

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 or design 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 really would like to execute V-grooves on my manual mat cutter. Can you please show me step-by-step how to do this?

John replies:

A. Pioneered in the early 1980s by Vermont (U.S.) framer Sean Hunt, the V-groove cut remains a popular mat design and is executed around the world in a variety of ways. It can be cut by manual mat cutter, as well as on a computerized mat cutter.

Small hand cutters using a pair of blades have been developed to drag across the mat surface, cutting both sides of the V-groove simultaneously. While these work for freehand doodles, they do not produce the professional job that most framers want. Good results can be achieved on professional, manual straight line mat cutters. Two different techniques, though similar, have yielded very good results (the traditional method and the surface V-groove). Here, let's examine the traditional method...

Simply stated, one would cut a window opening into a mat blank, remove the fallout, turn it face-up onto the mat cutter, and trim a small amount around the perimeter. We then place the fallout back into the opening, tape it together, and complete the design by cutting an opening after the V-groove is completed. This was the original technique developed.

(A word of caution: Due to the delicate nature of the V-groove, the mat cutter should be clean and well adjusted, as any play in the cutting head or the mat guide can produce unsatisfactory results. Make sure that your mat guide is parallel. Consult your owner's manual if need be.)

1) Begin with a mat blank cut as square as possible. You've elected to create a mat border of 3", and will

place the V-groove $\frac{1}{2}$ " from the bevel ($2\frac{1}{2}$ " from the outside of the mat).

2) Set the mat guide and measuring stops to $2\frac{1}{2}$ ", and place the mat, face-down in a normal cutting fashion. Before cutting, make a small pencil mark across one of the cuts to facilitate orientation later. Cut all four sides (see Photo 1).

3) Take a small piece of scrap matboard of the same thickness of your mat, approximately 11"x14". Move the mat guide to 1", and move the measuring stops out of the way. Place this scrap piece of matboard up against the mat guide and cut four to six strips of matboard out of this material



Photo 1



Photo 2



Photo 3



Photo 4



Photo 5



Photo 6



Photo 7



Photo 8

(see Photo 2). You have created a handful of "cheater strips" which will be used in the next step. You will note these strips have a positive bevel along one side and a negative bevel along the opposite side.

4) Consult your owner's manual to find how to set the mat guide to its V-groove setting. Most machines have a positioning device that will place the mat guide very close to the cutting head ($\frac{1}{16}$ to $\frac{5}{32}$ of an inch) (see Photo 3).

5) Place the mat fallout face-up, under the clamp and gently against the guide. We are now ready to trim off a small sliver of matboard from the face of the fallout. When we execute this cut, it is important to remember to pull the head back slow and steady. It is also important to *not* bring the blade down to its fullest extent. Because we are so close to the clamp, we would run the risk of colliding into the mat guide. Practice will easily give you the "right feel." Before we execute these cuts, we're going to insert the "cheater strips" into the leading edge of the fallout, locking the positive bevel of the cheater strip under the negative bevel of the fallout. This creates a seamless join for the blade to travel (see Photo 4).

Begin by lowering the blade lightly into the "cheater strip" and begin pulling back into the fall out going to the very end. This provision assures that the blade does not flex when it meets the resistance of the fall out, and leaves you with clean square corners! (See Photo 5.)

6) Remove the fallout from the machine, and lay it aside. Take the window mat and place it face-down. Apply a strip of 3M 810 Magic tape along two opposite edges so that the tape hangs into the opening (see Photo 6). Flip this window mat over, making reference to where you created your orientation pencil mark. Place the fallout into position from the front of the mat. This procedure will allow you to reposition the fall out until you have it perfectly back into its original position (see Photo 7). Once satisfied with the result, flip the mat to its backside and tape the remaining two sides with the same tape.

7) Set the mat guide and measuring stops to 3". Finally, cut the window opening into the mat and you have your V-groove design (see Photo 8). ■

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 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.