

Making Glass Doors

Woodline USA WL 1339 glass door set

Glass panel doors are easy to make and add a touch of class to curio cabinets, display cases or other projects. These instructions are intended to get you started with the Woodline USA glass panel set part number WL 1339.

The cutter functions similar to a traditional rail and stile system except that the result is a rabbet to hold the glass instead of a slot for a raised panel.

In the picture you will notice that the rail cutter (left) produces an exact opposite of the stile cutter. These two bits are a matched set and should be used together to assure a perfect fit. These bits are not designed to be sharpened because like any matched profile cutter the profile may change as they are sharpened and the resulting fit may be poor.

Always cut the end grain of the rails first. Use a backup block to prevent tear out on the back side of the material.



Figure 1. Rail (left) cope cutter
Stile (right) profile cutter

1. Set the rail bit height.

Rails are the pieces of wood at the top and bottom of a square panel. They have a cope pattern cut into the ends of each rail. Material is cut face down. Set the height of the bit so that the material left on the back of the wood (the side that is facing up when the cut is made) is equal to the thickness of the glass that is to be used. This is typically 1/8" thick but can be altered slightly for thicker or thinner glass panels.

2. Cut ends of all rails

Cut the coped ends of all rails. If you are making multiple panels cut them all at once if possible. Cut a piece and saw the profile off to save it for future height setup. These setup blocks come in handy if a mistake is made and you need to make a new part.

3. Set the profile bit height

Use the rail as a setup block for the profile cutter height. The top portion of the profile bit cuts a rabbet into the back side (facing up) of the rail and stile wood pieces. This rabbet allows space for the glass.

4. Cut the profiles

All profile cuts are made with the material face down. Cut the stiles and rails with a profile cut along the length of the entire piece. There are 2 rails and 2 stiles for each door or section.

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5. Glue up the rails and stiles.

Mate up the rails and stiles and dry fit all parts. The fits should be tight but some room for glue is necessary. Apply glue to the end of the rails sparingly and clamp the rails. Measure and make sure the panel remained in square during clamping operations.

6. Mount the glass or plastic sheeting.

HANDLE GLASS WITH CARE. SHARP EDGES WILL CUT YOU! Glass should be cut after measuring the back side of your panel. The glass should fit into the rabbet with a small allowance for error. Glass is often cut with less accuracy than wood so allowing 1/16" to 1/8" in each direction is a good practice. When using plastic clips (WL 1339 C) you can install the glass quickly and easily. These clips have a small bump on the inside edge that presses the glass into place. Do not over tighten the clip retaining screws as they may crack and release the glass.



WL 1339 C Glass retaining clips

Remove glass and clips to stain and finish the panel. Handle assembled panels carefully to prevent breakage.