sappi

The 1 Standard

A Sappi Guide to Designing for Print: Tips, Techniques and Methods for Achieving Optimum Printing Results

Prepress: Preparing Files for Print

With **The Standard**, Sappi Fine Paper North America continues its legacy of serving as an educational resource for print communications professionals. To ensure that you can always count on Sappi for quality printing papers that suit contemporary needs, we constantly keep abreast of design trends, technical advances and issues that concern the industry, and through our promotional materials, we are committed to sharing this information with you to help advance print communications at all levels. The premiere issue of The Standard looks at preparing files for print. Future issues will explore other technical topics related to design and printing.

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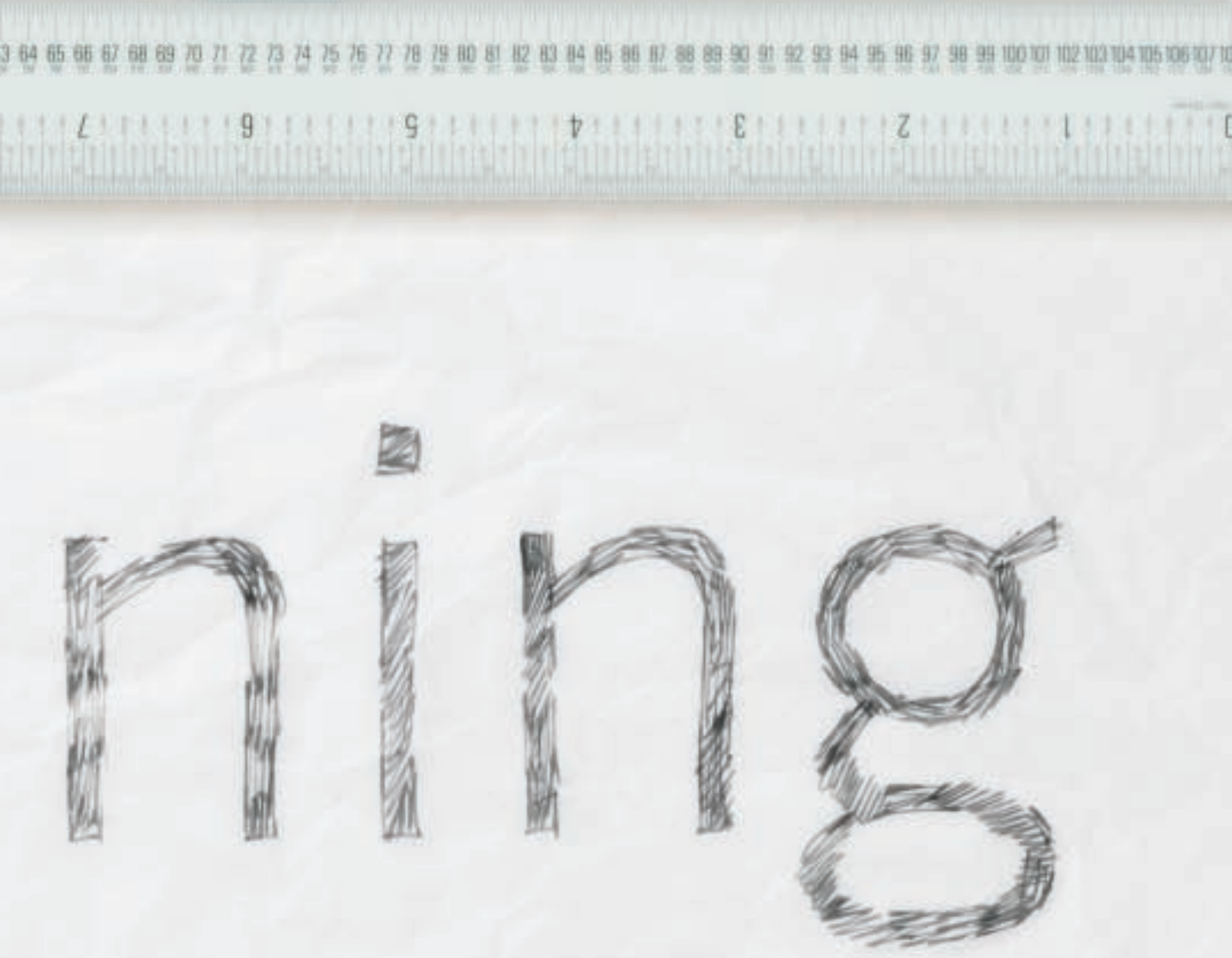
From Sappi, maker of the leading printing paper brands in North America, comes **The Standard**, a new technical publication on printing and design. This issue on prepress is not meant to be a how-to manual, but a resource of “best practice” tips, approaches and reminders, as shared with us by prepress specialists, printers (large, medium and small) and designers (seasoned and novice). We welcome your input. By making The Standard a forum intersecting design and printing, we hope to provide useful knowledge to elevate the level of professionalism and the quality of the end results.


Plan



Planning the Job

Consider this fact: Roughly half of all files sent to the printer cannot be output exactly as delivered. The reasons run the gamut from missing fonts and missing images to the use of incompatible software. Whatever the reason, it creates huge headaches for printers and results in delays, cost overruns, unanticipated proofing rounds, late-stage design changes, and sometimes unhappiness over the finished job. These problems can be avoided. But it demands that printing be factored into the creative process from the earliest planning stage. While designing, two questions should run in parallel: What do you want to create? What will it take to get there? Prepress work doesn't begin when the electronic file is turned over to the printer; it starts with the storyboard and continues right up to press time.

Ten Points to Cover in Your Print Specs

Preparing printing specifications (specs) may seem like a distraction from actual designing, but if you do it right, you're likely to find that your printer is your best ally in making your design work and bringing the job in on budget. Well thought-out specs help printers organize the job, order the right supplies, point out cost-saving options and head off design directions that may cause difficulties on press or throw off the schedule. When in doubt, consult your printer; you'll be happier and so will they. (See page 29 for Print Spec Checklist.)

1. Project Scope

To quote on a job, printers must know basic facts. What are you printing? A poster, book, brochure, packaging or presentation folder? The intended finished size? The format it will take? Portrait or landscape? For multi-paged pieces, how many pages and how will they be bound? Saddle-stitched, perfect bound, spiral, wire-o? What is the print quantity? This information is essential for determining the best press size, scheduling press time and ordering paper, among other things.

2. Storyboard

Whenever possible, for multi-page or multi-panel print jobs include a storyboard (see sample on pages 6-7) as part of your specs. This gives printers an overview of the entire job and helps them plan the best way to lay out forms for optimum printability, efficiency and economy. A storyboard is useful in noting areas of heavy ink coverage, paper stock changes, the location and number of crossovers and bleeds, and such. On two-sided printing jobs, it may also show how different inks can be used on opposite sides of a form or indicate ways to add a double-hit of color or a varnish without blowing the budget.

3. Page Layout

The storyboard provides an overview of the entire job, but sample page layouts give printers a close-up look at how each spread will appear. Be sure to annotate these comps to call attention to details that may affect cost and turn-around time – the use of bleeds, silhouetted images, drop shadows, screen tints, colored or reversed text, offline techniques, placement and type of illustrations, photographs and/or manipulated effects, etc. Printers take such elements into account when estimating costs and scheduling the job.

4. Paper Stock

Include the basis weight, finish and grade name and color of the paper(s) you want to use in your specs. Most printers consider the paper finish when scanning images and factor in dot gain differentials between finishes. The paper's basis weight and quality indicate how much ink the sheet can handle and its runnability on press. Basis weight also determines whether a book is thick enough to be perfect bound, needs scoring and can withstand special techniques such as embossing and die-cuts. Also, advise your printer if you plan to use multiple grades or finishes – say, McCoy Matte Text and McCoy Gloss Text with a McCoy Silk Cover –

and where the stock change will occur so press forms can be configured accordingly. Ask for a paper dummy to make sure you'll be getting what you have in mind.

5. Artwork

Mention whether the job includes photographs or illustrations, and the number and sizes of images involved. Also, state whether you will be providing artwork as transparencies, flat or reflective art, or high-resolution files, and whether they include silhouettes, drop shadows, bleeds, composites, or involve duotones, tritones or quadtones. Avoid surprises by telling your printer what to expect.

6. Inks

Specify the number and types of inks and varnishes you plan to use – e.g., four-color process, match colors, aqueous, metallics, fluorescents. Your printer may be able to show you how you can use more colors at little extra cost – e.g., add two match colors to a four-color job slated to run on a six-color press or use different inks on different forms.

7. Special Requirements

Mention any off-line processes or unusual bindery work. Embossing, die-cuts, laminations, tip-on art, engravings, thermography, French folds, glued flaps, etc., all have to be factored into the production time and cost, especially when additional suppliers are involved.

8. Proofs

Make sure that your printer knows what you expect in the way of proofs – loose color, stripped color, digital proofs or bluelines, ink and/or varnish drawdowns. List how many rounds you anticipate and how many sets of proofs you need per round. Particularly with annual reports, clients often request multiple bluelines or color laser copies for everyone from their CEO and CFO to their accountants and communications people to their outside auditors. Get a count in advance so printers can factor it into their estimate. Ink drawdowns are helpful when you are uncertain how a specific color or varnish will look printed, but be sure that the test is done on the actual stock because paper grade, shade, weight and finish may alter the look.

9. File Format

List the version of the operating system and software you will be using to create your files, particularly if you are working in a very old or very new program. The features of Mac OS® 9 and OS® X as well as versions of QuarkXPress®, Adobe® InDesign®, Illustrator® and Photoshop® must be taken into account by printers and service bureaus so they know how to open and work with your files. Make sure they can support your applications.

10. Scheduling, Packaging and Shipping

Include the delivery date in your printing specs as well as color and file release dates and any other relevant information, especially if it puts pressure on the schedule. If the job has to be on press on a specific date but the client can't sign off on content until the week before, the printer should be advised so they can come up with a contingency plan. Also, specify how you want the finished pieces packed – e.g., shrink-wrapped in bundles of 25, packed in cartons weighing no more than 50 pounds, or stacked on skids for delivery to a mailing house.

Storyboard

The more complex and multi-paged the design, the more important it is to create a story-board. Seeing the whole book laid out at thumbnail size may point out potential problems – e.g., impossible gatefold positioning, ill-placed stock changes, too many ink colors on a form, etc. – and reveal cost-saving opportunities.

Special Techniques
Call out the use of any offline techniques such as die-cuts, embossing or thermography and special inks.

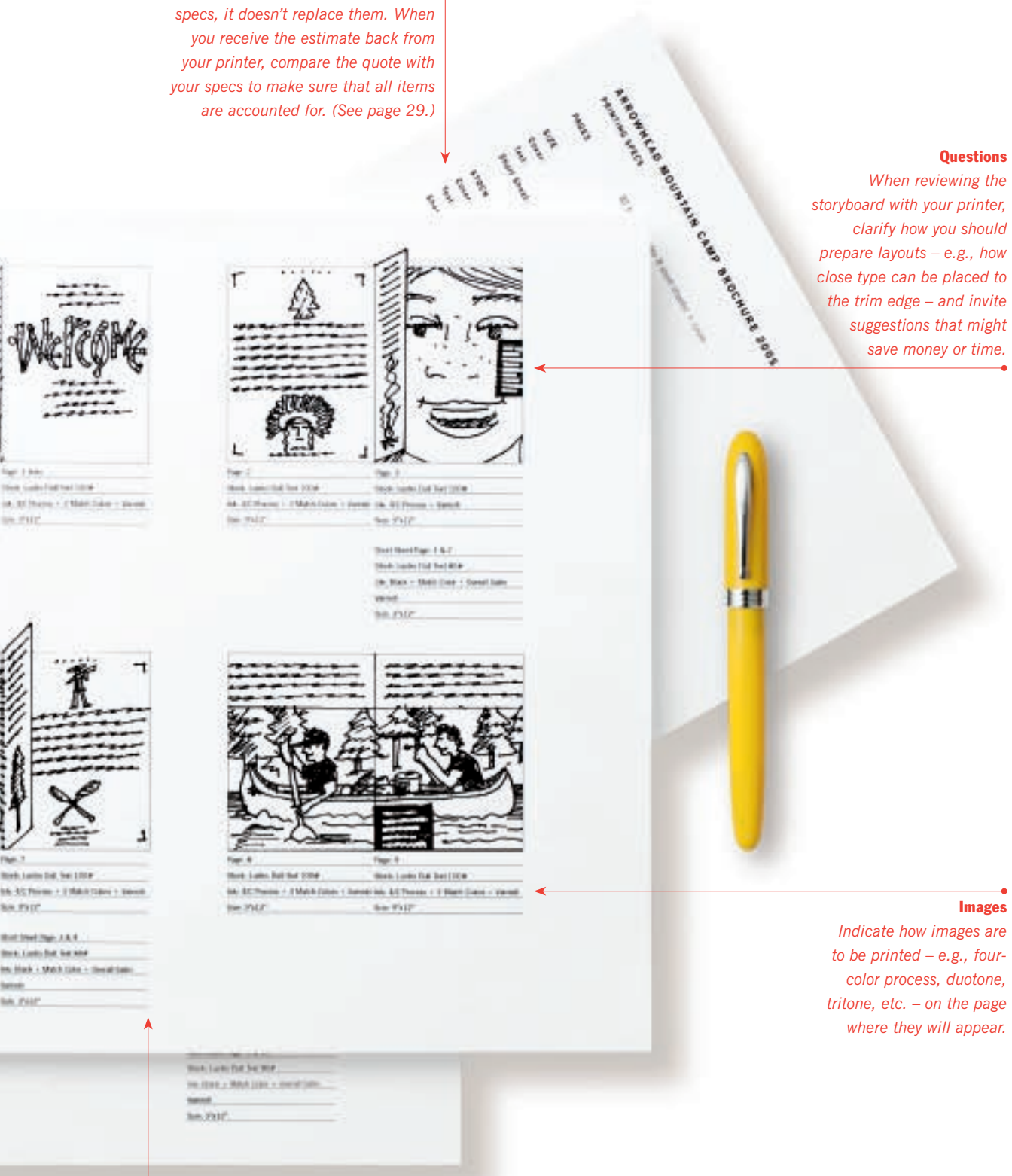
Solid Coverage
Specify how heavy ink coverage will be handled – e.g., 2 hits of the same color or a process under color. Specify color builds or ask your printer for recommendations.

Details
Be sure to note paper stock changes and number of inks.

Inks and Varnishes
Cite whether the color will be made from process or match inks. If you plan to use a varnish or coating, indicate the type (matte, dull, gloss, UV/ultraviolet) and whether it will be overall or spot.

Written Specs

A storyboard supplements written specs, it doesn't replace them. When you receive the estimate back from your printer, compare the quote with your specs to make sure that all items are accounted for. (See page 29.)



Questions

When reviewing the storyboard with your printer, clarify how you should prepare layouts – e.g., how close type can be placed to the trim edge – and invite suggestions that might save money or time.

Images

Indicate how images are to be printed – e.g., four-color process, duotone, tritone, etc. – on the page where they will appear.

Size and Folds

List page sizes and callout anything unusual such as stepped pages, short sheets and gatefolds.

Sample Page Layout

A sample color layout takes some of the guesswork out of estimating. Even though the printer is typically looking at a preliminary design comprehensive, or comp, made up of "placeholder" images representing the final effect you want to achieve, they can get a sense of how the design will come together.

Varnish or Drytrap?

Will a gloss varnish suffice in achieving a high-gloss finish or is a drytrap (which requires an extra pass through the press) necessary? Questions like this arise all the time. Posing the question at this stage, heads off the cost of unnecessary processes.

UV Printing

UV inks cost more than conventional inks, but offer several advantages including a high cure rate so presses can run faster, less dot gain on uncoated stock and excellent color values. But it is not suitable in some cases, so ask before specifying.

Annotate the Layout

When in doubt, point it out. Ask questions. Specify exactly how you want each element on the page to be reproduced. And double check if you know what you want but are not sure how to get there.

Stock vs. Custom

Be specific about the type of binding you have in mind. For instance, wire-o comes in different colors and thicknesses. Typically, black, white and silver are standard, but other colors are considered custom orders, requiring more time and money. If your printer does not have a sample, obtain one from the manufacturer.

Elements on Spread

Don't assume the printer notices every element on a spread. Indicate short pages, bleeds, inks and anything else that affects printing.

Paper Swatch

A paper swatch in the desired grade, weight and finish is essential for determining how to handle a sheet – e.g., whether it needs scoring, can take an emboss or requires a varnish.

Printed Sample

The look of a duotone, tritone or quadtone is determined by choice of ink colors and the proportionate use of each, which is very hard to determine when designing. To help the printer understand the effect you want, look for a sample image and attach it to your comp.

Sample of Techniques

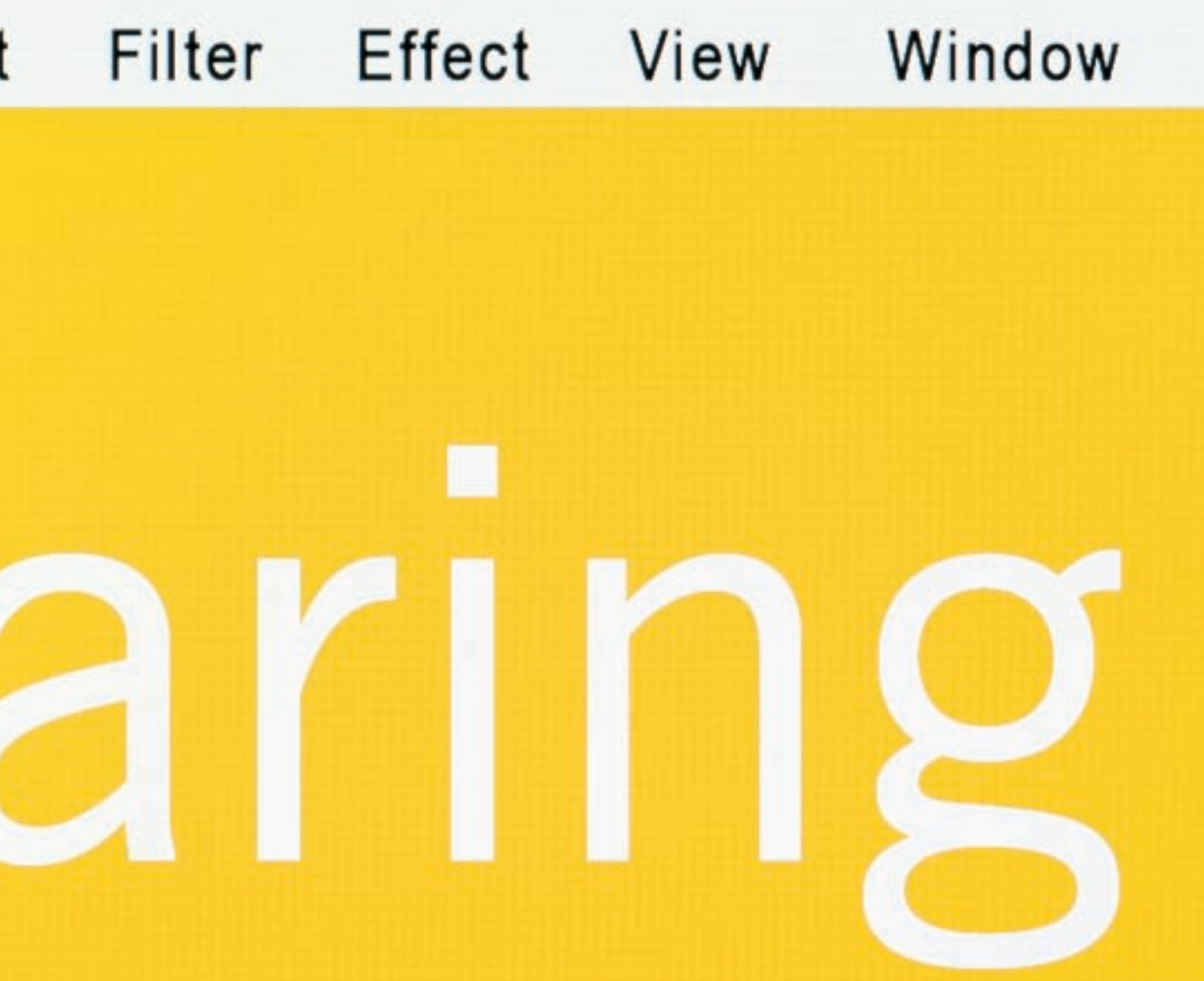
When it comes to embossing and foil-stamping, include a sample of the effect you want, or ask your printer about options. Paper weight and finish are critical in determining the depth and bevel possible for an emboss. Discuss with your printer and factor in extra time for any special processes.

Handwork

Any step that involves handwork or cannot be automated may cost more. Ask your printer to break out such costs separately so you can decide whether you want to proceed.

File Edit Object Type Select

Prepa



Preparing Art Files

Don't let what you see on your monitor or on a laser printout lull you into thinking that your files are print ready. They may not be. **Visually correct and mechanically correct are not one and the same.** Most printers and service bureaus can relate countless stories about beginning to output a document and getting bogged down in conflicts and corrupt files. Sometimes their only option is to rebuild from scratch. Designers have greater control – and responsibility – over prepress than they may realize. But it requires designing with awareness of the needs and capabilities of the print production process each step of the way.

Ten Best Practices of Successful Art Preparation

1. Start with the Best Art Possible

Despite all the advances in graphic software and printing, the adage “Garbage in, garbage out” still applies. The better the original, the more latitude the printer has in achieving the results you want. Use photographs that exhibit the full tonal range. Don’t convert a color photo to make a black-and-white reproduction, if a black-and-white original is available. Start with the best you can get because each step results in a generational loss in quality.

2. Work in the Right Software

Prepare your art in the program that is best suited for the task. Illustrator® is a drawing (vector) program, ideal for logos, packaging, posters and single-page layouts. Photoshop® is a pixel-based (raster) program that lets you size, color-correct and manipulate scanned images such as photographs and flat art. Neither is intended for multi-page documents. For that, use a page layout program such as QuarkXPress® or InDesign®.

3. Make Image Changes Before Importing Them

Scale, rotate, flop and manipulate images in the original graphic application (Photoshop® or Illustrator®) before importing them into your page-layout program (QuarkXPress® or InDesign®). If done in a page layout program, these steps consume a lot of computer memory and may cause output difficulties.

4. Maintain Image Quality

Photoshop® provides tremendous pixel control, but keep in mind that raster software cannot enlarge images without a loss in quality. When producing a digital image, start big because you can scale down with impunity. If you need to make an image larger, it is best to rescan or reshoot it at a higher resolution.

5. CMYK or RGB

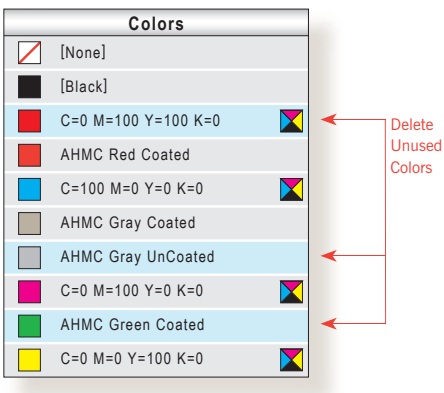
Remember that offset printing requires that all files be in CMYK to separate properly. For stock images that are usually supplied in RGB mode, printers often prefer to make the conversions themselves. If the printer requests otherwise, ask for a conversion profile to follow. Keep in mind that standard default settings on your software may convert some colors to straight black, rather than build the color out of CMYK. Images, especially with flesh tones, may appear dark and muddy.

6. Trust the Software, Not the Screen

If you are doing color corrections or manipulations on your own, rely on the numerical color gauges in Photoshop® rather than what you see on the screen. Be sure to color calibrate your monitor and printer to reduce discrepancies.

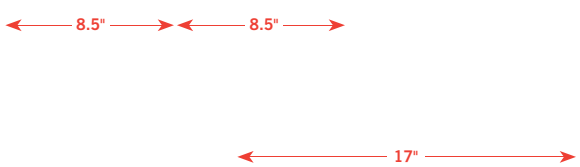
7. Keep Track of Your Colors

Graphic programs give you an infinite choice of colors, and you may want to test out different hues to see which works best. Just be sure to keep track of them and eliminate any unused colors before releasing files. If you don't, you may end up with a separate match-color plate for every color you tested. Or you may accidentally specify four-color process for a job that must be printed only in match colors.



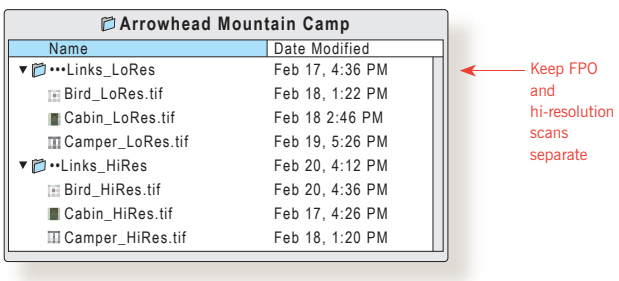
8. Build to Size

Build your files at actual size unless your final size is too large for your software to accommodate. A printed piece with a final size of 8.5 x 11 should be built to 8.5 x 11 page size. Spreads should be created as two 8.5 x 11 pages, not as a single 17 x 11 form. Before releasing, add 1/8th inch bleeds where appropriate and be sure to indicate this. Let your printer make any adjustments for crossovers, gutter grind-off, creep, etc.



9. Use Hi-Res and Low-Res Appropriately

When using a lot of images, don't put hi-res files in layouts because they will make the document unwieldy. Instead, use low-res versions of the original as placeholders and give the printer hi-res versions at the final size. Typically, the resolution should be 300 or 350 dpi. Some printers now offer automatic picture replacement (APR) services – supplying a low-res scan to be used for position only (FPO). The low-res version must be identical to the hi-res scan and be identically named.



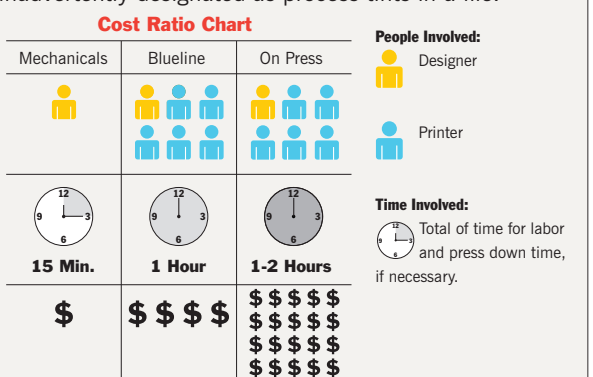
10. Name Your Files Clearly

Unusual characters in a name have been known to cause a printer's computer to crash. Keep file names under 30 characters and use letters and numbers only. Make sure your files are labeled with the correct extension: .ai or .eps for Illustrator®; .tif or .eps for Photoshop®; .indd for InDesign®; .qxd for QuarkXPress®, and .pdf for PDF. Important: Indicate which software version you used in preparing the file because some printers may not have the latest versions.

PROBLEMATIC SYMBOLS: / \ . : ; * # &

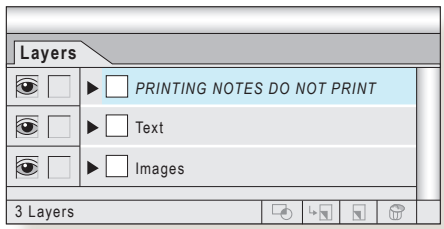
USE DASH OR UNDERSCORE INSTEAD OF WORD SPACE: Bird_HiRes.tif

Why Accuracy Matters. The later a mistake is caught, the more costly it becomes. This chart compares the manpower, time and cost involved, depending on when the correction is made, when a match color is inadvertently designated as process tints in a file.



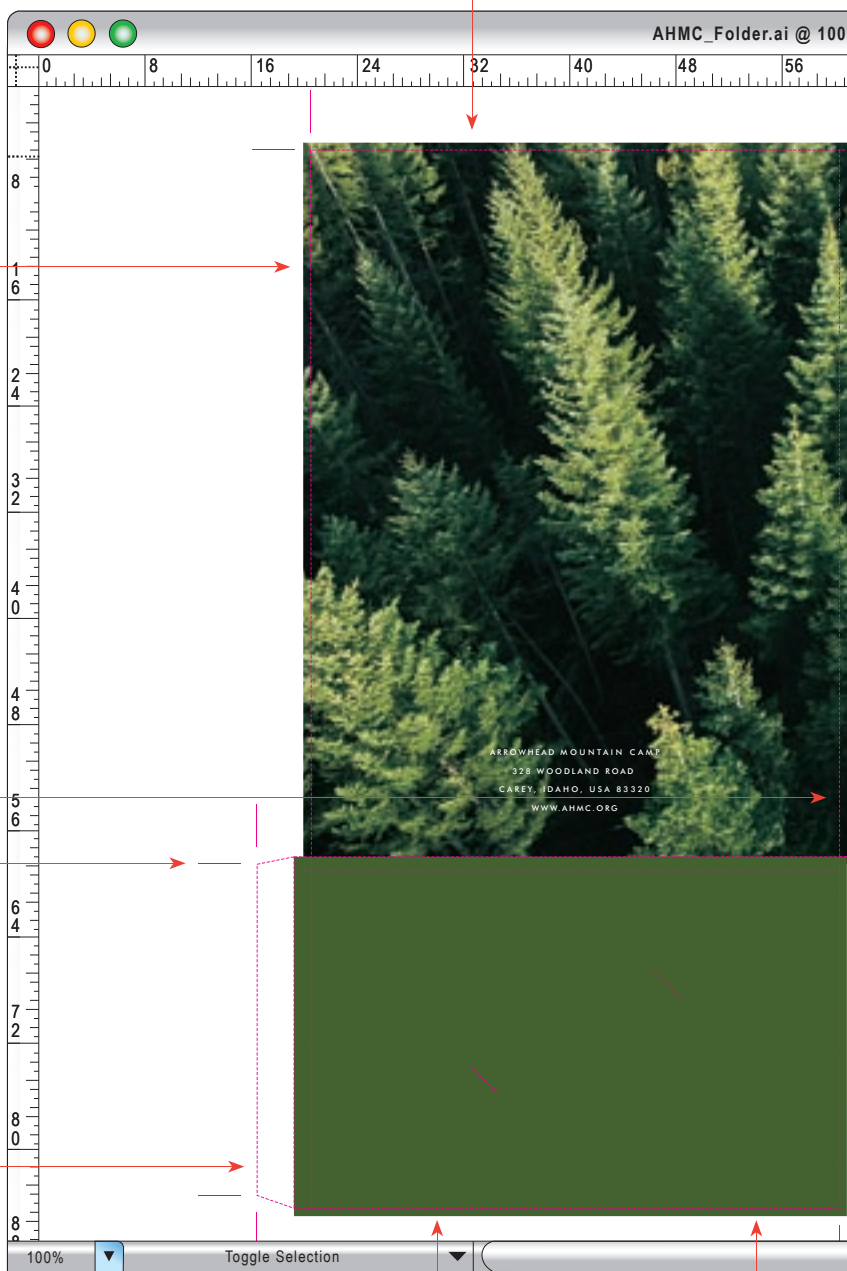
Practical Tips on Preparing Art

True professionals know that the success of a design relies heavily on how it has been executed. Even after a design concept has been approved, there are lots of technical considerations to keep in mind when creating the artwork. In some cases, failure to do so can lead to disastrous results. This spread looks at preparing artwork for a specific job – in this case, a presentation folder – and offers pointers on how to head off problems at the printer and in the bindery.



Label Your Layers

If your file has several layers, identify each layer – e.g., "printing notes," "text," "images," etc. – so it can be found quickly.



Dieline

For custom packaging, supply the printer with a mock-up with dimensional details and the specific paper you plan to use. The printer will provide a dieline engineered to the weight of the paper and the way it folds.

Avoid Cracking

Especially when "painting" the sheet with ink, be mindful of the potential for cracking when the sheet is folded. Let your printer know your plans, so they can make sure the job is laid out to score with the paper grain, not cross-grain. Also, consider the use of aqueous coating to prevent ink ruboff.

Capacity or Expansion?

When designing a presentation folder, an important question to ask early-on is what will go inside. That will determine whether you need to design a capacity (to hold a fixed number of items) or an expansion folder.

Glue Allowance

For presentation folders, remember that glue will not adhere properly on inked surfaces. Leave folder flaps to be glued unprinted.

Matching Colors

Ink color may vary from one side of the sheet to the other, so when preparing folders with fold-up pockets, consider printing each side in a contrasting color.

Check Your Colors

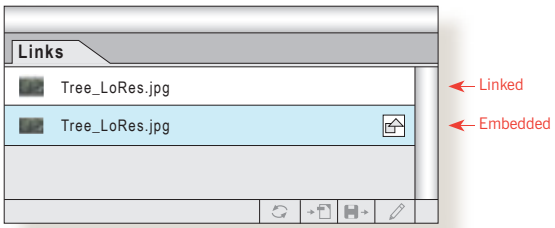
Illustrator® does not automatically match the colors you are using to your swatch palette, so be sure to check that any color you use exists in the swatch palette.

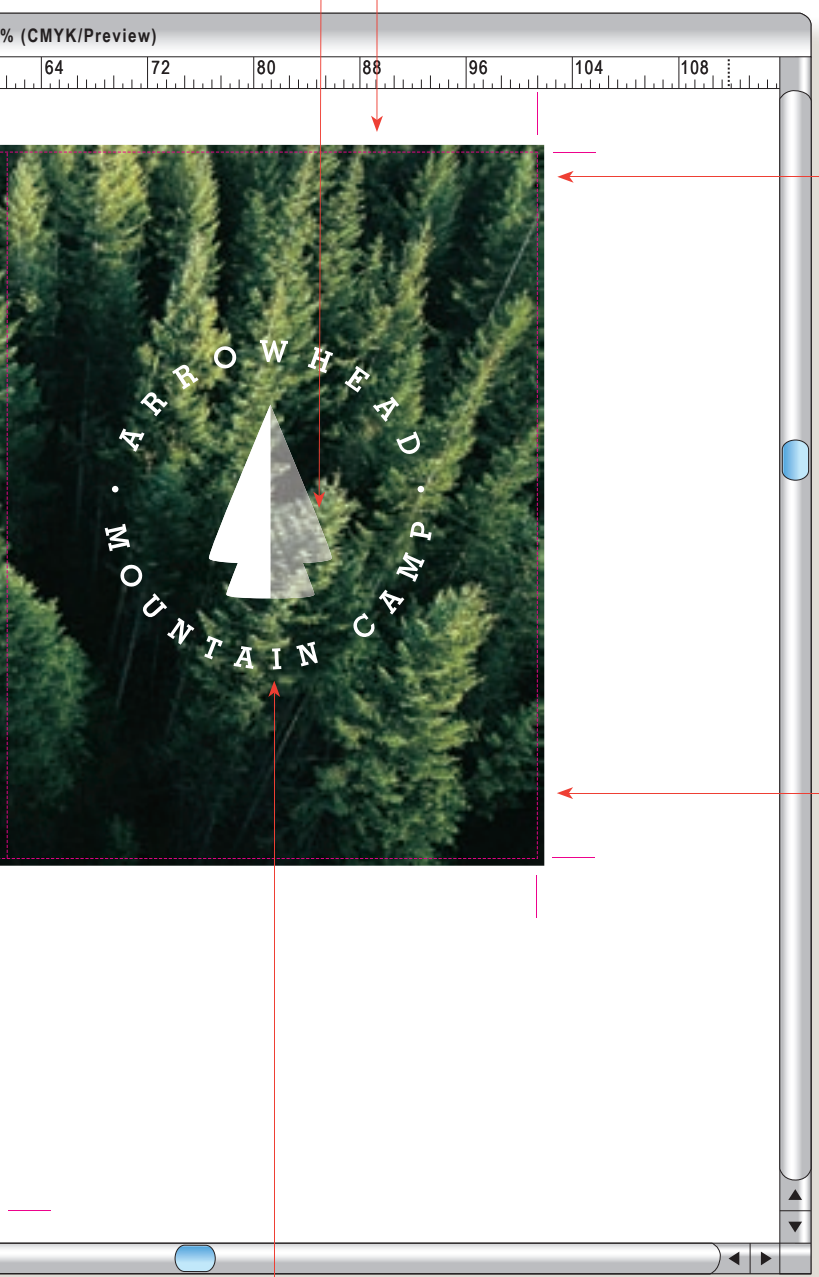
Transparency

Before using transparency, be sure to notify your printer and discuss the effect you want to achieve.

Embedded vs. Linked Images

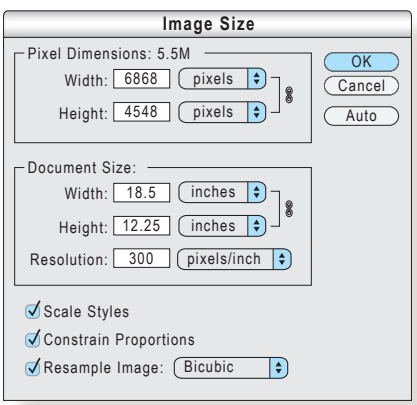
When saving Illustrator® files, embedding an image will cause files to be huge and will slow the processing of your file. Link images instead, and keep them in a separate folder.





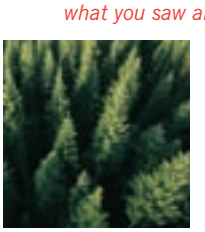
Hi-Res Imports

Hi-res photographs imported into an Illustrator® file should be sized at 100% and at the established resolution, generally 300 or 350 dpi.

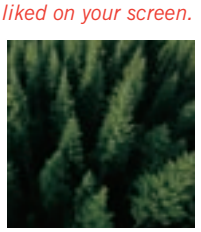


Check Color Manipulations

Whether your printer or you make color corrections or manipulations to a hi-res image, ask for a color proof and check it carefully. Unless your monitor and fiery printer are calibrated to your printer's output device, the color may come out looking different than what you saw and liked on your screen.



Output from Designer



Output from Printer

Convert Text to Outlines

When saving EPS files in Illustrator®, converting text to outlines can eliminate compatibility and missing font issues in production. Be sure to save the original un-outlined version, just in case you need to make changes later. If you have too much text to outline, make sure you provide the exact font in a separate font file.

Preparing Multi-page Files for Print

There are many things you should watch out for when designing brochures, annual reports and books in a page layout program such as QuarkXPress® or InDesign®. Here are a few tips.

Rule Weights

Always use numerical values to set rule weights because default weights (like "hairline" rules) vary among software applications and may not print properly. When reversing rules out of four-color backgrounds or heavy solid areas, consider increasing the rule weight (.35 increased to .5) to avoid filling-in on press.

File Names

Include a brief descriptor in file names: "cover" for a cover file, "mech" or "blue 1" to describe the mechanical or most current version of blueline file.

Achieving a Rich Solid

A double hit of the same color isn't the only way to achieve a rich solid. Also, because all the printing units may be "spoken for," it may not even be an option. Printers often have their own formula for building a rich black, so ask for recommendations.

Single Hit of Black

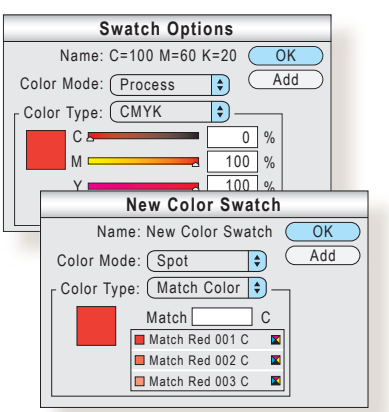
Black with 40% Match Gray

Black with 40% cyan under color

Four-Color Black (Black with 30c 30m 30y)

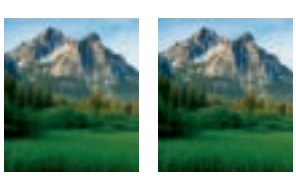
Defining Colors

In color palettes, CMYK builds should be defined as "process." Spot colors should be defined as "spot." To avoid confusion, make sure that colors used in imported Illustrator® and Photoshop® files follow the same naming convention as colors used in QuarkXPress® and InDesign® files.



Proper Image Resolution

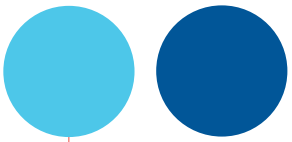
Make sure your images are in the correct dots-per-inch (DPI) for printing. The difference may not be visible on the computer screen but will be noticeable when printed.



100 dpi 300 dpi

Spot Color
Match Blue

Process Color
C100 M60 K18



Process vs. Match

Process and match colors may look identical on the screen, but they will separate differently. If you need to convert a match color to process, use a conversion guide or ask your printer for a recommendation.

Check the Font

Mixing font versions from different manufacturers can cause the type to reflow, changing line breaks or possibly losing copy. Always supply the exact font file, both printer's and screen fonts, to avoid this problem.

other crafts. Friendly Arrowhead counselors make every moment so much fun that young campers won't ever want to leave.

d @ 100% (CMYK/Preview)

64 72 80 88 96 104 108

Identify constellations in the night sky. See first-hand the geological and botanical complexity of the region. Practice wood carving and other crafts. Friendly Arrowhead counselors make every moment so much fun that young campers won't ever want to leave.

Trail Skills It is placed here in lieu of the actual text to be typeset. The copy you are now reading. It is

Cabin Life It is placed here in lieu of the actual text to be typeset. The copy you are now reading. It is placed here in lieu of the actual text to be

Style Sheets

Style sheets can streamline the creative process when preparing art, but be sure to eliminate unused style guides before releasing files to the printer.

Styles
Copy 20pt Black
Copy 10pt Blue
Header 10pt Blue
Header 10pt Red
Header 8pt Knockout

Forgiving Tints

When creating small type from process tints, remember that registering multiple tints on press is difficult. Limit your choice to a two-color combination. Yellow, in particular, is very forgiving if there are registration problems.

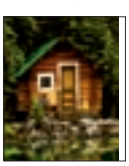
100% m + 100% y = red

a + a = a

Distorting to Fit

Sometimes after releasing loose color to your printer, you find you need to resize an image because the layout has changed. This is allowable within +/- 10% of the original scan size. Check with your printer and let them know if you have distorted the image.

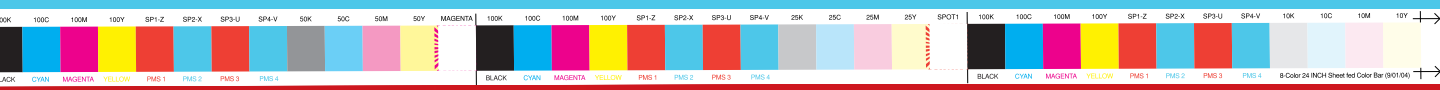
x:100%
y:100%



x:106%
y:100%

Drop Shadows

Even though newer software programs include a drop shadow feature, you may want to talk to your printer about the exact effect you seek.


00K 100C 100M 100Y SP1-Z SP2-X SP3-U SP4-V 50K 50C 50M 50Y MAGENTA
LACK CYAN MAGENTA YELLOW PMS 1 PMS 2 PMS 3 PMS 4
100K 100C 100M 100Y SP1-Z SP2-X SP3-U SP4-V 25K 25C 25M 25Y SPOT1
BLACK CYAN MAGENTA YELLOW PMS 1 PMS 2 PMS 3 PMS 4
100K 100C 100M 100Y SP1-Z SP2-X SP3-U SP4-V 10K 10C 10M 10Y
BLACK CYAN MAGENTA YELLOW PMS 1 PMS 2 PMS 3 PMS 4 8-Color 24 INCH Sheet fed Color Bar (9/01/04)

Relea

asing

Releasing Files for Print

When your service bureau or printer seems to take forever to output your files, the problem may not originate on their end, but in how you prepared the files. A lot of time can be lost in file repair. Since roughly half of all supplied files are done wrong to some degree, output providers routinely have to factor the extra work into their schedule and cost estimates, or bill for additional changes. When in doubt, consult with your service bureau or printer or ask if they will test a file early-on to make sure your methods are compatible with theirs.

Ten Common Mistakes When Releasing Files

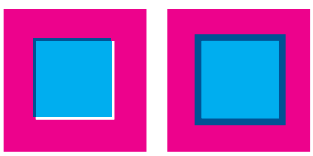
Here are ten of the most common mistakes made in preparing files, culled both from the Graphic Arts Technical Foundation and a survey of printers and designers.

1. Missing Fonts

Missing fonts are the bane of printers and service bureaus. So many versions of the same typeface exist that printers can't make font substitutions to fix type without risking a different look or causing the text to reflow. Always include the exact fonts used in your files.

2. Don't Trap

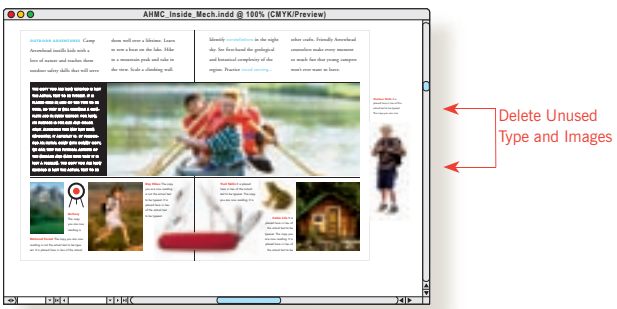
The emphatic plea from printers and services bureaus is: Do not trap! Trapping – the creation of overlaps between adjoining colors to make sure they abut exactly on press – must be set to the printing method used, otherwise the traps may come out too wide or thin, leaving haloes or gaps between colors. Since the printer's software cannot tell which traps are right and which are wrong when outputting files, they prefer to set the trap widths themselves.



TOO THIN TOO WIDE

3. Messy Files

Clean up your files before releasing them for output. Cluttered files not only confuse and frustrate service bureaus and printers, they compound the possibility of errors. Even an unused image (off to the side or on an unused layer) with no link can lead the printer to conclude something is missing. Remove unnecessary artwork, delete unused colors, make sure that you have recorded spot colors and that the color names match exactly across all programs. An oversight such as not specifying whether a color is process or match causes delays by forcing the printer to call and ask. Either that, or the RIP software will decide automatically and put the color on its own plate, conceivably turning a four-color job into a five-color job.

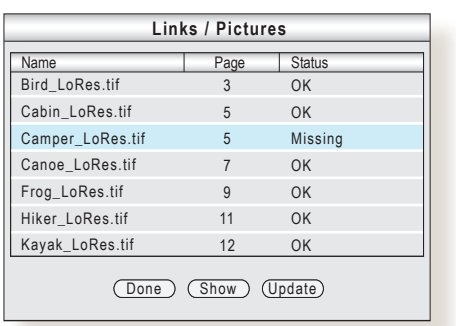


4. Incorrect Page Size Setting

Incorrectly specified page settings cannot be fixed by simply scaling up or down, so make sure your document size is your trim size. Leave decisions such as grind-off to your service bureau or printer.

5. Missing and Unlinked Graphics

Your page layout document shows the image, but the actual file is missing. It could have become unlinked when saved in a folder that differs from its original location. With missing links, graphics on the page layout document will output in low-res or cannot be output at all. Make sure all links are up-to-date.



6. Inadequate Bleeds

Bleed photos and other graphics that extend to the edge of a page must be set up to overlap the trim margins by an 1/8th inch to avoid white along the edge.

7. No Hard Copy Proof

A hard-copy printout lets printers see the final approved document, check for discrepancies and clarify how you intended the layouts to look. Make the printout at 100% of finished size if possible, or indicate what percentage of final size it represents. For digitally transmitted files, send a PDF with color mark-ups for reference. Also, for multi-page jobs, include a mock-up to show folding and binding. One of the most common printing mistakes is backing up in the wrong direction or binding pages out of sequence.

8. No Color Mark-Up

In addition to a hard-copy proof, supply a color mark-up so the printer can note where the color breaks, overprints and knock-outs are intended to go.

A word about PDFs

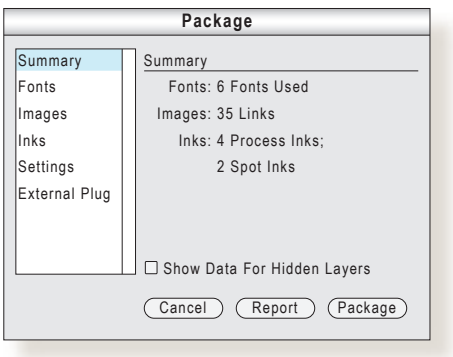
Releasing files in PDF (Adobe® Portable Document Format) has become increasingly popular in the publishing and advertising business because it provides a degree of standardization for materials printed in multiple locations and at different printers. This print-ready format preserves all the fonts, formatting, graphics and colors of any source document, independent of the application and platform used to create it. What's more, it can easily be viewed on multiple platforms without losing quality. **Caution:** Keep in mind that press-ready PDFs embed data so the printer cannot make last minute changes or color adjustments to images, but must print the file as-is.

For best results:

- All PDF files must be X1A compliant.
- Images must be high resolution; do not downsample.
- Include the bleeds and crop marks.
- Embed the fonts.
- Send CMYK, not RGB.

9. Failure to Use Preflight Software

If your software program has a preflight or "collect for output" feature, be sure to use it. The newer versions will help you collect all the fonts and images, search for missing items and avoid careless mistakes. They will also create a report for the printer. Be sure to double check that all files are there after you collect for output because sometimes the feature mistakes fonts.



10. Unmarked Revision

For revisions, send only the files that have changed and give them a new name. If new support files or fonts are used, include them – and supply new lasers with changes clearly marked.

Releasing Files

Remember that your printer is invariably working on several jobs at the same time, so make sure that your package is complete and everything inside is clearly marked. This will save both you and your printer a lot of time and aggravation.

Color Mark-Up

The color mark-up should be at 100% scale. If this is not possible, indicate the percentage of its intended size. (See page 24)

Hard Copy

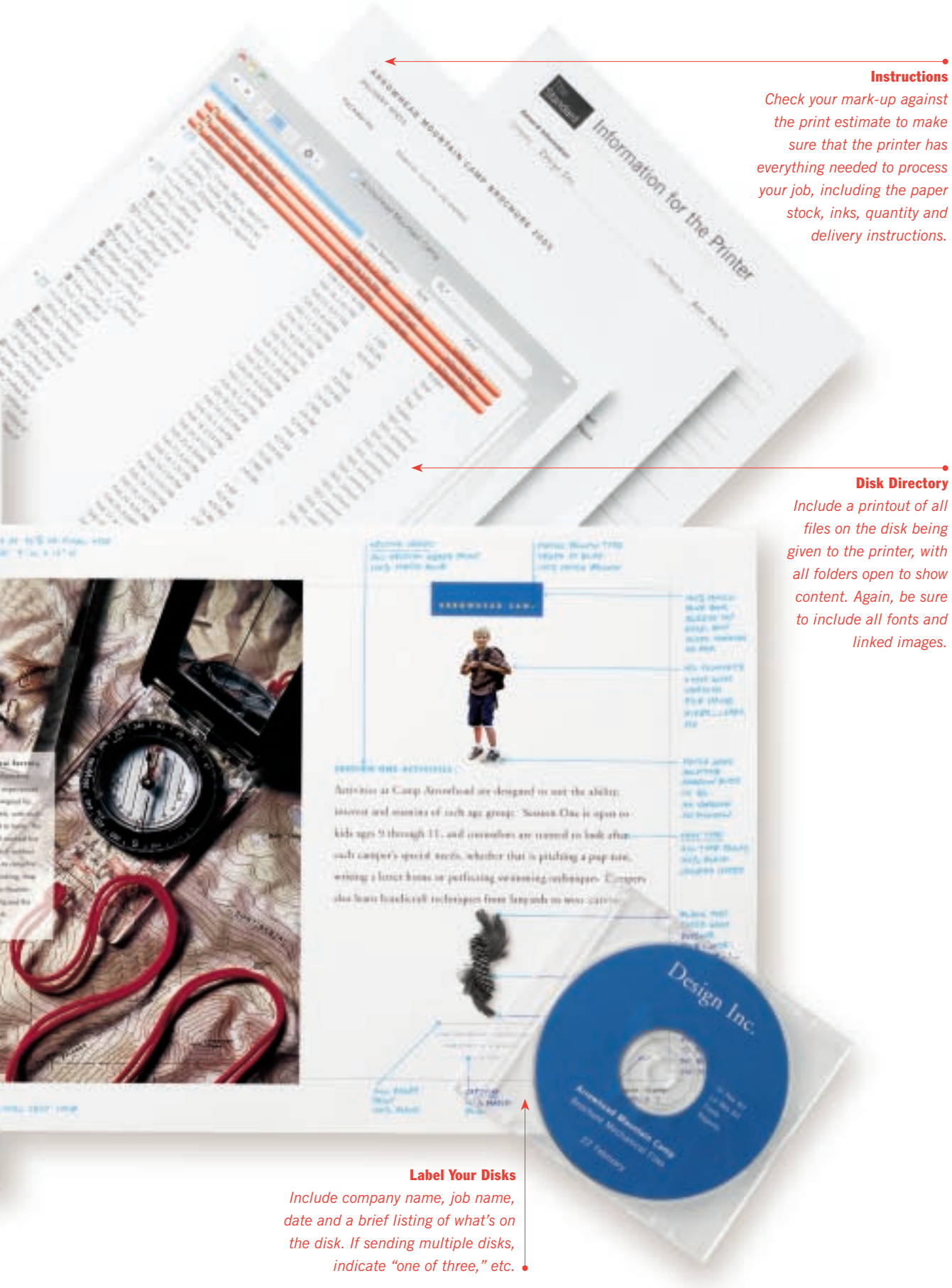
Include laser proofs that match the most recent version of your files. For large formats, tile and tape your proofs together if necessary.

Ink Drawdown

Not all jobs require an ink drawdown, but it may be helpful when trying to determine how a specific match color looks on a particular paper finish and weight. Colored stock, for instance, tends to affect transparent inks. It's preferable to do drawdowns early-on. Check them carefully and request color adjustments in advance of going on press.

Artwork

Label transparencies and reflective art with the page number they appear on and the file name of the low-res FPO file. Keep a photocopy of all transparencies and original art that you release.



Instructions

Check your mark-up against the print estimate to make sure that the printer has everything needed to process your job, including the paper stock, inks, quantity and delivery instructions.

Disk Directory

Include a printout of all files on the disk being given to the printer, with all folders open to show content. Again, be sure to include all fonts and linked images.

Label Your Disks

Include company name, job name, date and a brief listing of what's on the disk. If sending multiple disks, indicate "one of three," etc.

Color Mark-Up

A hard-copy color mark-up shows the printer what the layout should look like in color and provides instructions on how you intended it to be printed. If you are releasing your files as a PDF, you can prepare your mark-ups on a separate layer and send that PDF to your printer separately.

Write in the Margins
Write your instructions in the margins of the laser printout. When marking up color in the electronic file, be sure that instructions are on a separate layer that clearly states "not to be printed."

Bleed Images
Point out all areas that bleed off the page.

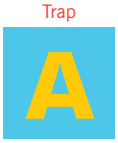
Screen Tints
Specify the colors and percentages used for the screen tints. If running black type over a ghosted four-color image, take the black out of the ghosted area so the type will read more clearly.

File Names
When working with multiple versions of the same image, be sure to note the file name on your mark-up, so the printer will not accidentally put the wrong one in place.

FPO Images
Low-res scans that are for position only (FPO) should be clearly marked. The hi-res file in a separate folder should be referenced to that page.

Overprint

Trap



Overprint or Trap

When there is an overlap, be sure to specify overprinting or trapping. Consult your printer if you have any doubts.

Drop Shadow

If shadows are to be created by the printer, specify their placement, width, direction and color. Provide a sketch or sample if possible. Also, indicate whether the shadow is to be varnished or not.

Dot-to-dot varnish

Outline varnish

Varnish

Specify the type of varnish – e.g., gloss, satin, dull, etc. – and whether the coverage is spot or overall.

Common Elements

Common elements can be mentioned once instead of repeating often.

Glossary of Prepress Terms

Basis weight

The weight in pounds of a ream (500 sheets) of a specific paper grade that has been cut to its basic size.

Binding

The fastening of papers to create a brochure or book. The most common binding styles are saddle-stitch, perfect-bound, side-stitched, case or edition, and mechanical.

Bleed

A printed color or image that extends past the trimmed edges of a page, usually an 1/8th inch.

Blueline

Prepress photographic proof made from stripped negatives where all colors show as blue images on white paper. Color digital proofs are beginning to replace bluelines.

Clipping path

A vector-based outline used to "clip" or silhouette an image from its surroundings so only the desired part will print.

Color separation

A laser scanning method used to separate full-color artwork or transparencies into the four primary printing ink colors of cyan, magenta, yellow and black.

Creep

The phenomenon of the middle pages of a folded signature extending slightly beyond the outside pages.

Crop

The blocking out of unwanted parts of an image to fit a layout space or deleting portions that aren't relevant.

Crossover

An image or type that continues across a spread of a brochure, book or magazine to another page.

CMYK

Acronym for the ink colors used in four-color process printing. The letters stand for cyan, magenta, yellow and key (black). Also called process colors.

DPI (Dots-per-inch)

In offset printing, the number of dots that fit horizontally and vertically into a one-inch measure. Generally, the higher the dpi, the sharper the printed image.

Drawdown

A test of the ink color on the actual paper stock that will be used to evaluate how it looks.

Dry trap

Printing over dry ink, which, unlike a wet trap, requires a separate pass through the press.

EPS (Encapsulated PostScript)

File format for images or graphics.

Finish

The surface characteristics of paper – such as gloss, matte, silk, velvet, satin, and dull.

Finishing

Post-press operations, including trimming, scoring, folding and binding.

Font

A typeface family that includes all letters and numbers in the same style.

Form

Pages of a book or brochure that are printed on the same sheet of paper as it passes through the press. Once the sheet is folded and trimmed, the form becomes a "signature."

Four-color process

Method of printing using cyan, magenta, yellow and black (CMYK) inks to simulate full-color images. Also called full-color printing and process printing.

FPO (For position only)

Usually a low-resolution image (72 or 100 dpi) file used only to indicate placement and size. It is meant to be replaced by a high-resolution image before printing.

Grindoff

The 1/8th inch along the spine that is ground off of gathered signatures before perfect binding.

Hard copy

A paper printout at 100% size of digital files. It is usually output on a desktop laser or inkjet printer.

Hi-res

High-resolution image, usually 300 to 350 dpi.

Knockout

An area of background color that has been masked out (knocked out) by a foreground object and therefore does not print.

Loose color

Proof of a halftone or color separation that is not assembled with other elements on a page. Also, known as loose or scatter proof.

Low-res

Low-resolution image, such as 72 or 100 dpi.

Mark-up

Instructions written on a hard-copy printout.

Match color

A custom-blended ink color that matches a specified color in a color system such as Pantone®, Toyo® or TruMatch®. It is not built from a combination of CMYK.

Overprint

Printing one ink over another, such as printing type over a screen tint.

PDF (Portable Document Format)

Adobe® Systems file format to facilitate cross-platform viewing of documents in their original form.

Prepress

RIPing files, platemaking, and other work performed by the printer, separator or service bureau in preparation for printing.

Process colors

See CMYK.

Proof

Print made from negatives or plates to check for errors and flaws, predict results on press and record how a printing job is intended to appear when finished.

Raster graphics

Computer image made up of pixels. Photoshop® is the most common raster program.

RGB

Red, green and blue – the additive primaries used in monitors. They are not printing colors.

RIP (Raster Image Processor)

This device is designed to interpret PostScript files and create a document suitable for printing.

Service Bureau

Typically an independent business that specializes in preparing digital files for print.

Source File

The original graphic file.

Spot Color or Varnish

Specific color or varnish that is applied only to portions of a sheet.

TIF or TIFF (Tagged Image File format)

Raster file format used for image placement in page layout programs. TIFs can sometimes be tinted and modified in a page layout program where EPS images cannot.

Trim size

The size of the printed piece in its finished form.

UV coating

Liquid applied to a coated sheet, then bonded and cured with ultraviolet light.

Vector graphics

Graphics that use mathematical calculations to describe lines and curves. Illustrator® is the most common vector program.

Guides

To help you double-check whether you have covered everything the printer needs, we have developed a **Print Specifications Checklist**, a **File Release Checklist** and an **Information for the Printer** form for your convenience. Make multiple copies and keep them handy for your next job. Also, keep in mind that Sappi is here to assist you. For swatchbooks, paper dummies and printed samples on any Sappi brands, please contact your local paper merchant or Sappi representative. For answers to print-related questions, call our technical experts at 1.877.Sappi.Help.

The Standard

Print Specifications Checklist

Copy this form and use it to check that you have provided everything your printer needs.

Printer Information

- ☐ Contact person/print rep
- ☐ Company
- ☐ Address
- ☐ Telephone
- ☐ Email

General Information

- ☐ Job name
- ☐ Total number of pages
- ☐ Quantity
- ☐ Final trim size
- ☐ Flat size (if applicable)
- ☐ Bleeds (if applicable)
- ☐ Number of colors

Stock

- ☐ Grade name
- ☐ Paper finish(es)
- ☐ Paper weight(s)
- ☐ Paper color

Inks

- ☐ Process, match, or special inks
- ☐ Type of varnish or aqueous coating
- ☐ Spot or overall coverage
- ☐ Double hits (if applicable)
- ☐ Drytraps (if applicable)

Files Furnished

- ☐ Digital files + hard copy + mark-up
- ☐ Software application(s) and version number(s) specified

Artwork

- ☐ Number of transparencies or flat art to scan, and print size
- ☐ Number of hi-res digital files, and print size
- ☐ Number of outlines/silhouettes (if applicable)
- ☐ Number of drop shadows (if applicable)

Proofs

- ☐ Number and rounds of loose proofs
- ☐ Number and rounds of composed proofs
- ☐ Number and rounds of bluelines/inkjets required

Bindery/Finishing

- ☐ Type of bindery (if applicable)
- ☐ Die-scores and folds
- ☐ List any offline processes (if applicable)

Packing/Shipping

- ☐ Quantity per carton
- ☐ Shrinkwrap or slipsheets if required
- ☐ Shipping instructions

Schedule

- ☐ Delivery date(s) – partial or full quantities and addresses

sappi Form courtesy of Sappi Fine Paper, maker of McCoy, Strobe, Lustro, Patina, Vintage, Opus, Northwest, Aero and Somerset

The Standard

File Release Checklist

Copy this form and use it to check that you have provided everything your printer needs.

File Information

- ☐ Disk directory or window printout (with all folders open)
- ☐ Final set of 100% laser printouts. Tile and tape together if necessary.
- ☐ Color printouts clearly marked for color breaks, knockouts, FPOs, bleeds, etc.

Fonts

- ☐ All fonts (printer and screen) included
- ☐ All fonts used in placed files included
- ☐ Fonts placed in a separate folder marked FONTS

Text & Rules

- ☐ All unwanted items deleted
- ☐ All rules set to a numerical value (not hairline rule)

Colors

- ☐ All colors properly defined (CMYK, spot colors)
- ☐ All colors used in placed files follow the same naming convention as page layout files
- ☐ All unused colors deleted

Support Files

- ☐ Most current version of all placed files included. Make sure each file has a unique file name. Verify proper placement of any modified files and check links.
- ☐ Support files placed in appropriately labeled folders (FPO/low-res, hi-res, source, etc.)
- ☐ Resolution of hi-res images should be at least 300 dpi at 100% of final size.
- ☐ Resolution of line art images should be at least 800 dpi.
- ☐ All sizing, cropping or rotating of images done in the original art program.

PDF Files

- ☐ All fonts embedded
- ☐ Make sure files are PDF format
- ☐ Make sure all images are hi-res
- ☐ CMYK color space
- ☐ PDF X1A format

Miscellaneous

- ☐ Include storyboard or folding dummy if applicable
- ☐ Include finishing and bindery information

The Standard

Information for the Printer

Copy this form and use it to check that you have provided everything your printer needs.

General Information

Company | Contact Person

Address

Telephone | Email

General Information About This Job

Job Name | Final Trim Size

Total Number of Pages | Quantity

Paper Stock

Computer System Information & Operating System

☐ Mac OS® ☐ Windows® ☐ Other

Media for File(s)

☐ CD-ROM ☐ FTP ☐ Other

Number of Disks

Software Applications

File Name | Applic. Software | Version

File Name | Applic. Software | Version

File Name | Applic. Software | Version

File Name | Applic. Software | Version

Colors

☐ CMYK ☐ Match ☐ Match ☐ Match

☐ Match ☐ Match ☐ Match ☐ Varnish

Finishing Information

Folding/Scoring

Perforating

Bindery Method

Packing & Delivery Information

Paper choice is an underlying consideration in every printing job. It influences the design and is factored into many prepress decisions. That is why designers and printers look for a sheet that allows them to proceed with confidence – and decide it has to be Sappi. Available in a range of grades, weights, finishes and shades, Sappi papers are engineered for modern printing technology and styled to meet current design trends. Seasoned professionals appreciate the difference, which explains why, despite this era of commoditization, they invariably specify Sappi papers by name.

Production Notes

Design

Pentagram

Text

Delphine Hirasuna

Photography

Cover and still-life: Barry Robinson
Arrowhead Mountain Camp compass still-life:
Terry Heffernan
Arrowhead Mountain Camp forest and pine cone:
Tom Tracy

Ink

Cover: Four-color process + match red touchplate + satin aqueous coating
Inside cover: Two hits match yellow + match red + black + satin aqueous coating
Text: Four-color process + match gray + red + blue + satin varnish

Paper

Cover: McCoy Gloss Cover 100lb/270gsm
Text: McCoy Silk Text 100lb/148gsm

sappi

Sappi Fine Paper North America
225 Franklin Street Boston, MA 02110
www.sappi.com 1.800.882.4332

PRO-5431