Don’t forget your margins when binding!

Most Graphic Designers have learned early on that you need to take into consideration the finishing processes (folding, trimming, binding and finishing etc) before you progress too far with a design job.

Not taking these things into consideration can incur costly re-designs or re-prints, for example if you did not allow a wide enough inner margin on the inside pages of a perfect bound publication. This article will help you to understand some of these processes better, and hopefully prevent you from making some of these common errors.

There are many different ways to combine multiple pages into a single finished piece. In its most simple form we could use staples, paper clips or binder clips to combine sheets of paper, but on a more professional level, methods are a little more elaborate. These include Saddle Stitching, Side-stitch Binding, Perfect and Case Binding, Comb Binding, Coil or Spiral Binding, Wire Binding and Post Binding to name but a few.

So, how do these binding methods actually work … let’s find out!

Figure 1: In saddle stitching, wire is fed from a roll, bent into shape, the legs are forced through the signatures and then bent into the staple shape.

Saddle Stitching

This is a very common, simple and cheap binding method and uses one or more staples on the spine of a signature. (A signature refers to

the group of pages that are printed on the same sheet of paper which is then cut down and trimmed to the finished page size. The number of pages on a signature depends on your page size and the size of the printer's sheet or roll of paper.) Magazines are the type of media that most often use this method of binding. The staples that are used to anchor the signature at the spine are more commonly created from a spool of wire. When binding, the loose sheets of pages are laid over a saddle-like holder (which is where the name comes from), the wire is put into position, cut to the correct shorter length, bent into shape and then the legs of the staple are forced through the signatures. The legs are then bent into the staple shape. This whole process is done incredibly quickly, usually less than 2 seconds from start to finish. Creep can be a major factor though when using this method of binding if large numbers of signatures are used, so remember to allow for larger margins when using this method, especially when the outside edge of the bound job is trimmed to produce a flat outer edge.

Side-stitch Binding

A similar process to saddle stitching, but rather than putting the staple through the spine, the staple is instead put through the sides of the signatures, close to the fold. The resulting binding is not quite as nice as saddle stitching.

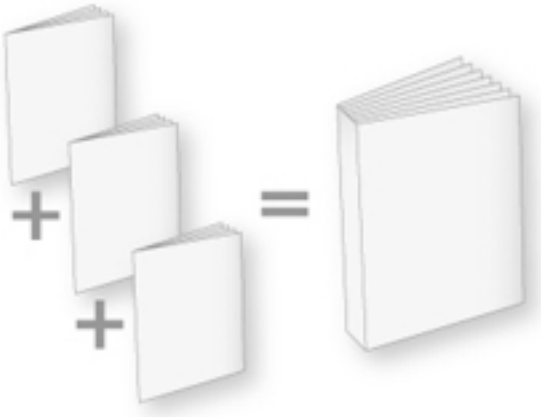


Figure 2: Signatures are placed together in groups of 16-pages and then glued into the cover.

Perfect Binding

This method of binding is commonly used in larger publications (50+ pages) such as annual reports and textbooks. In this method of binding, all of the project's signatures are placed together (usually in smaller groups of 16-page signatures) and stitched through the spine

and then the spine edge is ground to a perfectly flat edge. The cover of the project is then glued to the outside edge of the signatures.

Figure 3: When perfect binding large numbers of pages, remember to allow for pinch and ensure you add a larger inner margin (right).

Whilst perfect binding does not suffer from the same degree of creep that you might find in a magazine, consideration should still be made for the effects of combining a large number of pages with the relatively stiff spine of a perfect binding. Even a 192-page magazine (relatively slender by comparison to some) can show a large degree of pinching of the pages in the centre of the finished magazine, making it difficult to read text near the interior bound edge. Remember to compensate for this by using wider inside margins when designing your pages.

Case Binding

This process is almost the same as perfect binding and is ideal for larger hardcover books. In this method, after the signatures have been ground off, the spine is reinforced with a gauze or cloth strip before affixing a hard cover.

Figure 4: Comb binding allows books to be opened flat but makes a printed spine

difficult.

Comb Binding

This method of binding is ideal for business reports, cookbooks and workbooks and is often used by companies to bind their own short-run publications internally and it allows the bound booklet to lie flat when opened. Small rectangular holes are punched down the edge of a stack of pages and the plastic teeth of the comb binding are then inserted into these. The spines can be removed and reattached if required, but this method does make adding a printed spine difficult, but not impossible. Once again, remember to allow wider inner margins to avoid the punch holes.

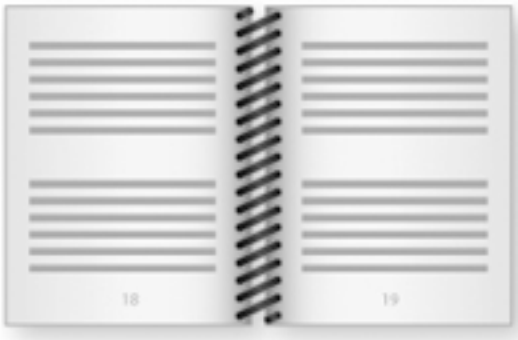


Figure 5: As with comb binding, coil binding allows the books pages to lie flat, but does not allow a printed spine.

Coil or Spiral Binding

In this method of binding, a wire or plastic spiral is threaded through round holes punched in the edges of a stack of pages. As with comb binding, this binding method allows the pages to lie flat when opened.

Wire Binding

Wire binding uses tooth-like loops of wire in a similar fashion to comb binding; however it produces a much sturdier binding than the plastic comb binding method.

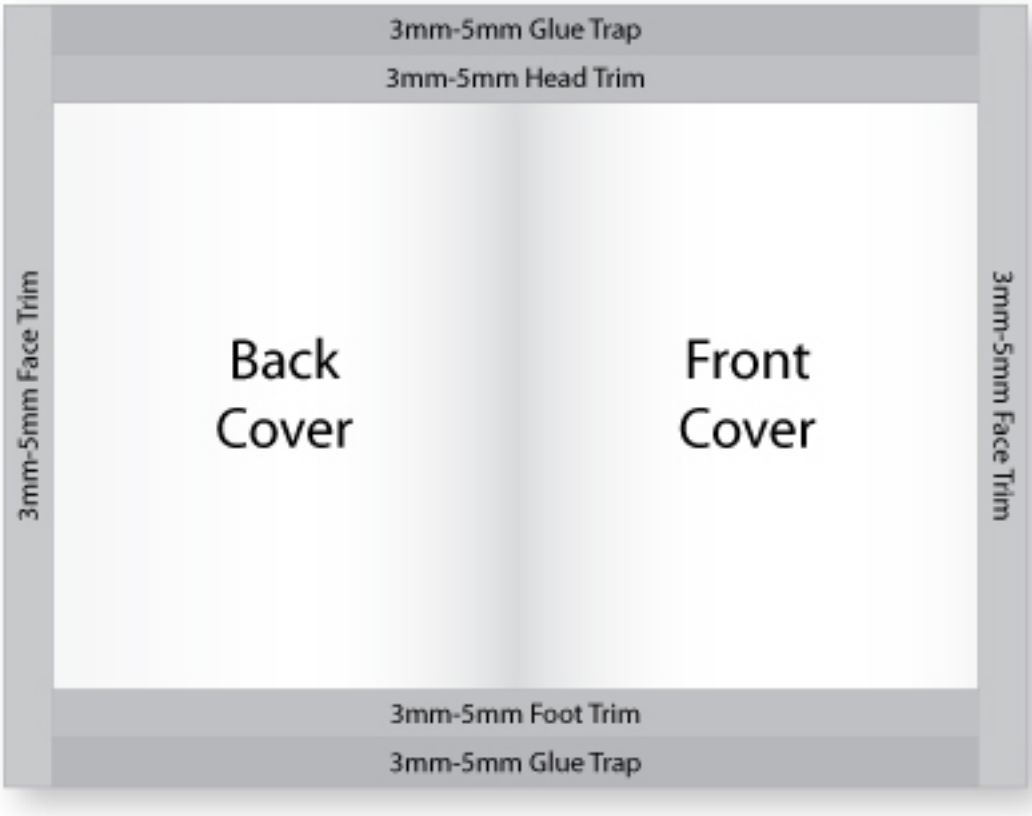
Post Binding

When producing heavy-duty publications with content that is constantly changing, this method might be the most suitable solution. Often seen in wallpaper sample books, metal posts are pushed through punched holes in the book and anchored with bolts that thread into the centre of the posts. This allows you to easily add or remove pages and can also allow an exterior cover with an imprinted spine.

There are many different variations on these basic binding methods,

such as using ribbons or screws for example, but these tend to entail limited print runs and a large amount of hands-on work to produce them, resulting in larger make-up expense. Whichever method you choose to use, plan it carefully and don't forget the margins!

Perfect Binding Layout Tips[2]



A typical perfect binding cover layout. Keep in mind that these figures are not absolute; some projects may require an alternative layout.

Include proper trim margins – Your layout should include proper trim margins; we suggest placing 3mm-5mm margins at the head, foot and face of all signatures. Also, layout images and copy away from the spine by 3mm-5mm to account for grind-off.

Don't forget a glue trap – Cover layouts require an additional 3mm-5mm glue trap margin at the head and foot. This extra margin helps prevent excess glue from seeping onto subsequent books during binding.

Plan crossovers carefully – When images and copy cross over the spine, it's important that the layout account for them – especially when they also cross over signatures. In addition to

the 3mm-5mm grind-off margin at the spine, make sure images are an additional 1.5mm-2.5mm from the spine area. This will allow the crossovers to meet right at the spine.
Nothing is set in stone – It's important to remember that these margins are approximations. Book block and paper thickness, inks and coatings are all different for each project.