1. Decide your Book Finished Size (Figure A)

This is the finished size of your book once printed and trimmed. This is also the page size you designate in your page-layout software. It is best to make this desicion focused on maximizing the number of books you can cut from your press sheet size. Not only will this conserve paper, it will most likely minimize your printing costs. The Perfect Binding Layout Dimensions sheet provides information about the most commonly available press sheet sizes and the number of books that can be cut from each sheet size.

2. Decide your Header, Body and Footer Sizes and Layout (Figure B)

These virtual boxes are used in your page-layout software to constrain header, body and footer content (text and images). Horizontally, these will shift depending on whether the page is front facing (Recto) or back facing (Verso). Vertically, the header and footer margin should be the same. The Perfect Binding Layout Dimensions sheet provides recommended head, foot, spine and face dimensions.

3. Understand the Book Block Run Size (Figures C & D)

This is the size of the book block (a unit consisting of all printed text sheets in a single book) fed into the perfect binding system. It is also used to ensure the correct bleed allowance by serving as a target for images and text that bleed off the finished-size page. The run size is determined by adding 1/16" to the spine and 1/8" to the head, foot and face dimensions of the book finished size. The additional 1/16" spine allowance is ground off creating rough paper fiber and notches for better glue adhesion. The 1/8" head, foot and face allowance is trimmed off creating clean, square book edges.

Example: You are printing a "100-page + Cover" 6"x9" finished-size book onto both sides of 60# offset paper. The cover will be printed onto 80# uncoated cover.

Calculation: Your book block run size is 6.1875"x9.25. The horizonal dimension is calculated by adding the 1/16" (.0625") spine allowance and 1/8" (.125") face allowance to the 6" horizontal book dimension (.0625" + 6" + .125" = 6.1875"). The vertical dimension is calculated by adding the 1/8" (.125") head allowance and 1/8" (.125") foot allowance to the 9" vertical book dimension (.125" + 9" + .125" = 9.25").

4. Lay Out Your Book Block Press Sheets (Figures E & F) This is the size of the press sheet you will use to print your book blocks. This decision was made in step one when you planned your book finished size. Your book block press sheet layout should be based on the informormation shown in The Perfect Binding Layout Dimensions sheet.

Example 1: Same as above using a <u>digital</u> printing process **Calculation:** Based on the Perfect Binding Layout Dimensions sheet, you can comfortably fit four run-size books on 14"x20" press sheets. Each of the four book images should be centered in the virtual quadrants of the sheets. This provides additional paper space for us to shift cutting as necessary. For instance, if text will be buried in the spine, we can add more paper to the spine and take extra from the face.

Example 2: Same as above using an <u>offset</u> printing process **Calculation:** Based on the Perfect Binding Layout Dimensions sheet, you can comfortably fit eight run-size books on 20"x26" press sheets. Each of the eight book images should be separated with 1/4" horizontal and 1/4" vertical gutters. This provides additional paper space for us to shift cutting as necessary. For instance, if text will be buried in the spine, we can add more paper to the spine and take extra from the face.



Figure F (Verso)



1. Determine your Cover Finished Size

This is the finished size of your cover once printed, wrapped around the book block and trimmed on three sides. If you removed the cover from your finished book, it would be this size. The Cover Finished Size is determined by combining the three cover panels as explained below.

Spine (Figure A)

This is the starting point for wrap-around cover layout. Create a new document and place the virtual spine box in the vertical and horizontal center. Determine the width of the virtual spine box by multiplying the number of sheets (leaves) by the sheet thickness. This dimension should be determined mathmetically, not by measurement. Additionally, no allowance is made for cover thickness.

Example: You are printing a "100-page + Cover" 6"x9" finished-size book onto both sides of 60# offset paper. The cover will be printed onto 80# uncoated cover.

Calculation: Your vertical spine dimension will be 9" and your horizonal spine dimension will be .225" (.0045" sheet thickness multiplied by 50 text sheets). Individual sheet thicknesses can be viewed in the Stock Specifications Chart.

Front Cover (Figure B)

This virtual box will be placed to the right of your spine. It will have the same vertical dimension as your spine and the same horizontal dimension as your finished-size book.

Example: Same as above.

Calculation: Your vertical front-cover dimension will be 9" and your horizonal front-cover dimension will be 6".

Back Cover (Figure B)

This virtual box will be placed to the left of your spine. It will have the same vertical dimension as your spine and the same horizontal dimension as your finished-size book.

Example: Same as above.

Calculation: Your vertical back-cover dimension will be 9" and your horizonal back-cover dimension will be 6".

2. Understand the Cover Run Size (Figure C)

This is the size of the cover fed into the perfect binding system. It includes a glue trap to catch glue squeezed from the spine during the perfect binding process. *For covers that bleed, extend the image to the run-size cover dimensions. This target ensures the correct bleed allowance.*

Example: Same as above.

Calculation: This size is determined by adding 1/4" to all four sides of the finished-size cover dimensions.

3. Decide your Cover Press-sheet Size (Figure D)

This is the size of the press sheet you will use when printing your covers. Shorter book runs most often dictate 1-up cover layouts, while longer runs make multiple-up layouts more economical. When multiple-up layouts are used, careful consideration must be used with regard to gutters.

Example 1: Same as above with 2-up <u>digitally</u>-printed cover sheets

Layout: Center each cover image in the center of each virtual press sheet half. This allows us to add additional paper to the cover run-size as needed.

Example 2: Same as above with 8-up <u>offset</u>-printed cover sheets

Layout: Use 1/4" vertical and horizontal gutters between each gutter. This allows us to add additional paper to the cover run-size as needed.







Figure B



Figure C



Figure D

