

# ShopBot®

We make  
the tools  
for making the  
future.

## Project: Coaster Set

**Overview:** Create a simple 6 pack of coasters and a coaster coral from minimal shop materials. Keep your favorite drink from leaving circles on the coffee table.

**Materials:** For this example red oak was used for the wood and a vinyl floor tile for the coaster circles. See below for more information.

**Minimum Cutting Area:** 1/2" x 18" x 24" red oak material. 12" x 12" floor vinyl floor tile.

**Bit Size:** 1/4"

**Finishing:** Minwax Wipe On Polyurethane



*\*\*Always read the entire project details before starting to cut the file yourself\*\**

*\*\*Account for the thickness of the physical material on hand and the material thickness in the file\*\**

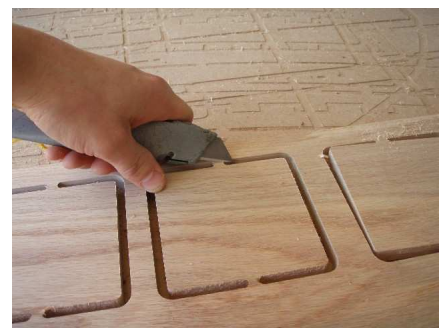
*\*\*This file is zeroed to the tables surface, Zero your bit to the tables surface\*\**



Included with the cut file is a hold down toolpath that shows where it is safe to put screws. Run this file separately from the cut file so you can screw down the work piece, or if you have a different size board or different type of hold down disregard the file.



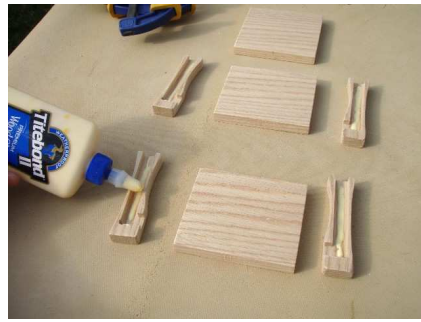
As the file starts cutting the profile of the parts make sure the cut is going all the way through the work piece and into the table surface. If you need to adjust any part of the file make sure you do not remove the hold down or you will loose position.



Tab are use to hold all the pieces to the scrap wood attached to them. Use a utility knife to score these edges. Never try to push a piece out without cutting the tab, it will tear the grain on your project. Sand remaining tab flat.



This project has straight, inside and outside edges. A good combination of hand, orbital, spindle and disk sanding will whip this material into smooth shape.



Once all the wood material has been sanded dry-fit all of the parts to make sure they fit together. Then apply some glue inside the four dadoed cap pieces.



Push the cap pieces onto the side pieces. Have a damp rag close by to wipe off any excess glue that might spill out.



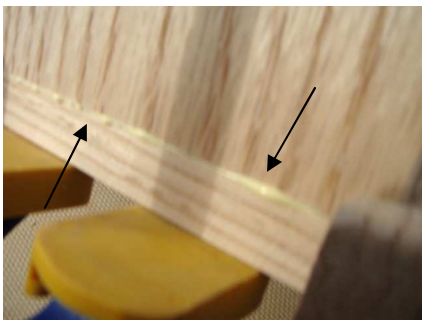
Quick grip clamps work great for applying pressure to this project. Put one on each of the side/cap glueups.



Apply a small amount of glue along the bottom of each side piece. Also put some glue on two of the edges of the bottom piece that fits into this groove.



Two more quick grip clamps will hold the whole project together. Have a square close by to ensure you have glued the sides at 90 degrees. Allow several hours for the glue to setup before removing the clamps.



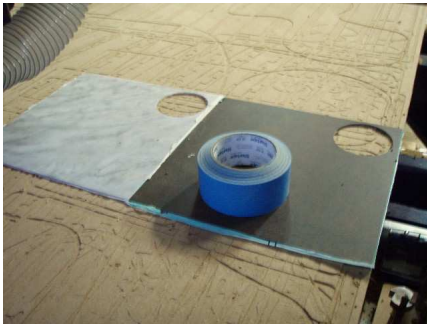
Watch for glue spills. Wipe these off with a damp towel. This will take away from the projects appearance if left to dry.



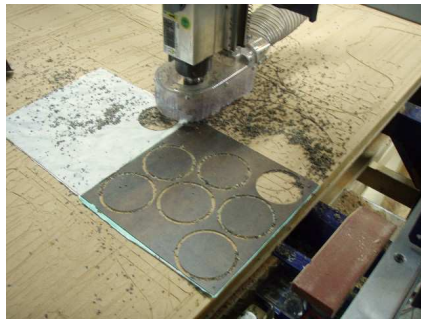
Now that all the wood pieces are glued up and sanded use Minwax Wipe On Polyurethane to finish all the wood pieces.



Your local flooring outlet will have several colors to choose from of vinyl floor tiling. These have self adhesive glue on the back of them. They are 12" x 12" and cost appx. \$1 a piece.



Do not peel off the backing paper for the self adhesive tile. This will be done later. Instead runs strips of carpet tape along the back side of these tiles and stick that to the surface of your machine.



There is a provided toolpath to cut the circles from these 12" x 12" tiles. No tabs are used because of the carpet tape. Also note in the file the bit that is used and the speed rate to cut these.



Depending on the tile one chooses, different feeds and speeds and bits will be used. Feel free to experiment. When the circles are cut pry them off keeping the backer on the tile.



One strip of carpet tape is all that is needed under each circle, you do not need to carpet tape the entire tile.



Once the backer is peeled off from the tile one will need to stick it to the wood within a few seconds. If you did not use a self adhesive tile try gluing the tile to the wood.



Push the tile circle down into the coaster. Make sure the two mate together and the glue holds. Repeat this for all six coasters.

Try experimenting with different wood and vinyl tile color combinations. This is a great little project that does not require a lot of material. Note that different tiles are made from different synthetics and can cut at different speeds than the one provided with this file.

