

The Mat Doctors



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Three leading mat designers in the picture framing industry are here each month to answer some frequently (and not so frequently) asked questions about mat cutting techniques.

With an average of 26 years of framing experience, they bring a wealth of knowledge to this column. If you've got a nagging problem with an aspect of cutting mats, or simply want to find out what the experts have to say about a certain technique, send in your question to

pfmeditor@hobbypub.com and The Mat Doctors will prescribe a remedy.

Q. I have a set of production stops for my mat cutter but always thought they are used only for production cutting because they are usually referred to as "production stops." Please clarify the benefits of using stops and how I can use them for custom mats rather than just for production cutting.

Brian replies:

A. You are correct; calling these attachments "production stops" is the primary cause of a misunderstanding for many custom framers, and the main reason stops are frequently relegated to a bottom drawer. Most manufacturers refer to them as "measuring stops" which is far more descriptive than "production stops."

During many of my visits to frame shops, I get the same answer to my perennial question, "Why aren't you using stops?" Almost always the answer is something like this, "Oh, we have a set somewhere but they don't work. I'd rather draw pencil lines!" or "I've tried using stops but they never stay accurate and cause all kinds of overcuts!"

These misconceptions are difficult to overcome, but a 10-minute demonstration usually wins over skeptics. Regardless of the brand of mat cutter or measuring stops being used, understanding the following considerations should help you decide to use these devices for more than just production cutting.

Blade Depth: To effectively use measuring stops, it is important to always have your blade depth set consistently to the same depth. This setting is correct when it cuts through the top mat and one-third of the way through the slipsheet. Extending the blade out from the cutting head will usually cause a curve at the start of the cut.

Squareness of Mat Blank: All mat cutting depends on starting with a square mat blank; cutting with stops is no exception. An accurate blank means an accurate result! (See "The Mat Doctors," December 2003, for tips on this.)

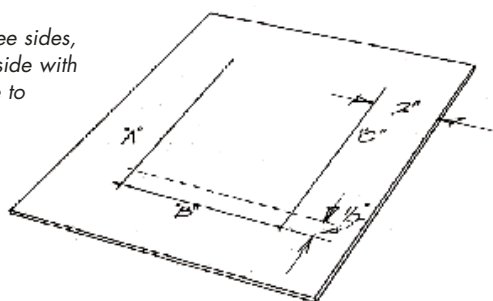
Mat Thickness: Another important consideration when using Stops is the mat thickness! If the stops are set for 4-ply matboard they will need to be reset for 2-ply, 6-ply, 8-ply, foil, fabric, or suede board. Whatever the mat thickness, the following method is recommended to ensure the best results for the thickness at hand.

Accurate Setting of Measuring Stops for Square and Rectangular Openings

The following steps will ensure perfect corners at all times provided that *blade depth*, *board thickness*, and *squareness* remain constant. This procedure is to be used when cutting *square* or *rectangular* openings. Note that for square or rectangular, the top and bottom measuring stops are always set to the same dimension. When they are set at 3", for example, you will always cut a mat with 3" borders regardless of the outside size of the mat blank.

- 1) Set blade depth to suit selected matboard thickness.
 - 2) Set the mat guide and stops at 2".
 - 3) Place an 11"x14" mat blank up against the mat guide, squarely into the corner created by the mat guide and mat stop.
 - 4) Cut only three sides of the mat (two long and one short side).
 - 5) Mark the long cuts "A" and "C," and the short cut "B."
- (See sketch at left.)
- 6) Reset the mat guide to 2½" and make a second cut on side "B" using the stops.
 - 7) The resulting ½" strip will show either an overcut on side "A," or an undercut on side "C."
 - 8) * If the problem is at the junction of cuts "A" and the second cut, readjust the *top stop* precision setting screw.
* If the problem is at the junction of cuts "B" and the second cut, readjust the *bottom stop* precision screw.
 - 9) Repeat the procedure by increasing the mat guide by increments of ½" until both top and bottom cuts are correct.

After cutting three sides, re-cut the short side with a ½" difference to check for the presence of over- or under-cuts.



10) Once satisfied, tighten the locknuts on both precision screws and cut a complete opening in a new blank.

Note: Changing the blade depth to suit the matboard thickness will affect the accuracy of the *top stop*; the *bottom stop* will remain set correctly regardless of the blade depth.

After a few practice cuts, you are sure to see measuring stops not as a "stop" light, but as a means to faster, more accurate mats!

Q. What steps should be taken to burnish matboard bevels for a smooth surface?

Tim replies:

A. The first step in working with matboard bevels is to make sure that, when cutting, you have a new underlayment (or slipsheet) and a new single-sided mat cutting blade. These two items will help eliminate most burring that may occur when cutting a mat window.

If burnishing is required, I use a burnishing bone that can be purchased from various framing suppliers. I apply very light pressure on the bevel edge to give it a smooth finished look. The burnishing bone is very effective when applied to overcuts and helps lay the paper fibers back into their cut area.

After cutting openings in 6-, 8-, or 12-ply matboards, a light pressure applied with a burnishing bone is very effective. You can also apply light pressure on the 12-ply bevel to burnish the layers of laminated paper together. This will give you a very smooth and custom look that even a sharp mat blade does not always do. ■

Brian Barnett, CPF, an industrial designer by profession, has spent 25 years in custom framing sales, product and graphic design, merchandising, operations, production control, and financial management. He appears in many training videos, has authored numerous training manuals and magazine articles, and teaches at educational venues. He currently is Larson-Juhl's consultant to the retail framing industry, consults with The Fletcher-Terry Co., and contracts for special projects with large industry retailers.

Tim Franer, CPF, CMG, has spent over 30 years in the art and custom framing industry. Known for his creative design and skilled craftsmanship, Tim is a former gallery owner and is currently a chairholder with the Color Marketing Group. He is currently development, design, and educational consultant for Nielsen Bainbridge.

John E. Ranes II, CPF, GCF, is an instructor of workshops and seminars throughout North America, Europe, South America, Australia, and New Zealand. He and his wife, Sarah, own a frame shop and gallery in Appleton, WI, which has won more than 60 framing awards. John also consults for The Fletcher-Terry Company.