There are almost an unlimited number of ways paper can be folded. Sometimes the choices seem overwhelming. Printing Services has a variety of folding options for your design job. Folding is seldom very precise; most machines work within a tolerance of about \( \frac{1}{32} \) of an inch per fold, so it is important that a designer keeps that in mind when designing jobs with elements ending at folds. Always plan your design to allow for tiny variations in folds, just as you would for variations in trims.

On sheets that need to fold several times, the accuracy of the first fold will affect all subsequent folds. The thickness of the paper will also cause variations in additional folds. Thicker paper will cause the folds to shift more than a thin paper. It is important to keep this in mind when designing your folded piece. When submitting a job to Printing Services, always include a folding dummy.

**Does it fold correctly?**

A common layout is the three-panel, two-fold brochure on letter-size paper that folds down to fit into a #10 envelope (Figure 1). It's easy to plan the layout of this kind of brochure so when folded all three panels are the same width and blocks of text aren't creased by the folds.

First some definitions are in order. A panel is the area from the edge of the page to a fold or the area between two folds. A column is typically a small area centered in a panel where text and graphical elements are placed. Gutters are the spaces between columns and margins are the spaces between the outside edges of the page and the left and right columns (Figure 2).
Assuming the column widths are equal, the gutter widths are equal, and the margin widths are equal, the formula for accurate folds is as follows: always make the margin width half the dimension of the gutter width. For example, if the margins are set to a quarter inch, make the gutters half an inch. This will ensure that all panels are equal width, and if all text is within a column, no text will be creased by a fold. This same formula works well with any size of folded brochure as well as brochures with more than three panels (Figure 3).

**Common Brochure Folds**

Shown below are some common folding methods. Talk to your customer service representative at Printing Services to determine which folding method will work for you.

**Letter fold, 3-Panel fold, or #10 Fold**

- **Notes:** Often mistakenly referred to as a tri-fold brochure.
- **Standard Sizes:** Called a #10 fold, as an 8.5”x11” (letter size) or 9”x12” page will fold in thirds into a #10 envelope. An 8.5”x14” (legal size) page folds to 4.67”x8.5” and would need to be a self-mailer.

**Gate fold**

- **Notes:** Two end panels fold inward and then folds again down center of page. This is a difficult fold to design for, as the end panels must be narrower than the two interior panels. There will be a gap of about .25” where the folded panels meet.
- **Standard Sizes:** Legal and 16”x9” sizes fold to fit into a #10 envelope.

**Accordion Fold**

- **Notes:** Panels fold on top of each other like an accordion. Resulting brochure, when unfolded, can lay flat and be read from side to side. When using this fold, keep in mind that it cannot be machine-inserted into envelopes.
- **Standard Sizes:** Legal and 16”x9” sheets fold to fit a #10 envelope.

**Parallel fold or Half-and-Half fold**

- **Notes:** This type of fold requires the finished piece to be folded in half, then in half again – final, folded size is one quarter the original width by the same height.
- **Standard Sizes:** 16”x9” folds down to 4”x9” (fits in a #10 envelope); legal size folds down to 3.5”x8.5” (fits in a #10.)

**Barrel fold or Roll fold**

- **Notes:** Panels fold in on each other. Due to thickness of the paper, each panel, from the outside in must be successively smaller (generally by about 1/16”)
- **Standard Sizes:** Legal and 16”x9” sizes are common to mail in a #10 envelope.

**French fold or Right-Angle fold**

- **Notes:** Fold page in half horizontally, then in half again vertically. Commonly used for greeting cards in computer software; often only has printing on one side of page.
- **Standard Sizes:** Letter-size page folds down to 4.25”x5.5” to fit an A2 envelope.