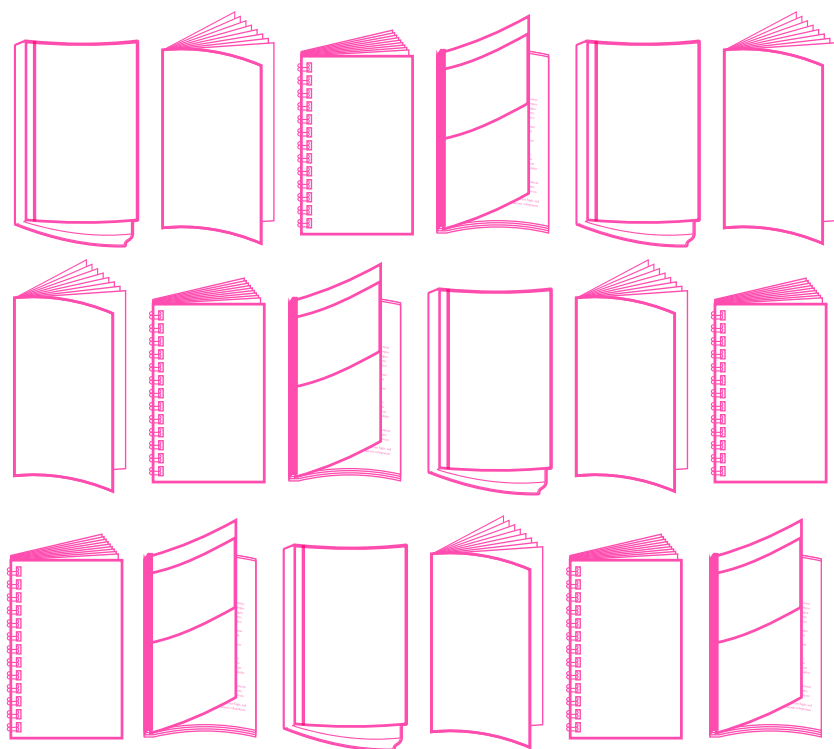


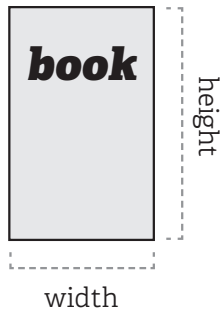
How Do I Make A Book?



Book Plan Checklist

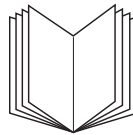
Dimensions

What is the width and height of the final, finished book?



Page Count

How many total pages?

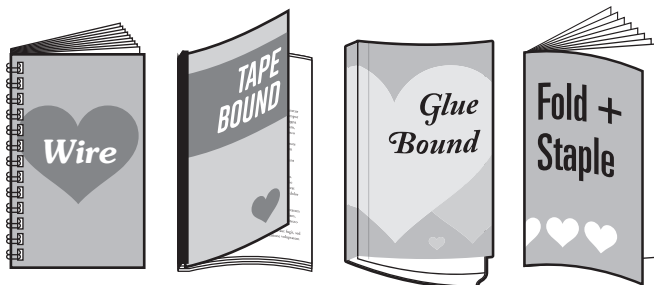


Include the covers if the book will all be printed together on the same paper.

Count the cover separately if it's printed on different paper, or if the book is glue bound.

Printing, Binding & Finishing

- What type of binding will the book use?
- What type of paper?
- What type of printing?
- Where will it be printed and bound?
- Does the book design need any special or unusual materials or print finishing techniques?



Self-Serve Laser Printing (*card readers*)

1st Floor BW Letter
1st Floor Colour Laser

LETTER
BW/colour

LEGAL
colour

TABLOID
BW/colour

2nd Floor Library BW Printer
2nd Floor Library Colour Laser

8.5"
× 11"

8.5"
× 14"

11" × 17"

3rd Floor Foundation BW
3rd Floor Foundation Colour
3rd Floor Design BW
3rd Floor Design BW Tabloid
3rd Floor Design Colour

4rd Floor DOC BW Letter
4rd Floor DOC Colour

Digital Output Centre Laser Printing

LETTER

TABLOID

TABLOID EXTRA

8.5"
× 11"

11" × 17"

12" × 18"

13" × 19"

Various papers and sizes available – see the sample books at the DOC (c4230/4280, on the 4th floor.) The black & white printer at the DOC is noticeably higher quality than an average black & white printer or copier.

Why laser printing?

Books that are digitally printed at school will almost always be laser printed, because the other printers (inkjet or large format toner) don't print double-sided, and are more expensive.

Typically, the only reason to use these other printers for a book project would be either 1) something designed to print single-sided, or 2) a book using special material for a cover or insert.

Printing at School

Binding + Finishing Options at the Digital Output Centre (DOC)

- Folding
- Wire Binding
- Stapling
- Spiral Binding
- Corner Rounding
- Click Binding
(a coil that can be opened and closed)
- Hole Drilling
- Tape Binding
- Glue Binding
(glue machine)

Binding + Finishing That You Can Do On Your Own

General

- Folding
- Stapling
- Sewing
- Chicago binding
(screw posts)
- Standard hole punching

Communication Design Studio

- Long-reach and booklet staplers
- Manual glue binding press
- Corner rounder
- Manual wire + plastic comb binding
- Manual creasing machine
- Manual paper drill

Access to shops/studios/equipment is determined by each area's technicians, and may be limited to students enrolled in specific programs or courses.

Visual Arts

- Long-reach staplers
- Print Media bindery area + equipment

Printer Margins

None of the school printers can print all the way to the edge of the paper, and you can expect to lose around 0.25" (6mm) on each side...but not exactly the same on all 4 sides, or identical on each printer. This doesn't matter for book designs with a white (or paper-coloured) background, but it will affect designs where any artwork or colour extends to the page edges.

What To Do:

BEST PLANNING

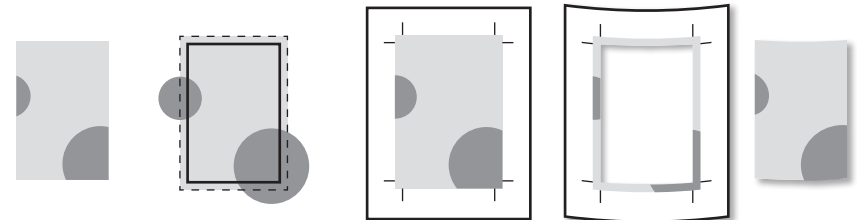
- A. Design it at a small enough size to fit on the paper with room for printer margin, bleed, and trim marks (a book at least 1 inch smaller than the paper size in both width and height is safe)
or
- B. Upgrade to print on bigger paper. 11x17" is the biggest in the self-serve printers, so anything that needs to trim down to 11x17 needs to go to the DOC and print on 12x18" or 13x19"

NOT IDEAL

- C. Shrink to less than 100% size when printing, to fit on the paper with bleed and crop marks
or
- D. Accept a white border around the edge of the design. Any artwork that should have appeared in that border space will be gone, and trying to trim it off perfectly without bleed is difficult.

Bleed

Bleed means printing a little extra beyond the edge of the page, so it can be trimmed off. This makes sure there aren't slivers of white paper visible on the edges, and allows room for error making the cut. Art that touches an outer page edge must extend to the bleed line (the red line outside InDesign pages)





Original Design

File with bleed

Printed and ready to trim

Trimmed and finished
The bleed is visible on the paper scraps.

Sample Document Setup

Width	<div><div></div><div>6 in</div><div></div></div>	Units	<div>Inches</div>
Height	<div><div></div><div>9 in</div><div></div></div>	Orientation	<div><div></div><div></div></div>
Pages	<div>16</div>	Facing Pages	<div><input checked="" type="checkbox"/></div>
Start#	<div>1</div>	Primary Text Frame	<div><input type="checkbox"/></div>
Columns	<div><div></div><div>1</div><div></div></div>	Column Gutter	<div><div></div><div>0.25 in</div><div></div></div>
▽ Margins			
Top	<div><div></div><div>0.5 in</div><div></div></div>	Bottom	<div><div></div><div>0.5 in</div><div></div></div>
Left	<div><div></div><div>0.5 in</div><div></div></div>	Right	<div><div></div><div>0.5 in</div><div></div></div>
▽ Bleed and Slug			
Bleed			
Top	<div><div></div><div>0.125 in</div><div></div></div>	Bottom	<div><div></div><div>0.125 in</div><div></div></div>
Left	<div><div></div><div>0.125 in</div><div></div></div>	Right	<div><div></div><div>0.125 in</div><div></div></div>

WIDTH & HEIGHT: The final size of ONE page, not a double spread.

UNITS: Inches are easiest here, because that matches North American paper sizes.

FACING PAGES: On

PAGES: Should be a multiple of 4 for a fold/staple book, and an even number for other books. Count the cover only if it's all printed together on the same paper.

COLUMNS, GUTTERS,

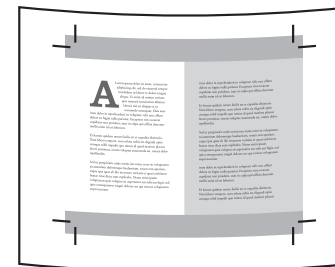
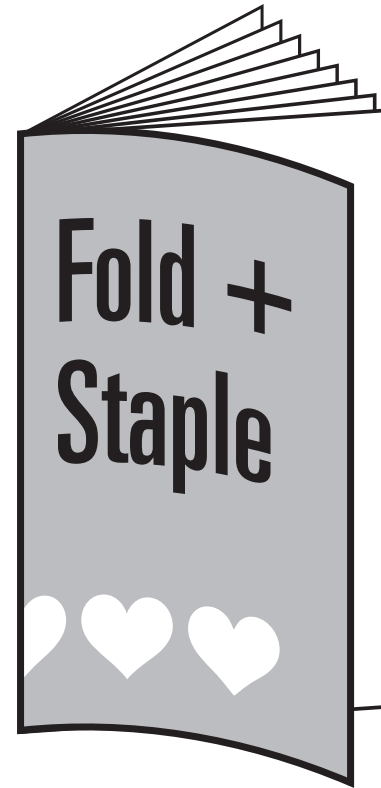
MARGINS: These are guides to help with your layout, and by default they don't print.

BLEED: 0.125" on all sides if you'll need to trim the book, and 0 if you don't.

Packaging

When you move or send an InDesign file to another computer, use **File > Package** instead of just Save or Save As. This makes a folder that collects the files it needs, like fonts and images.

Saving an .indd file won't automatically bring along fonts and images!



A two page spread for folding, printed with bleed and trim marks.

FOLD & STAPLE

*Also called Saddle Stitch,
or Saddle Staple*

- Two pages are printed on each side of each sheet of paper, and then folded in half and stapled.
- The book is designed in the order that it's meant to be read in, but then printed in a shuffled order so that it folds together correctly.
- The page order can be done automatically printing from InDesign (or from Acrobat, with some limitations.)
- It's possible to do this without software that can do it automatically: plan ahead, figure out which pages should be side by side and front to back, in what order, and set up a file for print with that arrangement.
- It's even possible to make these books without a printer or even a computer, if you have access to a copy machine.

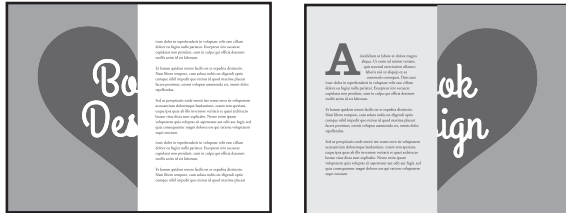
The page count is a multiple of 4.

$$\begin{array}{r} 2 \text{ pages printed per side} \\ + \quad 2 \text{ sides of each sheet} \\ \hline = \quad 4 \text{ pages per sheet of paper} \end{array}$$

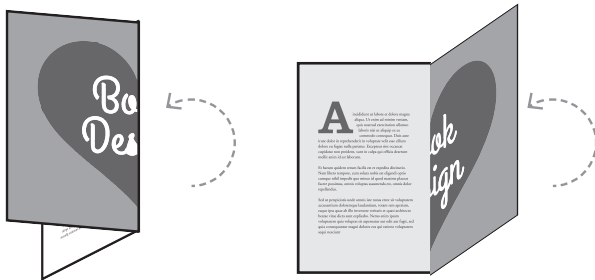
*The COMD studio has booklets with full printing instructions, titled **FOLD + STAPLE**, which are also on blogs.ecuad.ca/comdtech*

How does a folded book work?

Here are two sheets of paper, with book pages printed in a shuffled order.



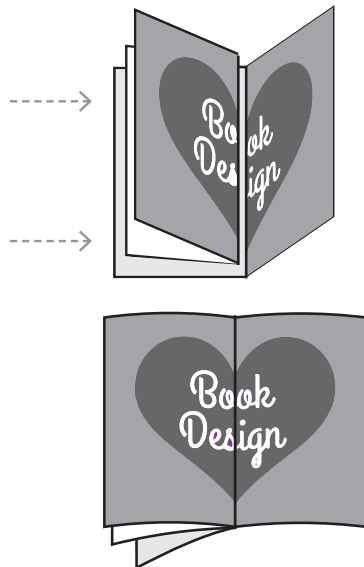
Each page gets folded in half...



...and when the sheets fold together, the matching page spreads line up. The book should now be in the correct reading order.

The pages are usually held together with staples, but it's also possible to:

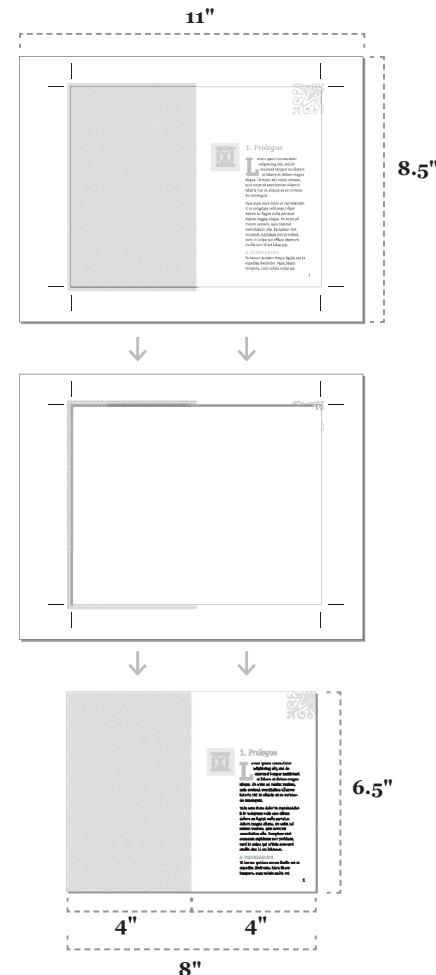
- Use other methods to bind a folded spine together (for example, sewing it with thread or string)
- Make a folding design that either doesn't need anything holding it together, or intentionally splits into loose pieces.



Planning for paper

A folding book needs to be printed on sheets of paper big enough for:

- 2 times the page width
- Room for bleed + trim marks if necessary
- Printer margins: the school printers leave a blank border about of 0.25" on all 4 edges



Page count

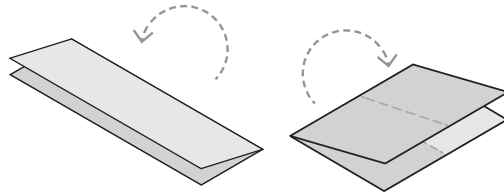
Standard fold + staple books have 4 pages on each sheet of paper (2 on the front, and 2 on the back).

Maximum page count depends on the weight of the paper, but 48 pages is usually around the thickest that can be stapled.

BOOK PAGES	FOLDED SHEETS	
8	2	
12	3	
16	4	
20	5	
24	6	
28	7	
32	8	
36	9	
40	10	
44	11	
48	12	

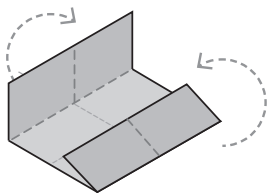
How to make a 1-sheet mini book

5 PAGE	4 PAGE	3 PAGE	2 PAGE
PAGE 6	PAGE 7	BACK 8	COVER 1

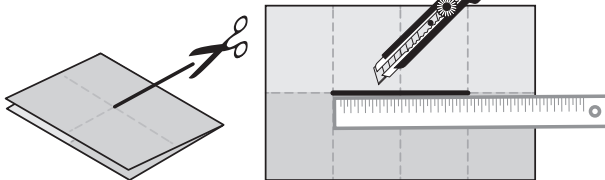


1. Lay out the design on one tabloid page, like this. It's easier to design pages 2-3-4-5 right side up, and then flip them upside down for printing

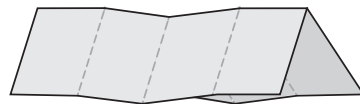
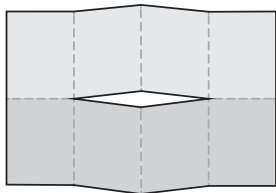
2. Fold the sheet in half the long way, and then fold it in half the other way. Now there are 4 sections.



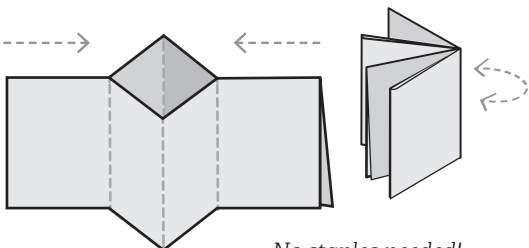
3. Fold both sides towards the centre. Now there are 8 sections.



4. Cut only the centre line, as shown, with either a knife or scissors. You can do this with the sheet either folded, or flat. The cut does not reach the paper edge.

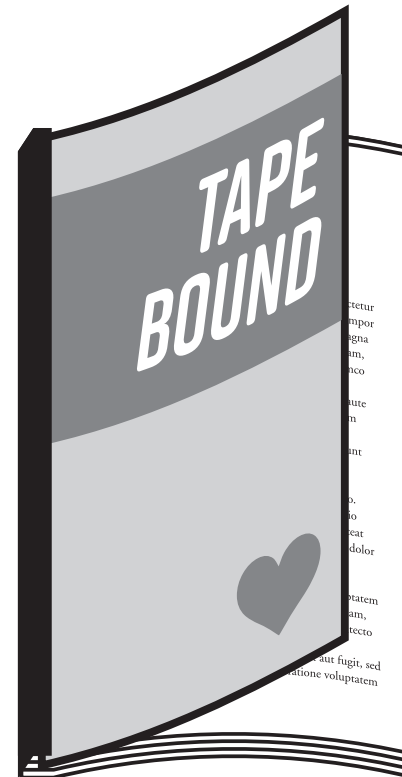


5. The cut should look like this. Now, fold the whole sheet in half the long way.



6. Push the sides together until the centre of the sheet bends outward, and fold the whole thing around for an 8 page book! Optional last step: smooth over all the folds with a bone folder to make it look flat and even.

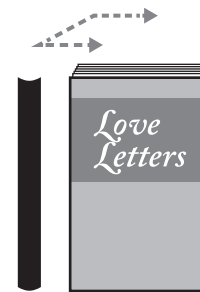
No staples needed!



TAPE BINDING

Available at the Digital Output Centre (DOC)

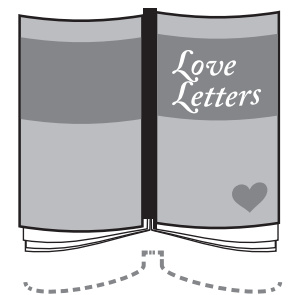
- Book is held together with a strip of adhesive tape that wraps around the spine. It can be either a visible fabric tape, or a double-sided tape attached to a wraparound cover.
- Does not open flat
- Uncoated stock only
- Cover can be a different paper stock
- Tape strips are **11"** long, and multi-strip binding is possible up to **14"**
- Choice of black or white tape
- Minimum 24 pages
- Number of pages must be divisible by 2

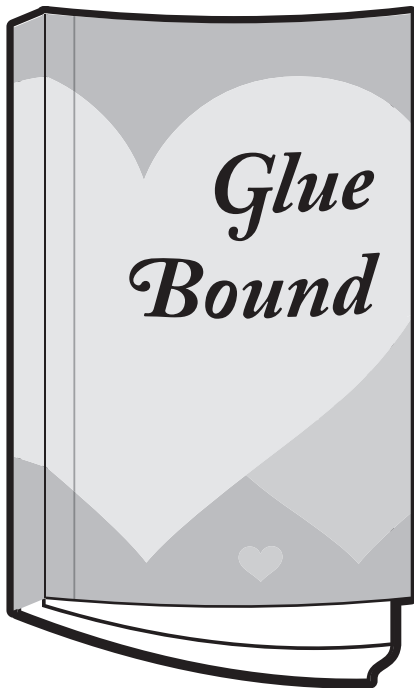


Visible tape spine



Tape under a wrap-around cover





GLUE BINDING

Also called
*Perfect Binding**

** All "perfect bound" books are glued at the spine, but the methods used in commercial softcover book production aren't exactly the same type of glue binding that we have at school.*

Available at the
Digital Output
Centre (DOC)

- Glued at the spine.
- Doesn't open entirely flat
- Maximum book thickness: **1.6"**
- Minimum spine length: **4"**
- Number of pages must be divisible by 2

Glue It Yourself

It's possible, but it can take some practice to get a nice result (and there are some good tutorials to watch online!) You'll need:

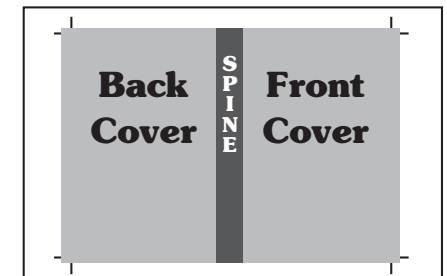
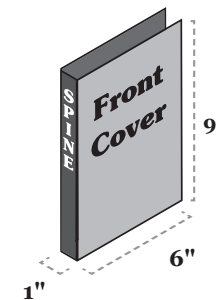
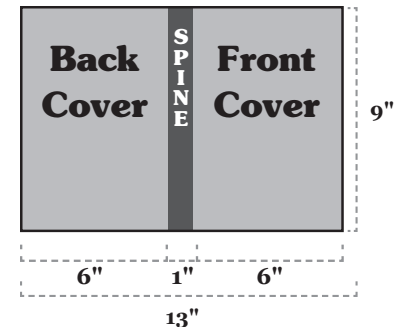
- » A neat, even stack of pages
- » A brush (a small, cheap paint-brush works), and some liquid glue (specific book glue is best, but regular white glue can work)
- » Something to clamp and hold the pages tightly together while you brush glue along the spine. There are book presses for this purpose, but other creative solutions are possible.

Planning a Cover

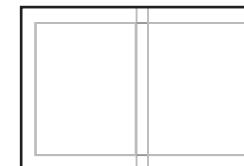
Glue or tape bound books with wraparound covers need the cover prepared as a separate file, where the width includes the front, back, AND spine.

The final size of this book is 6 × 9 inches, and the spine will be 1 inch thick, so the width of the cover is 13 inches total.

This cover could be printed with bleed and trim marks on 11 x 17 inch (tabloid) paper.



InDesign setup: An easy method is to set up one wide page (book height and total cover width) with 2 columns, and set the column gutter to the spine width. If there will be printing on the inside cover, that can be Page 2 of a cover file.



How can you know the spine width?
Here are some ways:

- If you get a quote from a printing company, it should include this info.
- Print the inside pages of the book first, and measure that.
- Count a blank stack of the exact same paper, and measure that.
- Use an online book spine calculator (you'll need to know the paper weight, and the page count)



WIRE, COIL + SPIRAL

- A machine punches a series of holes along the edges of a stack of paper, and a matching metal or plastic spine is fit through the holes and closed shut.
- Can combine any paper types
- Opens flat
- Page count must be divisible by 2
- No minimum number of pages
- The different types available (metal wire, reusable plastic combs, twisting spirals, etc) are **not** interchangeable.
- Book designs need to plan for the holes, and make sure nothing important, especially text, is close enough to the inside edges to get lost when it's punched and bound.

Common Binding Hole Punch Patterns

small metal wire and click binding: 3 holes per inch (3:1)



large metal wire: 2 holes per inch (2:1)



plastic comb: 19 holes per 11 inch spine



plastic spiral: 4 holes per inch (4:1)



At the Digital Output Centre (DOC)

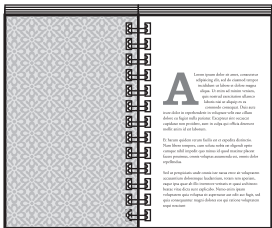
Choice of:

- » **Metal wire**
- » **Spiral**
- » **Click binding** (A reusable plastic spine that can open and close to take pages in and out.)
- Technician does the binding
- Holes are punched approximately $\frac{3}{8}$ " or **9.5mm** from the page edge
- White or black
- Spines are maximum **11"** long (the long side of a letter size sheet, or the short side of a tabloid sheet)
- Maximum book thickness: $\frac{7}{8}$ " (**22mm**) for wire $\frac{1}{16}$ " (**17.5mm**) for spiral $\frac{3}{8}$ " (**9.5mm**) for click

In Communication Design

Choice of:

- » **Metal wire binding machines**
- » **Plastic comb binding machine** (these are reusable)
- Spines are maximum **11"** long (the long side of a letter size sheet, or the short side of a tabloid sheet)
- Smallest wire spines available for purchase are $\frac{1}{4}$ " (**6mm**), largest are $\frac{3}{4}$ " (**19mm**)
- You do the binding yourself. Instructions are posted near the machines, or ask the COMD tech for help.



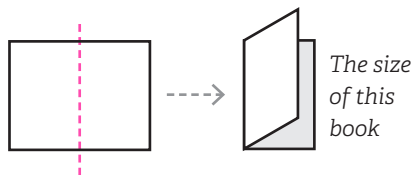
A wire bound book can open flat.

Book Sizes

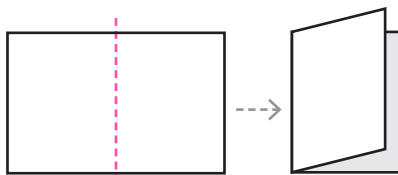
Comparison of Sizes + Formats

Folding Paper

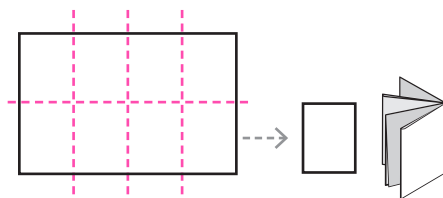
(Standard North American sizes)



8.5 × 11" (letter)
folded in half = 5.5 × 8.5"



11 × 17" (tabloid)
folded in half = 8.5 × 11"



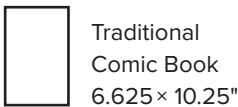
11 × 17" (tabloid) folded
into 8 page mini book = 4.25 × 5.5"

Publications

These are common, but not the only standards.



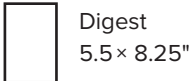
Magazine
8.375 × 10.875"



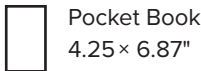
Traditional
Comic Book
6.625 × 10.25"



US Trade
Paperback
6 × 9"



Digest
5.5 × 8.25"



Pocket Book
4.25 × 6.87"



UK C-Format
5.375 × 8.5"



UK B-Format
5.125 × 7.75"



UK A-Format
4.375 × 7"

Other common items



Postcards
Standard: 4 × 6"
Large: 5 × 7"



Cards
Business: 2 × 3.5"
Credit: 2.125 × 3.375"



Invite Envelopes
A-6: 4.75 × 6.5"
A-7: 5.25 × 7.25"



Business Envelopes
#9: 3.375 × 8.875"
#10: 4.125 × 9.5"