

# LASER CUT PAPER

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## REGISTRATION

Laser cutting is compatible with other sheet fed processes such as printing, embossing, hot foil stamping, scoring, etc. and, as with other “off-line” processes, it is essential that everyone use the same reference corner. For that reason it is important that we discuss your sheet layout early in the design process to establish that consistency.

Laser cut registration consistency, on a sheet-to-sheet basis, is within a range of .002” total movement. This is comparable to much offset printing and considerably tighter than most embossing, foil stamping and conventional die-cuts. Because of the apparent movement of other processes, it is best to allow at least .020” bleed for the laser cut to trap whenever possible.

In laser cutting, we use “guide and gripper edges” to describe our reference corner only because they are familiar terms in the printing industry. In actual practice, the sheets are moved through the laser beam by a vacuum device and supported by air jets. The gripper and guide edges are only used to locate the sheet as it first enters the machine. This unusual handling technique enables us to laser cut entirely off of the gripper, guide and trailing edges of each sheet, if that is required for a particular job.

Occasionally, the economy of printing large sheets overwhelms the need for accurate registration. In these cases the “oversized” press sheet will need to be trimmed down to several workable size sheets for laser cutting. In this case, all cuts should be built from the reference corner and the sheets sheared in small lifts to avoid blade draw. The laser cut registration will be only as accurate as the shearing. Because laser cutting goes completely through the stock, it often creates a challenge for other two-sided processes because they now must back-up exactly. Another consideration is the amount of stretch or flair that occurs on a press sheet. The best way to avoid that problem is to keep the laser cut area as close to the reference corner as possible.

In all cases, please contact Laser Cut Paper to discuss your project early in the design process. It will help avoid unpleasant surprises and, in the long run, save you time and money.