

Making Casting Molds from Plastic Cutting Boards By Curtis O. Seebeck

A few years ago I decided to try to come up with a good way to make custom sized molds for casting pen blanks. After playing around with different materials, I found that the soft white cutting boards work really well since they are made with the right kind of plastic to keep resin from sticking. The advantage of a custom made mold is that you can make it exactly the size you need and they are also really cheap to make!

Below is a cut list for one of the size molds that I make. It is designed to use $15'' \times 20'' \times \frac{1}{2}''$ cutting boards that you can find at Sam's Club for around \$10. My cut list will make 3 molds out of one board. Each mold will produce a 4 13/16'' x 5 11/16'' block that can be cut into (5) $\frac{3}{4}''$ square by 5 $\frac{1}{2}''$ + blanks.

To make these molds you will need the following: (1) 15" x 20" cutting board A handful of drywall screws Tabesaw Drill Press

Start by cutting all of the pieces according to the cut list below. Next, temporarily tape the sides to the bottom piece (large square) with duct tape. This helps hold things together while you drill pilot holes. Now drill pilot holes through the sides and into the edge of the square bottom piece. I drill 3 holes, one on each end and one in the middle. Now screw the side pieces to the bottom with drywall screws.

Next, temporarily tape the end pieces to the assembly and drill pilot holes into the sides and bottom. Screw them together and you have a finished mold!

Now pour your resin and let it cure. Once done, remove the screws from one of the end pieces and remove it. This will help tremendously in removing the finished block. Tape each side piece and the end piece with a mallet. Place the mold upside down on your workbench and tap the bottom of the mold with a mallet and the block will fall right out. Screw the end back on and you are ready to go for another batch!

The first time you use the mold, you may get a few small leaks. The leaking resin will cure and fill the gaps and you mold will not leak the next time you use it. If you do not want to take a chance on leaking, use some plumber's putty between the pieces when you put them together. This will squish out and fill the cracks and your mold will be leak free!

[R] 3: 2.3/16" × 5	[R] 3: 2 3/16" × 5 11/16"	[R] 2: 2 3/16" × 5 11/16" [R] 2: 2 3/16" × 5 11/16"	[R] 2: 2 3/16" x 5 11/16" [R] 2: 2 3/16" x 5 11/16"	[R] 2: 2 3/16" × 5 11/16" [R] 2: 2 3/16" × 5 [R] 2: 2 3/16" × 5 11/16"			
	R] 1: 4 13/16" x 5 11/16"	[R] 1: 4 13/16" x 5 11/16"	[R] 1: 4 13/1 x 5 11/16"	[R] 3: 2 3/16" × 5 11/16"	6 X . 01/16" 11/16"		
	3: 2 3/16" x 5 11/16"	3: 2 3/16 11/16	" x 5 "				
Plastic: 1/2" x 15"	x 20"			o		Vendor:	Bin:
1 of 1 this size Kerf: 1/8"	Part Pac	his diagram: 1 dding: 0''	Waste: 22.	Final (Standard Layout		

Part #	Sub-Assembly	Description	Copies in Layout	Thick	Final Cut Y	Final Cut X	Rough Y	Rough X	Banding	<info></info>
1[R]		Bottoms	3	1/2"	5 11/16"	4 13/16"	5 11/16"	4 13/16"	None	
2[R]		Sides	6	1/2"	5 11/16"	2 3/16"	5 11/16"	2 3/16"	None	
3[R]		Ends	4	1/2"	5 11/16"	2 3/16"	5 11/16"	2 3/16"	None	
3		Ends	2	1/2"	2 3/16"	5 11/16"	2 3/16"	5 11/16"	None	