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Printing Industries Achieves Regulatory Relief for Printed Children's Products

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On August 12, 2011, President Obama signed into law the House of Representatives Bill 2715 (H.R. 2715). The bill's passage was the culmination of two plus years of effort by the Printing Industries of America and a coalition of other key printing groups before the Consumer Product Safety Commission (CPSC) and in the halls of Congress. Considerable resources were dedicated to providing testing data, explaining print manufacturing processes, and urging lawmakers to take action to undo or reduce the unintended consequence of the original law passed in 2008, and the effort was successful.

The bill provides much-needed flexibility and discretion to the CPSC to implement this law, and most important, it excludes all paperbased printed materials and most children's books from onerous third-party testing and certification requirements now in place for any and all products

marketed to children twelve years of age or younger. While all children's manufactured products received a measure of general relief from the Consumer Product Safety Improvement Act (CPSIA), "ordinary books and ordinary paperbased printed materials" (see legislative definition in the sidebar) was only one of two product categories to gain an exclusion from many parts of the regulations. Youth all-terrain vehicles/bicycles composed the other category.



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Background

The original CPSIA became law in 2008 as a reaction to a spate of incidents of lead-tainted children's products that were imported and being sold to consumers. The law set limits on lead and phthalates (chemicals that make plastics soft) allowable in children's products and required third-party testing, labeling and tracking systems, and safety certifications. While the original CPSIA was widely supported, its scope was so broad that it ensnared every possible

Continued next page

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children's product that was either imported or manufactured domestically. The list of covered products included such things as furniture, textiles, bicycles, musical instruments, hair barrettes, and, unfortunately, printed products such as books, flash cards, maps, magazines, and more in addition to the original culprit of toys.

Many unintended consequences—in addition to general market confusion—occurred as the Consumer Product Safety Commission tried to implement the law which caused the CPSC to issue two one-year stays of the testing and certification requirements. Manufacturers and even the CPSC called upon Congress to amend CPSIA to provide the Commission more discretion to apply the regulations and to determine exempt products. CPSC also singled out particular product categories—including books—that were likely unintentionally regulated and could be excluded from the law. In heeding the call for more practical application of CPSIA, Congress passed HR2715.

Key Provisions of HR 2715 for Books and Other Printed Matter

Once the president signed into law HR 2715 in August 2011 amending the original CPSIA passed in August 2008, the printing and publishing industry gained immediate relief from the third party testing and thus the certification require-

ments. The printed products excluded by HR 2715 include all "ordinary paper-based printed materials" and almost all "ordinary books" that are "bound and finished in a conventional manner" created for children. Books that were not included in the exemption are those "designed and intended" for children three years old or younger or those books having "play value." These books must be tested by an accredited third-party testing laboratory and certified by the manufacturer or importer as not exceeding the limit for lead or phthalates.

There are two important aspects of the CPSIA that HR 2715 left unchanged. They are the actual lead and phthalate limits and the requirements for tracking labels. HR 2715 did not change the requirements as they apply to books and printed matter, which means the limits for lead and phthalates must still be met, and tracking labels are required to be placed on all children's products. Nevertheless, HR 2715 does represent a significant change in the requirements.

In understanding the implications of HR 2715, it is important to look at how "ordinary books" and "ordinary paper-based printed materials" are defined. This is because the exemptions from testing, while covering thousands of products,

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HR 2715 Key Provision

Exclusion From Third-Party Testing. Certain Printed Materials

In General. The third-party testing requirements established under subsection (a) shall not apply to ordinary books or ordinary paper-based printed materials. The definitions follow:

(I) Ordinary Book. The term “ordinary book” means a book printed on paper or cardboard, printed with inks or toners, and bound and finished using a conventional method, and that is intended to be read or has educational value. Such term does not include books with inherent play value, books designed or intended for a child 3 years of age or younger, and does not include any toy or other article that is not a book that is sold or packaged with an ordinary book.

(II) Ordinary Paper-Based Printed Materials. The term “ordinary paper-based printed materials” means materials printed on paper or cardboard, such as magazines, posters, greeting cards, and similar products, that are printed with inks or toners and bound and finished using a conventional method.

(III) Exclusions. Such terms do not include books or printed materials that contain components that are printed on material other than paper or cardboard or contain non-paper-based components such as metal or plastic parts or accessories that are not part of the binding and finishing materials used in a conventional method.

do not exempt all books. In addition to the books for children three years of age or younger and those with “play value,” books that are not made from paper or paper board or any products that would accompany a book—such as balls that would be packaged with a book on juggling—require testing.

Current Status and Recommendations

In addition to the changes brought by HR 2715, CPSC has provided exemptions from testing and certification for certain component materials. Additionally, two testing rules addressing component testing and product testing have been issued in final form. Since the stay on all testing and certification has been lifted, all other products must now be third-party tested and certified prior to being distributed in commerce. A complete list of accredited testing labs can be found at <http://www.cpsc.gov/cgi-bin/labsearch>.

The name of the required certification was revised with the product testing rule and is now identified as a Children’s Product Certification (CPC). CPSC has a CPC template that can be found at <http://www.cpsc.gov/about/cpsia/faq/elecfaq.pdf>.

Below is a summary of the current requirements and recommended actions:

- ▶ Any “ordinary book” or “ordinary paper-based printed materials” printed on paper or cardboard with inks or toners and bound and finished using a conventional method produced for a child twelve years old or younger must meet the lead and tracking label requirements of the CPSIA.
- ▶ Ordinary books and “ordinary paper-based printed materials” for children from three to

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twelve years old are exempt from third-party testing and certification requirements.

- Books designed and intended for children three years old or younger must be tested by a third-party testing lab before being shipped. A certificate of compliance must be prepared and accompany the shipment.
- Books designed for children that have “play value” must be tested for lead by a third-party testing lab before being shipped. A certificate of compliance must be prepared and accompany the shipment.
- Books and “ordinary paper-based printed materials” printed on something other than paper or cardboard must be tested for lead and/or phthalates (for plasticized parts only) by a third-party testing lab before being shipped. A certificate of compliance must be prepared and accompany the shipment.
- Any products that would accompany an “ordinary book” or “ordinary paper-based printed materials” must be tested for lead and/or phthalates (for plasticized parts only) by a third-party testing lab before being shipped. A certificate of compliance must be prepared and accompany the shipment.

As of December 13, 2011, the CPSC is now allowing component testing to be performed in lieu of whole product testing. If a book or “ordinary paper-based printed materials” contain a mix of exempt and nonexempt components, then only the nonexempt components need to be tested. The CPSC is allowing customers to rely upon tests performed by vendors as long as the tests were conducted at an accredited third-party laboratory. When testing is required, letters, Material

Safety Data Sheets, and other declarations or assurances by vendors are not acceptable. Only third-party testing results are acceptable, as this is the only acceptable approach for issuing a compliance certificate.

- Books and “ordinary paper-based printed materials” manufactured using only components that have been exempt from the CPSIA are not required to be tested or certified regardless of the intended age level of the child. The exempt components are paper, process inks, coatings (varnish, water-based, or UV-cured), thread used for book binding, animal-based adhesives or adhesives, and other binding materials that are not accessible. Components not exempt are spot or PMS inks, saddle-stitch wire, non-animal-based adhesives that are accessible, metal and plastic coil used for binding, foils used for foil stamping, and laminates.
- It is anticipated your customers may still want some assurances the product you produced will meet the requirements of the CPSIA. Language to this effect can be included in your contractual reps and warranties with a letter or modifying the Certificate of Compliance to fulfill that purpose.
- Your customer should provide you with the information as to whether a book is one with play value and what age level the book is designed to address. However, if this information is not provided, the salesperson and/or customer service representative needs to contact the customer and clarify its intent and purpose as well as age level.
- Even though testing is not required for ordinary books or “ordinary paper-based printed

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materials” children four to twelve years, the manufacturer is required to produce a product that meets the requirements of the CPSIA. Therefore, companies are expected to verify the materials and process they use in manufacturing books and other printed matter meet the limits. The systems, procedures, or internal testing used to ensure these results is at your discretion. If an incident occurs where it is proven or suspected a product would exceed a limit, such as lead, you must be able to provide documentation as to how you have implemented a program to ensure compliance. It is highly recommended that declarations from vendors and records of products that show which materials were used in the production of the product be obtained and maintained. One way this can be done is to indicate on the “job jacket” that a specific product is a children’s product, as this will serve to alert all of the production personnel about the type of product being produced and that records should be maintained.

Summary and Conclusion

The passage of CPSIA has clearly changed the approach that printing companies have to take to produce books and other printed matter for children. Printing operations that produce children’s products need to either set up a formal third-party testing program or reach out to vendors to obtain their testing results for the individual components. An internal tracking system needs to be established to ensure compliance with the new requirements.

Printing Industries of America has been very successful in obtaining both legislative and regulatory relief for its members. In addition, it is part of a working group with representatives from the Book Manufacturers’ Institute and the American

Association of Publishers who have been working together to review the changes and submit comments to the CPSC on their proposed rules and lobbying Congress for changes. The working group continues to have discussions when needed and when questions arise regarding how the requirements apply to books and other printed matter. At this point, the general consensus is that additional clarification from the CPSC is not warranted. However, based on past experiences, once full implementation of the new rules, testing requirements, and HR 2715 occurs, additional contact with the CPSC may be required. 

For the latest industry information, visit the Printing Industries of America Press Center. Visit printing.org/ news for upcoming event and conference information, award competition updates, interviews, videos, and more.



**Hardcover
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Aspects of Planning for Short-run Bindings

By Werner Rebsamen



With e-books, iPads and other technology, it might be surprising that we still talk and write about printing and binding, but the opportunity to do just that presents itself regularly. Recently, while vacationing at a beach resort, I looked through shelves of books where people share them. After selecting a few books, a nearby guest gave me an unexpected lesson. He told me that “these books will soon be a thing of the past and that when his kids read, they will use only electronic media.” I must admit that, after spending my entire life with books, I was hurt by these comments.

Later, while preparing for a keynote speech in India, my findings confirmed what I already knew—that books will be anything but a thing of the past. Yes, the manufacturing, warehousing and distribution of books have changed. These days we search the Internet, order and pay for a book at anytime from anywhere—even books that are not yet printed and bound. Gone are the days when publishers stored millions of books in warehouses. I remember, decades ago, visiting a New York City publisher who had more than 26 million children’s books in storage. Markets and processes have changed, but it is still an exciting industry with lots of new opportunities for success if we are willing to change with the times.

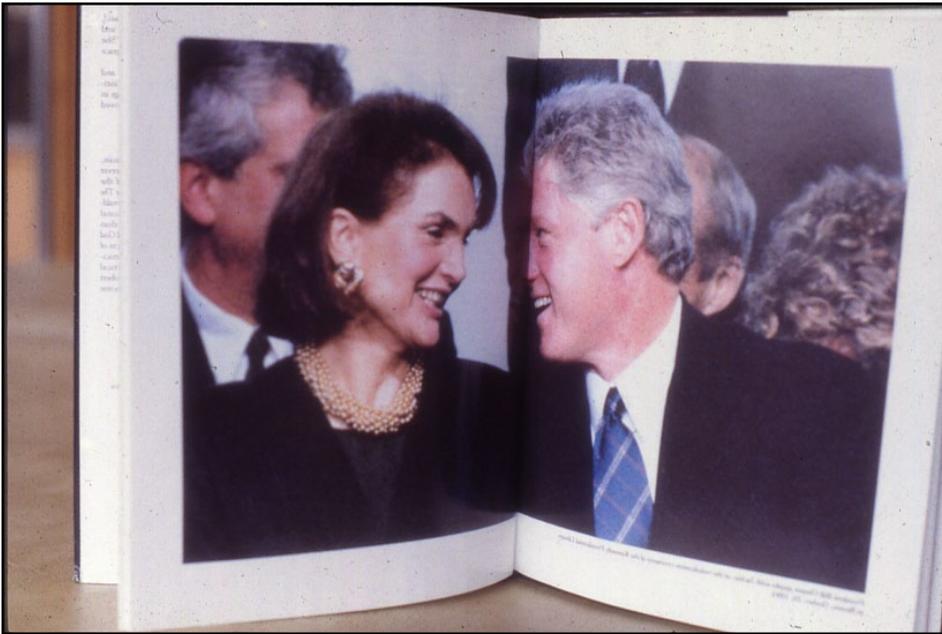
This article highlights some of the trends and shares the facts and figures that represent our industry’s new reality and will help prepare us for what the future has in store.

Today’s Publishing Trends

Bowker is the global leader in bibliographic information and their “Books in Print” publications are well known to active librarians (www.bowker.com). The Bowker database contains more than 12.8 million books, audio-book and video titles. In 2008, they reported that, for the first time, “non-traditional” titles surpassed the “traditional” titles of the book publishers. Their newest report, in spring 2011, also contained some very interesting data for short-run printers and binders. The report stated that, despite the popularity of e-books, traditional U.S. print title output increased 5 percent in 2010.

“Traditional” titles increased from 302,410 in 2009 to 316,480 in 2010. Granted, these are titles and not actual printed and bound books. With some exceptions, large jobs like “Harry Potter” are most likely a thing of the past. Book manufacturing figures report the quantities of books printed and bound, and are not so encouraging. But what is of great interest are the so-called “**non-traditional**” titles. From 2009 to 2010, they grew 169 percent to 2,776,260! Some other publications put this figure even higher, to over 3 million new titles published. Bear in mind that Bowker publishes only titles formally listed with ISBN. As this research company stated, many who are involved as self-publishers and are writing books do not

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A poorly placed image on an adhesive bound binding.

list their works. The explosive growth across this industry is great news for those of us involved with short-run hardcover bindings.

Planning for a book to be printed and bound

Not everybody is or has the qualifications to be a book designer. It is a skill that requires much talent and years of training. Graphic designers usually work for book publishers, who print and bind the so called “traditional” titles. Small self-publishers usually have no idea how to have a book designed, printed and bound. Printing itself can be a troublesome experience. In my library, I have a book titled “47 Printing Headaches (and how to avoid them)” by Linda Sanders. The cover also gives a hint of how to prevent costly printing mistakes. Try to find answers with regard to binding and margins, however, and you will be disappointed. Mistakes in the binding stages cost even more, as you have already

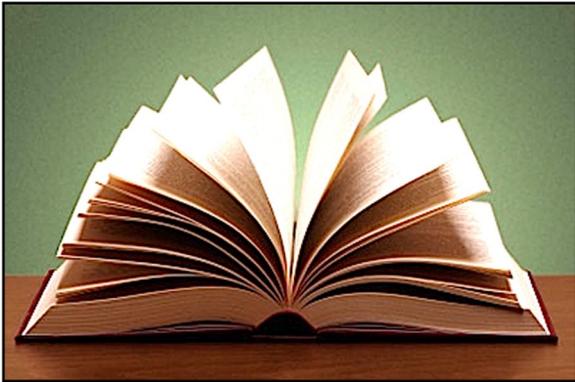
invested in paper and printing. With today’s technology, help is just around the corner. A quick Internet search will help you locate a number of companies (like www.lulu.com) that want to help you print and bind your book. Some of these websites even offer to review your manuscript and give you all kinds of advice on having your written words published, all “free” of charge! But all of those want your name and other information, so be careful.

I assume very few have the necessary skills when it comes to binding! That is why many HBI/LBI members now offer these services. Just check

out our website at www.hardcoverbinders.org. Why would I make such a self-promoting recommendation like that? After decades of being involved with the physical aspects of testing books, disputes and legal implications, my personal view and advice when planning a book is always talk to the binder first. In other words, one must always think backwards! I have published articles using this “Think Backward” title, and for 23 years, conducted book manufacturing seminars at RIT on behalf of BMI, the Book Manufacturer’s Institute. Why did BMI finance such seminars for publishers? The major reason is that the majority of mistakes are always made in the planning stages.

In the 2010 spring issue of the India publication of *Welbound Times* (on Google), Paul Parisi shares his experiences with fellow bookbinders, stressing the importance of communication with their customers. According to Paul, 39 percent

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The wrong paper grain direction affects margins and the joy of reading. This despite a flexible binding.

of all instructions given are wrong! Paul was modest. Some of our graduate printing students, who studied that topic, concluded that “up to 70 percent of all printing errors are the results of faulty planning of the jobs!” This sounded all too familiar as I used to teach classes which covered this topic. Why are we binders so concerned about poor planning? In the final stages of producing a book, we most often can no longer correct the mistakes. Need some examples? I have many, but here is one. A Canadian web-offset printer took on a job of a beautiful, hardcover bound cookbook. Not surprisingly, the publisher was looking for the lowest price. This particular printer was one of Canada’s best to put colorful images onto paper. However, being a commercial web-offset printer and not a book manufacturer, he had no idea how important the paper grain direction is to produce a book that should stay open. (The printer told me this during a visit to their facility). To make a long story short, he used the most economical imposition, resulting in a layout that had all the paper with its grain perpendicular to the binding edge. The printed sheets, glossy, coated paper stock, were then sent to a binder. Afraid that

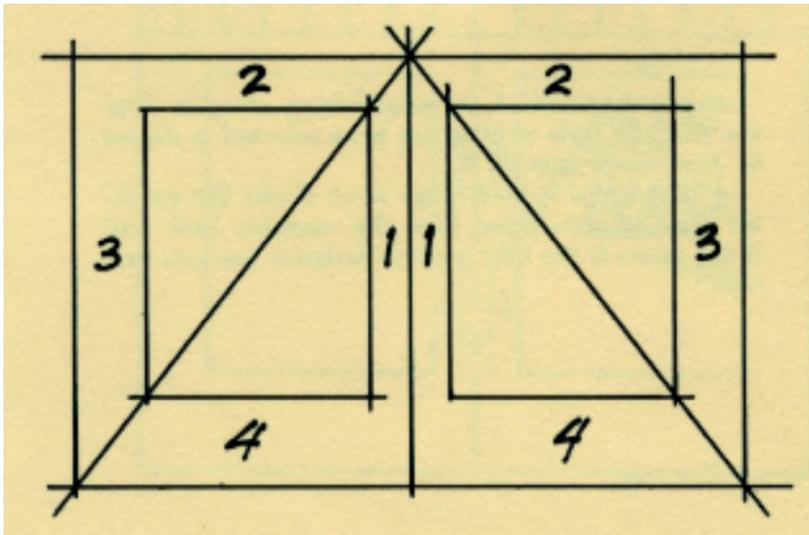
the cross-grain forces exerted onto the binding edge would make the book block crack apart, the adhesive binder operator used deep notches and put more hotmelt than necessary onto the spine. After the cookbooks were sold, they began to get returned in large numbers to the publisher for credit. That is when legal actions started. Thirty-five thousand hardcover books had to be discarded into the recycling process. With butter on your fingers, how can you use a cookbook that does not stay open? The moral of the story...when planning, always consider the end-use requirements and as stated, talk to us binders first. Our advice is free and will help you avoid disasters like the one described.

Items to Consider – Decisions, Decisions

What do you have in mind? How many pages did you generate? What is the product to be printed and bound for? Is it a children’s book? What kind of paper would you use? A heavy or light-weight paper? White or off-white? Coated or un-coated? Offset or digital printing? If you are familiar with PPI (pages per inch) and have that figure, we are able to calculate the exact thickness of the book block. Well, these are just some of the questions. In this article, we do not want to get into Postscript®, TITT, EPS files, and other necessary communication when having a book printed. Let us stay focused on the binding of the books.

Format/Trim-size. What format/ trim-size should you consider? Upright, oblong or square? I remember the times when virtually every designer had a different trim-size in mind. A 6 1/8” x 9 1/4” was, in their artistic, “creative” opinion, aesthetically so much more

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Considering Margins: 1) Bind margin/Gutter; 2) Head margin; 3) Outside margin; and 4) Foot/Tail or Bottom margin.

pleasing than a more common, popular 6" x 9" trim-size. In the 1970s, when we planned seminars for publishing production managers, the former BMI president and CEO of a large book manufacturing facility, Dr. Robert Hackford, told me there were over 130 different trim sizes for book formats. Keep in mind, paper is sold only in certain, given sizes to fit certain printing presses, and therefore, such unusual requests by the designers made it most difficult to find appropriate signature layouts and impositions. Book manufacturers then "cured" those creative ideas with higher prices. The good news today is digital printing. We again can give a client/designer unusual formats and trim sizes they desire. Printing may be done in an 8 1/2" x 11" format, but then we are able to trim it down to any size a client wishes. You just pay a flat rate for the paper. If you specify a trim-size, it is always the final dimension of your book. The correct way to do that is always to specify the width first, then the height. If it is an upright format, we specify 8 1/2 x 11 inches. If the book is to be an oblong format,

we specify it as 11" x 8 1/2", which means the binding is done on the 8 1/2" dimension.

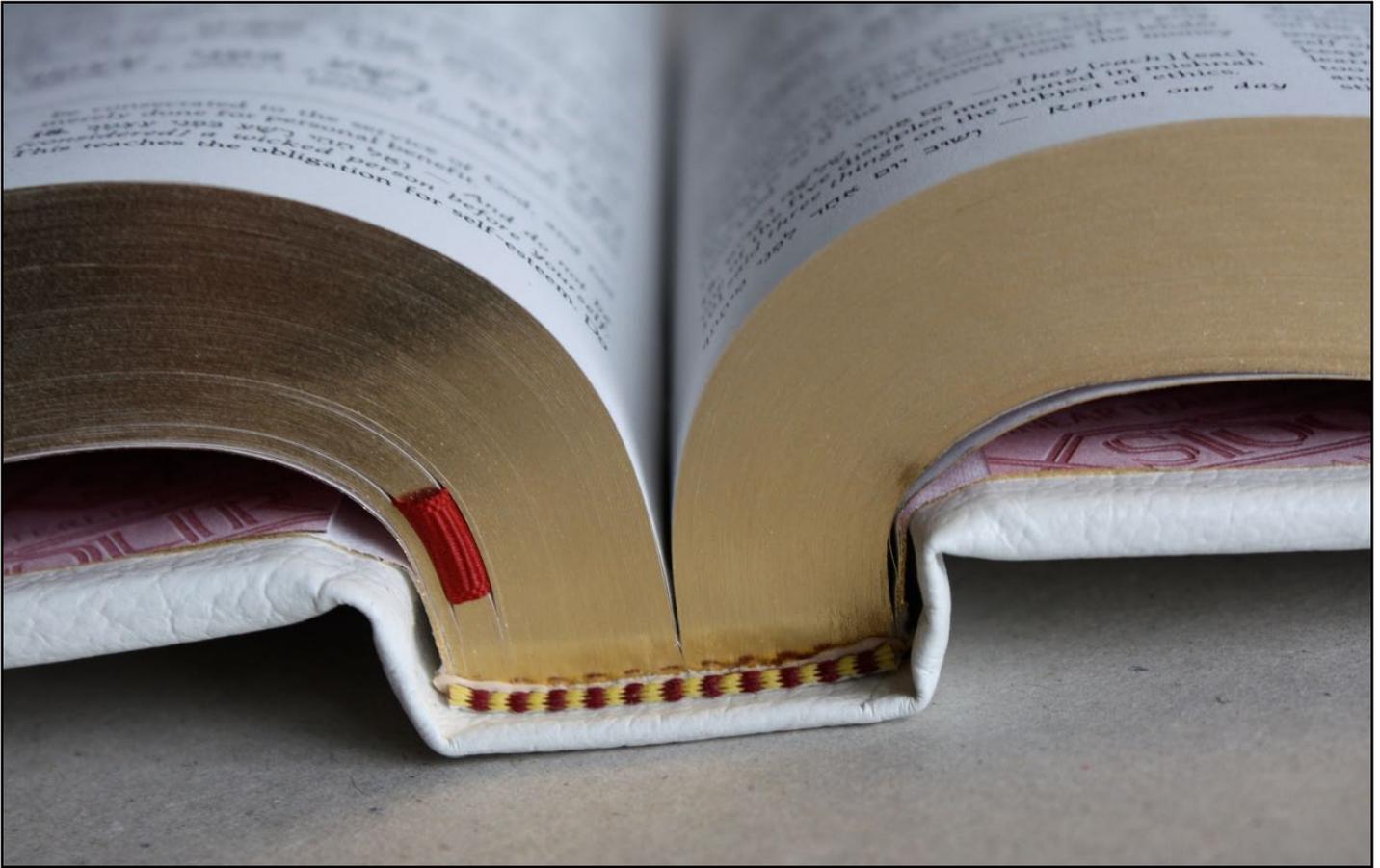
Margins/page layouts are a complex matter, but one can find good guidelines available on the Internet. Choosing a page layout is a design function. There are many methods of establishing margins. One critical item to consider is the optical center. In other words, if you take a given page layout and make all margins the same, they will be out of balance. For us book-binders, on a single page, we make the following references:

- A bind-margin or gutter space is the one that is being bound;
- The head-margin is the one on top;
- The outside margin is, on a single page, the one on the right; and
- The tail or foot margin is the one on the bottom, may also be called the bottom margin.

A good way to get started is to divide a sheet into eight parts. That will establish the bind margin or gutter. Bear in mind that when you open a book, you always see two facing pages, the bind margin is a visual double. Make the head-margin somewhat larger. The outside margin larger and the tail, foot or bottom margin the largest. Best is to take a printed page and paste it into the optical center. There are of course many formulas for a variety of page layouts. The purpose of this article is to make you aware of some critical items when planning for binding.

- **Sewing through the fold** – book will open flat, no adjustments needed.

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Side-sewn books need minimum margins of 1 inch.

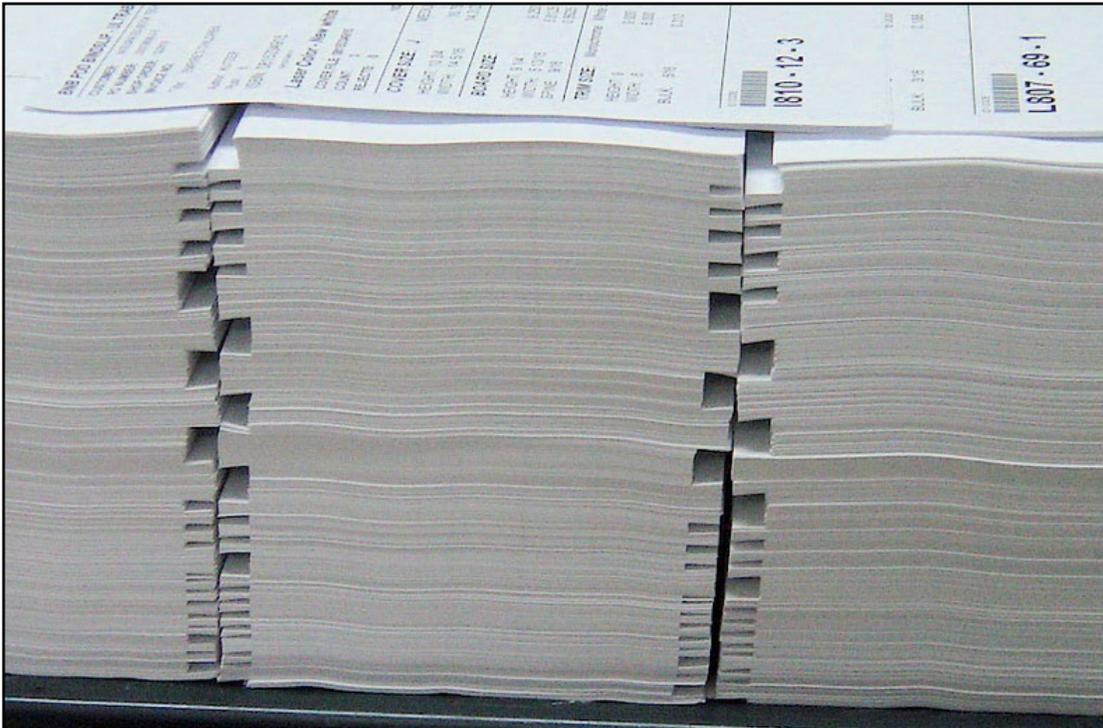
- **Adhesive binding** – double fan, no adjustments needed, binding opens flat.
- **Perfect binding**, milling off the spine 3/16 inch, extra paper in bind-fold required.
- **Side-sewing**, minimum margins one inch, push-out images at least 1/4 inch.
- **Mechanical bindings** – the sheets are trimmed on all four sides, holes or slots are punched into the sheets near bind edge. Allow 1/8 inch for trim on all four sides, 1/4 inch for punching and place margins no closer than 1/4 inch from punched holes or slots.
- **Saddle-stitching/sewing** requires adjustments for creep – a complex matter, binder will advise. Best is to make a sample with the

paper to be used, pierce or drill through it one inch from the bindfold and then adjust margins accordingly. There are exceptions to the rule. For example, if you use heavy folded signatures, you will also need to adjust for creepage. If a binding will not lay flat, less of the bind margins are visible.

The thickness of the book is another important factor that must be considered.

Trim allowances are the easiest part. A finished book, no matter if it is soft cover or hardcover bound must be delivered with smooth edges on all three sides. The minimum trim allowance is 1/8 inch. On heavy, folded

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In digital printing, most often this is done using a given size paper. If you want an odd trim size, the binder now is able to accommodate the designer's wishes.

signatures you will most likely need to add at least another 1/16 inch or the folds will not completely open.

When working as a sample maker for a large book manufacturing facility, I not only had to make a few advance sample books, but also had to furnish all specifications for production. Not a bad idea, especially since there are hundreds of different papers, thicknesses and other characteristics. With such sample bindings in advance, designers then could make decisions on covering materials and take and establish the exact dimensions of the book jacket. But, when they had a book in mind with a final trim size of 8 1/2 x 11 inches, they sometimes sent me the paper to be used to make smoothly trimmed sample books that was already cut

down to the final dimension! Yes, those are some of the experiences of a bookbinder/sample maker down in the trenches. Needless to say, they also wanted the sample books the next day.

Paper grain is perhaps the most critical aspect for successful bindings. As stated earlier with the example of cookbooks and a printer's masterpieces going to the graveyard, the

paper grain, on all books, should always be parallel to

the binding edge. One exception may be being mechanical bindings. Paper fibers always adjust to our environment; they grow and shrink, adjusting to the moisture in the air. How much? In their width, four to five times more than in their length. If a book is perfectly bound and the paper grain is parallel to the binding edge, the growth will show just on the fore-edge. However, should the paper's grain be perpendicular to the binding edge, the paper fibers want to shrink or expand but are "choked" by the glue on the spine. That is when waviness and buckling start to occur.

Particularly in the winter months, paper and paper grain play havoc with some bindings. A future article will cover those problems more in detail.

Continued next page

Soft-cover or hardcover/case binding?

This topic is one that will most likely be the subject of another article, as it can get very complex. For example, what kind of a binding do you have in mind? For soft-cover books, it is mostly perfect binding. For hardcover bindings, there are many different ways to bind. Hardcover bindings require endpapers; are they printed or plain? How will the book block be bound, sewn through the fold (Smyth), side-sewn, double fan adhesive, PUR, or some other technique? Will the hardcover bindings be rounded and backed or will they have a square back? How about headbands and reinforcements? What are the end-use requirements? What will the dimension be for a printed cover? For soft-cover bindings, for a turned-edge hardcover case? What about a dust jacket?

Get advice from the binder

As you can see for yourself, the writing of the book may have been the easy part. When it comes to printing and binding, and especially with all aspects of planning, it can get complex.

An engineer or architect never would attempt to build something without a blueprint. If we establish a blueprint for the entire book project, we are then able to communicate potential pitfalls with our printer/binder. Now, there are always those who look for the cheapest price and ignore good advice. That goes for both the client and for the printer/binder, the latter eager to get the job. After having been involved in many disputes and court cases, my best advice is to make sure everything is in writing. For binders, after giving advice, be sure not to waiver in order to get the job. While you might lose the customer to a competitor for that job, when their product fails, they will

remember your expert advice and, best of all, you will have earned a client for life. The nature of a binder's trained customer relations manager is to solve problems before they occur. She or he is here to help and plan for a most successful binding project.

Finally, you do not have to be familiar with all the details and tricks binders have up their sleeves. It is more important that you seriously communicate with them. And do not forget to always think backward and ask yourself, what is the use of this bound product? Want to have a lay-flat cookbook or a binding that acts like a mouse trap? It's your choice! 

Werner Rebsamen is Professor Emeritus of the Rochester Institute of Technology and the technical consultant to HBI and the Library Binding Institute. He can be reached at wtrebs@metrocast.net.