

Desktop Publishing

Carnegie-Mellon University

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Binding and Finishing

What is Binding and Finishing

- This category of the process includes everything from simple folding to complex die cutting and case binding

Design for Limitations

- Binding and finishing equipment is usually accurate to within $1/32$ of an inch whereas presses are accurate to within .010 of an inch.
- Take the tolerances into account when creating artwork for complex finishing work.

Imaging in the Bindery

- Die cutting
- Kiss Die cutting
- Embossing and Debossing
- Foil Stamping
- Holography

Cutting and Trimming

- We run jobs on paper larger than the TRIM size to accommodate bleeds, color bars, multiple-up images
- Waste must be trimmed away and items cut apart from each other

Drilling and Punching

- Holes for three-ring binders are drilled
- Diameters range from 1/8 in. to 1/4 in.
- Holes that are not round must be punched

Scoring and Perforating

- Scoring means to crease the printed piece to allow it to fold more easily
- This is necessary when paper is thicker than .005 in.
- Coated stock that is printed with large solids of ink requires scoring to prevent cracking

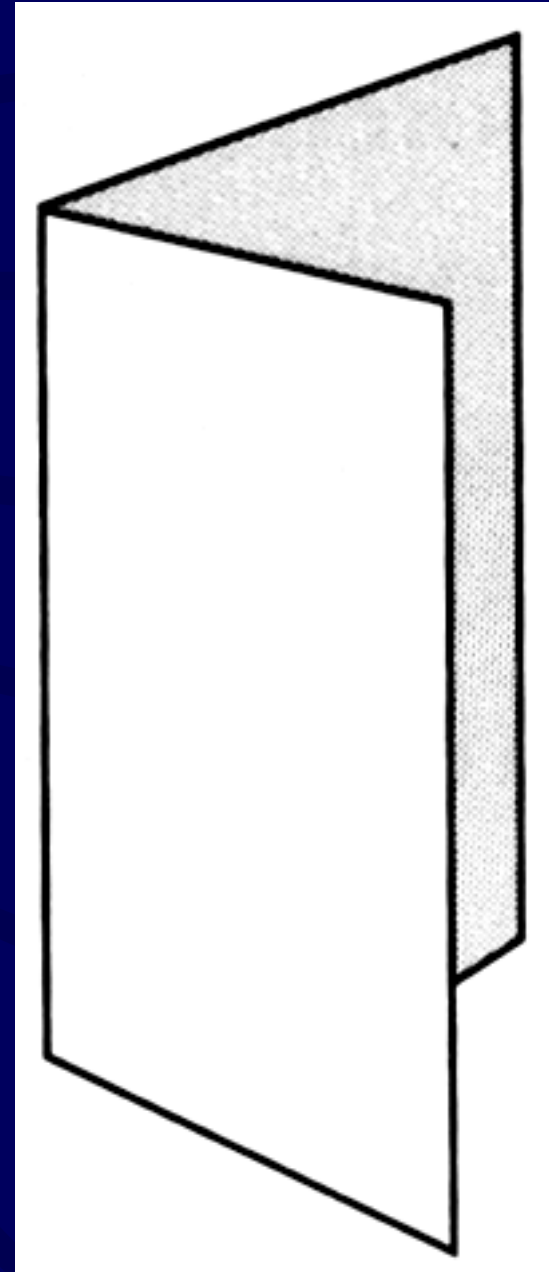
Folding

- The options seem almost endless
- Most printers do basic folding
- More complex jobs need to go to trade binderies
- Accuracy of the folds is compounded with the number of folds

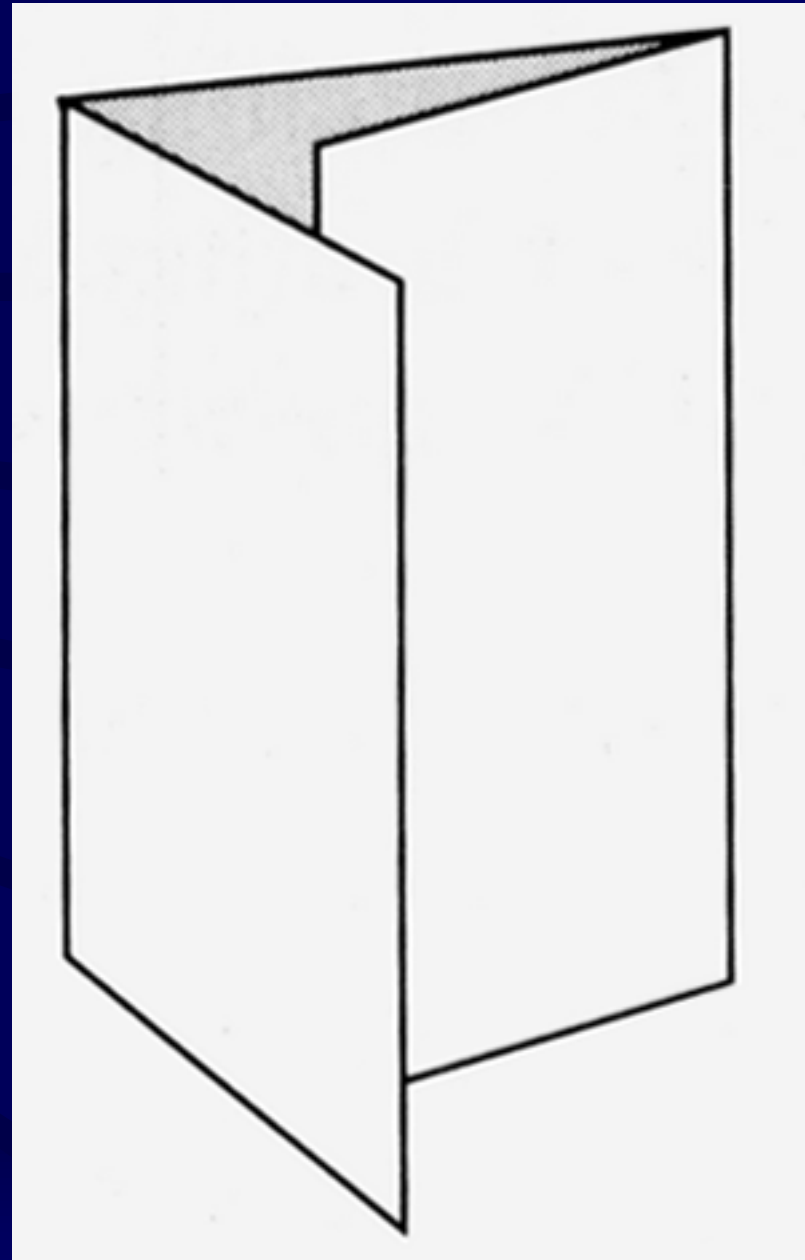
Grain Direction

- Paper folds better when folded WITH the grain rather than against it.
- Plan the final fold grain long so that the piece lies fat and opens easily
- Grain direction affects perfect binding also, causing pages to pucker in the binding edge

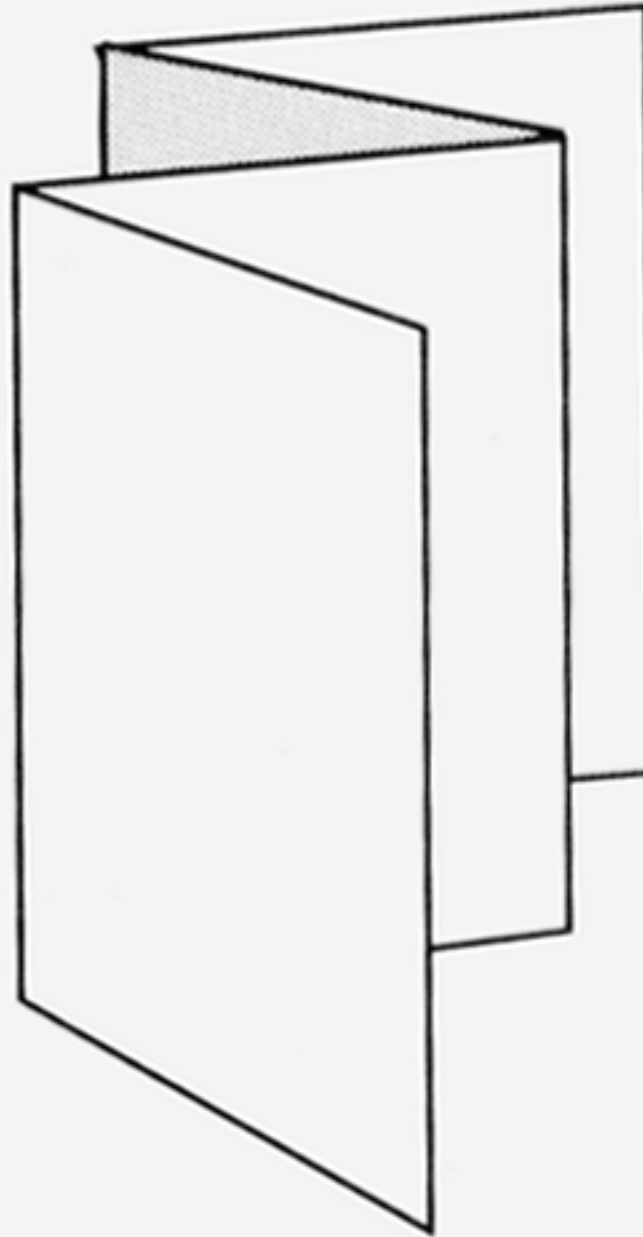
Four Page



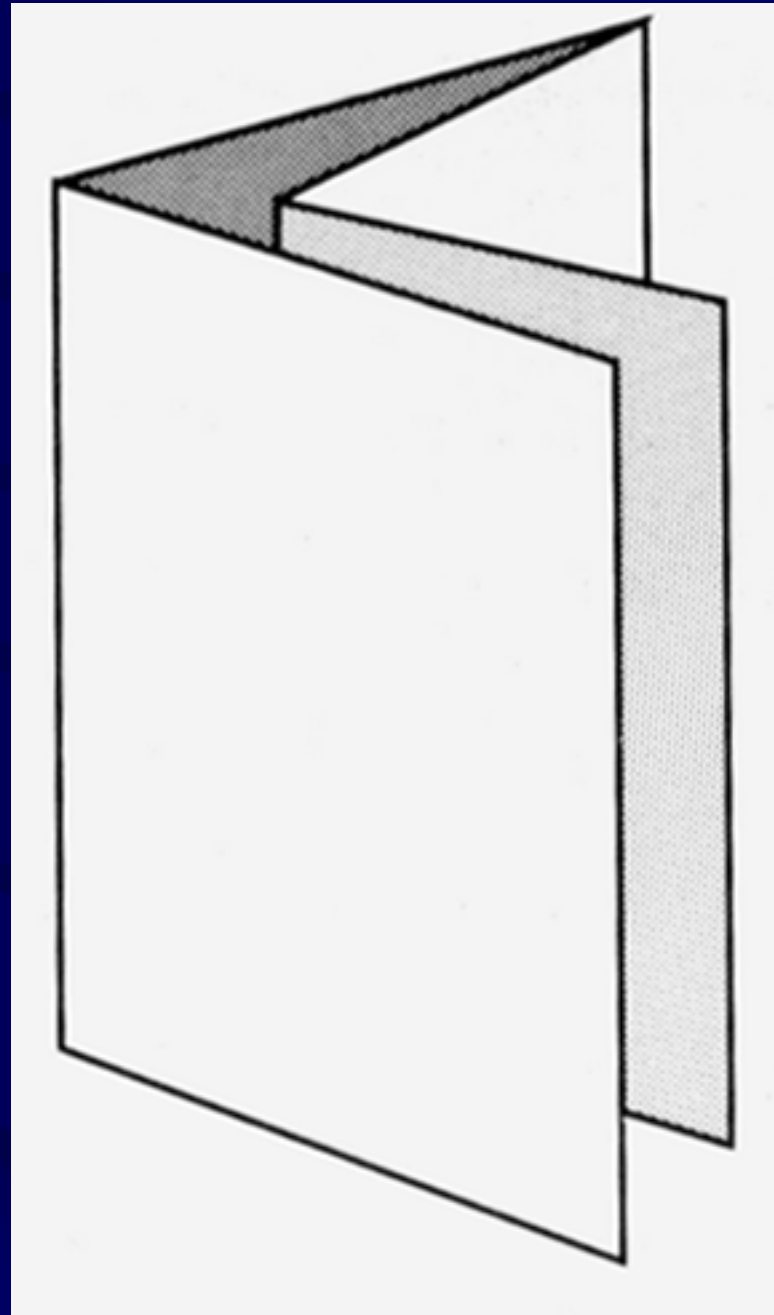
6-page letter



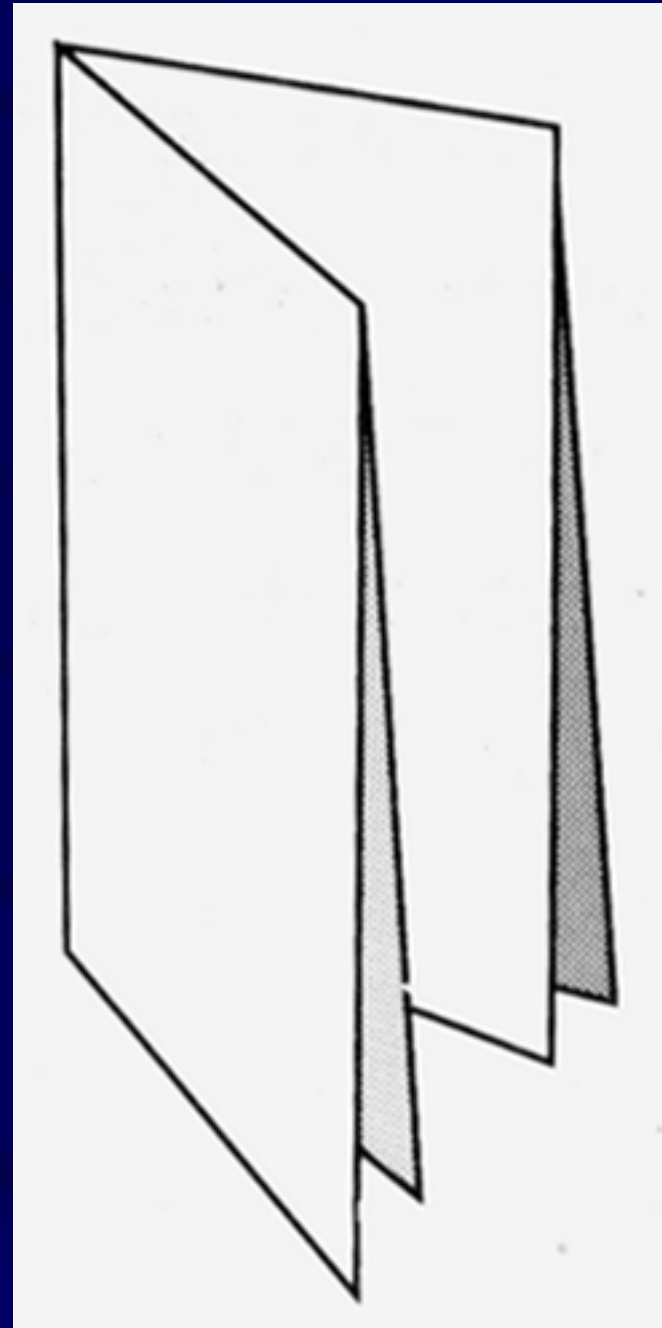
6-page accordion



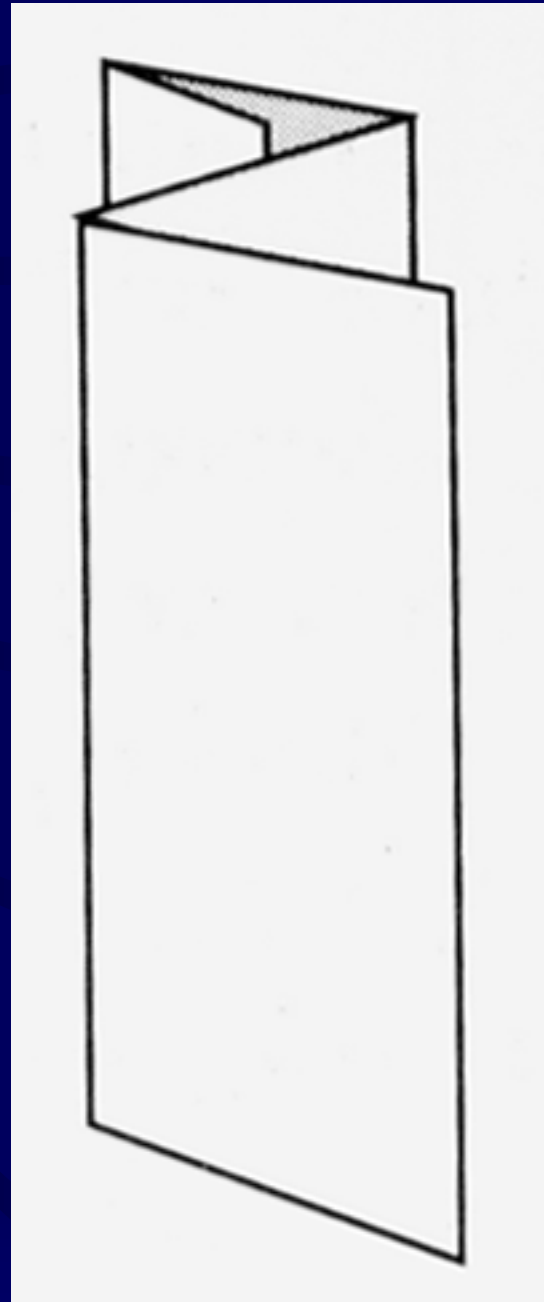
8-page parallel



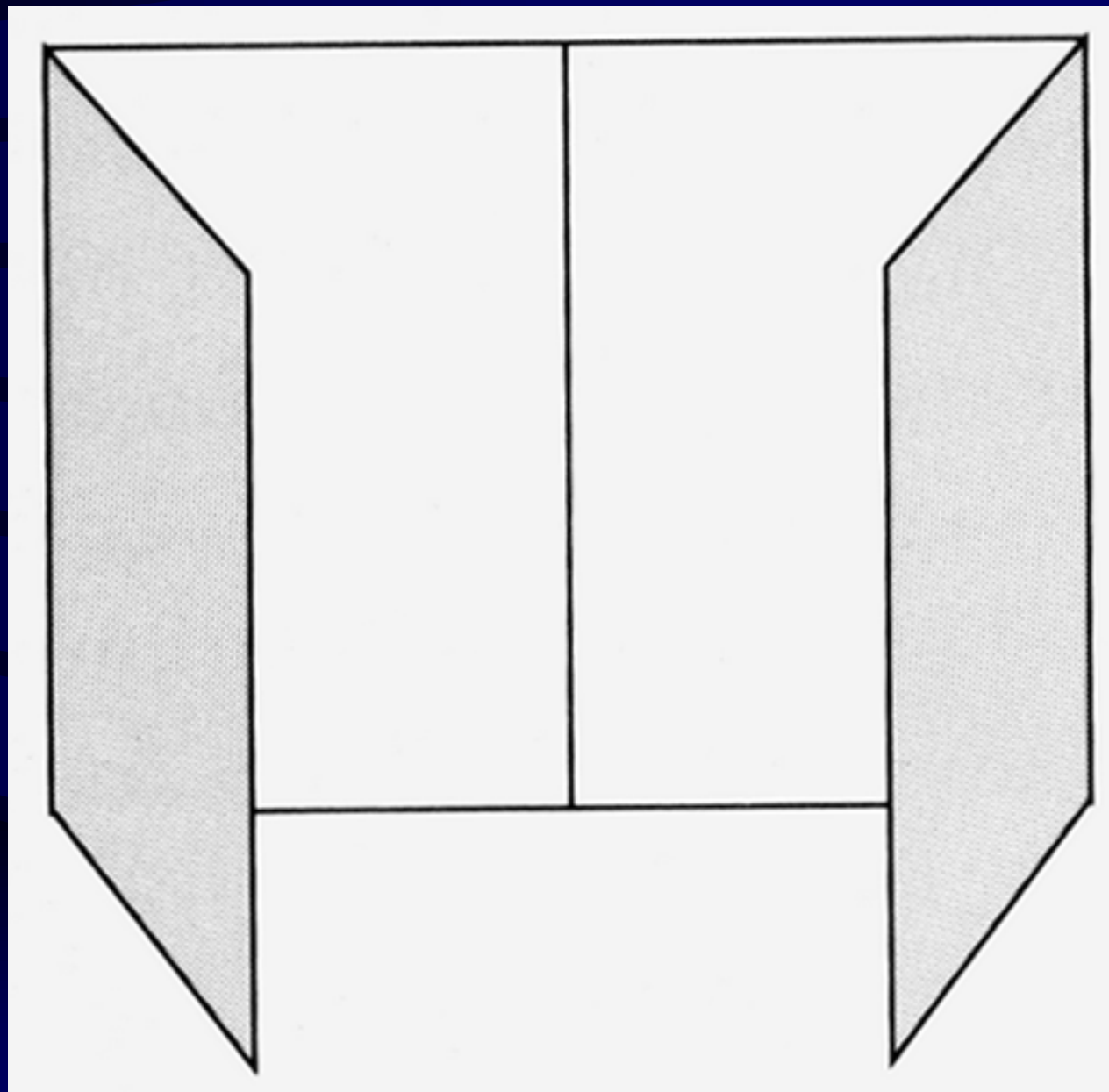
8-page French



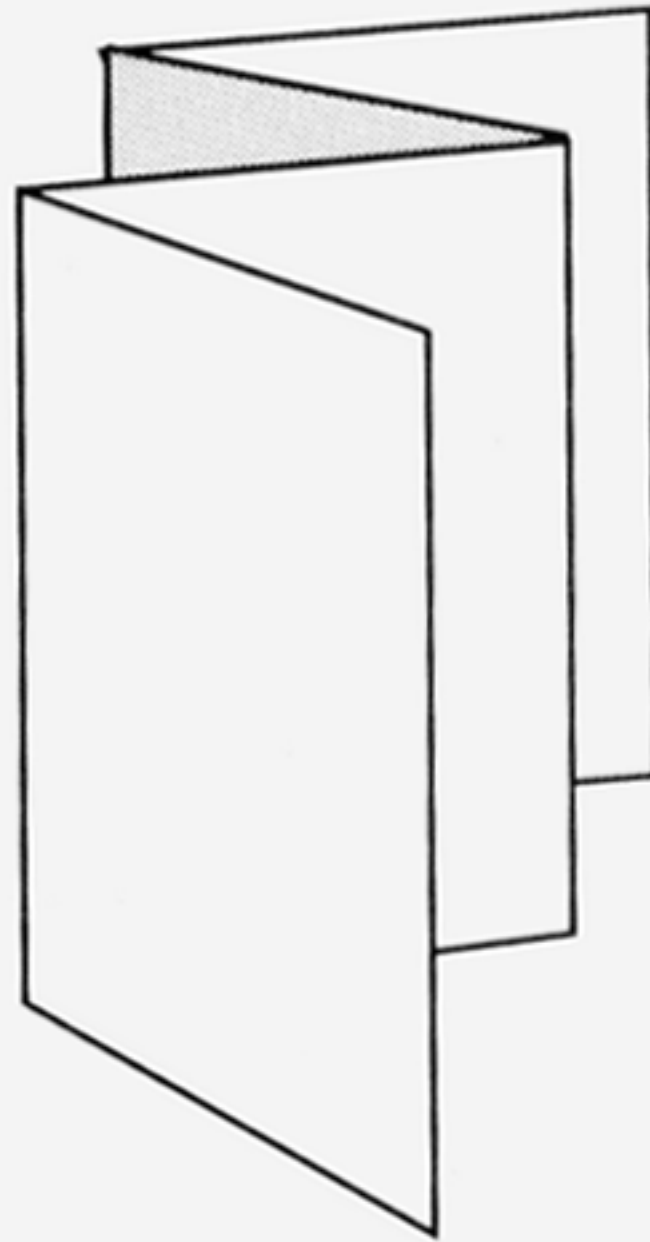
8-page map



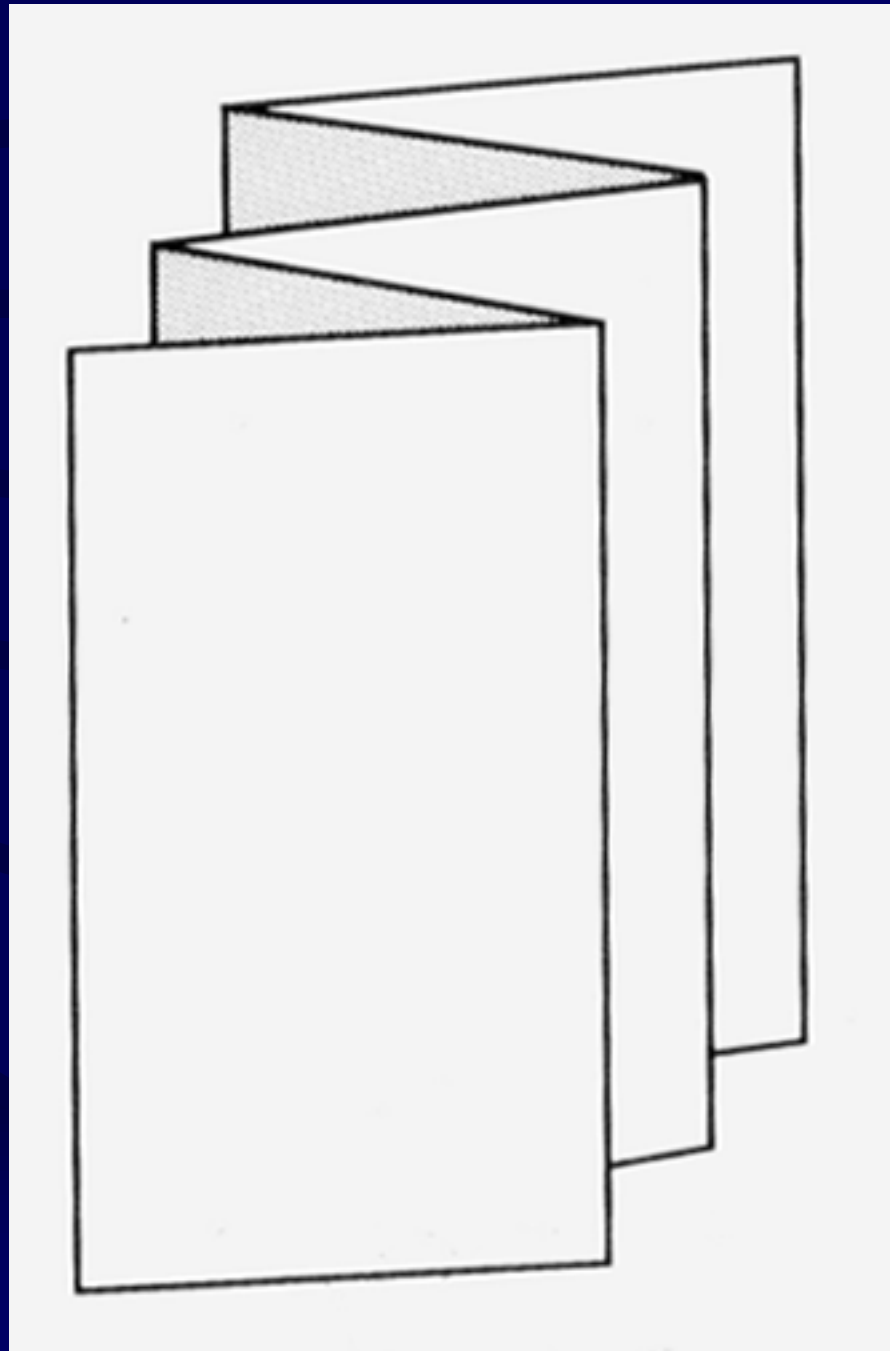
8-page gate



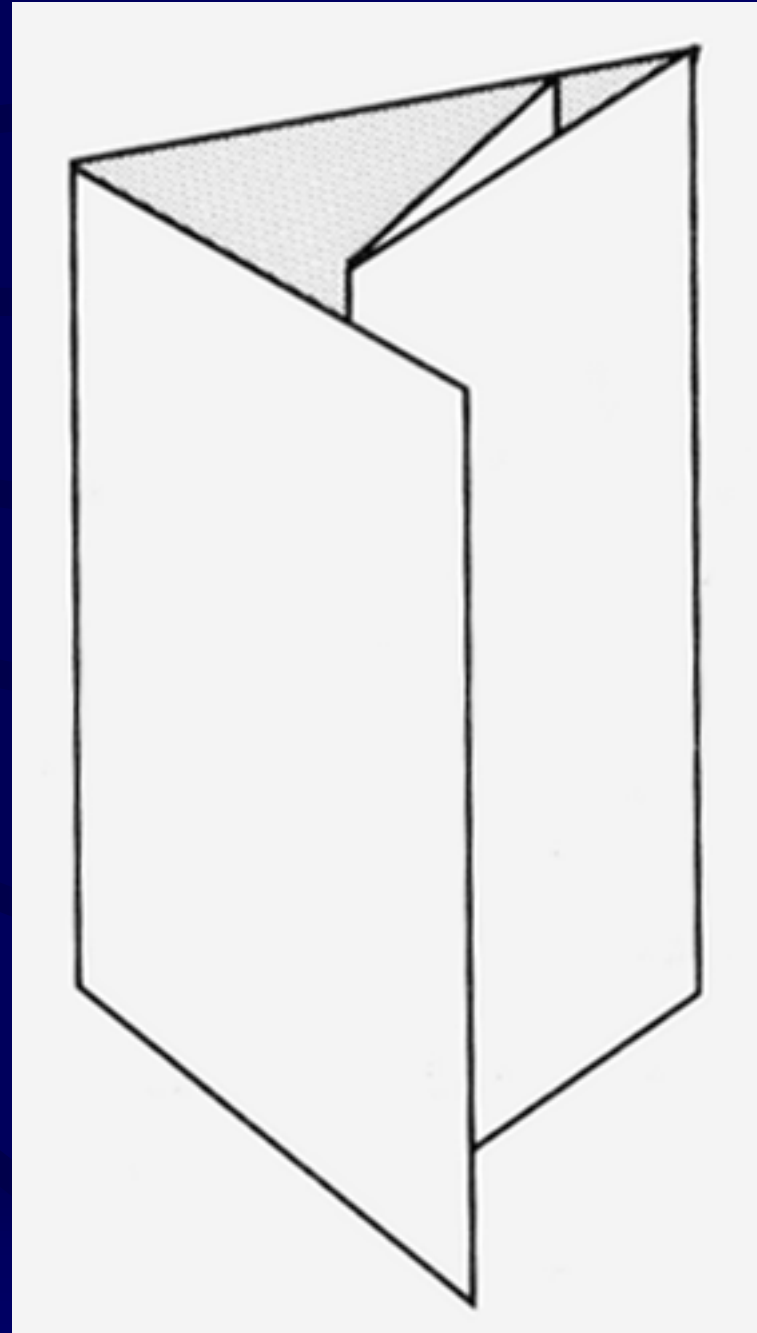
8-page accordion



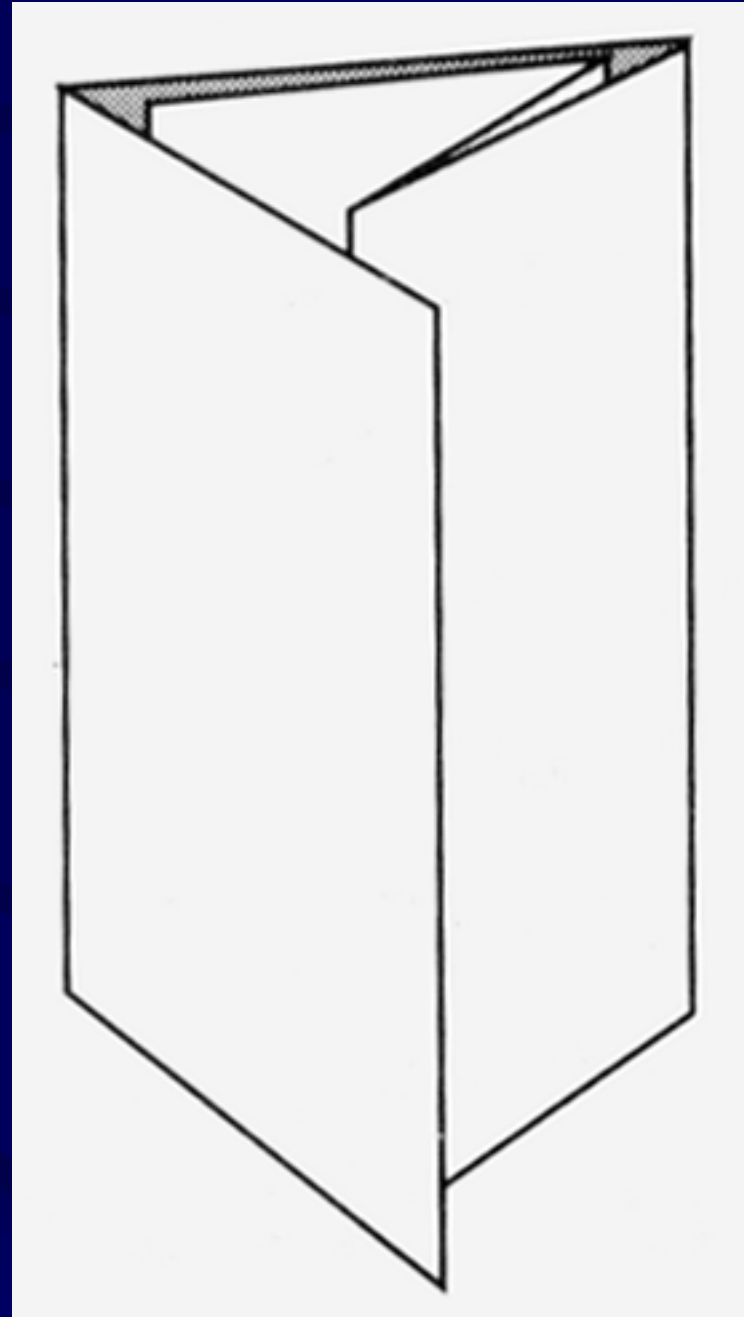
10-page accordion



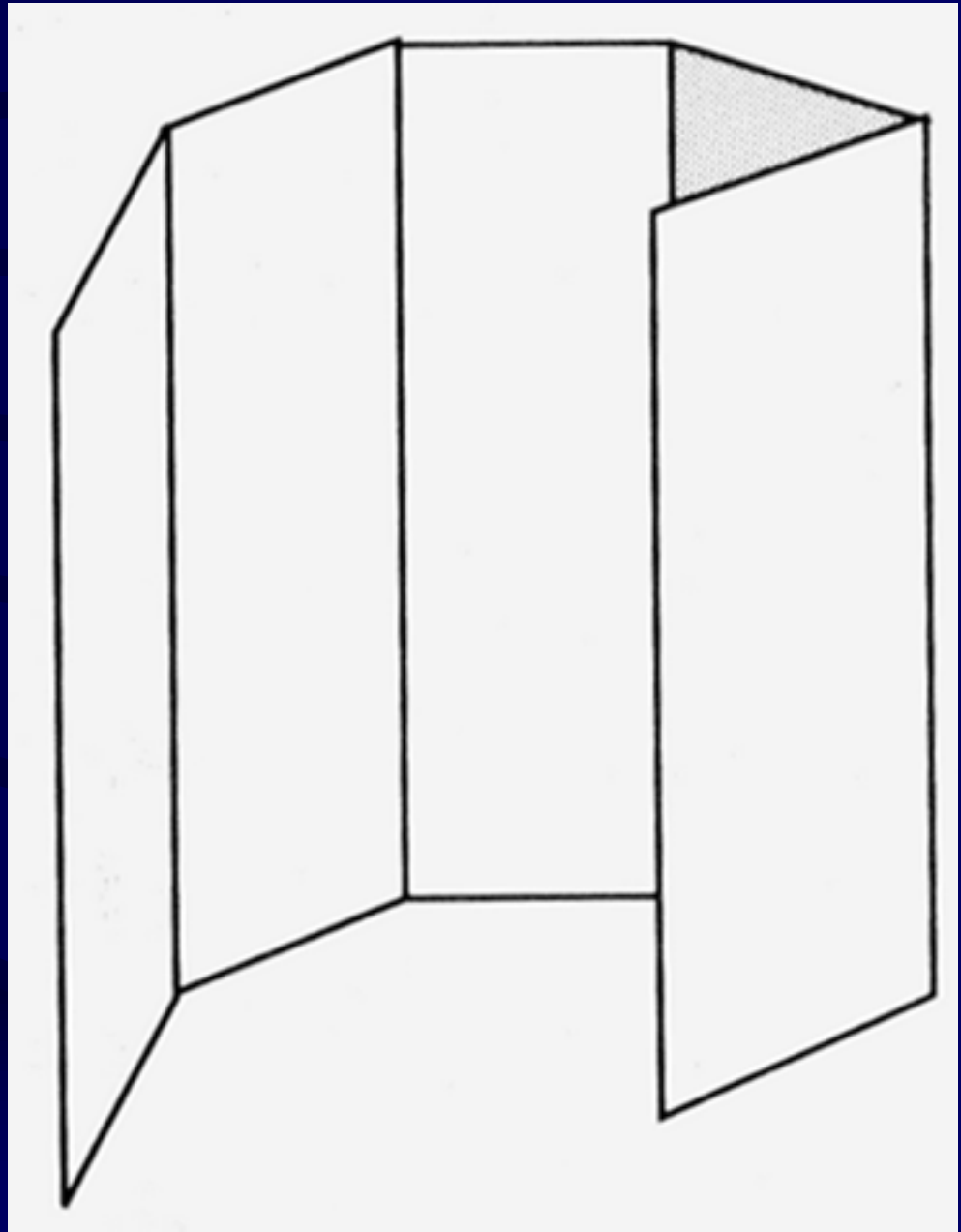
8-page roll



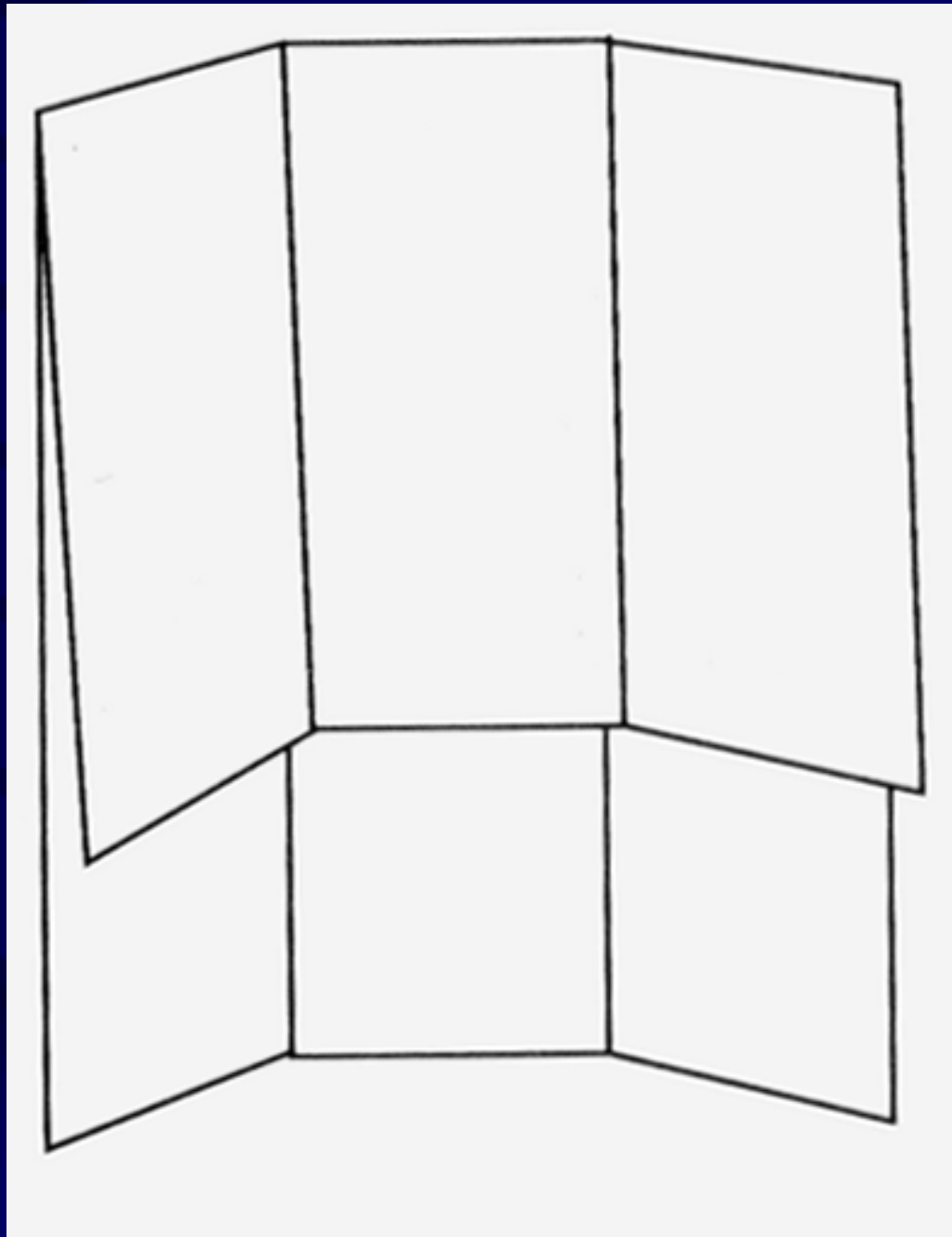
10-page parallel



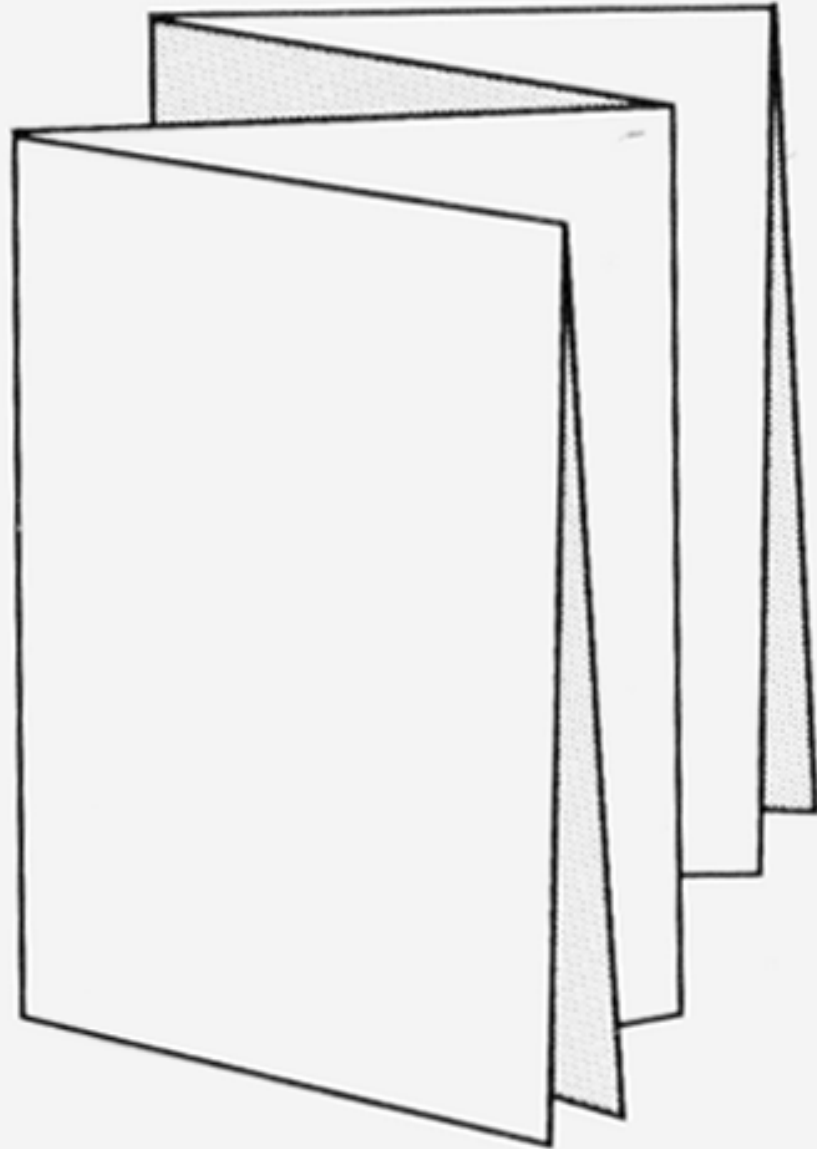
12-page roll



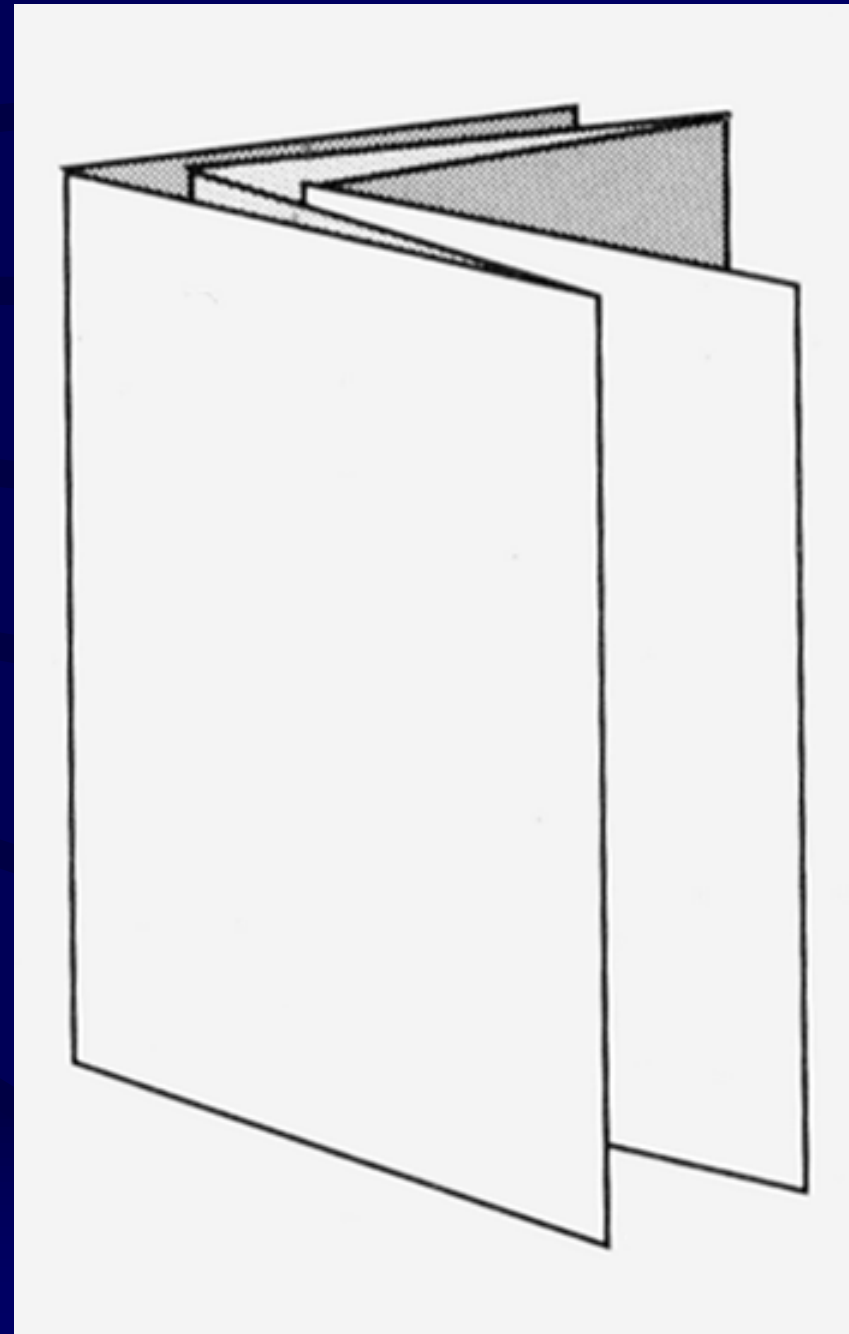
12-page broadsheet



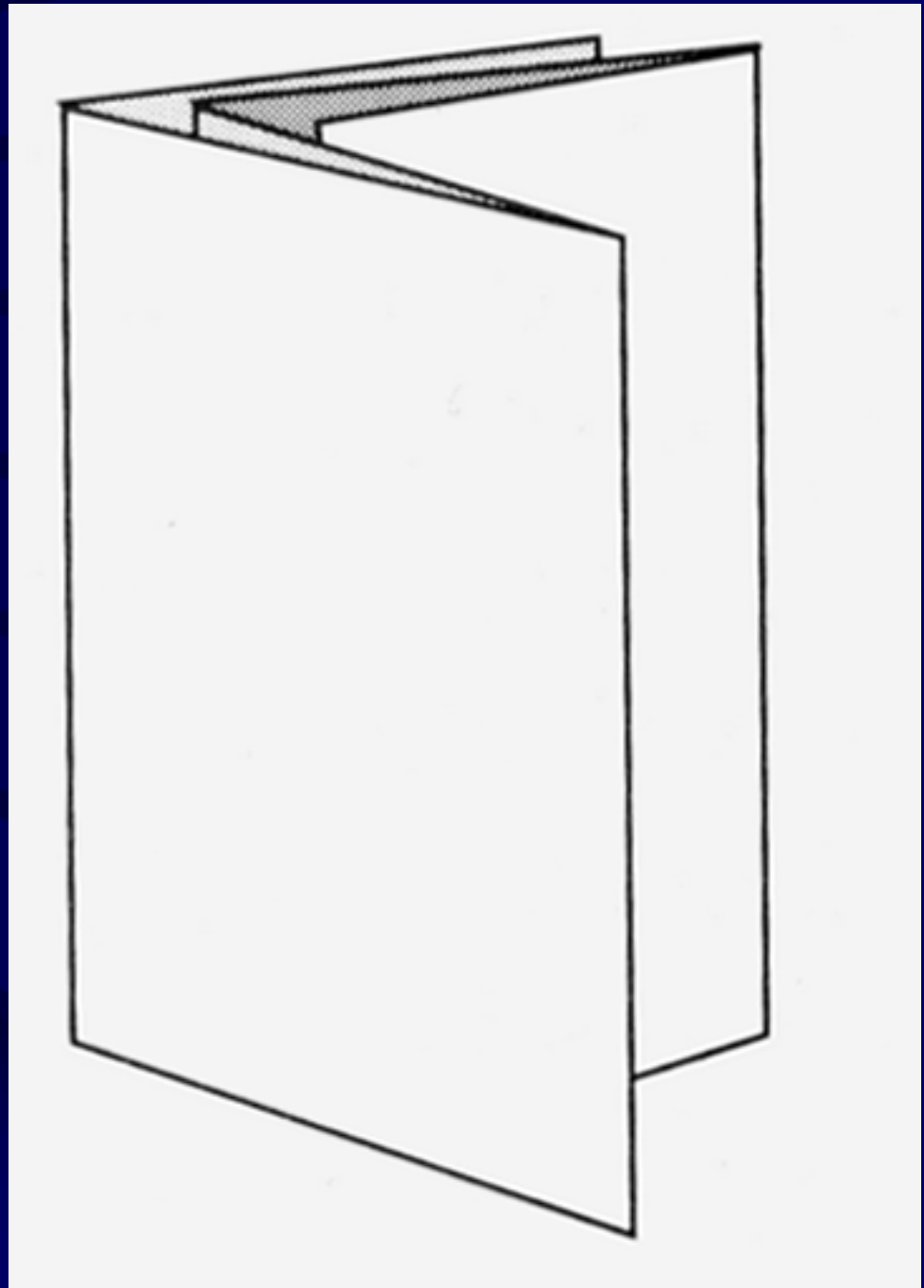
16-page broadsheet



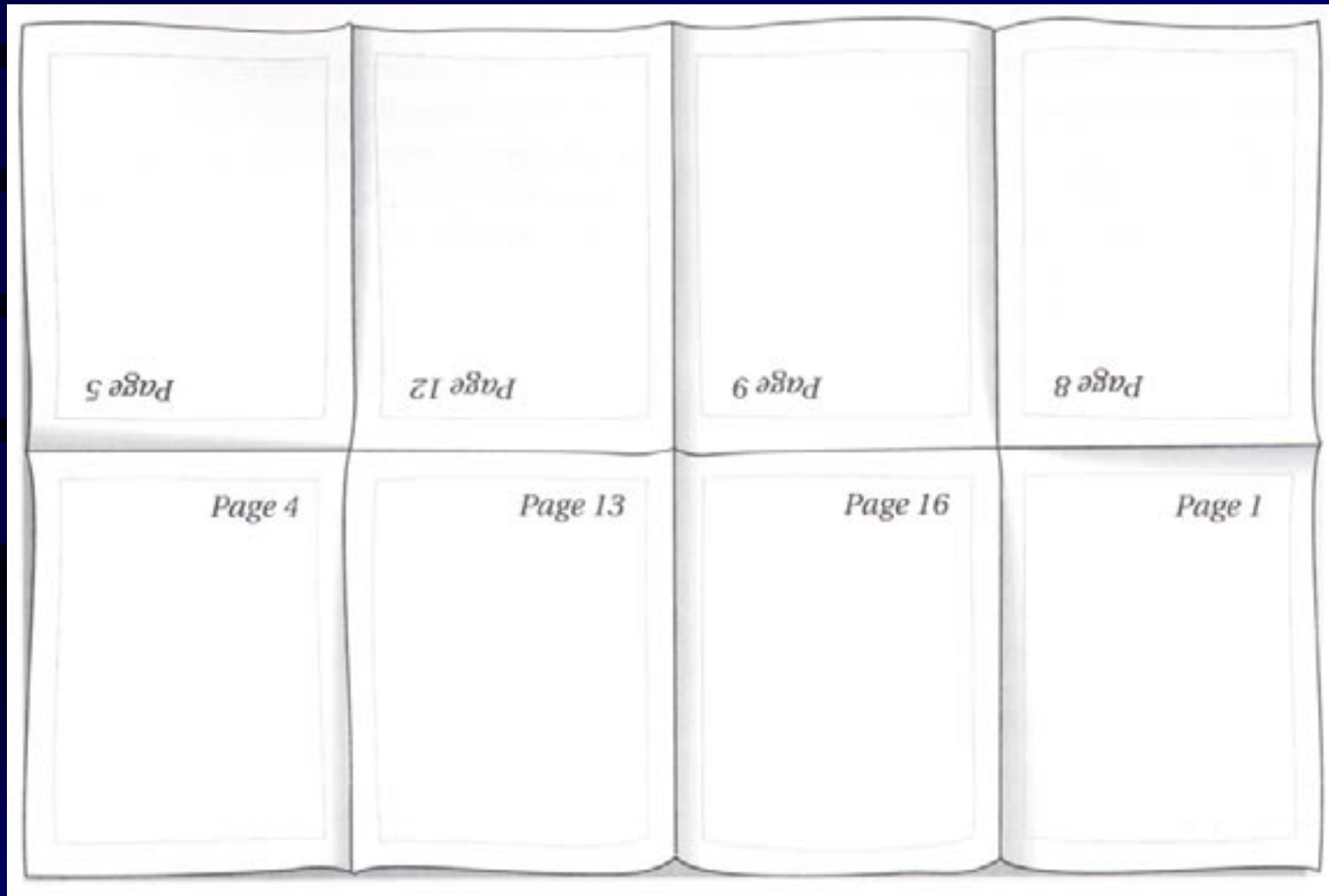
16-page signature



12-page signature



A signature



Collating

- Collating machines have specific tolerances and capabilities
- If your job has more sheets than pockets in the equipment, or the sheet size is too heavy it may require more than one pass through the machine

Laminating

- Relatively simple but costly operation
- Book jackets, maps, menus, cookbooks, counter displays, name tags
- Used to prevent moisture from reaching the final piece
- Watch curling

Adhesive Bindings

- There are several ways to glue loose folded sheets or signatures to each other.
- Each method offers a different mix of aesthetics, performance, convenience and cost.

Padding

- Almost every printer can glue a stack of paper into a pad
- One of the most simple of binding operations
- Can be a hand operation with a brush and glue pot

Gluing

- Binderies and envelope makers can apply adhesive strips for individual sealing by the user
- Remoistenable glue strips are inexpensive and can be wet sealed automatically

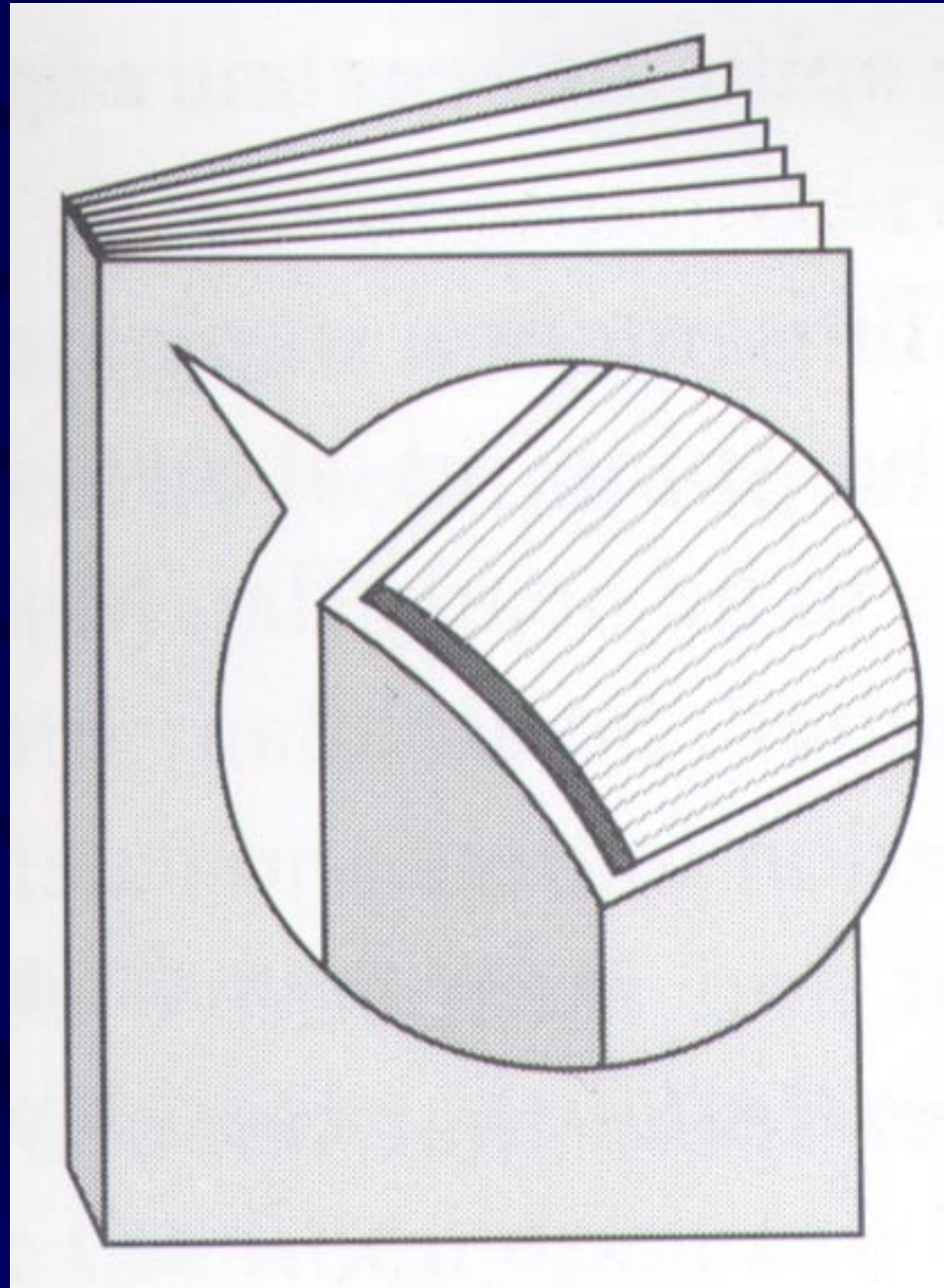
Perfect Binding

- Perfect-bound books are made from gathered signatures
- The left-side of the stack is trimmed to get rid of the folds
- The edges are roughed and notched for maximum surface adhesion

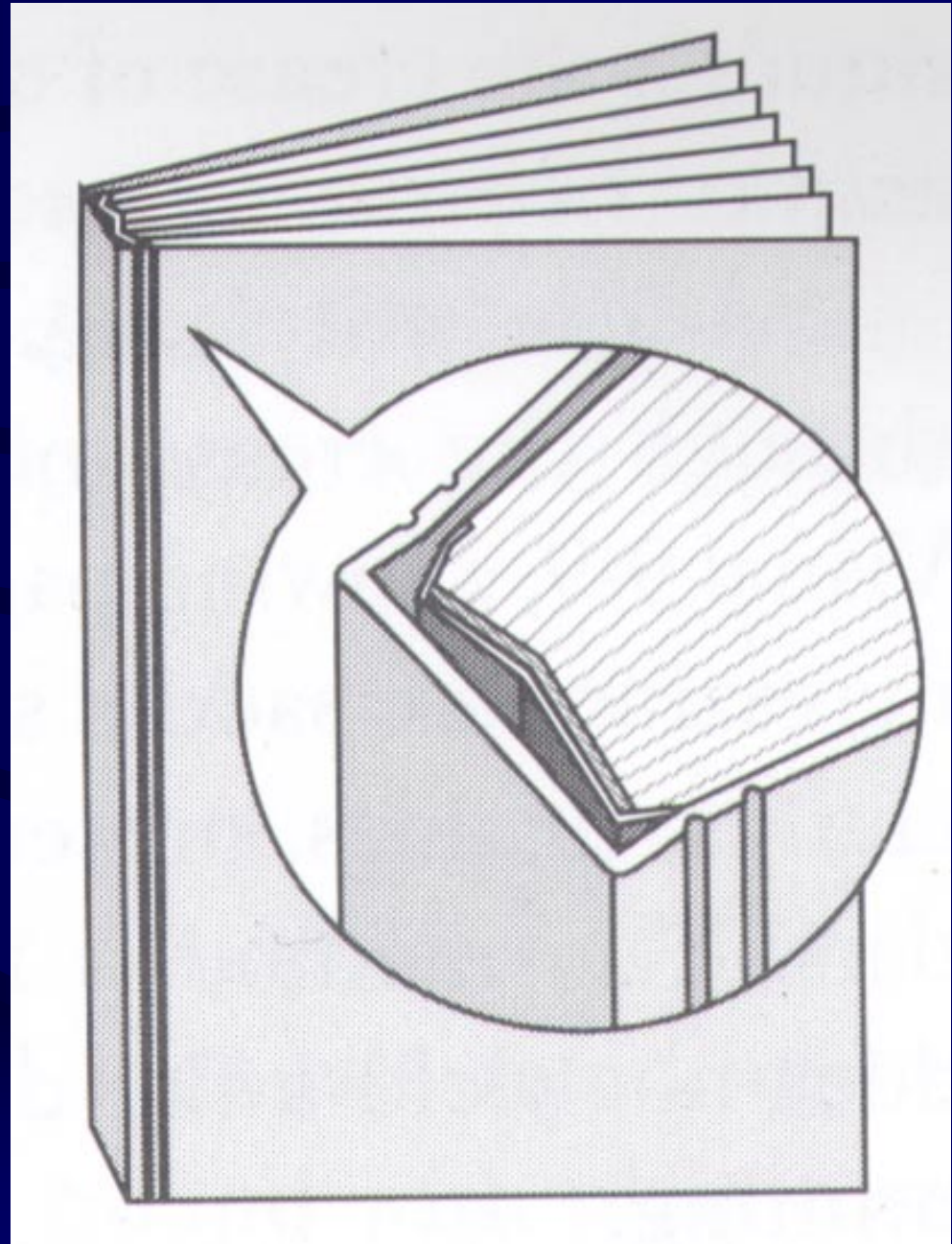
Perfect Binding

- Glue is applied to the spine of the publication and the pages are inserted
- When the glue is set-up the other three sides of the assembled book are trimmed

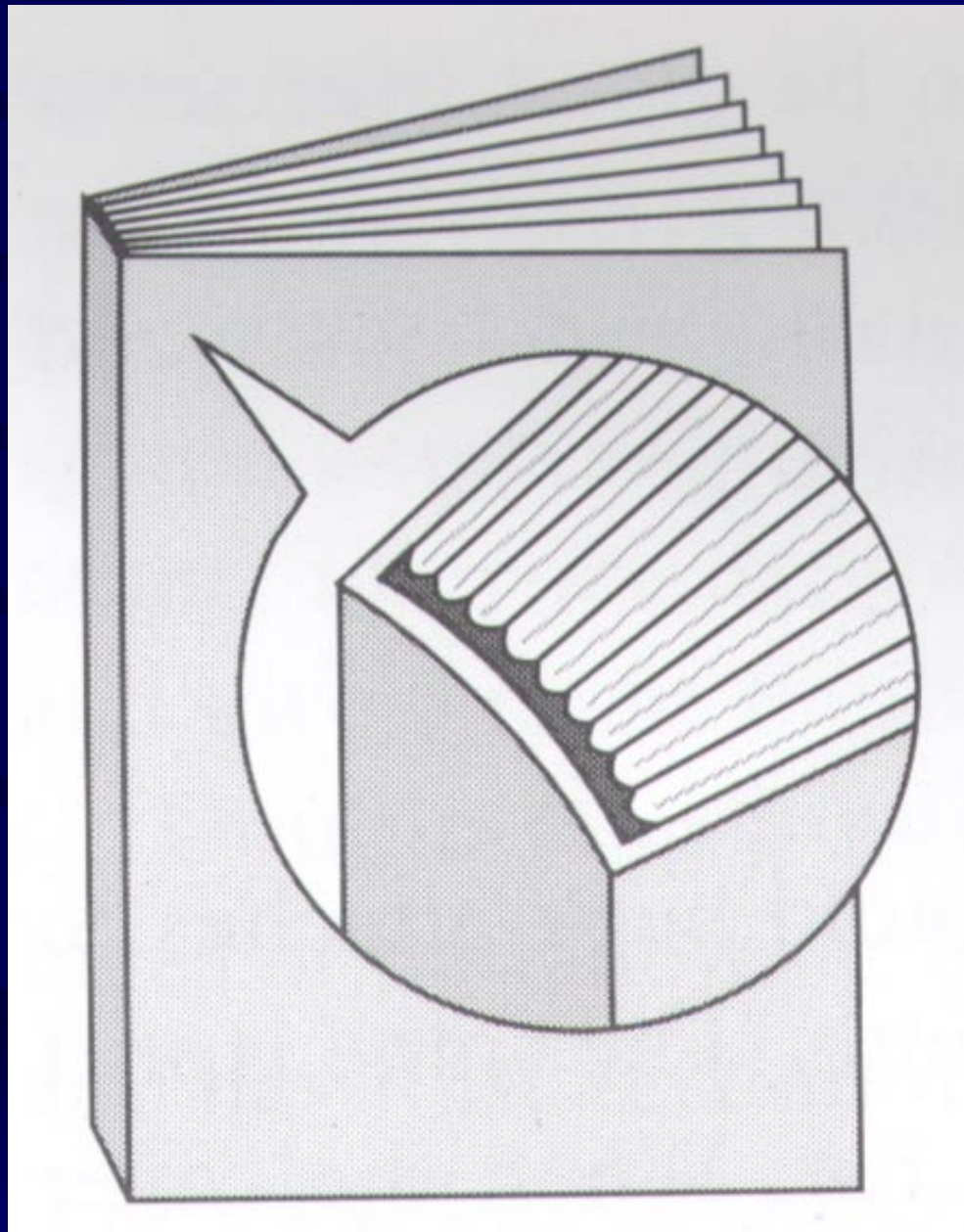
Perfect Binding



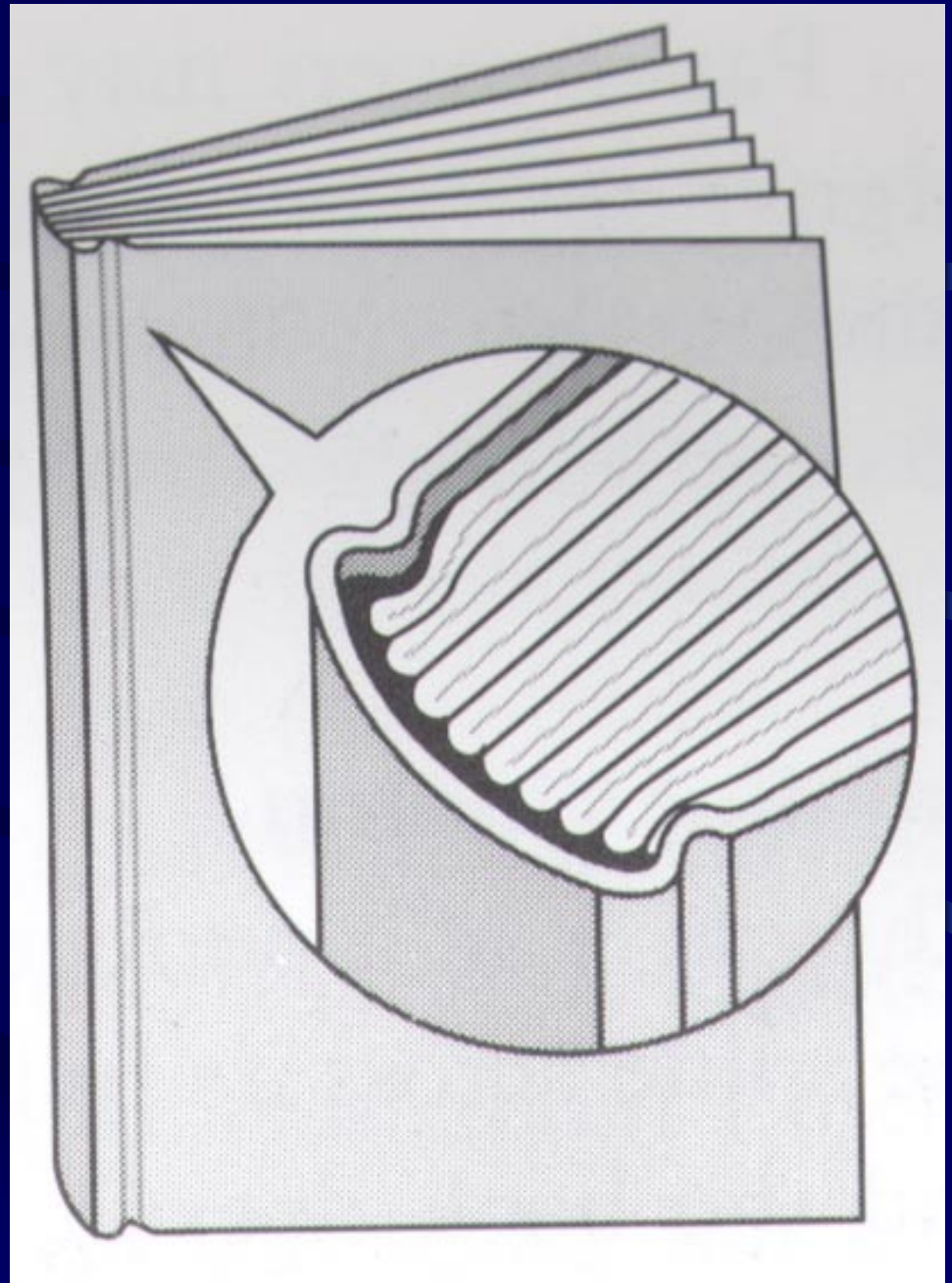
Lie-Flat Perfect Binding



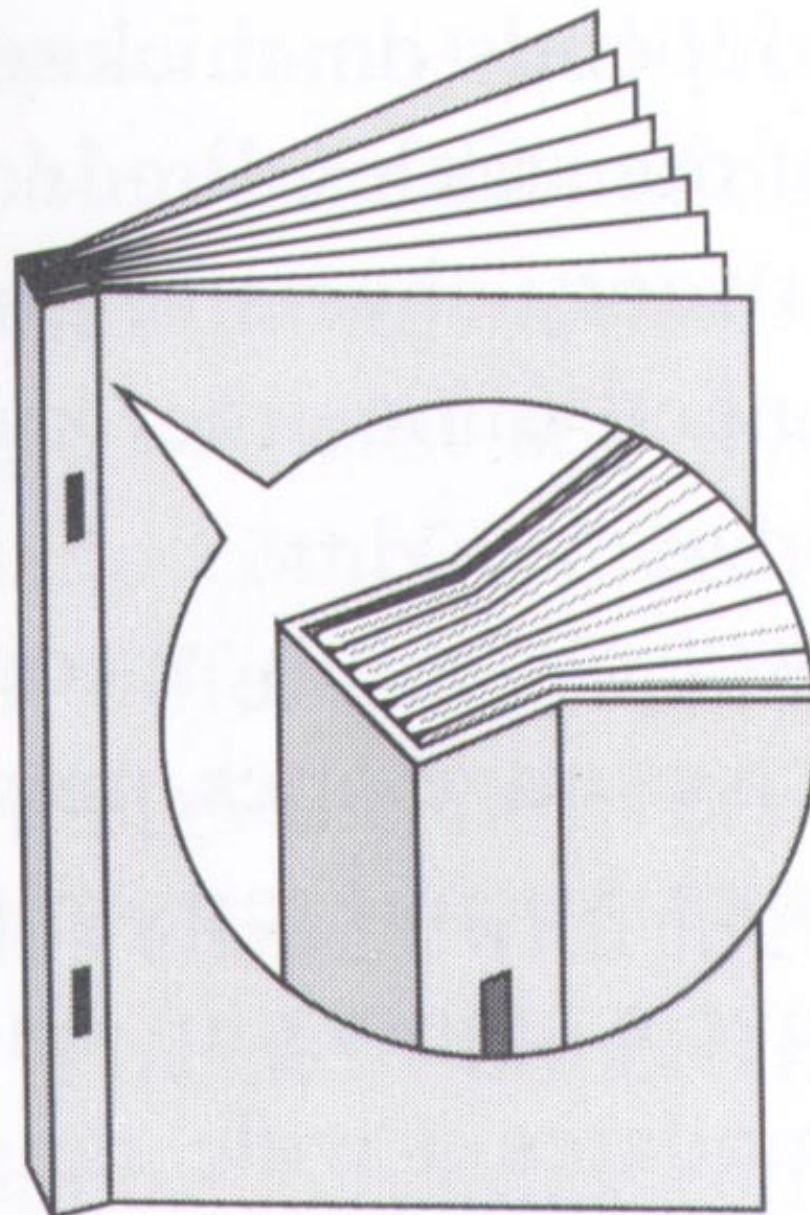
Burst Perfect Binding



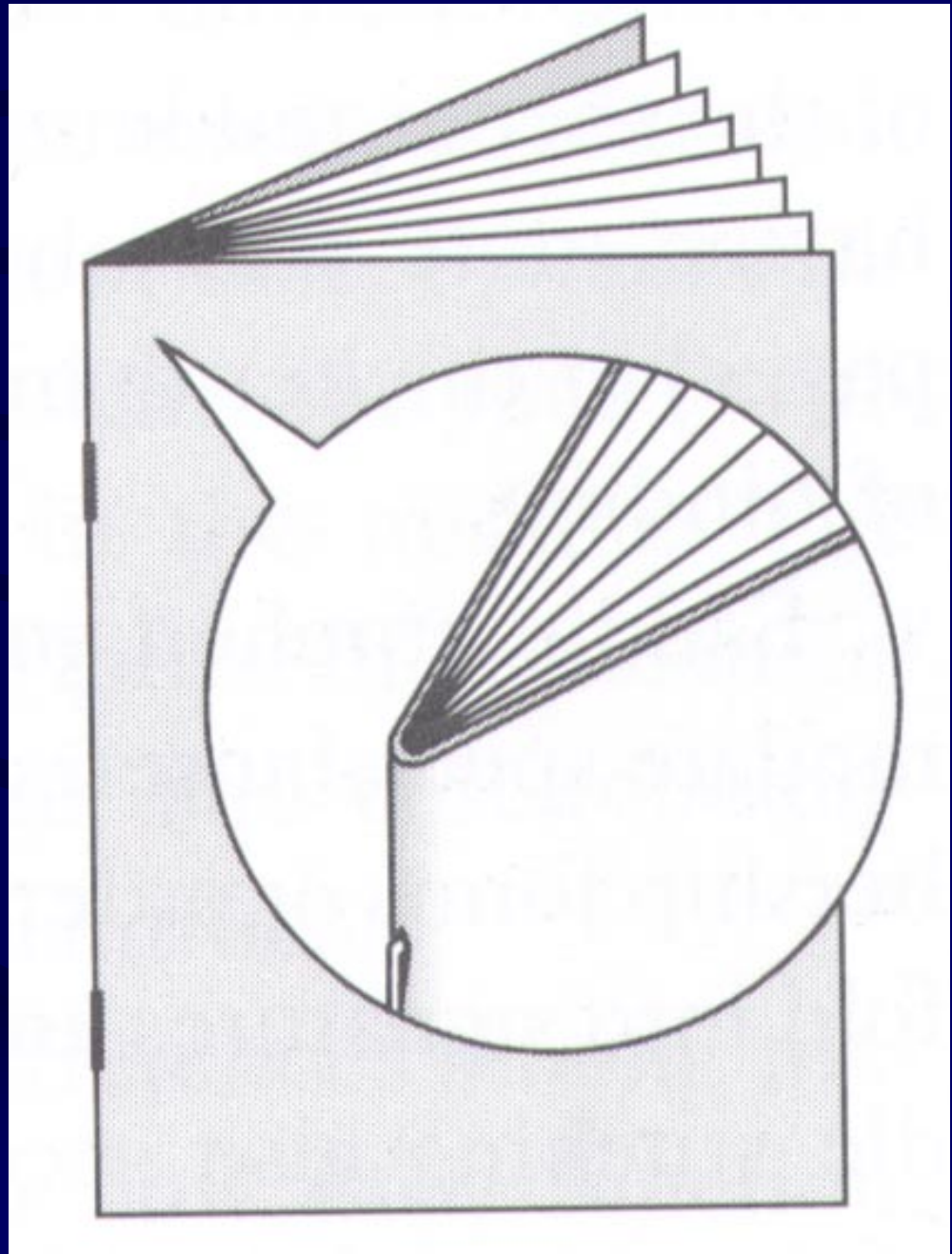
Case Bound Book



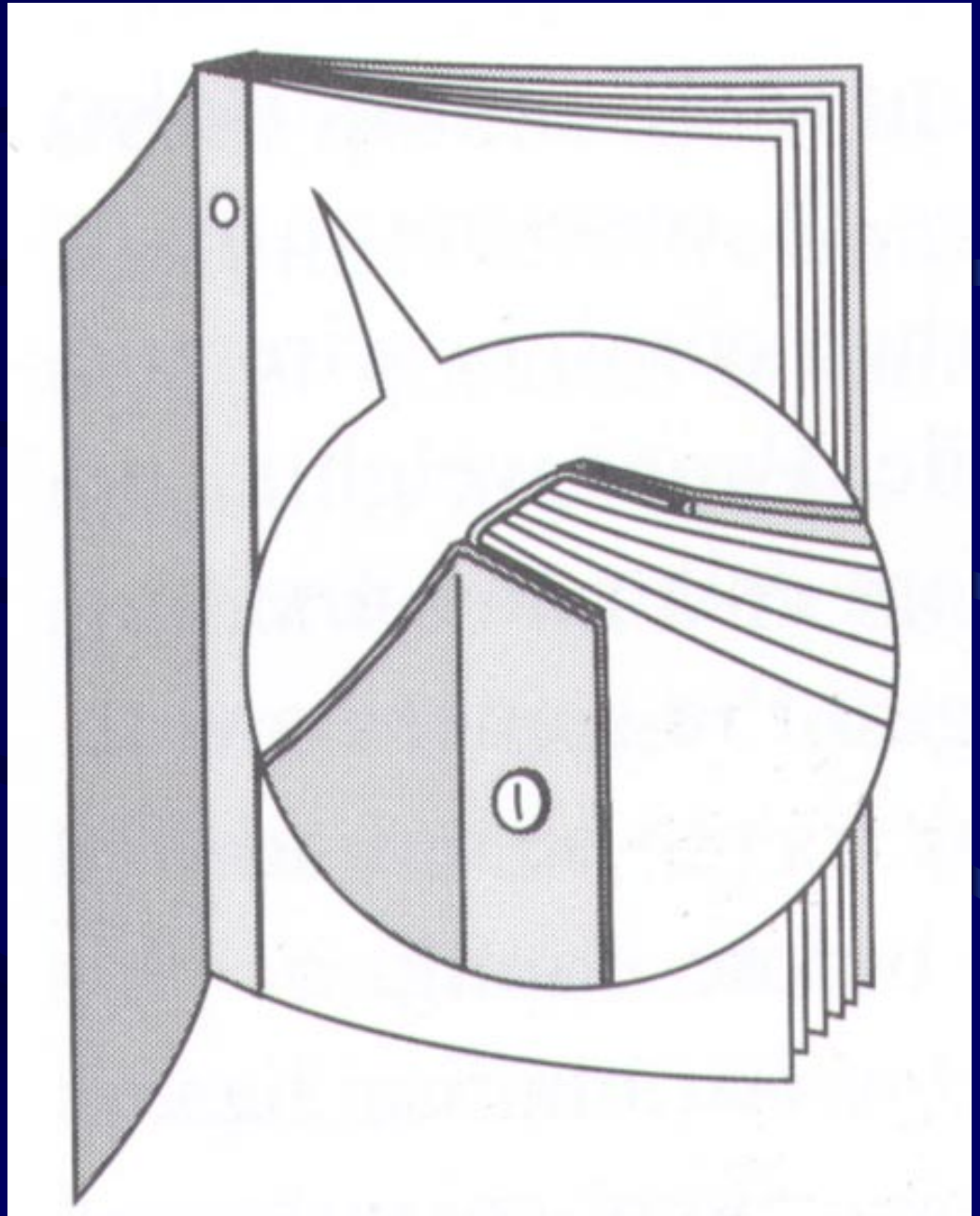
Side Stitch Binding



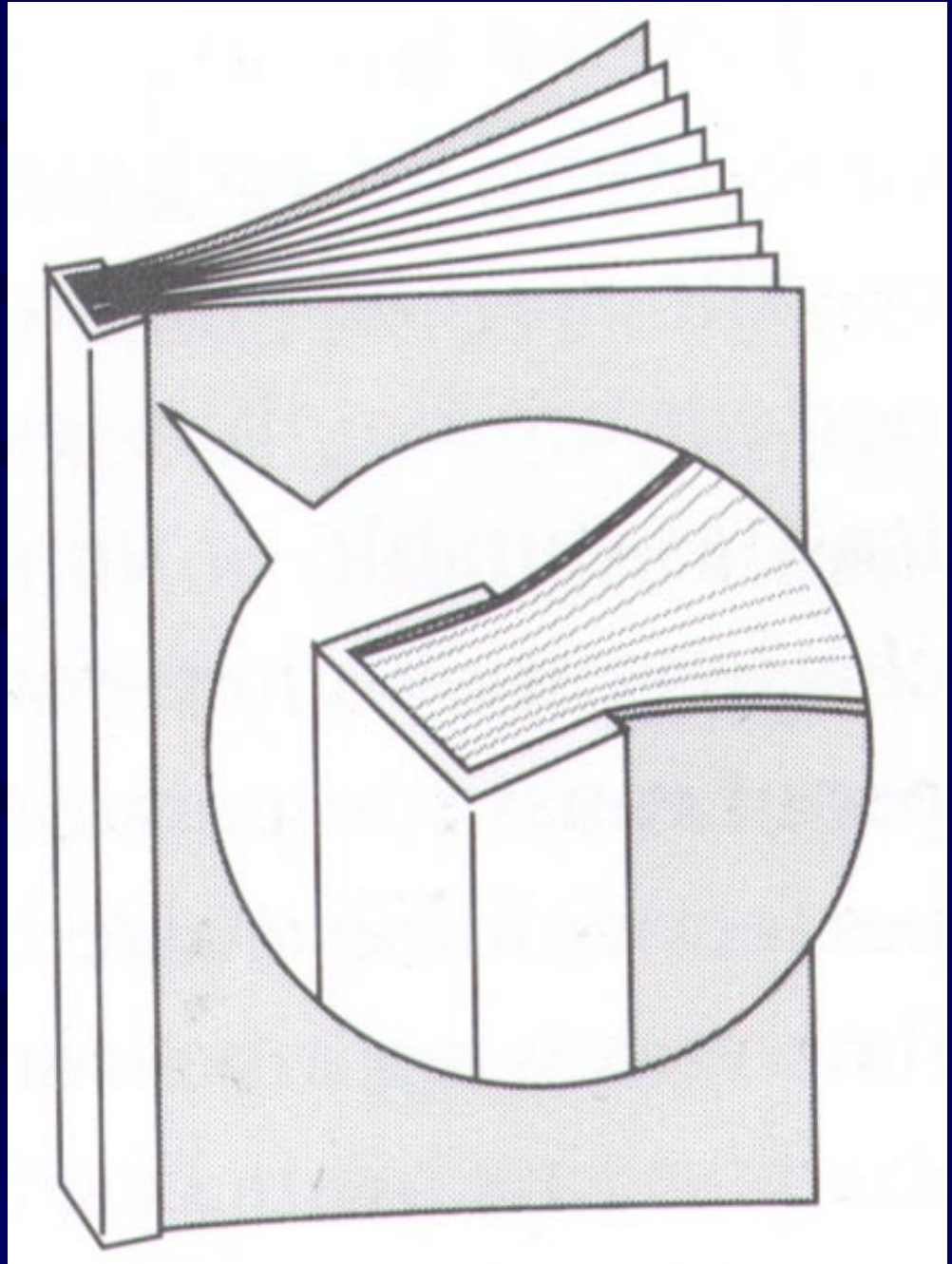
Saddle Stitch Binding



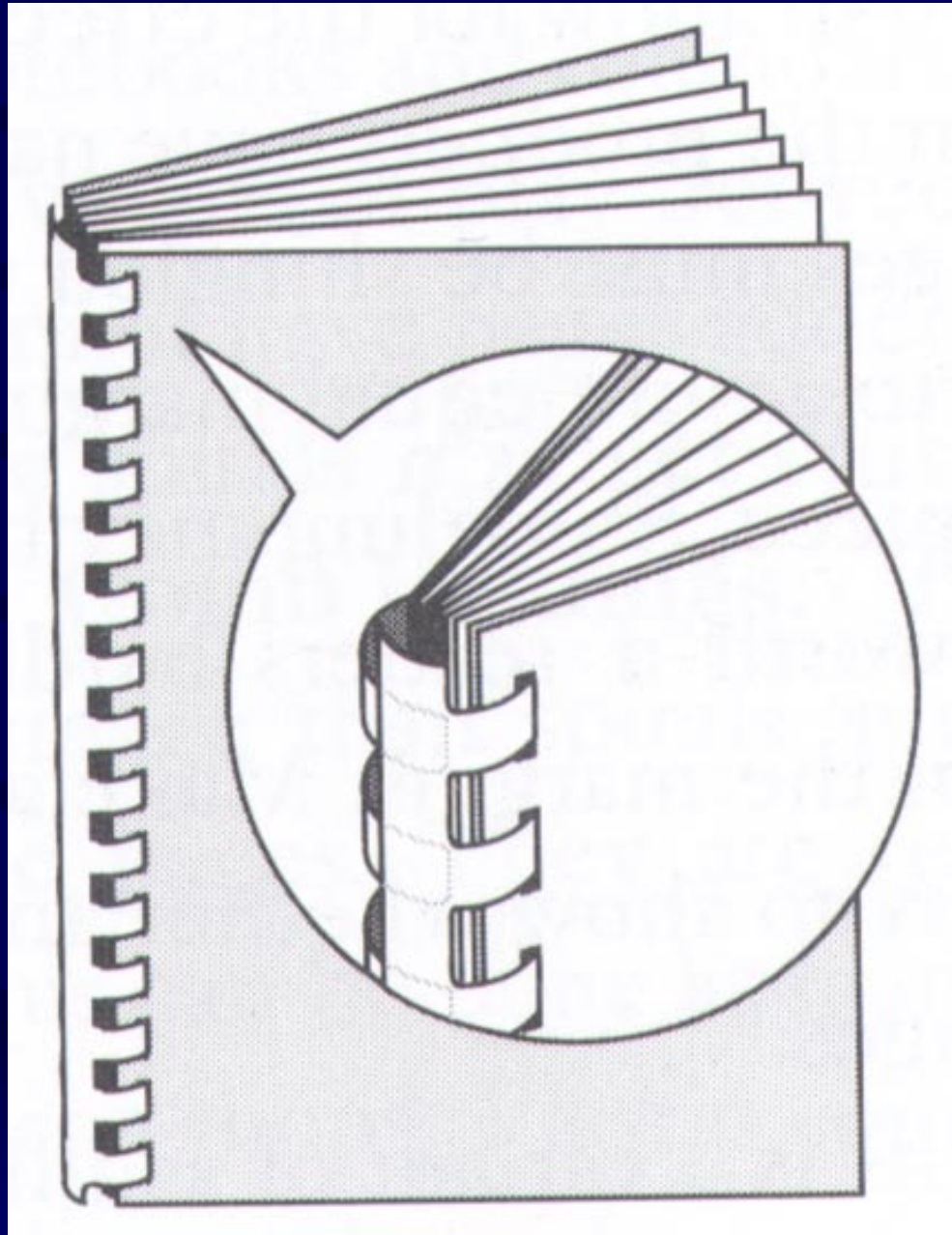
Screw and Post Binding



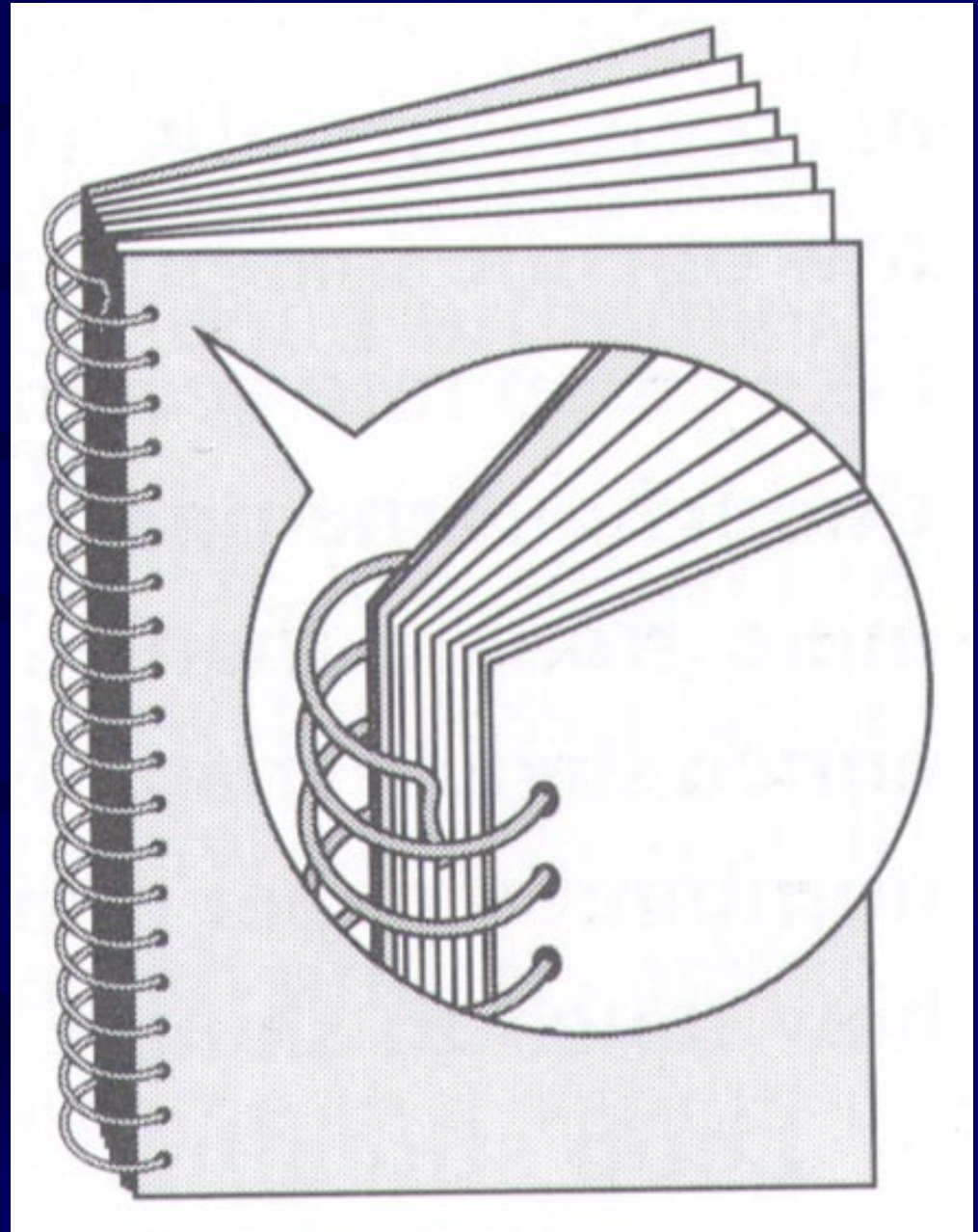
Plastic Grip Binding



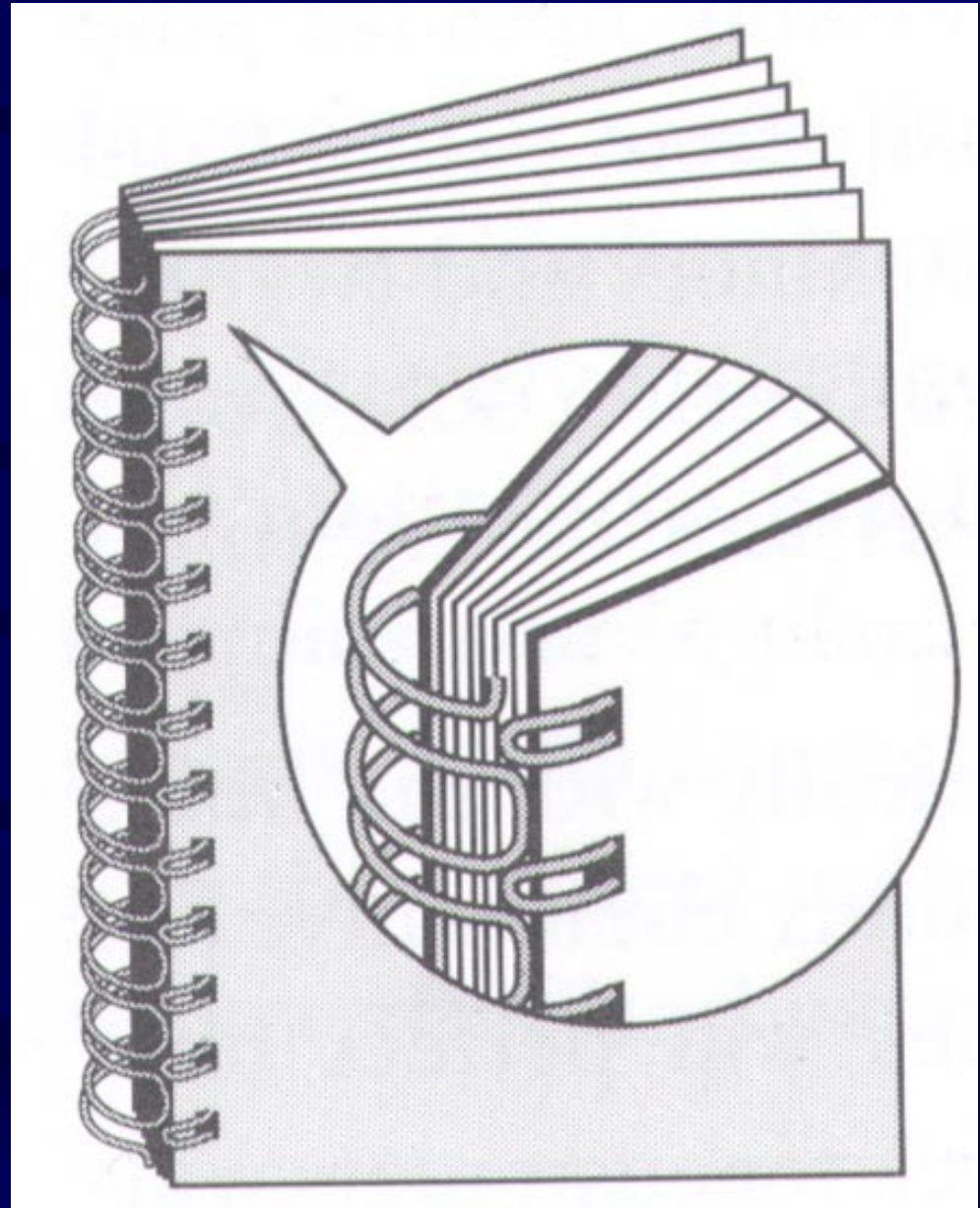
Comb Binding



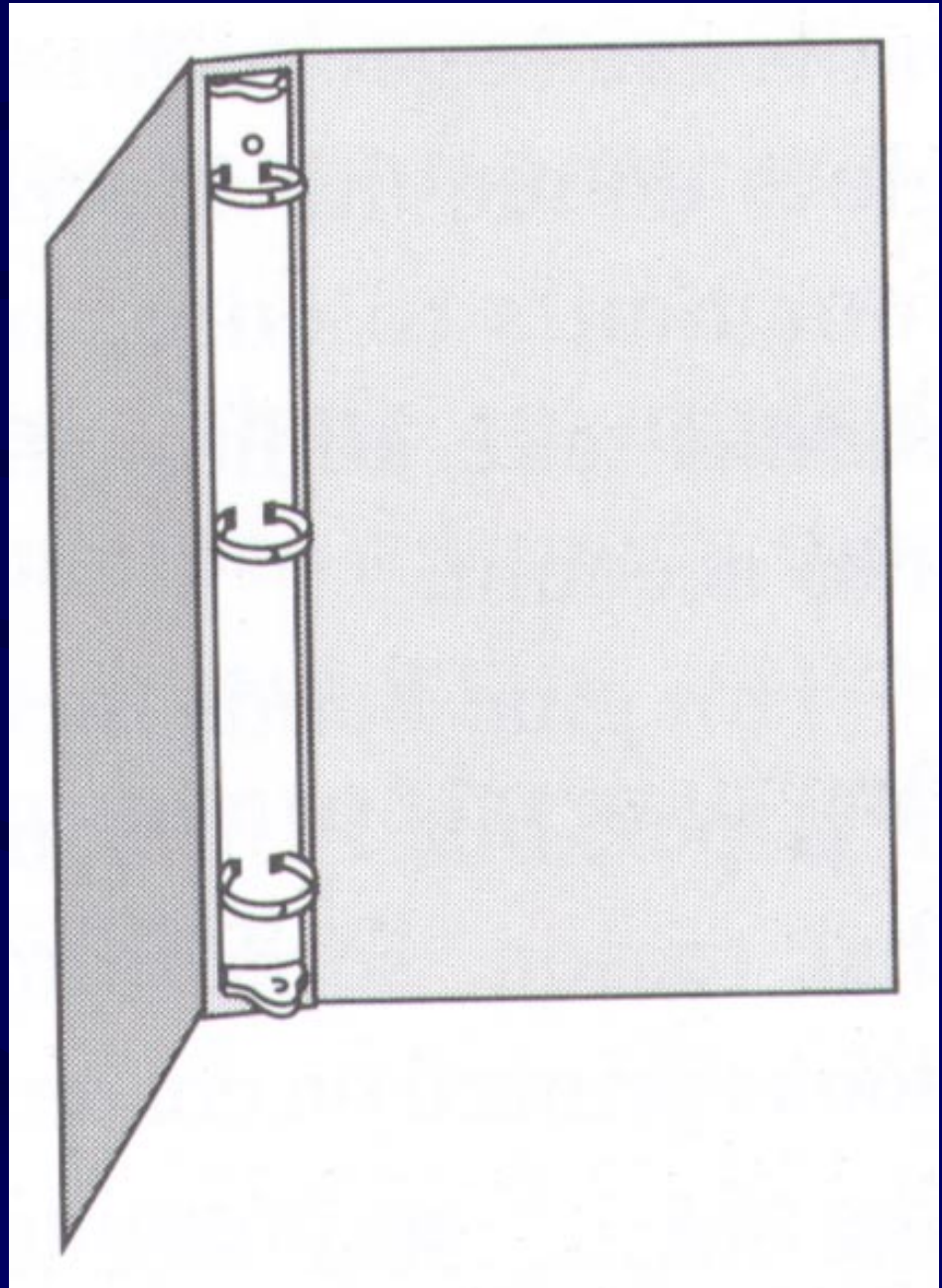
Spiral Bound



Double-loop wire bound



Three-ring bindery



Converting

- A printed sheet changed into a substantially new product—a box, point-of-purchase display, or envelope—has been converted

Converting companies

- Usually specialize in one area of the process, envelope creation, boxes, display houses
- Usually have specific tolerances and requirements

Final Considerations

- Packing
- Final Counts
- Shipping
- Storage

Contacting me

- I don't have an office on campus and really work all day
- Please e-mail me and I will set up a meeting time as quickly as possible

Thanks for your attention!

**Now let's head over to the lab
(CFA Room 318)**