

## 12-Sided Cedar Planter



### Preparing the Stock:

To determine the width of the stock needed for this project, first you must decide on how large of an outside diameter you want to end up with. After you have made your decision, use the following formula to figure out the width of each stave.

Stave Width for a 12 sided object = Diameter divided by 3.7

Example: 10" diameter divided by 3.7 = 2.70" Stave width  
(we will round up to a 2.75" or 2-3/4" stave width)

Rip enough length of 3/4" thick stock to a width of 2-3/4". Determine the total length needed by multiplying the total finished height of the planter by 12 and allow enough extra length for the saw kerf and possible end snipe from routing. Using long lengths of stock will make it easier to rout. This will then be cut down to 12 equal length pieces after the routing operation.

### Routing the Profile for the Joint:

Install MLCS Multi-sided Glue Joint bit # 7838 into your table mounted router. Adjust the router bit according to the instructions for the Multi-sided Glue Joint bits. Set the bit point height to 11/16" above the surface of your router table. Adjust the fence so that the bottom edge of your stock contacts the out-feed fence after it has passed by the router bit (*see fig. A & D*). Using scrap stock of the same thickness as your stock, test the set-up and joint and adjust as needed to achieve a proper fit. You may experience some snipe at the end of the board as the end of the board comes off of the in-feed fence (that is one of the reasons to leave the boards at a long length and cut into smaller pieces after routing) (*see fig. C*). Rout only one edge of your stock (If you have more than one length to rout, make sure that you rout the same edge on any additional pieces you have).

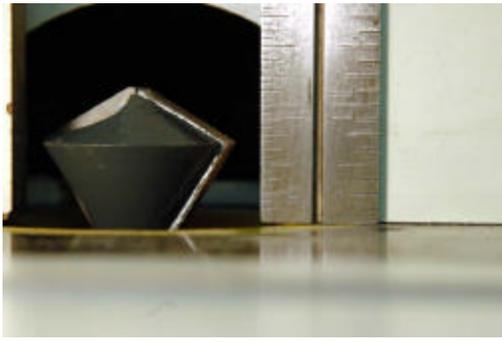


fig. A



fig. B

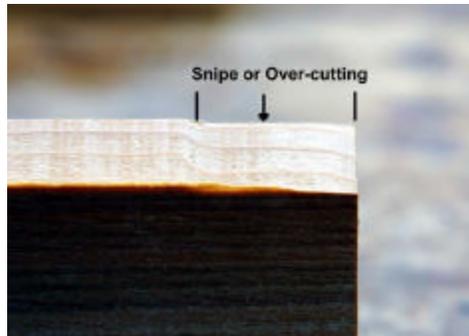


fig. C

### **Cutting and Assembly of the Staves:**

After completing the routing operation, cut your stock into 12 equal length pieces to create the vertical walls of the planter. Working quickly, apply glue (Waterproof if you plan to use the planter outdoors) to the routed edge of your pieces and carefully but quickly align the top and bottom of each piece until you have all 12 pieces assembled together. A long piece of masking tape, a large rubber band or surgical tubing can be used as a clamp to hold the pieces together until the glue sets (*see fig. D*). After the glue has dried, remove the clamping material.



fig. D

## Making the Bottom Insert:

Use a wide piece of stock, or make a piece glued up from narrower boards to create the blank for the bottom of the planter. The bottom needs to be at least as wide as the inside diameter of the planter bottom. Place the planter onto the bottom and trace the outline onto the bottom blank. Before removing the planter from the bottom blank, make a registration line on both the planter and bottom blank to align on final assembly. Use a table saw with a miter gauge, bandsaw or jigsaw to cut the bottom blank out on the traced lines (*see fig. E*). If you are going to use this outdoors as a planter, it is advisable do drill water drainage holes in the bottom of the planter (evenly spaced 3/8" holes will provide adequate drainage) (*see fig. F*).



fig. E



fig. F

## Preparing the Planter to Accept the Bottom Panel:

Glue (Waterproof if you plan to use the planter outdoors) 3/4" square by 1-1/2" long bottom supports on four opposing to support the bottom panel. Align the bottom supports with the bottom of the staves (*see fig. G*). After the glue has dried, complete the planter by installing the bottom panel from the topside of the planter (do not glue the bottom in place) (*see fig. H*).



fig. G



fig. H

## Final Notes:

Apply a UV grade outdoor finish to protect the wood from the elements. If untreated cedar will acquire a weathered dull gray finish. As an added decorative touch, copper banding can be applied around the outside of the top and bottom to really highlight the planter.