

Concertina binding

The concertina is a stitchless, folded binding that can be assembled with or without adhesive. It is easy to make and offers a versatility that can be creatively adapted to an enormous range of projects.

The concertina, or accordion binding, is an ancient binding method that sits somewhere between a modern sewn book and an ancient scroll. It was the first binding to take the book form—it can be read like a book, but its contents are displayed on one continuous folded sheet. Previously, concertinas would be limited to the size of a single sheet of paper, but contemporary versions are often made from a number of glued sections that overcome this limitation. This enables you not only to increase the size of your book, but also to change the

papers within the concertina at any point along its length. Here you will learn the principles of concertina binding, as well as one method of casing a concertina into a cover.

DEFINING CHARACTERISTICS

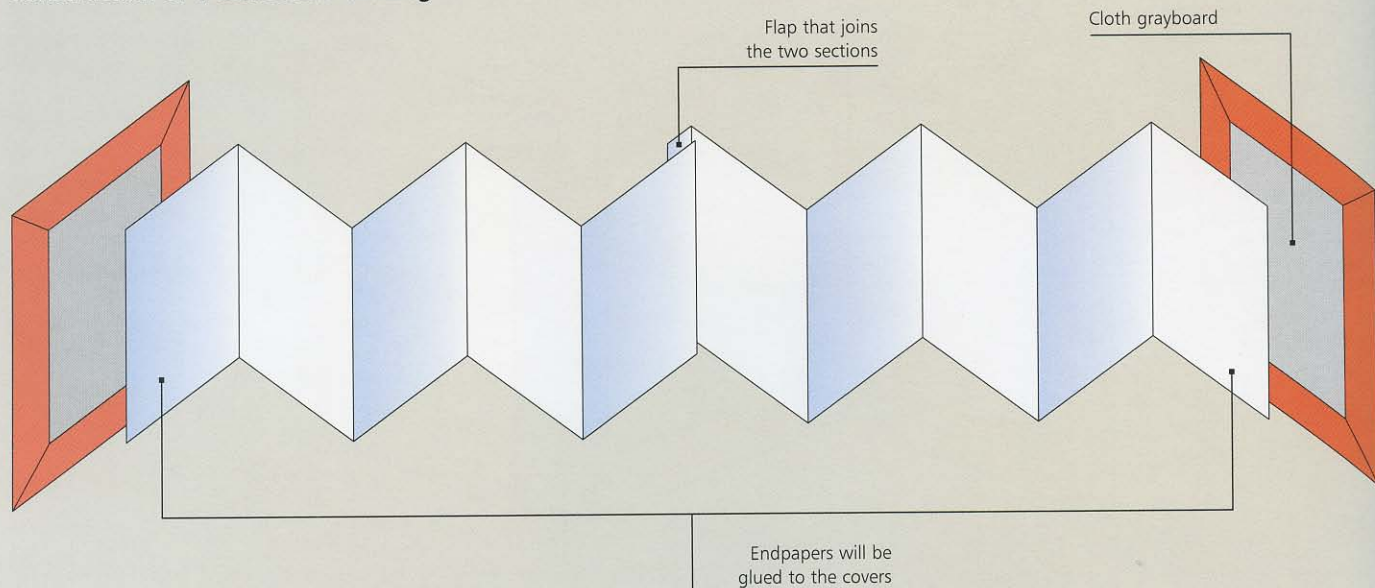
The concertina is made by the repeated, counter-folding of a sheet of paper—the flat surfaces between the folds constitute the pages. The folds allow the finished object to be held in the hand and read like a book, but when opened fully, the single sheet may be several feet long. By

its nature, the concertina book offers two distinct sides: the front, which is usually the side presented to the reader, and the back, which is often, although not always, left blank. The pages can be left unbound or can be cased either in a single board at front and back, or a case binding, similar to a sewn book.

See also

A Diction, on page 110, is a concertina book with an altered page shape.

Construction of a concertina binding

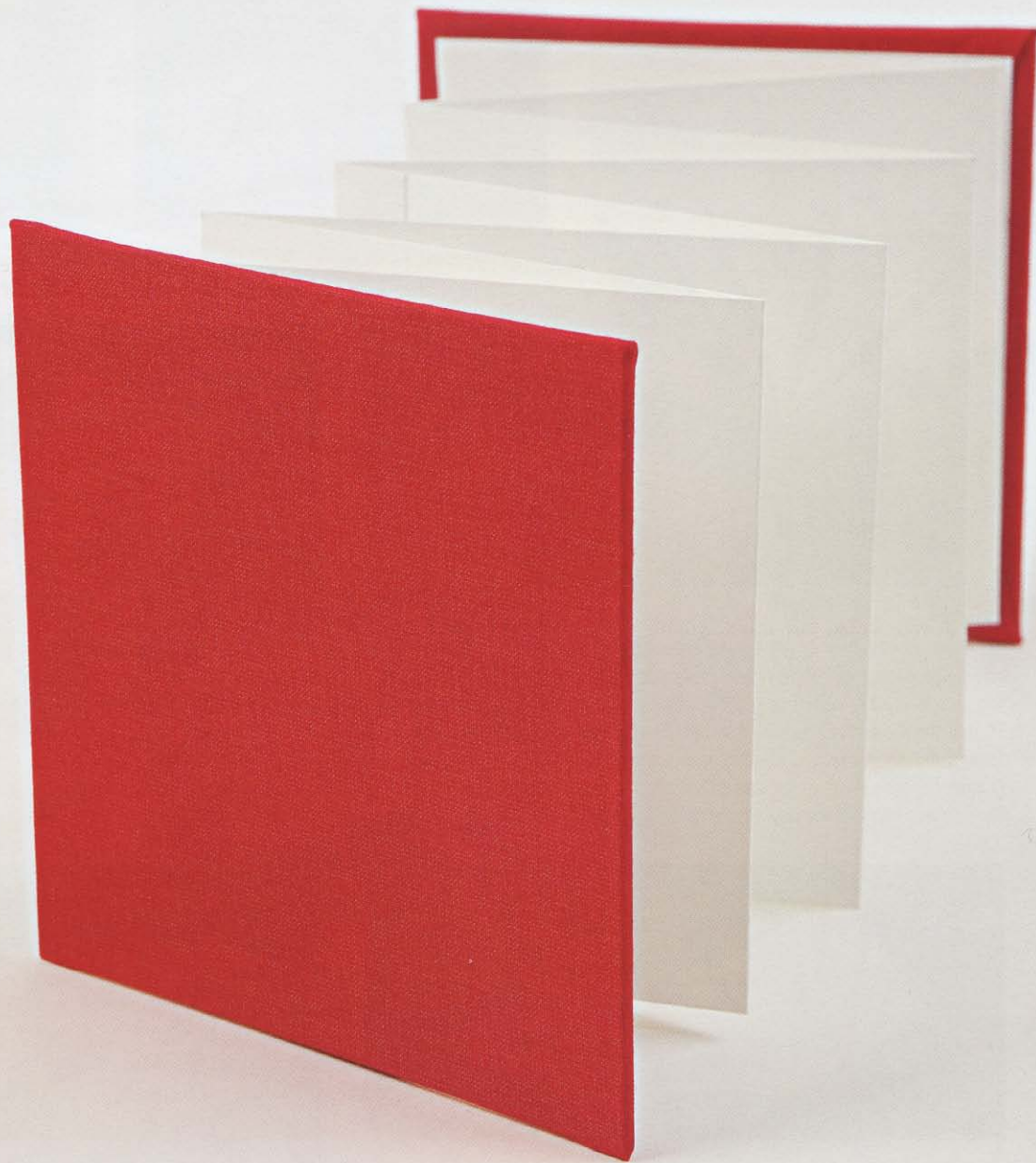


Materials

- ♦ Book block: one sheet 100 lb (220 gsm) paper, $3\frac{3}{4} \times 18\frac{3}{4}$ in. (9.5 x 47.5 cm), with grain parallel to the short edge; one sheet 100 lb (220 gsm) paper, $3\frac{3}{4} \times 19\frac{1}{4}$ in. (9.5 x 49 cm), with grain parallel to the short edge
- ♦ PVA glue
- ♦ Book cloth: two pieces, 6 x 6 in. (15 x 15 cm)
- ♦ PVA/paste mix
- ♦ Grayboard: two sheets $\frac{1}{8}$ in. (2 mm) thick, 4 x 4 in. (10 x 10 cm)
- ♦ Scrap paper

Tools

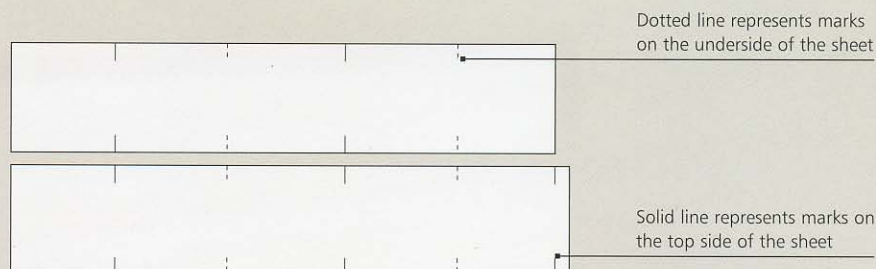
- ♦ Pencil
- ♦ Ruler
- ♦ Bone folder
- ♦ Glue brush
- ♦ Scalpel, steel ruler, and cutting mat
- ♦ Book weight or heavy, flat object



MAKING THE CONCERTINA BOOK BLOCK

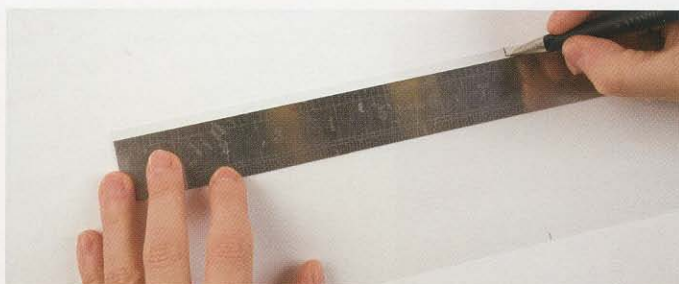
Follow the step-by-step instructions to create a concertina book block made from two strips of paper.

Marking the fold lines



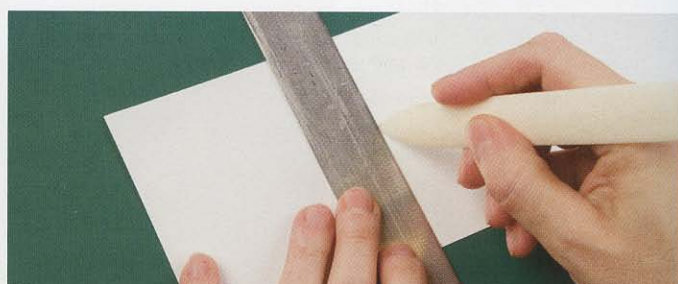
NOTE:

If you are using thinner paper—for example, around 70–90 lb (100–180 gsm)—you can make all of your marks on the same side of the sheet, because it is less liable to crack along the score marks when folded the “wrong” way.



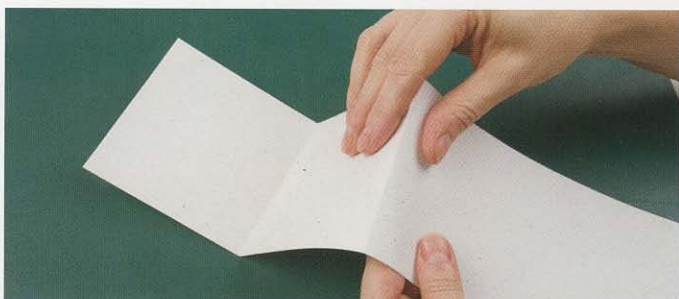
Step 1

Take the shorter sheet of paper and, with a pencil, mark the top and bottom edge of the sheet at $7\frac{1}{2}$ in. (19 cm) intervals. Turn the sheet over and mark the back every $7\frac{1}{2}$ in. (19 cm), but starting $3\frac{3}{4}$ in. (9.5 cm) in from the edge, so that the marks are positioned in between the marks on the other side. Repeat this on the second sheet of paper. You will be left with a $\frac{1}{2}$ in. (12 mm) extra portion at the end of the second sheet, which will become the flap used to join the two sheets together.



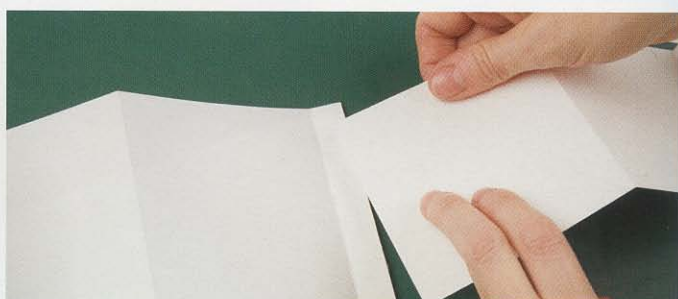
Step 2

Use the end of a bone folder along a steel ruler to lightly score the paper between the points you have marked. This will ensure that your paper folds over easily and cleanly. Repeat on the second sheet.



Step 3

Start with the shorter strip and fold the first crease backward, the next crease forward, and carry on in this way until you have folded all the creases. Do the same with the second strip of paper. Your score marks should end up on the inside of the “V” of the fold—this will prevent the paper from cracking when folded.



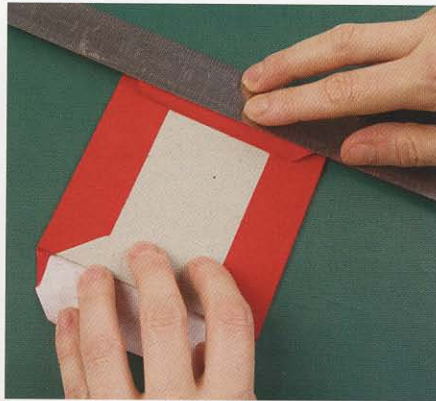
Step 4

To join the two strips together to make a single sheet, lightly glue the inside of the short flap on your longer strip. Join the two parts together so that the short flap is behind the end of the shorter strip. Dry this joint under a flat, heavy weight for ten minutes. Use a scalpel and steel ruler to trim any paper protruding at the top or bottom of the join.

MAKING AND ATTACHING THE COVERS

**Step 1**

Glue out one of the book cloth pieces, starting from the center and working outward, then place a piece of grayboard at the center. Cut off the four corners of your glued book cloth to about $\frac{1}{4}$ in. (5 mm) from the corner point of the grayboard. With the aid of the steel ruler, fold the two opposite sides of the cloth onto the grayboard, and press firmly down.

**Step 2**

Tuck in the corners of the book cloth then fold over the remaining two sides. Again, press these firmly down. Repeat Steps 1 and 2 for the second cover board, and dry both covers under a flat weight for 20 minutes.

**Step 3**

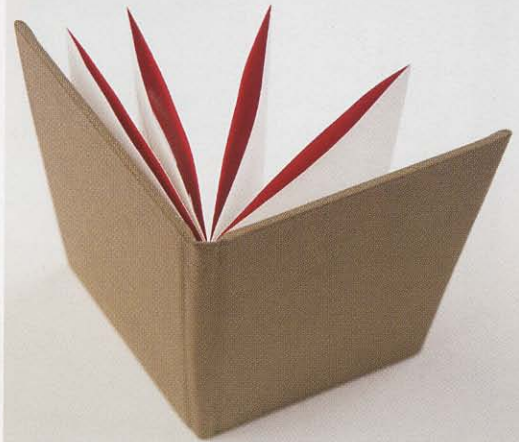
With the concertina folded, place a sheet of scrap paper under the top sheet. Glue out this top sheet lightly but thoroughly.

**Step 4**

Pick up the glued end sheet of the concertina with both hands and lightly position it on the reverse of one of the cover boards. Once you are sure it is centrally placed on the cover, firmly press it in place. Repeat Steps 1 and 2 for the back cover.

VARIATION

It is also possible to bind your concertina into a single-piece, case-binding (see pages 28–29). Binding it in this way makes it easier to handle, but also allows you to obscure the reverse of the concertina and play with this concealment using cut-throughs or hidden text.



Transformations

Some books are more transformative than others, containing hidden dimensions that need to be discovered and unleashed by the reader, and revealing metamorphoses of shape, size, and depth. The books in the following section use dynamic and economical ways of transforming their narrative and structure to become more than meets the eye.

BOOK ELEVEN

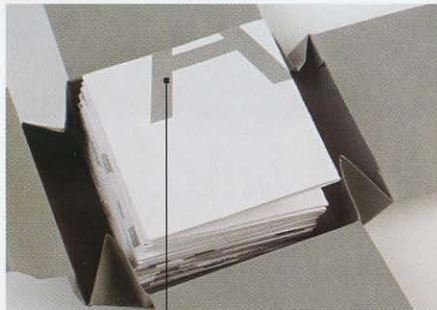
Sheet or book? *THE BOOKMAKER* BY DEB RINDL

At first sight, *The Bookmaker* appears to be a small folded and printed book-like object housed in a box. However, as the hands explore and expose its workings, and the eye takes in its fragmented and almost decorative text, the reader comes to discover that it is constructed from a single sheet of paper. As the sheet reveals itself, the text, no longer fragmented, conveys instructions for making a book from a single sheet of paper. The metamorphosis between raw and finished state betrays the simplicity of its structure. On the one hand it is a book, on the other a sheet, the transformation being enacted via cuts and folds. This is, after all, the very essence of bookmaking.

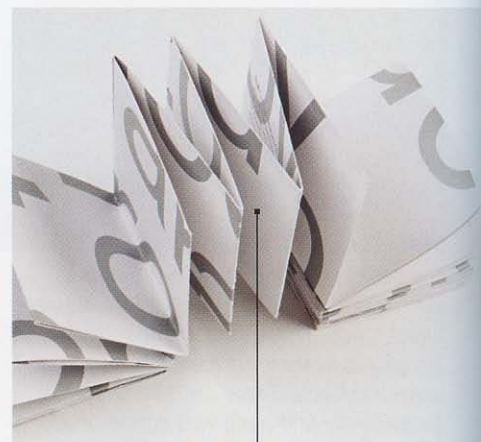
MATERIALS AND TECHNIQUES

The book was printed in two colors using offset lithography. The cuts and folds were then applied by hand, following a specific pattern. The artist sees this finishing process as an essential part of reclaiming the book as a handmade object.

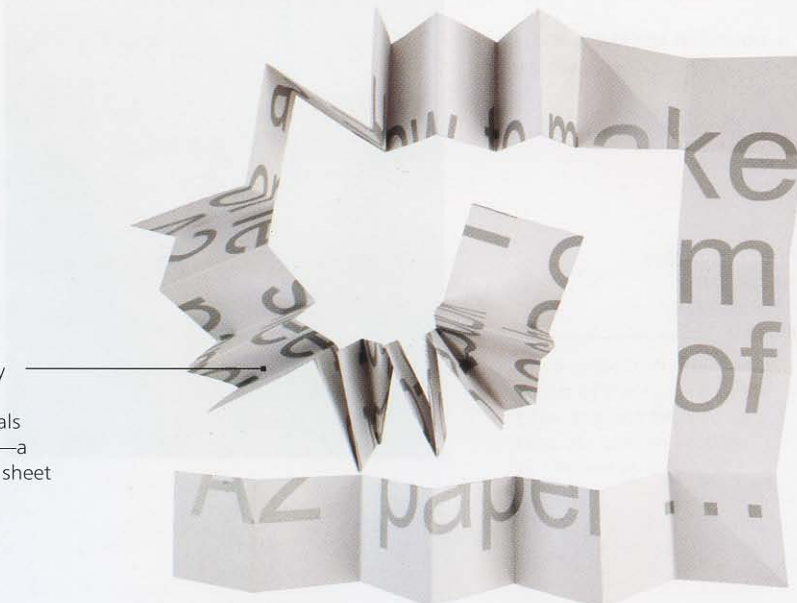
The book was produced in an edition of 150.



Exploring the book reveals a meandering, concertina fold with printed text on both sides



First impressions are of a small, multi-page book



When fully open the book reveals its origins—a single flat sheet

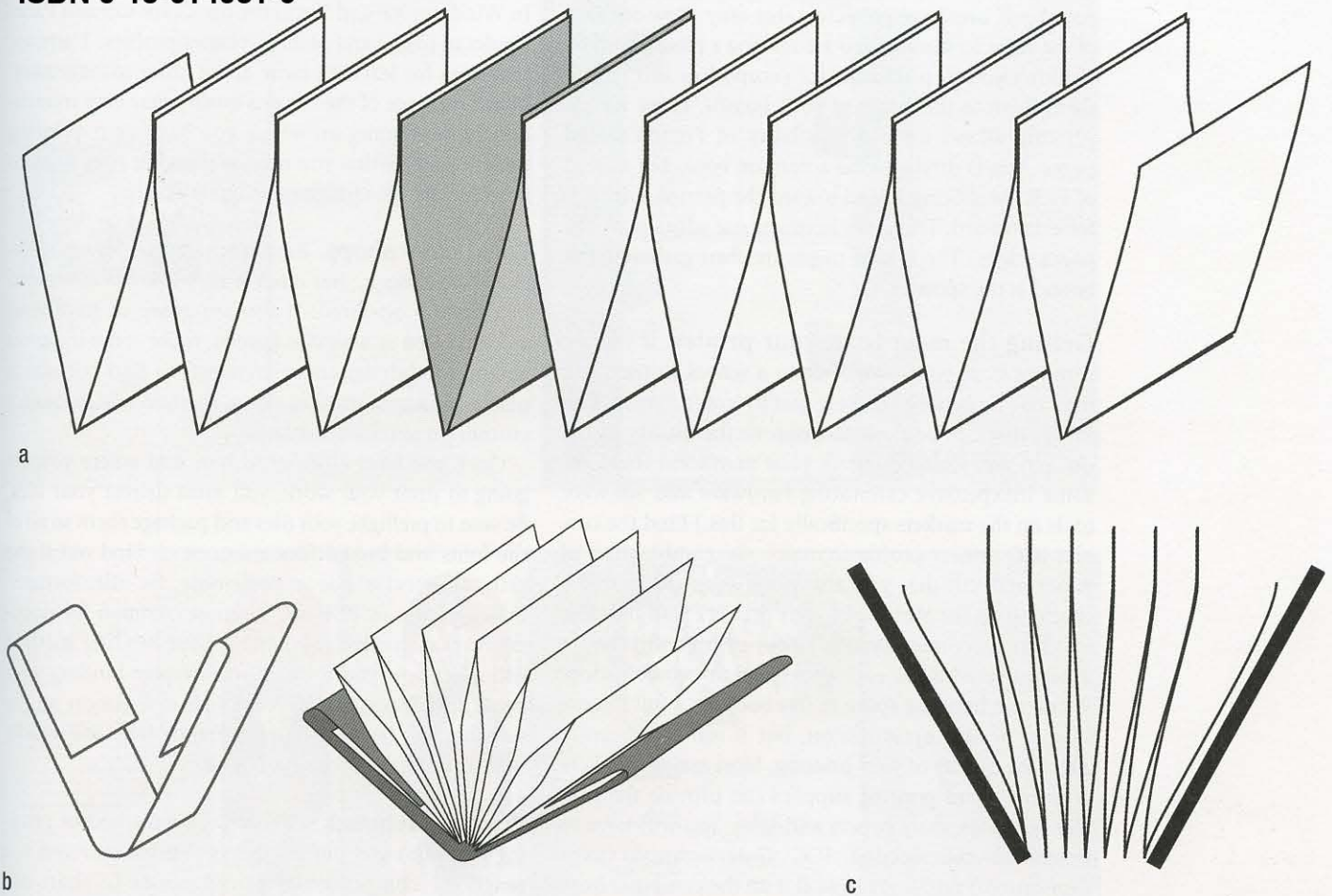


Figure 6-17a to 6-17c Accordion-fold or fan-fold books. **a.** Print each two-page spread for your book. Adhere the pages, back-to-back. **b.** When the entire book is assembled, a cover can be made to fold around the entire stack to hold it together. The spine can be held together more securely with a little PVA (polyvinyl acetate) glue and some cloth to make it more secure and flexible. **c.** Hardcover can be attached by adhering the end pages to book boards. The boards can be covered with book cloth or suitable paper.

Printing

Paper and paper size. In selecting paper to print your portfolio, pay particular attention to standard sizes, thicknesses, and finishes. For high quality printing, it is good to explore the range of papers designed for laser or inkjet printing. Matte coated papers designed specifically for inkjet have a smooth, non-glare surface and good ink holdout that results in excellent color saturation. Most sizes and weights are available coated on both sides for printing back to back.

Glossy finished papers tend to damage more easily, have a tendency to crack when folded, and are generally less suitable for book projects. However, they may be used for contrasting pages, for printing mockups of labels or other items that might be mounted or tipped into a book page. Offset printing papers, coated or uncoated, may be used for inkjet or laser printing, but results may vary widely. Some high quality uncoated offset papers produce excellent prints, and the tactile quality of the paper becomes part of the design statement. The portfolio book by Caspar Lam in Figure 1-6

was printed using Mohawk Superfine 100 lb cover and 100 lb text.

Alternative paper stocks, such as vellums, metallics, textured and colored papers should be considered for accent or variety. We certainly do not want to discourage experimentation and creativity! Test printing is, however, always a good idea.

As discussed earlier, except for leave-behinds or teasers, page sizes smaller than 8" × 10" will probably not show off graphic design work to its best advantage. The standard letter size (8.5" × 11") or the A4 size may be too common to get noticed. A suitable size for custom-printed work seems to be the 13" × 19" paper. Many newer-generation inkjet printers can handle this size; and folded in half, it yields a respectable 9.5" × 13" page. This size also conveniently corresponds to a standard portfolio case that comes 13.8" × 19.8" inches.

Large format roll printers. These printers can output from 24" to 52" wide paper. Most of these can only print on one side of the paper. This is not a problem if

Figure 6-5
Commercially available
screw posts.



Figure 6-6a Screw-post binding is a simple mechanical binding that can be done in a variety of ways. It allows you to change pages quickly. The posts can be allowed to show, or, as demonstrated above, they can be hidden by folding the cover back over them. (Always check the grain direction of the paper and score it before folding; paper folds more smoothly if the fold is parallel to the grain but the fold is stronger if it is across the grain.)

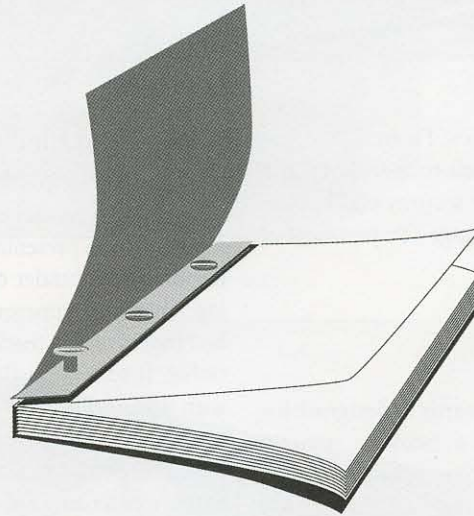


Figure 6-6b With screw-post binding or with stab binding, if you are using a rigid cover, you must make a hinge on both the front and back covers so they can fold completely open. Use a strip of book board wide enough to accommodate the screw-posts (about an inch to an inch and a half wide). This will be the spine. Glue a strip of cloth (preferably book cloth) on the spine and the cover, as shown, folding it over to make a neat edge. Be sure to leave about twice the thickness of the board between the spine strip and the cover, as shown, so that the cover can fold back. Then glue another piece of cloth onto the hinge to cover the folded-over edges. Make a hinged front and back cover. Use a drill to make the holes for posts or for sewing.

