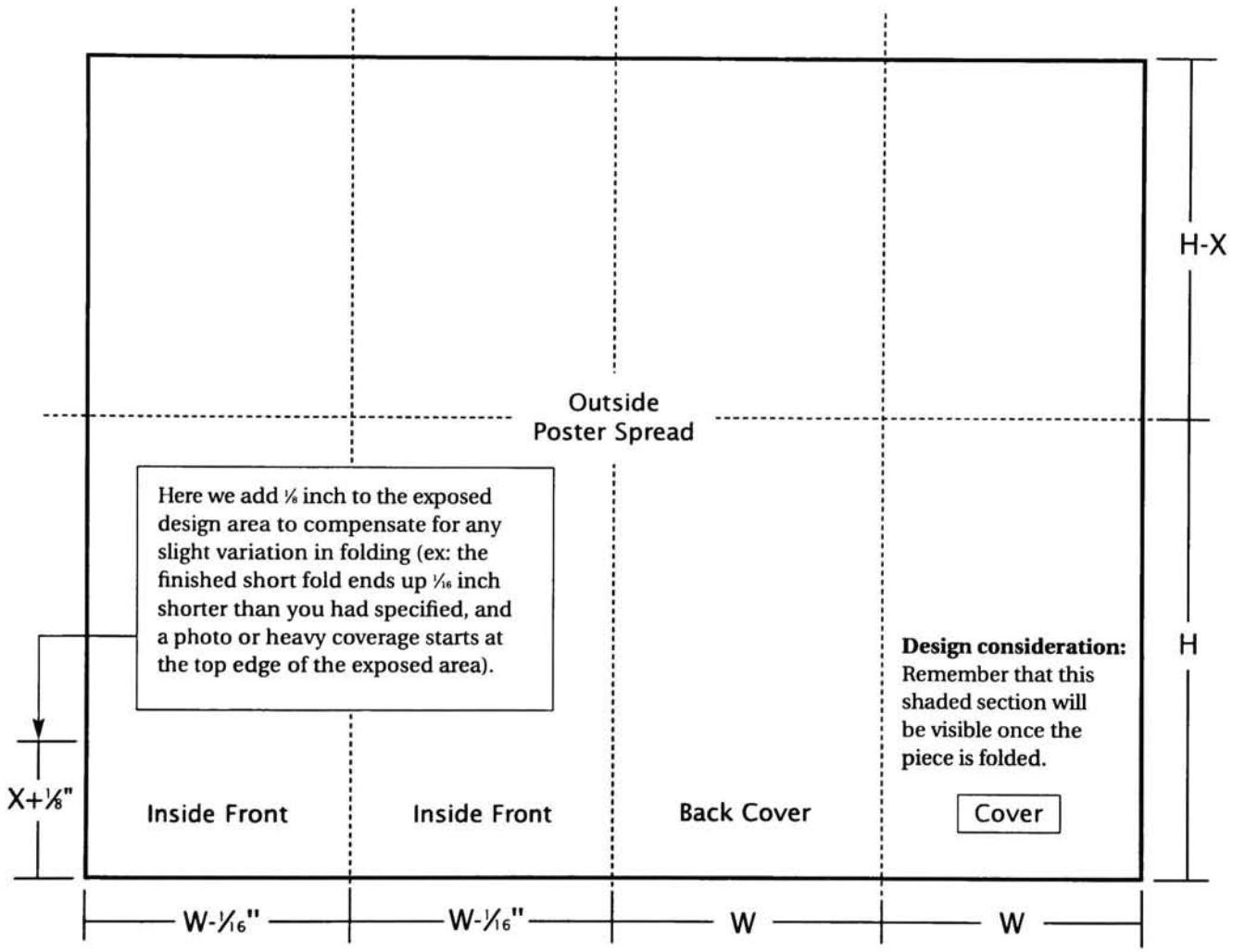
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

W: finished width
H: finished height
X: your choice
--- fold indication
upside-down

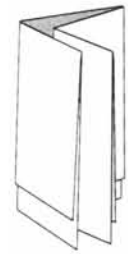


GETTING STARTED

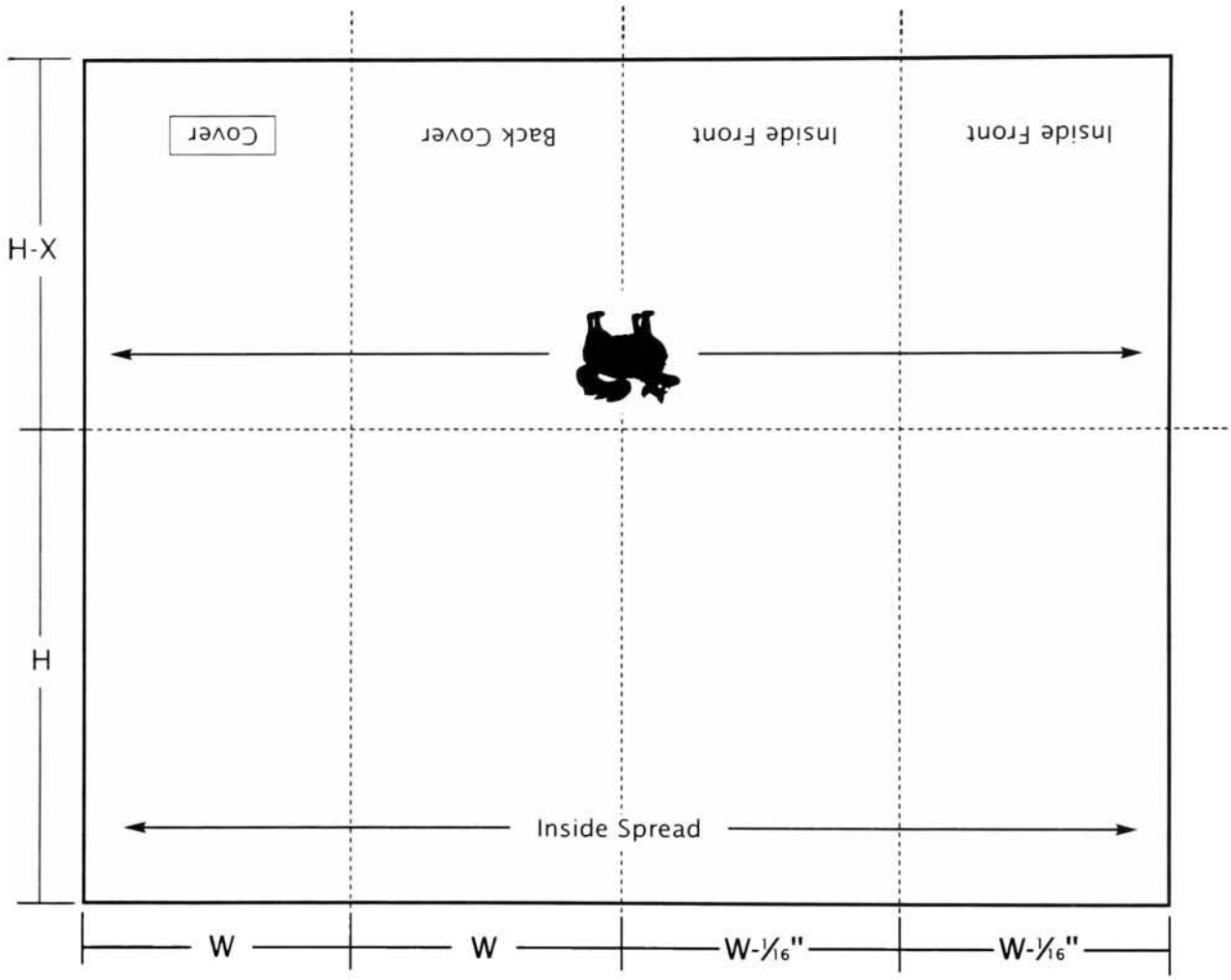
Here's an example: For a short fold, the first thing we must determine is how short the short fold will be. In this case, we'll make it 2 inches shorter than the finished height, so X=2. Now we can calculate our document height. If the finished size is 5 x 8, then 8 inches plus 6 (8-2 , or height minus X) equals a document height of 14 inches. Our finished width is 5 inches, so the panels for page 1 of the digital document would be, from left, 4 15/16 inches, 4 15/16 inches, 5 inches and 5 inches.

Then for page two everything reverses, so from left your panels would measure 5 inches, 5 inches, 4 15/16 inches and 4 15/16 inches.

Remember: Document size and flat size must be the same, so in this case the document size would be 19 7/8 (19.875) inches wide by 14 inches high.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- If you are designing a self-mailing piece, this folding style could require wafer-seals to make it mail-ready. An envelope would be more attractive and cost-effective.
- Make sure to have a folding dummy made in your specified paper. Paper weight will dramatically affect the success of this piece. Watch for bulkiness and problems in the corner joints of the folds—the printer can't do anything about this, and it will require a change in paper.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document width ahead of time. Create your document as if all panels will be the same (ex: for a double parallel with short fold with a finished size of 5 x 8, set the document size to 20 x 14). Then set crosshairs to upper left corner of document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, 4 15/16 inches). Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement (4 15/16). Repeat for the last 2 panels (5 inches and 5 inches). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Just change your document size by entering that decimal measurement (19.875). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

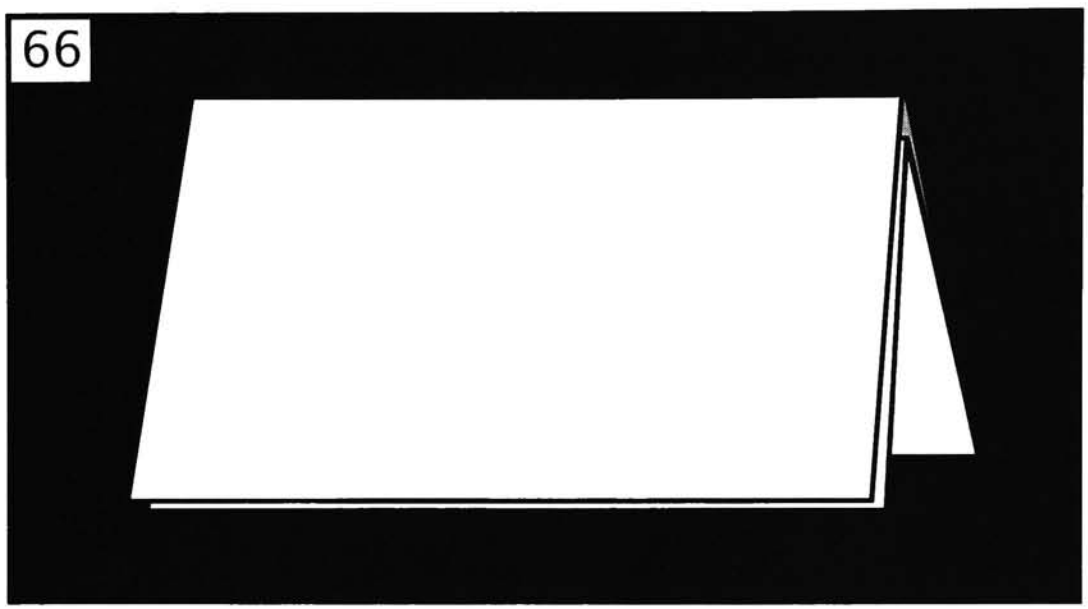
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

DOUBLE PARALLEL VERTICAL



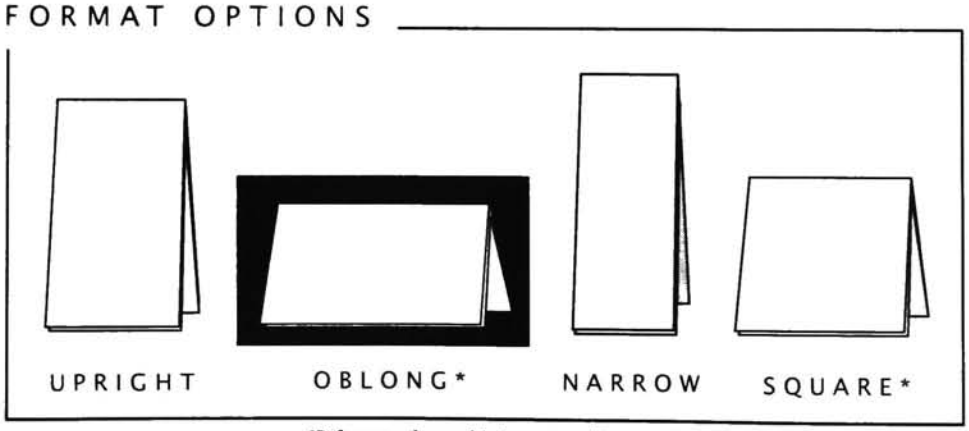
LEVEL

1	–		

A level 1 fold is standard and basic, easy to set up on the folding machine and the machine can run at highest speeds.

The vertical double parallel fold is a variation of the double parallel fold. What makes it different is that the parallel folding is horizontal instead of vertical, so it opens down instead of out to the side.

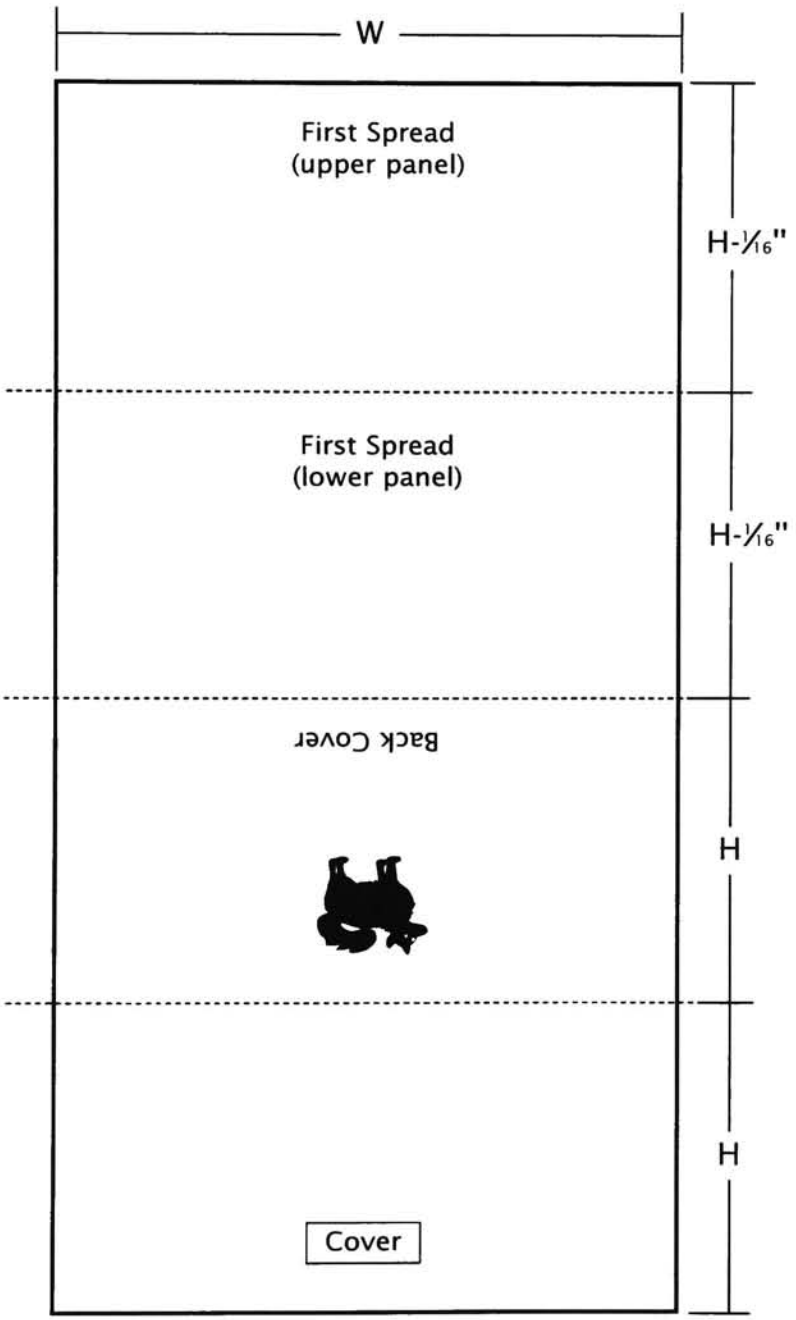
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

W: finished width
H: finished height
--- fold indication
upside-down



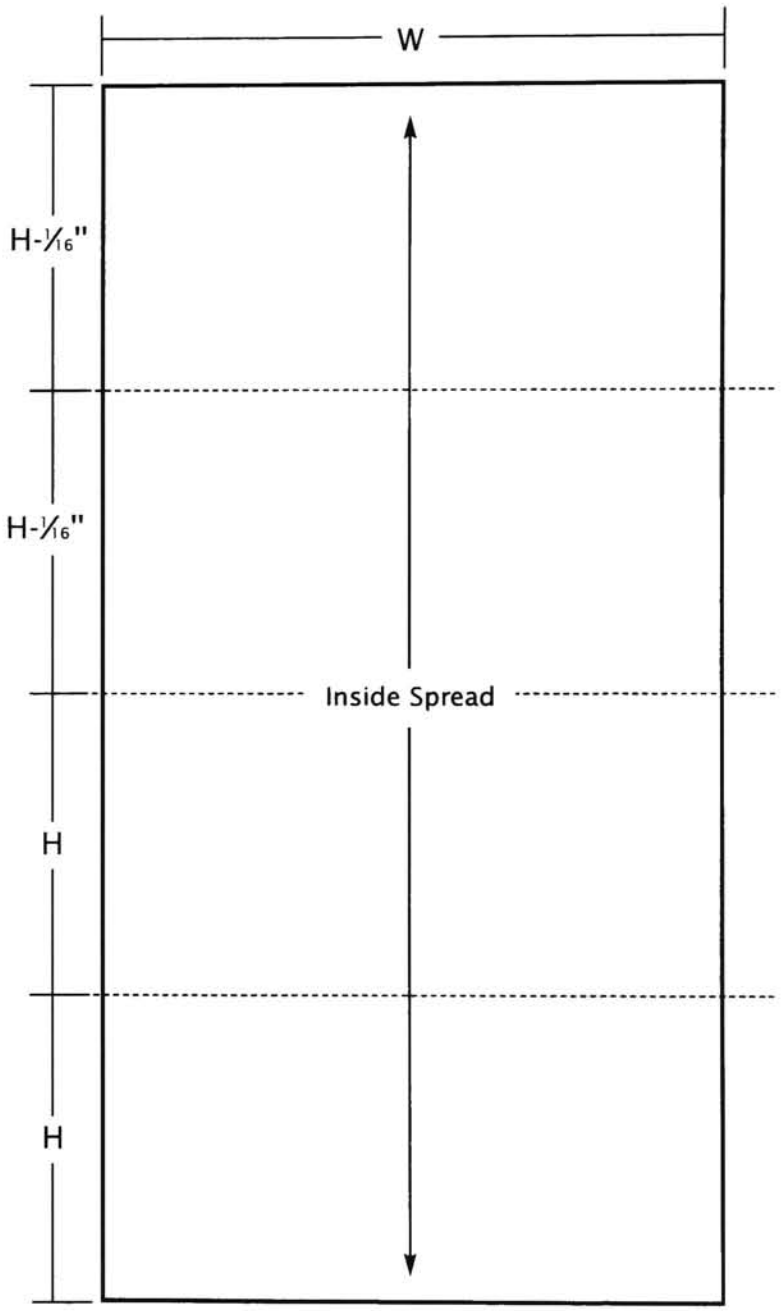
GETTING STARTED

Here's an example: If your finished size is 6 x 5, then your panels for page 1 of your digital document would be, from top, 4 15/16 inches, 4 15/16 inches, 5 inches and 5 inches, with a width of 6 inches. This document flips laterally, and therefore page 2 measures exactly the same as page 1.

Remember: Document size and flat size must be the same, so in this case the document size would be 6 inches wide by 19 7/8 (19.875) inches high.

Time-saving tip: For this particular folding style, the fold placement is exactly the same for page 1 as it is for page 2. If you're creating your document in a page layout program which has a master page option, like QuarkXPress, save time by setting your folds on the master page. Then, return to the document and add the second page.

Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- If you are designing a large piece, or a piece which is meant to be self-standing, make sure to have a folding sample made up from your specified paper. If the paper is too lightweight, it could turn into a sagging flimsy piece.
- If your paper choice is any heavier than 80# text, you will want to consider scoring the piece. Ask your printer for a recommendation.
- If you are designing a self-mailing piece, this folding style could require a wafer-seal to make it mail-ready.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document height ahead of time. Create your document as if all panels will be the same (ex: for a vertical double parallel with a finished size of 6 x 5, set the document size to 6 x 20). Then set crosshairs to upper left corner of document, pull down a guide bar from the top ruler and set it to the length of your first panel (in this example, 4 15/16 inches). Then, bring the cross-hairs down to the guide you just set (which lets you measure from zero again) and drag your guide down to the next panel measurement (4 15/16). Repeat for the last 2 panels (5 inches and 5 inches). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the Y measurement, that will give you the document length you are looking for. Just change your document size by entering that decimal measurement (19.875). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

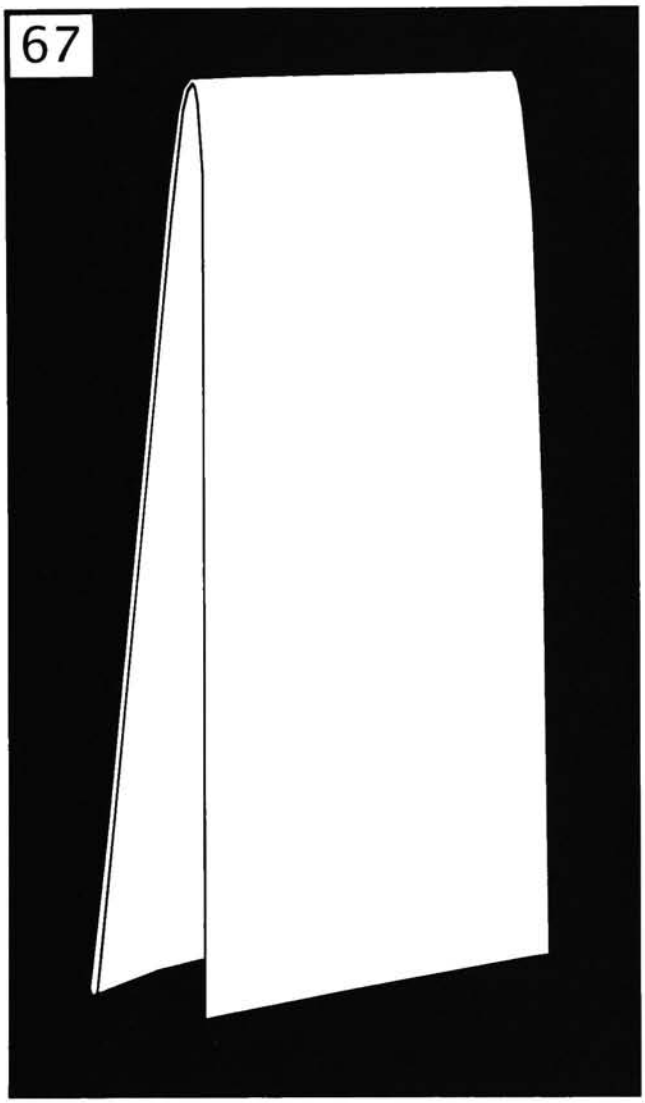
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

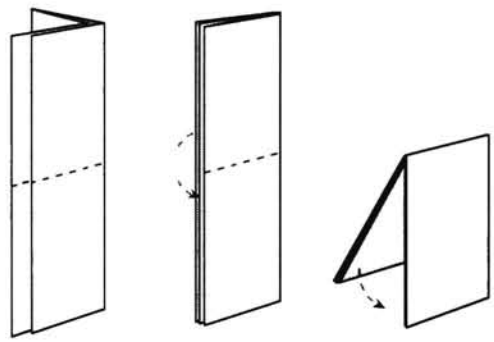
Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

TOP-FOLDING DOUBLE PARALLEL



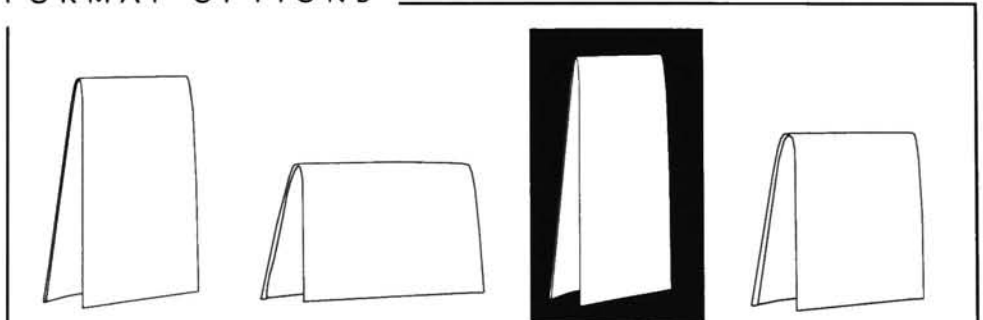


LEVEL

A level 3 fold has a long and difficult makeready, could require special machinery and low folding speed. These issues will be reflected in the cost.

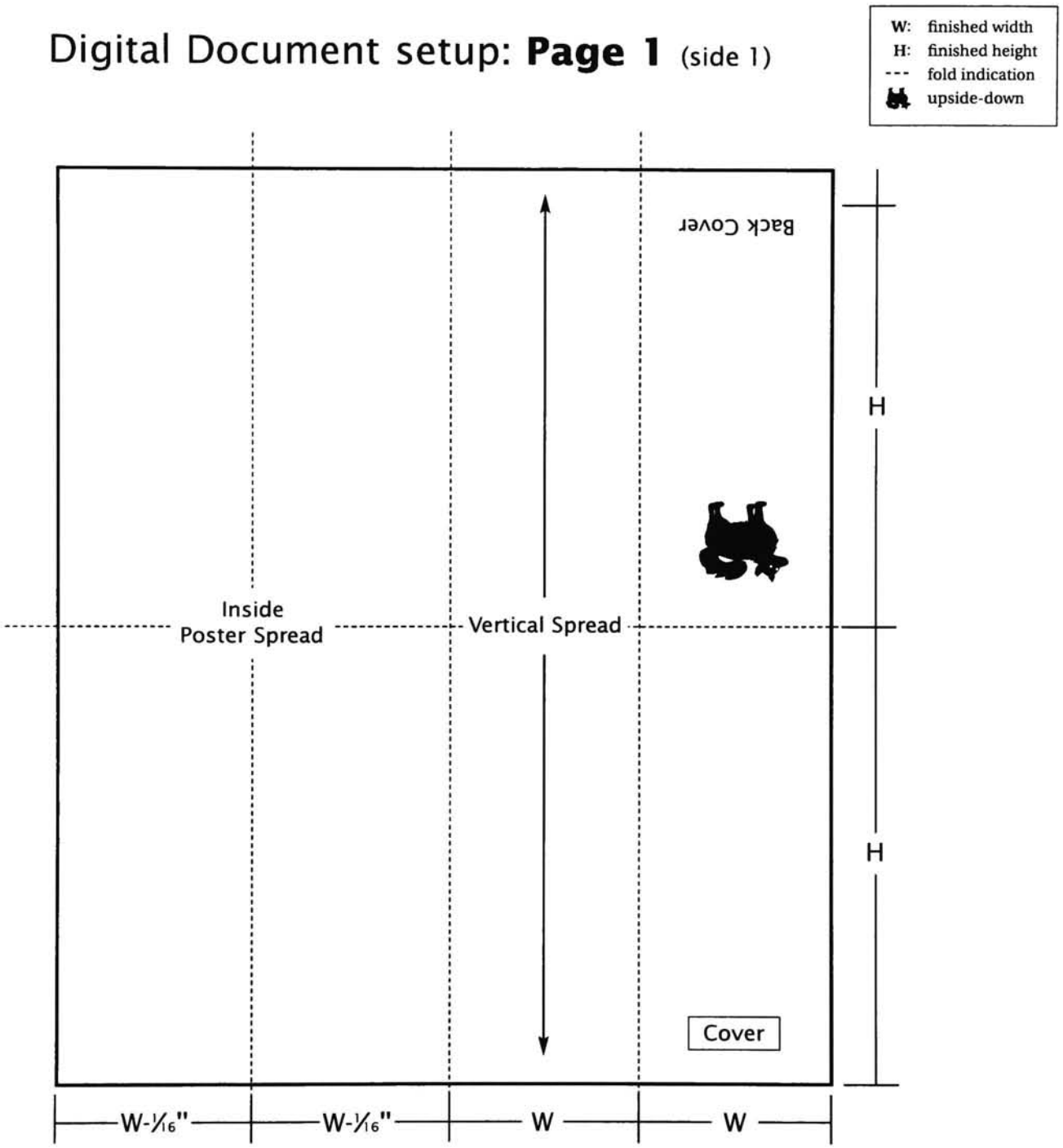
The top-folding reverse map consists of the same characteristic folding style as the reverse map fold, but in a taller format. When the map folding is done, this style then folds in half onto itself.

FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

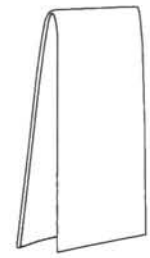
Digital Document setup: **Page 1** (side 1)



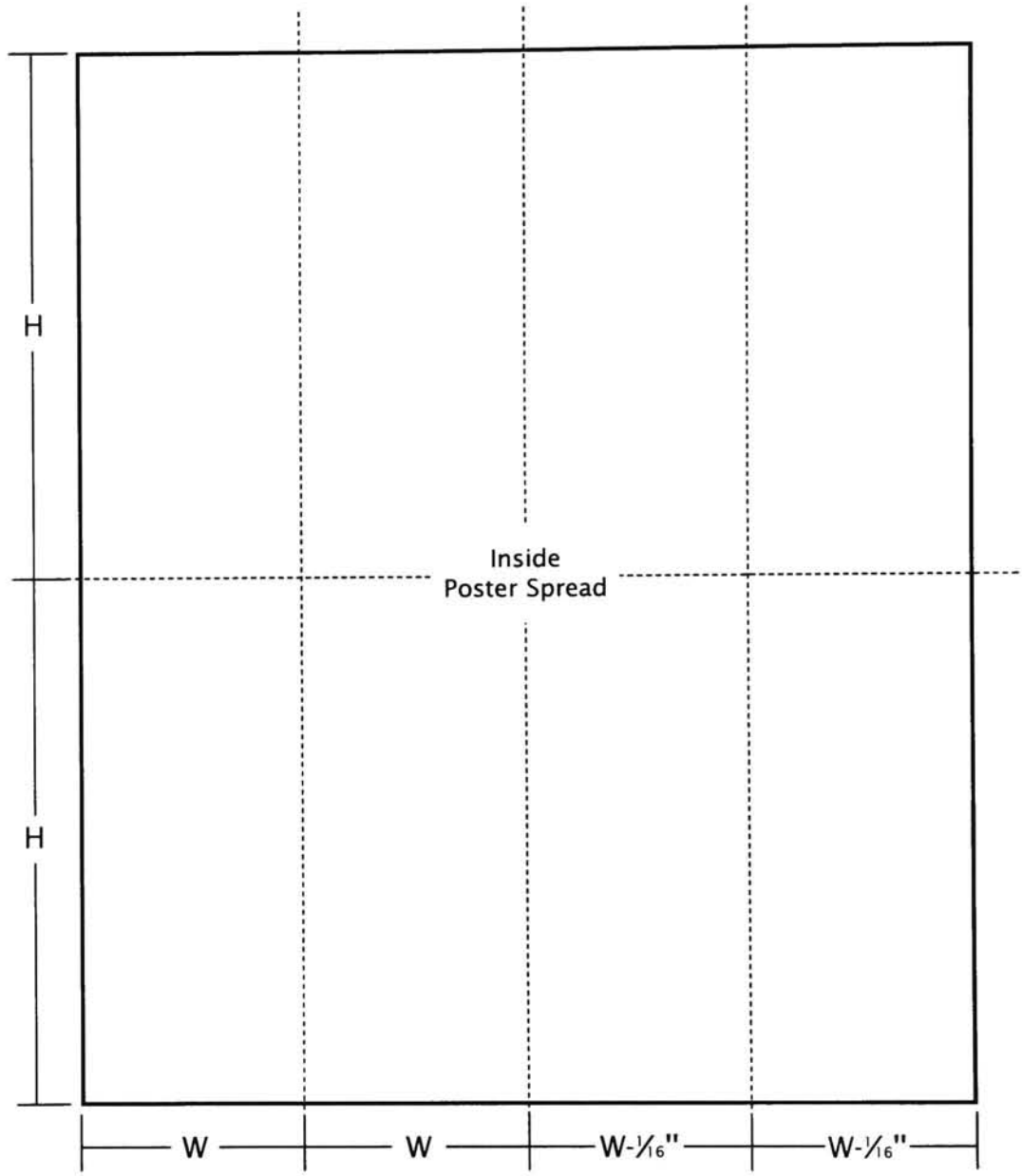
GETTING STARTED

Here's an example: If your finished size is 4 x 9, then your panels for page 1 of your digital document would be, from left, 3 15/16 inches, 3 15/16 inches 4 inches and 4 inches. Then for page two everything reverses, so from left your panels would measure 4 inches, 4 inches 3 15/16 inches and 3 15/16 inches, with a height of 18 inches (9 inches plus 9 inches).

Remember: Document size and flat size must be the same, so in this case the document size would be 15⅞ (15.875) inches wide by 18 inches high.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- A paper choice of any heavier than 60# text is not recommended.
- Make sure to have a folding dummy made in your specified paper.
- Be aware of your printer or bindery's minimum and maximum sheet sizes for their equipment. Top-folding double gates and any other folded pieces which open out to very large dimensions generally require special large format folders.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document width ahead of time. Create your document as if all panels will be the same (ex: for a top-folding double parallel with a finished size of 4 x 9, set the document size to 16 x 18). Then set crosshairs to upper left corner of document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, 4 15/16 inches). Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement (4 15/16). Repeat for the last 2 panels (5 inches and 5 inches). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Just change your document size by entering that decimal measurement (19.875). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

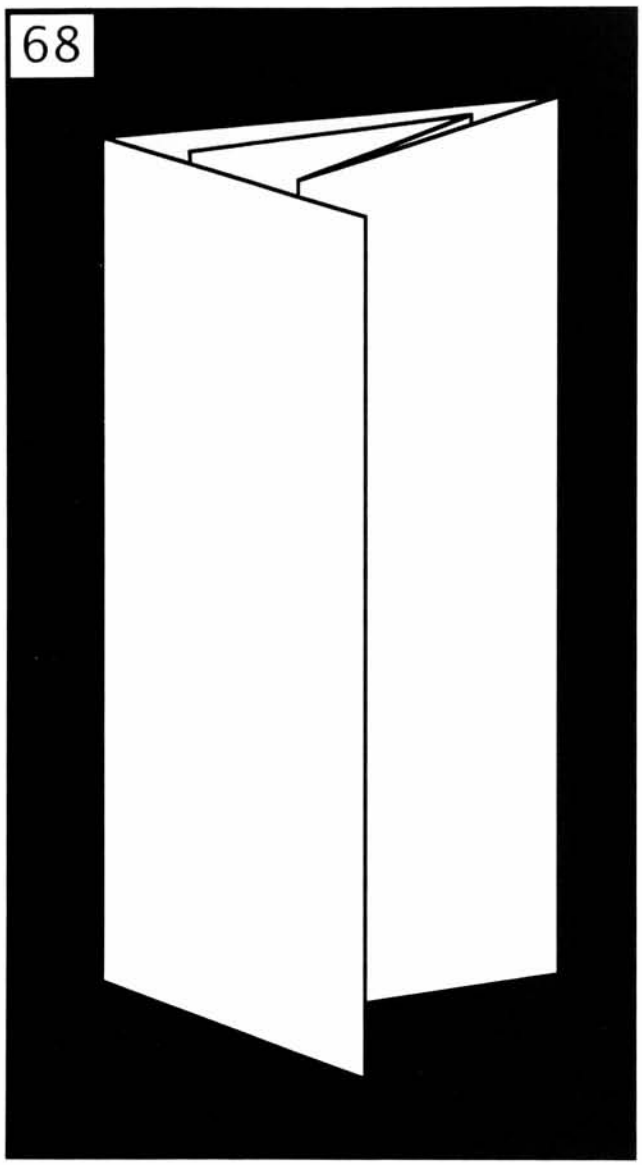
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

10-PAGE PARALLEL

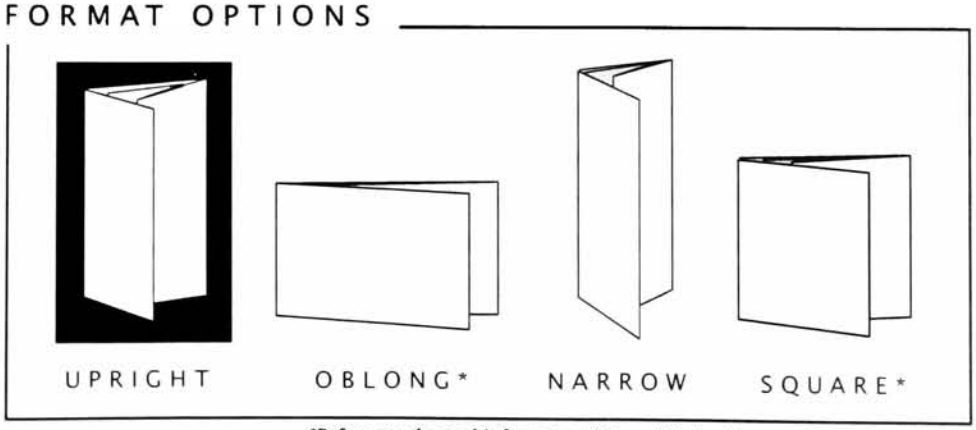


LEVEL

A level 3 fold has a long and difficult makeready, could require special machinery and low folding speed. These issues will be reflected in the cost.

There are many members of the parallel folding family, the next of which is the 10-page parallel fold. The basic characteristic of the parallel fold is that the panels always remain parallel to each other no matter how many times the piece is folded. In this case, the double parallel consists of three main folds and five panels.

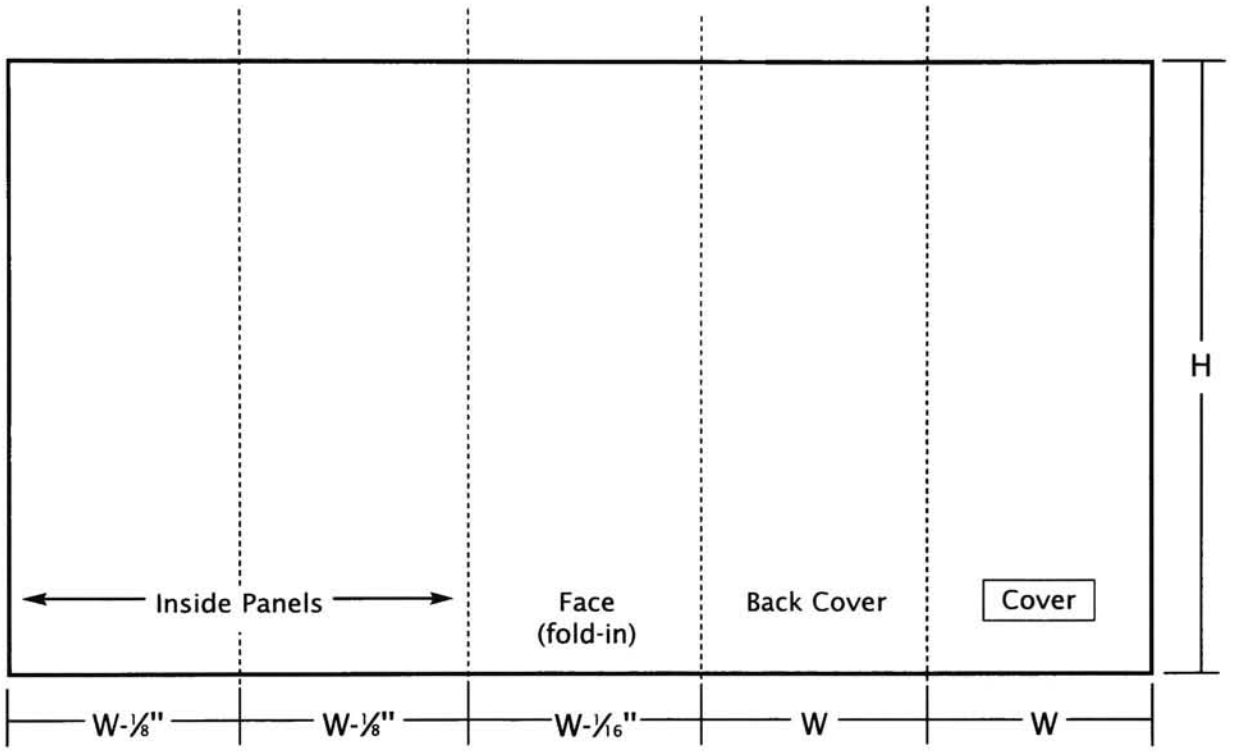
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

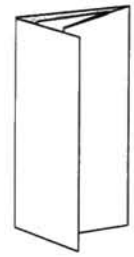
W: finished width
H: finished height
--- fold indication



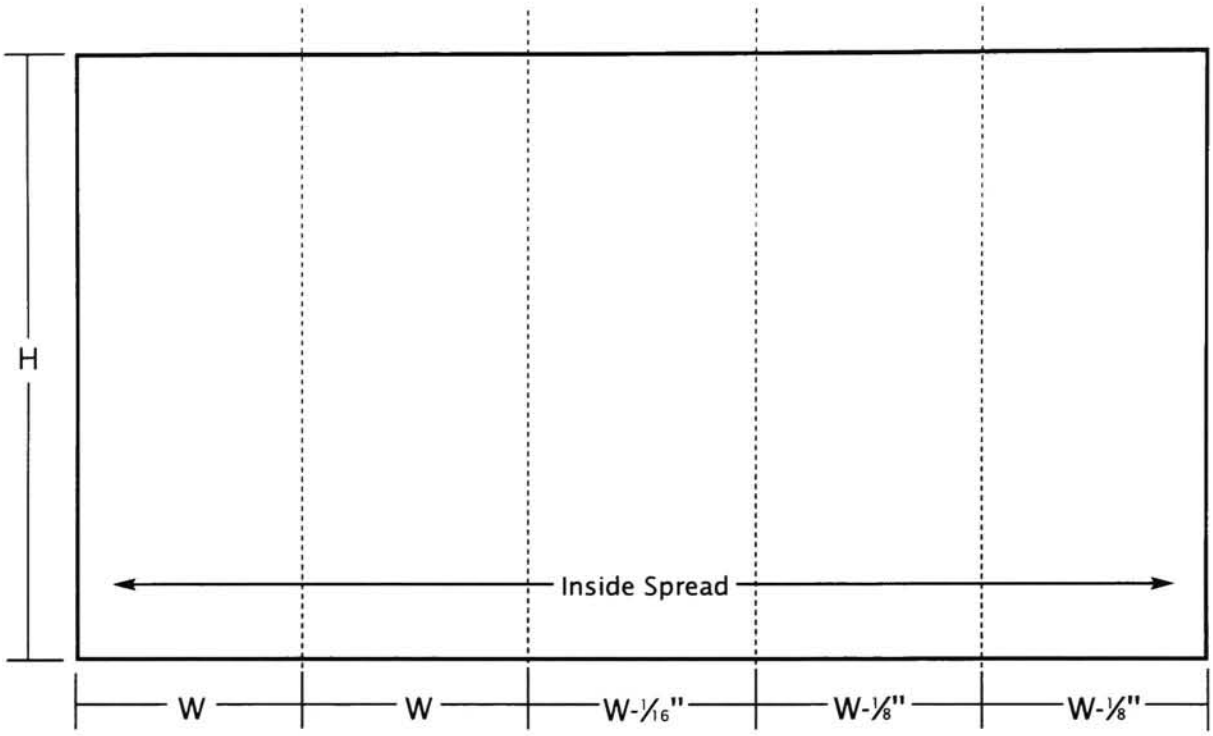
GETTING STARTED

Here's an example: If your finished size is 5 x 8, then your panels for page 1 of your digital document would be, from left, 4 ⅞ inches, 4 ⅞ inches, 4 15/16 inches, 5 inches and 5 inches. Then for page two everything reverses, so from left your panels would measure 5 inches, 5 inches, 4 15/16 inches 4 ⅞ inches, and 4 ⅞ inches, with a height of 8 inches.

Remember: Document size and flat size must be the same, so in this case the document size would be 19 11/16 (19.687) inches wide by 8 inches high.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- Consult your printer about the size of the press sheet. Also ask for a diagram of how your piece will be run on the press sheet. Sometimes there is a lot of waste on the sheet, and you may be able to add another panel (see triple parallel, page x) without adding to the cost of the job.
- If you are designing a long piece, make sure to have a folding sample made up from your specified paper. If the paper is too lightweight, it could turn into a sagging flimsy piece.
- If you are designing a self-mailing piece, this folding style could require wafer-seals to make it mail-ready.
- If your paper choice is any heavier than 80# text (not recommended), you will want to consider scoring the piece.
- Be aware of your printer or bindery's minimum and maximum sheet sizes for their equipment.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document width ahead of time. Create your I document as if all panels will be the same (ex: for a 10-page parallel with a finished size of 5 x 8, set the document size to 25 x 8). Then set crosshairs to upper left corner of document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, 4 ⅞ inches). Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement (4 ⅞). Repeat for the last 3 panels (4 $^{15}/_{16}$, 5 inches and 5 inches). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Just change your document size by entering that decimal measurement (19.687). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

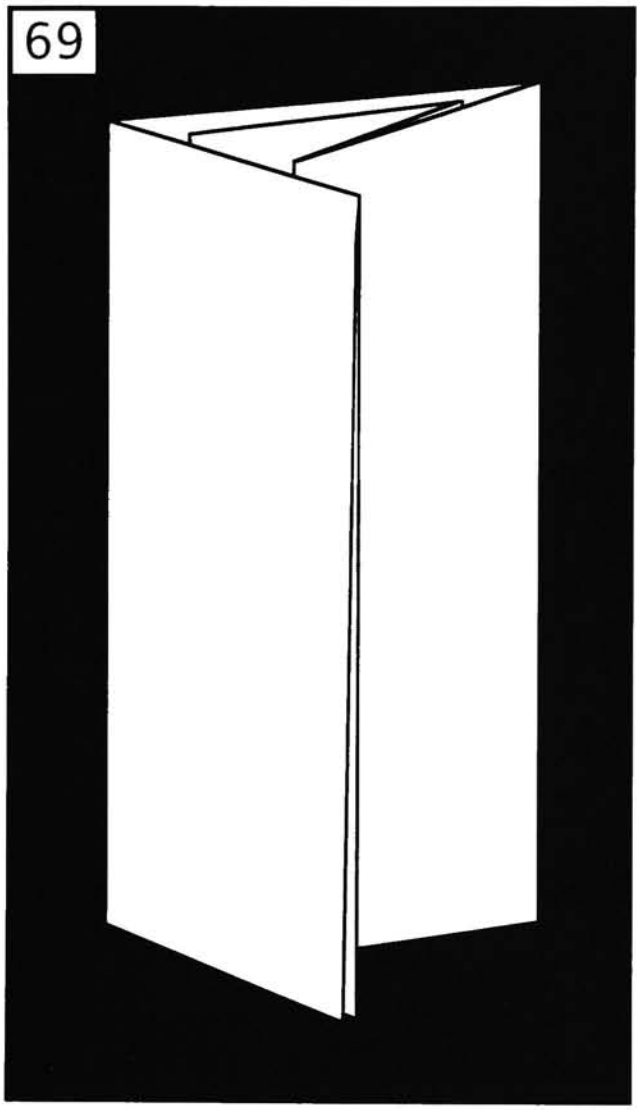
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

20-PAGE PARALLEL (BROADSIDE FOLD)

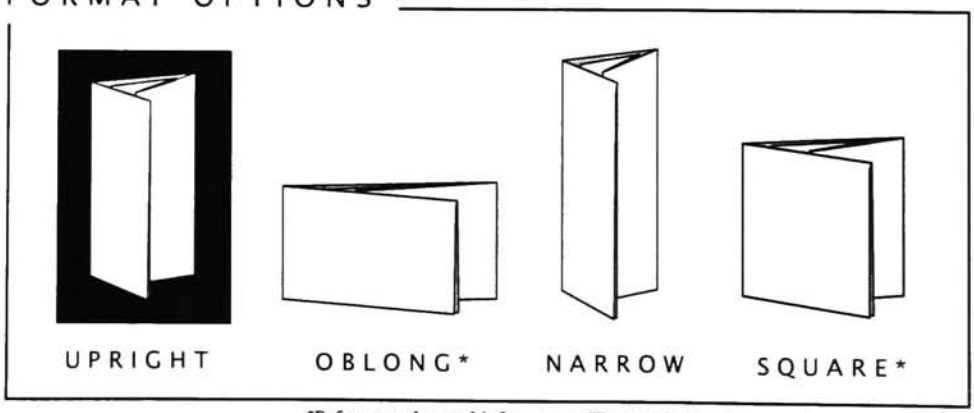


LEVEL

A level 3 fold has a long and difficult makeready, could require special machinery and low folding speed. These issues will be reflected in the cost.

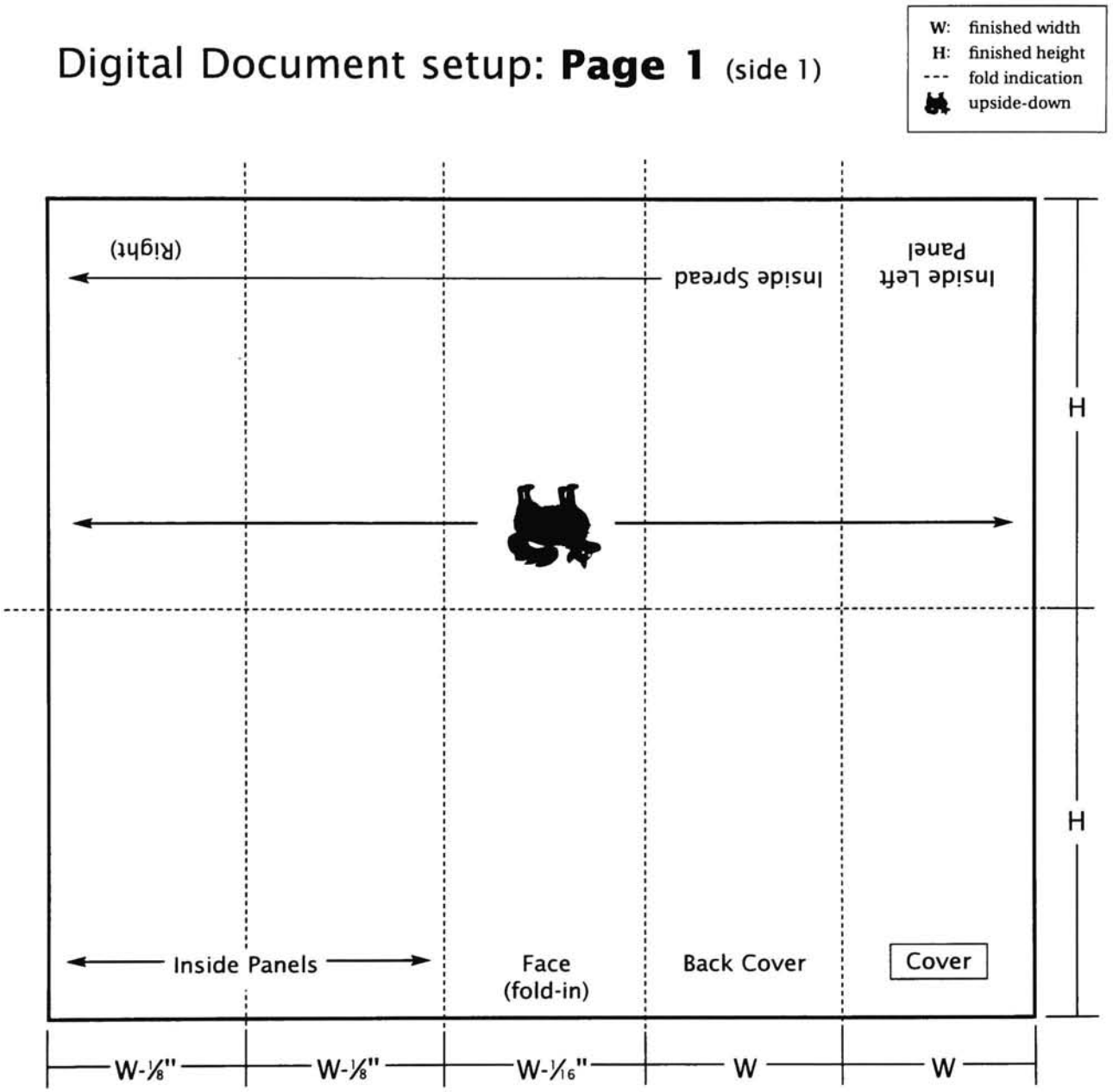
The 20-page parallel (broadside) fold has the same characteristics as the standard 10-page parallel fold, but the difference is that this fold has twice the area (20 pages instead of 10) because it folds in half on itself before the parallel folding is done.

FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

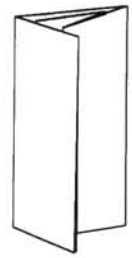
Digital Document setup: **Page 1** (side 1)



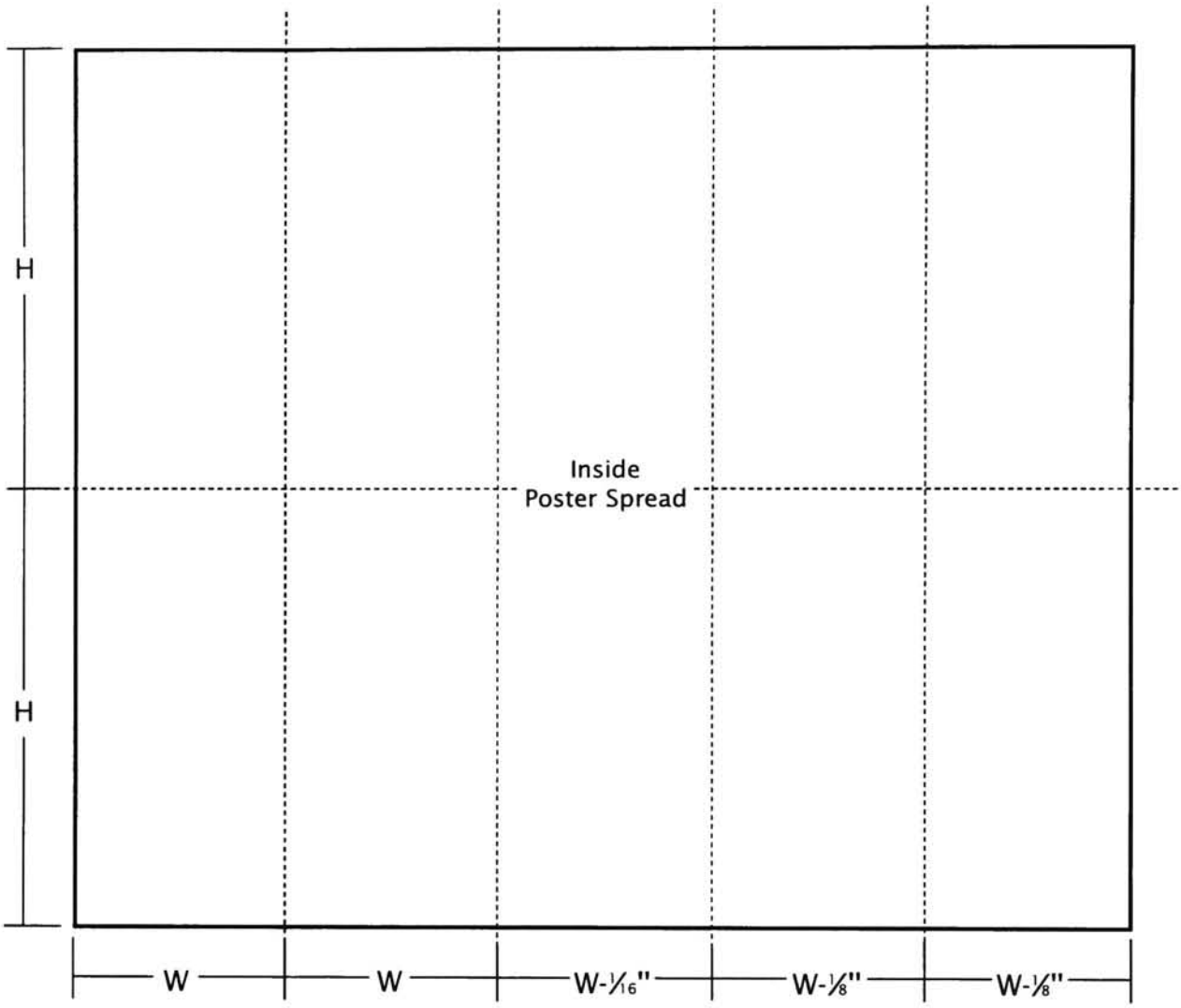
GETTING STARTED

Here's an example: If your finished size is 5 x 8, then your panels for page 1 of your digital document would be, from left, 4 ⅞ inches, 4 ⅞ inches, 4 15/16 inches, 5 inches and 5 inches. Then for page two everything reverses, so from left your panels would measure 5 inches, 5 inches, 4 15/16 inches 4 ⅞ inches, and 4 ⅞ inches, with a height of 16 inches(8 inches plus 8 inches).

Remember: Document size and flat size must be the same, so in this case the document size would be 19 11/16 (19.687) wide by 16 inches high.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- Consult your printer about the size of the press sheet. Also ask for a diagram of how your piece will be run on the press sheet. Sometimes there is a lot of waste on the sheet, and you may be able to add another panel (see triple parallel, page x) without adding to the cost of the job.
- If you are designing a self-mailing piece, this folding style could require wafer-seals to make it mail-ready.
- Be aware of your printer or bindery's minimum and maximum sheet sizes for their equipment.
- Make sure to have a folding dummy made in your specified paper. Paper weight will dramatically affect the success of this piece. Watch for bulkiness and problems in the corner joints of the folds—the printer can't do anything about this, and it will require a change in paper.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document width ahead of time. Create your document as if all panels will be the same (ex: for a 20-page parallel with a finished size of 5 x 8, set the document size to 25 x 16). Then set crosshairs to upper left corner of document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, 4 ⅞ inches). Then, bring the crosshairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement (4 ⅞). Repeat for the last 3 panels (4 15⁄16, 5 inches and 5 inches). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Just change your document size by entering that decimal measurement (19.687). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

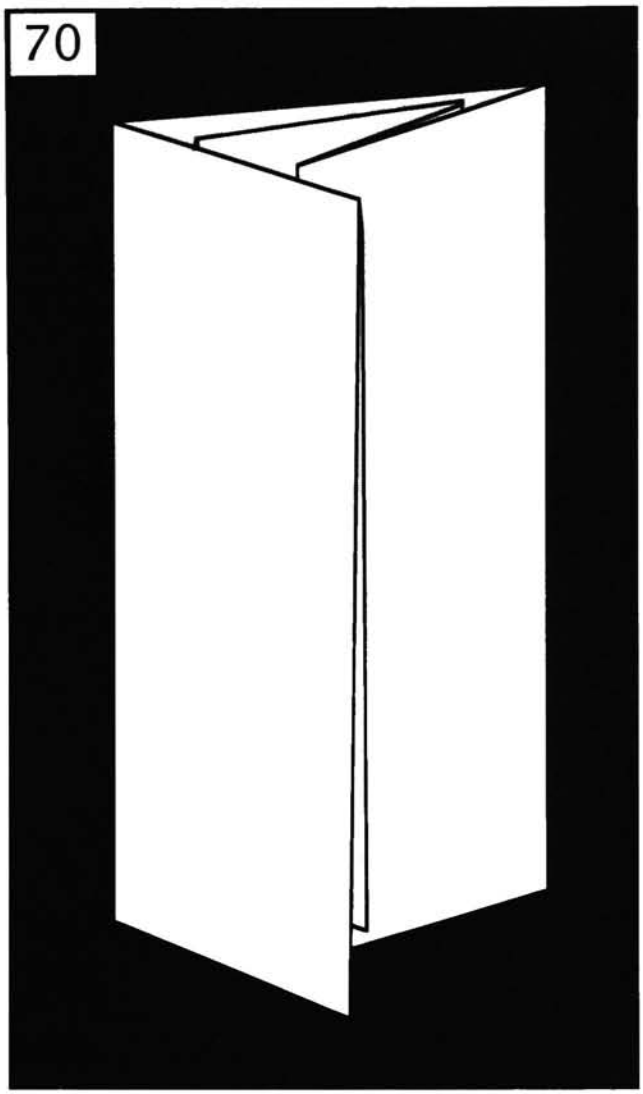
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

20-PAGE PARALLEL WITH SHORT FOLD (INSIDE)

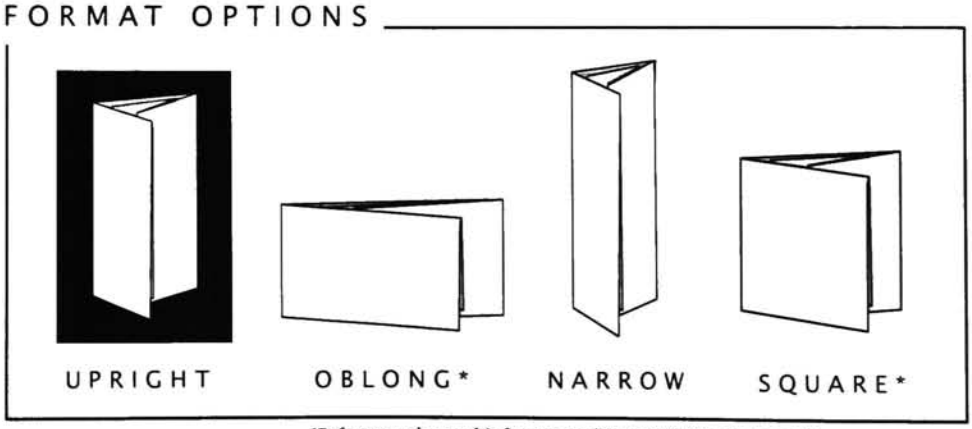


LEVEL

A level 3 fold has a long and difficult makeready, could require special machinery and low folding speed. These issues will be reflected in the cost.

The 20-page parallel with short fold inside has the same characteristic folding style as the 10-page parallel fold, and is similar to the 20-page parallel (broadside) fold because it folds in half on itself before the parallel folding is done. What makes this fold different is that unlike a broadside fold where panels are of equal length, in a short fold the fold-over panels are shorter than the finished height.

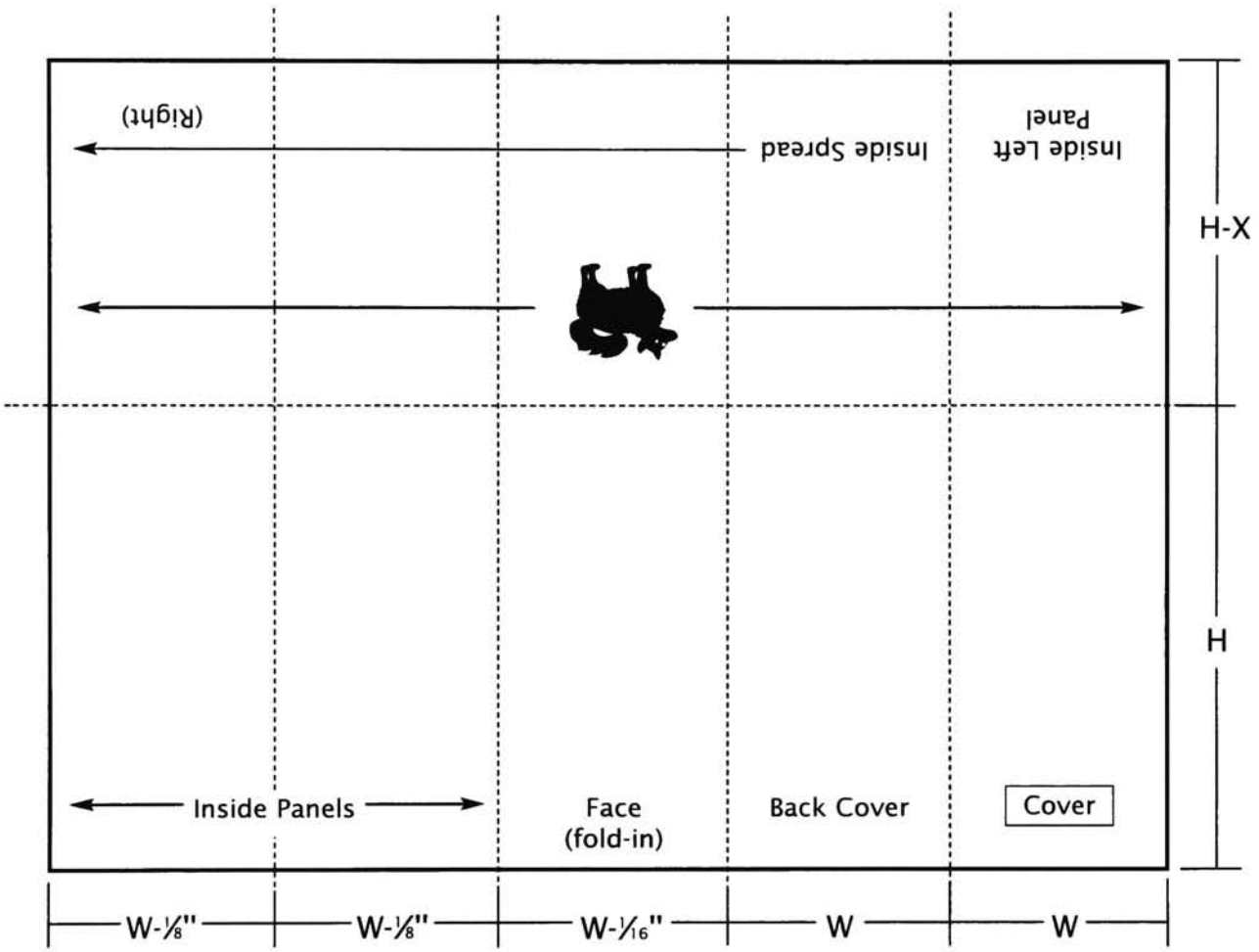
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

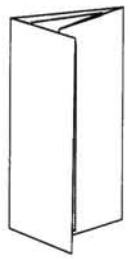
W: finished width
H: finished height
X: your choice
--- fold indication
upside-down



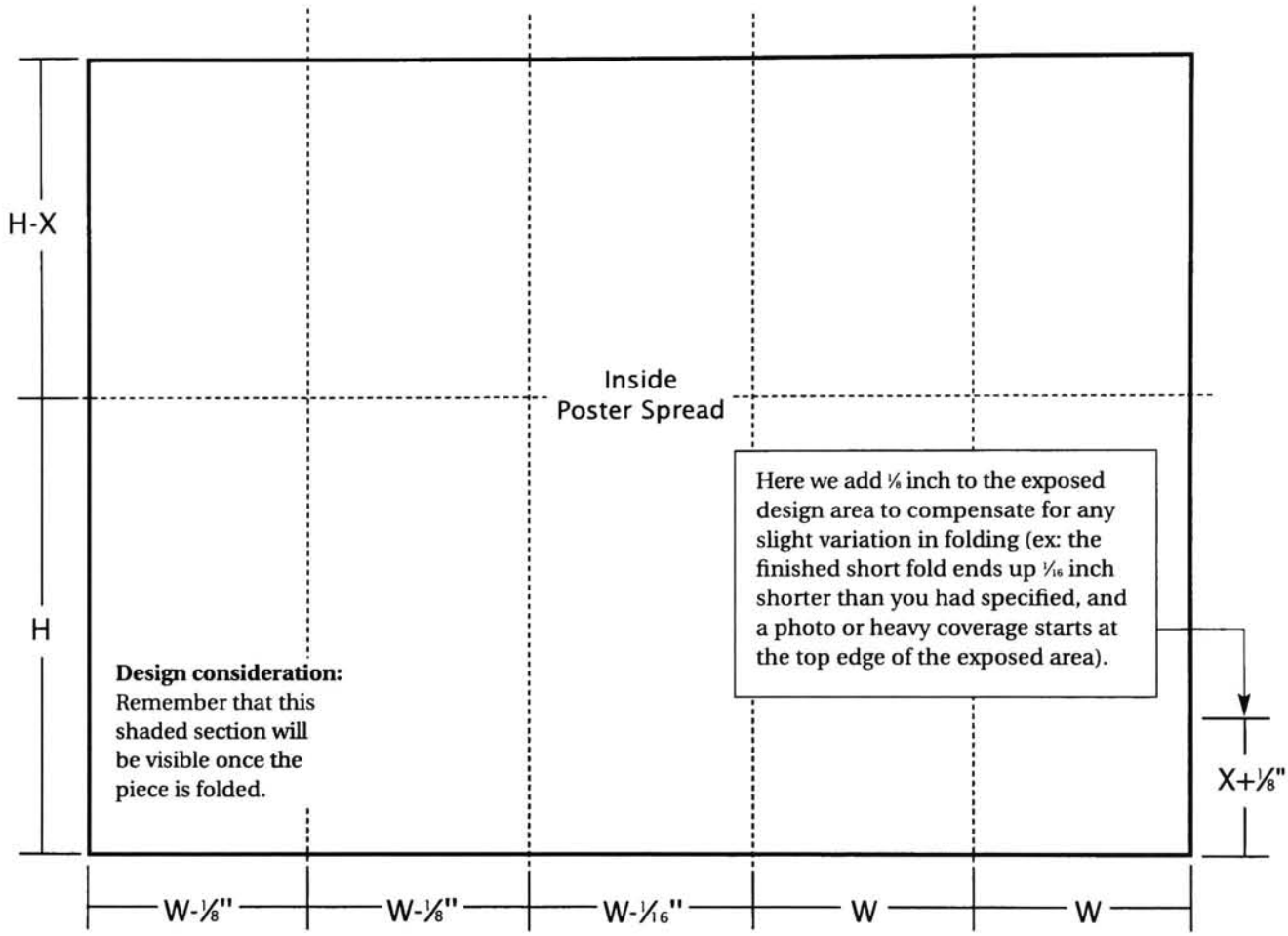
GETTING STARTED

Here's an example: For a short fold, the first thing we must determine is how short the short fold will be. In this case, we'll make it 2 inches shorter than the finished height, so X=2. Now we can calculate our document height. If the finished size is 5 x 8, then 8 inches plus 6 (8-2 , or height minus X) equals a document height of 14 inches. Our finished width is 5 inches, so the panels for page 1 of the digital document would be, from left, 4 ⅞ inches, 4 ⅞ inches, 4 15/16 inches, 5 inches and 5 inches. Then for page two everything reverses, so from left your panels would measure 5 inches, 5 inches, 4 15/16 inches 4 ⅞ inches, and 4 ⅞ inches.

Remember: Document size and flat size must be the same, so in this case the document size would be 19 11/16 (19.687) inches wide by 14 inches high.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- Consult your printer about the size of the press sheet. Also ask for a diagram of how your piece will be run on the press sheet. Sometimes there is a lot of waste on the sheet, and you may be able to add another panel (see triple parallel, page x) without adding to the cost of the job.
- If you are designing a self-mailing piece, this folding style could require wafer-seals to make it mail-ready.
- Be aware of your printer or bindery's minimum and maximum sheet sizes for their equipment.
- Make sure to have a folding dummy made in your specified paper. Paper weight will dramatically affect the success of this piece. Watch for bulkiness and problems in the corner joints of the folds—the printer can't do anything about this, and it will require a change in paper.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document width ahead of time. Create your document as if all panels will be the same (ex: for a 20-page parallel with short fold with a finished size of 5 x 8, set the document size to 25 x 14). Then set crosshairs to upper left corner of document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, 4 ⅞ inches). Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement (4 ⅞). Repeat for the last 3 panels (4 15/16, 5 inches and 5 inches). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Just change your document size by entering that decimal measurement (19.687). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

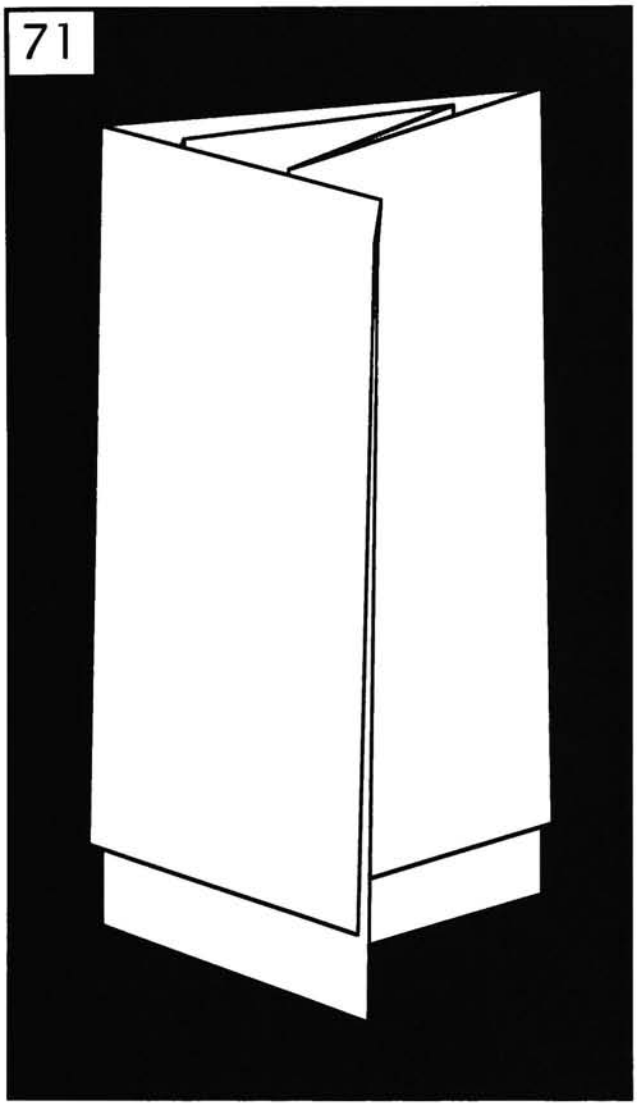
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

20-PAGE PARALLEL WITH SHORT FOLD (OUTSIDE)

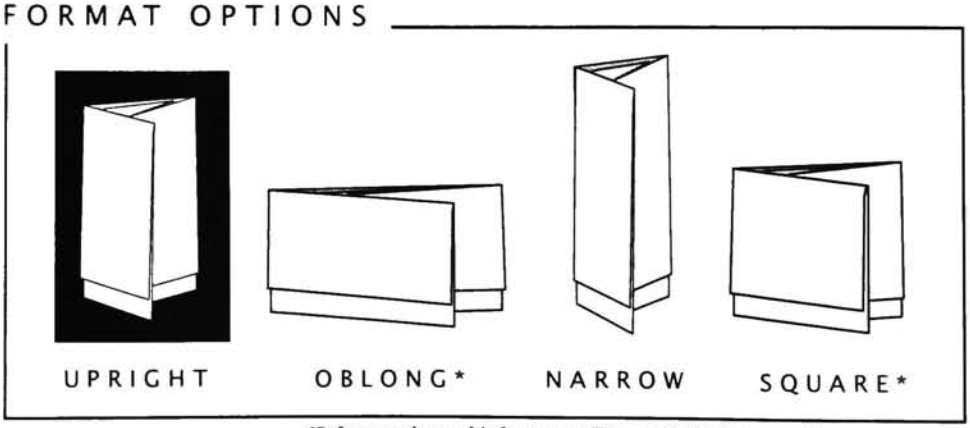


LEVEL

A level 3 fold has a long and difficult makeready, could require special machinery and low folding speed. These issues will be reflected in the cost.

The 20-page parallel with short fold outside has the same characteristic folding style as the 10-page parallel fold, and is similar to the 20-page parallel (broadside) fold because it folds in half on itself before the parallel folding is done. What makes this fold different is that unlike a broadside fold where panels are of equal length, in a short fold the fold-over panels are shorter than the finished height.

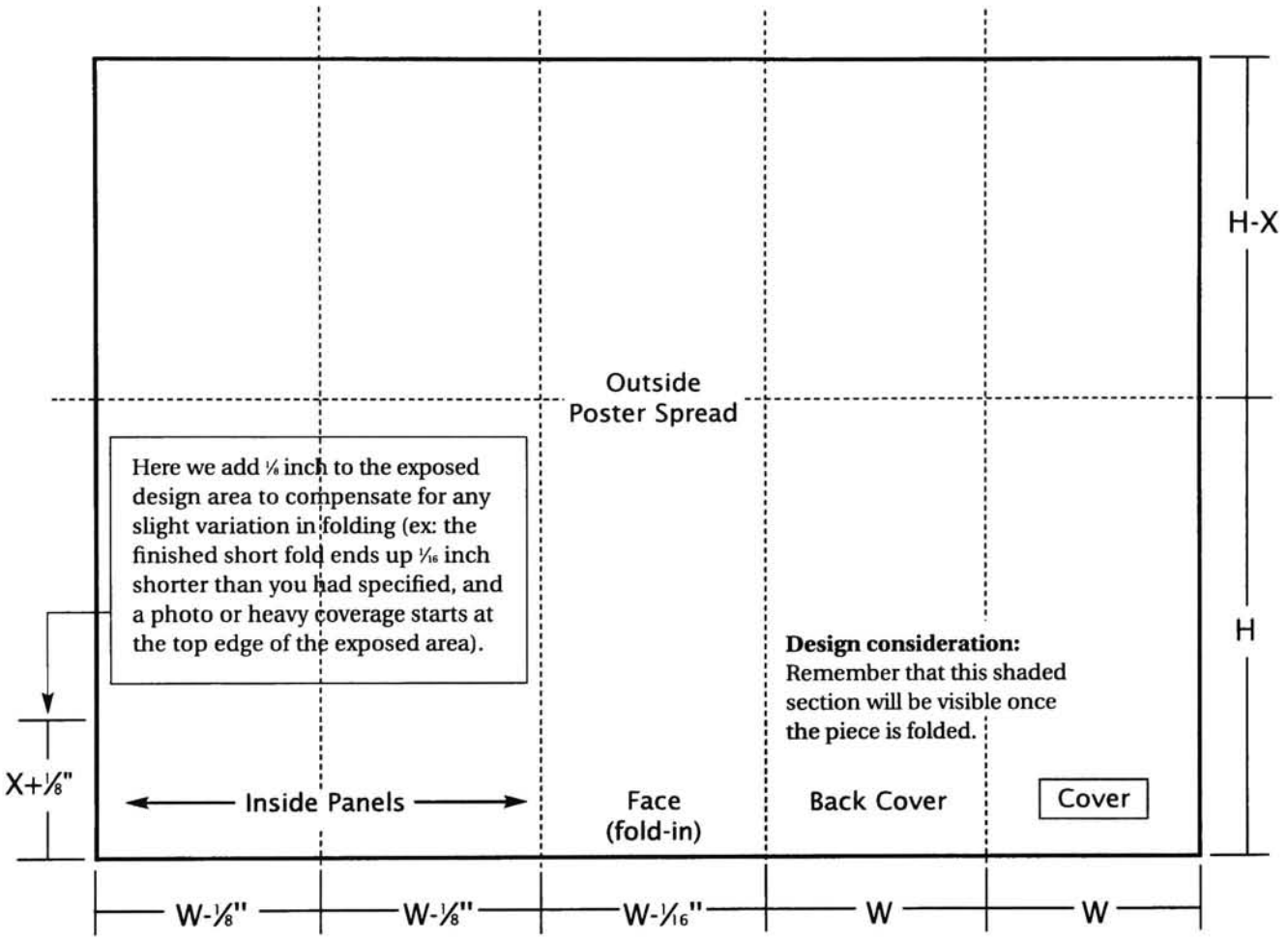
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

W: finished width
H: finished height
X: your choice
--- fold indication
upside-down

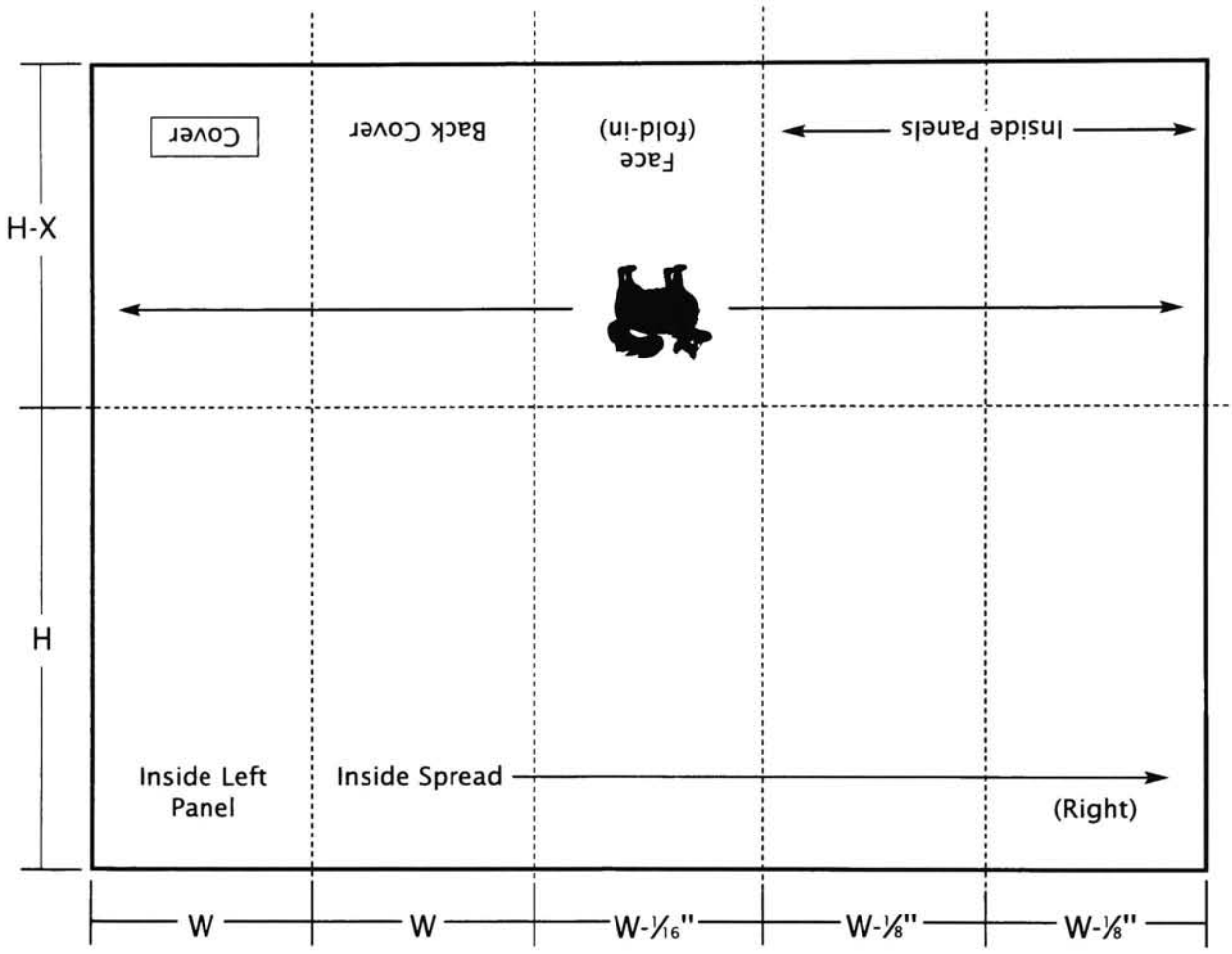


GETTING STARTED

Here's an example: For a short fold, the first thing we must determine is how short the short fold will be. In this case, we'll make it 2 inches shorter than the finished height, so X=2. Now we can calculate our document height. If the finished size is 5 x 8, then 8 inches plus 6 (8-2 , or height minus X) equals a document height of 14 inches. Our finished width is 5 inches, so the panels for page 1 of the digital document would be, from left, 4 ⅞ inches, 4 ⅞ inches, 4 15/16 inches, 5 inches and 5 inches. Then for page two everything reverses, so from left your panels would measure 5 inches, 5 inches, 4 15/16 inches 4 ⅞ inches, and 4 ⅞ inches.

Remember: Document size and flat size must be the same, so in this case the document size would be 19 11/16 (19.687) inches wide by 14 inches high.

Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- Consult your printer about the size of the press sheet. Also ask for a diagram of how your piece will be run on the press sheet. Sometimes there is a lot of waste on the sheet, and you may be able to add another panel (see triple parallel, page x) without adding to the cost of the job.
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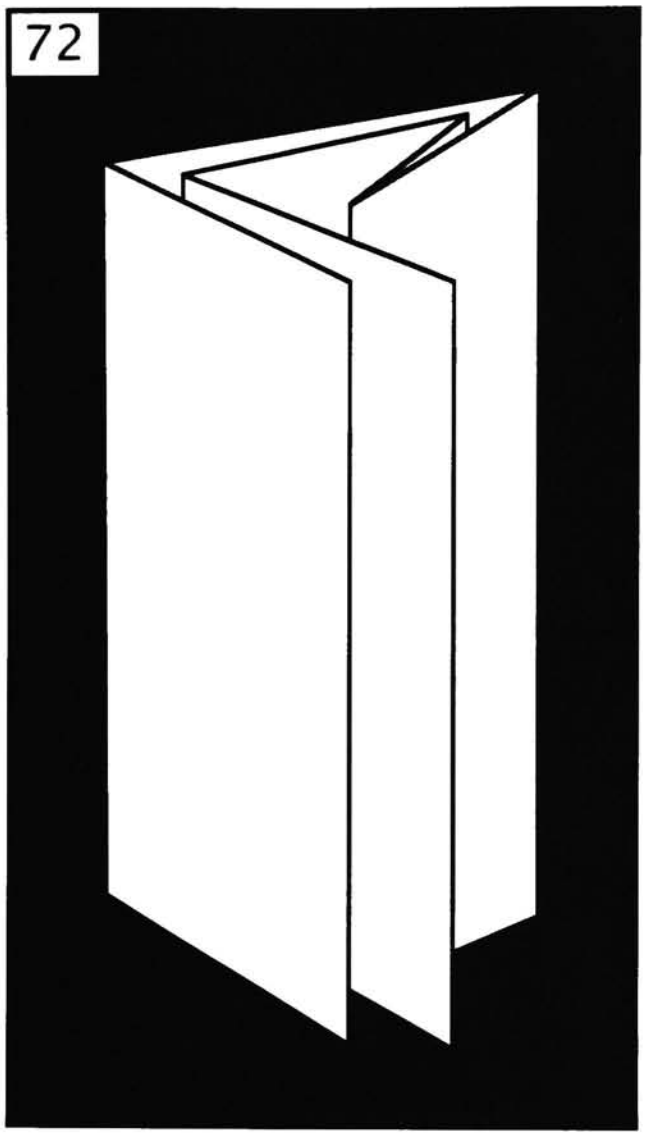
NOTES:

TRIPLE PARALLEL

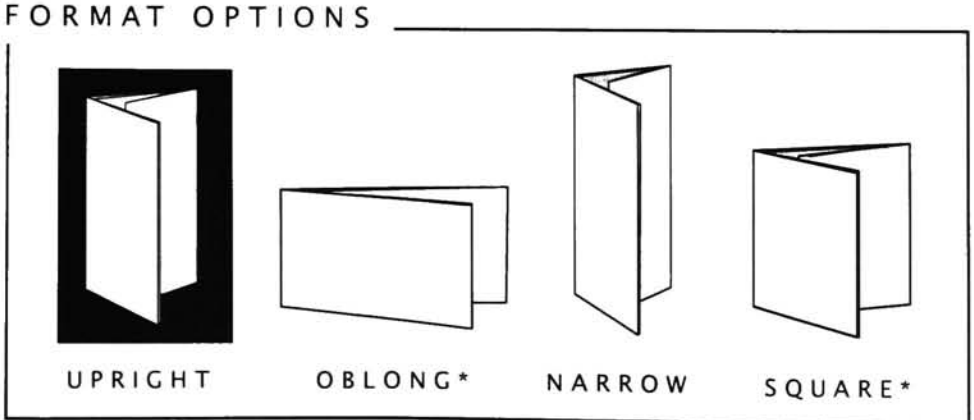


LEVEL

A level 3 fold has a long and difficult makeready, could require special machinery and low folding speed. These issues will be reflected in the cost.

There are many members of the parallel folding family, the next of which is the triple parallel fold. The basic characteristic of the parallel fold is that the panels always remain parallel to each other no matter how many times the piece is folded. In this case, the double parallel consists of three main folds and six parallel panels.

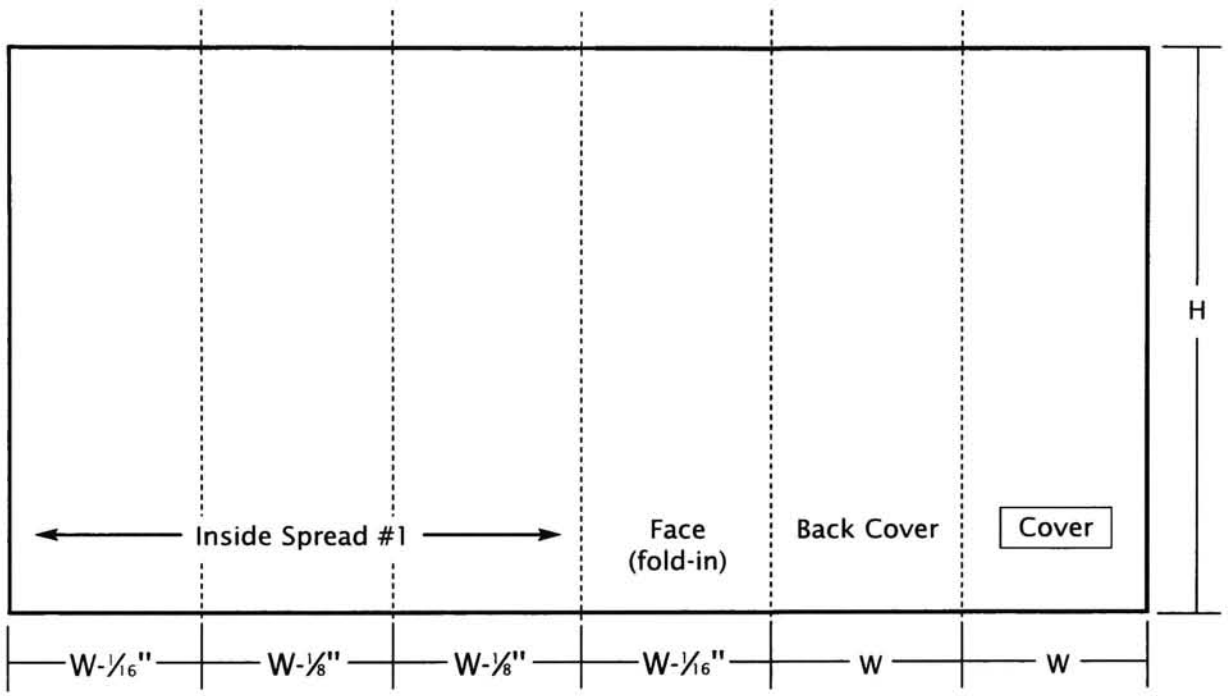
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

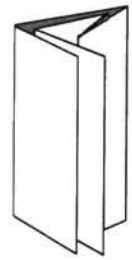
W: finished width
H: finished height
--- fold indication



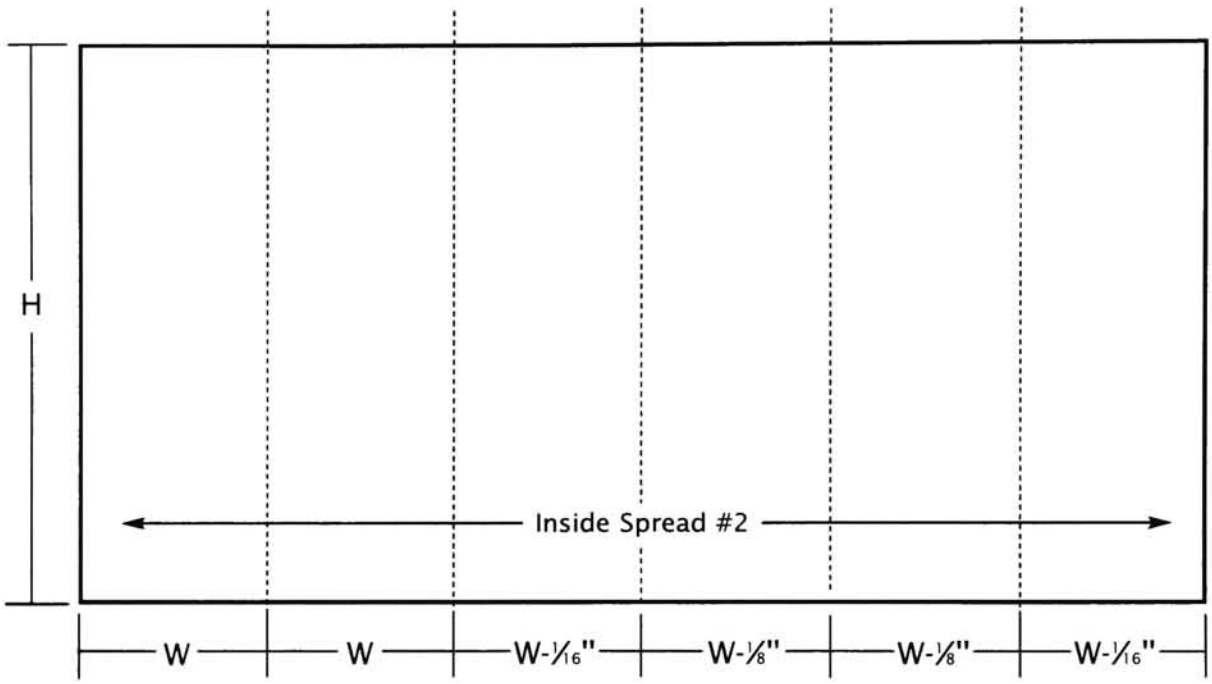
GETTING STARTED

Here's an example: If your finished size is 4 x 8, then your panels for page 1 of your digital document would be, from left, 3 15/16 inches, 3 7/8 inches, 3 7/8 inches, 3 15/16 inches, 4 inches and 4 inches. Then for page two everything reverses, so from left your panels would measure 4 inches, 4 inches, 3 15/16 inches 3 7/8 inches, and 3 7/8 inches and 3 15/16 inches, with a height of 8 inches.

Remember: Document size and flat size must be the same, so in this case the document size would be 23 5/8 (23.625) inches wide by 8 inches high.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- Make sure to have a folding dummy made in your specified paper. Paper weight will dramatically affect the success of this piece. Watch for bulkiness—the printer can't do anything about this, and it will require a change in paper.
- If you are designing a self-mailing piece, this folding style could require wafer-seals to make it mail-ready.
- If your paper choice is any heavier than 80# text (not recommended), you will want to consider scoring the piece.
- Be aware of your printer or bindery's minimum and maximum sheet sizes for their equipment.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document width ahead of time. Create your document as if all panels will be the same (ex: for a triple parallel with a finished size of 4 x 8, set the document size to 24 x 8). Then set crosshairs to upper left corner of document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, $3^{15}/_{16}$ inches). Then, bring the crosshairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement ($3\ ^{7}/_{8}$). Repeat for the last 4 panels ($3\ ^{7}/_{8}$, $3^{15}/_{16}$ inches, 4 inches and 4 inches). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Just change your document size by entering that decimal measurement (23.625). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

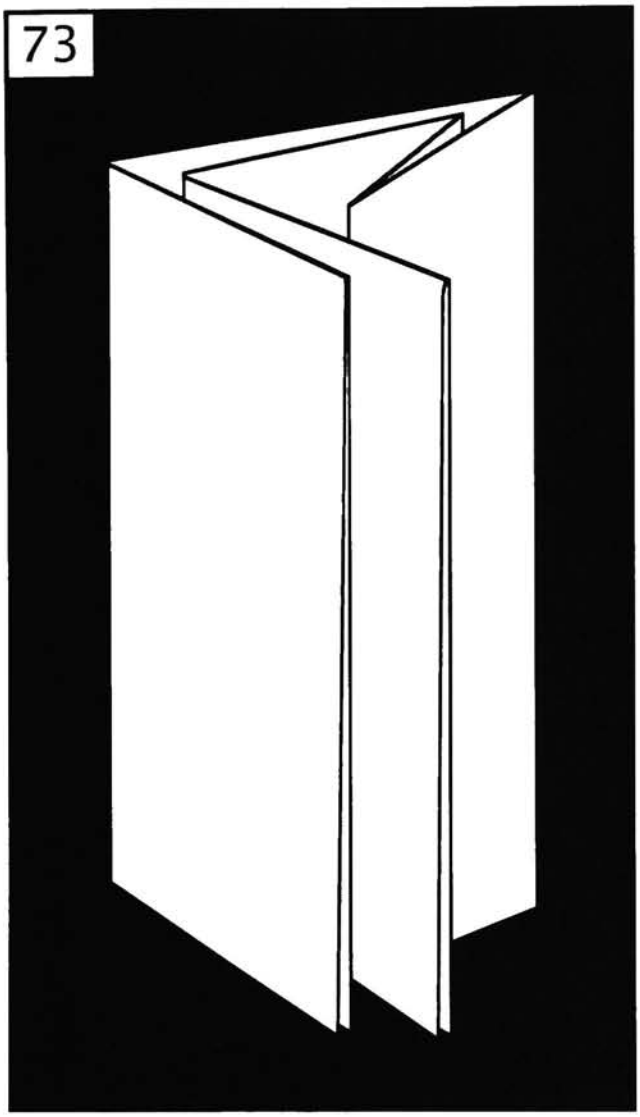
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

TRIPLE PARALLEL BROADSIDE

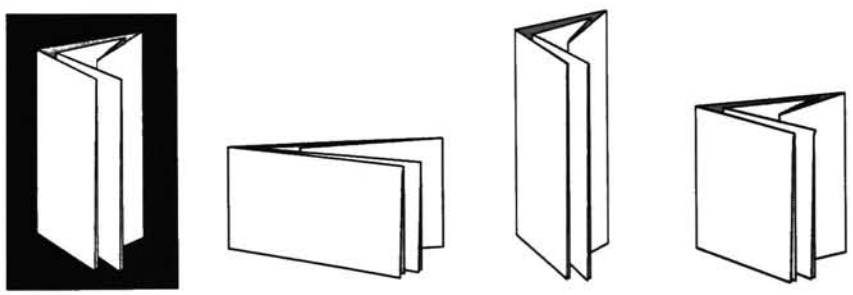


LEVEL

A level 3 fold has a long and difficult makeready, could require special machinery and low folding speed. These issues will be reflected in the cost.

The broadside triple parallel fold has the same characteristics as the standard triple parallel fold, but the difference is that this fold has twice the area because it folds in half on itself before the parallel folding is done.

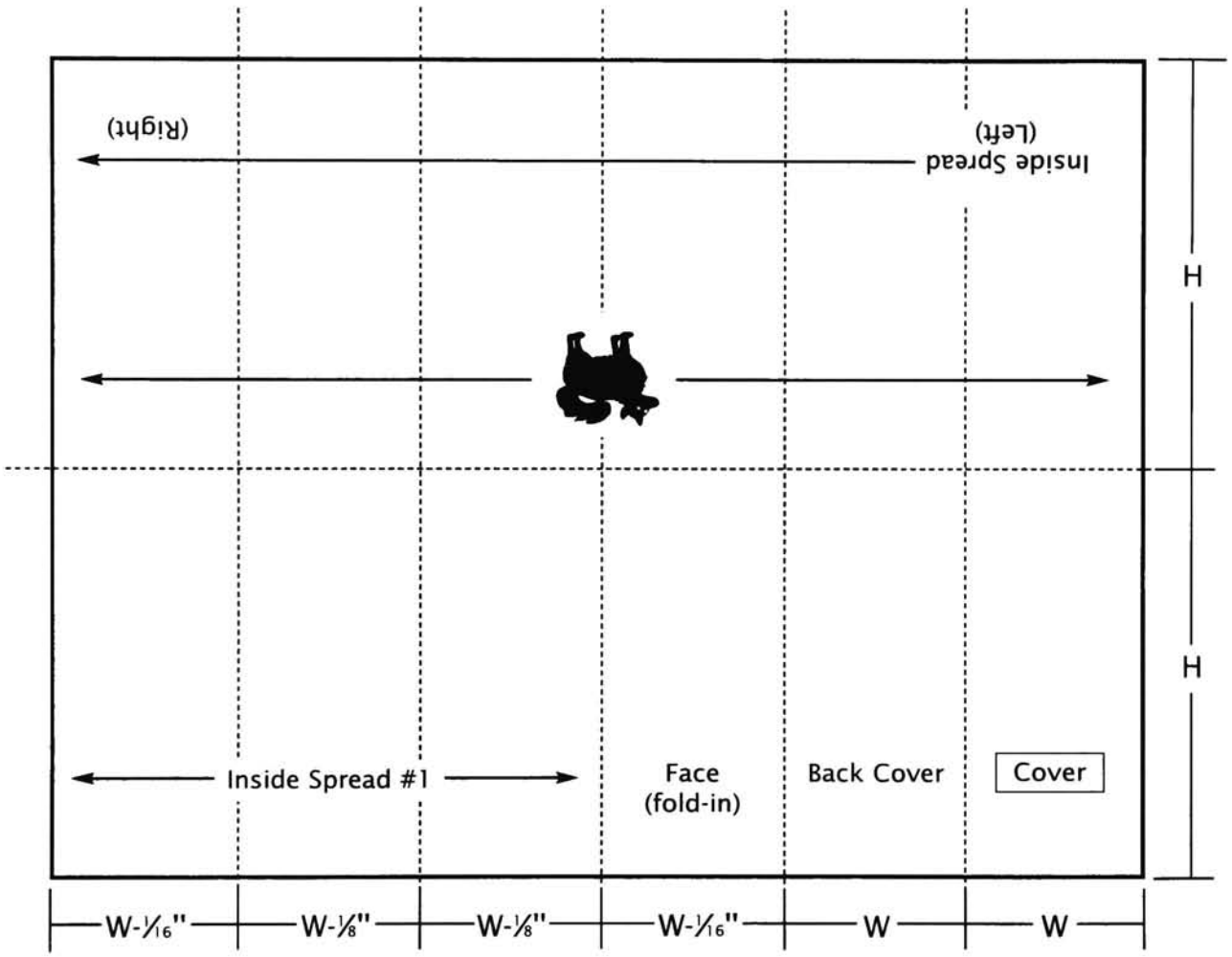
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

W: finished width
H: finished height
--- fold indication
upside-down

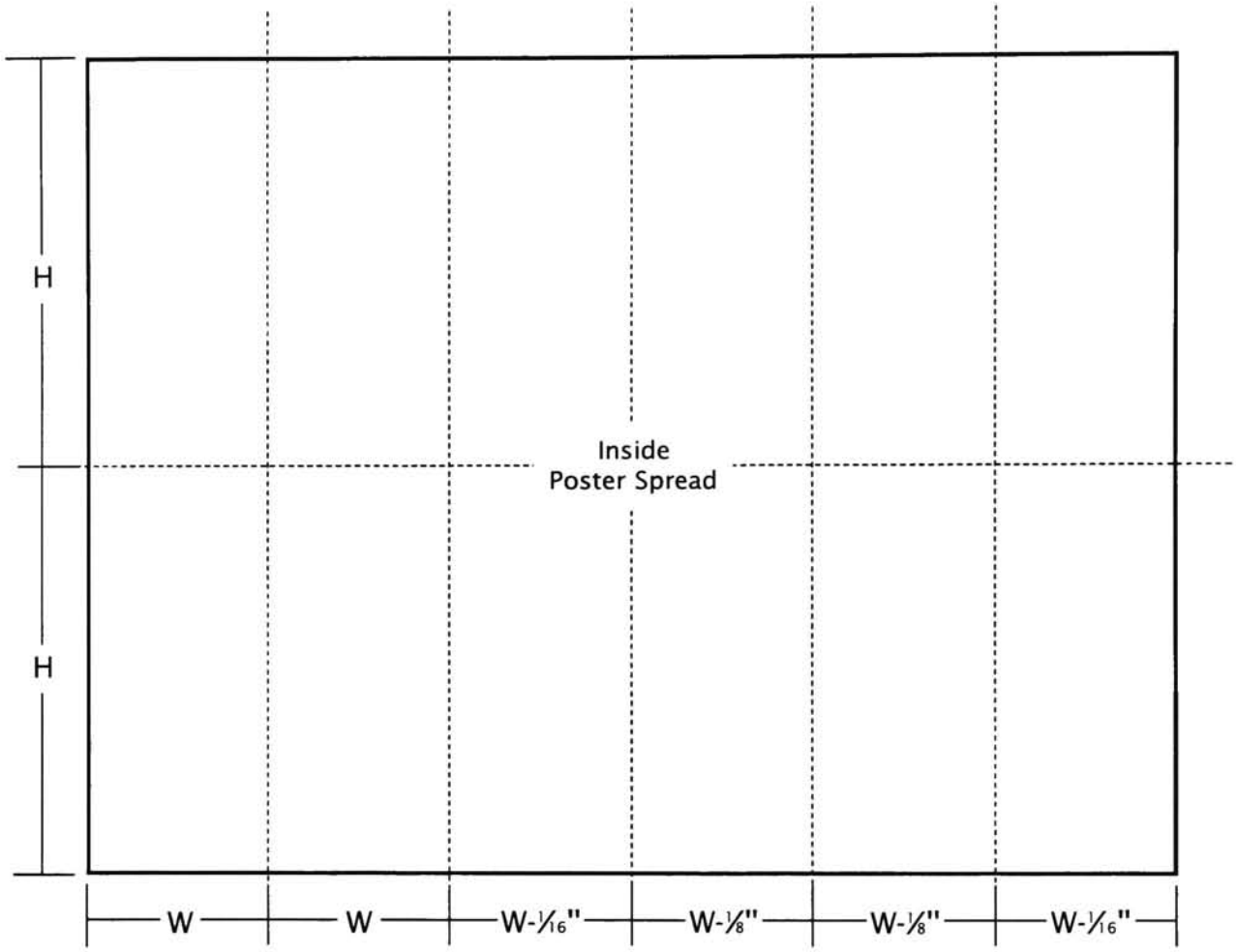


GETTING STARTED

Here's an example: If your finished size is 4 x 8, then your panels for page 1 of your digital document would be, from left, 3 15/16 inches, 3 7/8 inches, 3 7/8 inches, 3 15/16 inches, 4 inches and 4 inches. Then for page two everything reverses, so from left your panels would measure 4 inches, 4 inches, 3 15/16 inches 3 7/8 inches, and 3 7/8 inches and 3 15/16 inches, with a height of 16 inches (8 inches plus 8 inches).

Remember: Document size and flat size must be the same, so in this case the document size would be 23 5/8 (23.625) inches wide by 16 inches high.

Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- If you are designing a self-mailing piece, this folding style could require wafer-seals to make it mail-ready.
- Be aware of your printer or bindery's minimum and maximum sheet sizes for their equipment. triple parallels with a broadside fold and any other folded pieces which open out to very large dimensions generally require special large format folders.
- Make sure to have a folding dummy made in your specified paper. Paper weight will dramatically affect the success of this piece. Watch for bulkiness and problems in the corner joints of the folds—the printer can't do anything about this, and it will require a change in paper.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document width ahead of time. Create your document as if all panels will be the same (ex: for a broadside triple parallel with a finished size of 4 x 8, set the document size to 24 x 16). Then set crosshairs to upper left corner of document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, $3^{15}/_{16}$ inches). Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement ($3\ ^{7}/_{8}$). Repeat for the last 4 panels ($3\ ^{7}/_{8}$, $3^{15}/_{16}$ inches, 4 inches and 4 inches). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Just change your document size by entering that decimal measurement (23.625). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

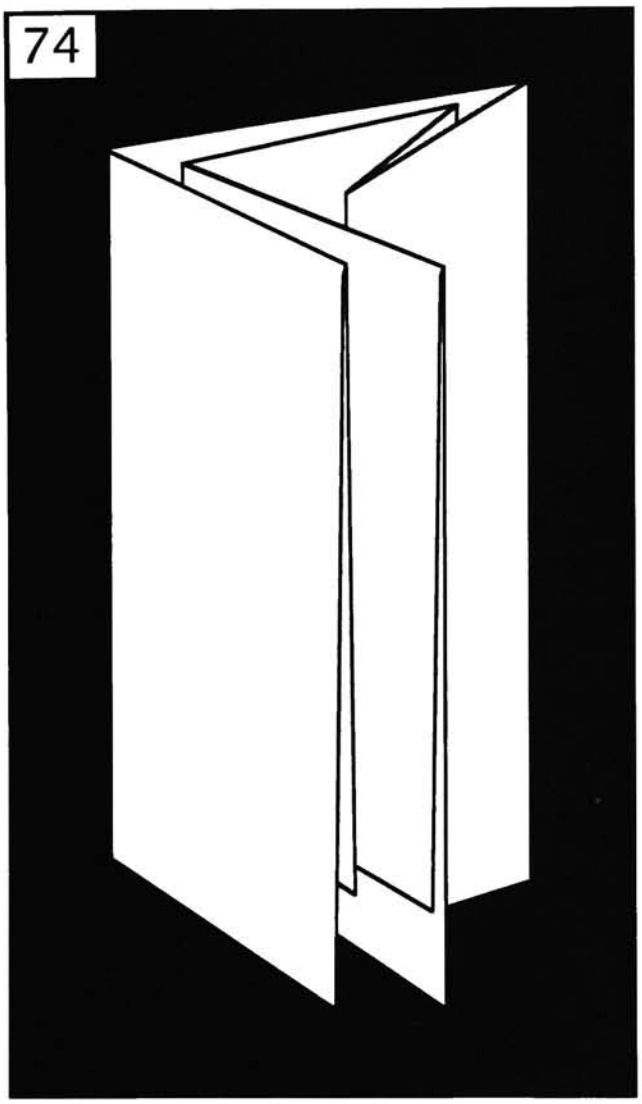
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

TRIPLE PARALLEL WITH SHORT FOLD (INSIDE)

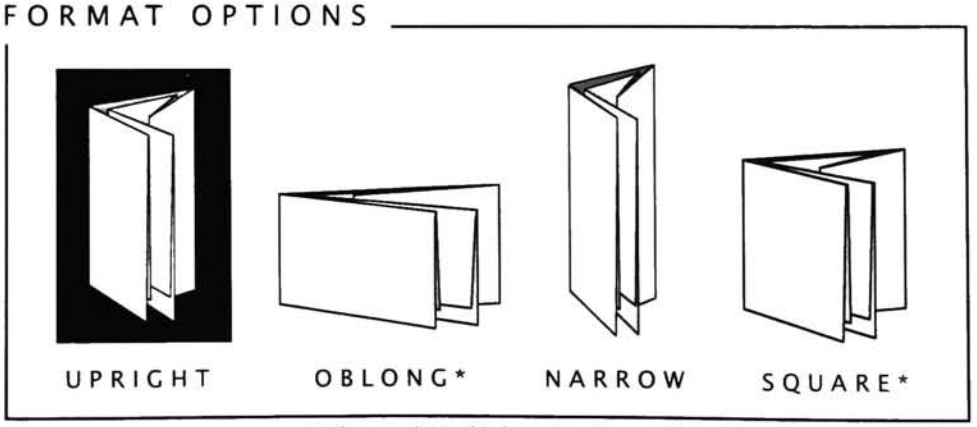


LEVEL

A level 3 fold has a long and difficult makeready, could require special machinery and low folding speed. These issues will be reflected in the cost.

The triple parallel with short fold inside has the same characteristic folding style as the triple parallel fold, and is similar to the broadside triple parallel fold because it folds in half on itself before the parallel folding is done. What makes this fold different is that unlike a broadside fold where panels are of equal length, in a short fold the fold-over panels are shorter than the finished height.

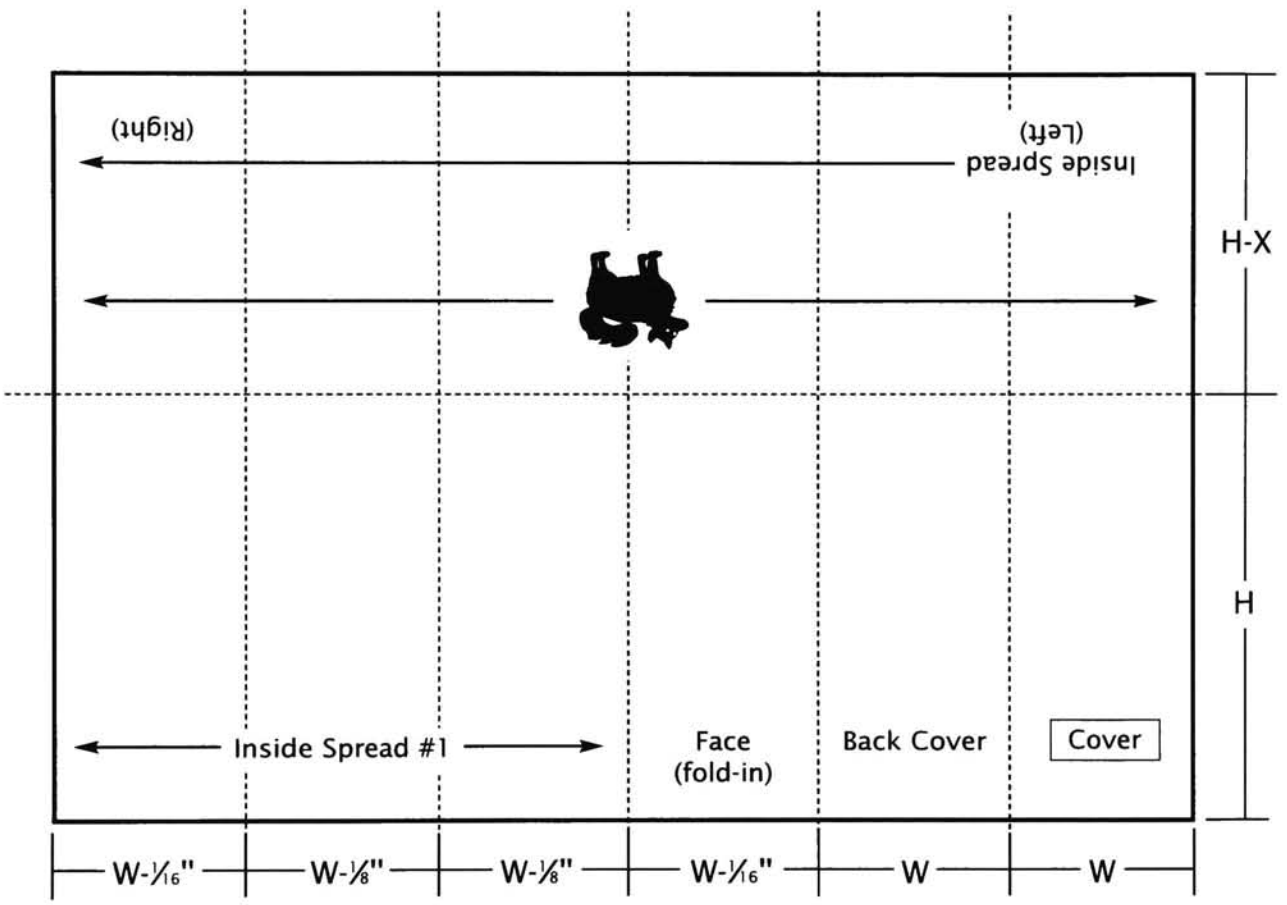
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

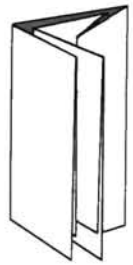
W: finished width
H: finished height
X: your choice
--- fold indication
upside-down



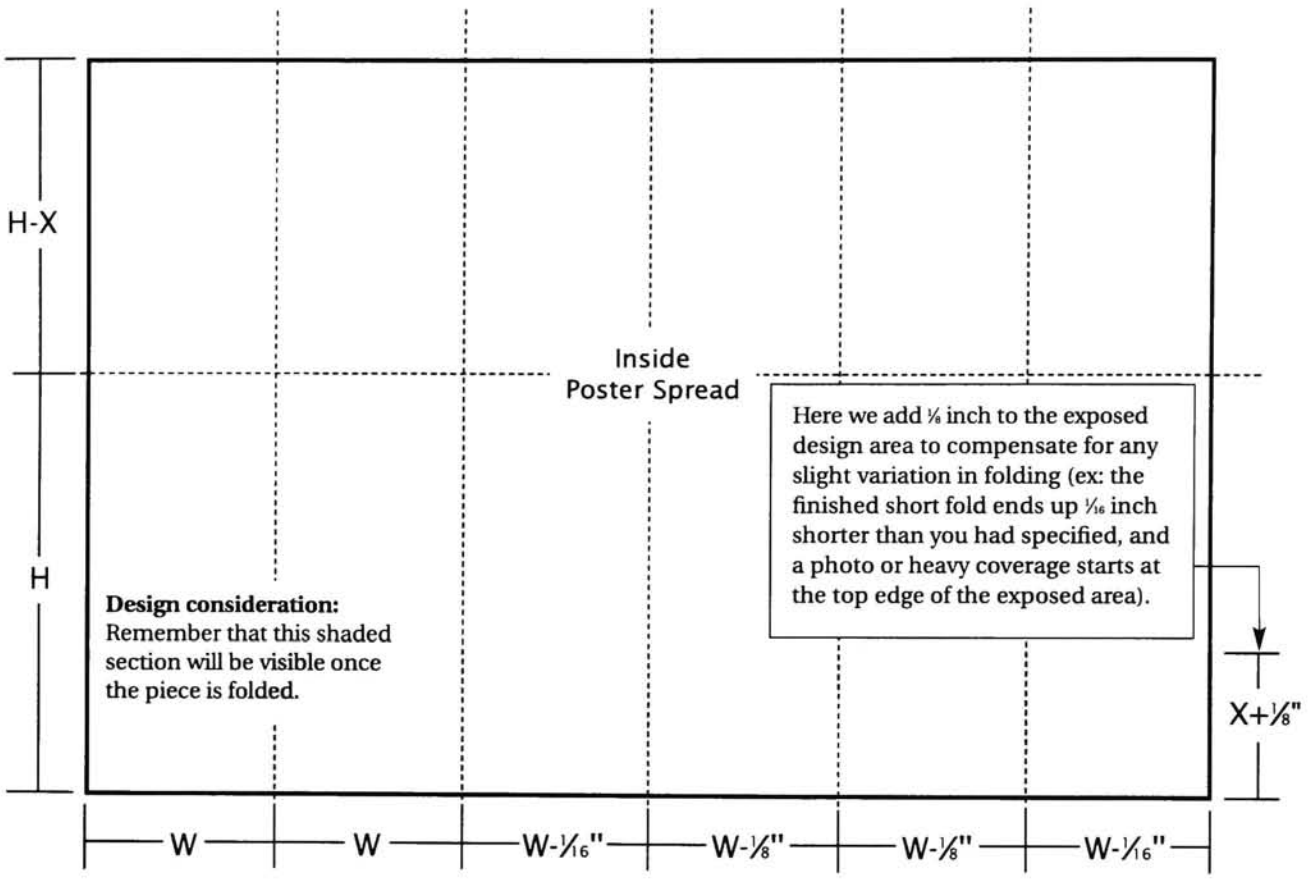
GETTING STARTED

Here's an example: For a short fold, the first thing we must determine is how short the short fold will be. In this case, we'll make it 2 inches shorter than the finished height, so X=2. Now we can calculate our document height. If the finished size is 4 x 8, then 8 inches plus 6 (8-2 , or height minus X) equals a document height of 14 inches. Our finished width is 4 inches, so the panels for page 1 of the digital document would be, from left, 3 15/16 inches, 3 7/8 inches, 3 7/8 inches, 3 15/16 inches, 4 inchesand 4 inches. Then for page two everything reverses, so from left your panels would measure 4 inches, 4 inches, 3 15/16 inches 3 7/8 inches, and 3 7/8 inches and 3 15/16 inches.

Remember: Document size and flat size must be the same, so in this case the document size would be 19 11/16 (19.687) inches wide by 14 inches high.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- If you are designing a self-mailing piece, this folding style could require wafer-seals to make it mail-ready.
- Be aware of your printer or bindery's minimum and maximum sheet sizes for their equipment. triple parallels with a short fold and any other folded pieces which open out to very large dimensions can require special large format folders.
- Make sure to have a folding dummy made in your specified paper. Paper weight will dramatically affect the success of this piece. Watch for bulkiness and problems in the corner joints of the folds—the printer can't do anything about this, and it will require a change in paper.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document width ahead of time. Create your document as if all panels will be the same (ex: for a triple parallel with short fold with a finished size of 4 x 8, set the document size to 24 x 14). Then set crosshairs to upper left corner of document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, $3^{15}/_{16}$ inches). Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement ($3\ ^{7}/_{8}$). Repeat for the last 4 panels ($3\ ^{7}/_{8}$, $3^{15}/_{16}$ inches, 4 inches and 4 inches). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Just change your document size by entering that decimal measurement (23.625). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

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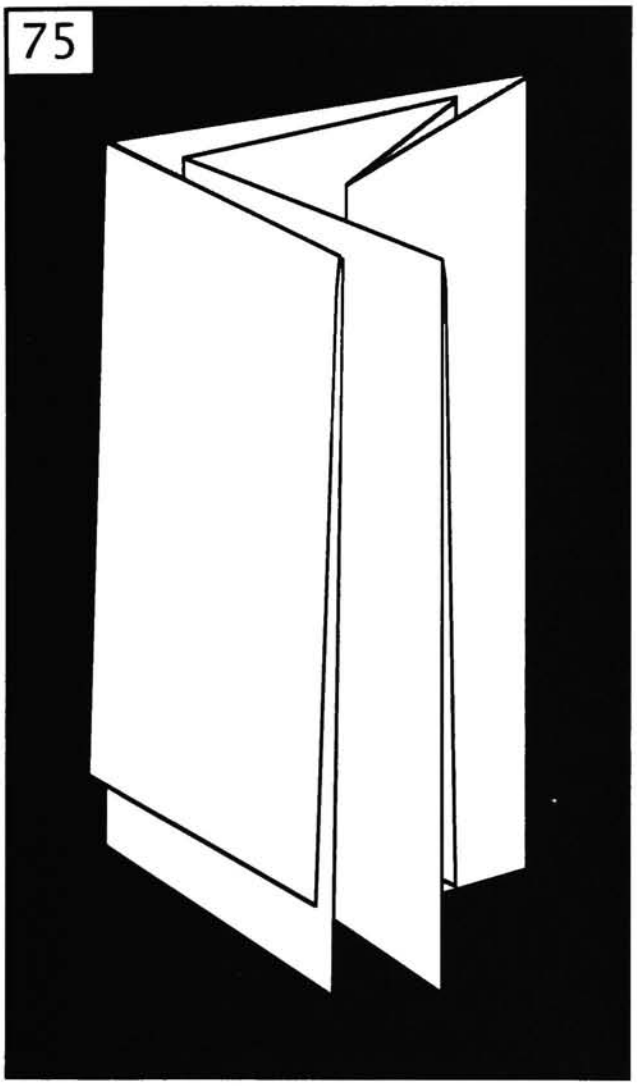
Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

TRIPLE PARALLEL WITH SHORT FOLD (OUTSIDE)

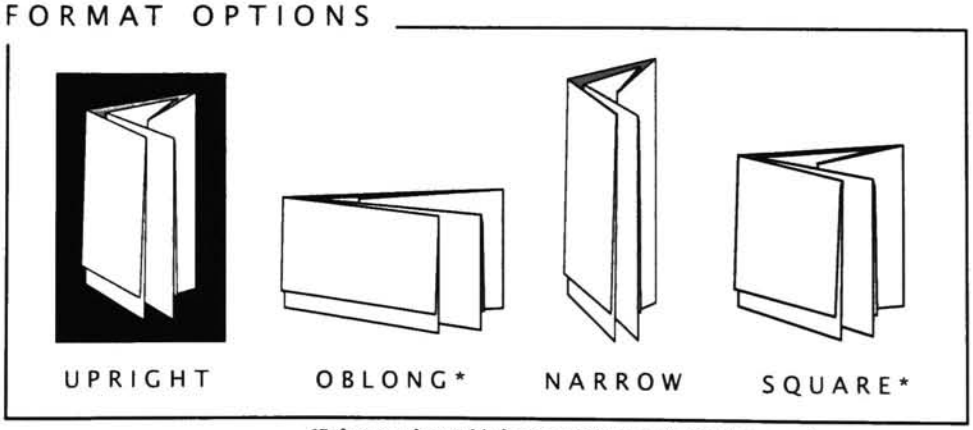


LEVEL

A level 3 fold has a long and difficult makeready, could require special machinery and low folding speed. These issues will be reflected in the cost.

The triple parallel with short fold outside has the same characteristic folding style as the triple parallel fold, and is similar to the broadside triple parallel fold because it folds in half on itself before the parallel folding is done. What makes this fold different is that unlike a broadside fold where panels are of equal length, in a short fold the fold-over panels are shorter than the finished height.

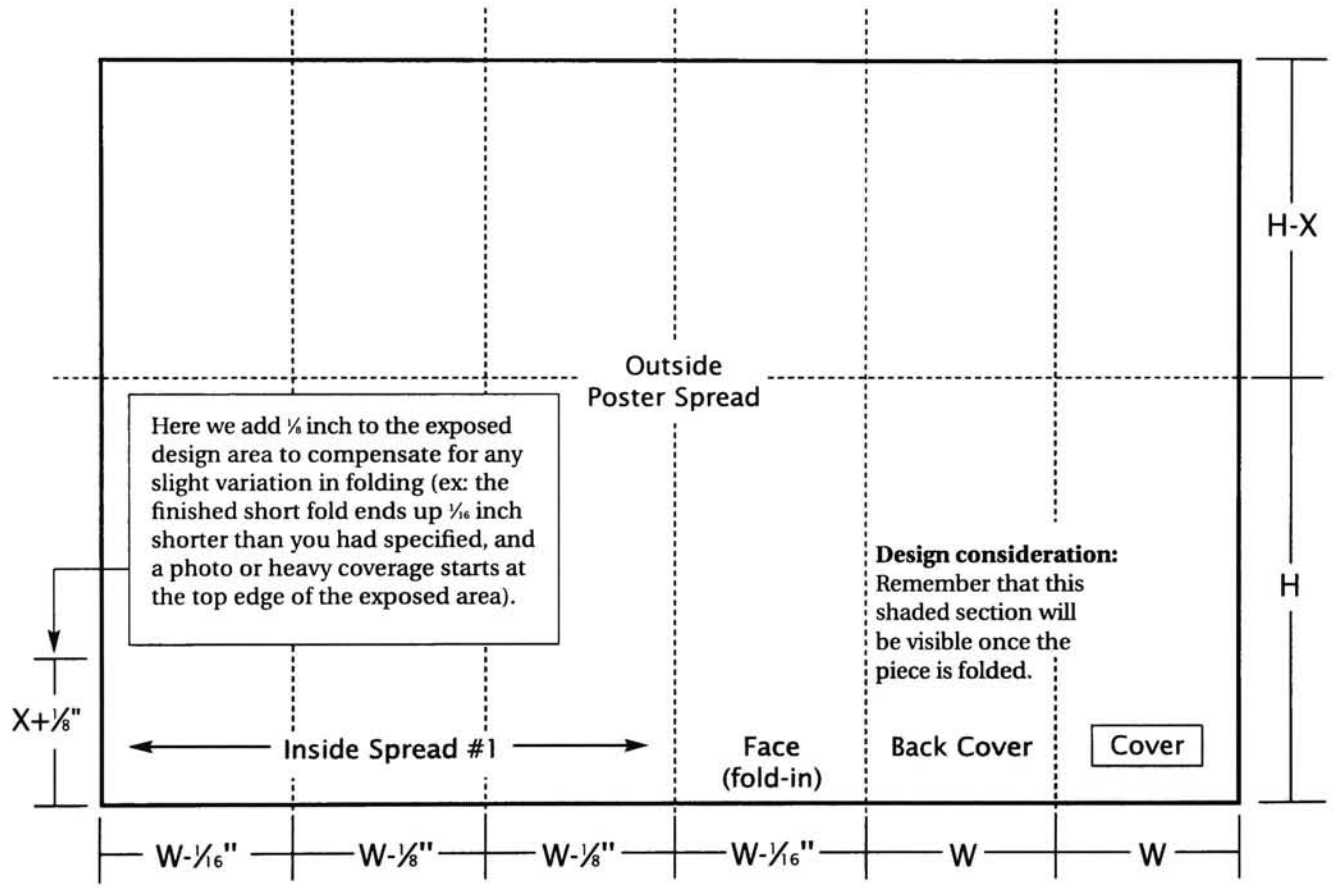
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

W: finished width
H: finished height
X: your choice
--- fold indication
upside-down

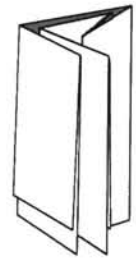
Digital Document setup: **Page 1** (side 1)



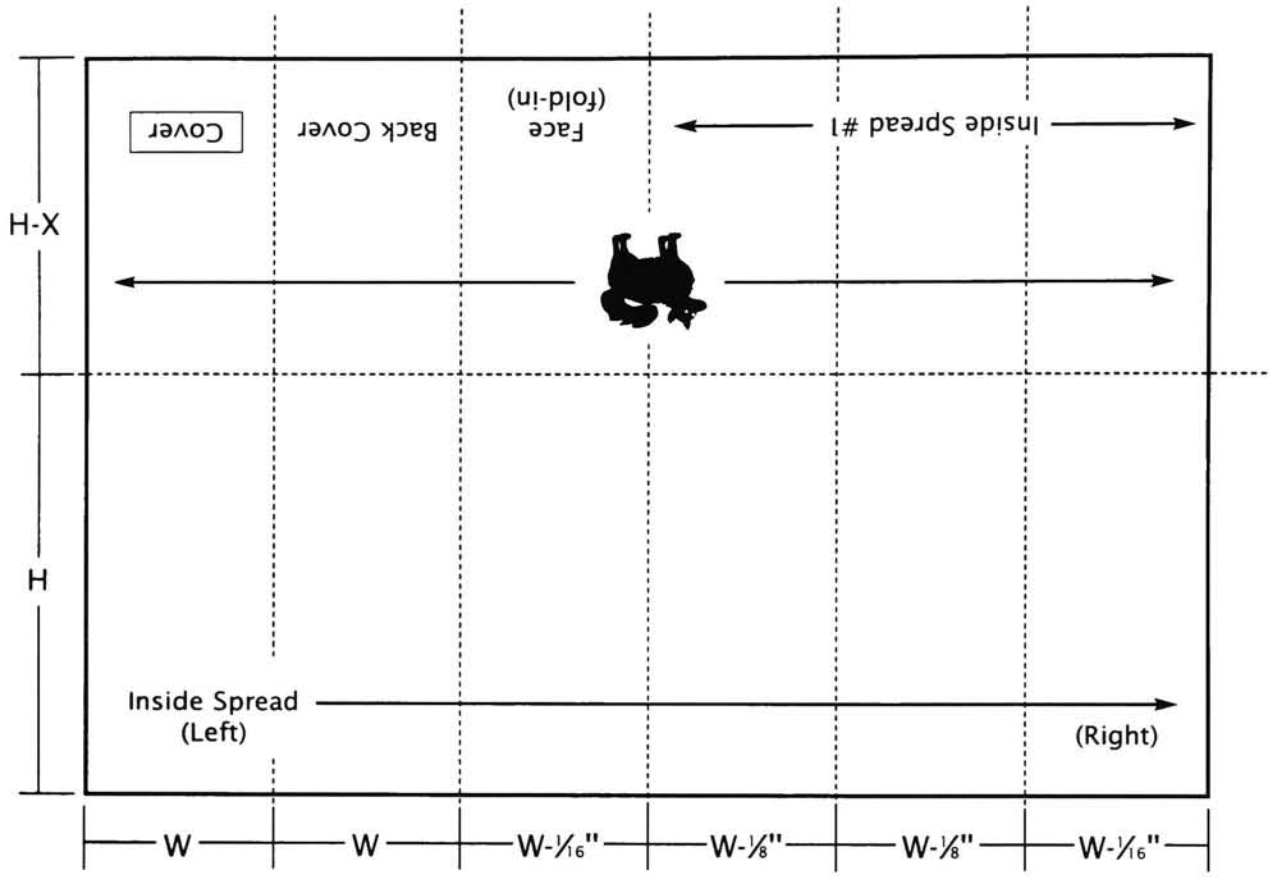
GETTING STARTED

Here's an example: For a short fold, the first thing we must determine is how short the short fold will be. In this case, we'll make it 2 inches shorter than the finished height, so X=2. Now we can calculate our document height. If the finished size is 4 x 8, then 8 inches plus 6 (8-2 , or height minus X) equals a document height of 14 inches. Our finished width is 4 inches, so the panels for page 1 of the digital document would be, from left, 3 15/16 inches, 3 7/8 inches, 3 7/8 inches, 3 15/16 inches, 4 inches and 4 inches. Then for page two everything reverses, so from left your panels would measure 4 inches, 4 inches, 3 15/16 inches 3 7/8 inches, and 3 7/8 inches and 3 15/16 inches.

Remember: Document size and flat size must be the same, so in this case the document size would be 19 11/16 (19.687) inches wide by 14 inches high.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

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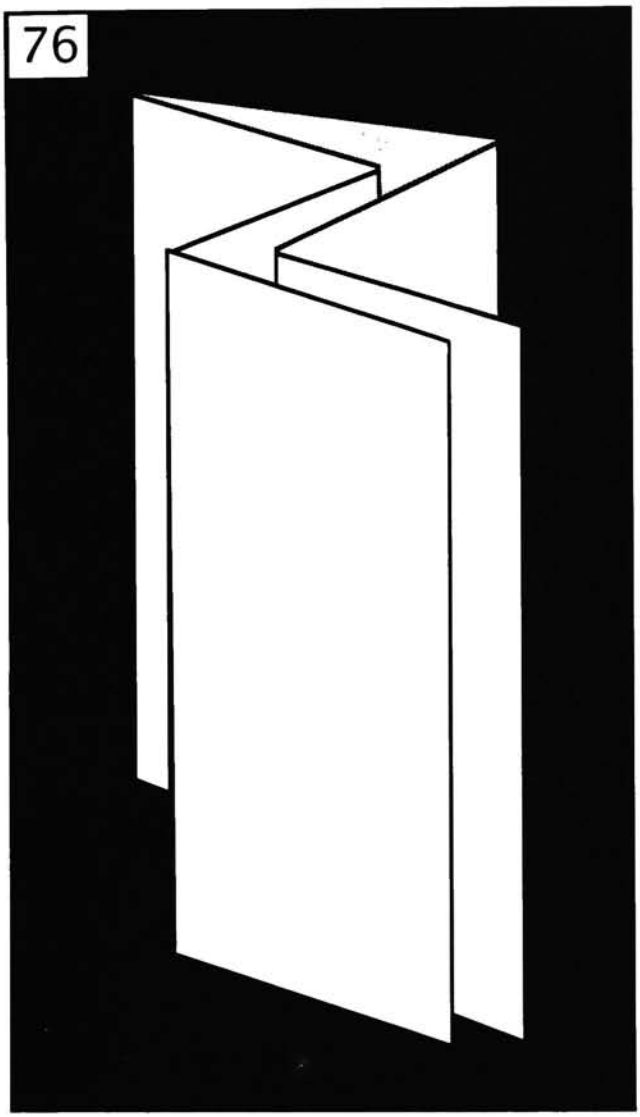
NOTES:

TRIPLE PARALLEL ACCORDION STYLE

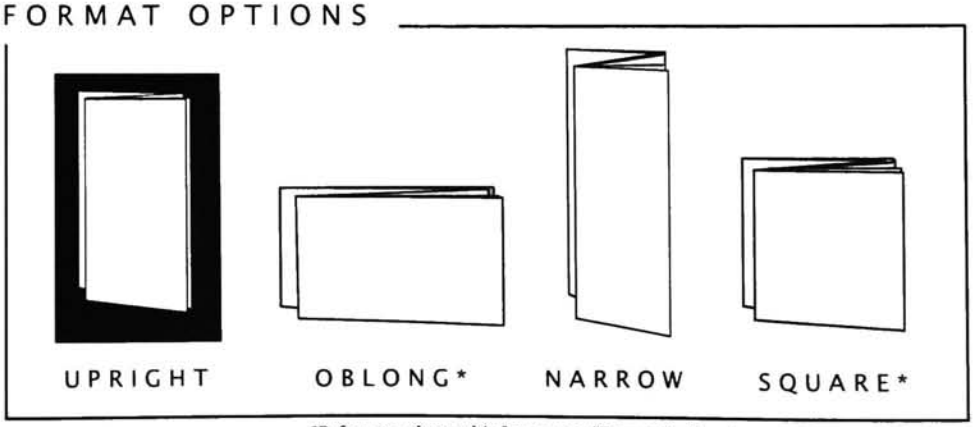


LEVEL

A level 2 fold has a moderate makeready, possible slower speed on the folding machine, and could have some special considerations.

The triple parallel accordion style fold is a variation of the triple parallel fold in which the characteristic parallel panels take on the characteristics of the accordion fold, "zig-zagging" back and forth.

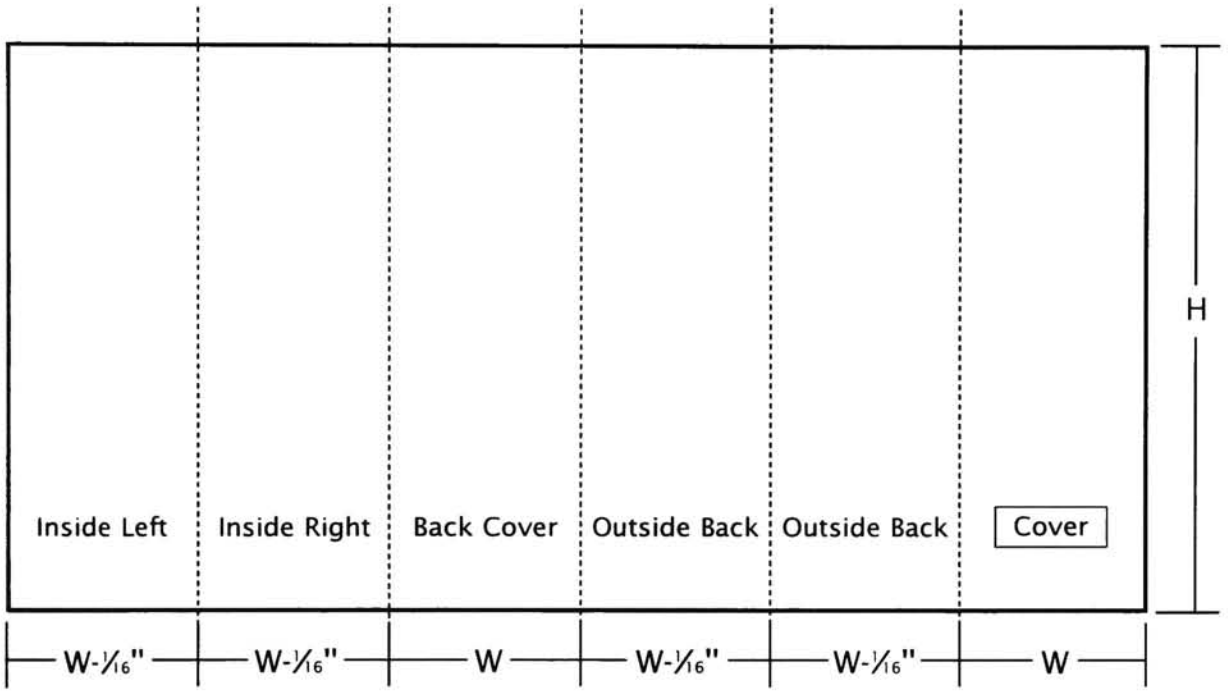
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

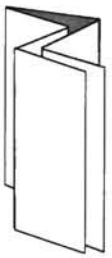
W:	finished width
H:	finished height
---	fold indication



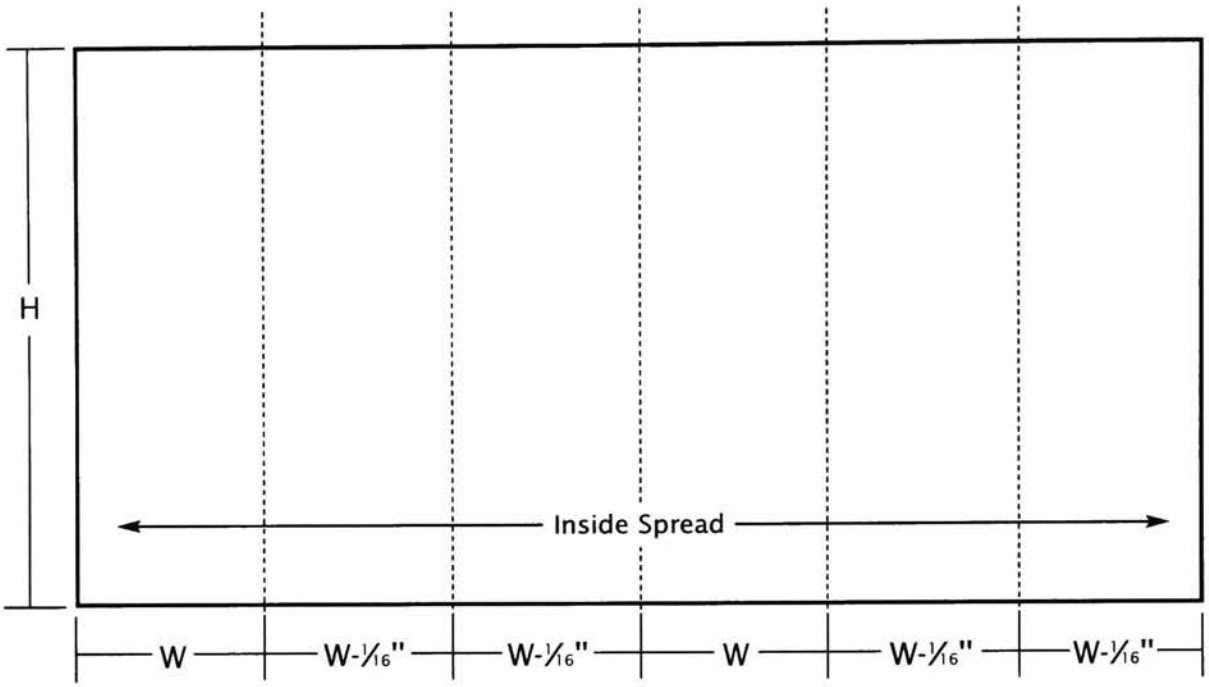
GETTING STARTED

Here's an example: If your finished size is 4 x 8, then your panels for page 1 of your digital document would be, from left, 3 15/16 inches, 3 15/16 inches, 4 inches, 3 15/16 inches, 3 15/16 inches, and 4 inches. Then for page two everything reverses, so from left your panels would measure 4 inches, 3 15/16 inches, 3 15/16 inches, 4 inches, and 3 15/16 inches and 3 15/16 inches, with a height of 8 inches.

Remember: Document size and flat size must be the same, so in this case the document size would be 23 3/4 (23.75) inches wide by 8 inches high.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- If you are designing a long piece, make sure to have a folding sample made up from your specified paper. If the paper is too lightweight, it could turn into a sagging flimsy piece.
- If you are designing a self-mailing piece, this folding style could require wafer-seals to make it mail-ready.
- If your paper choice is any heavier than 80# text (not recommended), you will want to consider scoring the piece.
- Be aware of your printer or bindery's minimum and maximum sheet sizes for their equipment.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document width ahead of time. Create your document as if all panels will be the same (ex: for an accordion-style triple parallel with a finished size of 4 x 8, set the document size to 24 x 8). Then set crosshairs to upper left corner of document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, $3^{15}/_{16}$ inches). Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement ($3^{15}/_{16}$). Repeat for the last 4 panels (4, $3^{15}/_{16}$, $3^{15}/_{16}$ and 4 inches). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Just change your document size by entering that decimal measurement (23.75). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

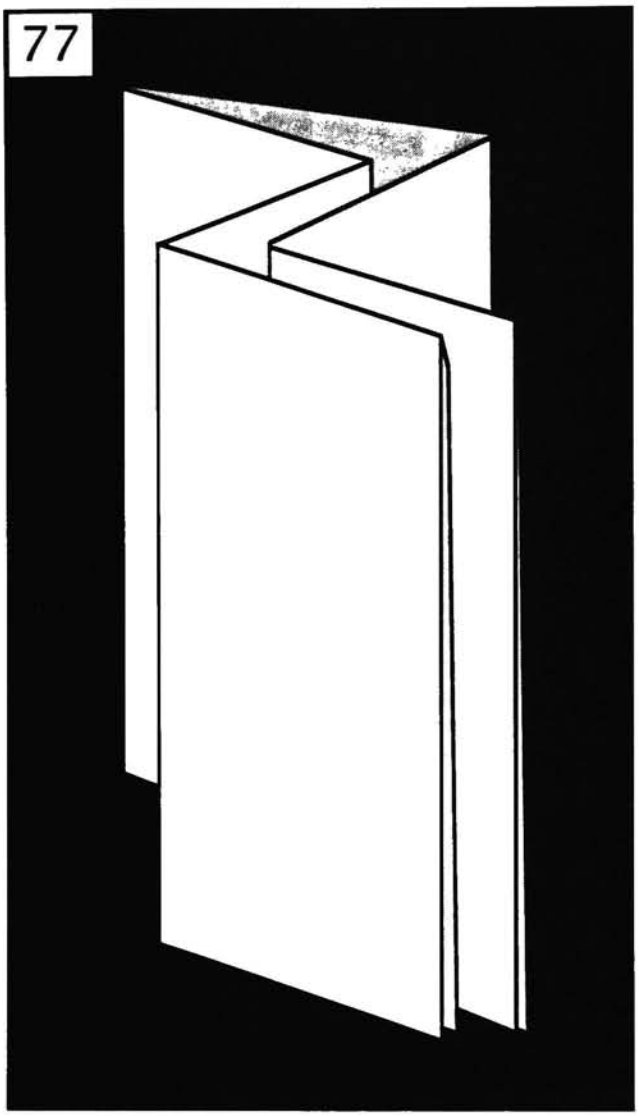
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

TRIPLE PARALLEL ACCORDION/ BROADSIDE

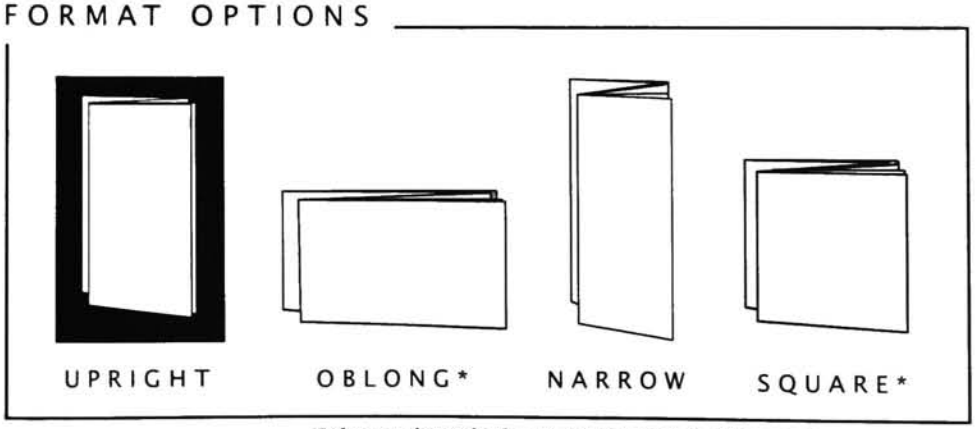


LEVEL

A level 3 fold has a long and difficult makeready, could require special machinery and low folding speed. These issues will be reflected in the cost.

The broadside triple parallel accordion fold has the same characteristics as the standard triple parallel accordion fold, but the difference is that this fold has twice the area because it folds in half on itself before the parallel folding is done.

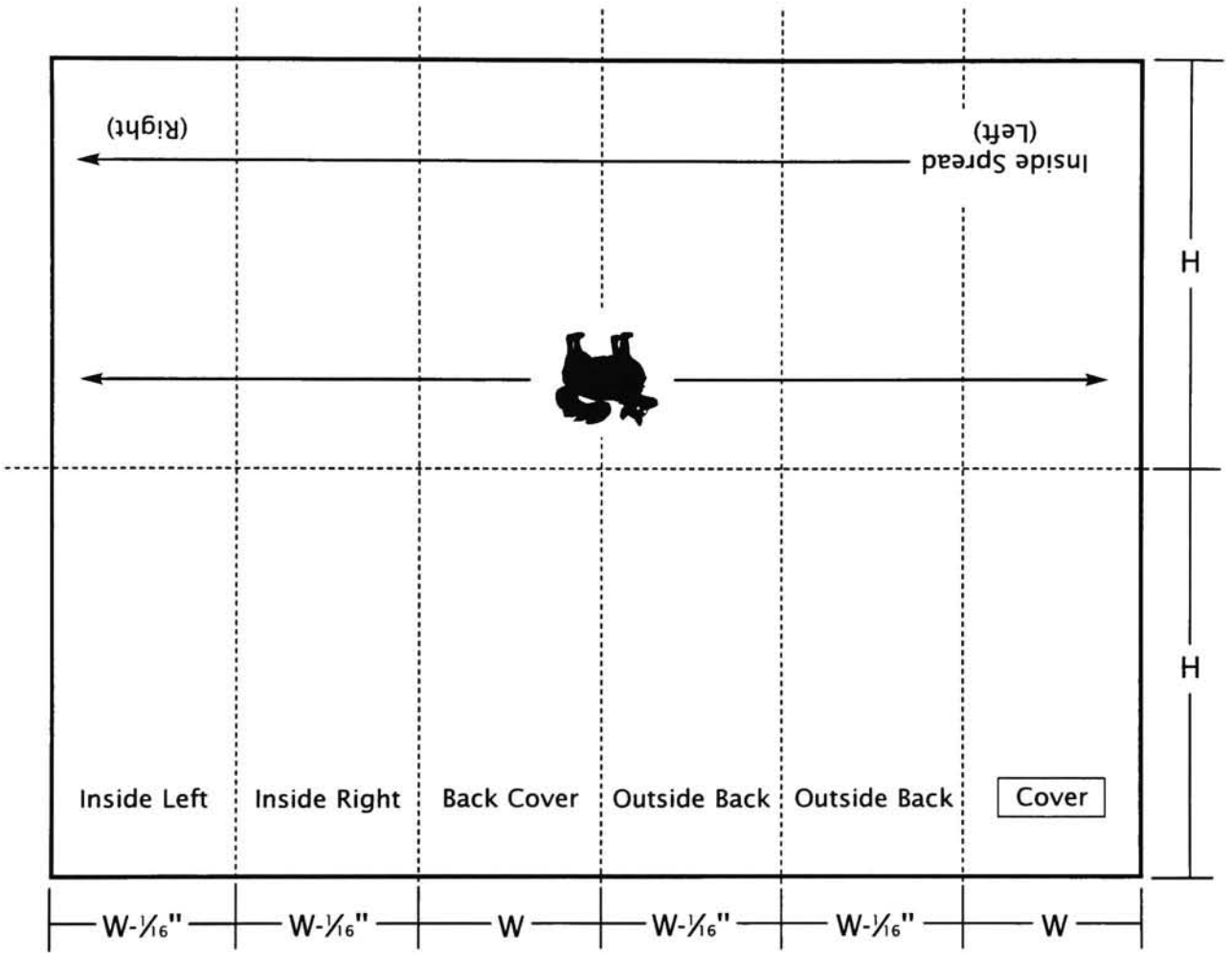
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

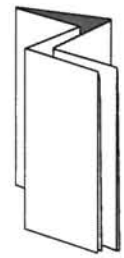
W: finished width
H: finished height
--- fold indication
upside-down



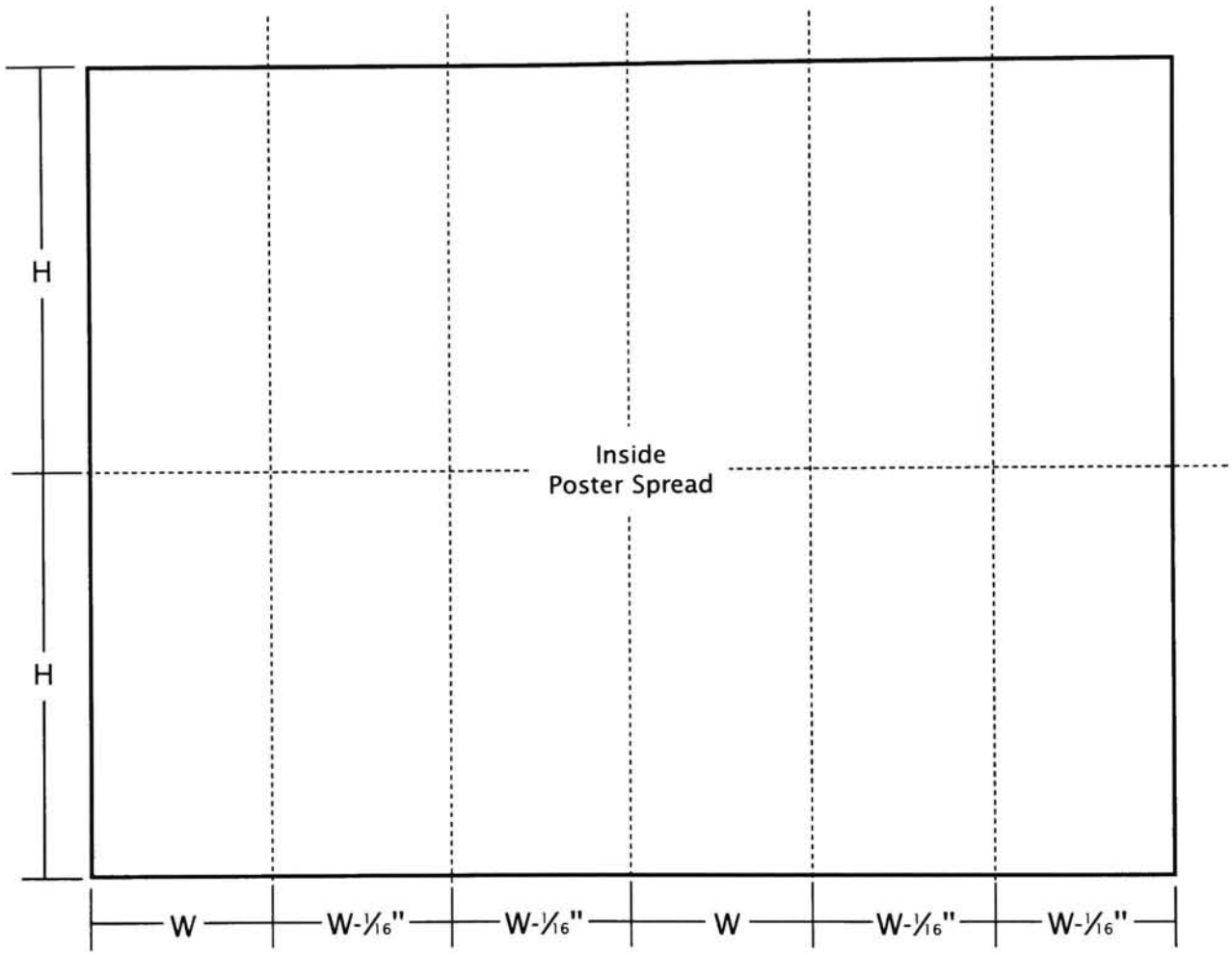
GETTING STARTED

Here's an example: If your finished size is 4 x 8, then your panels for page 1 of your digital document would be, from left, 3 15/16 inches, 3 15/16 inches, 4 inches, 3 15/16 inches, 3 15/16 inches, and 4 inches. Then for page two everything reverses, so from left your panels would measure 4 inches, 3 15/16 inches, 3 15/16 inches, 4 inches, and 3 15/16 inches and 3 15/16 inches, with a height of 16 inches (8 inches plus 8 inches).

Remember: Document size and flat size must be the same, so in this case the document size would be 23 3/4 (23.75) inches wide by 16 inches high.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- If you are designing a self-mailing piece, this folding style could require wafer-seals to make it mail-ready.
- Be aware of your printer or bindery's minimum and maximum sheet sizes for their equipment. triple parallels with a broadside fold and any other folded pieces which open out to very large dimensions generally require special large format folders.
- Make sure to have a folding dummy made in your specified paper. Paper weight will dramatically affect the success of this piece. Watch for bulkiness and problems in the corner joints of the folds—the printer can't do anything about this, and it will require a change in paper.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document width ahead of time. Create your document as if all panels will be the same (ex: for an accordion-style broadside triple parallel with a finished size of 4 x 8, set the document size to 24 x 16). Then set crosshairs to upper left corner of document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, $3^{15}/_{16}$ inches). Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement ($3^{15}/_{16}$). Repeat for the last 4 panels (4, $3^{15}/_{16}$, $3^{15}/_{16}$ and 4 inches). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Just change your document size by entering that decimal measurement (23.75). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

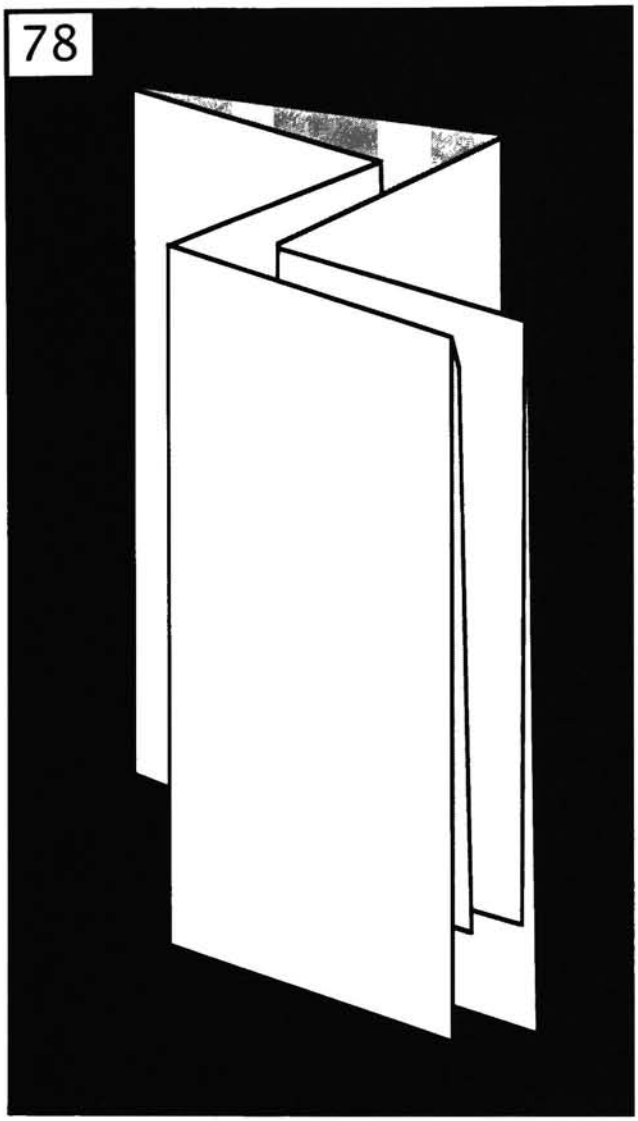
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

TRIPLE PARALLEL ACCORDION WITH SHORT FOLD (INSIDE)

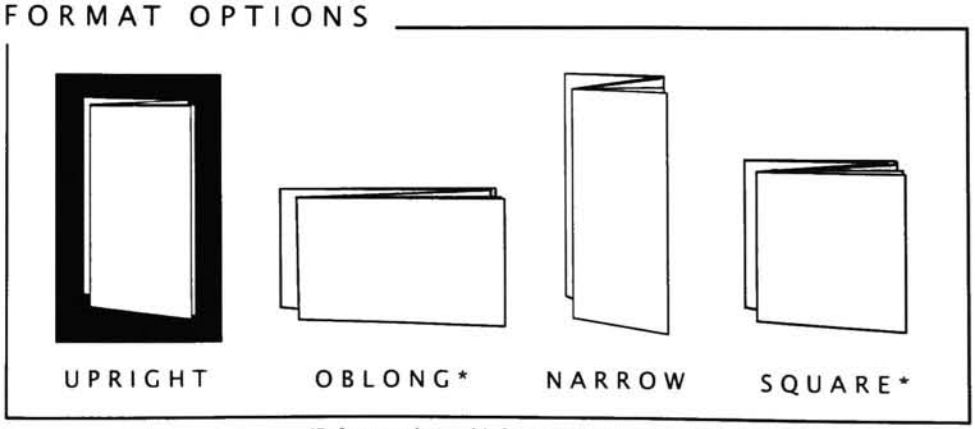


LEVEL

A level 3 fold has a long and difficult makeready, could require special machinery and low folding speed. These issues will be reflected in the cost.

The triple parallel accordion with short fold inside has the same characteristic folding style as the triple parallel accordion fold, and is similar to the broadside triple parallel accordion fold because it folds in half on itself before the parallel folding is done. What makes this fold different is that unlike a broadside fold where panels are of equal length, in a short fold the fold-over panels are shorter than the finished height.

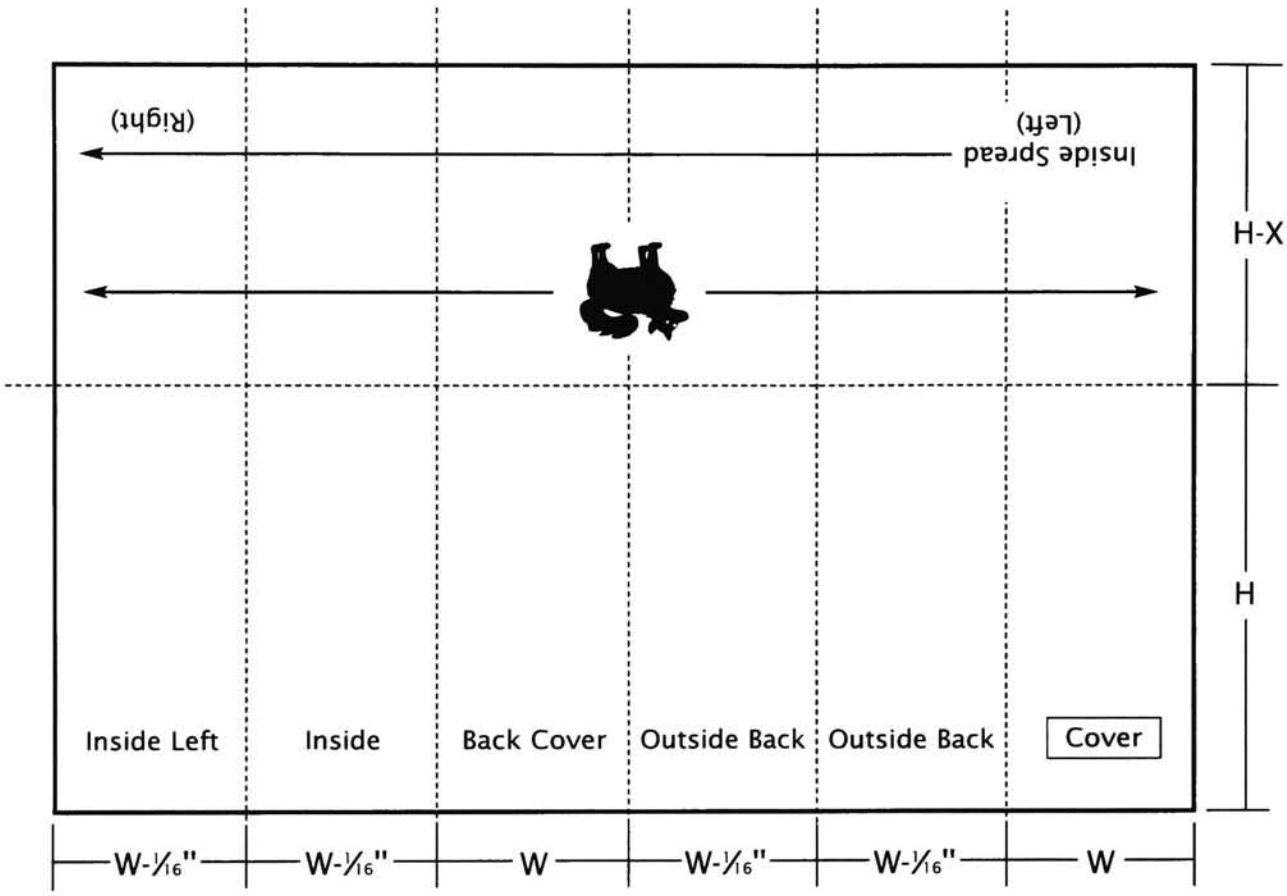
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

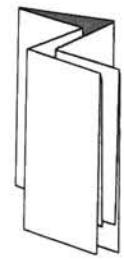
W: finished width
H: finished height
X: your choice
--- fold indication
upside-down



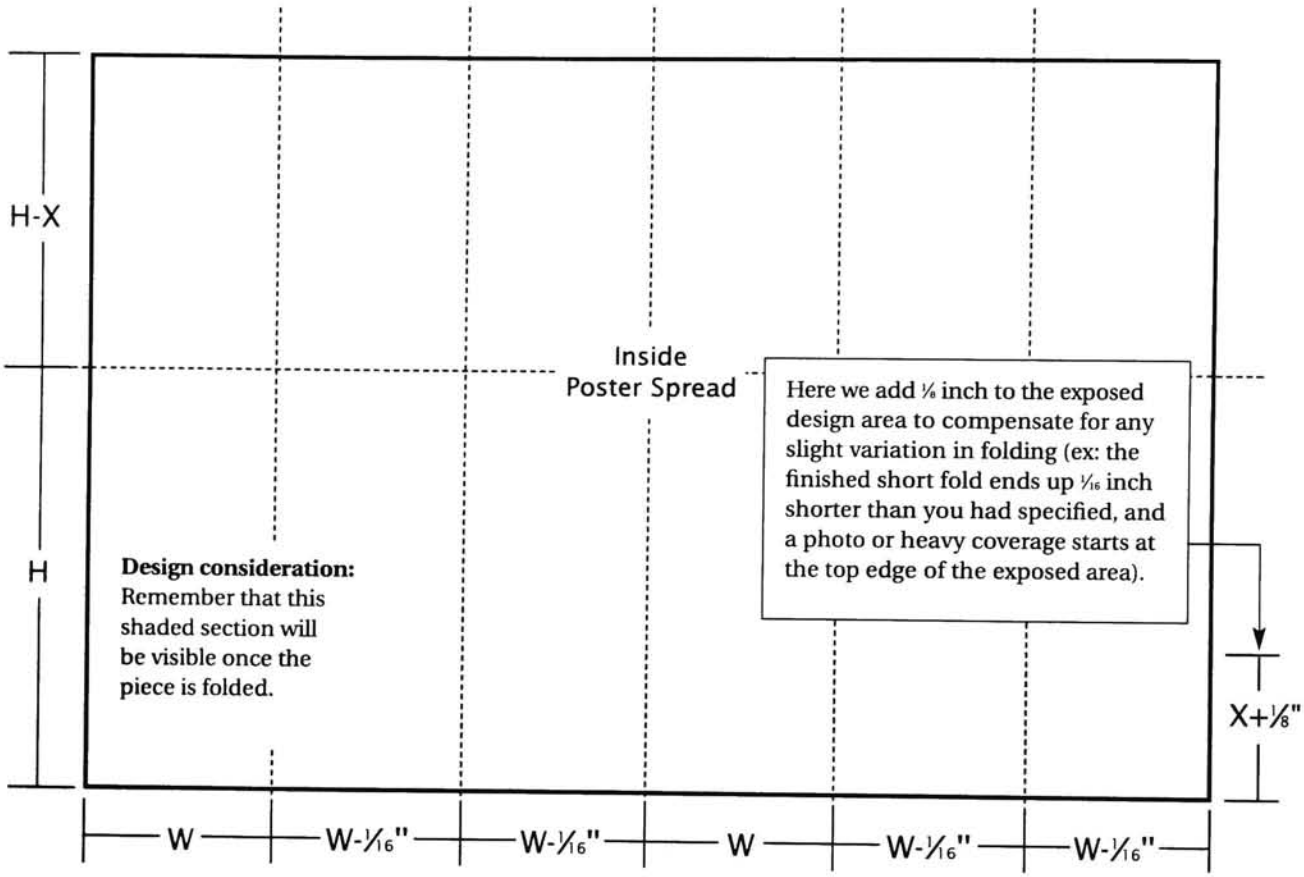
GETTING STARTED

Here's an example: For a short fold, the first thing we must determine is how short the short fold will be. In this case, we'll make it 2 inches shorter than the finished height, so X=2. Now we can calculate our document height. If the finished size is 4 x 8, then 8 inches plus 6 (8-2 , or height minus X) equals a document height of 14 inches. Our finished width is 4 inches, so the panels for page 1 of the digital document would be, from left, 3 15/16 inches, 3 15/16 inches, 4 inches, 3 15/16 inches, 3 15/16 inches, and 4 inches. Then for page two everything reverses, so from left your panels would measure 4 inches, 3 15/16 inches, 3 15/16 inches, 4 inches, and 3 15/16 inches and 3 15/16 inches.

Remember: Document size and flat size must be the same, so in this case the document size would be 23 3/4 (23.75) inches wide by 14 inches high.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- If you are designing a self-mailing piece, this folding style could require wafer-seals to make it mail-ready.
- Be aware of your printer or bindery's minimum and maximum sheet sizes for their equipment. triple parallels with a broadside fold and any other folded pieces which open out to very large dimensions generally require special large format folders.
- Make sure to have a folding dummy made in your specified paper. Paper weight will dramatically affect the success of this piece. Watch for bulkiness and problems in the corner joints of the folds—the printer can't do anything about this, and it will require a change in paper.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document width ahead of time. Create your document as if all panels will be the same (ex: for an accordion-style broadside triple parallel with short fold with a finished size of 4 x 8, set the document size to 24 x 14). Then set crosshairs to upper left corner of document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, $3^{15}/_{16}$ inches). Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement ($3^{15}/_{16}$). Repeat for the last 4 panels (4, $3^{15}/_{16}$, $3^{15}/_{16}$ and 4 inches). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Just change your document size by entering that decimal measurement (23.75). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

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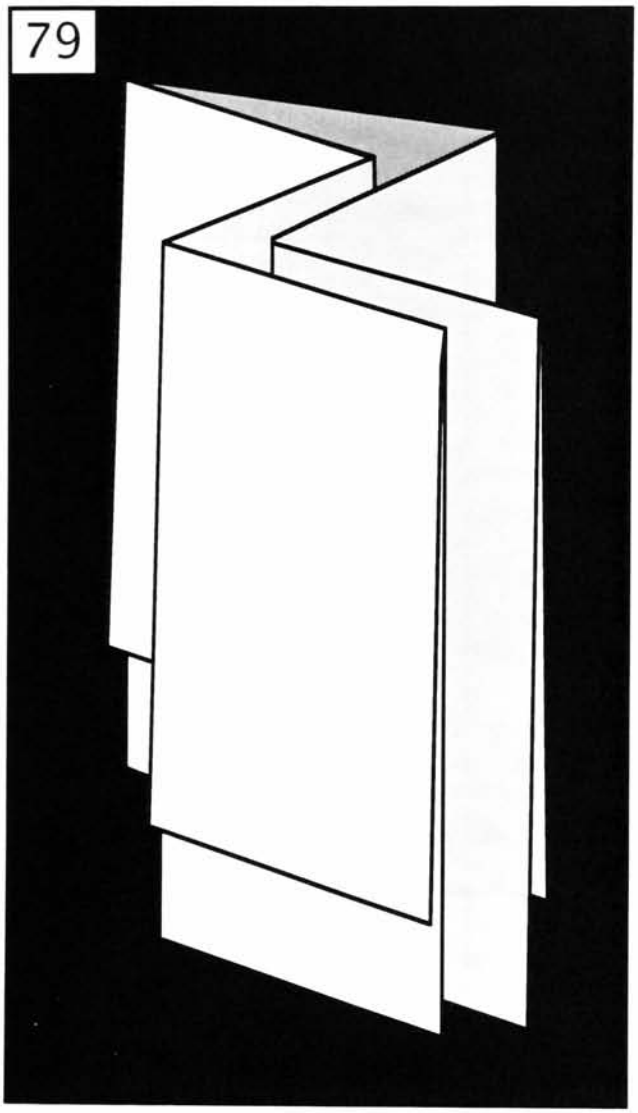
Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

TRIPLE PARALLEL ACCORDION WITH SHORT FOLD (OUTSIDE)

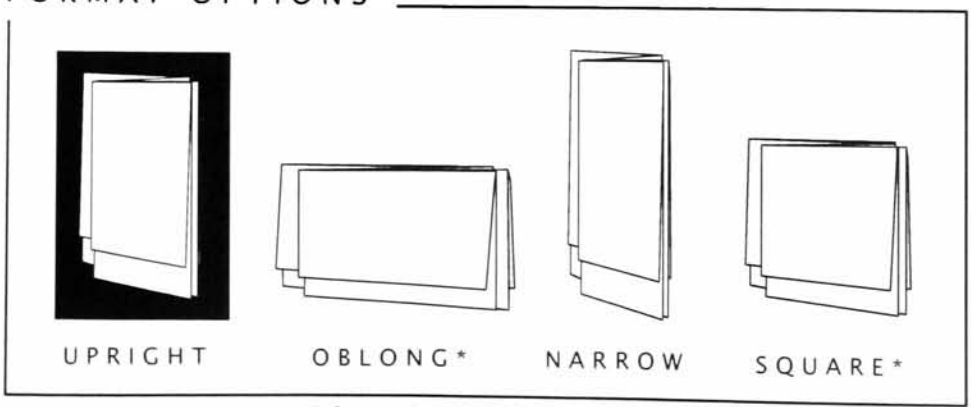


LEVEL

A level 3 fold has a long and difficult makeready, could require special machinery and low folding speed. These issues will be reflected in the cost.

The triple parallel accordion with short fold outside has the same characteristic folding style as the triple parallel accordion fold, and is similar to the broadside triple parallel accordion fold because it folds in half on itself before the parallel folding is done. What makes this fold different is that unlike a broadside fold where panels are of equal length, in a short fold the fold-over panels are shorter than the finished height.

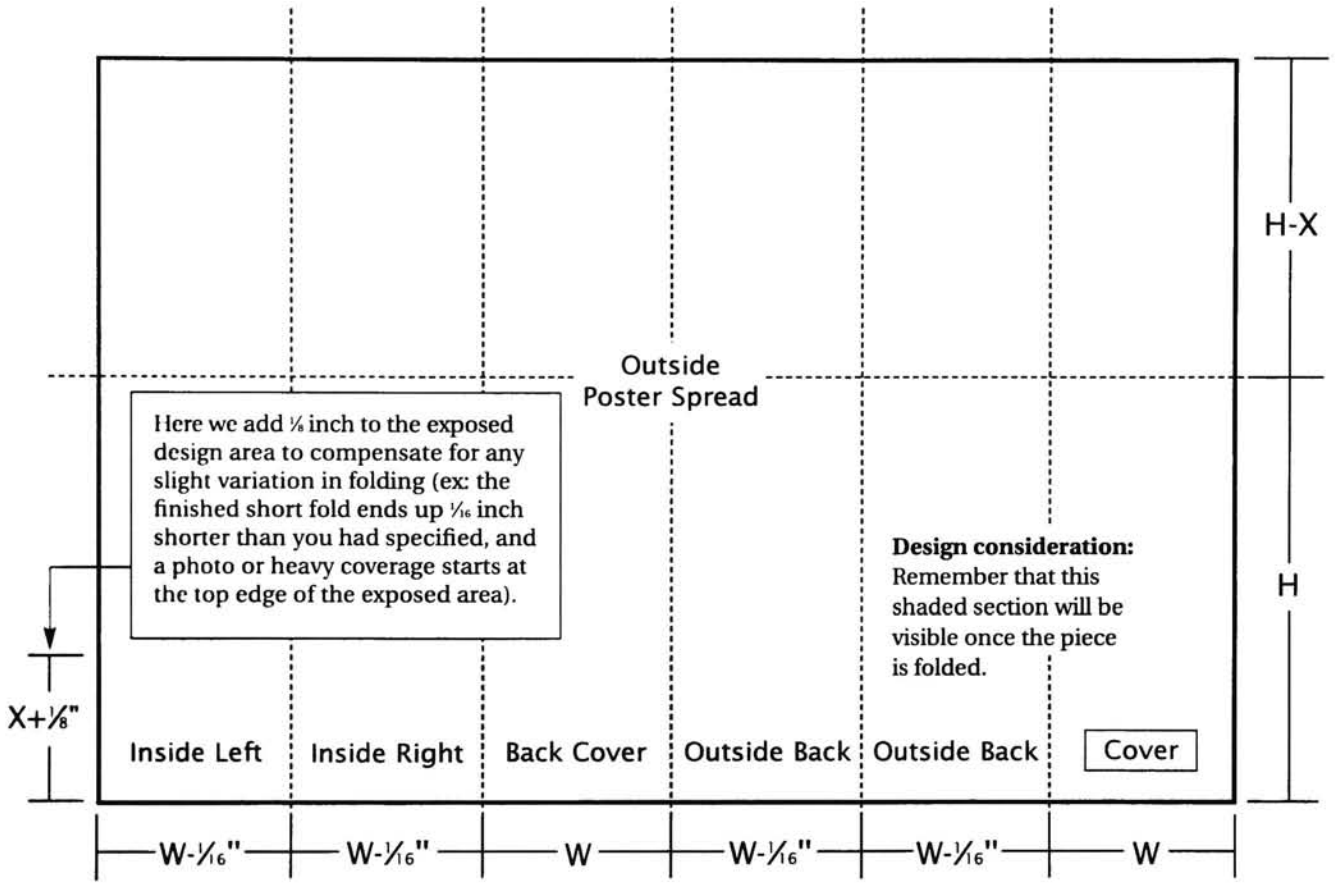
FORMAT OPTIONS



*Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

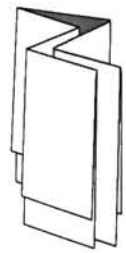
W: finished width
H: finished height
X: your choice
--- fold indication
upside-down



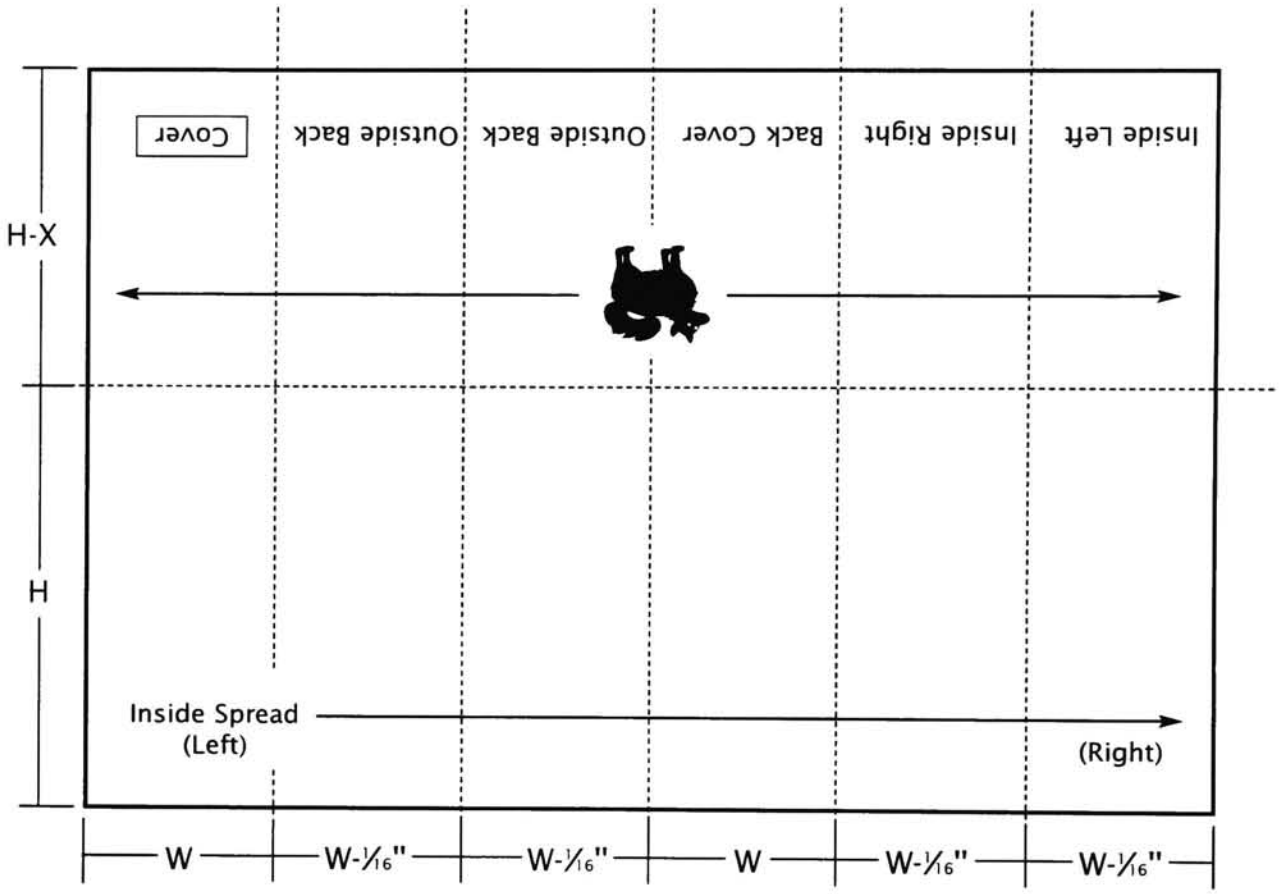
GETTING STARTED

Here's an example: For a short fold, the first thing we must determine is how short the short fold will be. In this case, we'll make it 2 inches shorter than the finished height, so X=2. Now we can calculate our document height. If the finished size is 4 x 8, then 8 inches plus 6 (8-2 , or height minus X) equals a document height of 14 inches. Our finished width is 4 inches, so the panels for page 1 of the digital document would be, from left, 3 15/16 inches, 3 15/16 inches, 4 inches, 3 15/16 inches, 3 15/16 inches, and 4 inches. Then for page two everything reverses, so from left your panels would measure 4 inches, 3 15/16 inches, 3 15/16 inches, 4 inches, and 3 15/16 inches and 3 15/16 inches.

Remember: Document size and flat size must be the same, so in this case the document size would be 23 ¾ (23.75) inches wide by 14 inches high.



Digital Document setup: **Page 2** (side 2)



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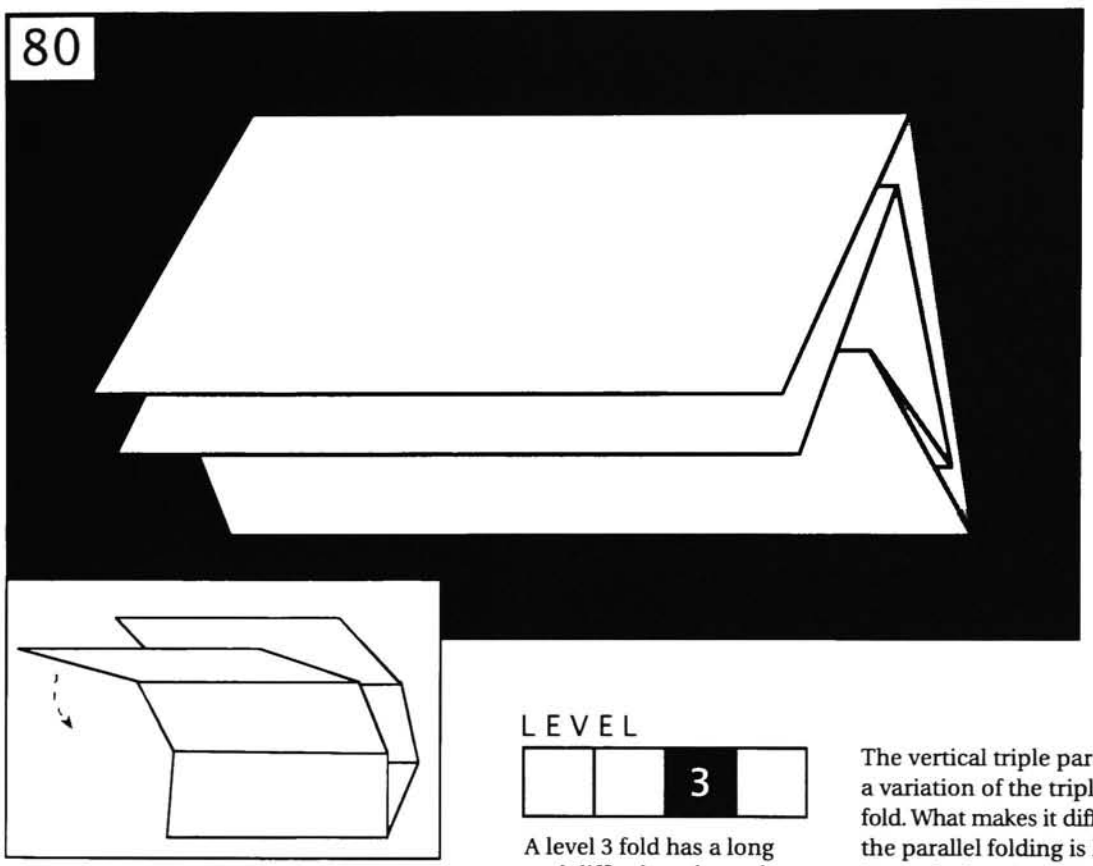
NOTES:

TRIPLE PARALLEL VERTICAL

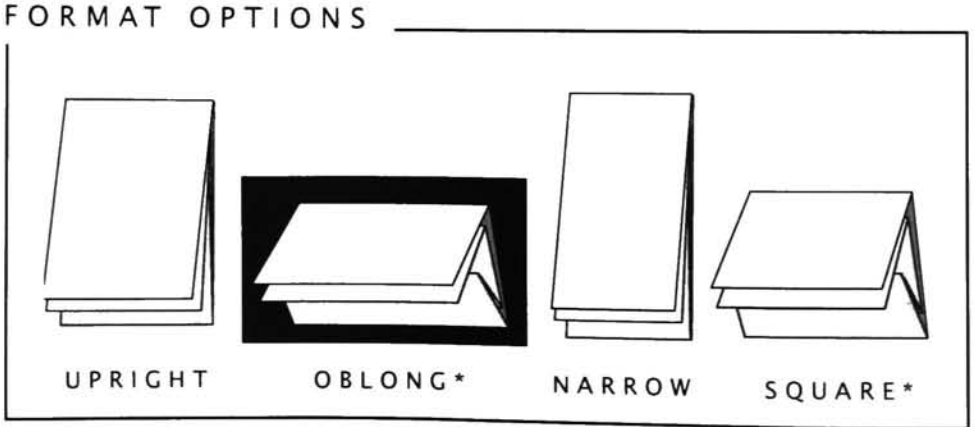


LEVEL

A level 3 fold has a long and difficult makeready, could require special machinery and low folding speed. These issues will be reflected in the cost.

The vertical triple parallel fold is a variation of the triple parallel fold. What makes it different is that the parallel folding is horizontal instead of vertical, so it opens down instead of out to the side.

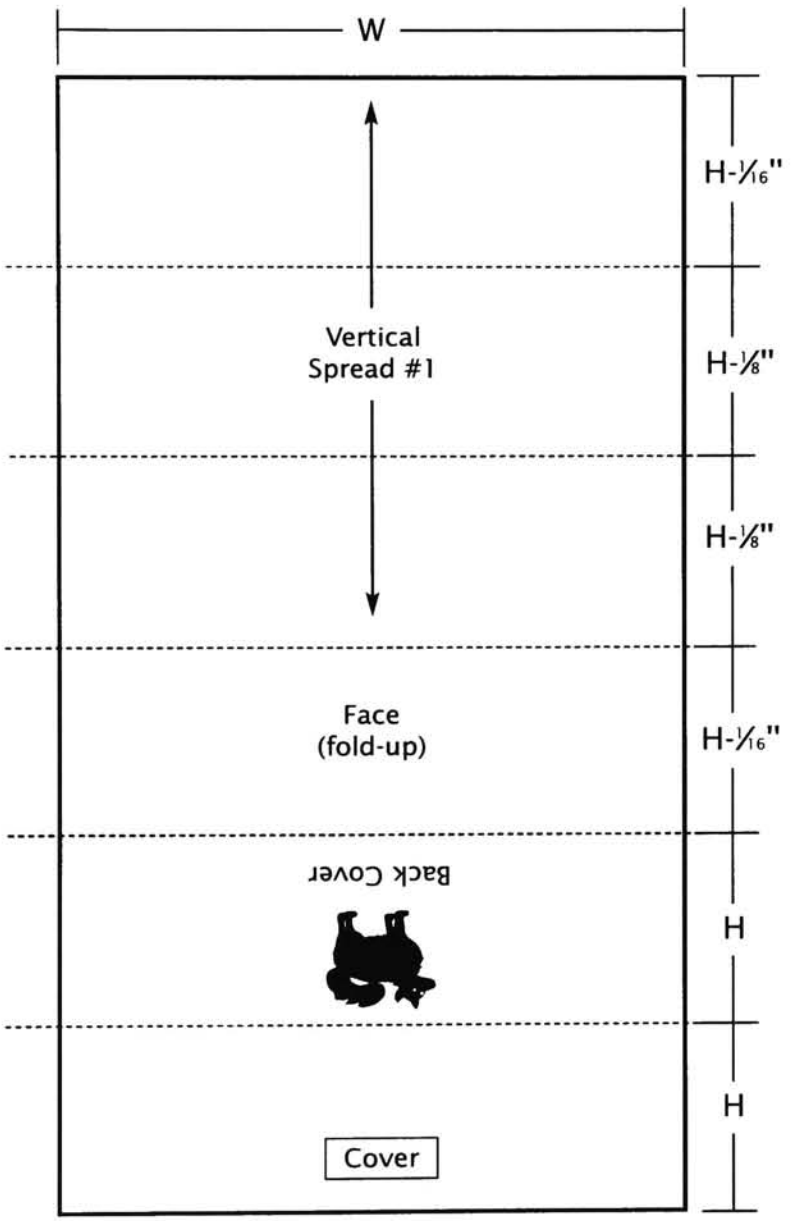
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

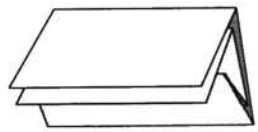
W: finished width
H: finished height
--- fold indication
upside-down



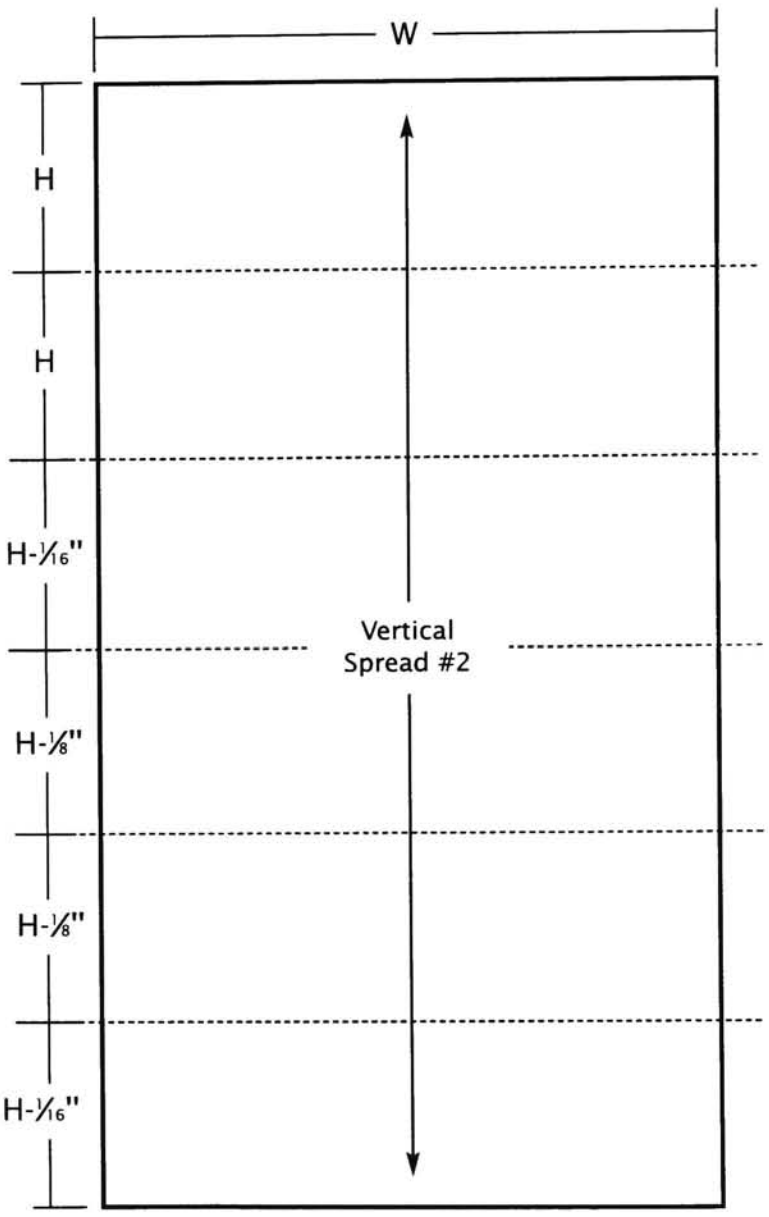
GETTING STARTED

Here's an example: If your finished size is 6 x 4, then your panels for page 1 of your digital document would be, from top, 3 15/16 inches, 3 7/8 inches, 3 7/8 inches, 3 15/16 inches, 4 inches and 4 inches, with a width of 6 inches. This document flips laterally, and therefore page 2 measures exactly the same as page 1.

Remember: Document size and flat size must be the same, so in this case the document size would be 6 inches wide by 23 5/8 (23.625) inches high.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- If you are designing a long piece, make sure to have a folding sample made up from your specified paper. If the paper is too light-weight, it could turn into a sagging flimsy piece.
- If you are designing a self-mailing piece, this folding style could require wafer-seals to make it mail-ready.
- If your paper choice is any heavier than 80# text (not recommended), you will want to consider scoring the piece.
- Be aware of your printer or bindery's minimum and maximum sheet sizes for their equipment.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document height ahead of time. Create your document as if all panels will be the same (ex: for a vertical triple parallel with a finished size of 6 x 4, set the document size to 6 x 24). Then set crosshairs to upper left corner of document, pull down a guide bar from the top ruler and set it to the length of your first panel (in this example, 3 15/16 inches). Then, bring the cross-hairs down to the guide you just set (which lets you measure from zero again) and drag your guide down to the next panel measurement (3 7/8). Repeat for the last 4 panels (3 7/8, 3 15/16, 4 inches and 4 inches). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the Y measurement, that will give you the document length you are looking for. Just change your document size by entering that decimal measurement (23.625). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

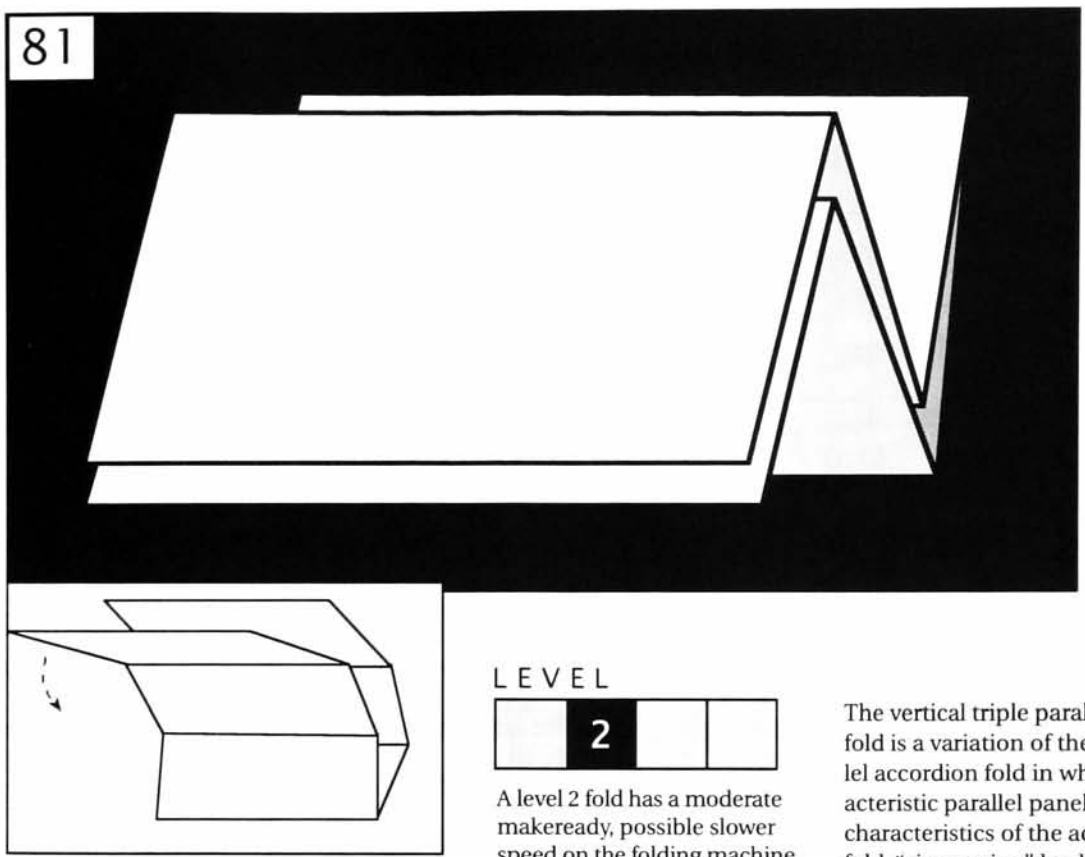
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

TRIPLE PARALLEL / VERTICAL ACCORDION STYLE

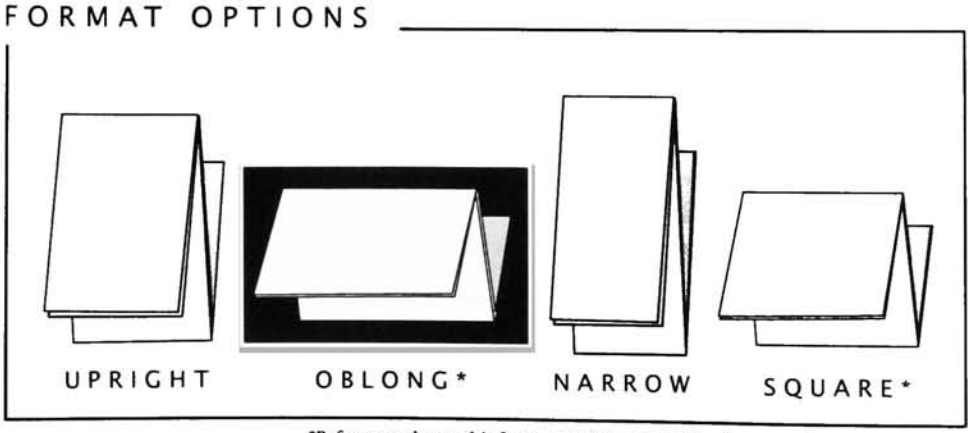


LEVEL

A level 2 fold has a moderate makeready, possible slower speed on the folding machine, and could have some special considerations.

The vertical triple parallel accordion fold is a variation of the triple parallel accordion fold in which the characteristic parallel panels take on the characteristics of the accordion fold, "zig-zagging" back and forth. What makes it different is that the parallel folding is horizontal instead of vertical, so it opens down instead of out to the side.

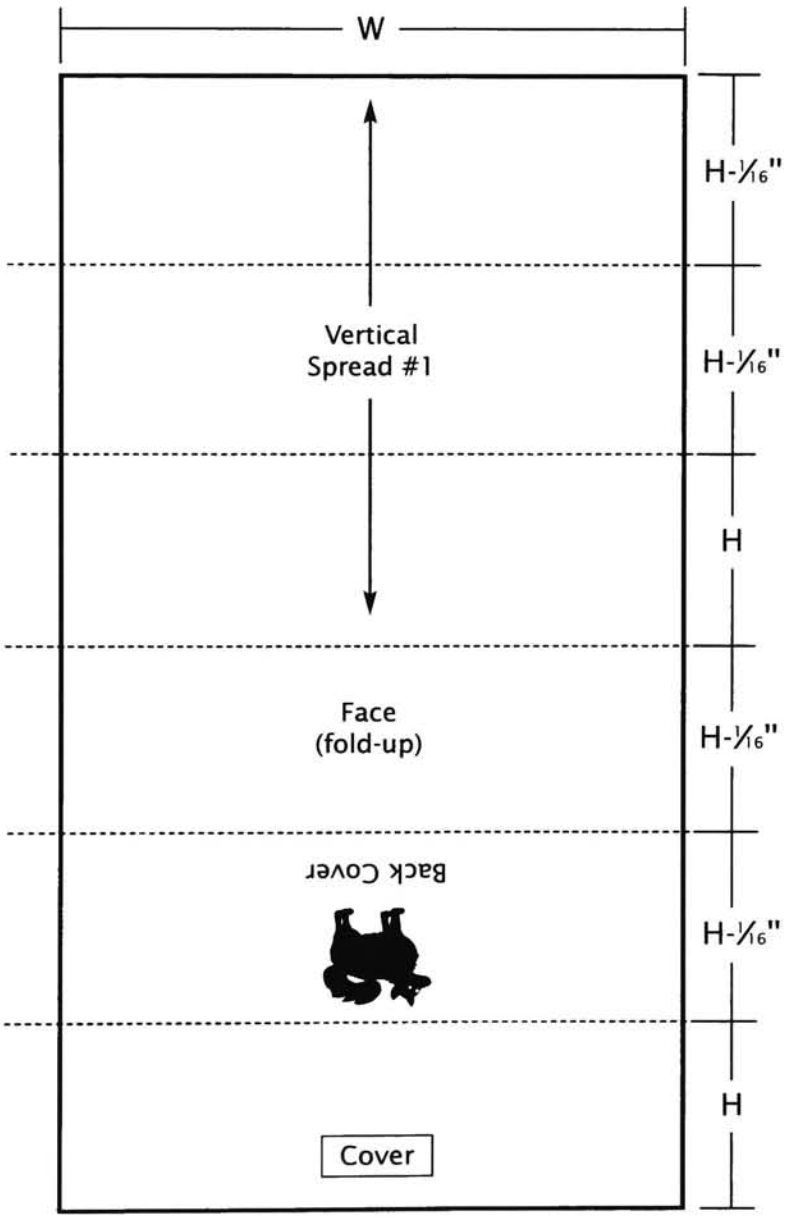
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

W: finished width
H: finished height
--- fold indication
upside-down

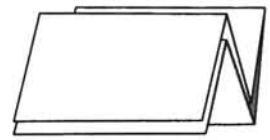


GETTING STARTED

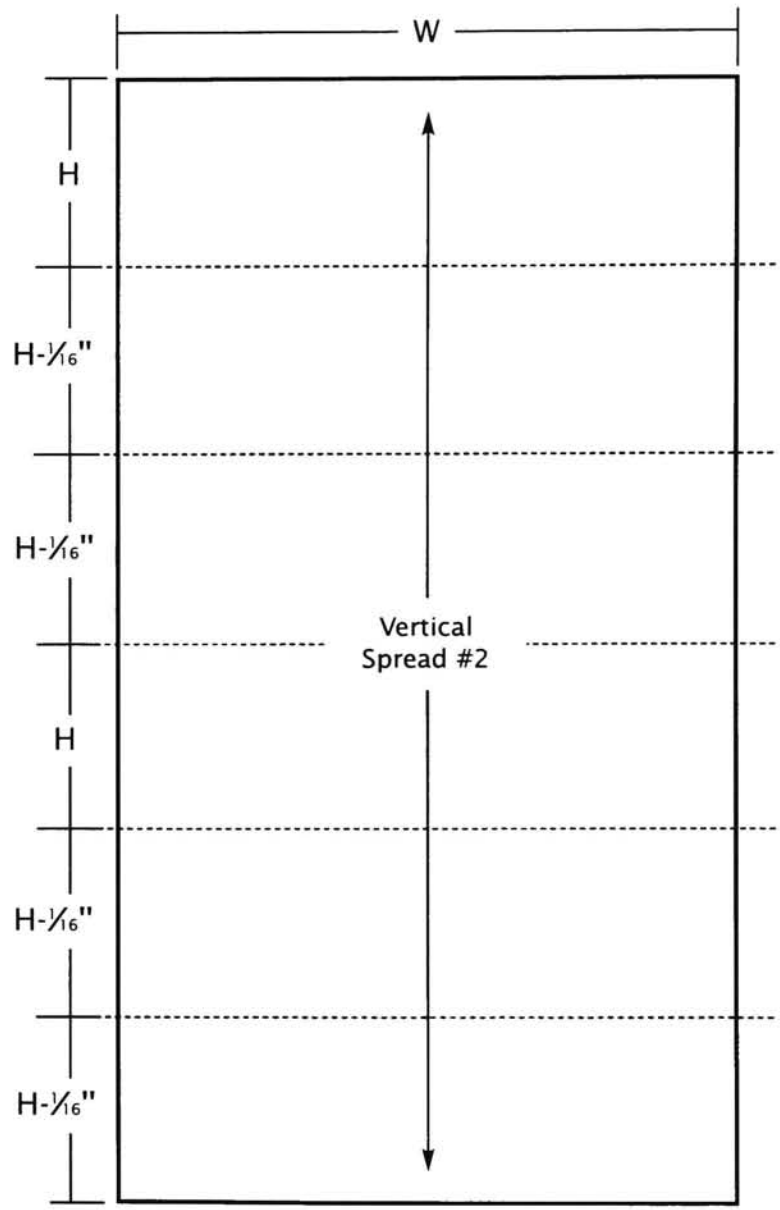
Here's an example: If your finished size is 6 x 4, then your panels for page 1 of your digital document would be, from top, 3 15/16 inches, 3 15/16 inches, 4 inches, 3 15/16 inches, 3 15/16 inches and 4 inches, with a width of 6 inches. This document flips laterally, and therefore page 2 measures exactly the same as page 1.

Remember: Document size and flat size must be the same, so in this case the document size would be 6 inches wide by 23 3/4 (23.75) inches high.

PARALLELS



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- If you are designing a long piece, make sure to have a folding sample made up from your specified paper. If the paper is too lightweight, it could turn into a sagging flimsy piece.
- If you are designing a self-mailing piece, this folding style could require wafer-seals to make it mail-ready.
- If your paper choice is any heavier than 80# text (not recommended), you will want to consider scoring the piece.
- Be aware of your printer or bindery's minimum and maximum sheet sizes for their equipment.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document height ahead of time. Create your document as if all panels will be the same (ex: for an accordion-style vertical triple parallel with a finished size of 6 x 4, set the document size to 6 x 24). Then set crosshairs to upper left corner of document, pull down a guide bar from the top ruler and set it to the length of your first panel (in this example, 3 15/16 inches). Then, bring the cross-hairs down to the guide you just set (which lets you measure from zero again) and drag your guide down to the next panel measurement (3 15/16). Repeat for the last 4 panels (4, 3 15/16, 3 15/16 and 4 inches). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the Y measurement, that will give you the document length you are looking for. Just change your document size by entering that decimal measurement (23.75). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

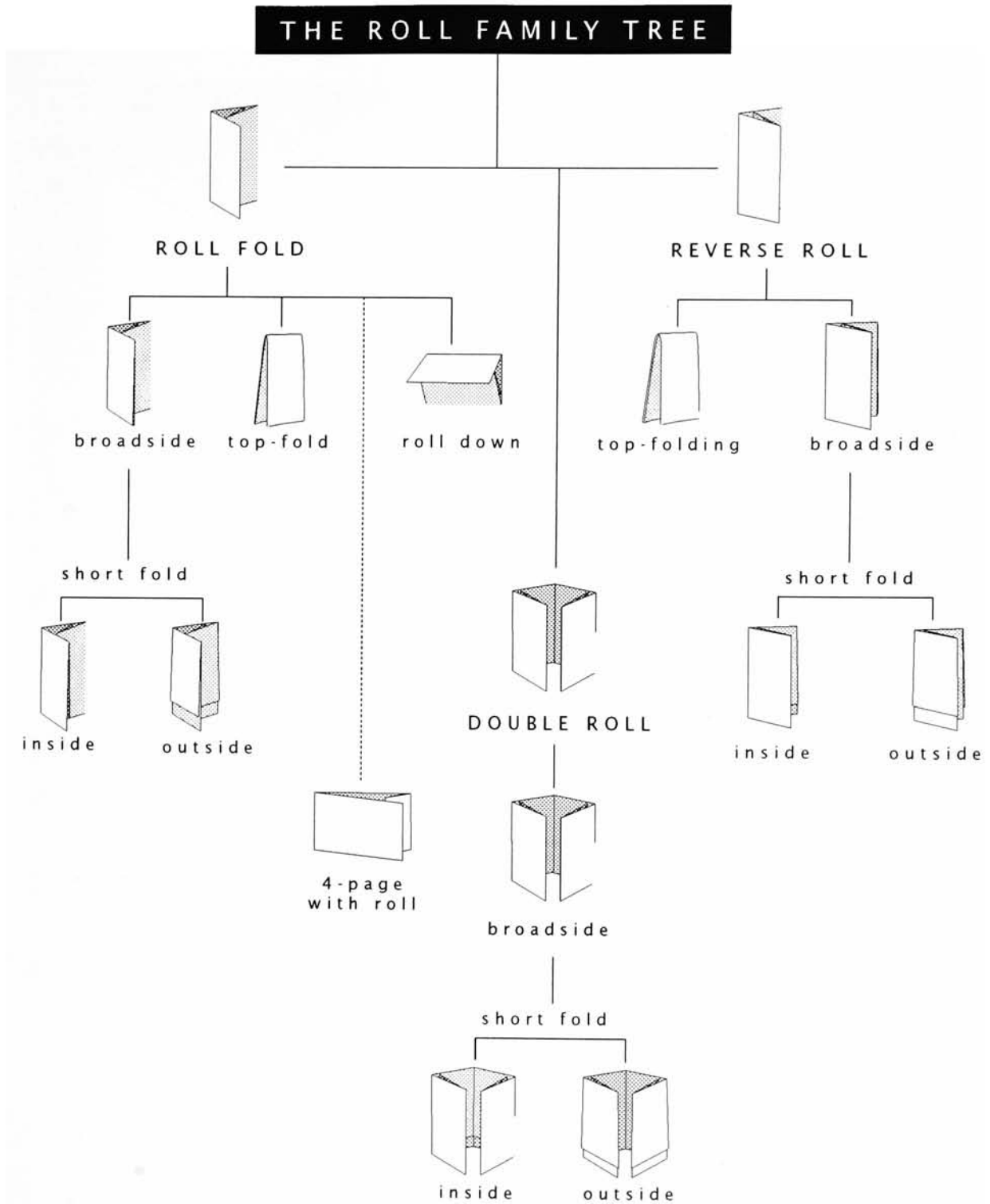
Other Related Considerations:

Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

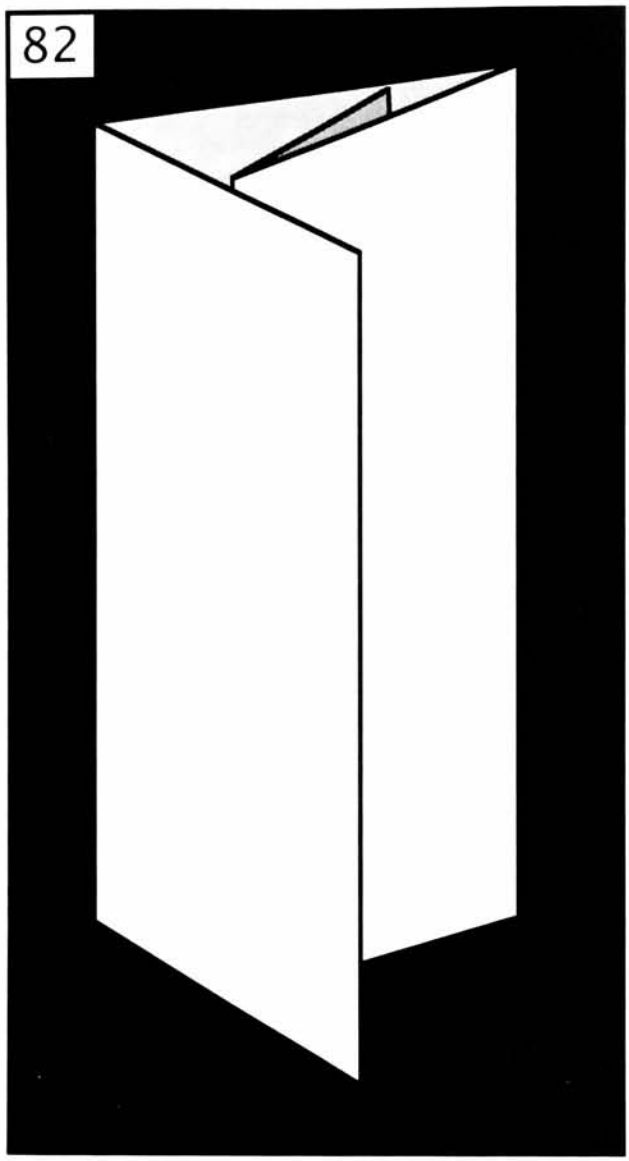
Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

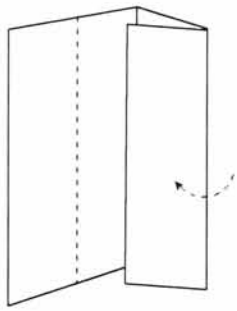
Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

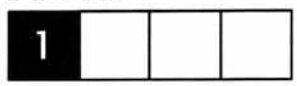

THE ROLL FAMILY TREE
ROLL FOLD
REVERSE ROLL
broadside
top-fold
roll down
top-folding
broadside
short fold
short fold
inside
outside
inside
outside
DOUBLE ROLL
4-page
with roll
broadside
short fold
inside
outside

ROLL FOLD





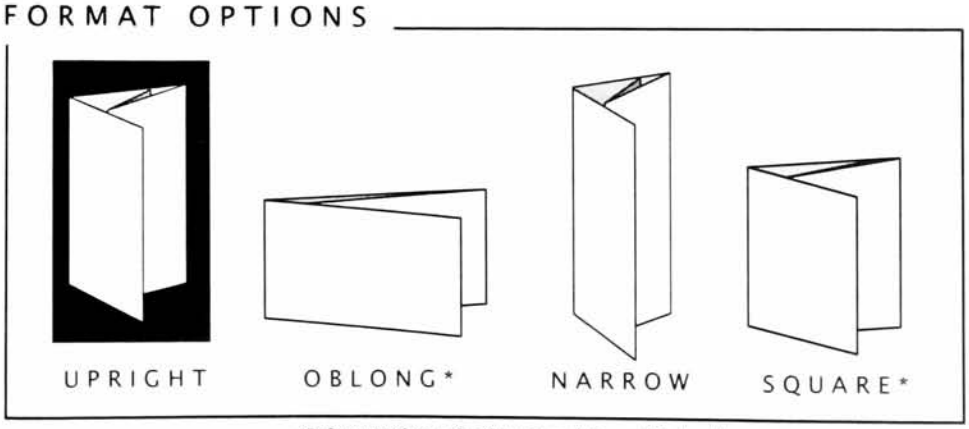
LEVEL



A level 1 fold is standard and basic, easy to set up on the folding machine and the machine can run at highest speeds.

The roll fold is a common folding style in which consecutive panels get narrower to enable it to roll up into itself. The standard roll fold rolls distinctively out to the right. There can be as many panels as you wish, but bear in mind the dimensions of the press sheet your printer is using.

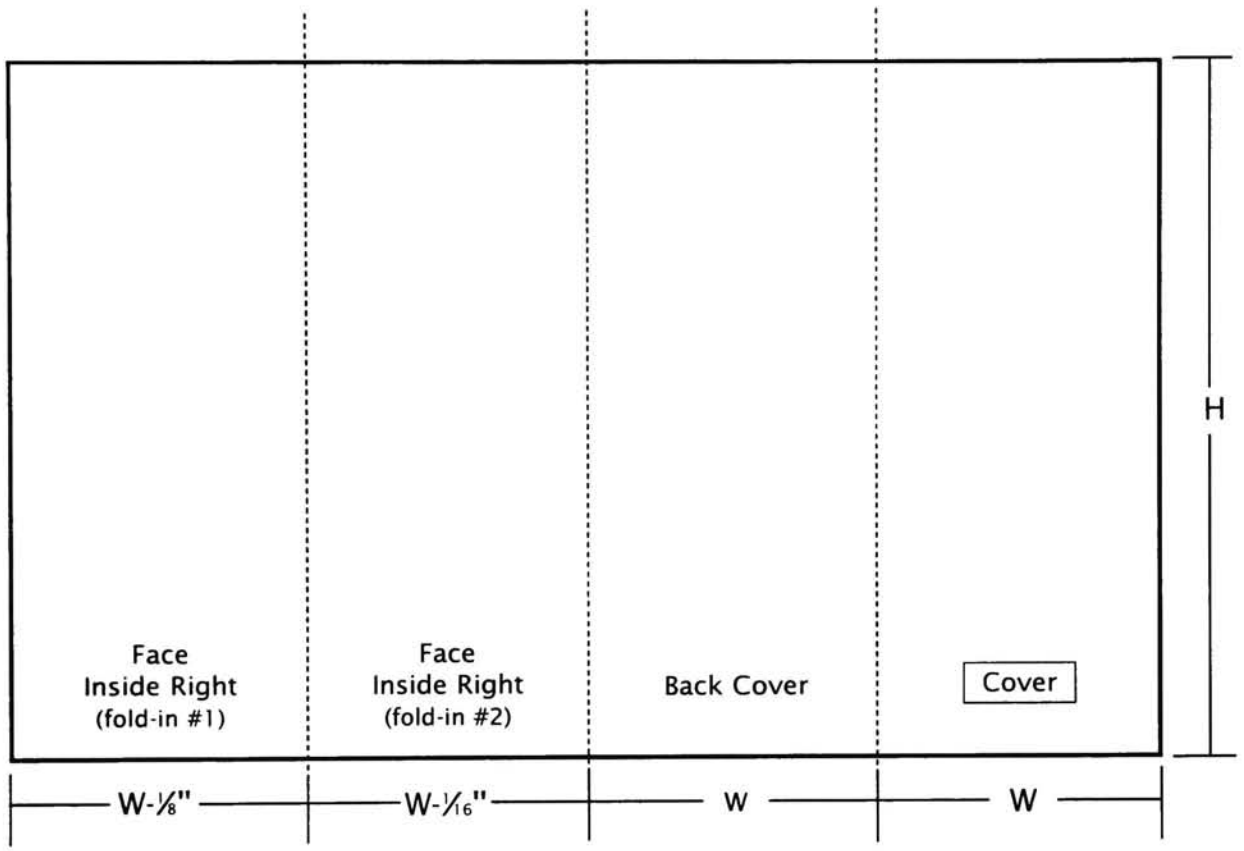
FORMAT OPTIONS



*Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

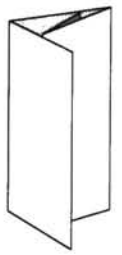
W: finished width
H: finished height
--- fold indication



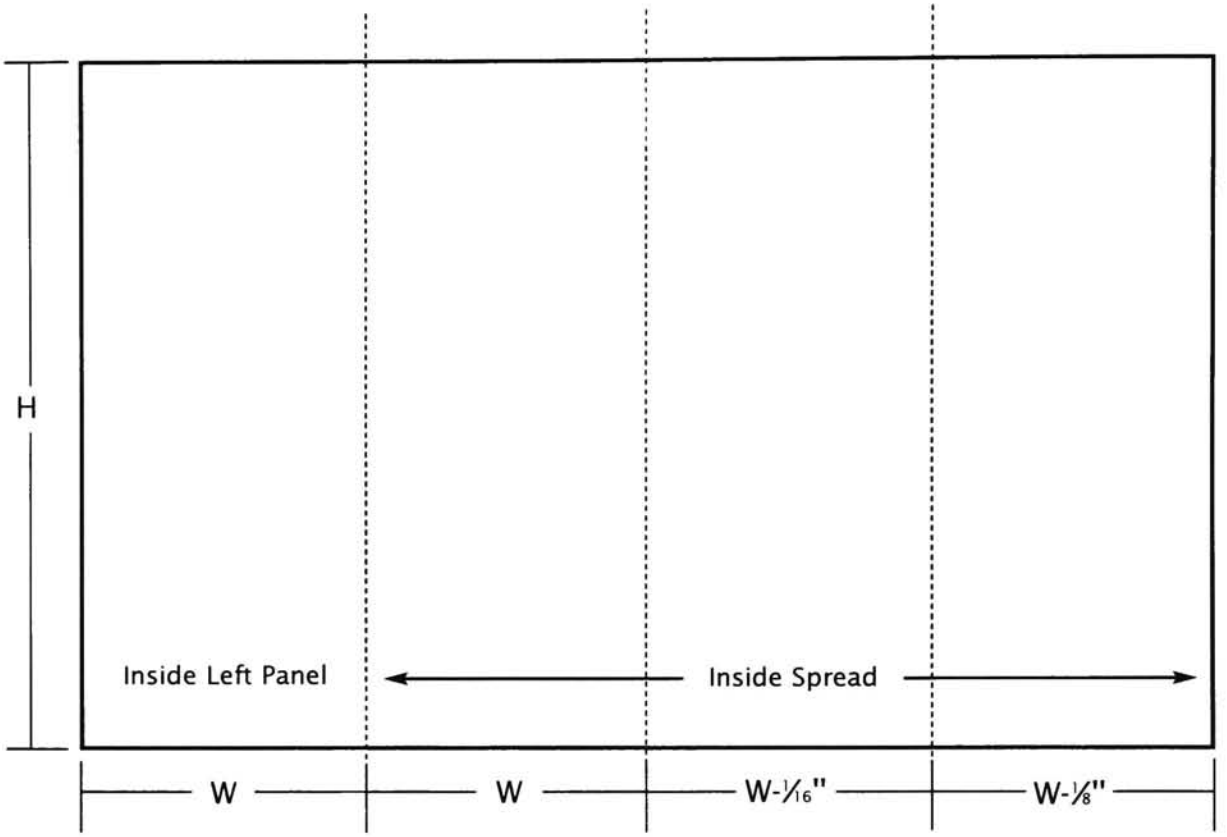
GETTING STARTED

Here's an example: If your finished size is 4 x 9, then your panels for page 1 of your digital document would be, from left, 3 ⅞ inches, 3 15/16 inches, 4 inches and 4 inches. Then for page two everything reverses, so from left your panels would measure 4 inches, 4 inches, 3 15/16 inches and 3 ⅞ inches, with a height of 9 inches.

Remember: Document size and flat size must be the same, so in this case the document size would be 15 13/16 (15.812) inches wide by 9 inches high.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- Remember that, with each panel getting narrower, it won't be long until the difference in panel width is noticeable. Adjust margins accordingly.
- Consult your printer about the size of the press sheet. Also ask for a diagram of how your piece will be run on the press sheet. Sometimes there is a lot of waste on the sheet, and you may be able to add another panel or two without adding to the cost of the job.
- If you are designing a long piece, make sure to have a folding sample made up from your specified paper. If the paper is too lightweight, it could turn into a sagging flimsy piece.
- If you are designing a self-mailing piece, this folding style could requirewafer-seals to make it mail-ready.
- If your paper choice is any heavier than 80# text, you will want to consider scoring the piece.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document width ahead of time. Create your document as if all panels will be the same (ex: for a roll fold with a finished size of 4 x 9, set the document size to 16 x 9). Then set crosshairs to upper left corner of document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, 3 ⅞ inches). Then, bring the crosshairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement (3 15/16). Repeat for the last 2 panels (4 inches and 4 inches). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Just change your document size by entering that decimal measurement (15.812). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

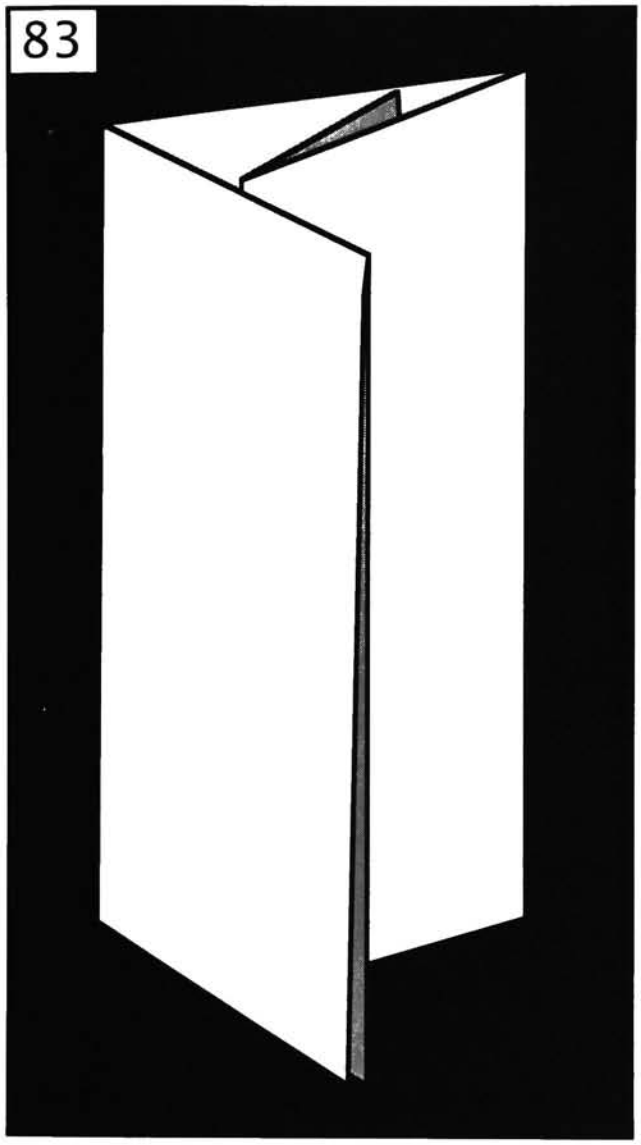
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

ROLL FOLD / BROADSIDE

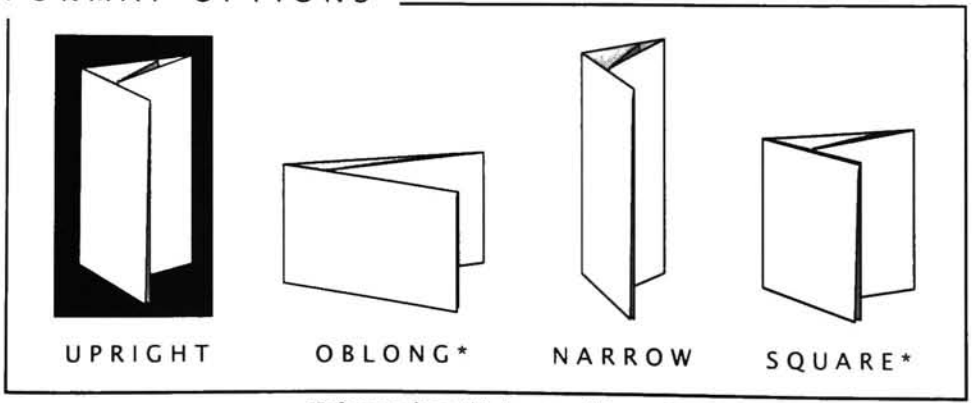


LEVEL

A level 2 fold has a moderate makeready, possible slower speed on the folding machine, and could have some special considerations.

The broadside roll fold consists of the same "roll-in" panel style, but the difference is that this fold has twice the area because it folds in half on itself before the roll folding is done. As in the standard roll fold, there can be as many panels as you wish, but bear in mind the dimensions of the press sheet your printer is using, and the bulk of the paper.

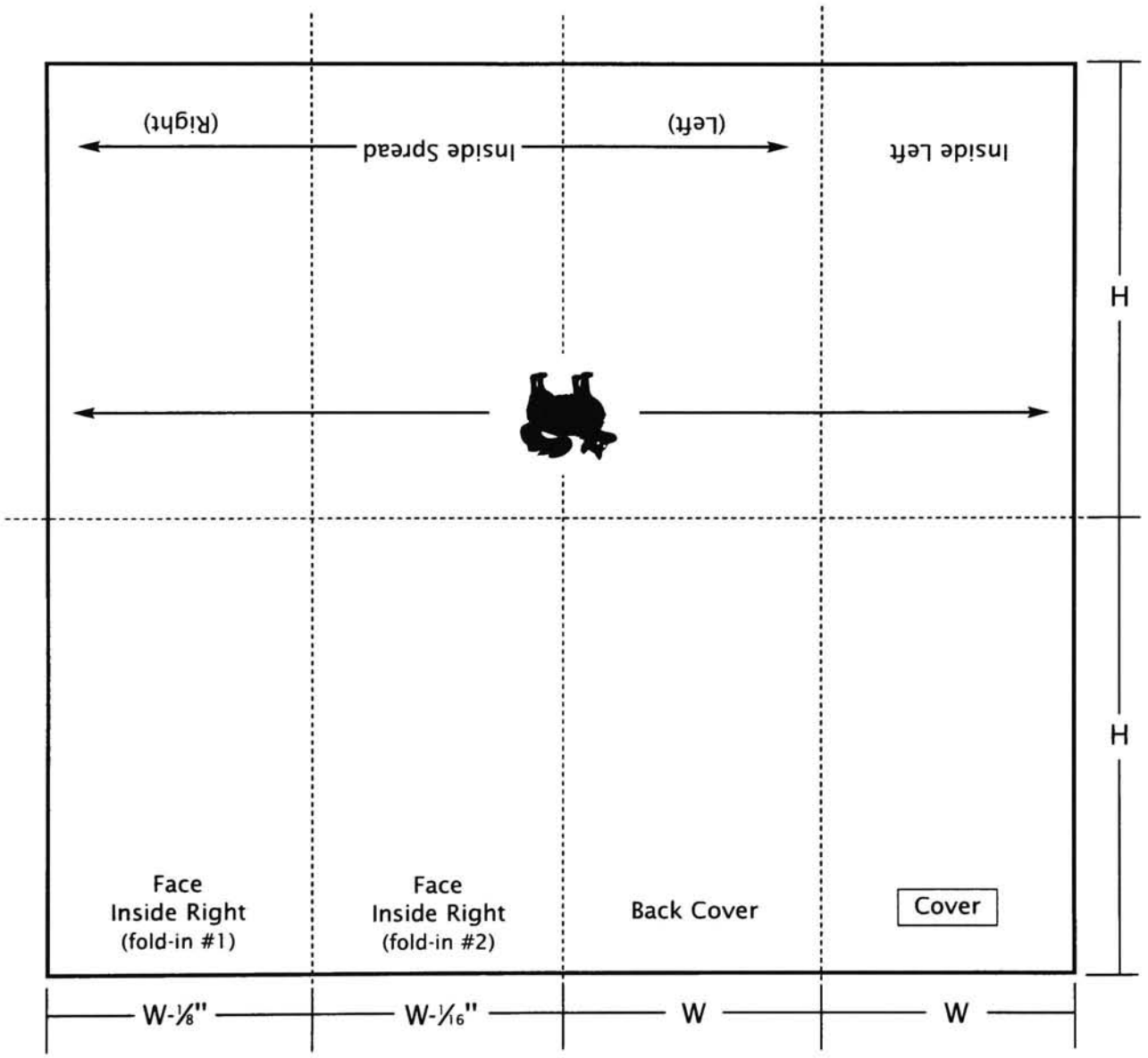
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

W: finished width
H: finished height
--- fold indication
upside-down

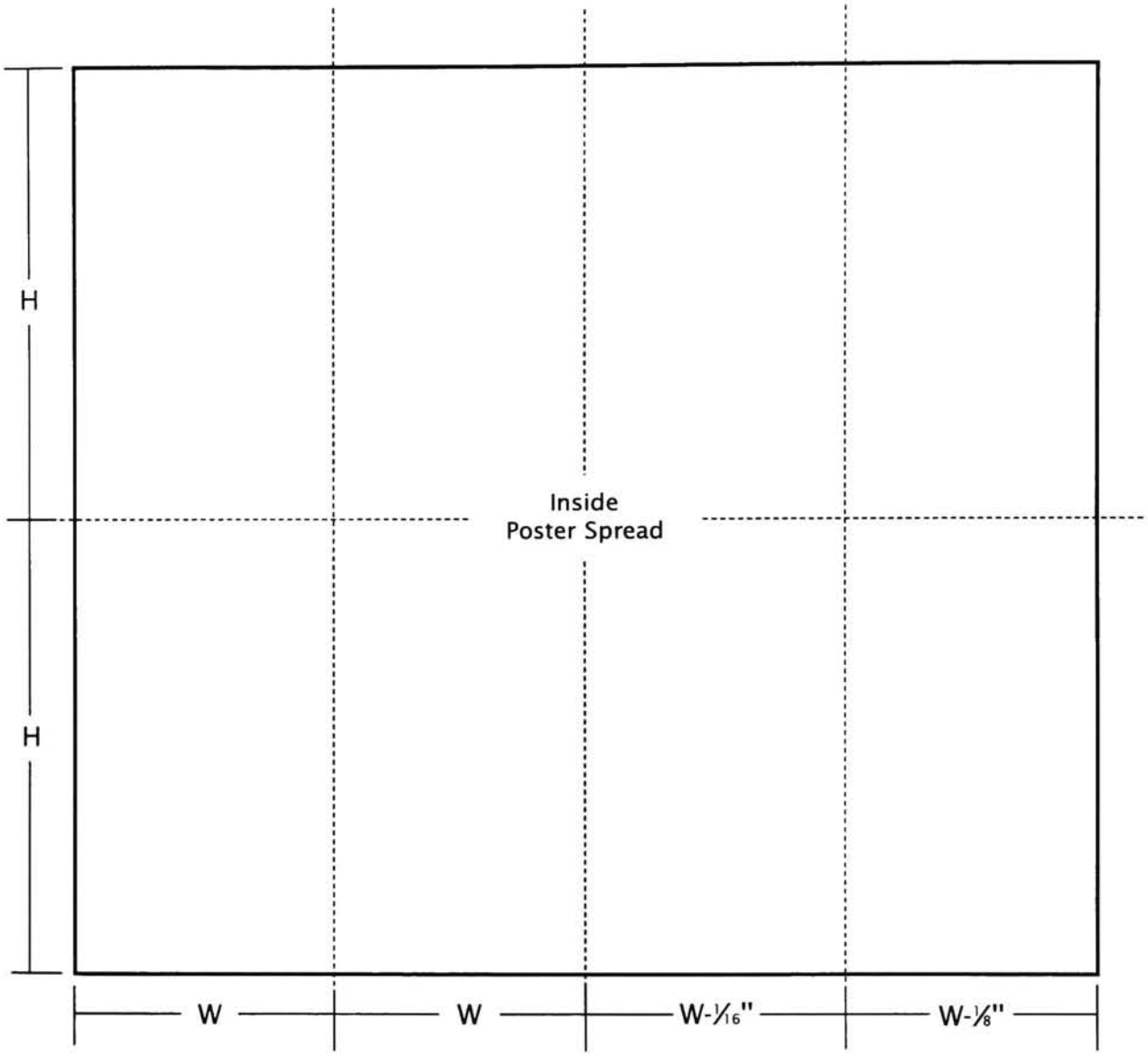


GETTING STARTED

Here's an example: If your finished size is 4 x 6, then your panels for page 1 of your digital document would be, from left, 3 ⅞ inches, 3 15/16 inches, 4 inches and 4 inches. Then for page two everything reverses, so from left your panels would measure 4 inches, 4 inches, 3 15/16 inches and 3 ⅞ inches, with a height of 12 inches (6 inches plus 6 inches).

Remember: Document size and flat size must be the same, so in this case the document size would be 15 13/16 (15.812) inches wide by 12 inches high.

Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- Remember that, with each panel getting narrower, it won't be long until the difference in panel width is noticeable. Adjust margins accordingly.
- Consult your printer about the size of the press sheet. Sometimes there is a lot of waste on the sheet, and you may be able to add another panel or two without adding to the cost of the job.
- Be aware of your printer or bindery's minimum and maximum sheet sizes for their equipment.
- Make sure to have a folding dummy made in your specified paper. Paper weight will dramatically affect the success of this piece. Watch for bulkiness and problems in the corner joints of the folds—the printer can't do anything about this, and it will require a change in paper.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document width ahead of time. Create your document as if all panels will be the same (ex: for a broadside roll fold with a finished size of 4 x 9, set the document size to 16 x 18). Then set crosshairs to upper left corner of document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, 3 7/8 inches). Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement (3 15/16). Repeat for the last 2 panels (4 inches and 4 inches). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Just change your document size by entering that decimal measurement (15.812). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

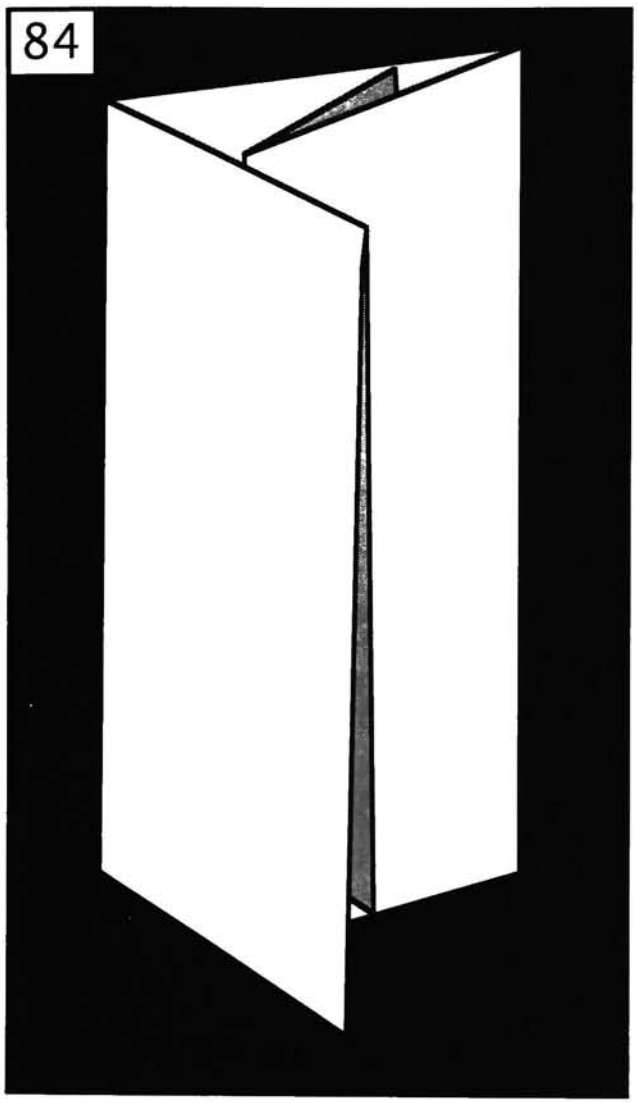
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

ROLL WITH SHORT FOLD (INSIDE)

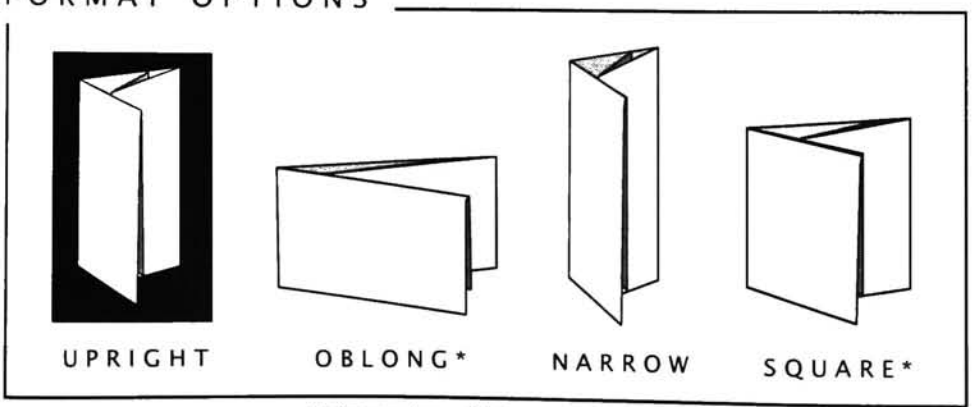


LEVEL

A level 2 fold has a moderate makeready, possible slower speed on the folding machine, and could have some special considerations.

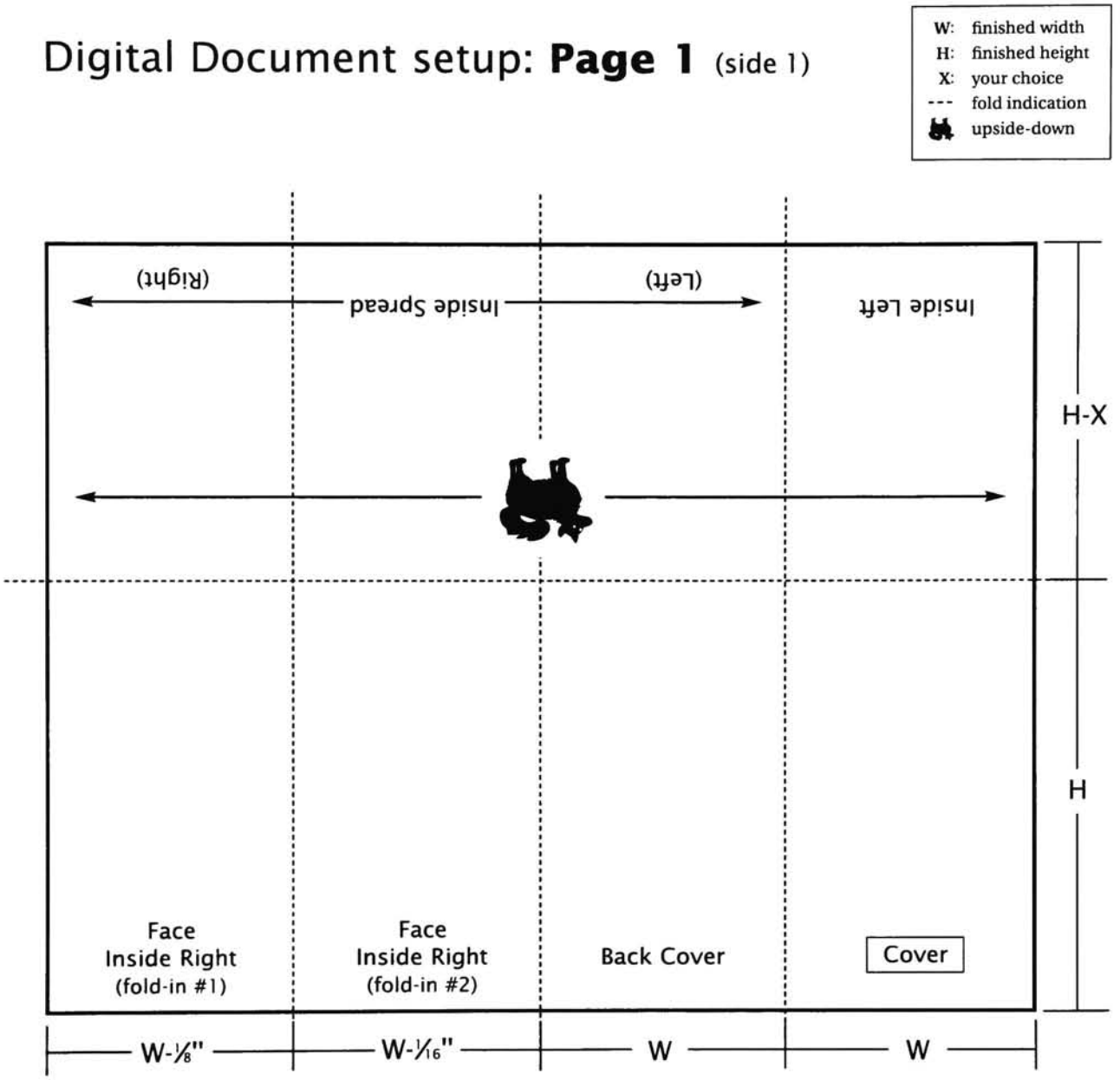
The roll with short fold inside consists of the same "roll-in" panel style, and is similar to the broadside roll fold because it folds in half on itself before the roll folding is done. What makes this fold different is that unlike a broadside fold where panels are of equal length, in a short fold the fold-over panels are shorter than the finished height. There can be as many panels as you wish, but bear in mind the dimensions of the press sheet your printer is using, and the bulk of the paper.

FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

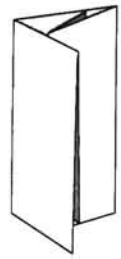
Digital Document setup: **Page 1** (side 1)



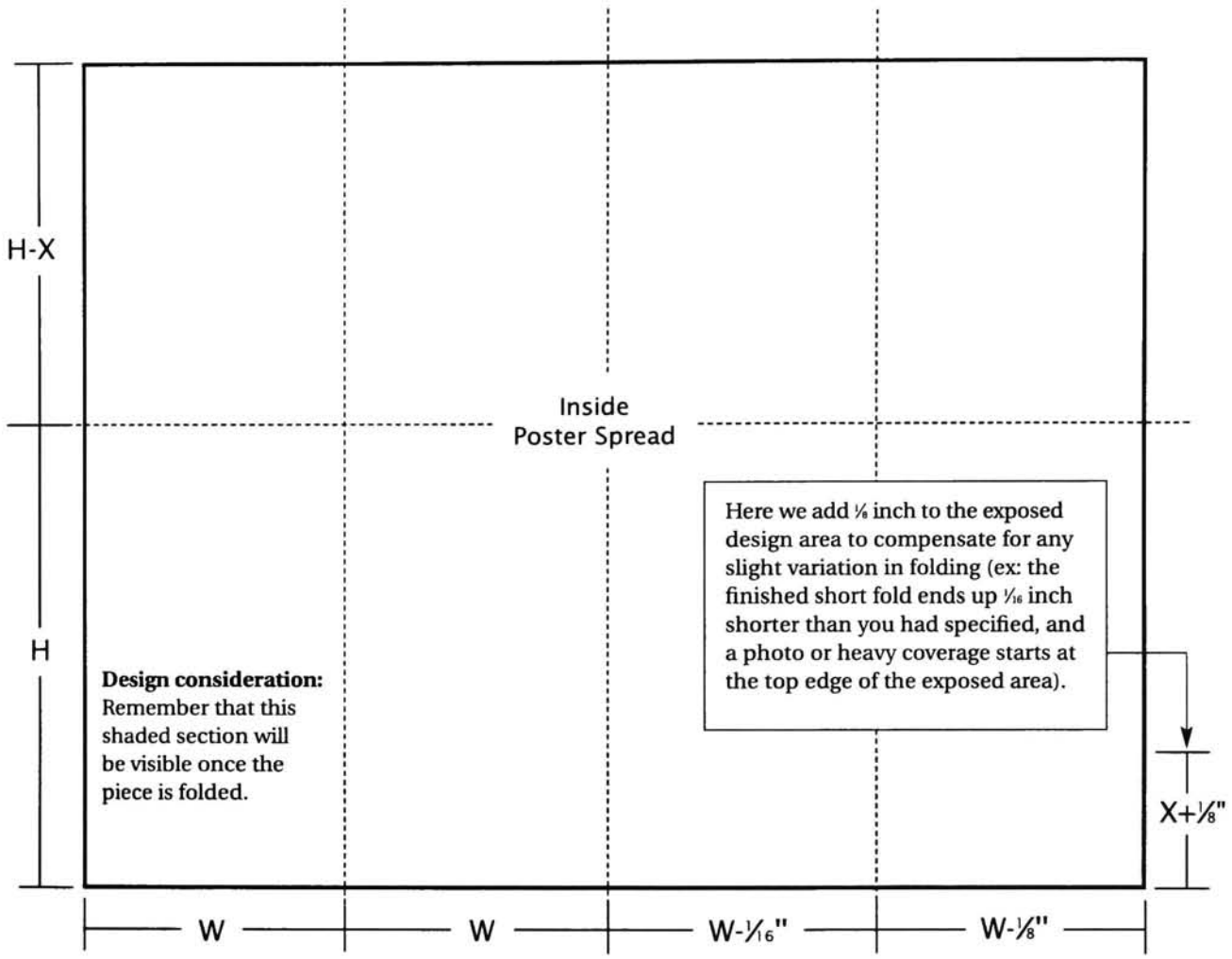
GETTING STARTED

Here's an example: For a short fold, the first thing we must determine is how short the short fold will be. In this case, we'll make it 2 inches shorter than the finished height, so X=2. Now we can calculate our document height. If the finished size is 4 x 9, then 9 inches plus 7 (9-2 , or height minus X) equals a document height of sixteen inches. Our finished width is 4 inches, so the panels for page 1 of the digital document would be, from left, 3 ⅞ inches, 3 15/16 inches, 4 inches and 4 inches.Then for page two everything reverses, so from left your panels would measure 4 inches, 4 inches, 3 15/16 inches and 3 ⅞ inches.

Remember: Document size and flat size must be the same, so in this case the document size would be 15 13/16 (15.812) inches wide by 16 inches high.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- Remember that, with each panel getting narrower, it won't be long until the difference in panel width is noticeable. Adjust margins accordingly.
- Consult your printer about the size of the press sheet. Sometimes there is a lot of waste on the sheet, and you may be able to add another panel or two without adding to the cost of the job.
- Be aware of your printer or bindery's minimum and maximum sheet sizes for their equipment.
- Make sure to have a folding dummy made in your specified paper. Paper weight will dramatically affect the success of this piece. Watch for bulkiness and problems in the corner joints of the folds—the printer can't do anything about this, and it will require a change in paper.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document width ahead of time. Create your document as if all panels will be the same (ex: for a roll fold with short fold with a finished size of 4 x 9, set the document size to 16 x 16). Then set crosshairs to upper left corner of document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, 3 7/8 inches). Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement (3 15/16). Repeat for the last 2 panels (4 inches and 4 inches). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Just change your document size by entering that decimal measurement (15.812). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

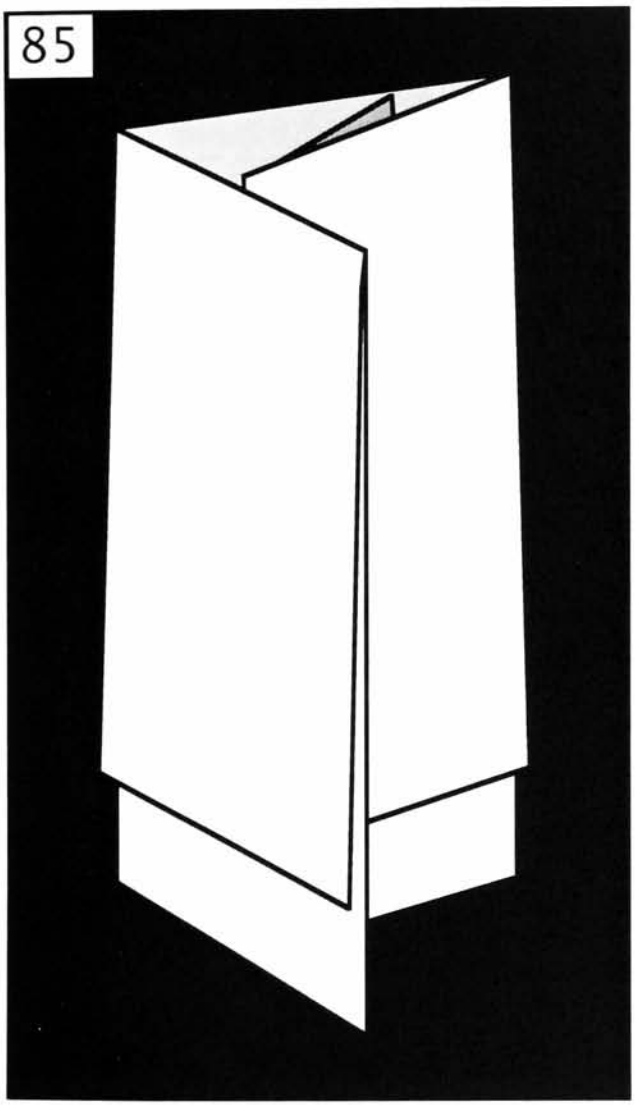
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

ROLL WITH SHORT FOLD (OUTSIDE)

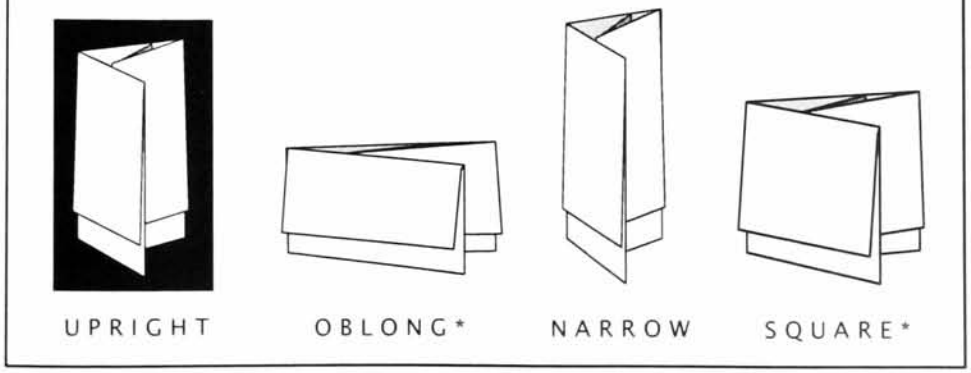


LEVEL

A level 2 fold has a moderate makeready, possible slower speed on the folding machine, and could have some special considerations.

The roll with short fold outside consists of the same "roll-in" panel style, and is similar to the broadside roll fold because it folds in half on itself before the roll folding is done. What makes this fold different is that unlike a broadside fold where panels are of equal length, in a short fold the fold-over panels are shorter than the finished height. There can be as many panels as you wish, but bear in mind the dimensions of the press sheet your printer is using, and the bulk of the paper.

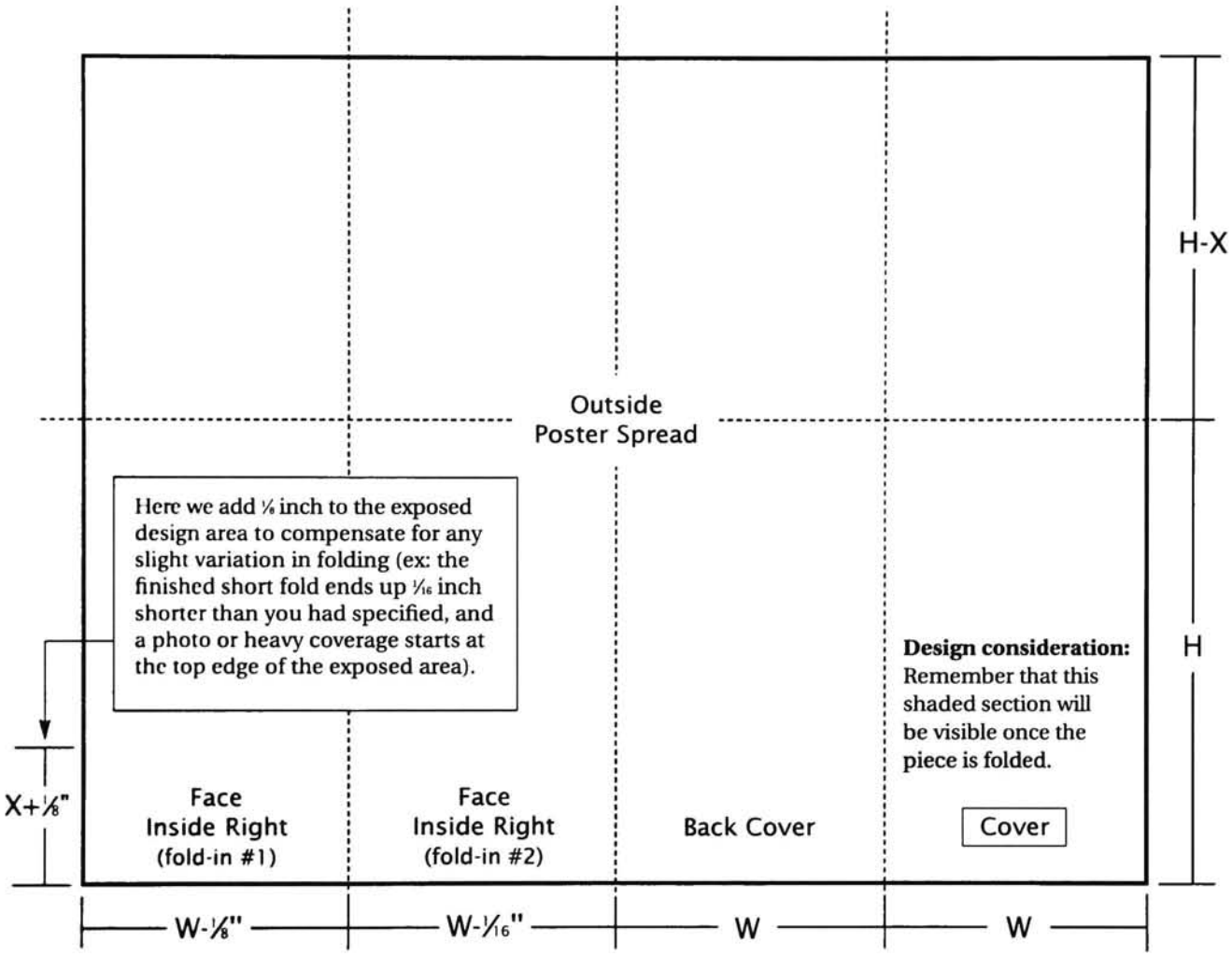
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

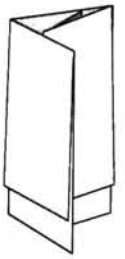
W: finished width
H: finished height
X: your choice
--- fold indication
upside-down



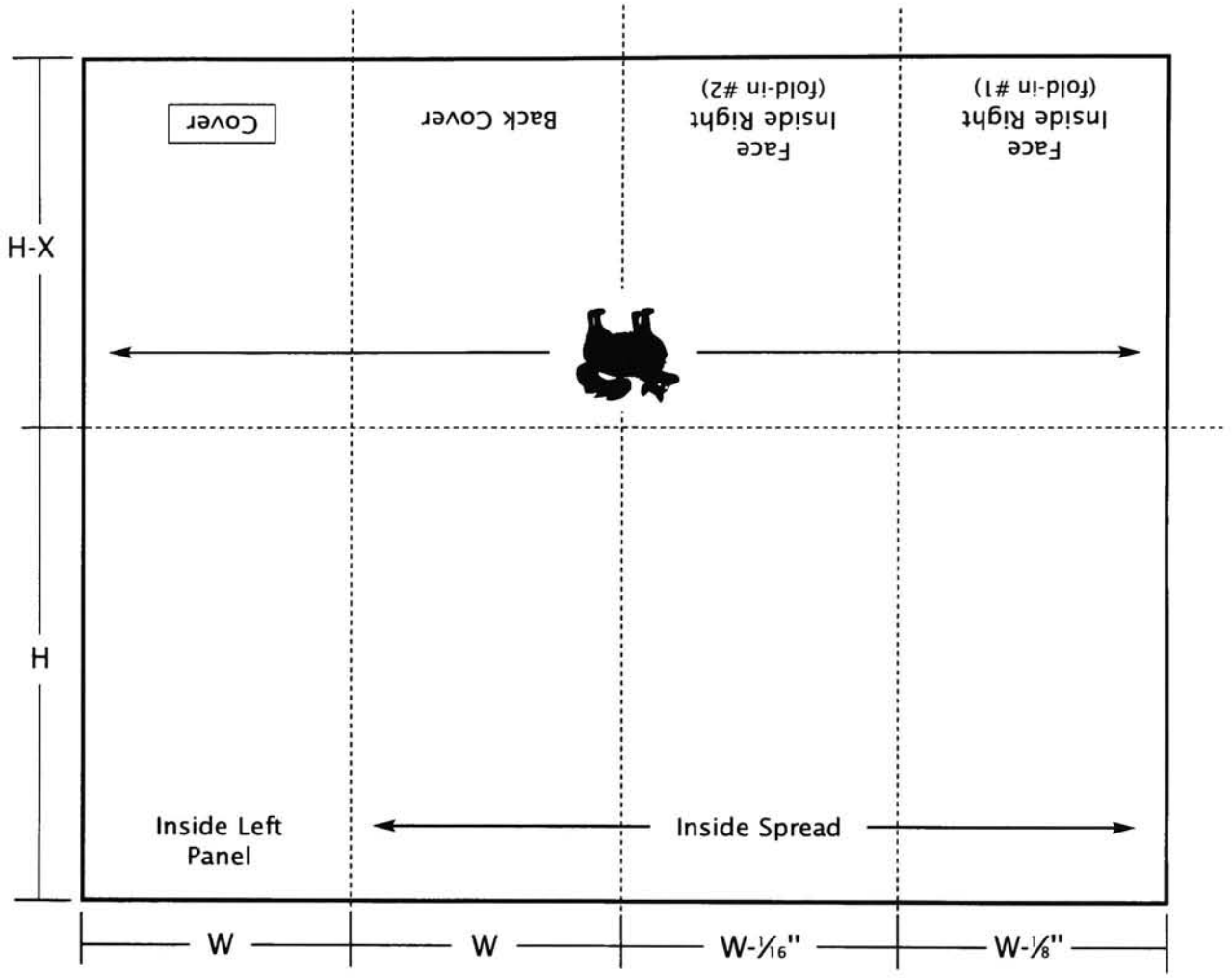
GETTING STARTED

Here's an example: For a short fold, the first thing we must determine is how short the short fold will be. In this case, we'll make it 2 inches shorter than the finished height, so X=2. Now we can calculate our document height. If the finished size is 4 x 9, then 9 inches plus 7 (9-2 , or height minus X) equals a document height of sixteen inches. Our finished width is 4 inches, so the panels for page 1 of the digital document would be, from left, 3 ⅞ inches, 3 15/16 inches, 4 inches and 4 inches. Then for page two everything reverses, so from left your panels would measure 4 inches, 4 inches, 3 15/16 inches and 3 ⅞ inches.

Remember: Document size and flat size must be the same, so in this case the document size would be 15 13/16 (15.812) inches wide by 16 inches high.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- Remember that, with each panel getting narrower, it won't be long until the difference in panel width is noticeable. Adjust margins accordingly.
- Consult your printer about the size of the press sheet. Sometimes there is a lot of waste on the sheet, and you may be able to add another panel or two without adding to the cost of the job.
- Be aware of your printer or bindery's minimum and maximum sheet sizes for their equipment.
- Make sure to have a folding dummy made in your specified paper. Paper weight will dramatically affect the success of this piece. Watch for bulkiness and problems in the corner joints of the folds—the printer can't do anything about this, and it will require a change in paper.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document width ahead of time. Create your document as if all panels will be the same (ex: for a roll fold with short fold with a finished size of 4 x 9, set the document size to 16 x 16). Then set crosshairs to upper left corner of document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, 3 ⅞ inches). Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement (3 15/16). Repeat for the last 2 panels (4 inches and 4 inches). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Just change your document size by entering that decimal measurement (15.812). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

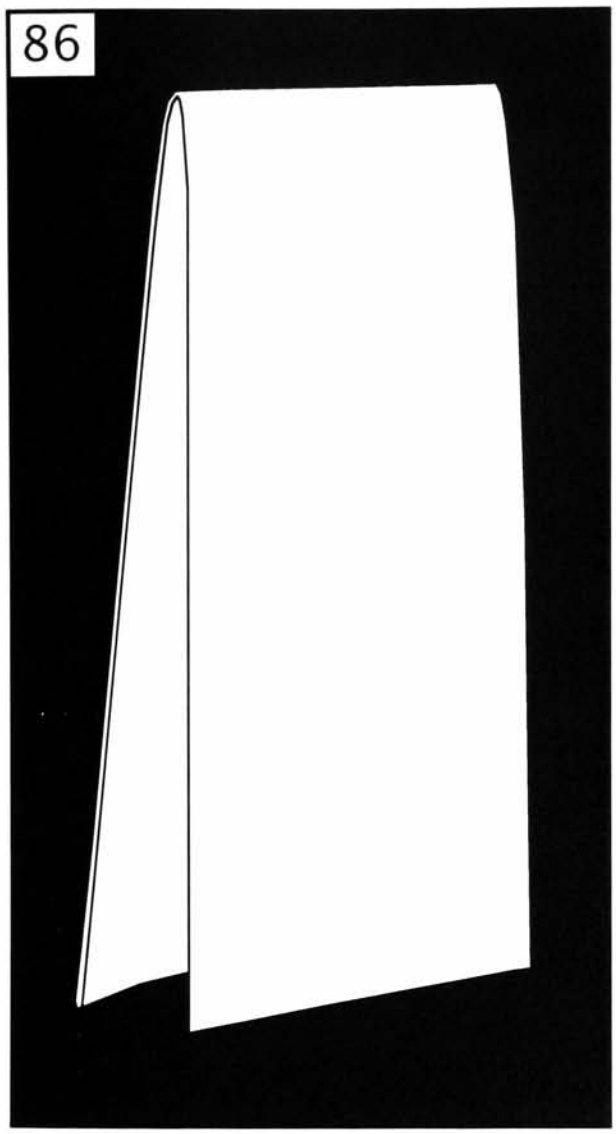
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

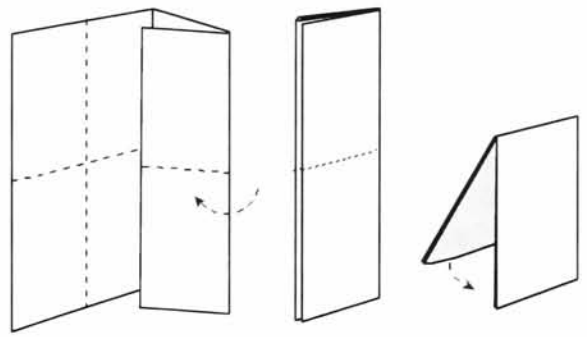
Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

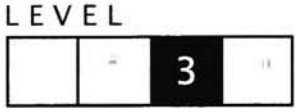
NOTES:

TOP-FOLDING ROLL





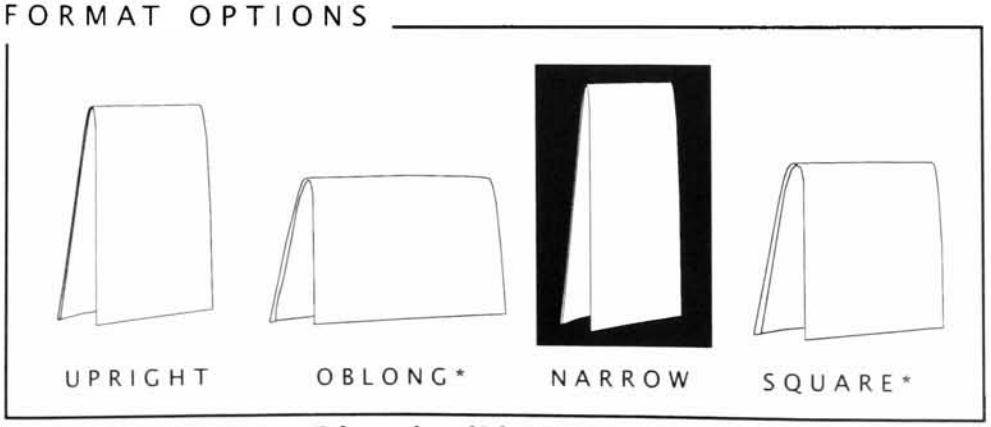
LEVEL



A level 3 fold has a long and difficult makeready, could require special machinery and low folding speed. These issues will be reflected in the cost.

The top-folding roll consists of the same characteristic folding style as the basic roll fold, but in a taller format. When the roll folding is done, this style then folds in half onto itself.

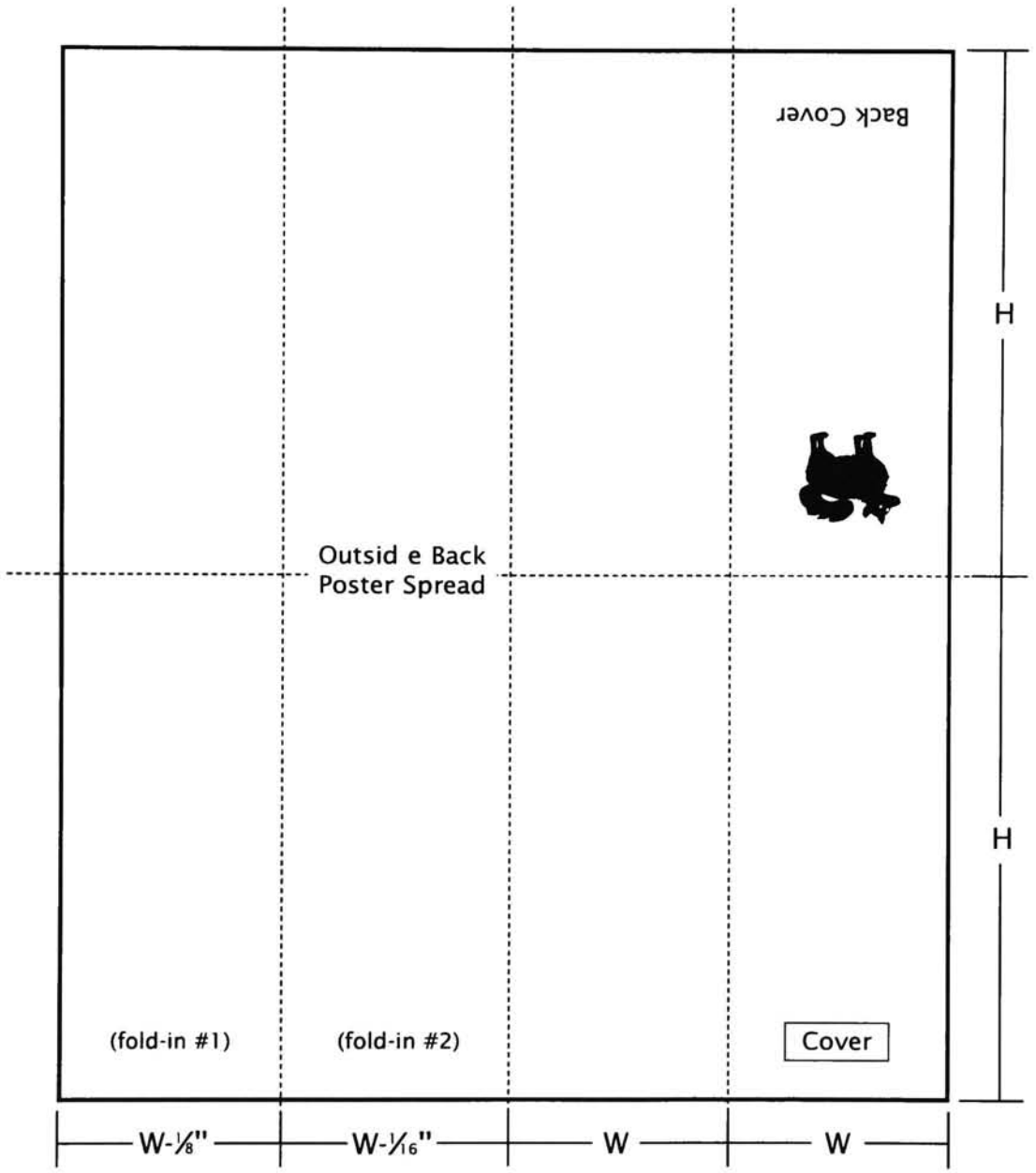
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

W: finished width
H: finished height
--- fold indication
upside-down

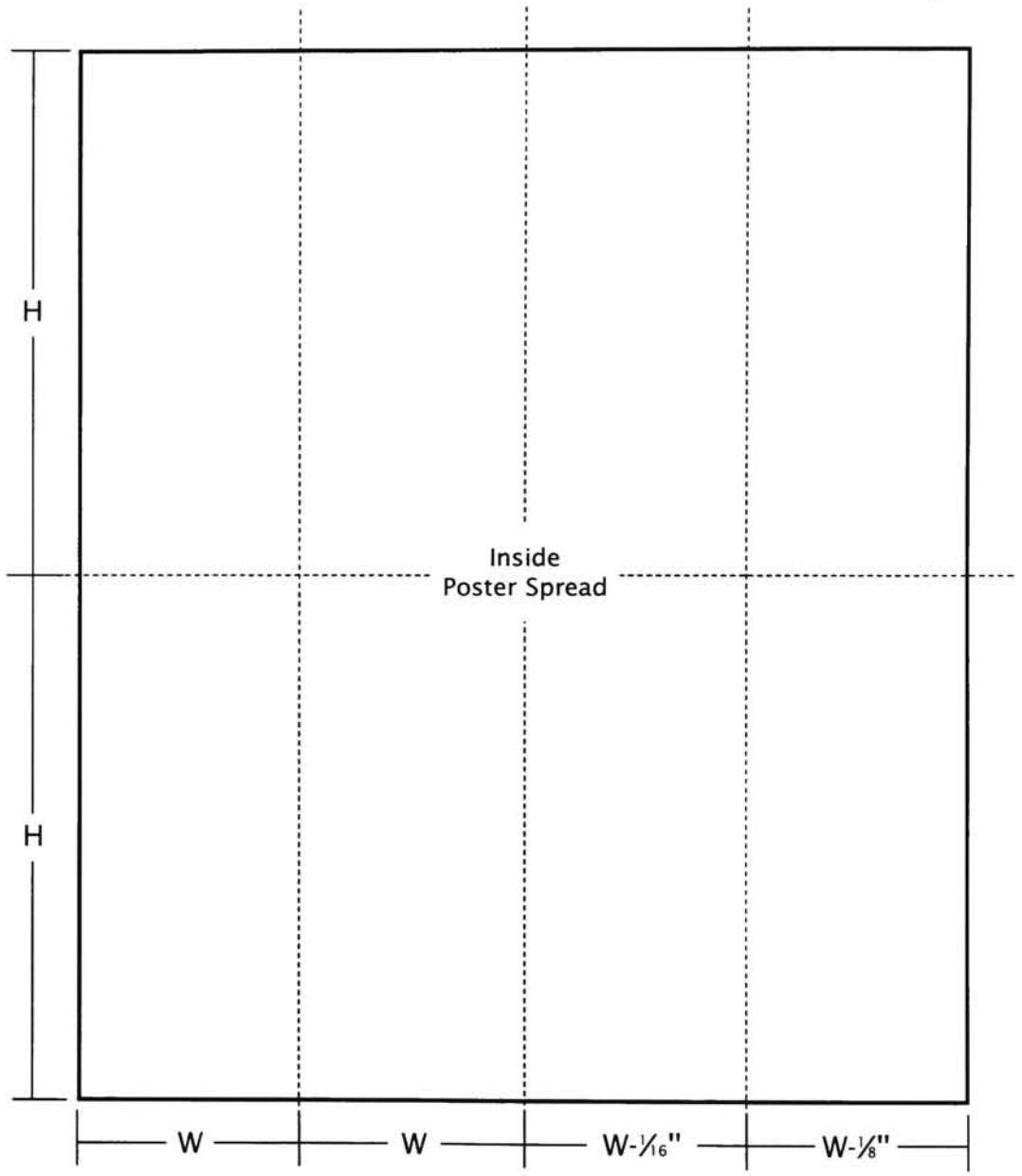


GETTING STARTED

Here's an example: If your finished size is 4 x 9, then your panels for page 1 of your digital document would be, from left, 3 ⅞ inches, 3 15/16 inches, 4 inches and 4 inches. Then for page two everything reverses, so from left your panels would measure 4 inches, 4 inches, 3 15/16 inches and 3 ⅞ inches, with a height of 18 inches (9 inches plus 9 inches).

Remember: Document size and flat size must be the same, so in this case the document size would be 15 13/16 (15.812) inches wide by 18 inches high.

Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- Consult your printer about the size of the press sheet. Sometimes there is a lot of waste on the sheet, and you may be able to add another panel or two without adding to the cost of the job.
- A paper choice of any heavier than 60# text is not recommended.
- Make sure to have a folding dummy made in your specified paper.
- Be aware of your printer or bindery's minimum and maximum sheet sizes for their equipment. Top-folding rolls and any other folded pieces which open out to very large dimensions generally require special large format folders.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document width ahead of time. Create your document as if all panels will be the same (ex: for a top-folding roll with a finished size of 4 x 9, set the document size to 16 x 18). Then set crosshairs to upper left corner of document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, 3 7/8 inches). Then, bring the crosshairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement (3 15/16). Repeat for the last 2 panels (4 inches and 4 inches). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Just change your document size by entering that decimal measurement (15.812). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

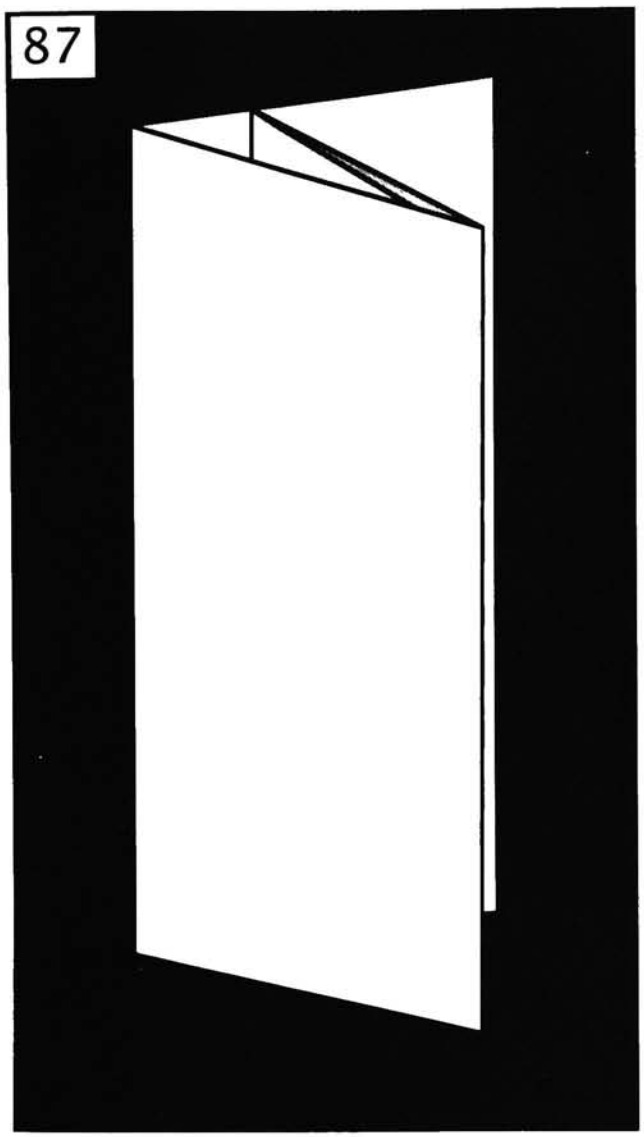
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

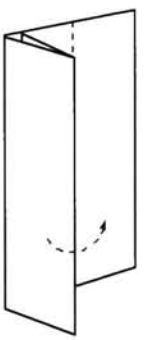
Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

REVERSE ROLL





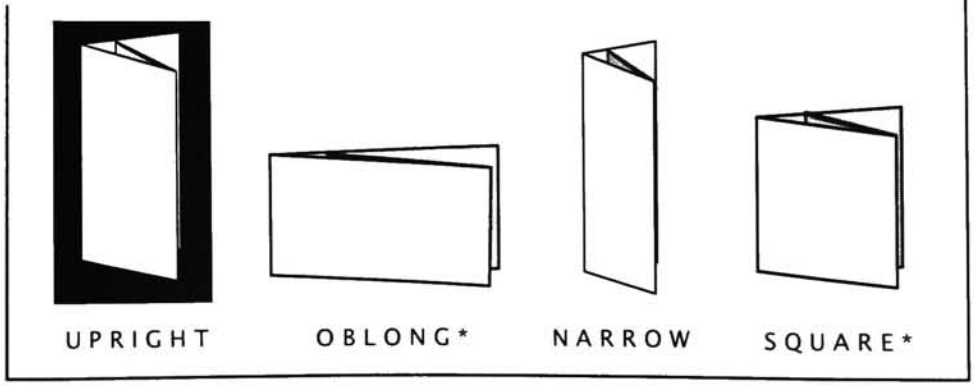
LEVEL

1			

A level 1 fold is standard and basic, easy to set up on the folding machine and the machine can run at highest speeds.

The reverse roll fold is an uncommon variation of the standard roll fold in which consecutive panels get narrower to enable it to roll up into itself. The reverse roll fold rolls distinctively out to the **left.** There can be as many panels as you wish, but bear in mind the dimensions of the press sheet your printer is using.

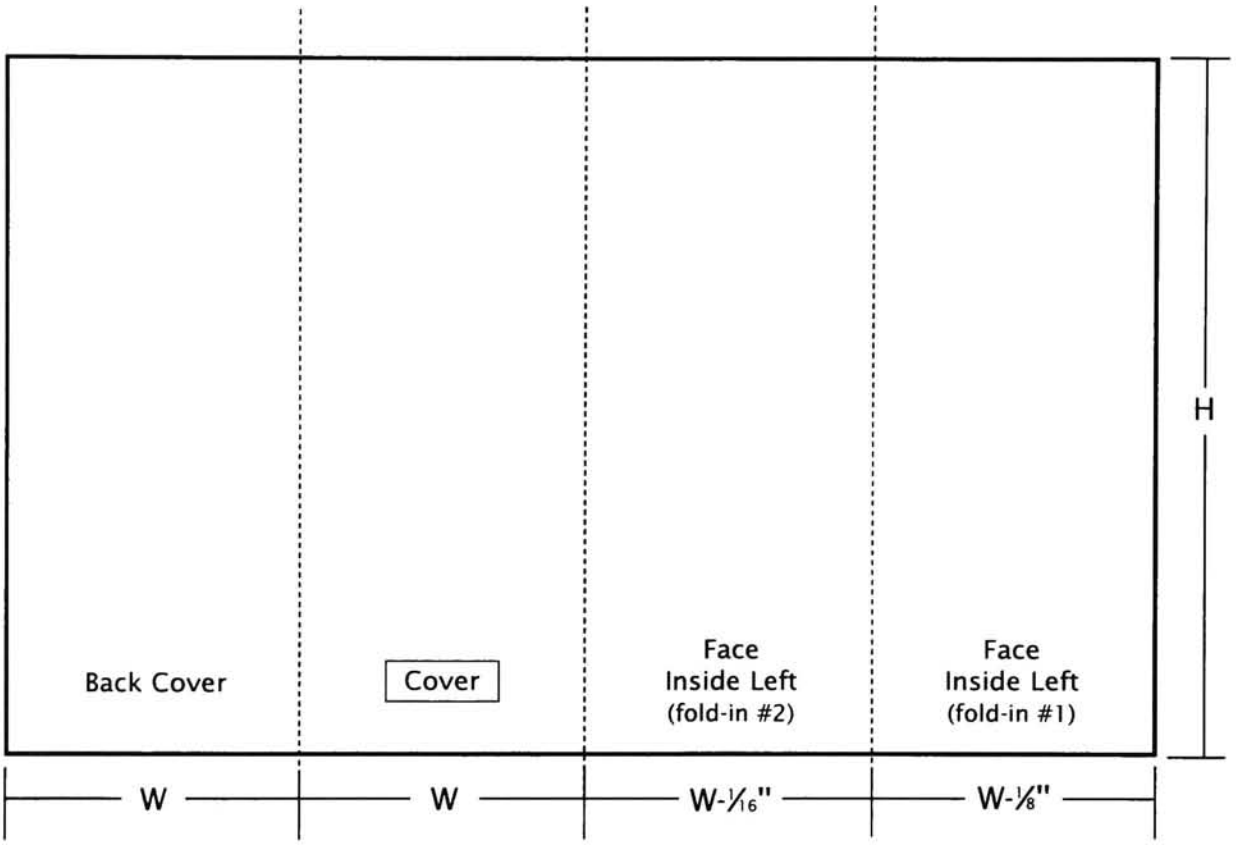
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

W: finished width
H: finished height
--- fold indication

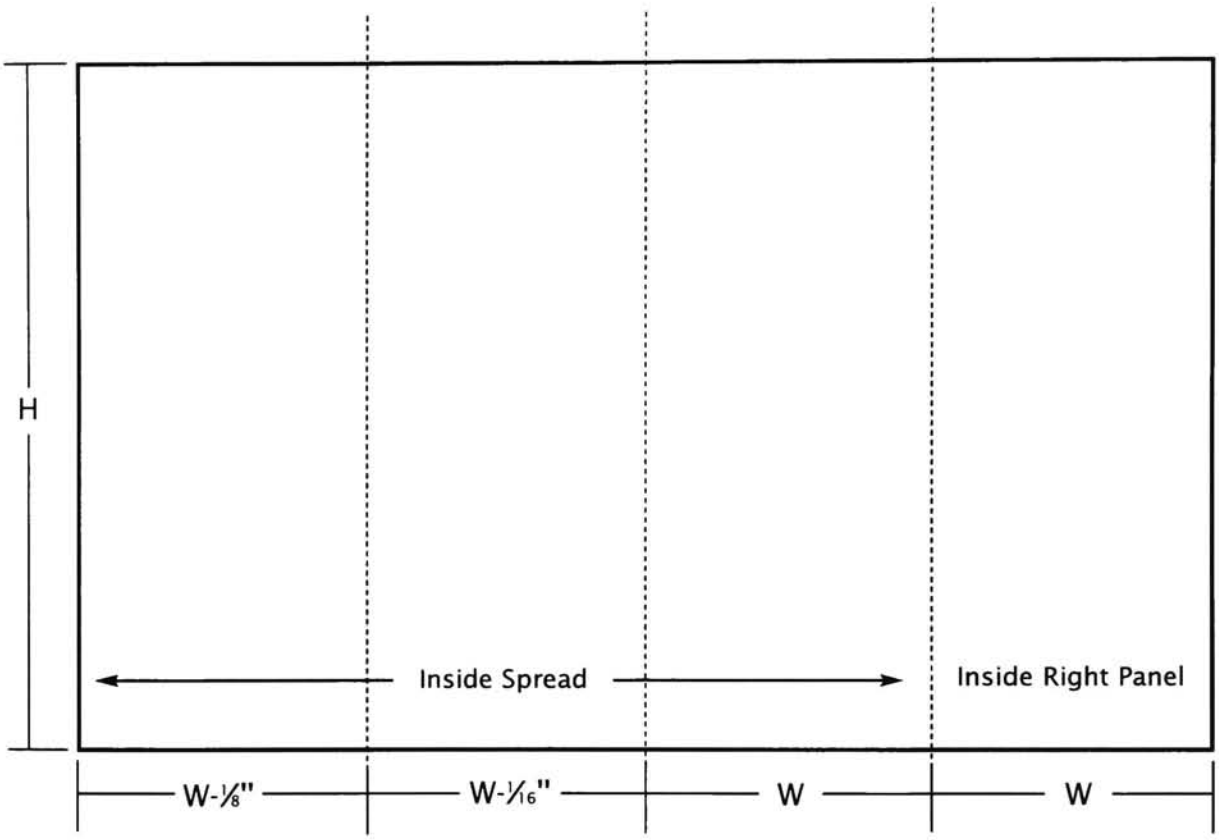


GETTING STARTED

Here's an example: If your finished size is 4 x 9, then your panels for page 1 of your digital document would be, from left, 4 inches, 4 inches, 3 15/16 inches and 3 7/8 inches. Then for page two everything reverses, so from left your panels would measure 3 7/8 inches, 3 15/16 inches, 4 inches and 4 inches, with a height of 9 inches.

Remember: Document size and flat size must be the same, so in this case the document size would be 15 13/16 (15.812) inches wide by 9 inches high.

Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- Remember that, with each panel getting narrower, it won't be long until the difference in panel width is noticeable. Adjust margins accordingly.
- Consult your printer about the size of the press sheet. Also ask for a diagram of how your piece will be run on the press sheet. Sometimes there is a lot of waste on the sheet, and you may be able to add another panel or two without adding to the cost of the job.
- If you are designing a long piece, make sure to have a folding sample made up from your specified paper. If the paper is too lightweight, it could turn into a sagging flimsy piece.
- If you are designing a self-mailing piece, this folding style could requirewafer-seals to make it mail-ready.
- If your paper choice is any heavier than 80# text, you will want to consider scoring the piece.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document width ahead of time. Create your document as if all panels will be the same (ex: for a reverse roll fold with a finished size of 4 x 9, set the document size to 16 x 9). Then set crosshairs to upper left corner of document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, 4 inches). Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement (4). Repeat for the last 2 panels (3 15/16 inches and 3 7/8 inches). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Just change your document size by entering that decimal measurement (15.812). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

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Other Related Considerations:

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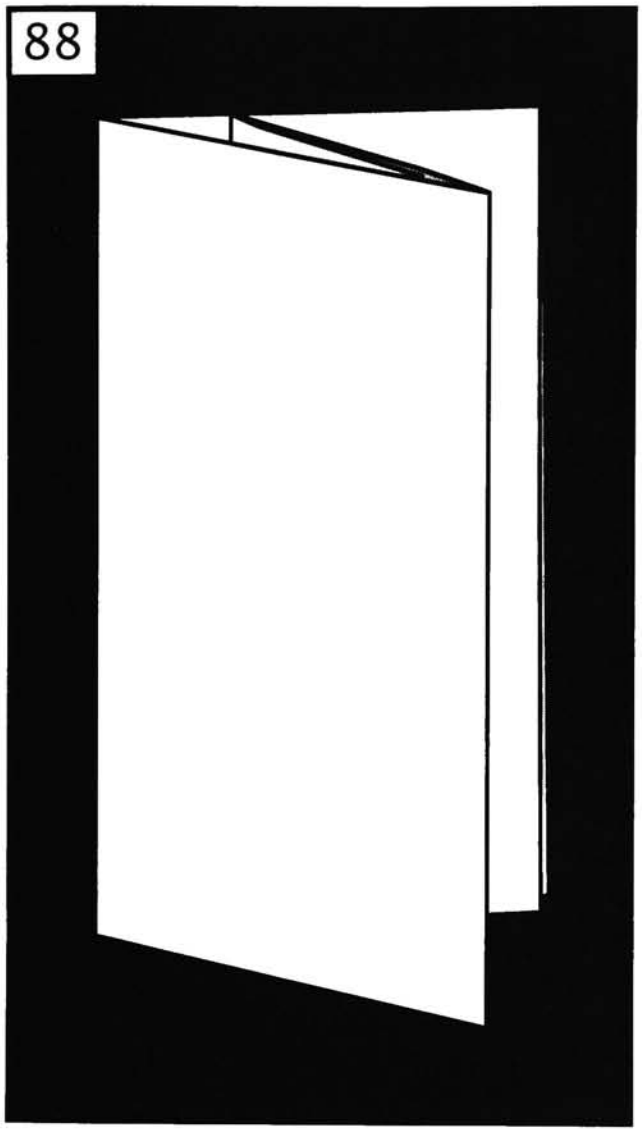
Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

REVERSE ROLL / BROADSIDE

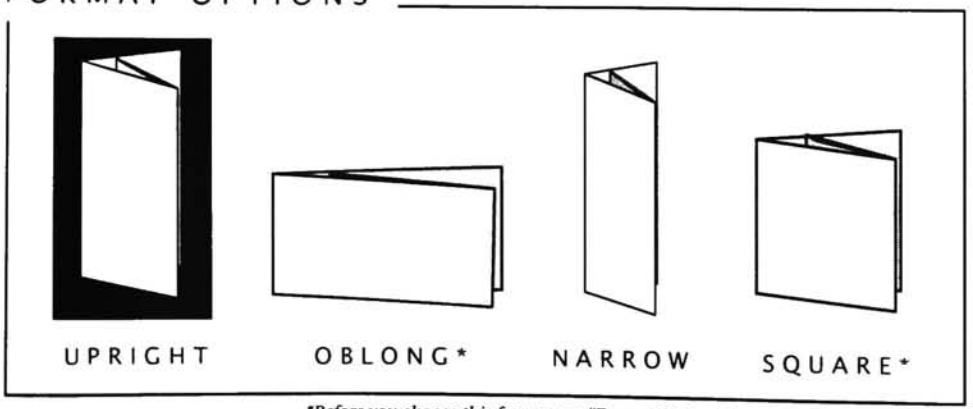


LEVEL

A level 2 fold has a moderate makeready, possible slower speed on the folding machine, and could have some special considerations.

The broadside reverse roll fold consists of the same "roll-in" panel style, but the difference is that this fold has twice the area because it folds in half on itself before the roll folding is done. As in the standard reverse roll fold, there can be as many panels as you wish, but bear in mind the dimensions of the press sheet your printer is using, and the bulk of the paper.

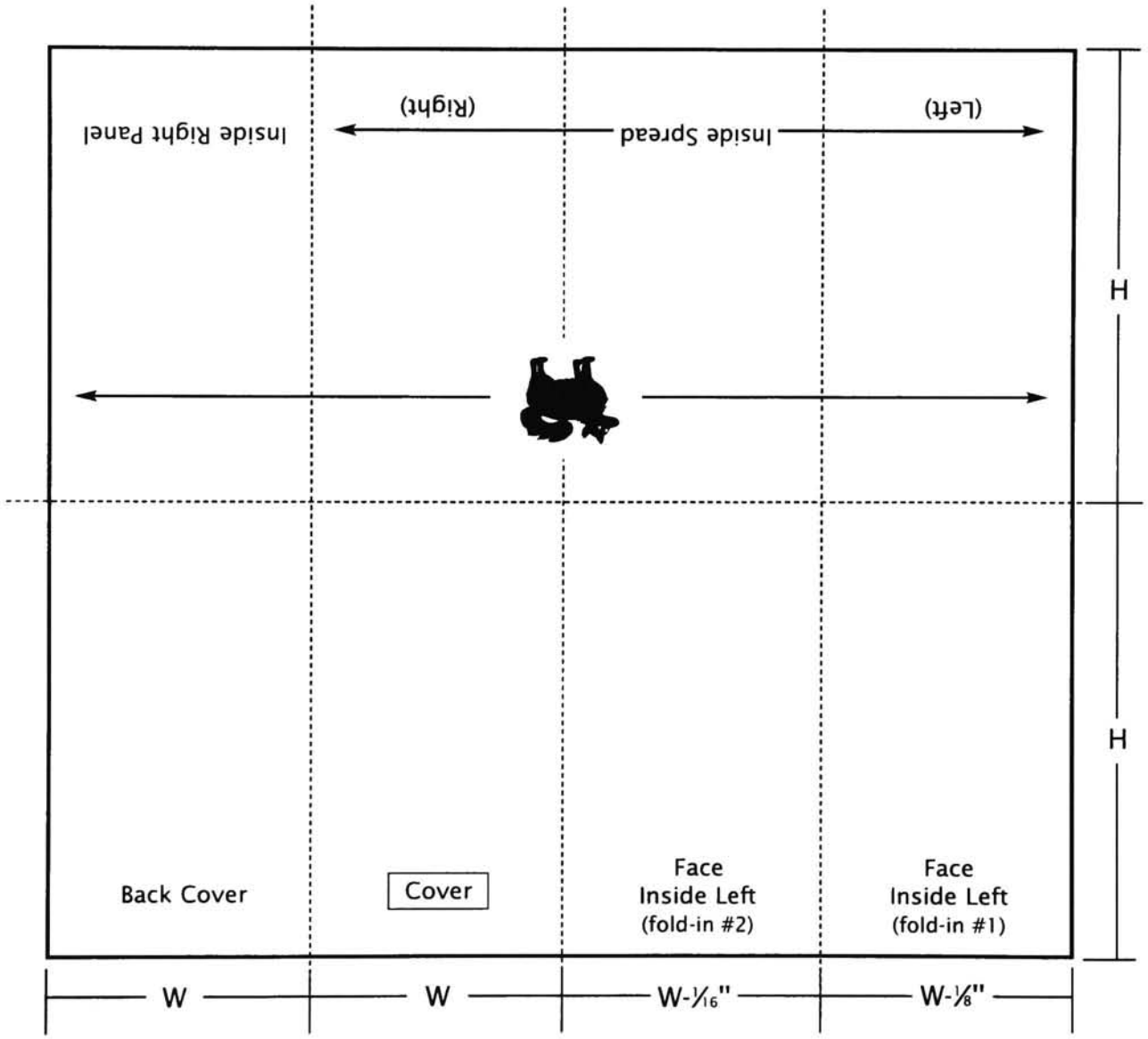
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

W: finished width
H: finished height
--- fold indication
upside-down

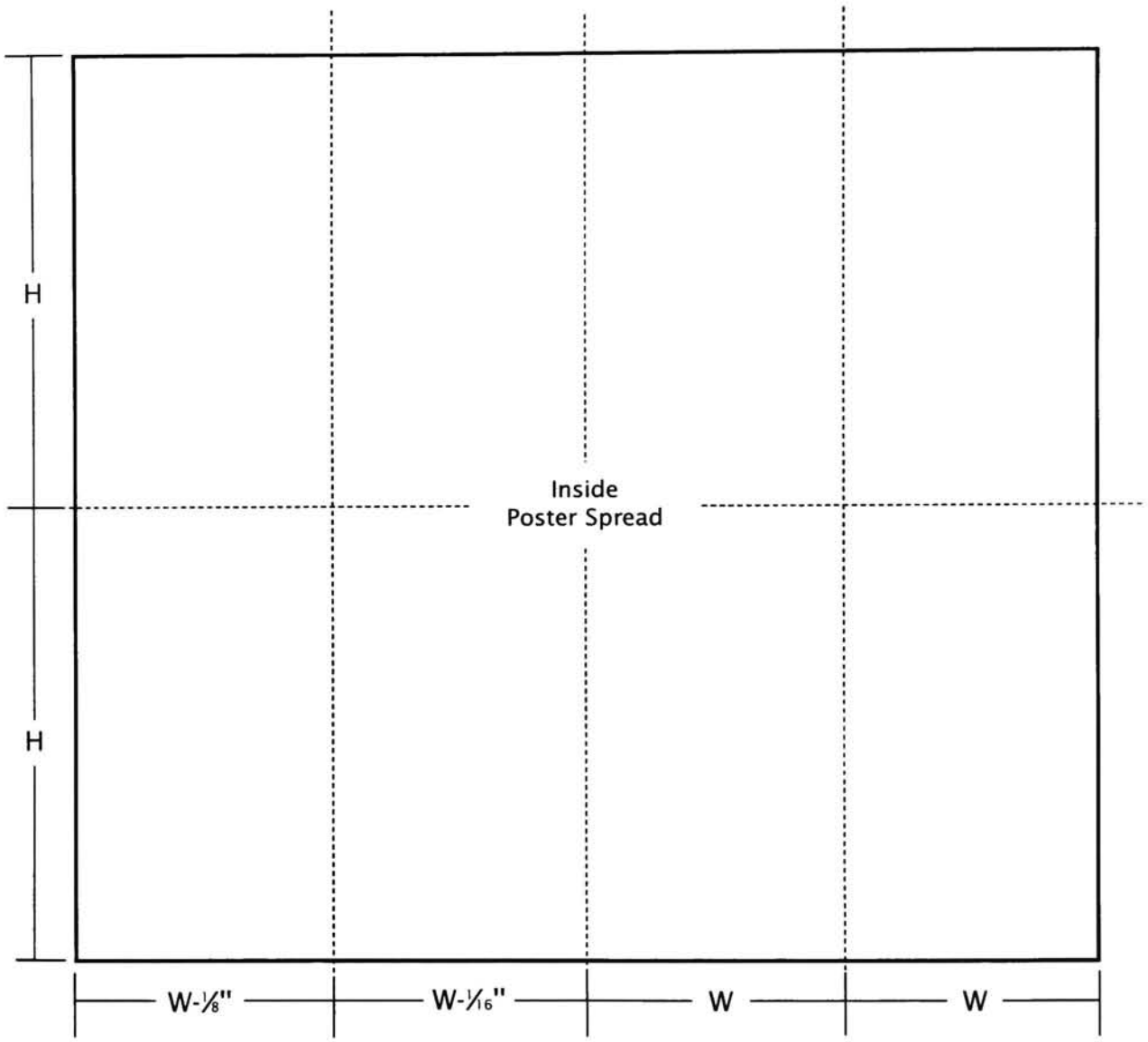


GETTING STARTED

Here's an example: If your finished size is 4 x 9, then your panels for page 1 of your digital document would be, from left, 4 inches, 4 inches, 3 15/16 inches and 3 7/8 inches. Then for page two everything reverses, so from left your panels would measure 3 7/8 inches, 3 15/16 inches, 4 inches and 4 inches, with a height of 18 inches (9 inches plus 9 inches).

Remember: Document size and flat size must be the same, so in this case the document size would be 15 13/16 (15.812) inches wide by 18 inches high.

Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- Remember that, with each panel getting narrower, it won't be long until the difference in panel width is noticeable. Adjust margins accordingly.
- Consult your printer about the size of the press sheet. Sometimes there is a lot of waste on the sheet, and you may be able to add another panel or two without adding to the cost of the job.
- Be aware of your printer or bindery's minimum and maximum sheet sizes for their equipment.
- Make sure to have a folding dummy made in your specified paper. Paper weight will dramatically affect the success of this piece. Watch for bulkiness and problems in the corner joints of the folds—the printer can't do anything about this, and it will require a change in paper.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document width ahead of time. Create your document as if all panels will be the same (ex: for a broadside reverse roll fold with a finished size of 4 x 9, set the document size to 16 x 18). Then set crosshairs to upper left corner of document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, 4 inches). Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement (4). Repeat for the last 2 panels (3 15/16 inches and 3 7/8 inches). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Just change your document size by entering that decimal measurement (15.812). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

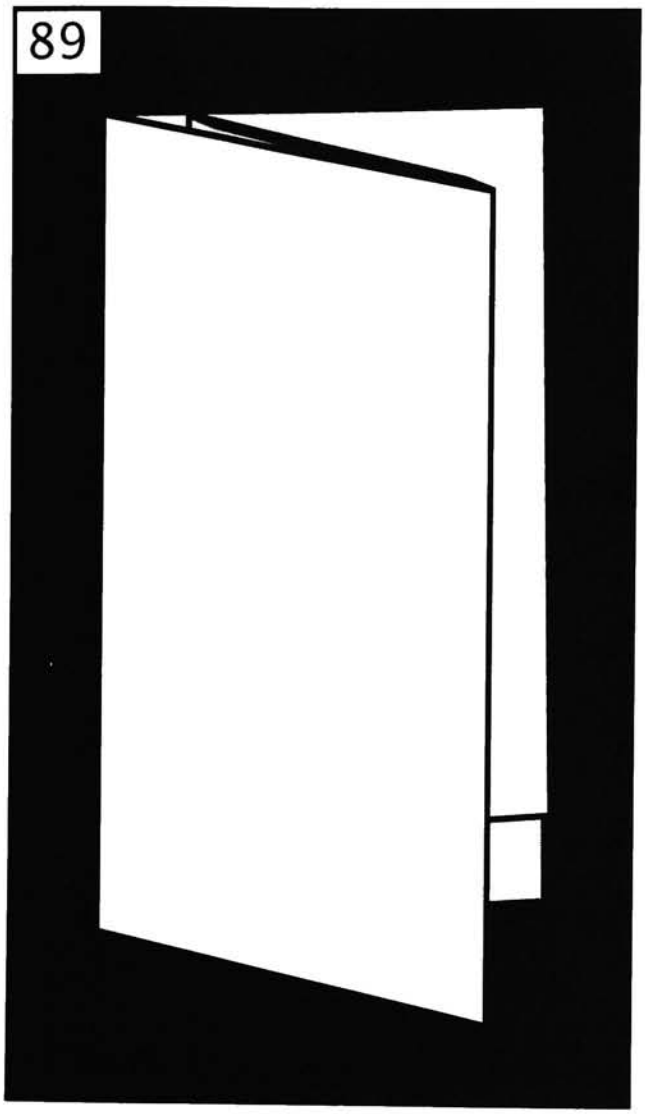
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

REVERSE ROLL WITH SHORT FOLD (INSIDE)

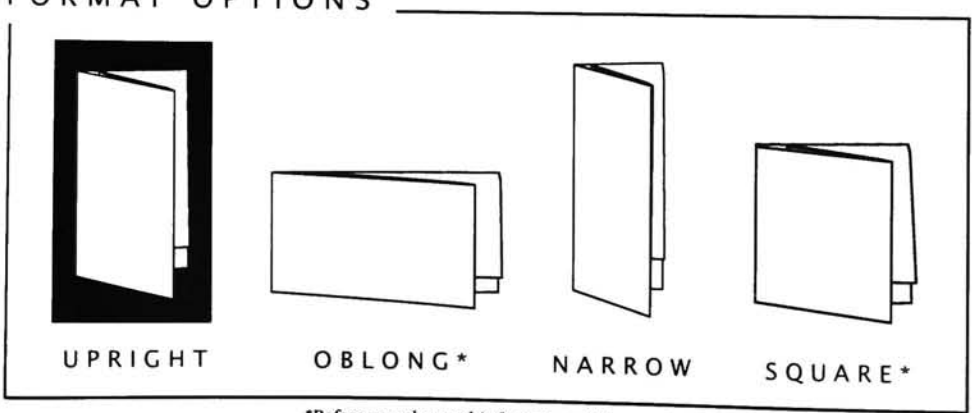


LEVEL

A level 2 fold has a moderate makeready, possible slower speed on the folding machine, and could have some special considerations.

The reverse roll with short fold inside consists of the same "roll-in" panel style, and is similar to the broadside reverse roll fold because it folds in half on itself before the roll folding is done. What makes this fold different is that unlike a broadside fold where panels are of equal length, in a short fold the fold-over panels are shorter than the finished height. There can be as many panels as you wish, but bear in mind the dimensions of the press sheet your printer is using, and the bulk of the paper.

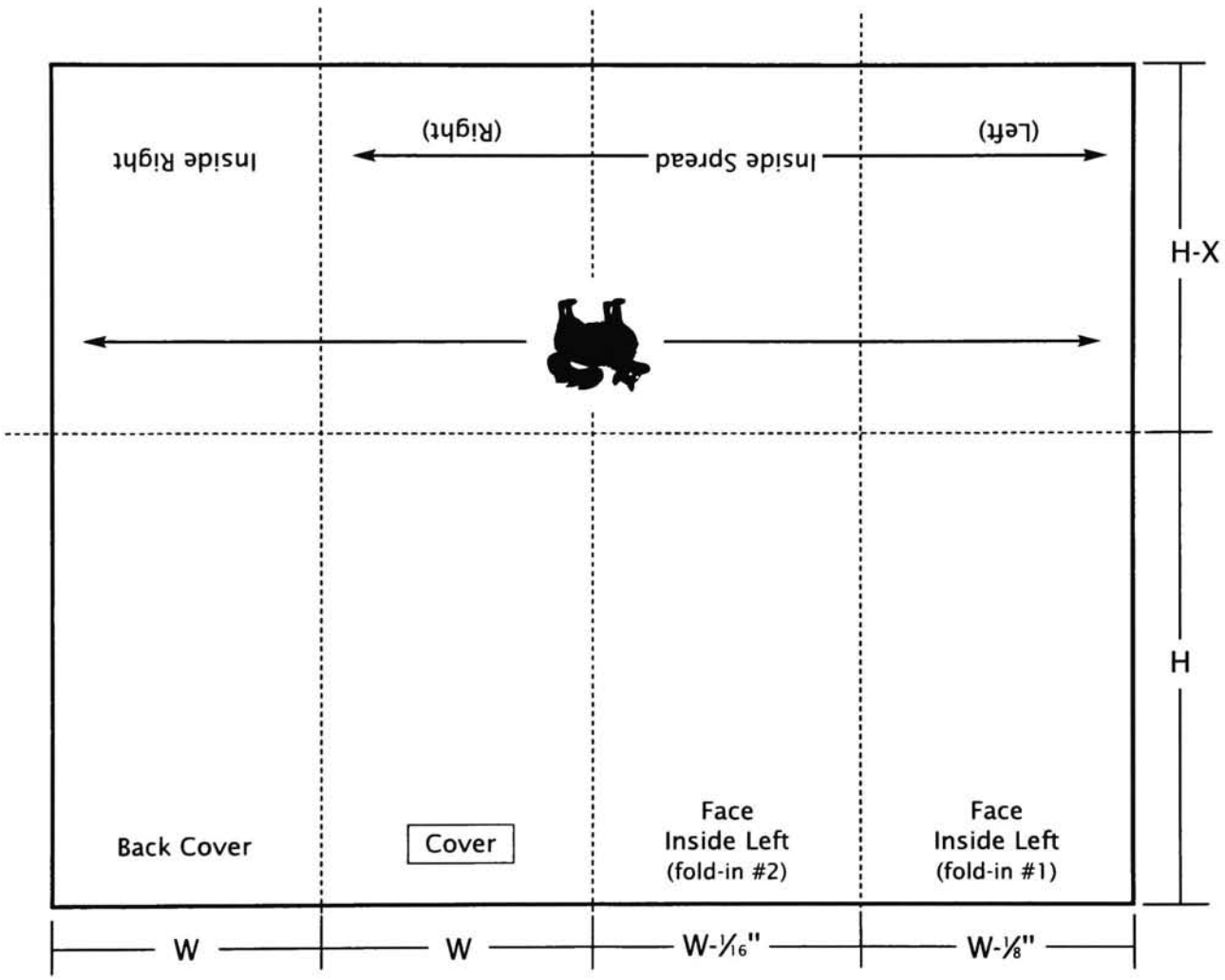
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

W: finished width
H: finished height
X: your choice
--- fold indication
upside-down

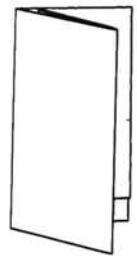
Digital Document setup: **Page 1** (side 1)



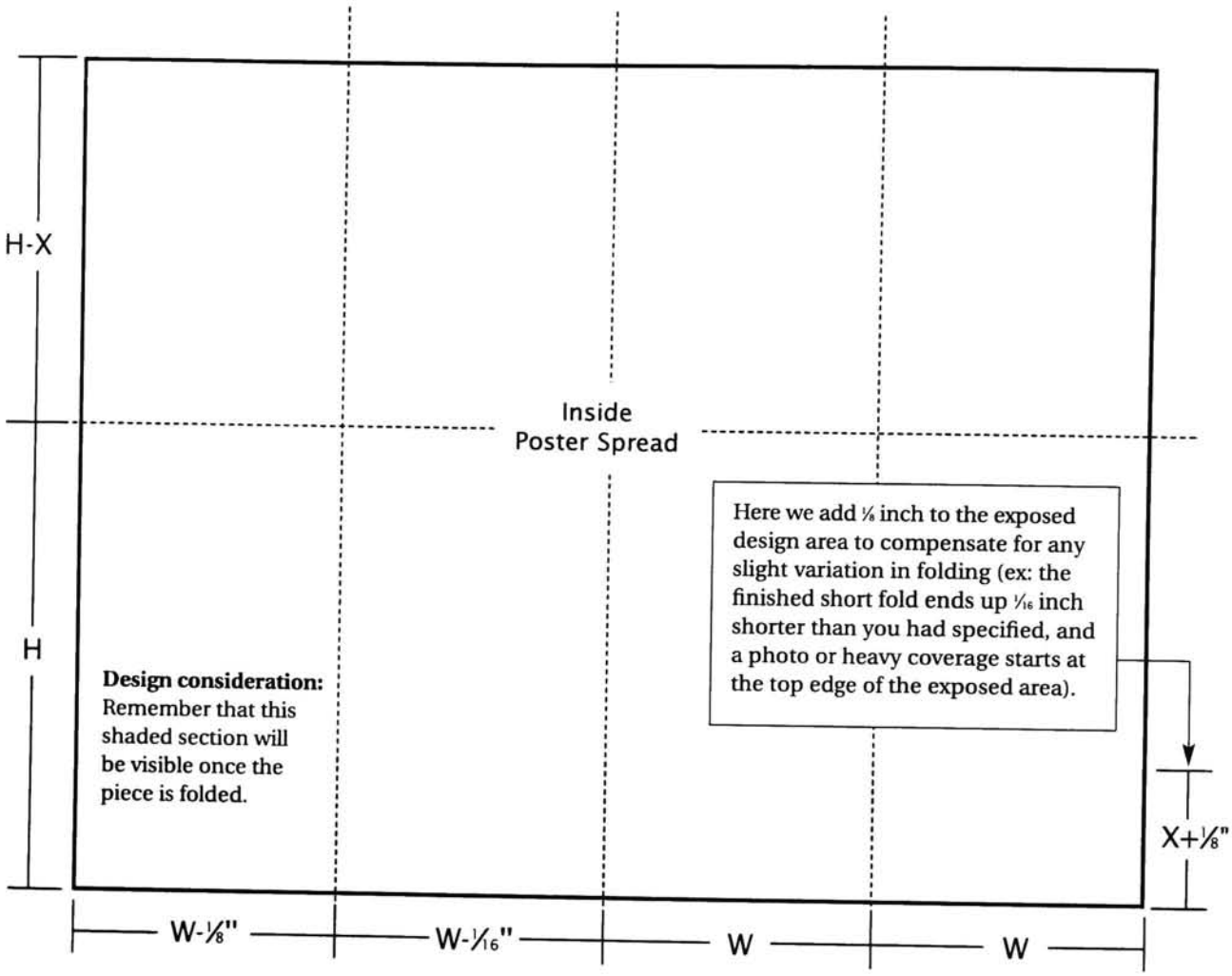
GETTING STARTED

Here's an example: For a short fold, the first thing we must determine is how short the short fold will be. In this case, we'll make it 2 inches shorter than the finished height, so X=2. Now we can calculate our document height. If the finished size is 4 x 9, then 9 inches plus 7 (9-2 , or height minus X) equals a document height of sixteen inches. Our finished width is 4 inches, so the panels for page 1 of the digital document would be, from left, 4 inches, 4 inches, 3 15/16 inches and 3 7/8 inches. Then for page two everything reverses, so from left your panels would measure 3 7/8 inches, 3 15/16 inches, 4 inches and 4 inches.

Remember: Document size and flat size must be the same, so in this case the document size would be 15 13/16 (15.812) inches wide by 16 inches high.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- Remember that, with each panel getting narrower, it won't be long until the difference in panel width is noticeable. Adjust margins accordingly.
- Consult your printer about the size of the press sheet. Sometimes there is a lot of waste on the sheet, and you may be able to add another panel or two without adding to the cost of the job.
- Be aware of your printer or bindery's minimum and maximum sheet sizes for their equipment.
- Make sure to have a folding dummy made in your specified paper. Paper weight will dramatically affect the success of this piece. Watch for bulkiness and problems in the corner joints of the folds—the printer can't do anything about this, and it will require a change in paper.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document width ahead of time. Create your document as if all panels will be the same (ex: for a reverse roll with short fold with a finished size of 4 x 9, set the document size to 16 x 16). Then set crosshairs to upper left corner of document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, 4 inches). Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement (4). Repeat for the last 2 panels (3 15/16 inches and 3 7/8 inches). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Just change your document size by entering that decimal measurement (15.812). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

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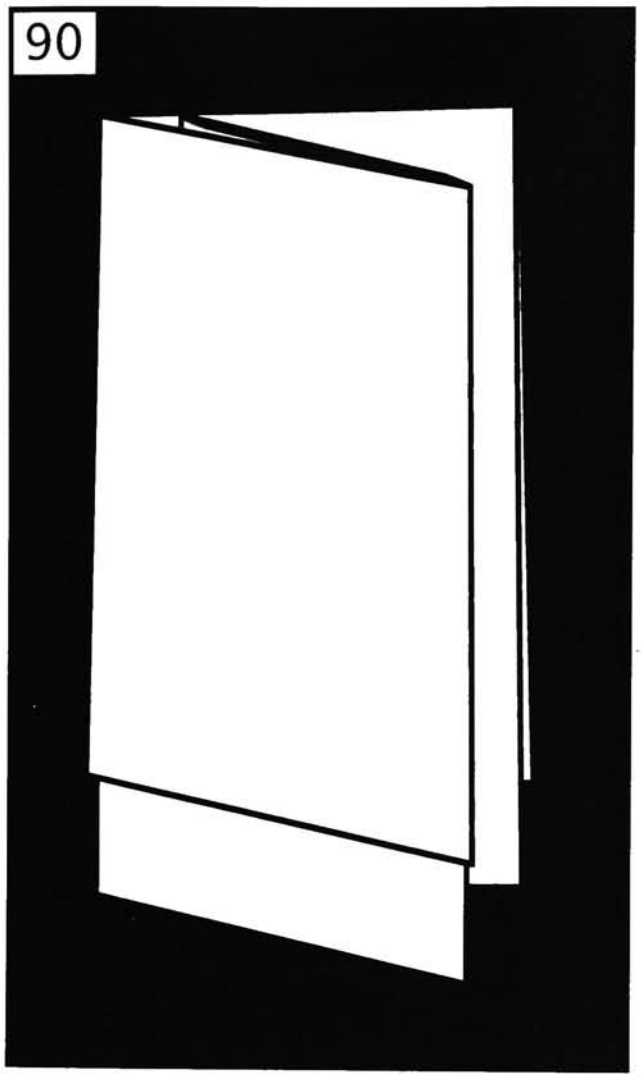
Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

REVERSE ROLL WITH SHORT FOLD (OUTSIDE)

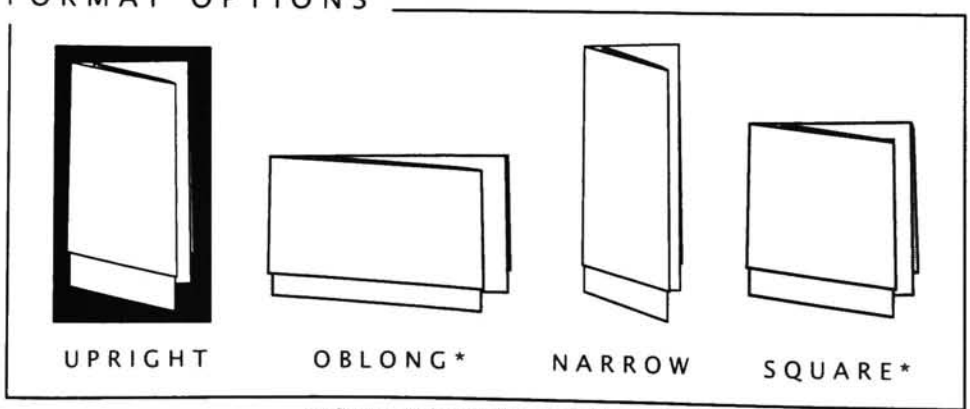


LEVEL

A level 2 fold has a moderate makeready, possible slower speed on the folding machine, and could have some special considerations.

The reverse roll with short fold outside consists of the same "roll-in" panel style, and is similar to the broadside reverse roll fold because it folds in half on itself before the roll folding is done. What makes this fold different is that unlike a broadside fold where panels are of equal length, in a short fold the fold-over panels are shorter than the finished height. There can be as many panels as you wish, but bear in mind the dimensions of the press sheet your printer is using, and the bulk of the paper.

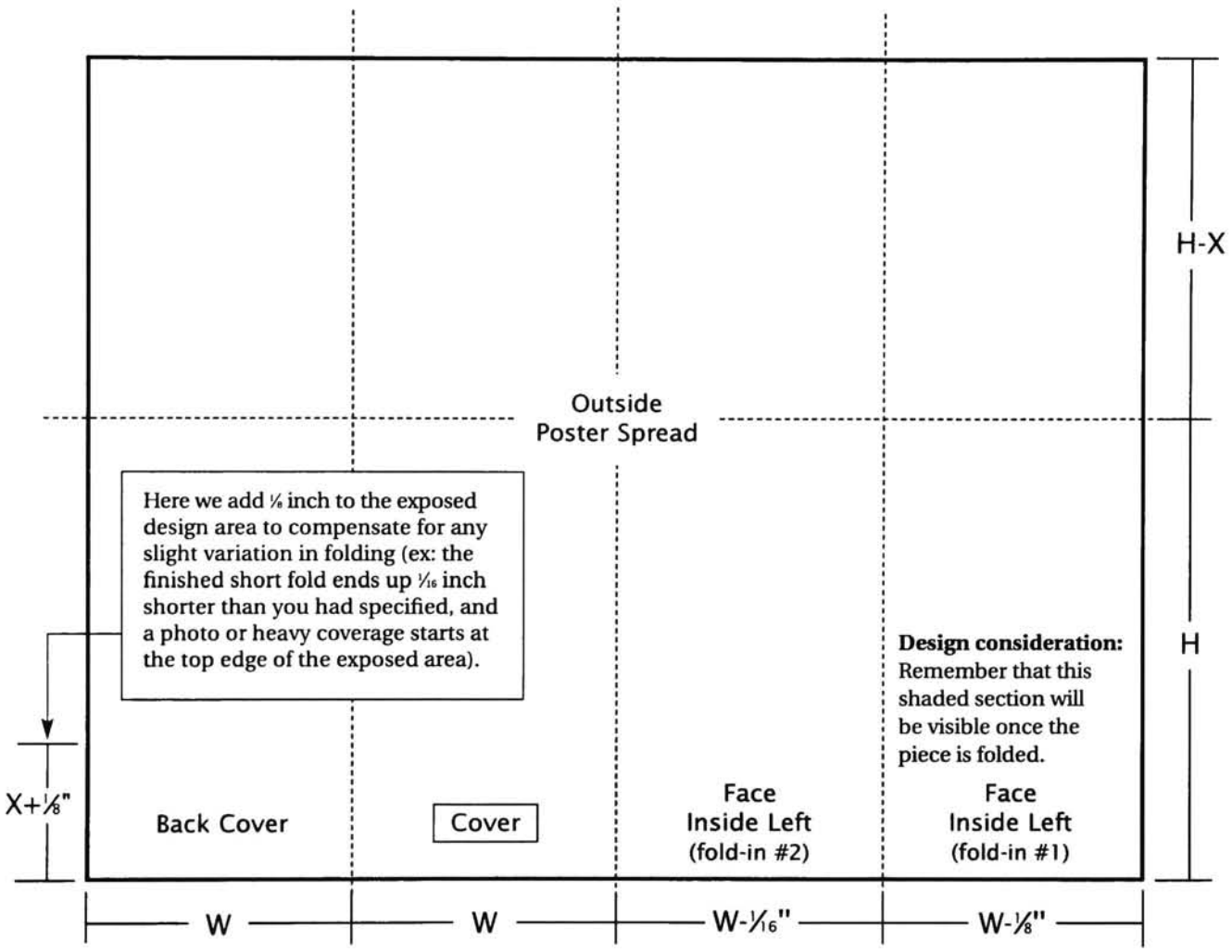
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

W: finished width
H: finished height
X: your choice
--- fold indication
upside-down



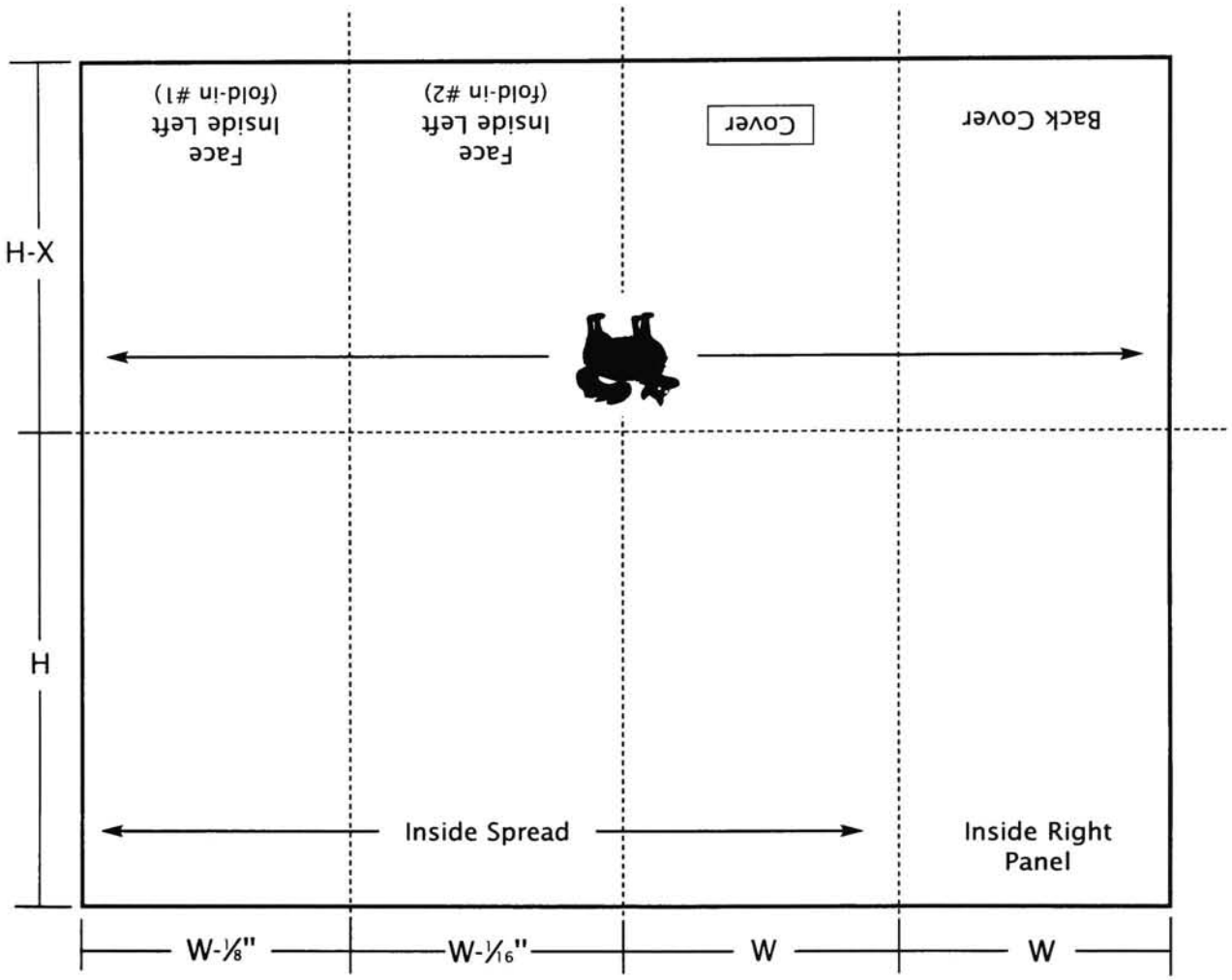
GETTING STARTED

Here's an example: For a short fold, the first thing we must determine is how short the short fold will be. In this case, we'll make it 2 inches shorter than the finished height, so X=2. Now we can calculate our document height. If the finished size is 4 x 9, then 9 inches plus 7 (9-2 , or height minus X) equals a document height of sixteen inches. Our finished width is 4 inches, so the panels for page 1 of the digital document would be, from left, 4 inches, 4 inches, 3 15/16 inches and 3 7/8 inches.

Then for page two everything reverses, so from left your panels would measure 3 7/8 inches, 3 15/16 inches, 4 inches and 4 inches.

Remember: Document size and flat size must be the same, so in this case the document size would be 15 13/16 (15.812) inches wide by 16 inches high.

Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- Remember that, with each panel getting narrower, it won't be long until the difference in panel width is noticeable. Adjust margins accordingly.
- Consult your printer about the size of the press sheet. Sometimes there is a lot of waste on the sheet, and you may be able to add another panel or two without adding to the cost of the job.
- Be aware of your printer or bindery's minimum and maximum sheet sizes for their equipment.
- Make sure to have a folding dummy made in your specified paper. Paper weight will dramatically affect the success of this piece. Watch for bulkiness and problems in the corner joints of the folds—the printer can't do anything about this, and it will require a change in paper.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document width ahead of time. Create your document as if all panels will be the same (ex: for a reverse roll with short fold with a finished size of 4 x 9, set the document size to 16 x 16). Then set crosshairs to upper left corner of document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, 4 inches). Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement (4). Repeat for the last 2 panels (3 15/16 inches and 3 7/8 inches). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Just change your document size by entering that decimal measurement (15.812). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

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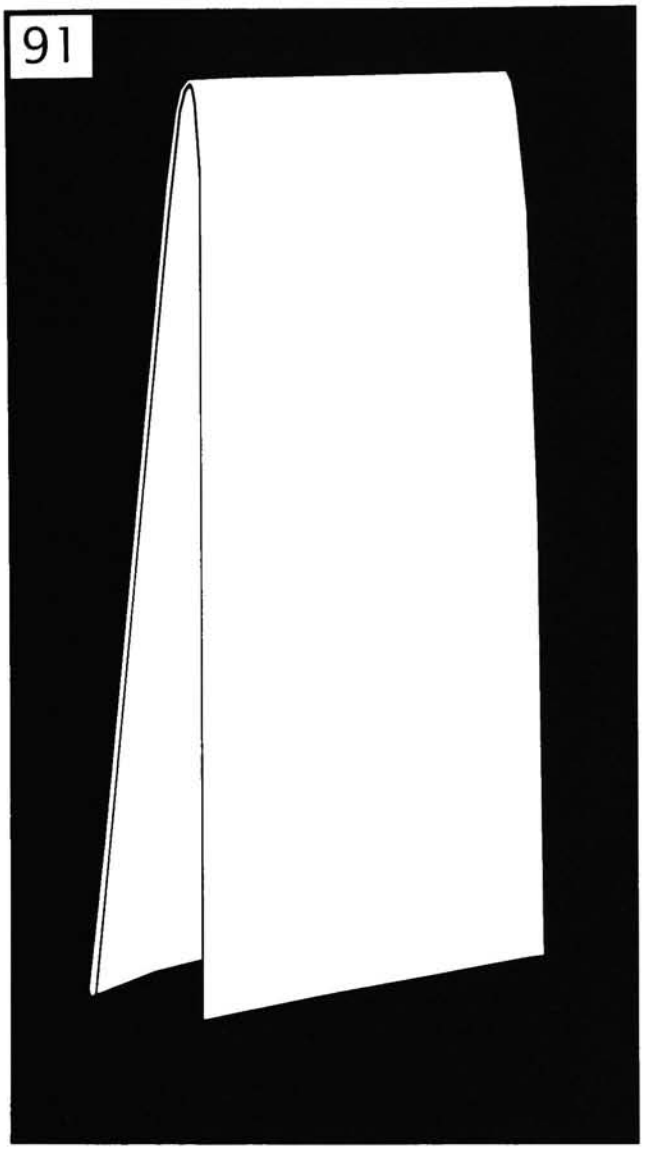
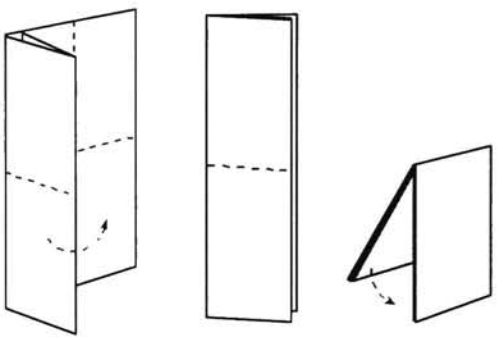
Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

TOP-FOLDING REVERSE ROLL





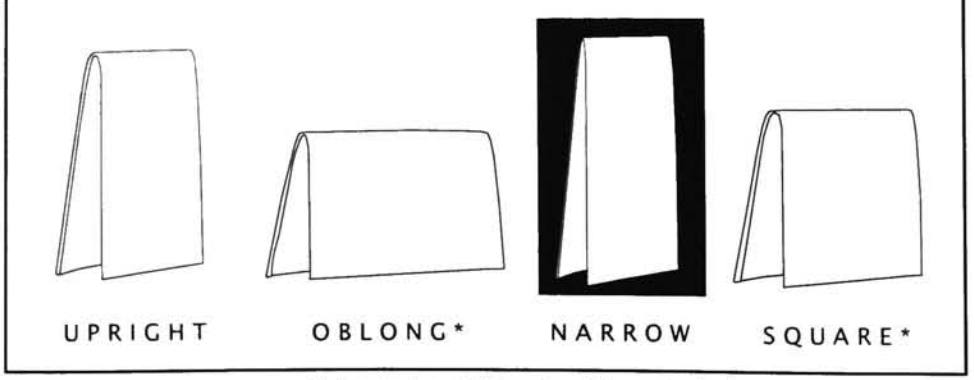
LEVEL

A level 3 fold has a long and difficult makeready, could require special machinery and low folding speed. These issues will be reflected in the cost.

The top-folding reverse roll consists of the same characteristic folding style as the standard reverse roll fold, but in a taller format. When the roll folding is done, this style then folds in half onto itself.

ROLLS

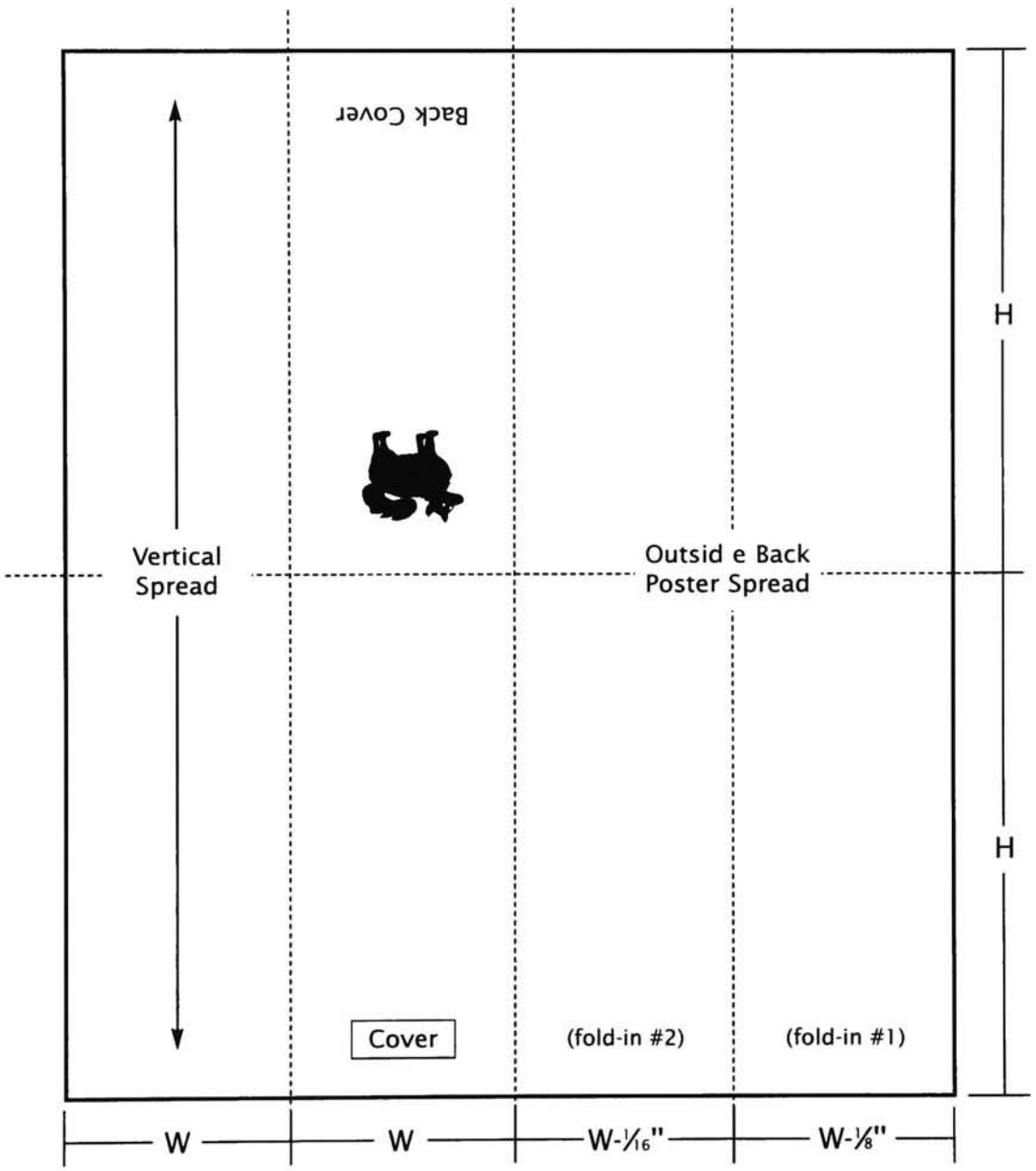
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

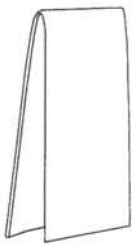
W: finished width
H: finished height
--- fold indication
upside-down



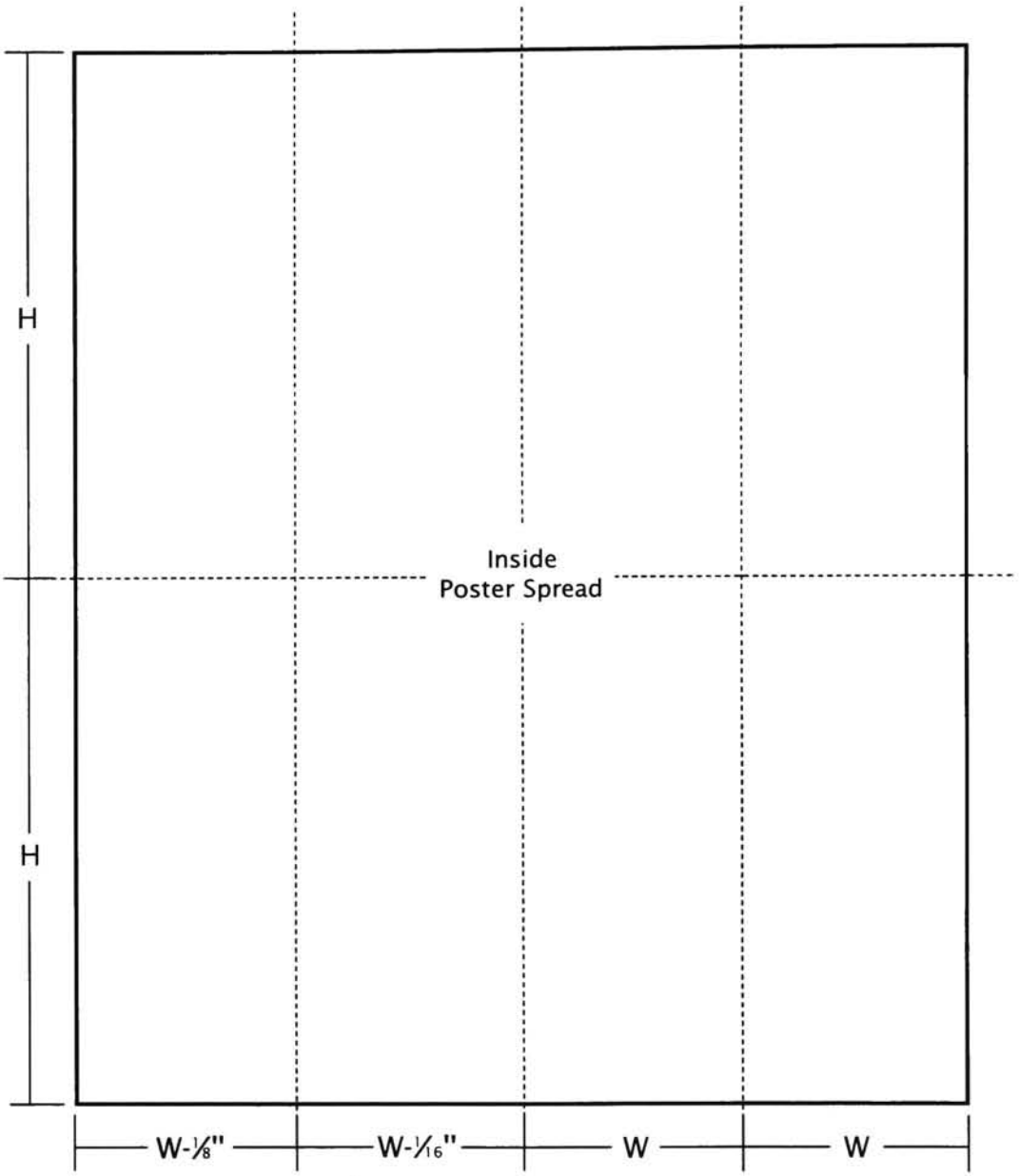
Getting started

Here's an example: If your finished size is 4 x 9, then your panels for page 1 of your digital document would be, from left, 4 inches, 4 inches, 3 15/16 inches and 3 7/8 inches. Then for page two everything reverses, so from left your panels would measure 3 7/8 inches, 3 15/16 inches, 4 inches and 4 inches, with a height of 18 inches (9 inches plus 9 inches).

Remember: Document size and flat size must be the same, so in this case the document size would be 15 13/16 (15.812) inches wide by 18 inches high.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- Consult your printer about the size of the press sheet. Sometimes there is a lot of waste on the sheet, and you may be able to add another panel or two without adding to the cost of the job.
- A paper choice of any heavier than 60# text is not recommended.
- Make sure to have a folding dummy made in your specified paper.
- Be aware of your printer or bindery's minimum and maximum sheet sizes for their equipment. Top-folding rolls and any other folded pieces which open out to very large dimensions generally require special large format folders.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document width ahead of time. Create your document as if all panels will be the same (ex: for a reverse roll with short fold with a finished size of 4 x 9, set the document size to 16 x 18). Then set crosshairs to upper left corner of document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, 4 inches). Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement (4). Repeat for the last 2 panels (3 15/16 inches and 3 7/8 inches). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Just change your document size by entering that decimal measurement (15.812). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

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Other Related Considerations:

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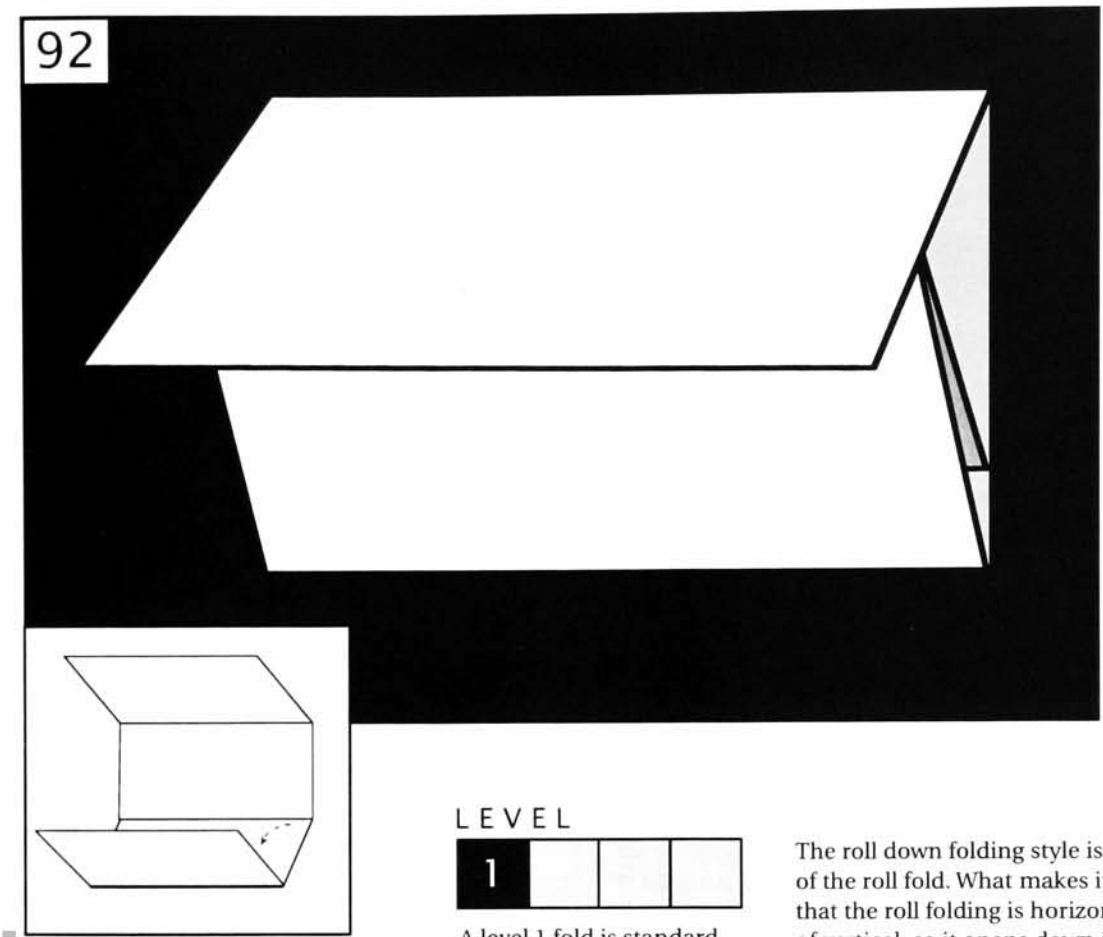
Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

ROLL DOWN

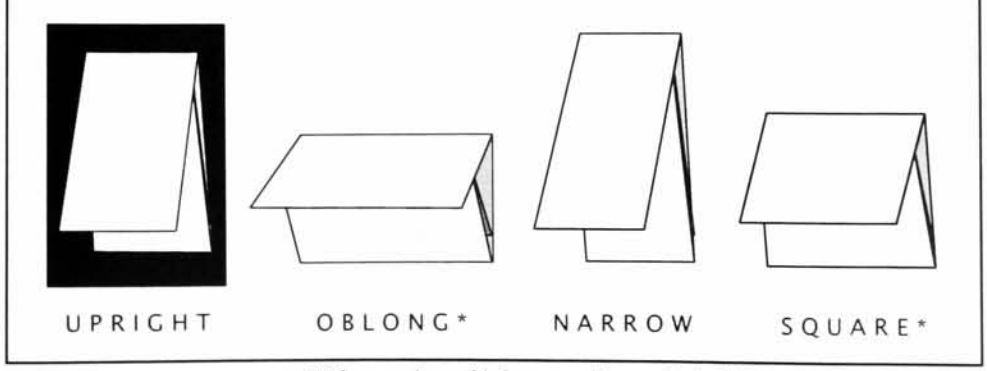


LEVEL

A level 1 fold is standard and basic, easy to set up on the folding machine and the machine can run at highest speeds.

The roll down folding style is a variation of the roll fold. What makes it different is that the roll folding is horizontal instead of vertical, so it opens down instead of out to the side.

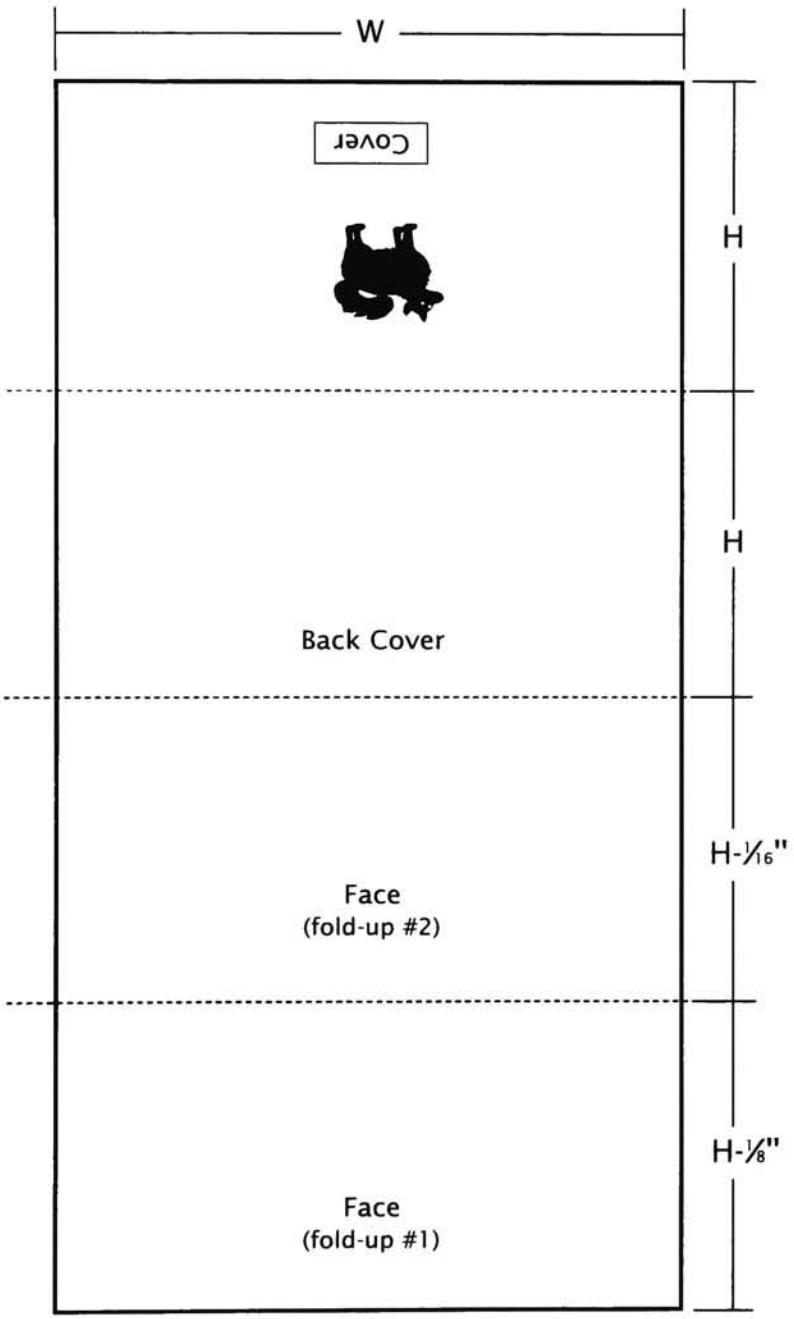
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

W: finished width
H: finished height
--- fold indication
upside-down

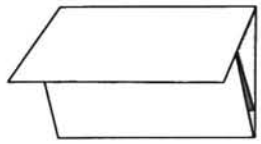


GETTING STARTED

Here's an example: If your finished size is 6 x 5, then your panels for page 1 of your digital document would be, from top, 5 inches, 5 inches, 4 15/16 inches and 4 7/8 inches, with a width of 6 inches. This document flips laterally, and therefore page 2 measures exactly the same as page 1.

Remember: Document size and flat size must be the same, so in this case the document size would be 6 inches wide by 19 13/16 (19.812) inches high.

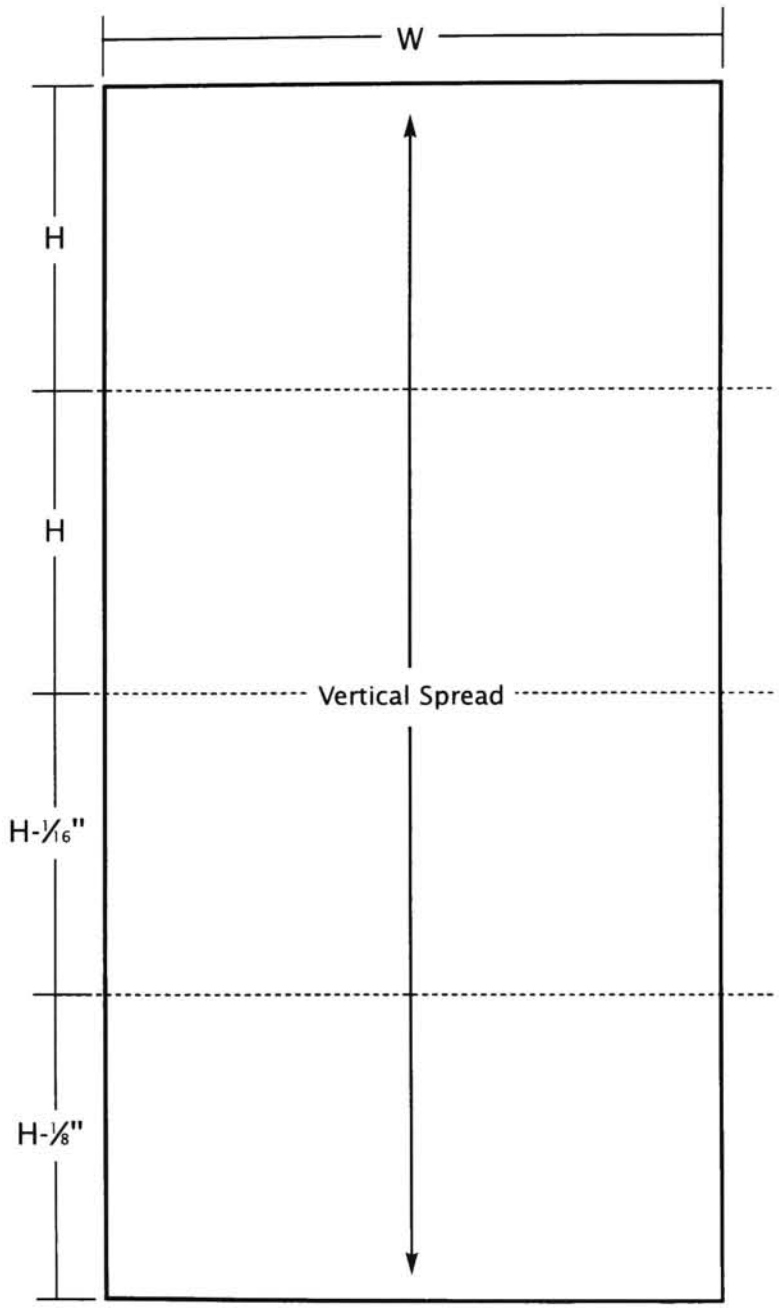
Time-saving tip: For this particular folding style, the fold placement is exactly the same for page 1 as it is for page 2. If you're creating your document in a page layout program which has a master page option, save time by setting your folds on the master page. Then, return to the document and add the second page.



Digital Document setup: **Page 2** (side 2)

CONSIDERATIONS:

- Remember that, with each panel getting shorter, it won't be long until the difference in panel length is noticeable. Adjust margins accordingly.
- Consult your printer about the size of the press sheet. Also ask for a diagram of how your piece will be run on the press sheet. Sometimes there is a lot of waste on the sheet, and you may be able to add another panel or two without adding to the cost of the job.
- If you are designing a long piece, make sure to have a folding sample made up from your specified paper. If the paper is too lightweight, it could turn into a sagging flimsy piece.
- If you are designing a self-mailing piece, this folding style could require wafer-seals to make it mail-ready.
- If your paper choice is any heavier than 80# text, you will want to consider scoring the piece.



A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document height ahead of time. Create your document as if all panels will be the same (ex: for a 4-panel roll down with a finished size of 6 x 5, set the document size to 6 x 20). Then set crosshairs to upper left corner of document, pull down a guide bar from the top ruler and set it to the length of your first panel (in this example, 5 inches). Then, bring the cross-hairs down to the guide you just set (which lets you measure from zero again) and drag your guide down to the next panel measurement (5). Repeat for the last 2 panels (4 15/16 inches and 4 7/8 inches). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the Y measurement, that will give you the document length you are looking for. Just change your document size by entering that decimal measurement (19.812). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

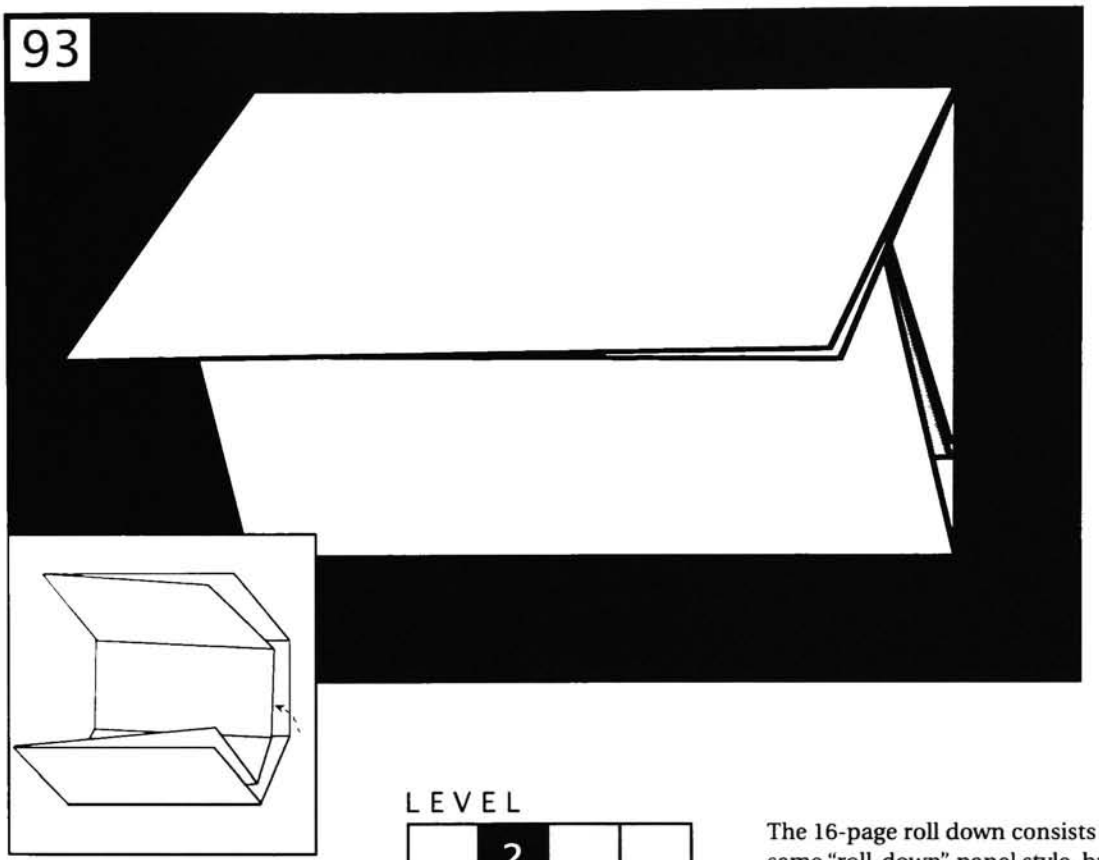
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

16-PAGE ROLL DOWN

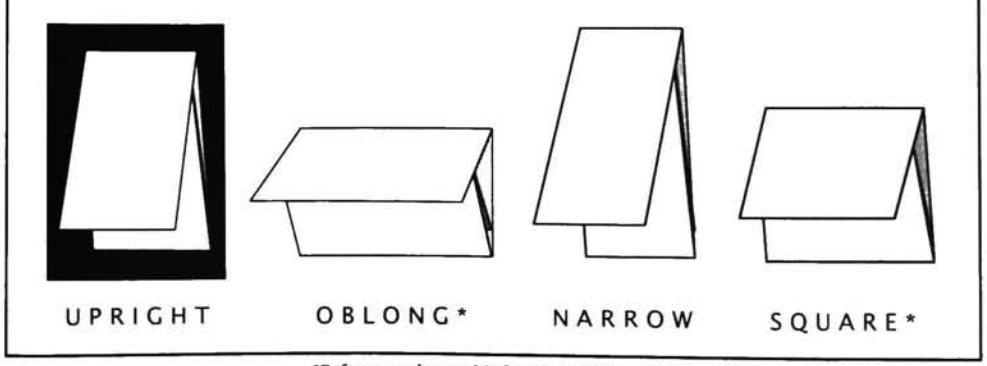


LEVEL

A level 2 fold has a moderate makeready, possible slower speed on the folding machine, and could have some special considerations.

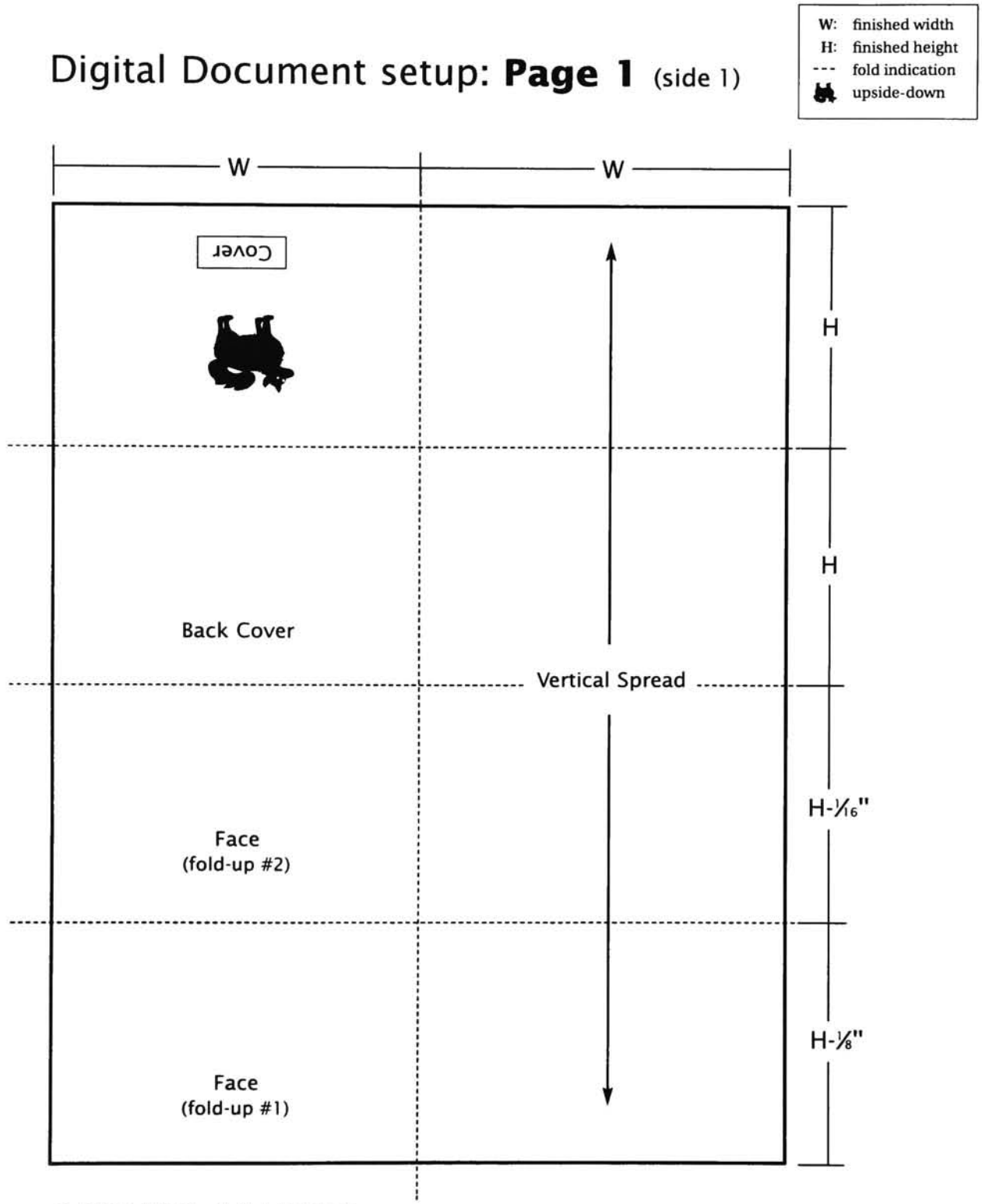
The 16-page roll down consists of the same "roll-down" panel style, but the difference is that this fold has twice the area because it folds in half on itself before the roll folding is done. As in the standard roll fold, there can be as many panels as you wish, but bear in mind the dimensions of the press sheet your printer is using, and the bulk of the paper.

FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)



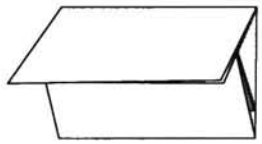
GETTING STARTED

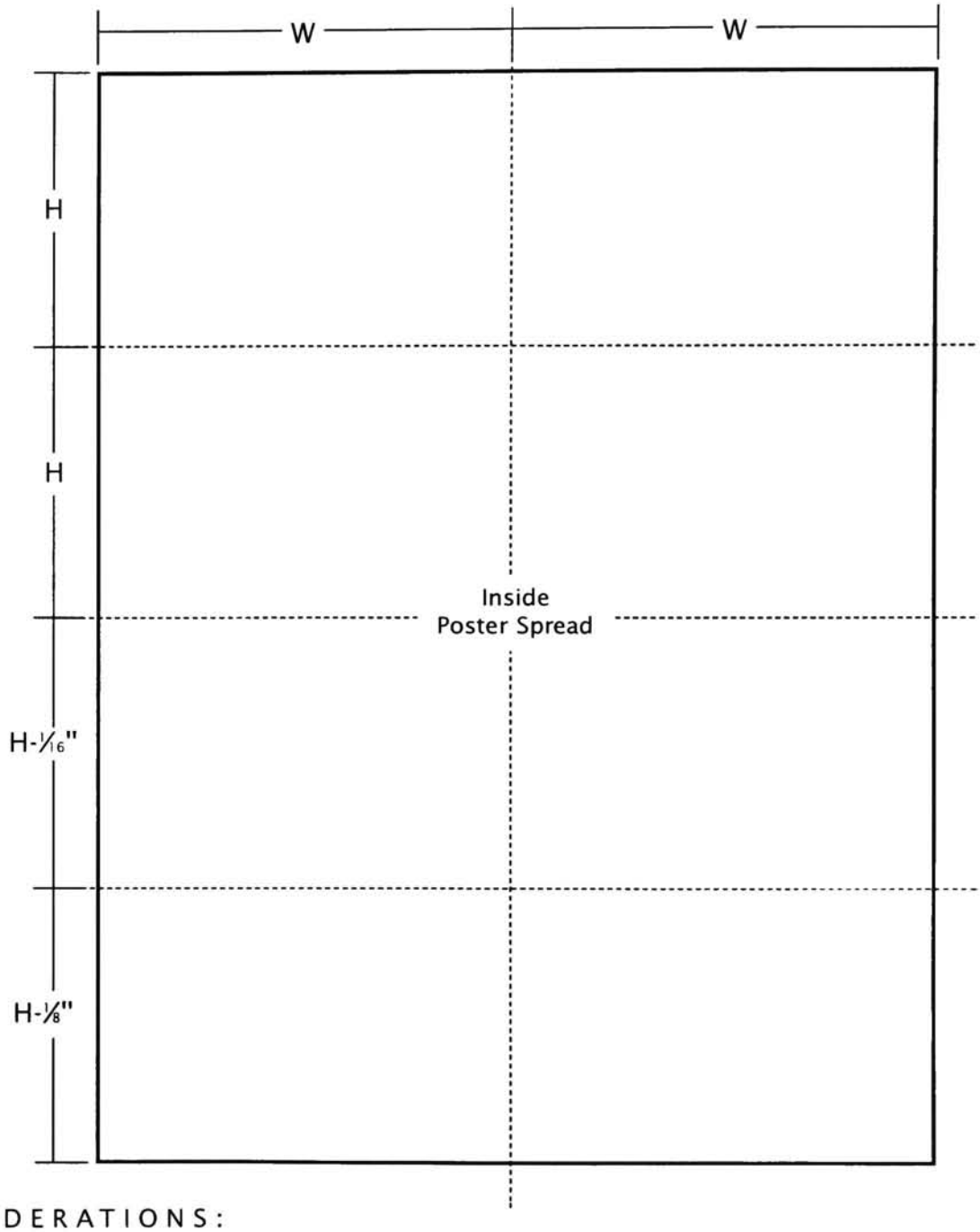
Here's an example: If your finished size is 6 x 5, then your panels for page 1 of your digital document would be, from top, 5 inches, 5 inches, 4 15/16 inches and 4 7/8 inches, with a width of 12 inches (6 inches plus 6 inches). This document flips laterally, and therefore page 2 measures exactly the same as page 1.

Remember: Document size and flat size must be the same, so in this case the document size would be 12 inches wide by 19 13/16 (19.812) inches high.

Time-saving tip: For this particular folding style, the fold placement is exactly the same for page 1 as it is for page 2. If you're creating your document in a page layout program which has a master page option, like QuarkXPress, save time by setting your folds on the master page. Then, return to the document and add the second page.

Digital Document setup: **Page 2** (side 2)





CONSIDERATIONS:

- Remember that, with each panel getting narrower, it won't be long until the difference in panel width is noticeable. Adjust margins accordingly.
- Consult your printer about the size of the press sheet. Sometimes there is a lot of waste on the sheet, and you may be able to add another panel or two without adding to the cost of the job.
- Make sure to have a folding dummy made in your specified paper. Paper weight will dramatically affect the success of this piece. Watch for bulkiness and problems in the corner joints of the folds—the printer can't do anything about this, and it will require a change in paper.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document height ahead of time. Create your document as if all panels will be the same (ex: for a 16-page roll down with a finished size of 6 x 5, set the document size to 12 x 20). Then set crosshairs to upper left corner of document, pull down a guide bar from the top ruler and set it to the length of your first panel (in this example, 5 inches). Then, bring the cross-hairs down to the guide you just set (which lets you measure from zero again) and drag your guide down to the next panel measurement (5). Repeat for the last 2 panels (4 15/16 inches and 4 7/8 inches). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the Y measurement, that will give you the document length you are looking for. Just change your document size by entering that decimal measurement (19.812). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

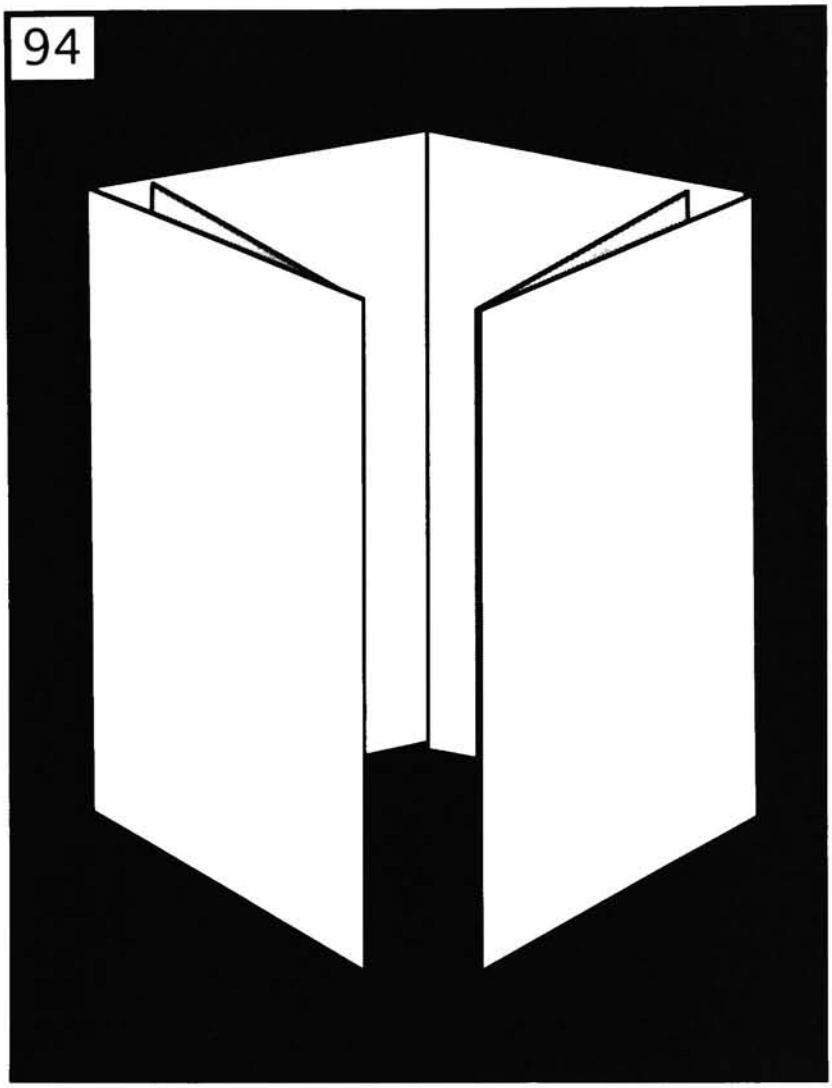
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

DOUBLE ROLL

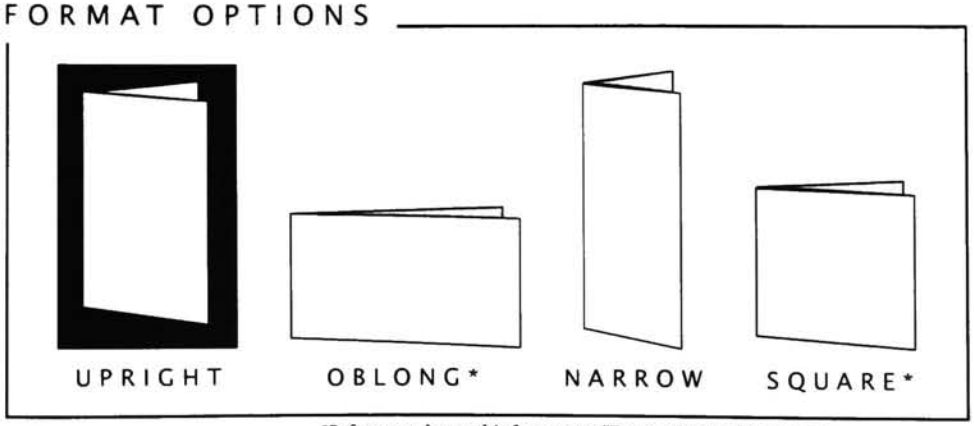


LEVEL

A level 3 fold has a long and difficult makeready, could require special machinery and low folding speed. These issues will be reflected in the cost.

The double roll fold is a variation of the roll fold in which the panels roll in from **both sides.** There can be as many panels as you wish, but bear in mind the dimensions of the press sheet your printer is using.

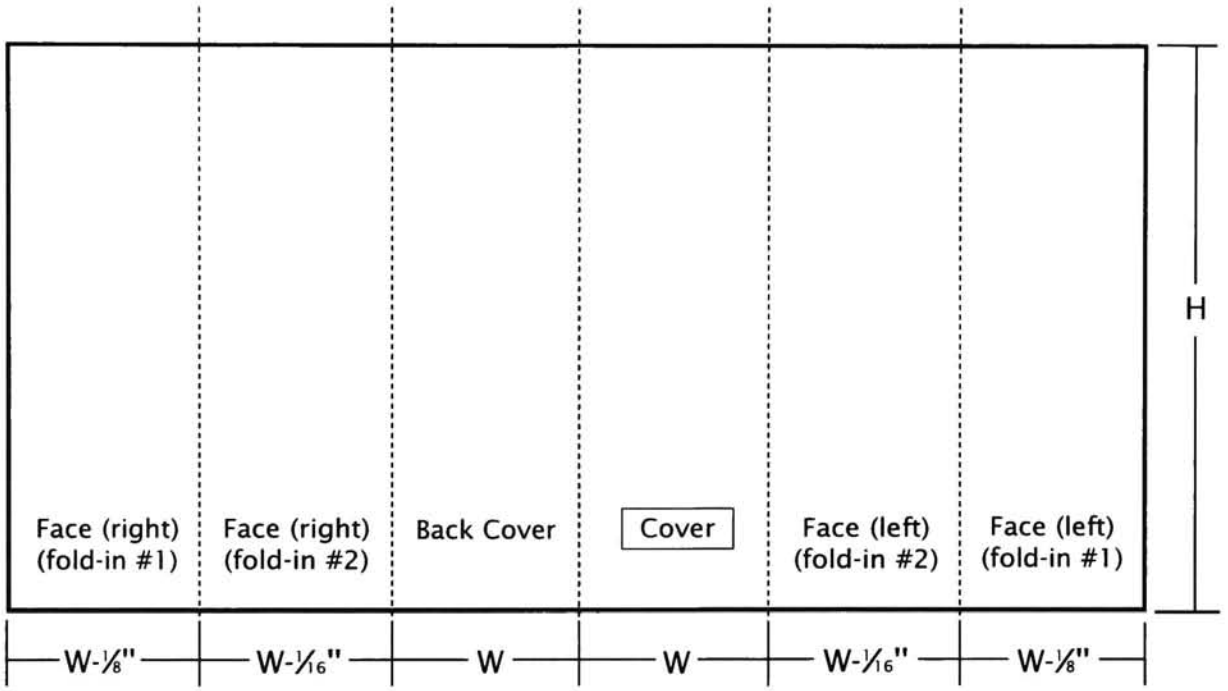
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

W: finished width
H: finished height
--- fold indication

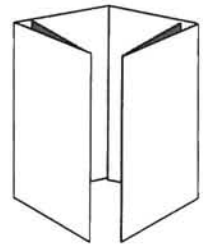


GETTING STARTED

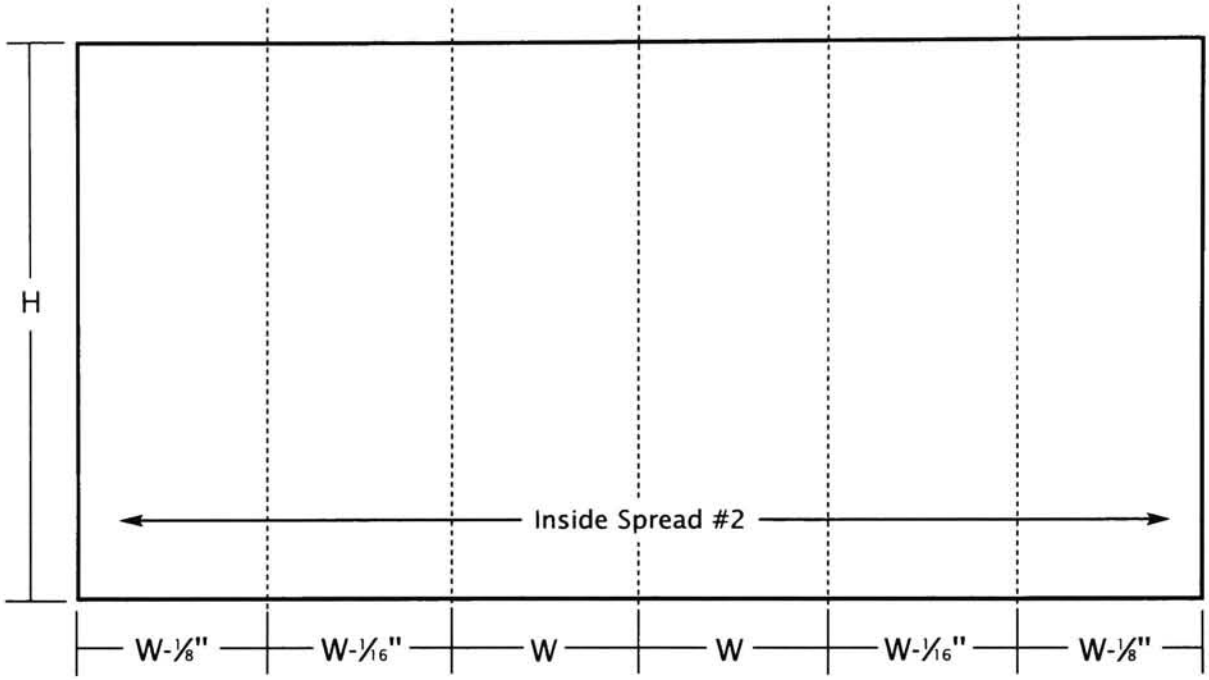
Here's an example: If your finished size is 4 x 8, then your panels for page 1 of your digital document would be, from left, 3 7/8 inches, 3 15/16 inches, 4 inches, 4 inches, 3 15/16 inches and 3 7/8 inches, with a height of 8 inches. This fold is symmetrical, so for page 2 the measurements are the same as page 1.

Remember: Document size and flat size must be the same, so in this case the document size would be 23 13/16 (23.625) inches wide by 8 inches high.

Time-saving tip: For this particular folding style,the fold placement is exactly the same for page 1 as it is for page 2. If you're creating your document in a page layout program which has a master page option, save time by setting your folds on the master page. Then, return to the document and add the second page.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- Remember that, with each panel getting narrower, it won't be long until the difference in panel width is noticeable. Adjust margins accordingly.
- Consult your printer about the size of the press sheet. Also ask for a diagram of how your piece will be run on the press sheet. Sometimes there is a lot of waste on the sheet, and you may be able to add another panel or two without adding to the cost of the job.
- Be aware of your printer or bindery's minimum and maximum sheet sizes for their equipment.
- Make sure to have a folding dummy made in your specified paper. Paper weight will dramatically affect the success of this piece. Watch for bulkiness—the printer can't do anything about this, and it will require a change in paper.
- If you are designing a self-mailing piece, this folding style could require wafer-seals to make it mail-ready.
- If your paper choice is any heavier than 80# text (not recommended), you will want to consider scoring the piece.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document width ahead of time. Create your document as if all panels will be the same (ex: for a double roll with a finished size of 4 x 8, set the document size to 24 x 8). Then set crosshairs to upper left corner of document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, 3 ⅞ inches). Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement (3 15/16). Repeat for the last 4 panels (4, 4, 3 15/16 and 3 ⅞ inches). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your cross-hairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Just change your document size by entering that decimal measurement (23.625). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

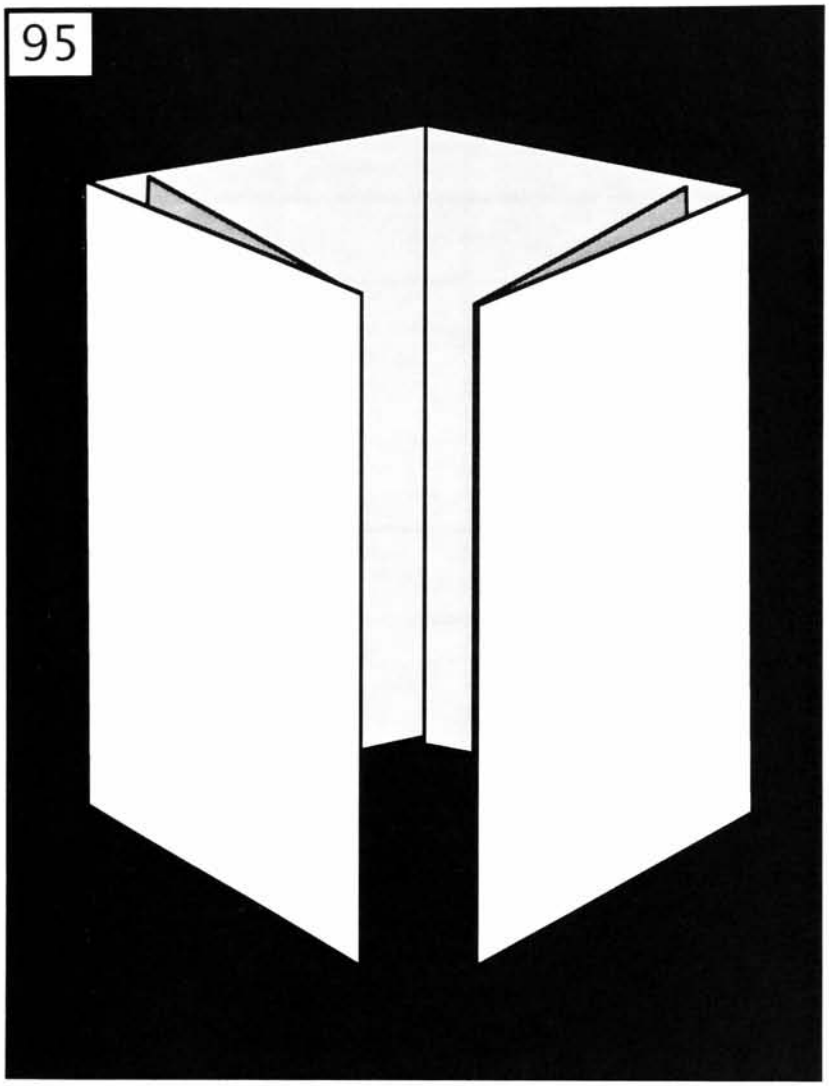
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

BROADSIDE DOUBLE ROLL

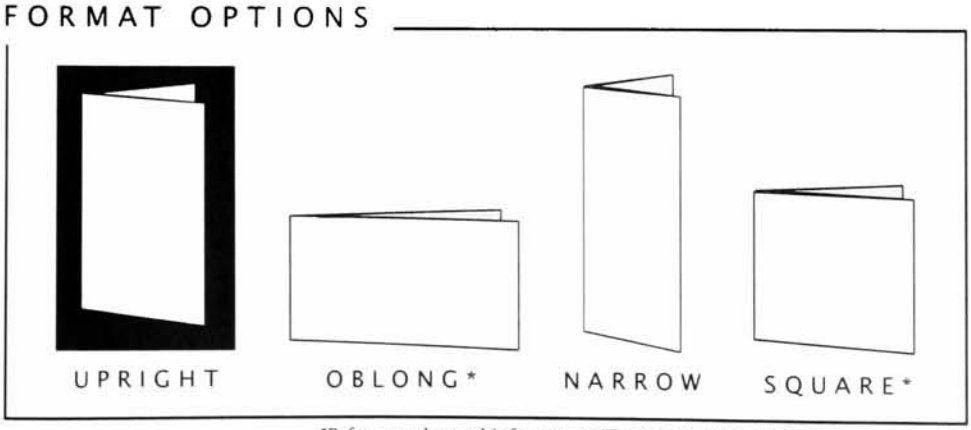


LEVEL

A level 3 fold has a long and difficult makeready, could require special machinery and low folding speed. These issues will be reflected in the cost.

The broadside double roll fold consists of the same "roll-in" panel style, but the difference is that this fold has twice the area because it folds in half on itself before the roll folding is done. As in the standard double roll fold, there can be as many panels as you wish, but bear in mind the dimensions of the press sheet your printer is using, and the bulk of the paper.

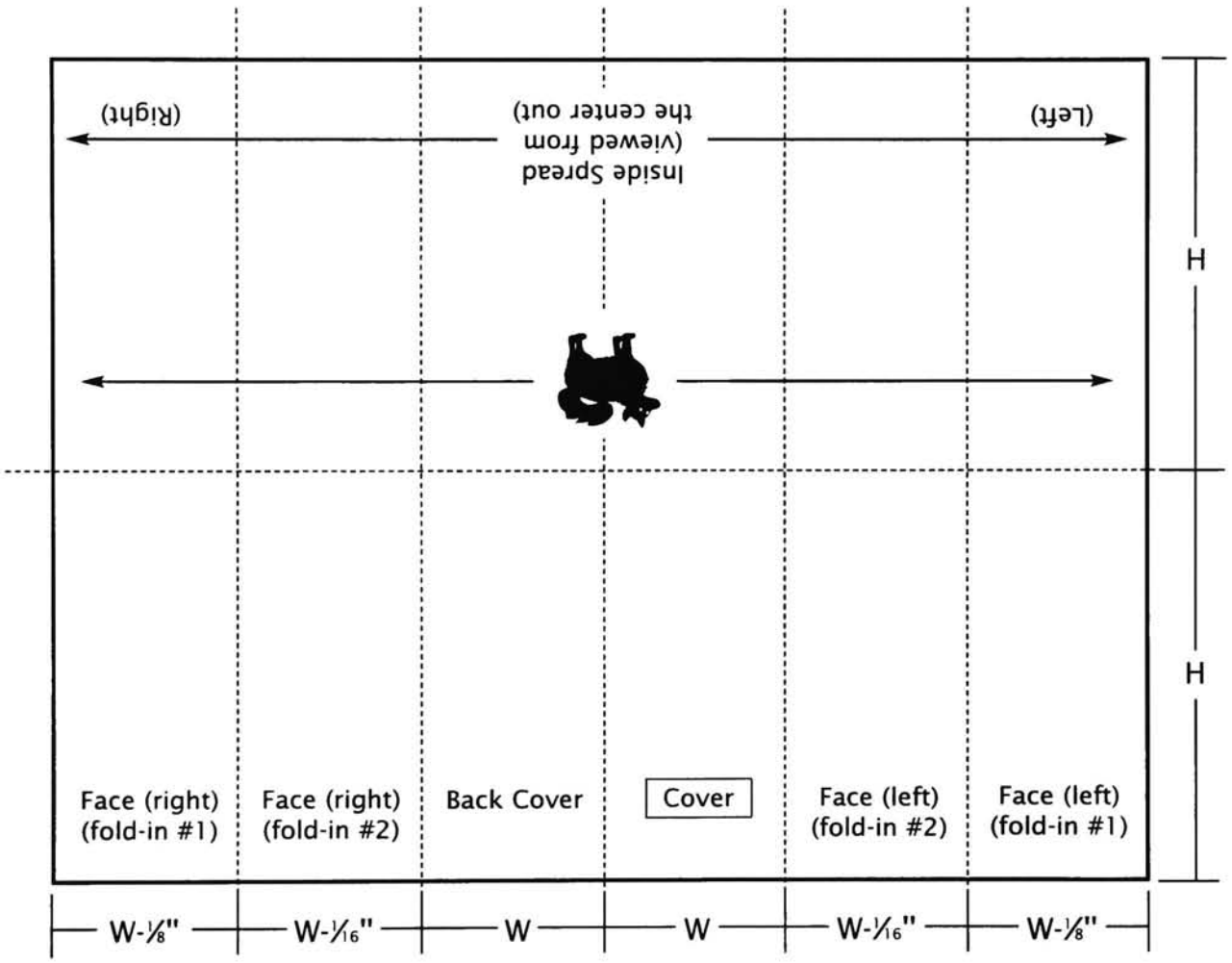
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

W: finished width
H: finished height
--- fold indication
upside-down

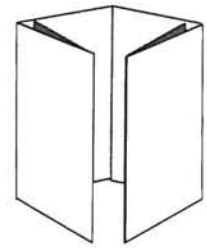


GETTING STARTED

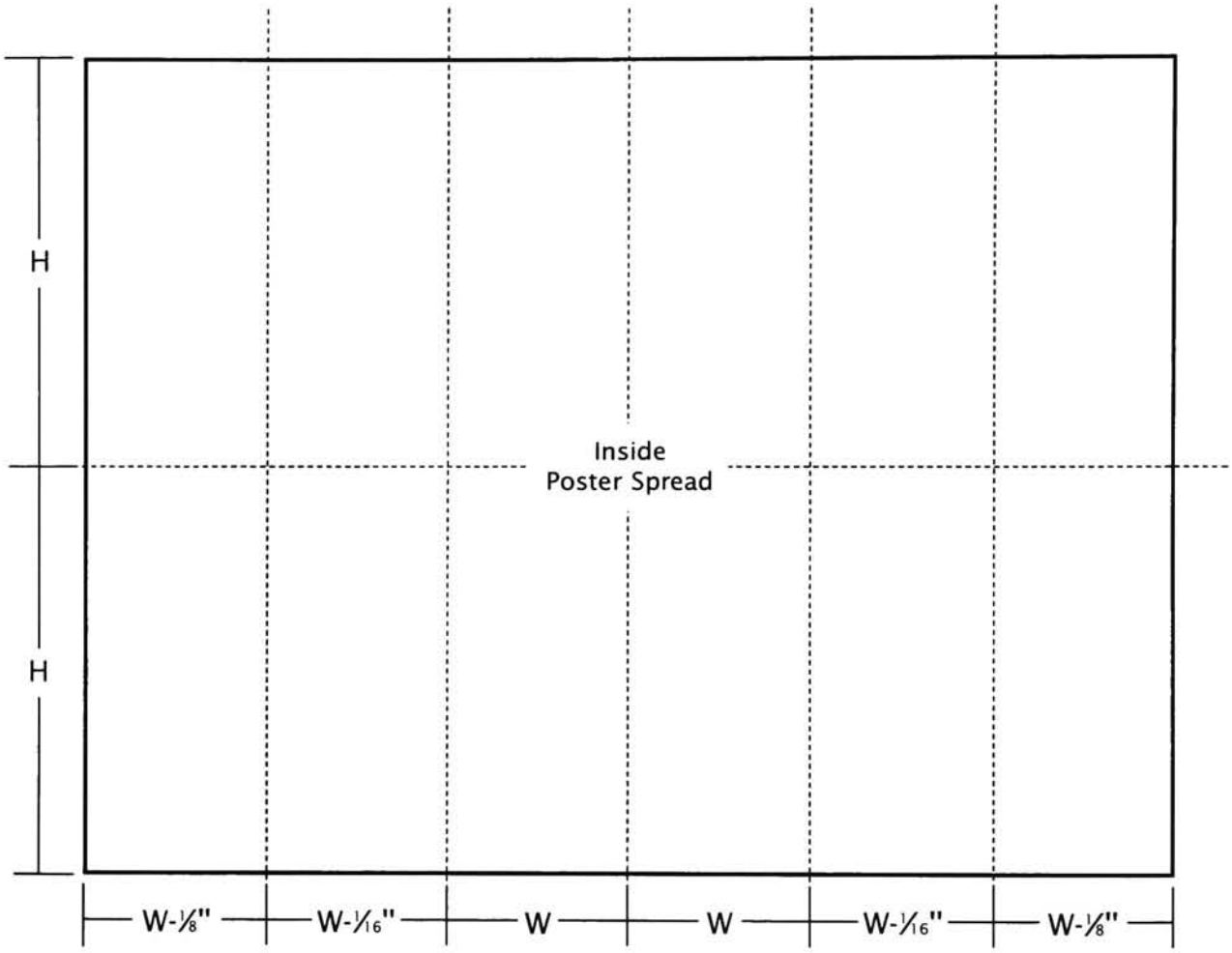
Here's an example: If your finished size is 4 x 8, then your panels for page 1 of your digital document would be, from left, 3 ⅞ inches, 3 15/16 inches, 4 inches, 4 inches, 3 15/16 inches and 3 ⅞ inches, with a height of 16 inches (8 inches plus 8 inches). This fold is symmetrical, so for page 2 the measurements are the same as page 1.

Remember: Document size and flat size must be the same, so in this case the document size would be 23 13/16 (23.625) inches wide by 16 inches high.

Time-saving tip: For this particular folding style, the fold placement is exactly the same for page 1 as it is for page 2. If you're creating your document in a page layout program which has a master page option, save time by setting your folds on the master page. Then, return to the document and add the second page.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- Remember that, with each panel getting narrower, it won't be long until the difference in panel width is noticeable. Adjust margins accordingly.
- Consult your printer about the size of the press sheet. Also ask for a diagram of how your piece will be run on the press sheet. Sometimes there is a lot of waste on the sheet, and you may be able to add another panel or two without adding to the cost of the job.
- Be aware of your printer or bindery's minimum and maximum sheet sizes for their equipment.
- Make sure to have a folding dummy made in your specified paper. Paper weight will dramatically affect the success of this piece. Watch for bulkiness and problems in the corner joints—the printer can't do anything about this, and it will require a change in paper.
- If you are designing a self-mailing piece, this folding style could require wafer-seals to make it mail-ready.
- Paper heavier than 60# text is not recommended.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document width ahead of time. Create your document as if all panels will be the same (ex: for a broadside double roll with a finished size of 4 x 8, set the document size to 24 x 16). Then set crosshairs to upper left corner of document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, 3 ⅞ inches). Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement ($3^{15}/_{16}$). Repeat for the last 4 panels (4, 4, $3^{15}/_{16}$ and 3 ⅞ inches). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Just change your document size by entering that decimal measurement (23.625). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

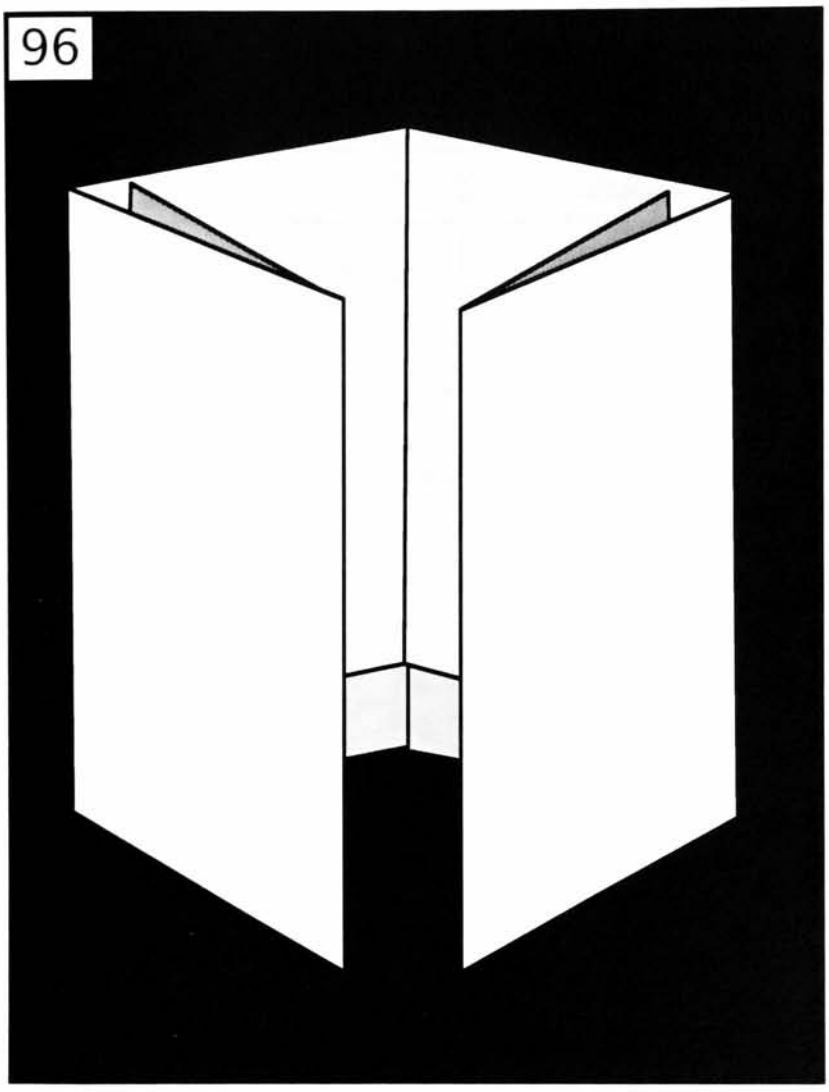
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

DOUBLE ROLL WITH SHORT FOLD (INSIDE)



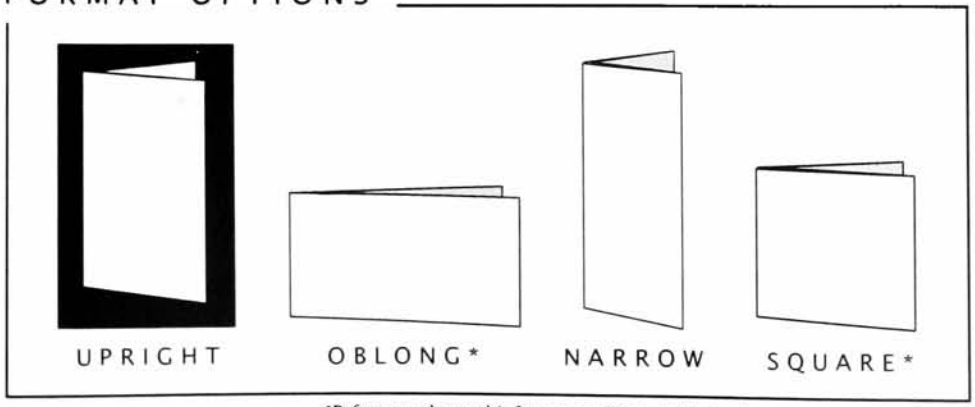
LEVEL

A level 3 fold has a long and difficult makeready, could require special machinery and low folding speed. These issues will be reflected in the cost.

The double roll with short fold inside consists of the same "roll-in" panel style, and is similar to the broadside double roll fold because it folds in half on itself before the roll folding is done. What makes this fold different is that unlike a broadside fold where panels are of equal length, in a short fold the fold-over panels are shorter than the finished height. There can be as many panels as you wish, but bear in mind the dimensions of the press sheet your printer is using, and the bulk of the paper.

ROLLS

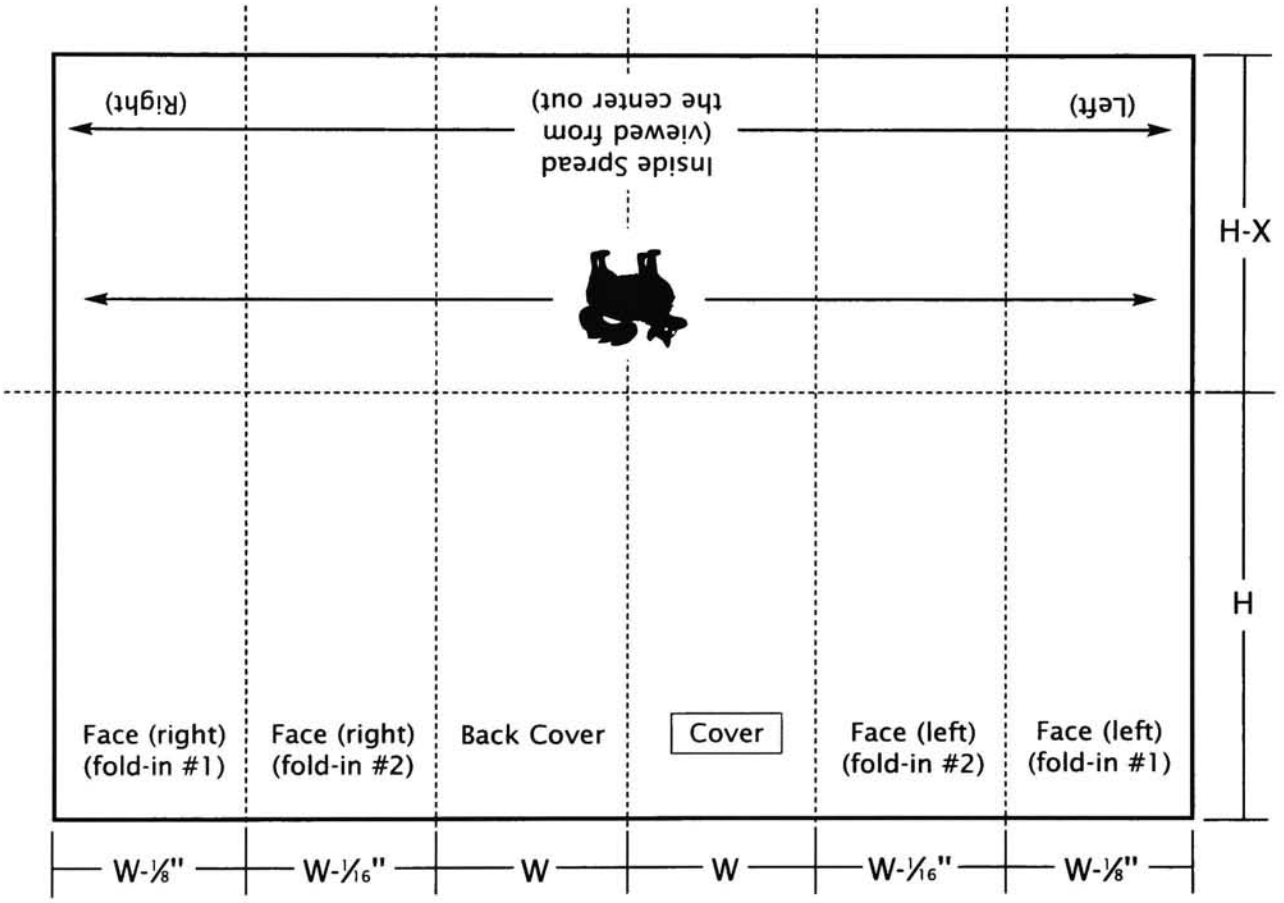
FORMAT OPTIONS



*Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

W: finished width
H: finished height
X: your choice
--- fold indication
upside-down

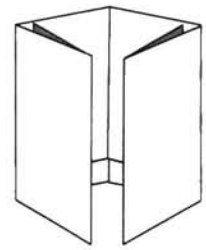


GETTING STARTED

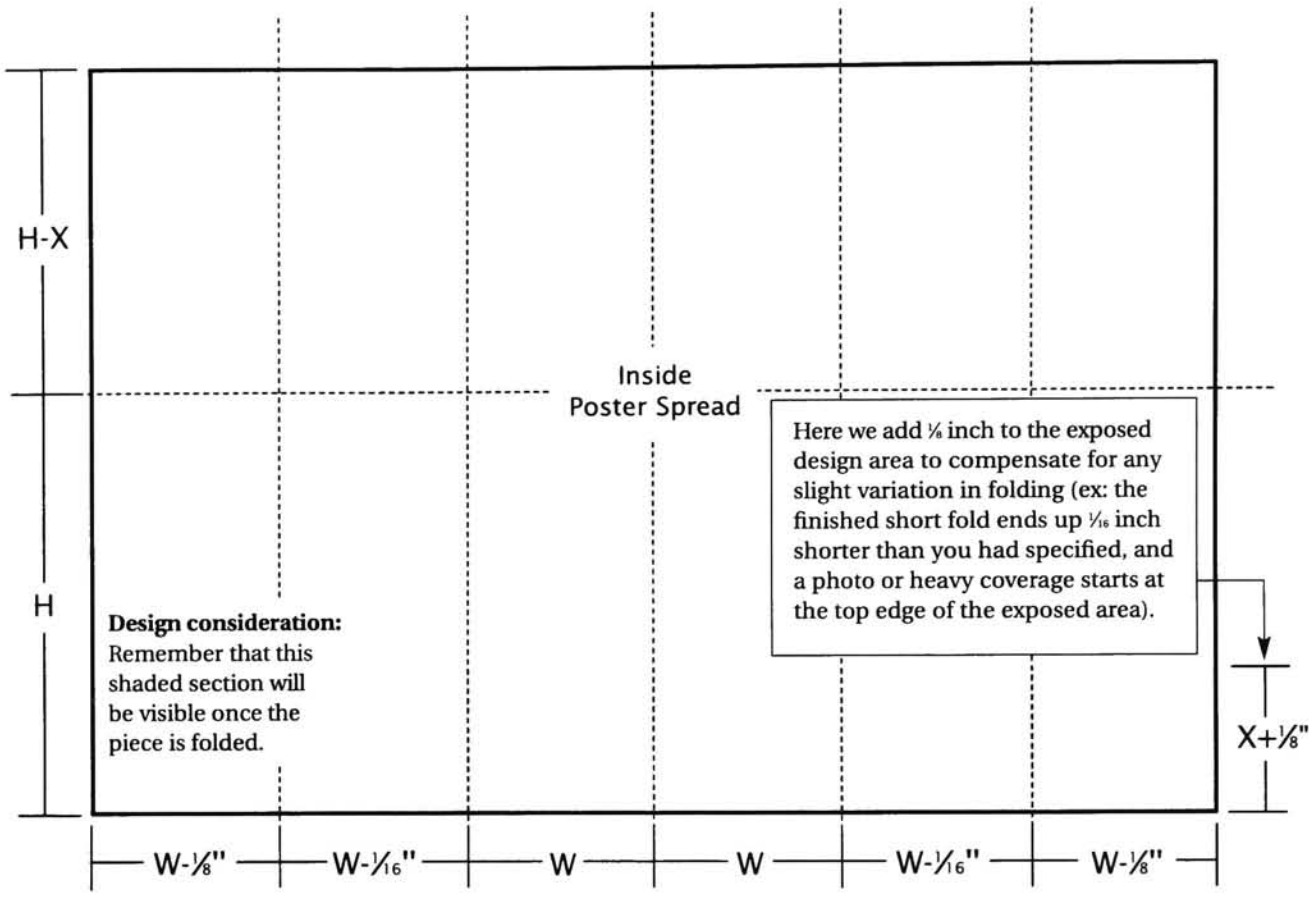
Here's an example: For a short fold, the first thing we must determine is how short the short fold will be. In this case, we'll make it 2 inches shorter than the finished height, so X=2. Now we can calculate our document height. If the finished size is 4 x 8, then 8 inches plus 6 (8-2 , or height minus X) equals a document height of 14 inches. Our finished width is 4 inches, so the panels for page 1 of the digital document would be, from left, 3 ⅞ inches, 3 15/16 inches, 4 inches, 4 inches, 3 15/16 inches and 3 ⅞ inches, with a height of 16 inches (8 inches plus 8 inches). This fold is symmetrical, so for page 2 the measurements are the same as page 1.

Remember: Document size and flat size must be the same, so in this case the document size would be 15 13/16 (15.812) inches wide by 14 inches high.

Time-saving tip: For this particular folding style, the fold placement is exactly the same for page 1 as it is for page 2. If you're creating your document in a page layout program which has a master page option, save time by setting your folds on the master page. Then, return to the document and add the second page.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- Remember that, with each panel getting narrower, it won't be long until the difference in panel width is noticeable. Adjust margins accordingly.
- Consult your printer about the size of the press sheet. Also ask for a diagram of how your piece will be run on the press sheet. Sometimes there is a lot of waste on the sheet, and you may be able to add another panel or two without adding to the cost of the job.
- Be aware of your printer or bindery's minimum and maximum sheet sizes for their equipment.
- Make sure to have a folding dummy made in your specified paper. Paper weight will dramatically affect the success of this piece. Watch for bulkiness and problems in the corner joints—the printer can't do anything about this, and it will require a change in paper.
- If you are designing a self-mailing piece, this folding style could require wafer-seals to make it mail-ready.
- Paper heavier than 60# text is not recommended.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document width ahead of time. Create your document as if all panels will be the same (ex: for a double roll with short fold with a finished size of 4 x 8, set the document size to 24 x 14). Then set cross-hairs to upper left corner of document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, 3 7/8 inches). Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement (3 15/16). Repeat for the last 4 panels (4, 4, 3 15/16 and 3 7/8 inches). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Just change your document size by entering that decimal measurement (23.625). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

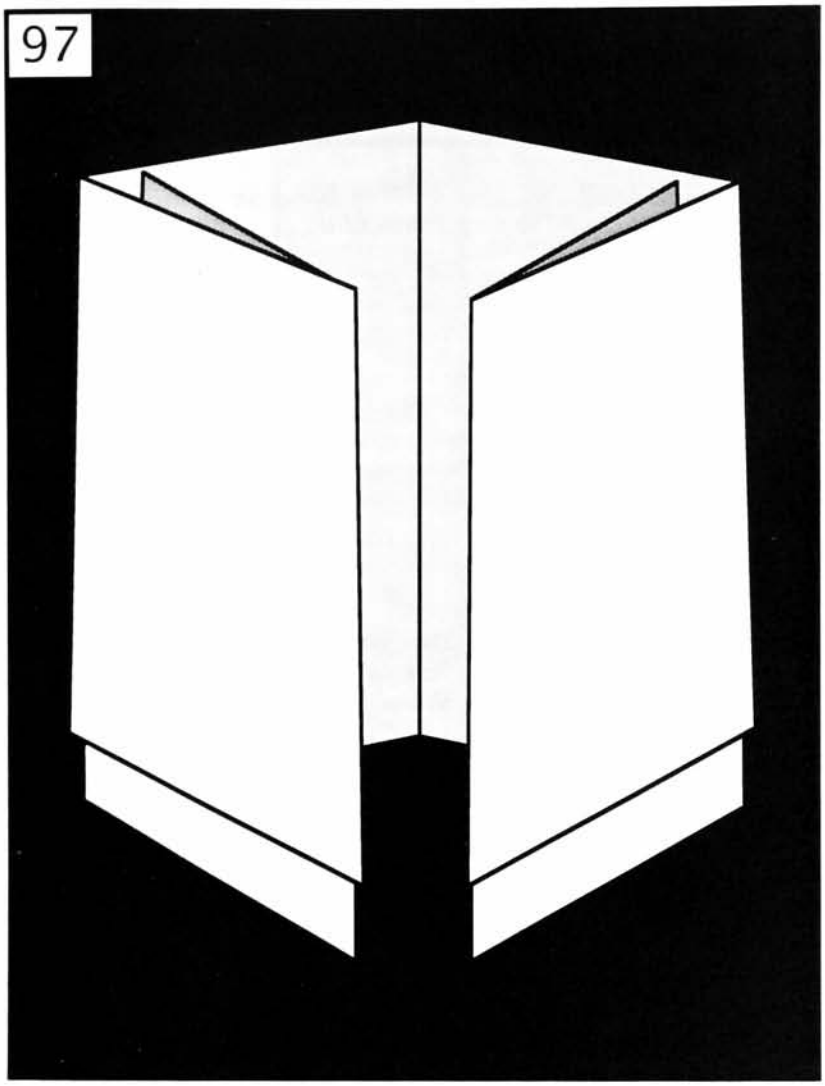
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

DOUBLE ROLL WITH SHORT FOLD (OUTSIDE)



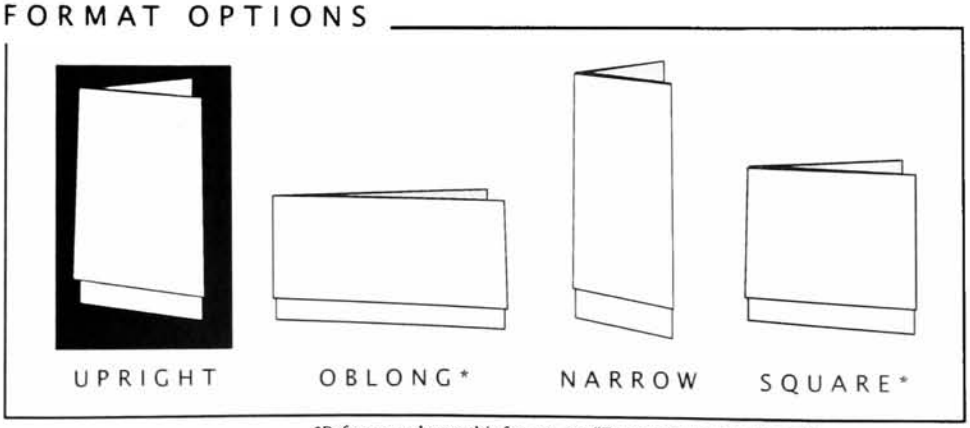
LEVEL

		3	

A level 3 fold has a long and difficult makeready, could require special machinery and low folding speed. These issues will be reflected in the cost.

The double roll with short fold outside consists of the same "roll-in" panel style, and is similar to the broadside double roll fold because it folds in half on itself before the roll folding is done. What makes this fold different is that unlike a broadside fold where panels are of equal length, in a short fold the fold-over panels are shorter than the finished height. There can be as many panels as you wish, but bear in mind the dimensions of the press sheet your printer is using, and the bulk of the paper.

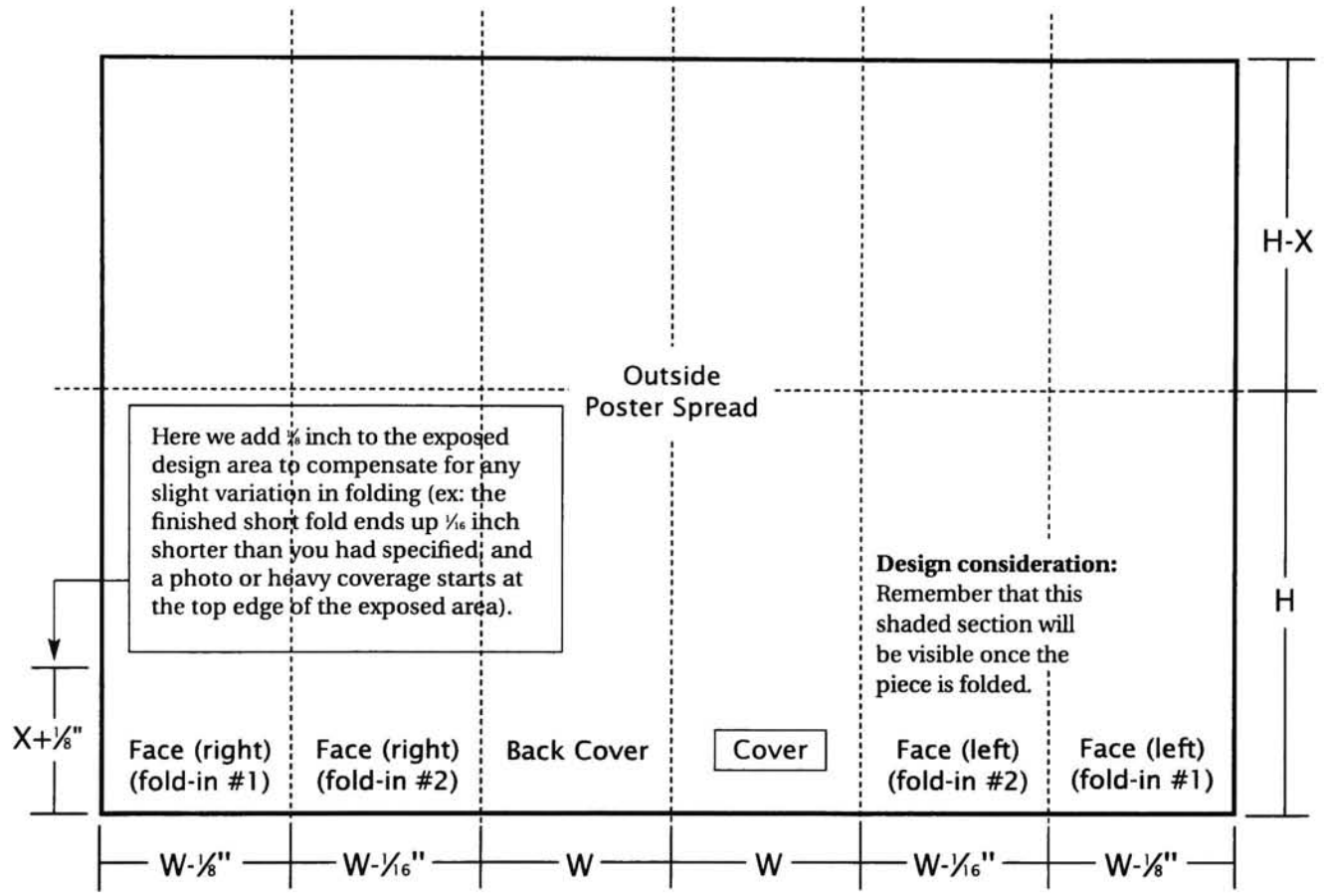
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

W: finished width
H: finished height
X: your choice
--- fold indication
upside-down



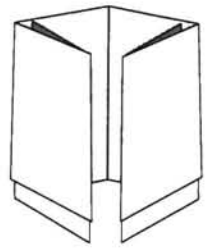
ROLLS

GETTING STARTED

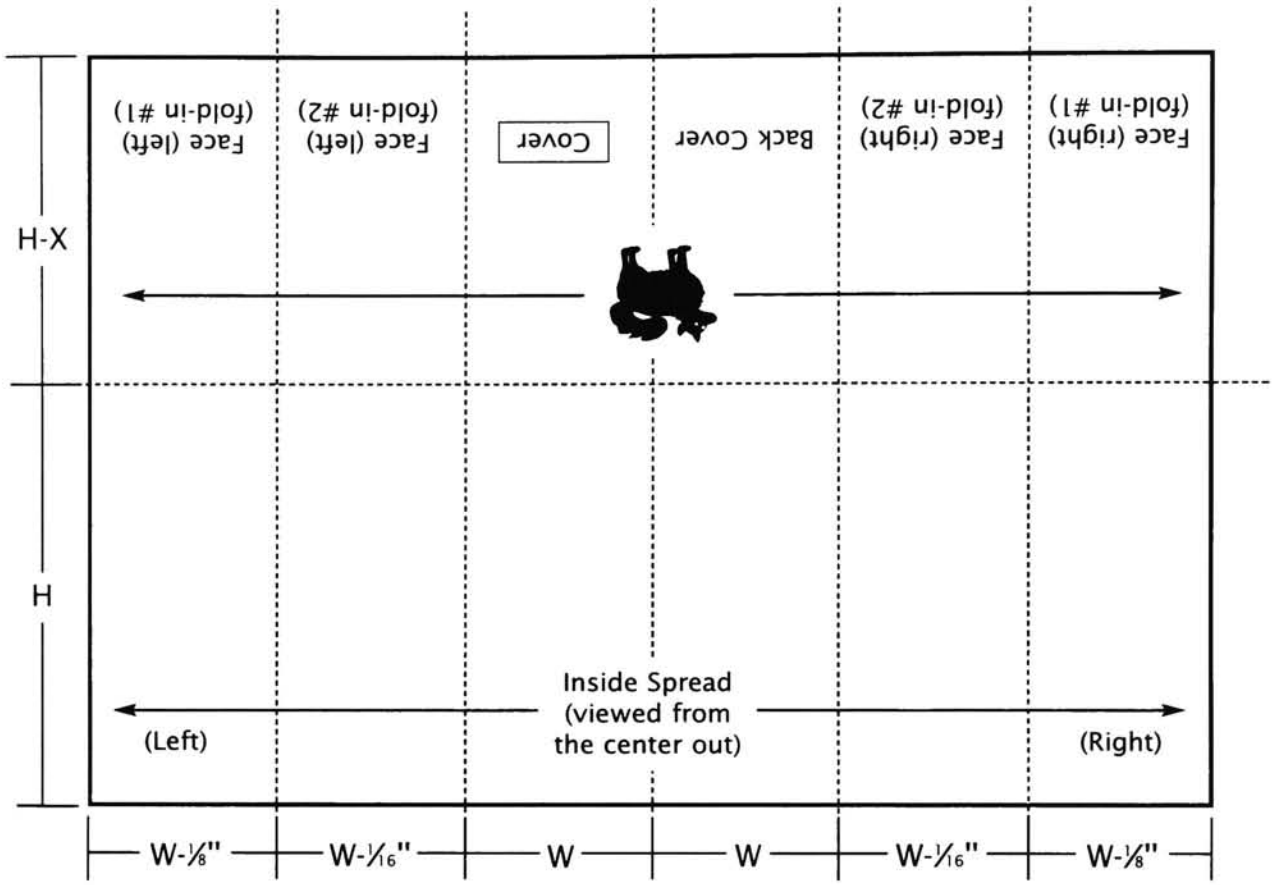
Here's an example: For a short fold, the first thing we must determine is how short the short fold will be. In this case, we'll make it 2 inches shorter than the finished height, so X=2. Now we can calculate our document height. If the finished size is 4 x 8, then 8 inches plus 6 (8-2 , or height minus X) equals a document height of 14 inches. Our finished width is 4 inches, so the panels for page 1 of the digital document would be, from left, 3 ⅞ inches, 3 15/16 inches, 4 inches, 4 inches, 3 15/16 inches and 3 ⅞ inches, with a height of 16 inches (8 inches plus 8 inches). This fold is symmetrical, so for page 2 the measurements are the same as page 1.

Remember: Document size and flat size must be the same, so in this case the document size would be 15 13/16 (15.812) inches wide by 14 inches high.

Time-saving tip: For this particular folding style, the fold placement is exactly the same for page 1 as it is for page 2. If you're creating your document in a page layout program which has a master page option, save time by setting your folds on the master page. Then, return to the document and add the second page.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- Remember that, with each panel getting narrower, it won't be long until the difference in panel width is noticeable. Adjust margins accordingly.
- Consult your printer about the size of the press sheet. Also ask for a diagram of how your piece will be run on the press sheet. Sometimes there is a lot of waste on the sheet, and you may be able to add another panel or two without adding to the cost of the job.
- Be aware of your printer or bindery's minimum and maximum sheet sizes for their equipment.
- Make sure to have a folding dummy made in your specified paper. Paper weight will dramatically affect the success of this piece. Watch for bulkiness and problems in the corner joints—the printer can't do anything about this, and it will require a change in paper.
- If you are designing a self-mailing piece, this folding style could require wafer-seals to make it mail-ready.
- Paper heavier than 60# text is not recommended.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document width ahead of time. Create your document as if all panels will be the same (ex: for a double roll with short fold with a finished size of 4 x 8, set the document size to 24 x 14). Then set cross-hairs to upper left corner of document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, 3 ⅞ inches). Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement (3 15/16). Repeat for the last 4 panels (4, 4, 3 15/16 and 3 ⅞ inches). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Just change your document size by entering that decimal measurement (23.625). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

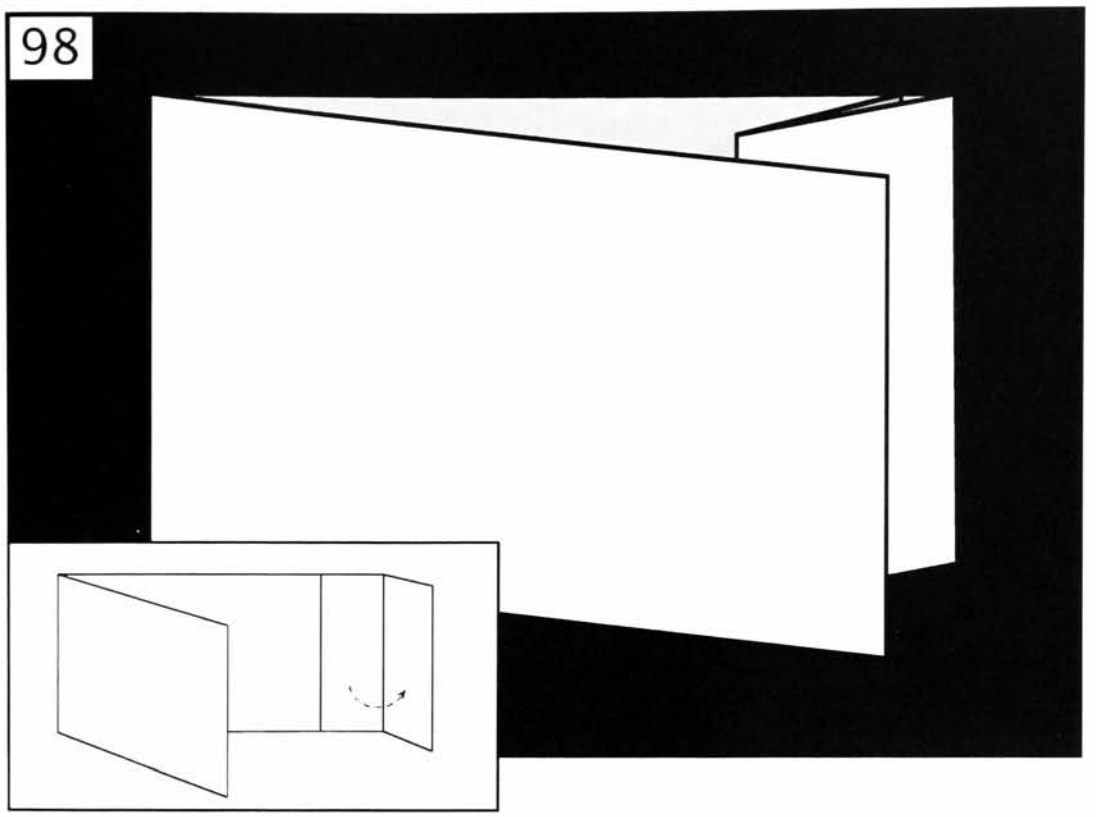
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

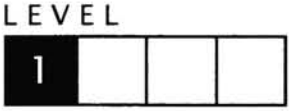
Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

4-PAGE WITH ROLL



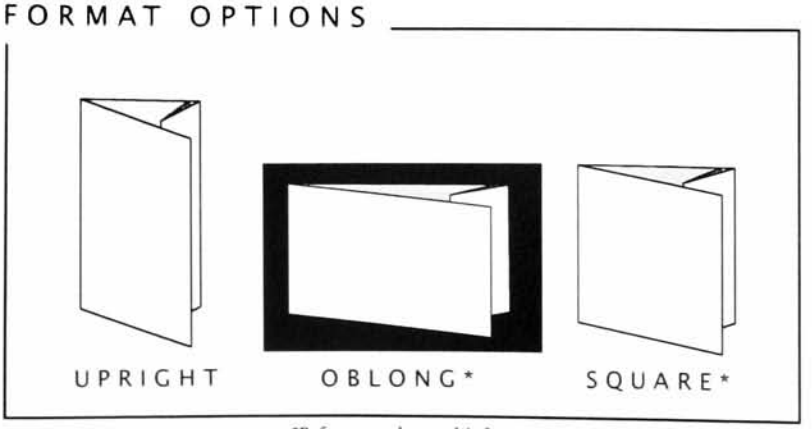
LEVEL



A level 1 fold is standard and basic, easy to set up on the folding machine and the machine can run at highest speeds.

The 4-page with roll is a special fold whose closest relation would be the roll folding family. What makes it wonderful is the surprise of the shorter panels when opened—very uncommon. Uses for the short, roll-in panels could be self-mailing business reply cards, perforated coupons, a tear-off self-mailing survey or other informational materials, as well as many other more creative options.

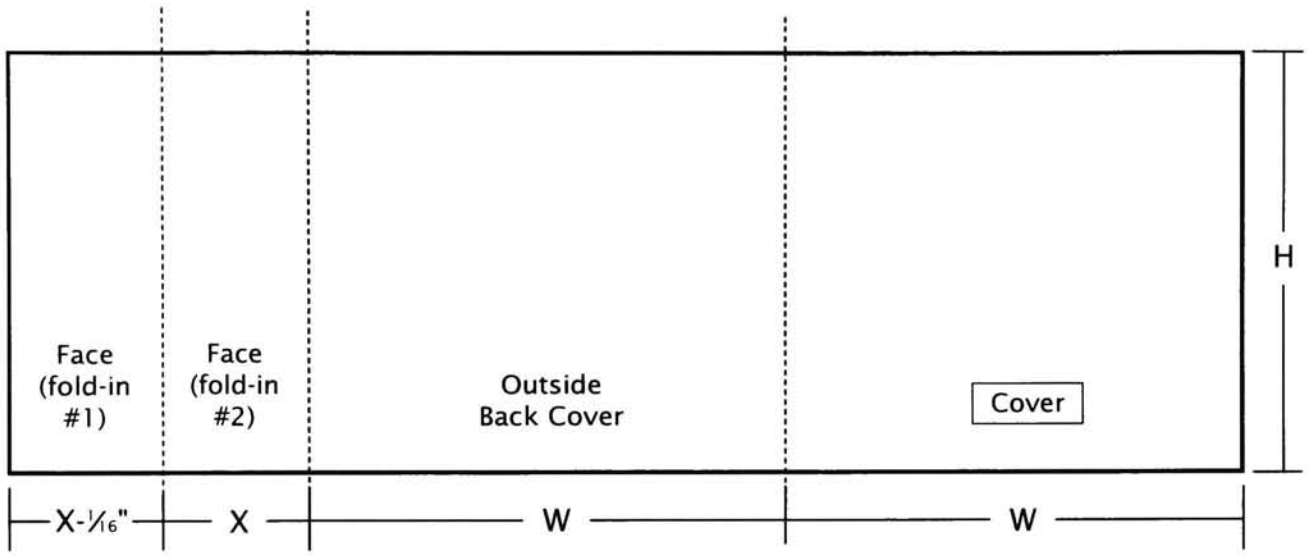
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

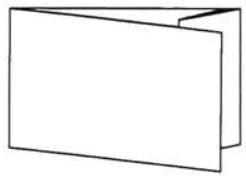
W:	finished width
H:	finished height
X:	your choice
---	fold indication



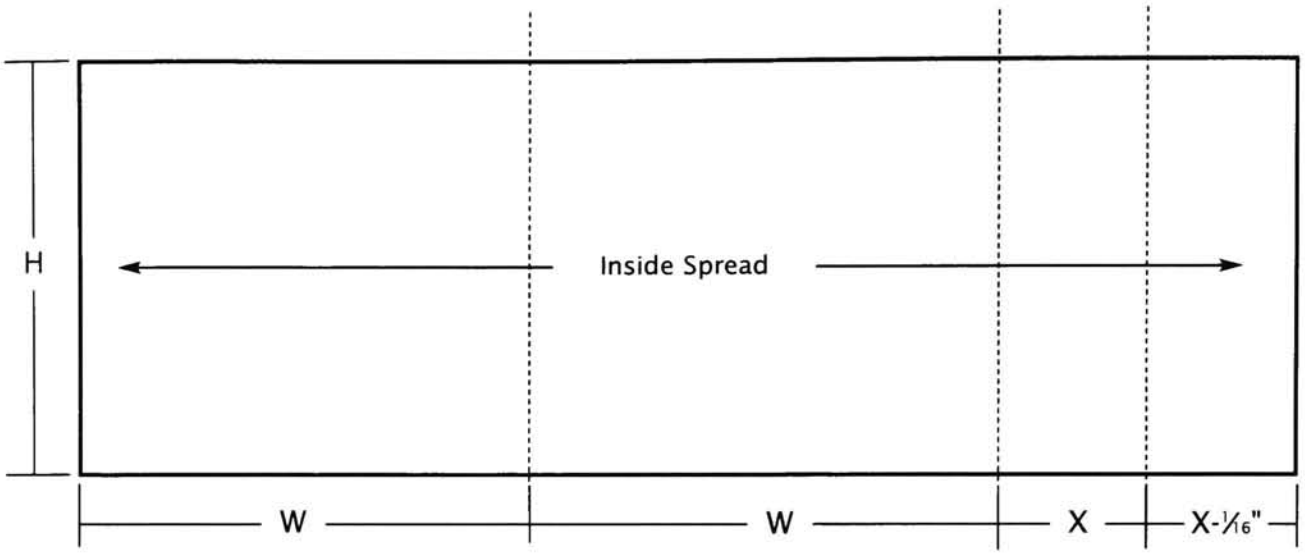
GETTING STARTED

Here's an example: The first thing we need to do is to decide the width of the fold-in panels. For this example we'll make it 4 inches, so X=4. If your finished size is 10 x 8, then your panel width for page 1 of your digital document would be, from left, $3\frac{15}{16}$ inches, 4 inches, 10 inches and 10 inches. Then for page two everything reverses, so from left your panels would measure 10 inches, 10 inches, 4 inches and $3\frac{15}{16}$ inches, with a height of 8 inches.

Remember: Document size and flat size must be the same, so in this case the document size would be $27\frac{15}{16}$ (27.937) inches wide by 8 inches high.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- If you're planning a tear-off reply card, remember that the paper for a business reply card must be equivalent to 7pt. card stock to go through the mail, and that there are also size requirements.
- Remember that, with each rolling panel getting narrower, it won't be long until the difference in panel width is noticeable. Adjust margins accordingly.
- If your paper choice is any heavier than 80# text, you will want to consider scoring the piece.
- Consult your printer about the size of the press sheet. Also ask for a diagram of how your piece will be run on the press sheet. Sometimes there is a lot of waste on the sheet, and you may be able to add another panel or two without adding to the cost of the job.
- If you are designing a long piece, make sure to have a folding sample made up from your specified paper. If the paper is too lightweight, it could turn into a sagging flimsy piece.
- If you are designing a self-mailing piece, this folding style could require wafer-seals to make it mail-ready.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document width ahead of time. For the 4-page with roll fold, decide the finished size and the width you would like the roll-in panels to be. If the finished size is 10 x 8, and the roll-in panels are 4 inches. set crosshairs to upper left corner of document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, $3^{15}/_{16}$ inches). Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement (4). Repeat for the last 2 panels (10 inches and 10 inches). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Just change your document size by entering that decimal measurement (27.937). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

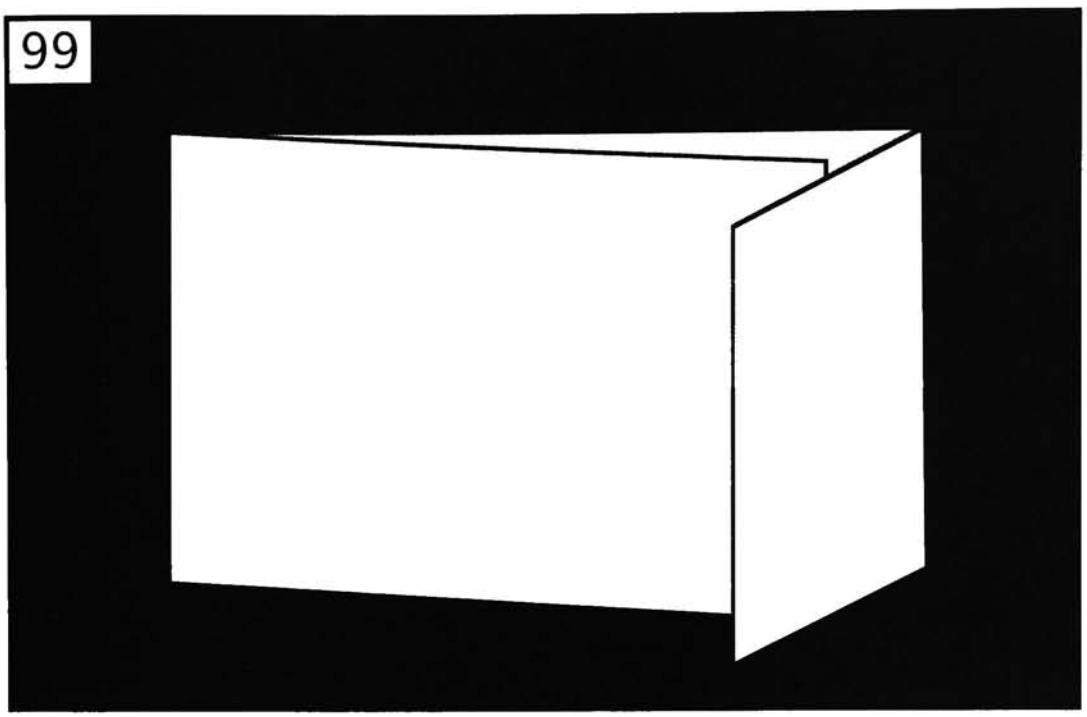
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

4-PAGE WITH EXPOSED FLAP / HORIZONTAL

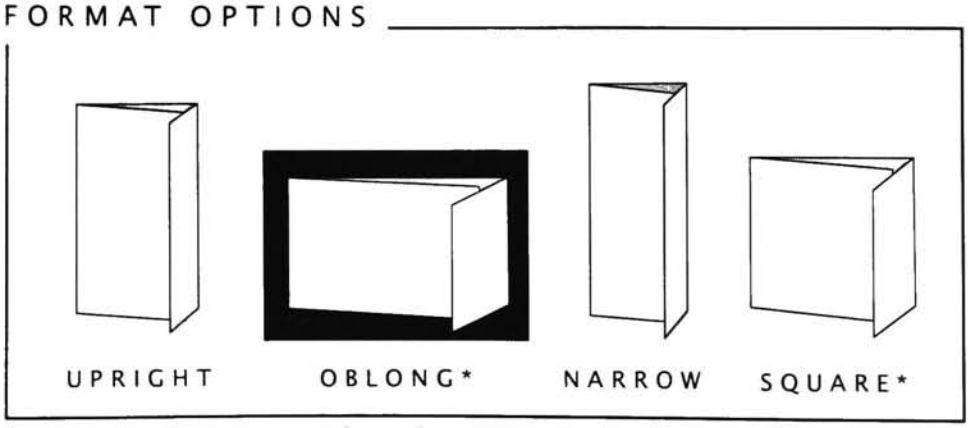


LEVEL

A level 1 fold is standard and basic, easy to set up on the folding machine and the machine can run at highest speeds.

The 4-page with exposed flap—horizontal format is a special fold whose closest relation would be the gate fold family. It has a short flap which remains on the outside. This fold is especially nice when accompanied by a custom seal or printed wafer seal. Another idea would be to perforate the flap so that it may be a coupon or reminder card.

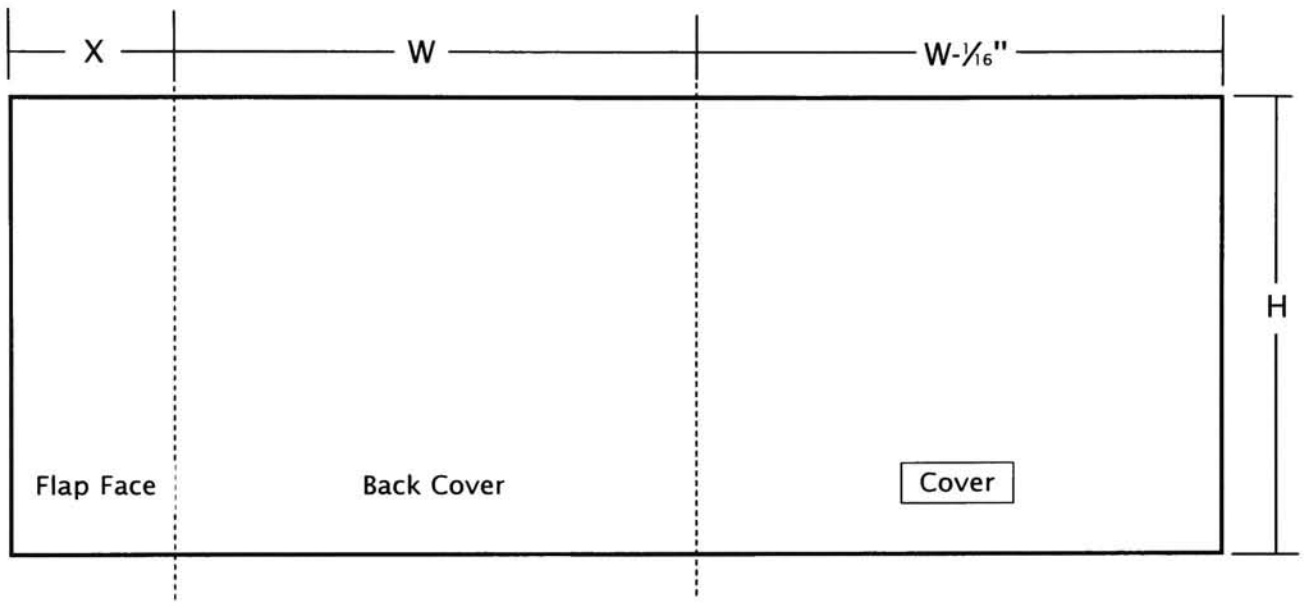
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

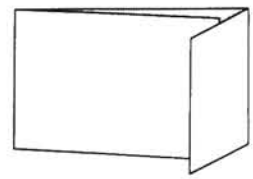
W: finished width
H: finished height
X: your choice
--- fold indication



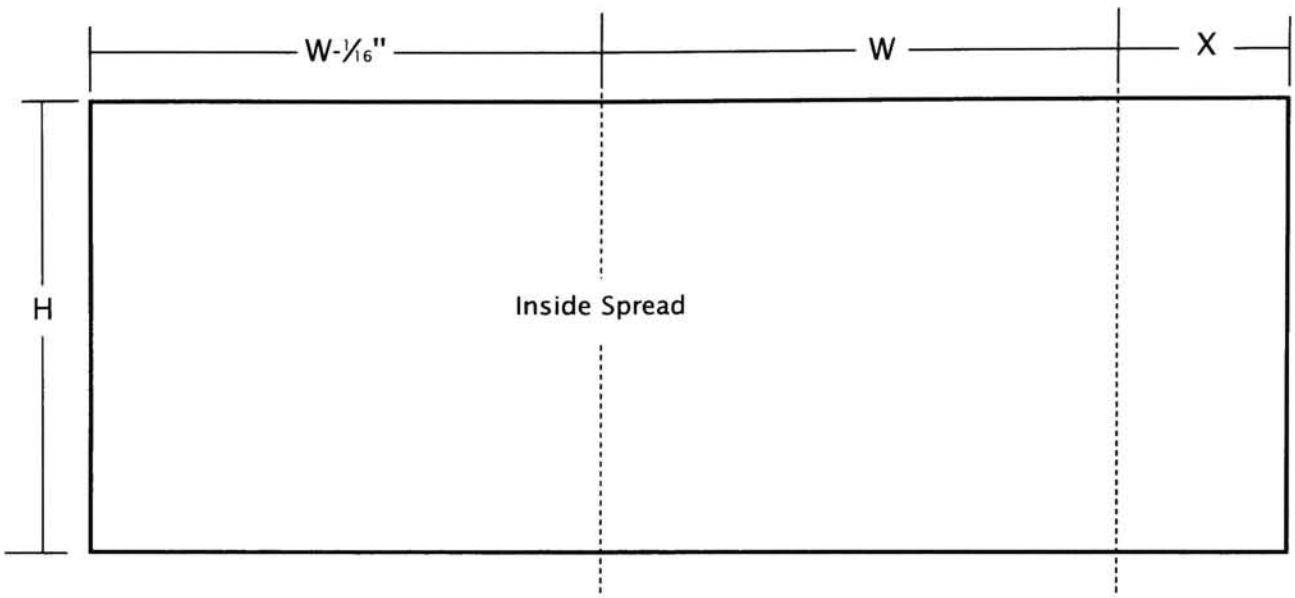
GETTING STARTED

Here's an example: The first thing we need to do is to decide the width of the flap. In for this example we'll make it 2 inches, so X=2. If your finished size is 6 x 4, then your panels for page 1 of your digital document would be, from left, 2 inches, 6 inches and 5 15/16 inches. Then for page two everything reverses, so from left your panels would measure 5 15/16 inches, 6 inches and 2 inches, with a height of 4 inches.

Remember: Document size and flat size must be the same, so in this case the document size would be 13 15/16 (13.937) inches wide by 4 inches high.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- If you're planning a tear-off reply card, remember that the paper for a business reply card must be equivalent to 7pt. card stock to go through the mail, and that there are also size requirements.
- If you are designing a large piece, make sure to have a folding sample made up from your specified paper. If the paper is too lightweight, it could turn into a sagging, flimsy piece.
- If you are designing a self-mailing piece, this folding style could require a wafer-seal to make it mail-ready.
- If your paper choice is any heavier than 80# text, you will want to consider scoring the piece. Ask your printer for a recommendation.
- Understand your printer or binder's minimum and maximum size requirements for their equipment. Practicality is important for mechanical folding.

A Tip for Measuring Panels:

For the 4-page with exposed flap, horizontal format, the smartest thing to do would be to decide the dimensions of your panels ahead of time. Calculate the document width and height and create your document. Set the crosshairs to upper left corner of the document, pull a guide bar from the left ruler and set it to the measurement of your first panel. Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement . After setting the second fold, bring the crosshairs over one last time, drag a guide for your last panel width. If you've done it right, your last guide will come to the exact edge of the document. Repeat for page two. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

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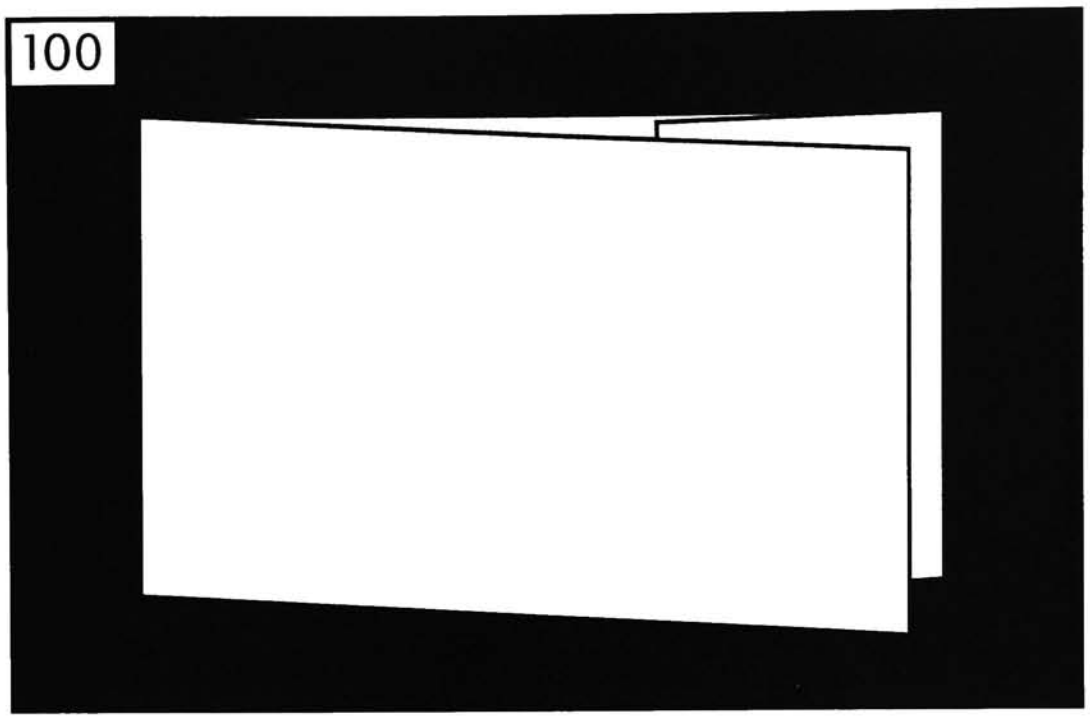
Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

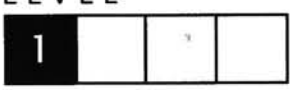
Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

4-PAGE WITH HIDDEN FLAP / HORIZONTAL



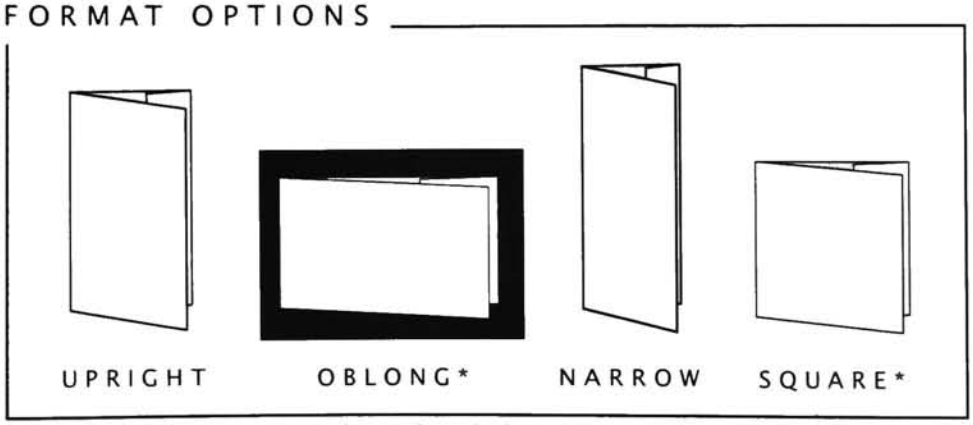
LEVEL



A level 1 fold is standard and basic, easy to set up on the folding machine and the machine can run at highest speeds.

The 4-page with hidden flap—horizontal format is a special fold whose closest relation would be the gate fold family. It has a short flap which remains on the inside. A common use for the flap would be to perforate the flap so that it may be a coupon, reminder card, business cards or business reply card.

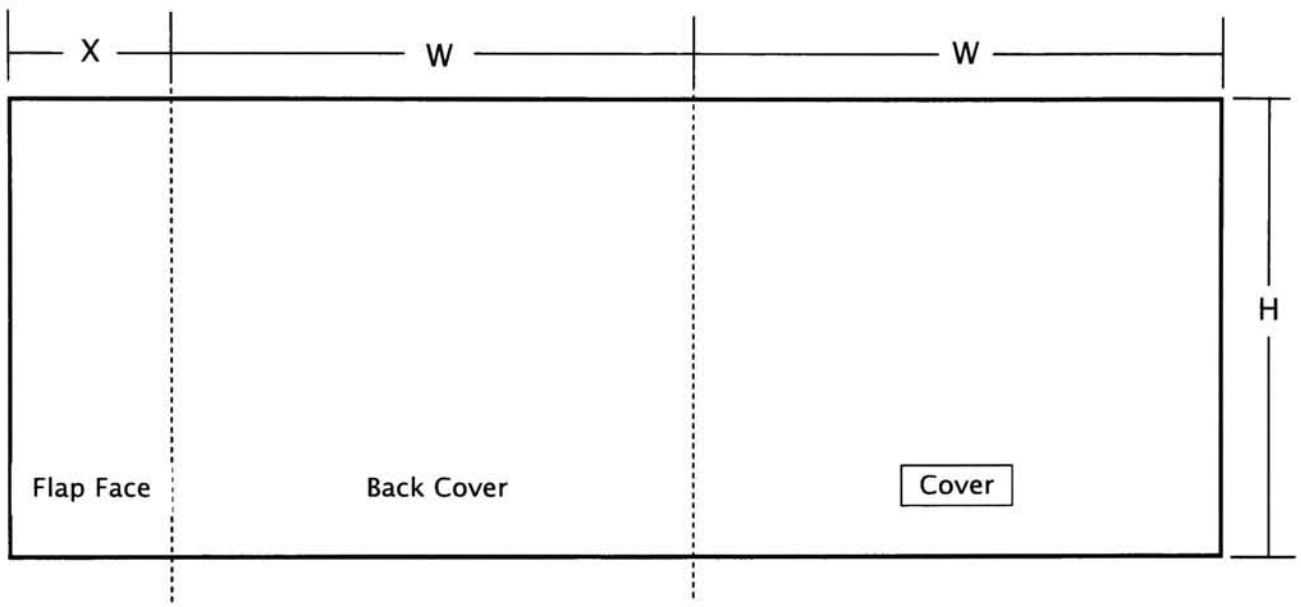
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

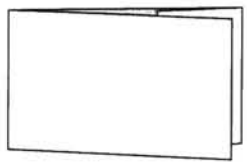
W: finished width
H: finished height
X: your choice
--- fold indication



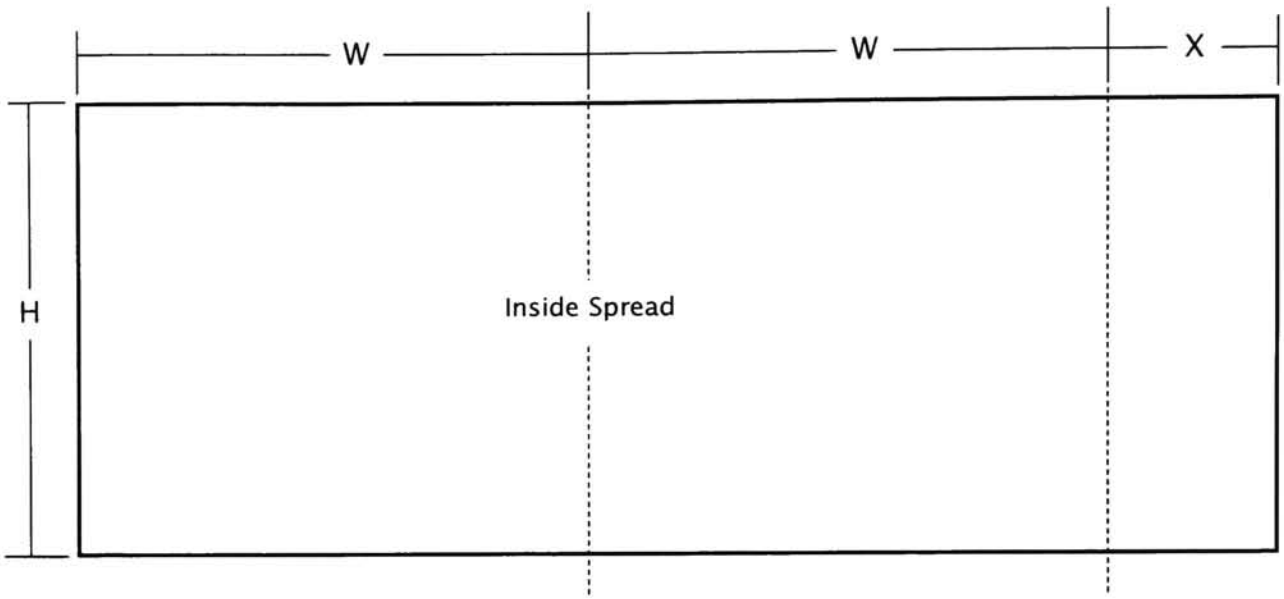
GETTING STARTED

Here's an example: The first thing we need to do is to decide the width of the flap. In for this example we'll make it 2 inches, so X=2. If your finished size is 6 x 4, then your panels for page 1 of your digital document would be, from left, 2 inches, 6 inches and 6 inches. Then for page two everything reverses, so from left your panels would measure 6 inches, 6 inches and 2 inches, with a height of 4 inches.

Remember: Document size and flat size must be the same, so in this case the document size would be 14 inches wide by 4 inches high.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- If you're planning a tear-off reply card, remember that the paper for a business reply card must be equivalent to 7pt. card stock to go through the mail, and that there are also size requirements.
- If you are designing a large piece, make sure to have a folding sample made up from your specified paper. If the paper is too lightweight, it could turn into a sagging, flimsy piece.
- If you are designing a self-mailing piece, this folding style could require a wafer-seal to make it mail-ready.
- If your paper choice is any heavier than 80# text, you will want to consider scoring the piece. Ask your printer for a recommendation.
- Understand your printer or binder's minimum and maximum size requirements for their equipment. Practicality is important for mechanical folding.

A Tip for Measuring Panels:

For the 4-page with hidden flap, horizontal format, the smartest thing to do would be to decide the dimensions of your panels ahead of time. Calculate the document width and height and create your document. Set the crosshairs to upper left corner of the document, pull a guide bar from the left ruler and set it to the measurement of your first panel. Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement . After setting the second fold, bring the crosshairs over one last time, drag a guide for your last panel width. If you've done it right, your last guide will come to the exact edge of the document. Repeat for page two. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

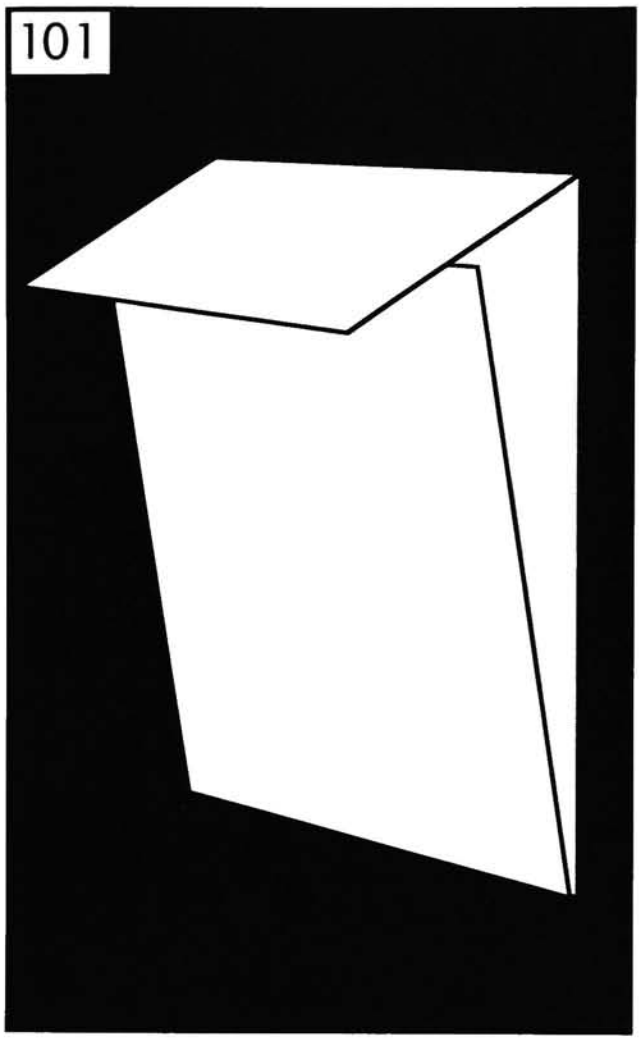
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

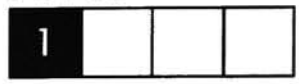
Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

4-PAGE WITH EXPOSED FLAP / VERTICAL



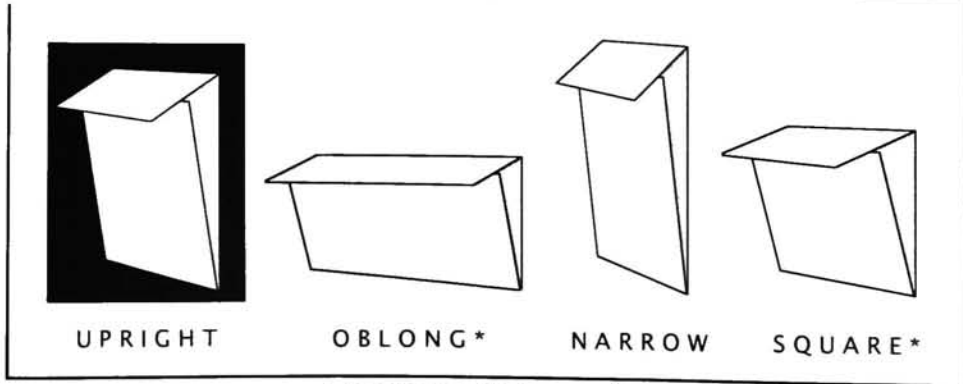
LEVEL



A level 1 fold is standard and basic, easy to set up on the folding machine and the machine can run at highest speeds.

The 4-page with exposed flap—vertical format is a special fold whose closest relation would be the letter fold family. It has a short flap which remains on the outside. This fold is especially nice when accompanied by a custom seal or printed wafer seal. Another idea would be to perforate the flap so that it may be a coupon or reminder card.

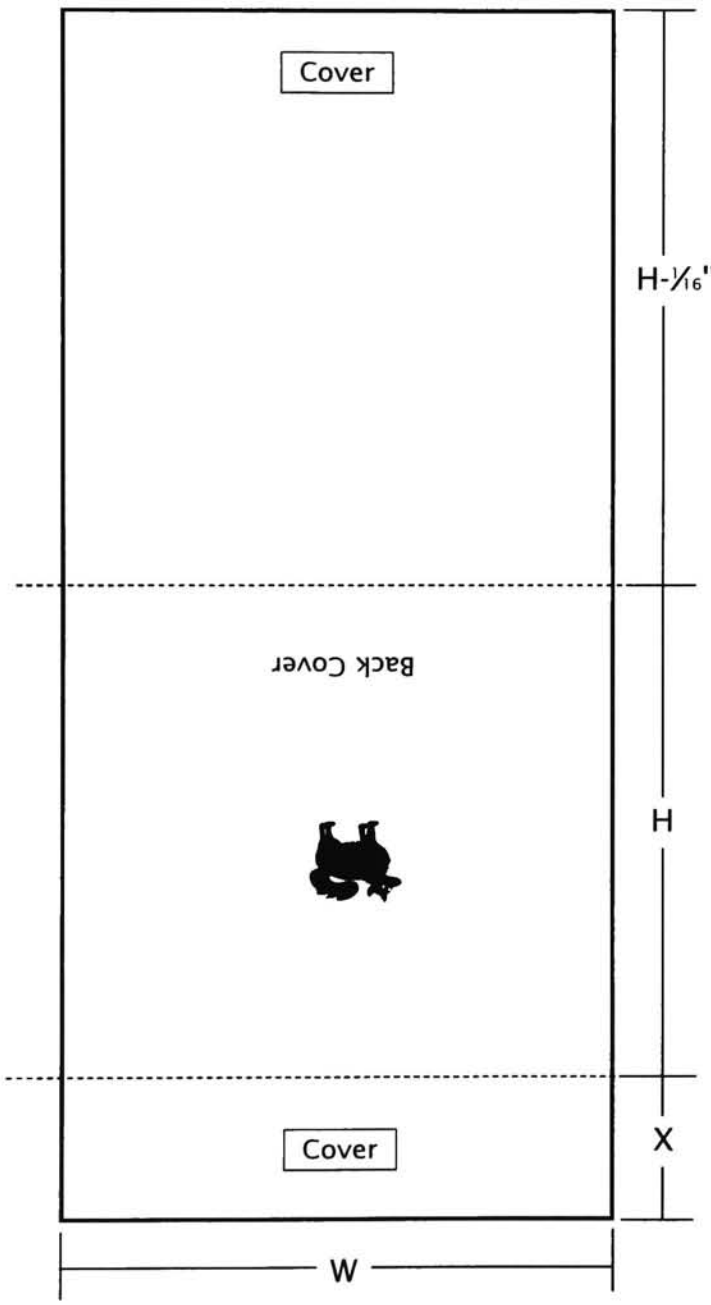
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

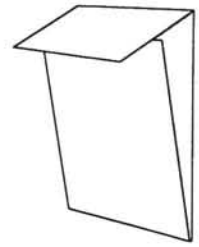
W:	finished width
H:	finished height
X:	your choice
---	fold indication
	upside-down



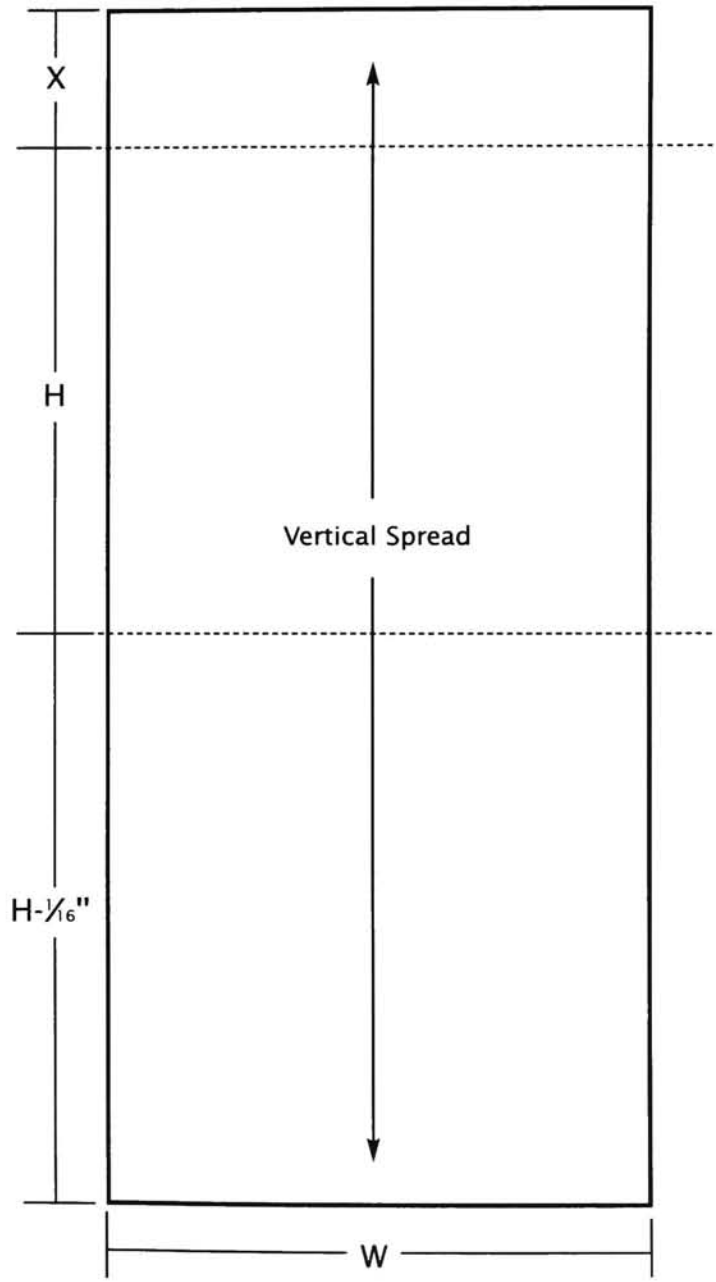
GETTING STARTED

Here's an example: The first thing we need to do is to decide the height of the flap. In for this example we'll make it 2 inches, so X=2. If your finished size is 4 x 6, then your panels height for page 1 of your digital document would be, from top, 5 15/16 inches, 6 inches and 2 inches, with a width of 4 inches. Then for page two everything flips, so from top your panels would measure 2 inches, 6 inches and 5 15/16 inches.

Remember: Document size and flat size must be the same, so in this case the document size would be 4 inches wide by 13 15/16 (13.937) inches long .



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- If you're planning a tear-off reply card, remember that the paper for a business reply card must be equivalent to 7pt. card stock to go through the mail, and that there are also size requirements.
- If you are designing a large piece, make sure to have a folding sample made up from your specified paper. If the paper is too lightweight, it could turn into a sagging, flimsy piece.
- If you are designing a self-mailing piece, this folding style could require a wafer-seal to make it mail-ready.
- If your paper choice is any heavier than 80# text, you will want to consider scoring the piece. Ask your printer for a recommendation.
- Understand your printer or binder's minimum and maximum size requirements for their equipment. Practicality is important for mechanical folding.

A Tip for Measuring Panels:

For the 4-page with exposed flap, vertical format, the smartest thing to do would be to decide the dimensions of your panels ahead of time. Calculate the document width and height and create your document. Set the crosshairs to upper left corner of the document, pull a guide bar down from the top ruler and set it to the length of your first panel. Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide down to the next panel measurement . After setting the second fold, bring the crosshairs over one last time, drag a guide down for your last panel length. If you've done it right, your last guide will come to the exact edge of the document. Repeat for page two. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

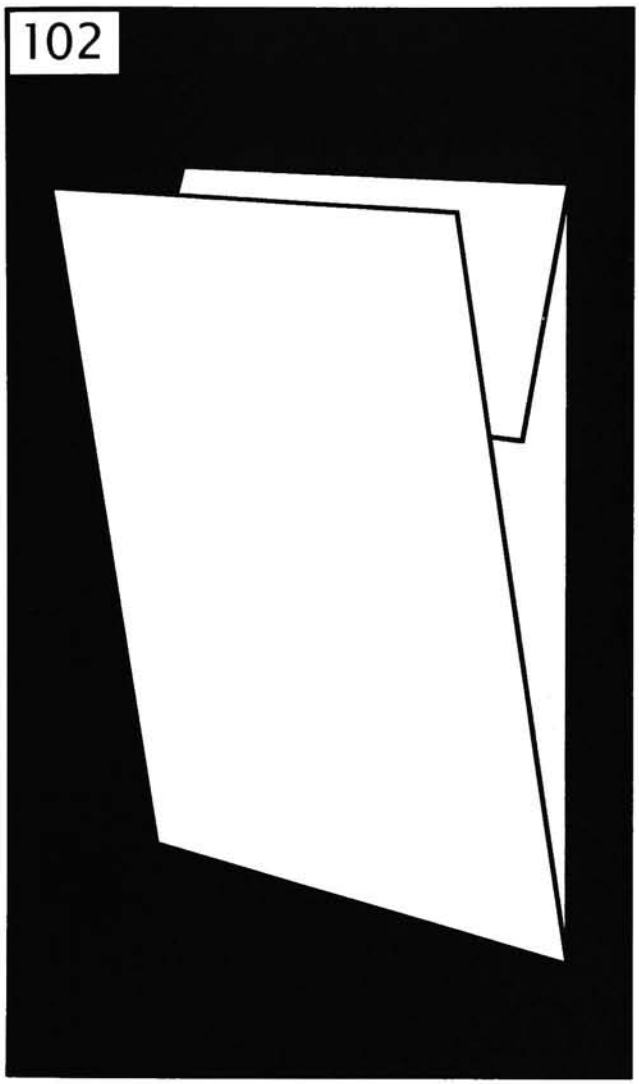
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

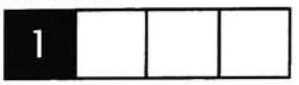
Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

4-PAGE WITH HIDDEN FLAP / VERTICAL



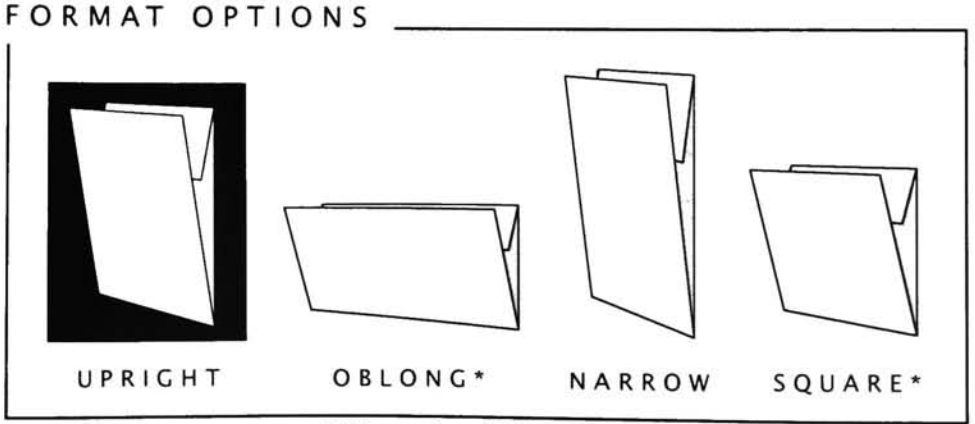
LEVEL



A level 1 fold is standard and basic, easy to set up on the folding machine and the machine can run at highest speeds.

The 4-page with hidden flap—vertical format is a special fold whose closest relation would be the letter fold family. It has a short flap which remains on the inside. A common use for the flap would be to perforate the flap so that it may be a coupon, reminder card, business cards or business reply card.

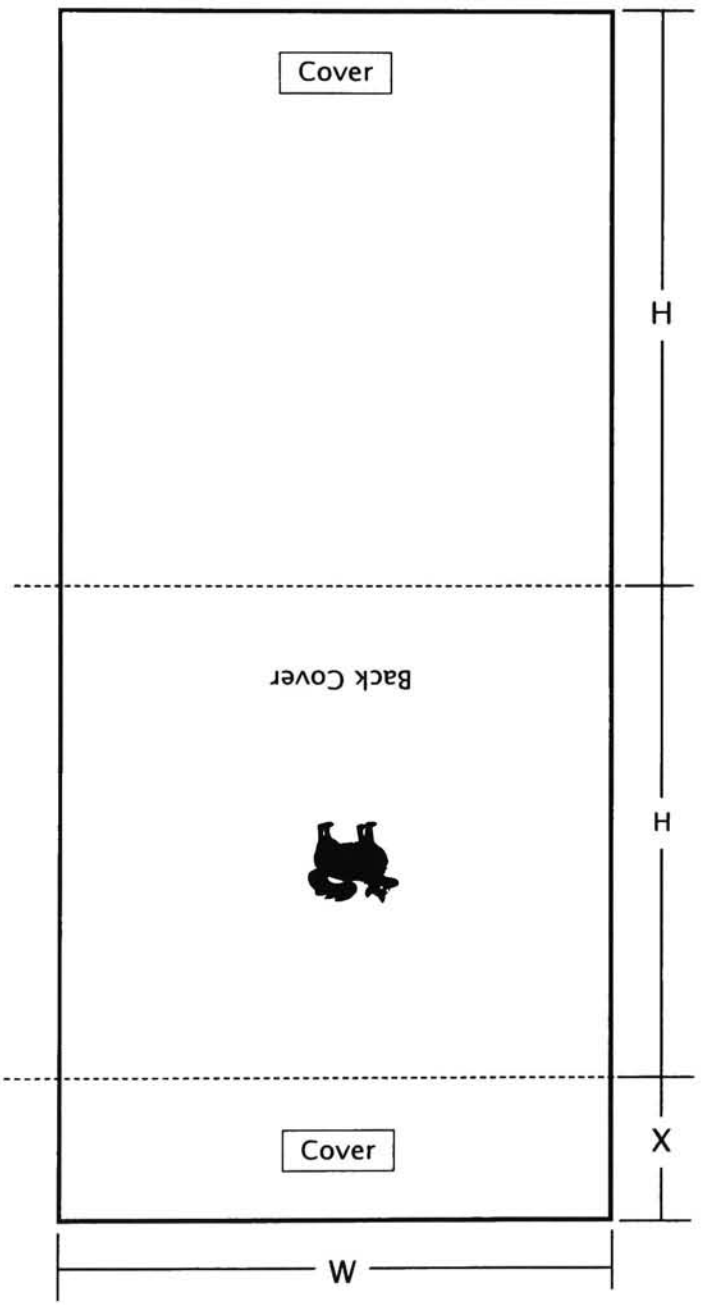
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

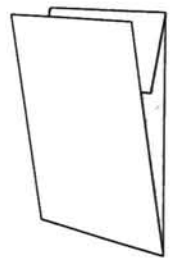
W: finished width
H: finished height
X: your choice
--- fold indication
upside-down



GETTING STARTED

Here's an example: The first thing we need to do is to decide the height of the flap. In for this example we'll make it 2 inches, so X=2. If your finished size is 4 x 6, then your panel height for page 1 of your digital document would be, from top, 6 inches, 6 inches and 2 inches. Then for page two everything flips, so from top your panels would measure 2 inches, 6 inches and 2 inches, with a width of 4 inches.

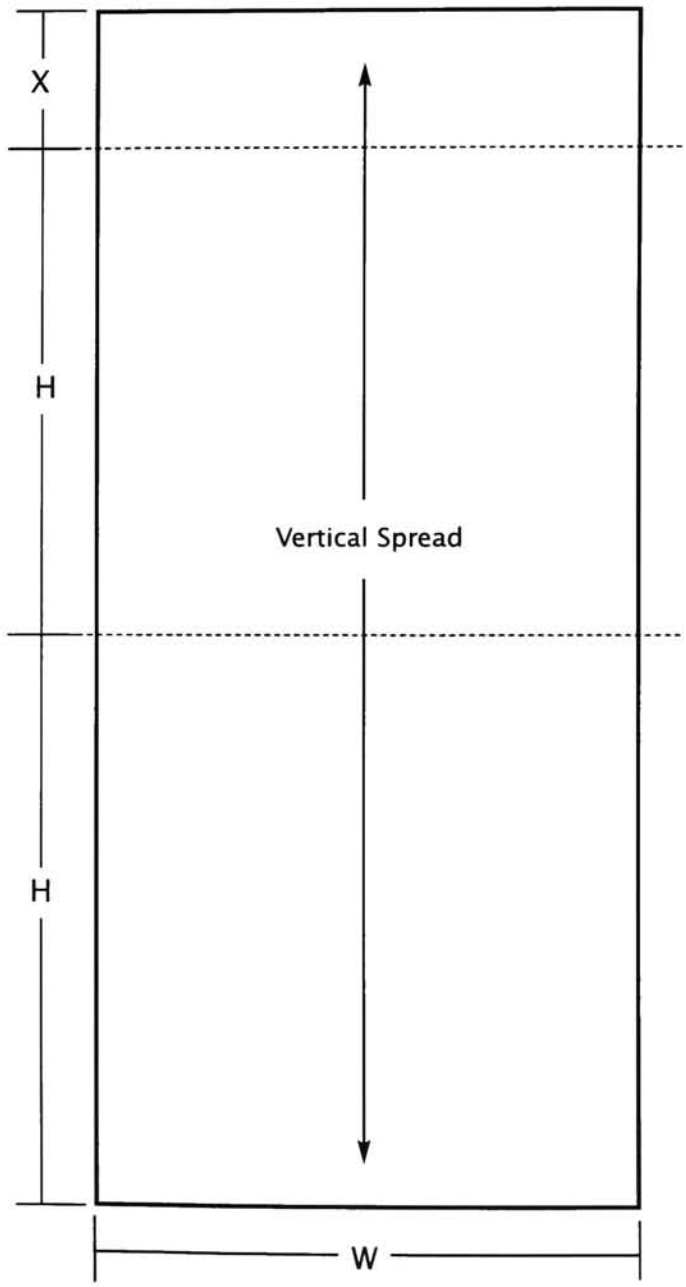
Remember: Document size and flat size must be the same, so in this case the document size would be 4 inches wide by 14 inches long.



Digital Document setup: **Page 2** (side 2)

CONSIDERATIONS:

- If you're planning a tear-off reply card, remember that the paper for a business reply card must be equivalent to 7pt. card stock to go through the mail, and that there are also size requirements.
- If you are designing a large piece, make sure to have a folding sample made up from your specified paper. If the paper is too lightweight, it could turn into a sagging, flimsy piece.
- If you are designing a self-mailing piece, this folding style could require a wafer-seal to make it mail-ready.
- If your paper choice is any heavier than 80# text, you will want to consider scoring the piece. Ask your printer for a recommendation.
- Understand your printer or binder's minimum and maximum size requirements for their equipment. Practicality is important for mechanical folding.



A Tip for Measuring Panels:

For the 4-page with hidden flap, vertical format, the smartest thing to do would be to decide the dimensions of your panels ahead of time. Calculate the document width and height and create your document. Set the crosshairs to upper left corner of the document, pull a guide bar down from the top ruler and set it to the length of your first panel. Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide down to the next panel measurement. After setting the second fold, bring the crosshairs over one last time, drag a guide down for your last panel length. If you've done it right, your last guide will come to the exact edge of the document. Repeat for page two. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

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Other Related Considerations:

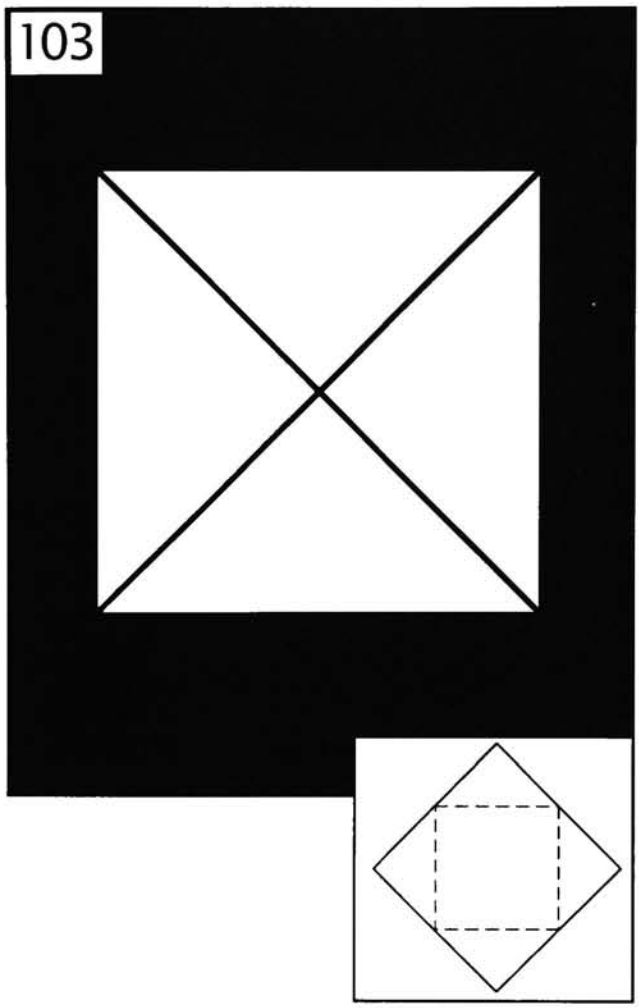
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

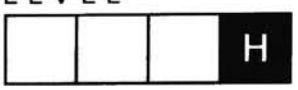
Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

4-POINT SQUARE



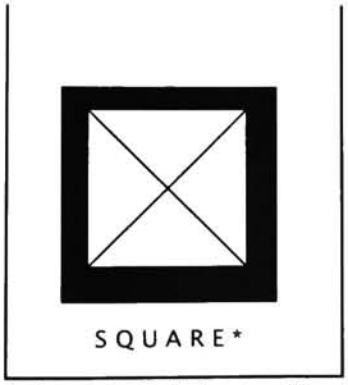
LEVEL



A level H fold requires hand folding. In other words, it cannot be produced in good quality by machine. Hand-folding is far more expensive than machine folding and should be considered only for shorter runs.

The 4-point square is a special style in which four points meet, and then open up to a square center. This style is wonderfully deceiving because it gives the impression of complexity and sophistication, but is actually quite simple in concept. Sometimes this fold is used as a "package" which holds something inside, like square sheets of paper, promotional materials, etc.

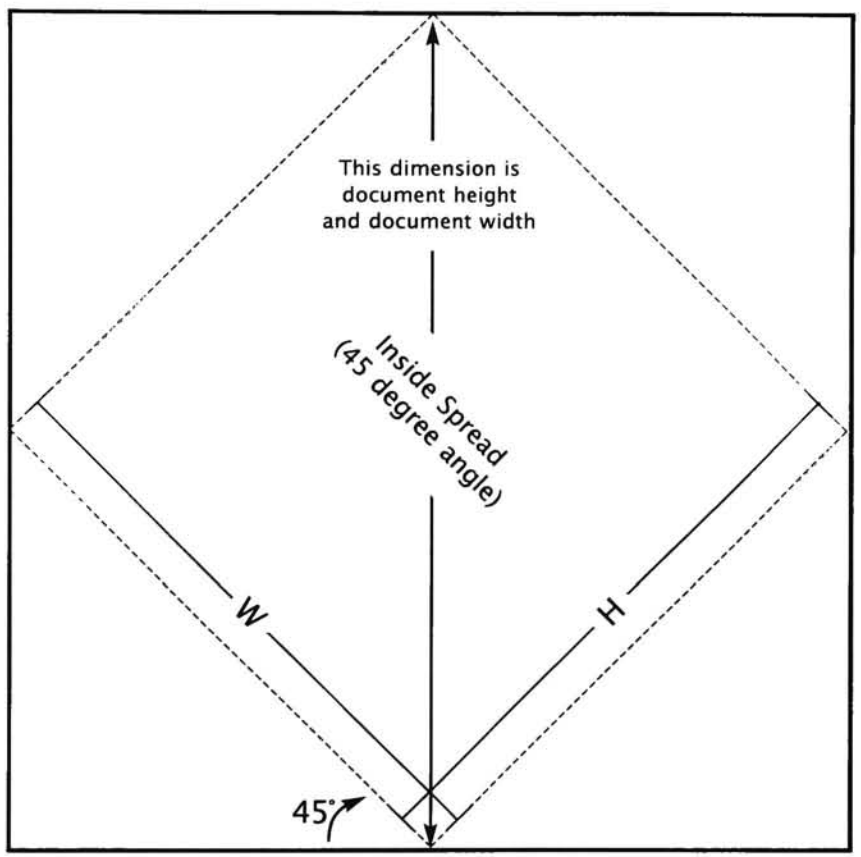
FORMAT OPTION



**Before you choose this format, see "Format Options" on page 5.*

Digital Document setup: **Page 1** (side 1)

W:	finished width
H:	finished height
X:	your choice
---	fold indication

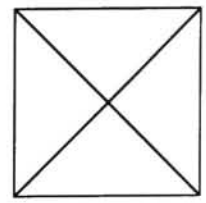


W=H

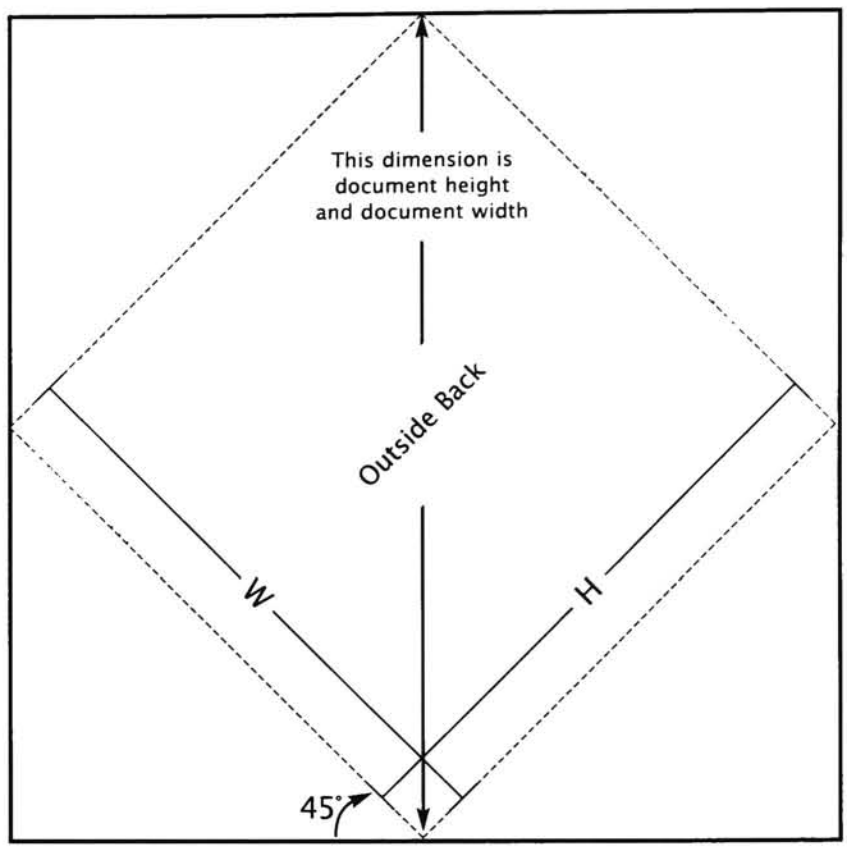
GETTING STARTED

This one looks a lot harder than it is: Let's say we want a 6 inch square piece. All you have to do is make a 6 inch square, then measure its diagonal. For a 6 inch square, the diagonal measurement is 8½ inches. With the diagonal measurement, we now have the document dimensions as well. Just make an 8½ inch by 8½ inch square document, draw your 6 inch square box (I would give it a dotted line rule because it will be used to define your folds—instruct the printer not to print the dotted line), and rotate the box to a 45 degree angle. If you've done it right, the points of your 45 degree box will touch the boundaries of your document.

Remember: Document size and flat size must be the same, so in this case the document size would be 8½ inches wide by 8½ inches high.



Digital Document setup: **Page 2** (side 2)



W=H

CONSIDERATIONS:

- This folding style requires hand-folding, which will be an extra expense.
- Square-format mail often requires extra postage. Have a dummy made up in your specified paper and bring it to the post office. Be prepared to tell them your quantity. They will weigh it and give you a cost estimate.
- This folding style will require a wafer seal.
- If you are going to design square (or other) pieces to insert (also a hand operation), make sure to make the dimensions ⅛" smaller in width and height (1/16" per side) than the finished square dimensions to accomodate for the folds.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

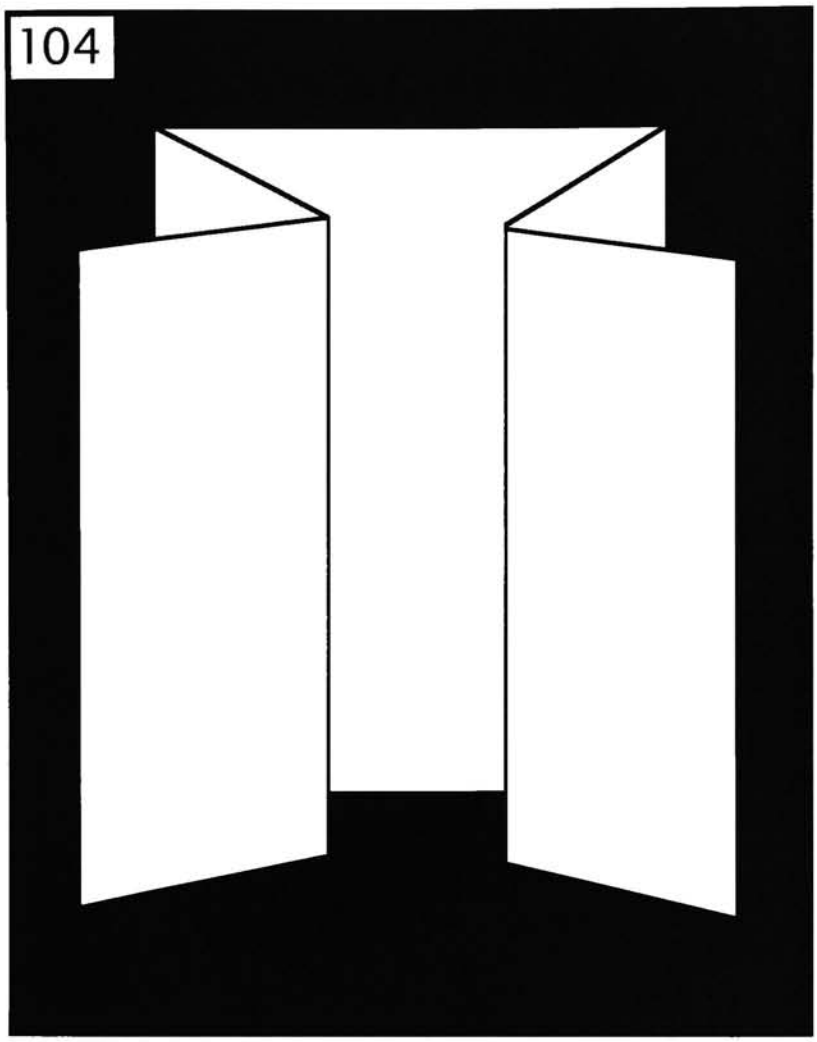
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

CONCERTINA

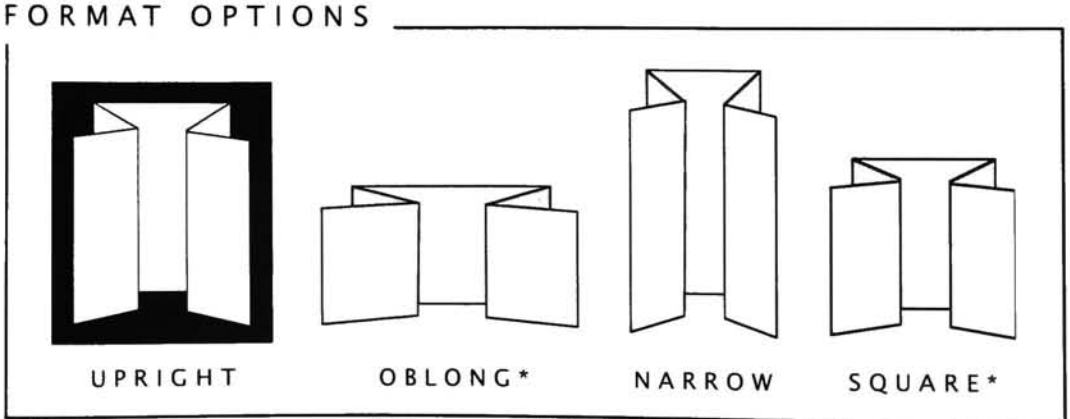


LEVEL

A level H fold requires hand folding. In other words, it cannot be produced in good quality by machine. Hand-folding is far more expensive than machine folding and should be considered only for shorter runs.

The concertina is a special fold whose closest relation would be the accoridon family. This is an uncommon fold with many creative possibilities. This folding style is great for self-standing pieces, and not so great if the desire is for something which will remain flat

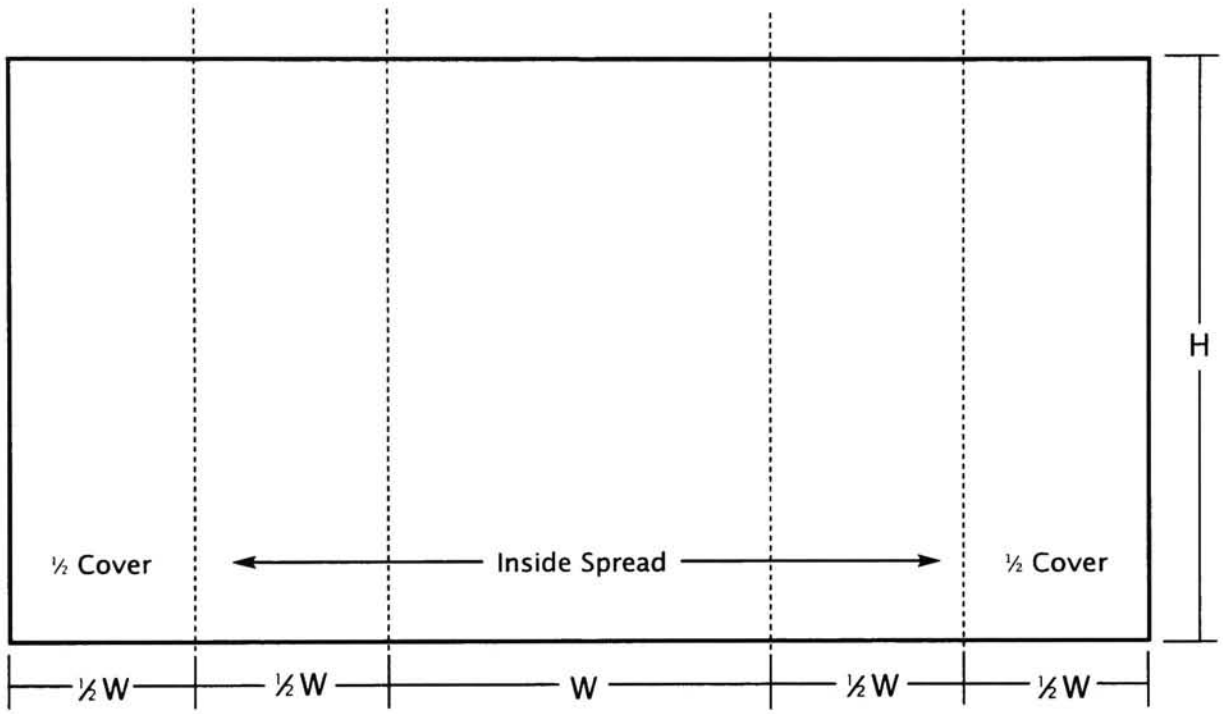
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

W: finished width
H: finished height
--- fold indication

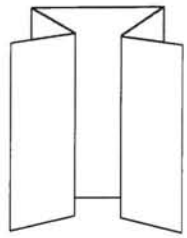


GETTING STARTED

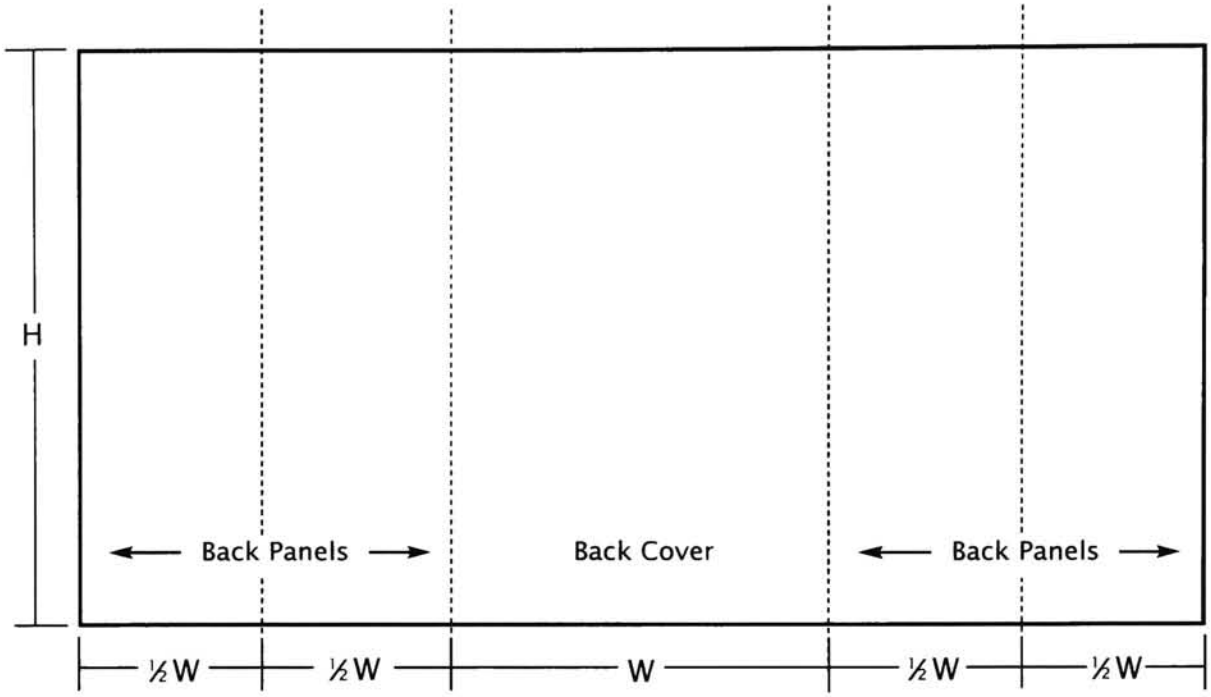
Here's an example: The first thing we need to do is to decide the finished width so that we can define the width of the folding panels. If we decide that the piece is to measure 6 inches wide, then ½ the width (½W), or 3 inches, would be the width of the shorter folding panels. If your finished size is 6 x 8, then your panel width for page 1 of your digital document would be, from left, 3 inches, 3 inches, 6 inches, 3 inches and 3 inches, with a height of 8 inches. This fold is symmetrical, so for page 2 the measurements are the same as page 1.

Remember: Document size and flat size must be the same, so in this case the document size would be 18 inches wide by 8 inches high.

Time-saving tip: For this particular folding style, the fold placement is exactly the same for page 1 as it is for page 2. If you're creating your document in a page layout program which has a master page option, save time by setting your folds on the master page. Then, return to the document and add the second page.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- This folding style does not meet postal regulations for a self-mailing piece. This style would require an envelope.
- If your paper choice is any heavier than 80# text, you will want to consider scoring the piece. Ask your printer for a recommendation.
- Make sure to have a folding dummy made in your specified paper. If your paper choice is too light, it may not be successful as a self-standing piece.
- This folding style requires hand-folding, which will be an extra expense.

A Tip for Measuring Panels:

For the concertina fold, the smartest thing to do would be to decide the dimensions of your panels ahead of time. Calculate the document width and height and create your document. Set the crosshairs to upper left corner of the document, pull a guide bar from the left ruler and set it to the measurement of your first panel. Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement . After setting the second fold, bring the crosshairs over one last time, drag a guide for your last panel width. If you've done it right, your last guide will come to the exact edge of the document. Repeat for page two. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

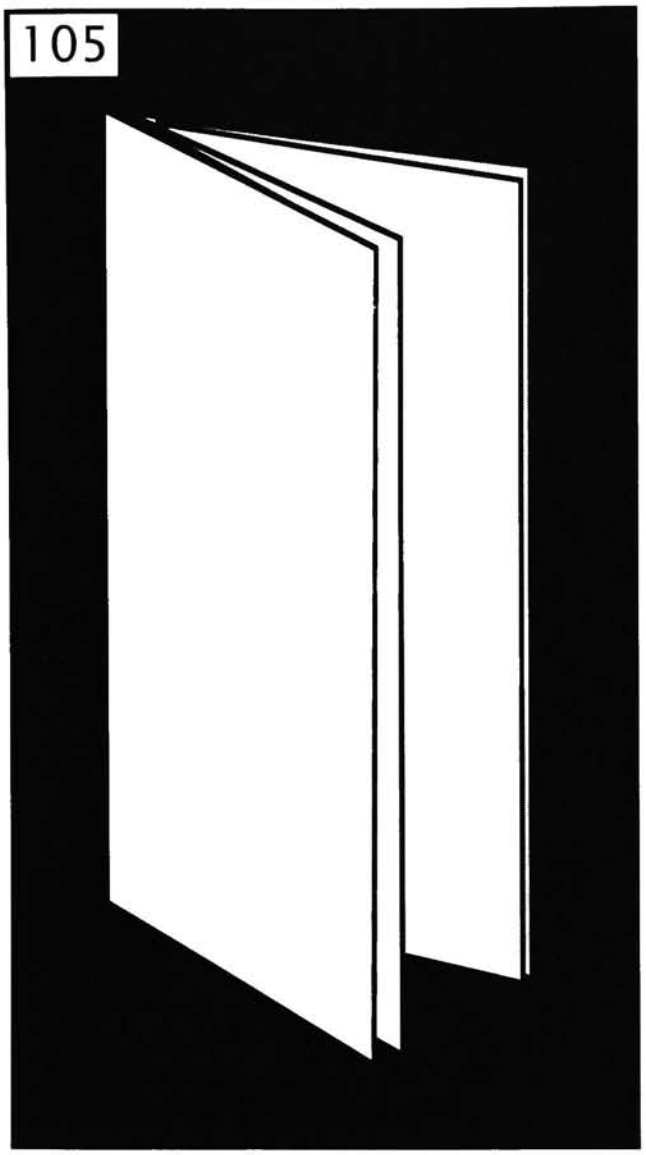
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

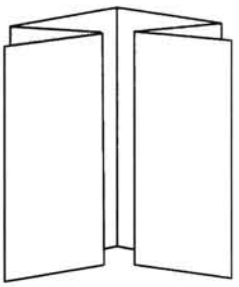
Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

CLOSED CONCERTINA



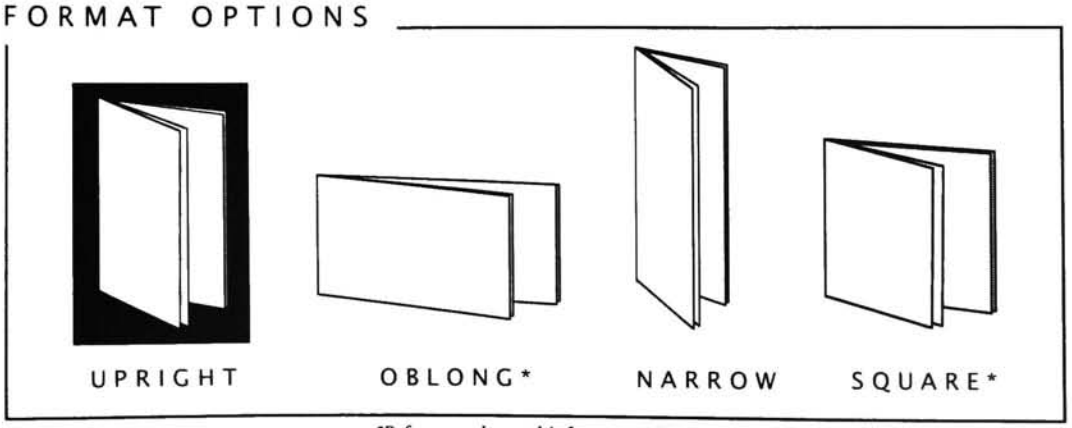


LEVEL

A level 3 fold has a long and difficult makeready, could require special machinery and low folding speed. These issues will be reflected in the cost.

The closed concertina is a variation of the standard concertina fold. What makes this style different is the fold down the center which allows it to fold in on itself. This folding style is a nice alternative if you like the concertina style, but need something a bit more practical, or possibly a self-mailing piece.

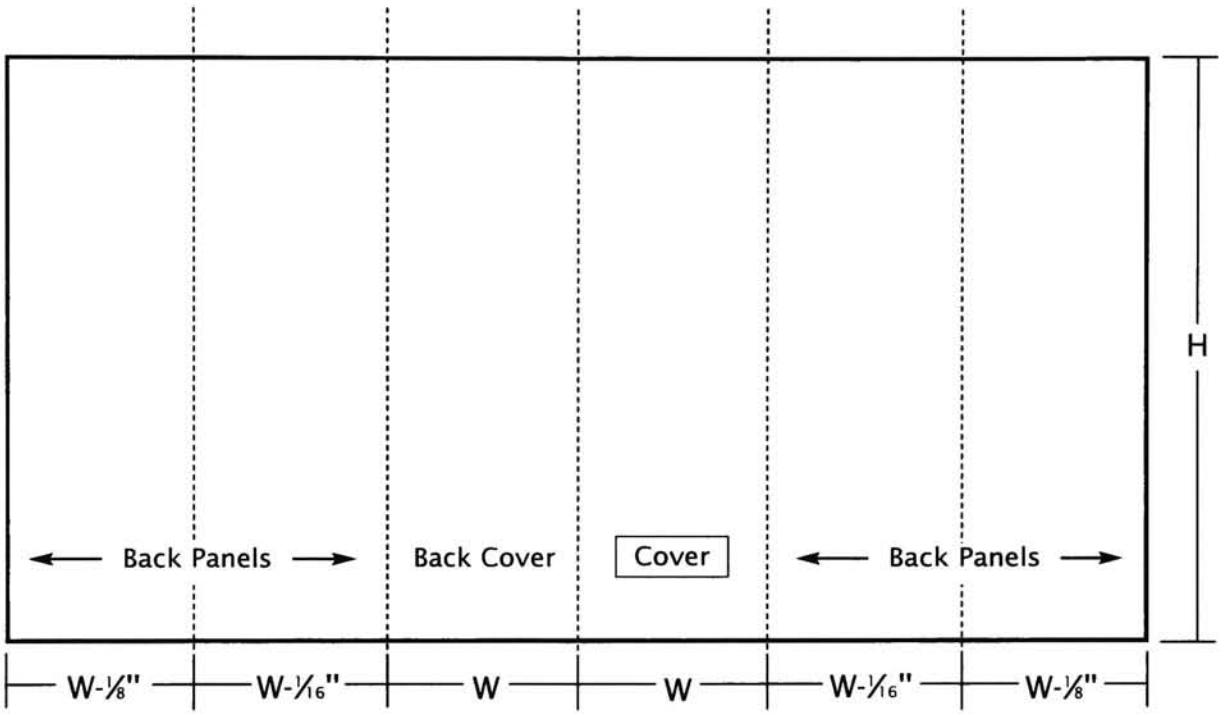
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

W: finished width
H: finished height
--- fold indication

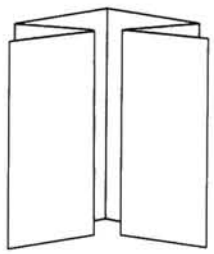


GETTING STARTED

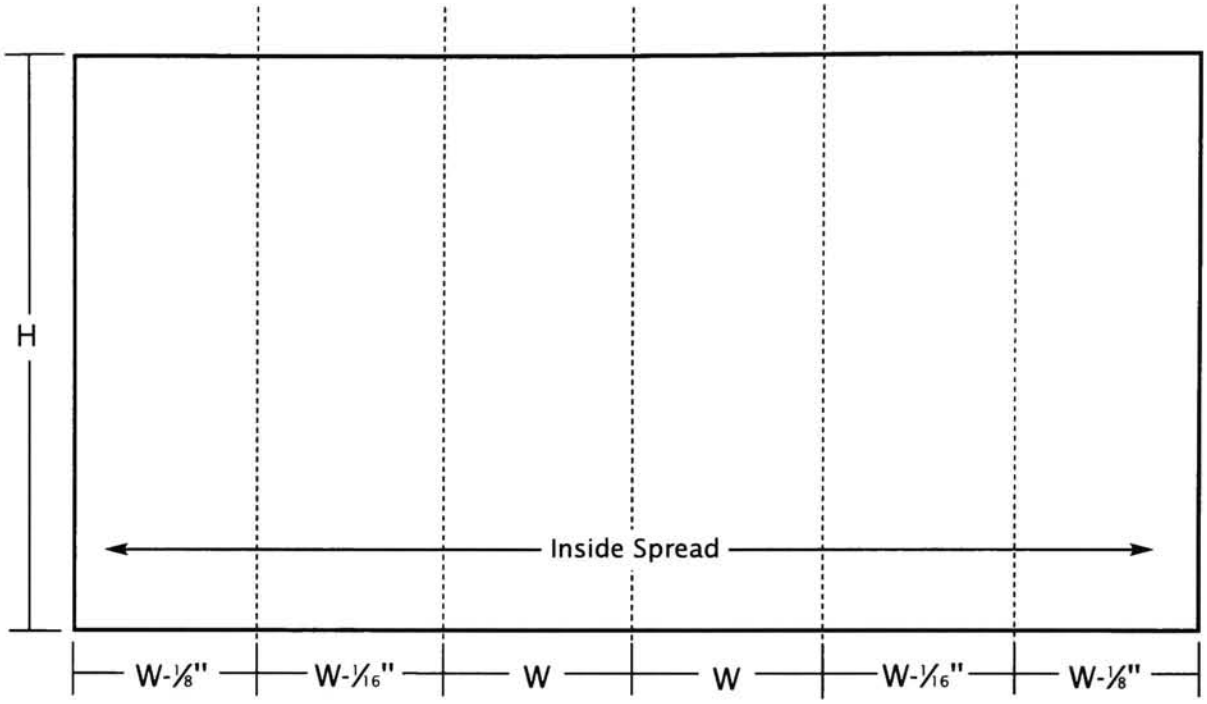
Here's an example: If your finished size is 4 x 9, then your panel width for page 1 of your digital document would be, from left, 3⅞ inches, 3 15/16 inches, 4 inches, 4 inches, 3 15/16 inches and 3 ⅞ inches, with a height of 9 inches. This fold is symmetrical, so for page 2 the measurements are the same as page 1.

Remember: Document size and flat size must be the same, so in this case the document size would be 23⅝ (23.625) inches wide by 9 inches high.

Time-saving tip: For this particular folding style, the fold placement is exactly the same for page 1 as it is for page 2. If you're creating your document in a page layout program which has a master page option, ave time by setting your folds on the master page. Then, return to the document and add the second page.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- If you are designing a self-mailing piece, this folding style may require a wafer-seal to make it mail-ready.
- If your paper choice is any heavier than 80# text, you will want to consider scoring the piece. Ask your printer for a recommendation.
- Make sure to have a folding dummy made in your specified paper. If your paper choice is too light, it may not be successful as a self-standing piece.
- Make sure to have a folding dummy made in your specified paper. Watch for bulkiness and overall weight, especially if it is a self-mailing piece.

A Tip for Measuring Panels:

Don't give yourself a headache trying to calculate the document width ahead of time. Create your document as if all panels will be the same (ex: for a closed concertina with a finished size of 4 x 9, set the document size to 24 x 9). Then set crosshairs to upper left corner of document, pull a guide bar from the left ruler and set it to the measurement of your first panel (in this example, 3⅞ inches). Then, bring the crosshairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement (3 15/16). Repeat for the last 4 panels (4, 4, 3 15/16 inches and 3⅞ inches). At this point you'll notice that the document length extends past your last guide. No problem. Zoom out and set your crosshairs back to the upper left corner of your document. If you grab that last guide you just set and look in the measurements panel for the X measurement, that will give you the document width you are looking for. Just change your document size by entering that decimal measurement (23.625). Easy! If you've done it right, when you set the folds for page two, your last guide will come to the exact edge of the document. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

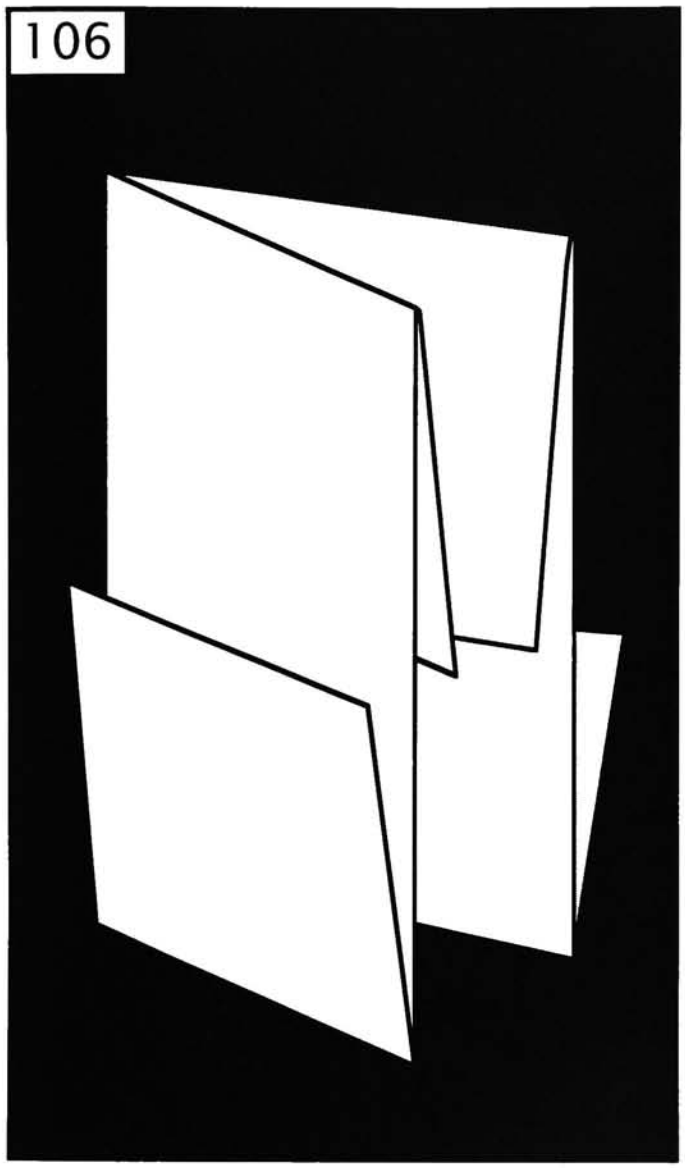
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

CRAZY FOLD

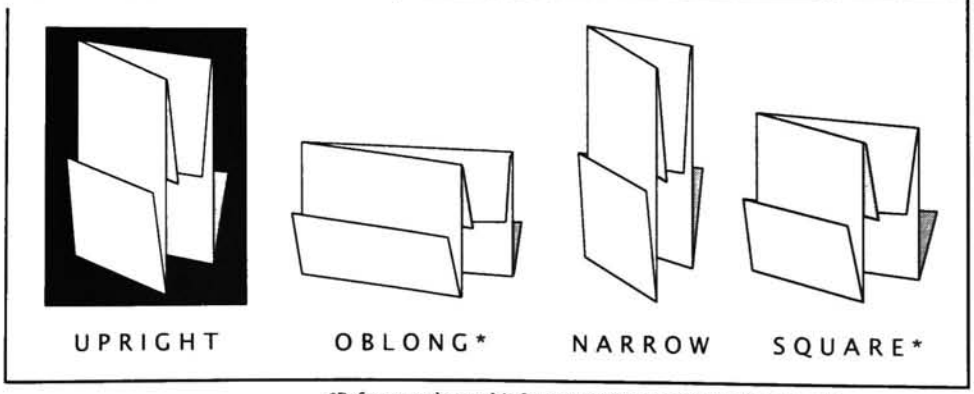


LEVEL

A level 3 fold has a long and difficult makeready, could require special machinery and low folding speed. These issues will be reflected in the cost.

There is nothing to call this exotic fold except "crazy." It has no folding relatives to relate to, but has plenty of creative potential.

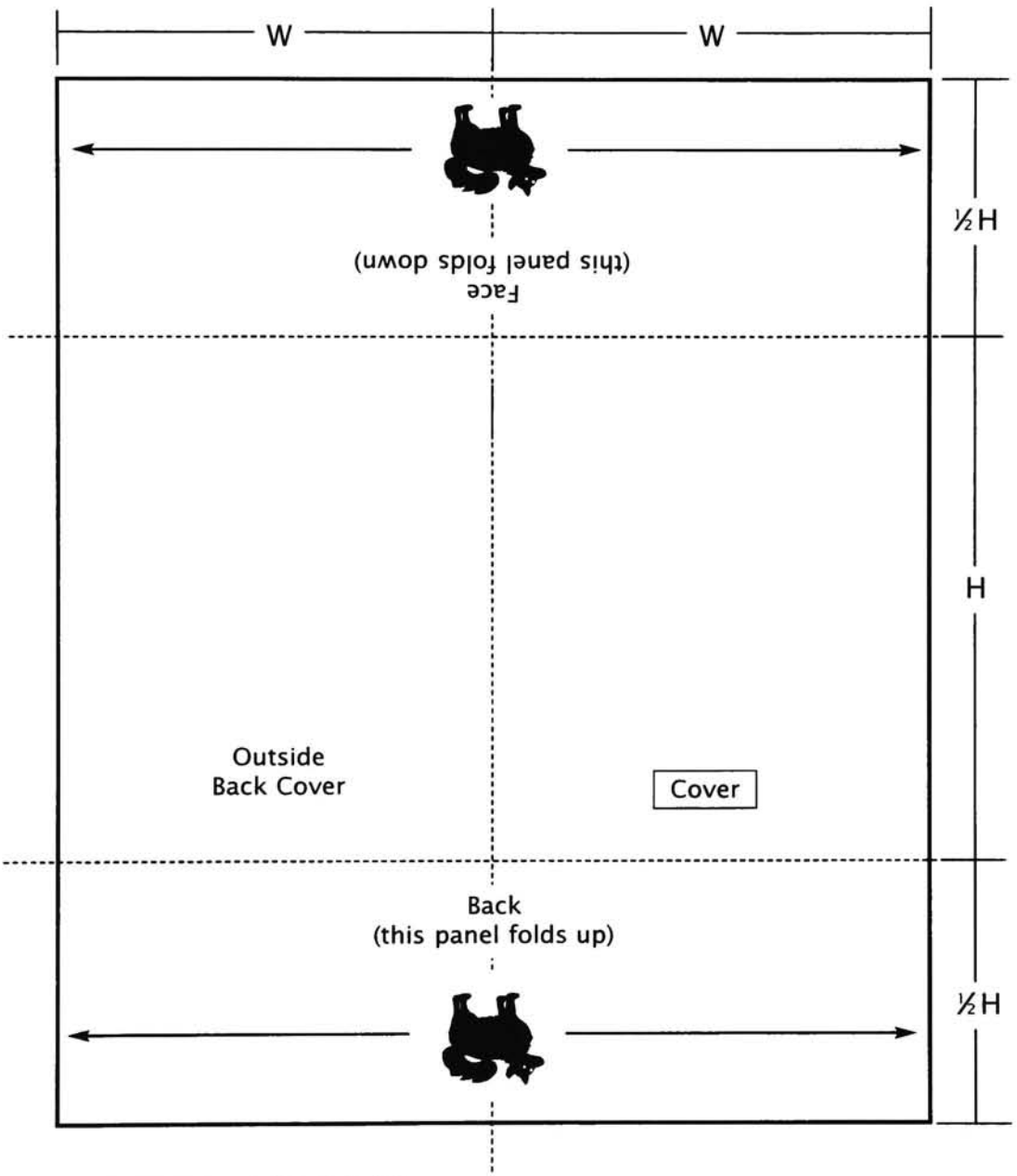
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

W: finished width
H: finished height
--- fold indication
upside-down

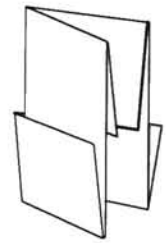


GETTING STARTED

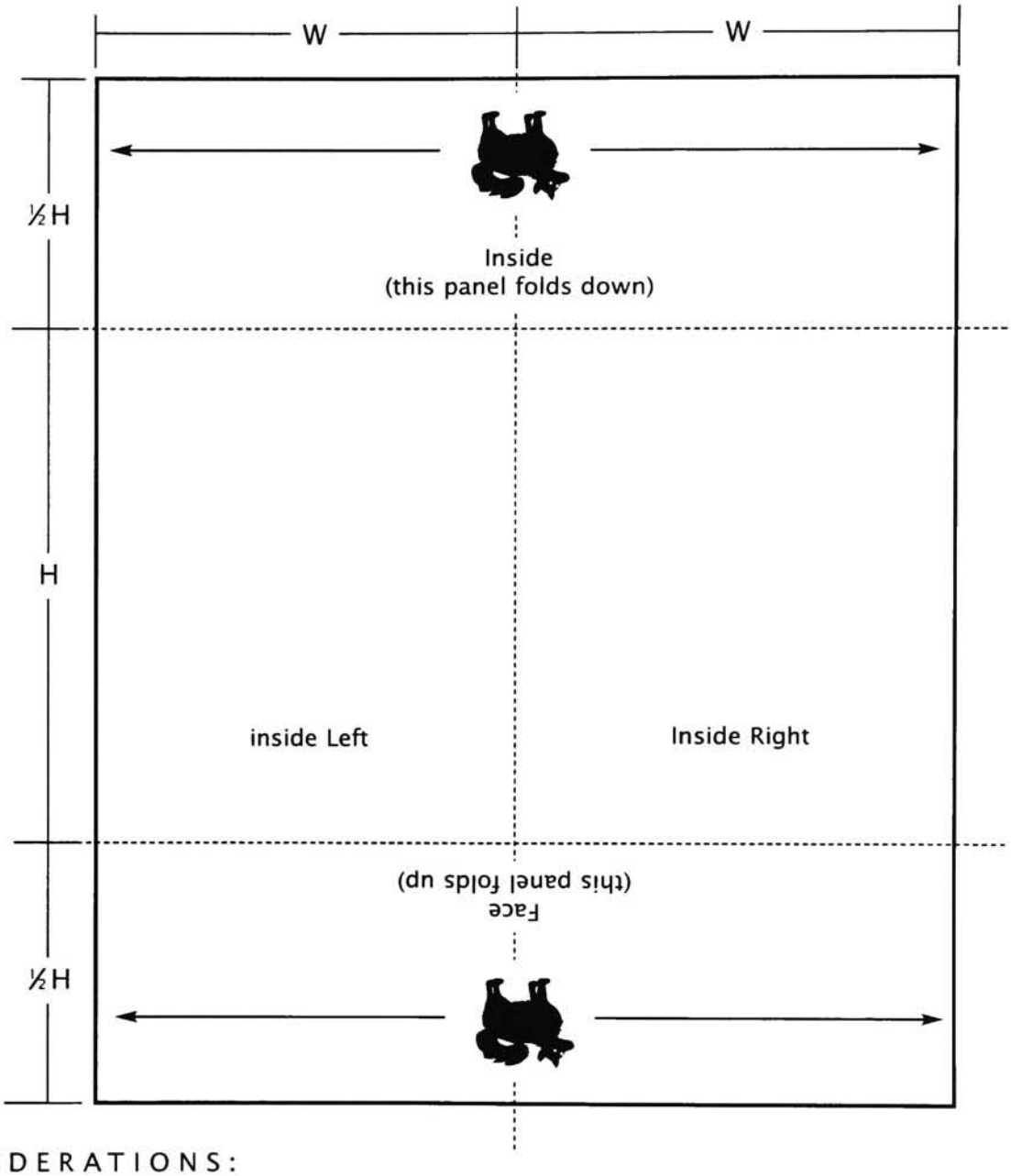
Here's an example: If your finished size is 4 x 6, then your panel height for page 1 of your digital document would be, from top, 3 inches, 6 inches and 3 inches, with a document width of 8 inches (4 inches plus 4 inches). This fold is symmetrical, so for page 2 the measurements are the same as page 1.

Remember: Document size and flat size must be the same, so in this case the document size would be 8 inches wide by 12 inches high.

Time-saving tip: For this particular folding style, the fold placement is exactly the same for page 1 as it is for page 2. If you're creating your document in a page layout program which has a master page option, save time by setting your folds on the master page. Then, return to the document and add the second page.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- Make sure to have a folding dummy made in your specified paper. Paper weight will dramatically affect the success of this piece. Watch for bulkiness and problems in the corner joints of the folds—the printer can't do anything about this, and it will require a change in paper.
- This folding style does not meet postal regulations for a self-mailing piece. This style would require an envelope.
- This is a very rare fold, so send a dummy to the printer ahead of time so that they may familiarize themselves with it.

A Tip for Measuring Panels:

For the crazy fold, the smartest thing to do would be to decide the dimensions of your panels ahead of time. Calculate the document width and height and create your document. Set the crosshairs to upper left corner of the document, pull a guide bar down from the top ruler and set it to the length of your first panel. Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide down to the next panel measurement . After setting the second fold, bring the crosshairs over one last time, drag a guide down for your last panel length. If you've done it right, your last guide will come to the exact edge of the document. Repeat for page two. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

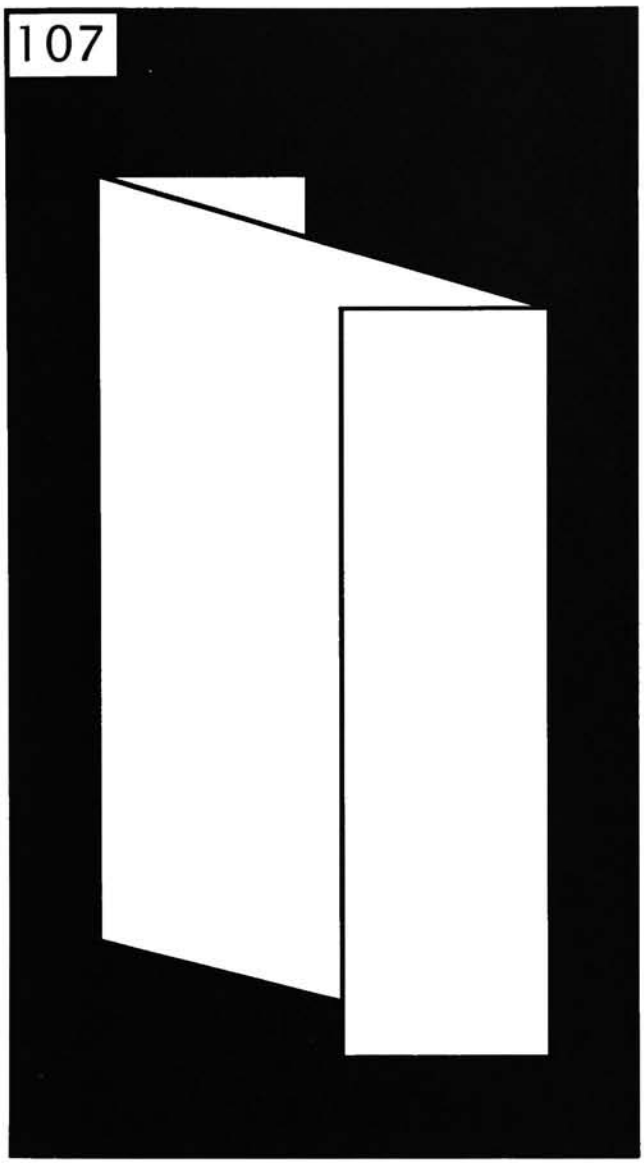
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

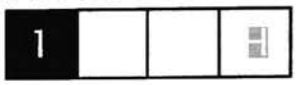
Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

DOUBLE COVER



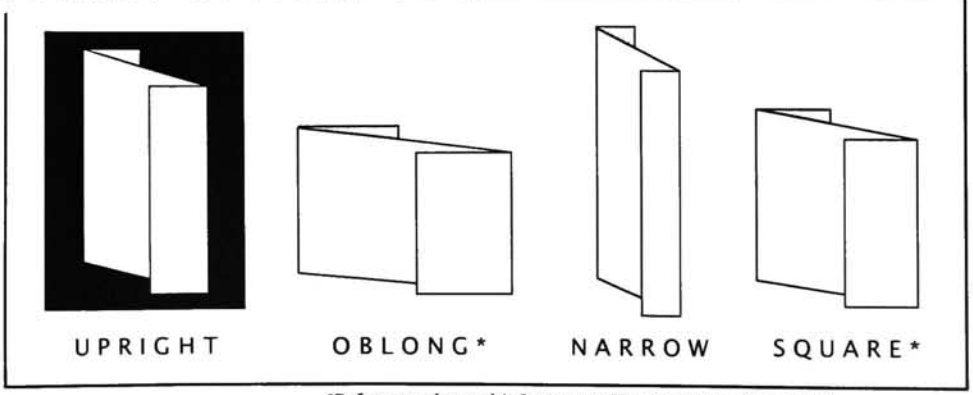
LEVEL



A level 1 fold is standard and basic, easy to set up on the folding machine and the machine can run at highest speeds.

The double cover fold is a special fold whose closest relation would be the accordion family. It has two short flaps which fold in opposite directions. This is a rare folding style that works well for a self-standing piece.

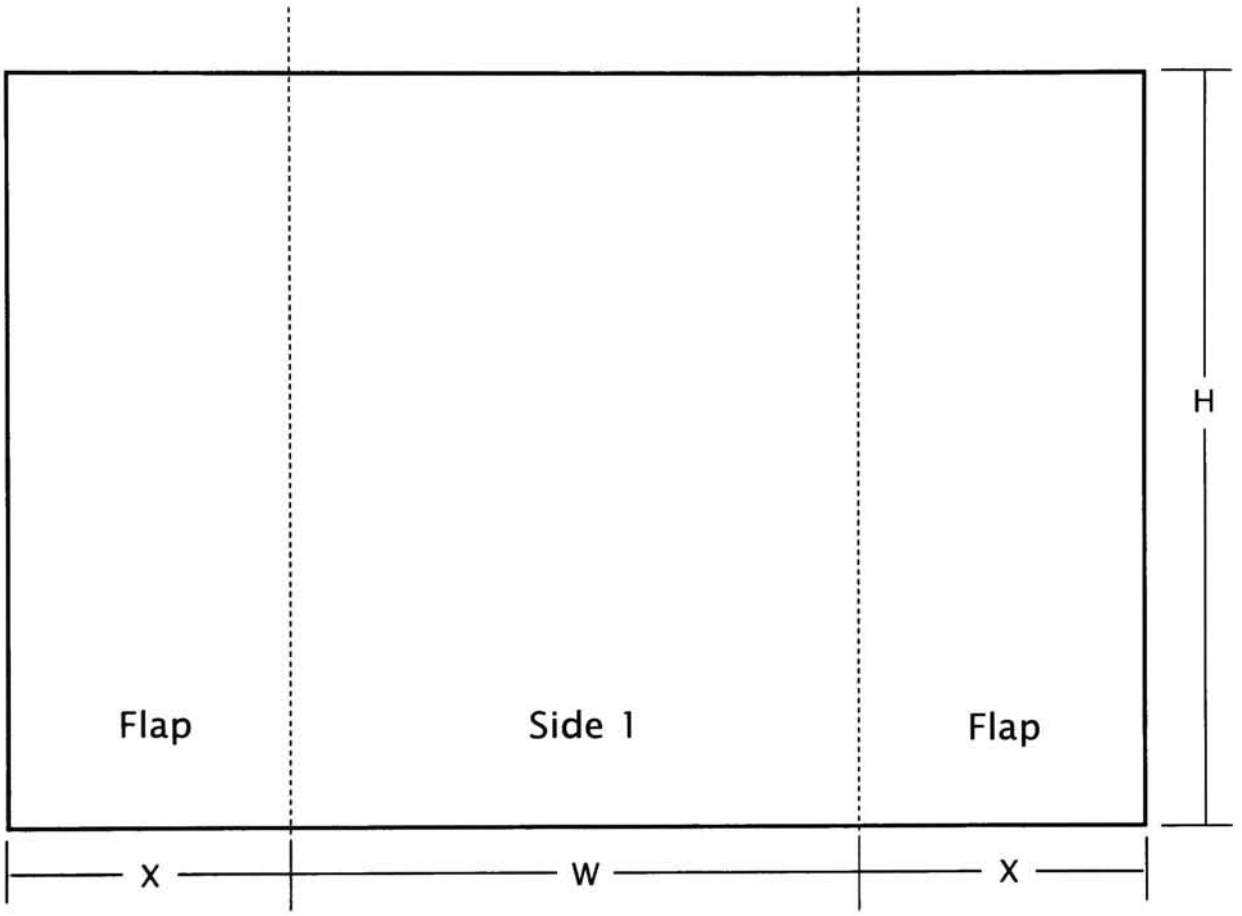
FORMAT OPTIONS



Before you choose this format, see "Format Options" on page 5.

Digital Document setup: **Page 1** (side 1)

W:	finished width
H:	finished height
X:	your choice
---	fold indication

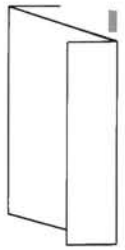


GETTING STARTED

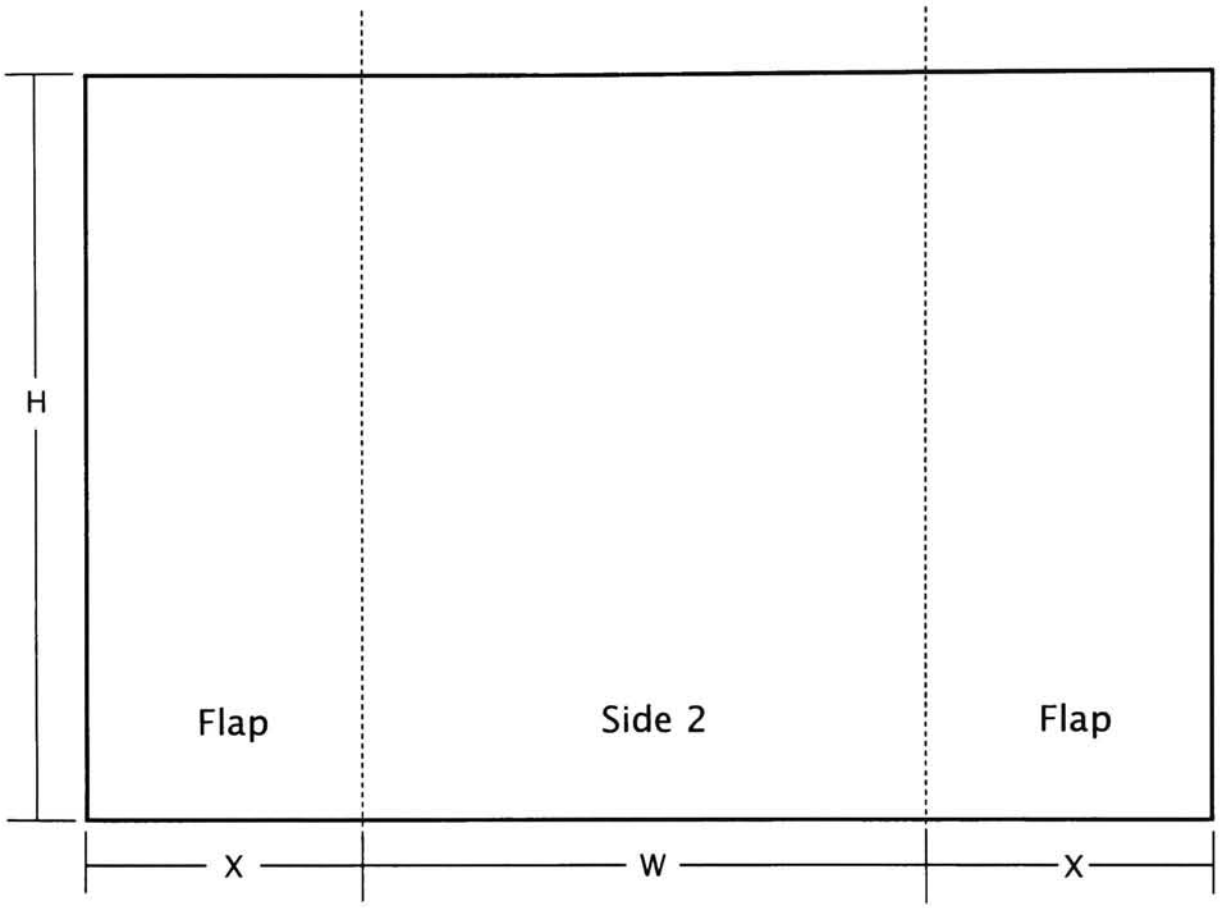
Here's an example: The first thing we must determine is the finished size. Once we determine that, then we can decide the width of the flaps. For this example, let's define the finished width as 6 inches, so W=6, and the flap widths as 2 inches, so X=2. If your finished size is 6 x 4, then your panels for page 1 of your digital document would be, from left, 2 inches, 6 inches and 2 inches, with a height of 4 inches. This fold is symmetrical, so for page 2 the measurements are the same as page 1.

Remember: Document size and flat size must be the same, so in this case the document size would be 10 inches wide by 4 inches high.

Time-saving tip: For this particular folding style, the fold placement is exactly the same for page 1 as it is for page 2. If you're creating your document in a page layout program which has a master page option, save time by setting your folds on the master page. Then, return to the document and add the second page.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS:

- This folding style does not meet postal regulations for a self-mailing piece. This style would require an envelope.
- If your paper choice is any heavier than 80# text, you will want to consider scoring the piece. Ask your printer for a recommendation.
- Make sure to have a folding dummy made in your specified paper. If your paper choice is too light, it may not be successful as a self-standing piece.

A Tip for Measuring Panels:

For the double cover, the smartest thing to do would be to decide the dimensions of your panels ahead of time. Calculate the document width and height and create your document. Set the crosshairs to upper left corner of the document, pull a guide bar from the left ruler and set it to the measurement of your first panel. Then, bring the cross-hairs over to the guide you just set (which lets you measure from zero again) and drag your guide to the next panel measurement . After setting the second fold, bring the crosshairs over one last time, drag a guide for your last panel width. If you've done it right, your last guide will come to the exact edge of the document. Repeat for page two. Now, go back and place fold indicators on the guides you just set. For a more thorough explanation of how to set folds correctly, see "Setting Your Folds," page 16.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Other Related Considerations:

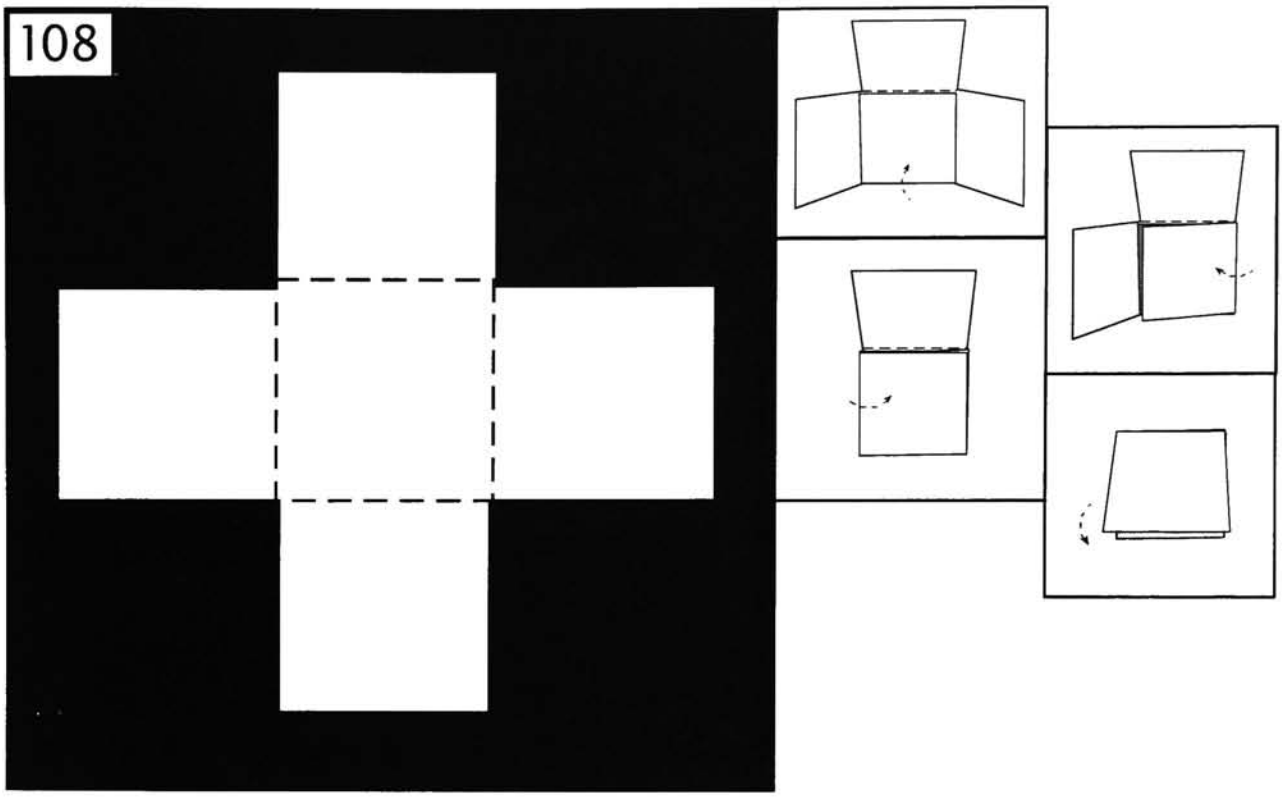
Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

NOTES:

IRON CROSS FOLD



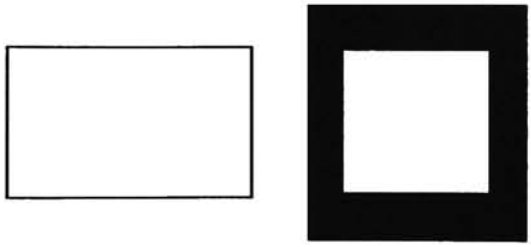
LEVEL

A level H fold requires hand folding. In other words, it cannot be produced in good quality by machine. Hand-folding is far more expensive than machine folding and should be considered only for shorter runs.

The iron cross fold is a special fold whose closest relation would be the gate family. Some specialty folders have set up their machines to fold this style, but generally it is a hand folded piece that also requires a die cut and score, which will drive the cost up.

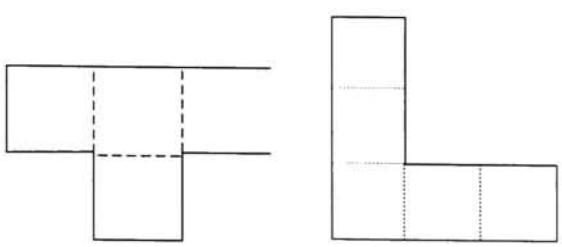
Panels may be rectangular-shaped instead of square, and panels may be added or eliminated to create "T" and "L" shapes (see alternative shapes below).

FORMAT OPTIONS



OBLONG* SQUARE*

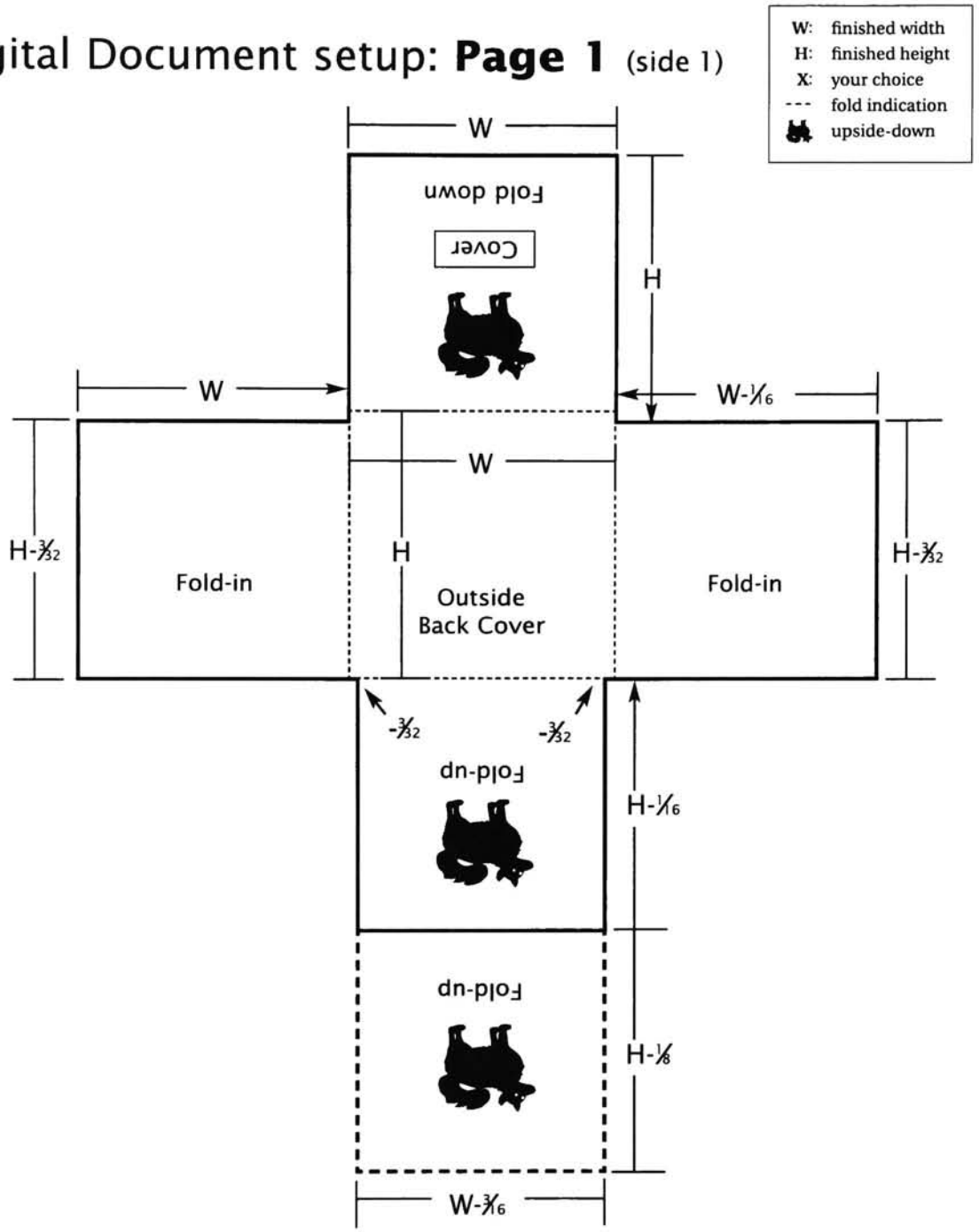
ALTERNATIVE SHAPES



"T" SHAPE "L" SHAPE

Before you choose this format, see "Format Options" on page 5.

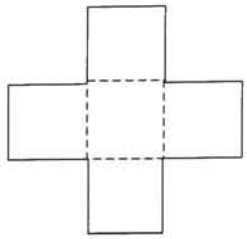
Digital Document setup: **Page 1** (side 1)



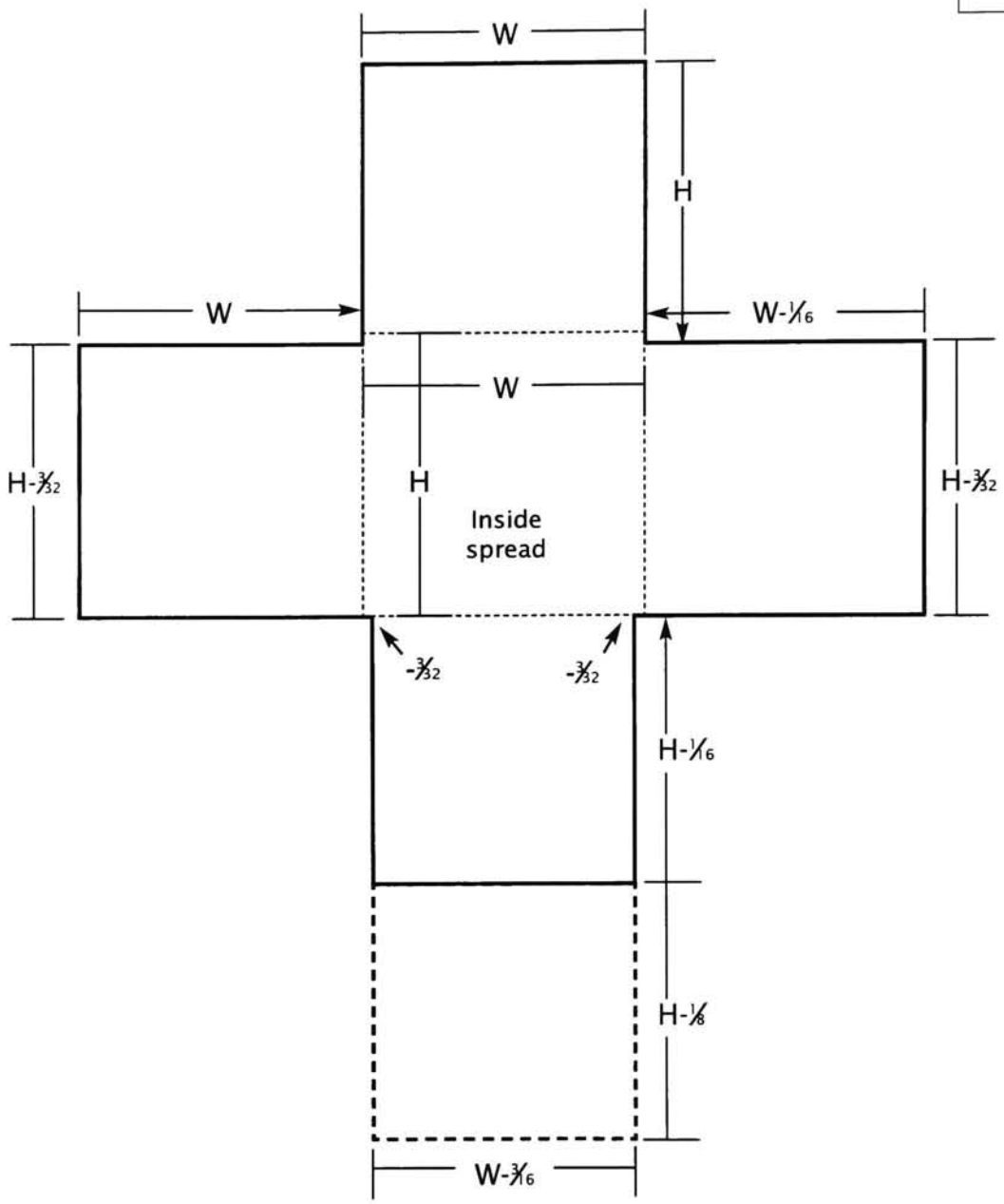
GETTING STARTED

Setting up the digital document for an iron cross fold is not something that can be easily explained. Start on paper and sketch out the dimensions before you start to set it up on your document. Here are some basic guidelines to follow:

- Remember that for a panel into the piece, it must be at least 1/16 inch narrower in width (or length, depending upon which direction it is folding—up or over)
- Looking at the diagram, you'll notice that none of the panels meet exactly at the corners of the square in the center. They're a little shorter or narrower. This is crucial. It would never work is the panels met exactly at the corners—one always has to accomodate for slight variations from the machinery. So, if folds met exactly at the corners and one fold was slightly off, the entire piece would shift dramatically, and the points would not meet in the center. So, we compensate by starting the panel edges very close to, but not exactly at the corners of the center square.
- If you're having trouble setting up the document or figuring out a variation of this folding style, don't be afraid to ask your printer for help with the measurements.



Digital Document setup: **Page 2** (side 2)



CONSIDERATIONS: *from Jack Rickard, Rickard Bindery*

- Panels may open in any sequence, but panel sizes must be adjusted based on which panels open first.
- Additional hanging panels may be attached to the first leg in the fold sequence (see diagram).
- Minimum paper weight is 60# text, maximum is 100# coated cover.
- One of the biggest problems with iron cross folds that adds to the cost is that it's hard to fit enough of them on a sheet to make it economical. "L" formats can nest togethter a little easier, but if you can't decide which format you want, ask your printer to help diagram them out on a sheet so that you can figure out which one will be most economical.
- If you are designing a self-mailing piece, remember that square mail often requires extra postage. This folding style will also require a wafer-seal.

Other Related Considerations:

Always notify your printer before you decide to make a change in your document size. Even the slightest increase or decrease in document size can dramatically affect many aspects of the job. For example, you may not realize that your document size (flat size) fits perfectly on a certain press sheet size. Increasing the size even by a small amount could suddenly bump you to a bigger press sheet size, which could add cost, produce more waste, or if the paper has already been ordered and received by the printer—cost you a re-stocking fee and possibly extra time to order and receive the new paper size.

Now, you may be wondering how reducing the size could cost you money, too. By reducing the size, two things could happen. The good news is that you may be able to fit more on the sheet. The bad news is that if you can't, you're producing more waste and it may be more practical to move to a larger press sheet to be able to fit more on the sheet and decrease waste. If the paper has already been ordered and received by the printer, you may pay a re-stocking fee and it may take extra time to order and receive the new paper size. Communication is key, so make sure your printer always knows what you're up to.

After you have set your folds, always print and fold up a dummy of your document before you start designing. If you've made a mistake, you can catch it early and correct it, but also the dummy will give you a better idea of scale and layout placement.

Think ahead when choosing your paper and envelopes. Many papers and envelopes are special-order and could require up to 3 weeks to deliver. Another consideration is that special-order, or "mill items," often must be purchased in cartons or certain minimum quantities. Lastly, your paper samples could be outdated, possibly causing you to choose a paper which has changed or been discontinued. Ask your paper representatives if they have updated your sample cabinets within the past 6 months or so (paper representatives usually do this automatically, but if you do not maintain a relationship with your paper representatives, you probably have outdated samples).

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