The Packaging Professor's guide to
Offset Pre-Press Guidelines

For efficient handling of files, please reference these guidelines before starting a new graphics project.

SOFTWARE: Adobe® Creative Suite® Cloud

- For packaging graphics, please use Illustrator and/ or Photoshop, exclusively.
- Please avoid web design or multi-pagnation programs (in other words DO NOT USE Flash or Quark Xpress).
- Files created with older versions of the Creative Suite are acceptable, but could contribute to text and transparency issues.
- Our design department works with Mac OS X 10.12. Though most PC vs Mac issues are no longer a problem, please ensure any fonts provided are Mac compatible.

ILLUSTRATOR files (AI, EPS, or PDF): Known as "layout" file.

- Do Not flatten layers. If a layer is hidden, and not meant to print, delete it.
- Convert text to outlines. If text edits may be necessary, supplied separate Font file, with the layout file.
- Use the CMYK Document color mode.
- Spot colors must be PANTONE solid coated. Any graphic element meant to print with the spot color must be "filled" with that spot color. A spot color in the swatch palette does not indicate that the color must print. Delete unused swatches.
- Line art must be at least .5pt thick (no less than .007")
- Do not embed linked images. The separate high res images (300 dpi, at final print dimensions) must be supplied with the layout file. Low res images may be linked into the layout, as long as the high res image is also supplied (mark low res file with an "FPO" suffix).
- Avoid creating shadow and intricate transparency effects in Illustrator. Photoshop is a better tool for transparency, and will provide more desirable print results.

PHOTOSHOP files (PSD, TIF, or EPS): Known as "placed images" or "support graphics".

- Final files should be CMYK. If you supply and RGB file, it will be converted and a color shift may occur.
- Rasterize text. If must be crisp, or if it may be edited, it should be created in Illustrator.
- Please ensure there is enough bleed past the edges of the visible image (about 1/2").
- Files must be "high res", which is 300 DPI when the image is scaled to 100% of the final print size.
- We often need to edit the placement of graphics, or extract more bleed. If your file allows, please do not flatten layers. However, delete excessive layers to reduce the file size. It is recommended to flatten intricate effects and delete any hidden layers. Please simplify files as much as possible, but still allow for placement adjustments.

LAYOUT: Graphic Registration to Cutting Die

We must allow space around graphic elements to account for "press-shift" (the more machines your package passes through, the more space we need for possible misalignment on each machine). Each project will vary. Please check these details with your customer service representative. Please consider these two methods:

BEST REGISTRATION:

- Used for "full" labels only (meaning no spot labels, partially covering the die lines).
- Better registration utilizes more expensive production methods, which will be reflected in the package pricing.
- Allow for 1/8" spacing. The graphics may shift up to 1/8", so place graphics that distance away from the die lines. Bleeds should be no less than 1/4" past the die lines.

COMMON REGISTRATION:

- Used for spot label laminating, on press runs of more than 1000 sheets, and less than 8000 sheets.
- Allow for 1/4" spacing (there is a chance this production method could shift more, so please avoid any hard edged graphics, along the die lines, and provide 1/2" of bleed).

LITHO PRINTING: Offset Press Considerations

We utilize several different Litho presses throughout the country. Each press is selected based upon the job criteria (size, color, quality, etc) and scheduling. Art files may need different color cutbacks and trapping set for different print factors. For this reason, we ask that you not provide a final, locked file or color proofs.

PLEASE CONSIDER:

- If color matching from an existing litho sample, please send us AT LEAST 2 samples. The samples will be sent to various sources (ink, paper, pressman, etc) to determine the best duplication method.
- Aqueous coating is the standard coating used to seal litho print, and provides a slight sheen. Other reflective coatings are available, for additional cost. Certain coatings are also used in different applications to better protect the ink (meaning, against moisture, light exposure, or cracking when folded).
- Paper can only hold so much moisture before it saturates and buckles. Do not exceed a CMYK value over 250%, such as in a process black. If you can not obtain the rich hues you desire, with low screen count, use spot colors.
- Process printing uses separate plates to transfer the image. Each plate will overlap the other, when transferred to the paper, to hide any possible shifting. This is called trapping. Very fine lines will be enhanced if there is not enough image area to create the trap.
- Light colors (such as flesh tones, yellows, and greys) are challenging to reproduce with CMYK. If these colors are critical, please select a spot color, or the printed graphics will have a noticeable color variance.
- Choose a spot color for any large, solid coverage area. If you have a large, 100% black area, it is a good idea to add another color to print under the black (40% cyan is most commonly used). We call this adding a bump under the black. Also consider that cracks on the paper surface, where a box folds, will be most noticeable in large black areas. You may need a stronger coating if cracking is a concern.

PROOFING: Contract Color Proofs

To avoid incurring excessive art costs, we will require a preliminary approval for layout and content. This may be in the form of a mockup, a full size digital proof, or possibly a PDF. We expect these layout proofs to be reviewed thoroughly. If any changes are necessary, we will produce an additional layout proof, for approval, before we produce the contract proof.

With advancements in digital proofing technology, most color contract proofs are 95% color accurate. Meaning, using a spectrophotometer, we can measure the reflective hue of the proof and compare it to the printed sheet. From that measurement, we can determine if the printed sheet is "not close enough" to the proof*. Since viewing color is often subjective, please consider the following:

COLOR CONSIDERATIONS:

- Fluorescent light is inadequate for comparing color. Next to a professional light booth, outdoor light would provide the best viewing conditions.
- There are many different types of paper (whites can vary from yellow to grey). The paper color and sheen will impact your view of the color.
- If your final print job will have a high-gloss coating, the perceived color will be brighter on the final printed sheet.
- Since most proofs are produced on digital printers (which only print CMYK), Pantone colors may not look as expected on the proof itself. If you have chosen a Pantone color, a Pantone color swatch will be provided as a color reference.
- Unconventional printing effects are more difficult to accurately proof (such as metallic or varnish strike-out effects). We often recommend press side approval for these critical projects, with the understanding that a last minute change will effect the production lead time and cost.

Contract proofing is the most critical point in this entire process, for mistakes missed on the contract proof will be costly to correct. Please be extremely thorough and question anything you find concerning. If you approve the contract proof, and the printed sheets do not match (layout, quality, and color, as determined above) then it will be our responsibility to replace the printed item. However, if you sign the contract proof as approved, and then you are dissatisfied with the printed sheets (even though they match the proof), further discussion with your sales representative will be required

The more your files must be reviewed and edited, the more chances something could go wrong. If you adhere to all these guidelines, the less file manipulation will be necessary. If you have any questions your Sales Representative, Customer Service Representative and our Graphic Design team will be happy to help.

*Within the printing industry, it is considered acceptable to stay within 3% of the standard deviation of the initial LAB value. A standard deviation of more than 5% is considered to be an unacceptable color match. LAB readings will be taken when a color is questioned, and those results will be available by request.