

Butcher Block Style Cutting Board



Router Bits Used:

5/32" Slot Cutter Bit (MLCS #7664/ 5364) for biscuit joining

1/2" Flush Trimming Bit (MLCS #7805 or #7807)

3/4" Top Mounted Bearing Dish Cutter Bit (MLCS #5516)

3/16" Radius Round Over Bit (MLCS #8651/ 6351)

Additional MLCS Accessories Used:

Double Sided Tape (MLCS #9489/ 9493)

#20 Biscuits (MLCS #9020)

Preparing your stock:

Start by planing your stock to a uniform thickness. We are using 1-1/2" thick stock to create a heavy, solid cutting board. The thicker stock can prevent against warping over time and in the future when the top surface becomes rough and exhibits many deep cut marks in it, it will be possible to re-plane the top layer of the cutting board to create a clean, flat work surface. We will end with a finished dimension of 18" by 12" but to make the glue up easier, we will start with stock that is 23" in length. By using boards of varying narrower widths, we will create the butcher-block look and resist cupping. To join the boards edge to edge a simple glue joint could be used, but to really strengthen the joint we will use a biscuit joint for our cutting board.

Making the slots for the biscuit joint:

Insert the 5/32" Slot Cutting router bit (MLCS #7664/ 5364) into your router and adjust the cutting height of the router bit to place the biscuit slots in the center, or slightly below the centerline, of your stock. Before cutting the biscuit slots, the boards must be laid out and corresponding center marks made on both pieces at the center point of the biscuit slot. Keep in mind that the overall length of the cutting board will be 18". So when laying out the biscuit slots make sure to keep the slots inside of the 18" finished length. If not, you will end up with slots showing on the ends of your cutting board. Also at this time number the boards to keep them in the same order when gluing the assembly together.

(See Figures A & B)



Figure A



Figure B

Use a handheld or table mounted router to cut the corresponding biscuit slots into both edges of the interior boards and on the interior edge of the outside boards.

(See Figures C & D)

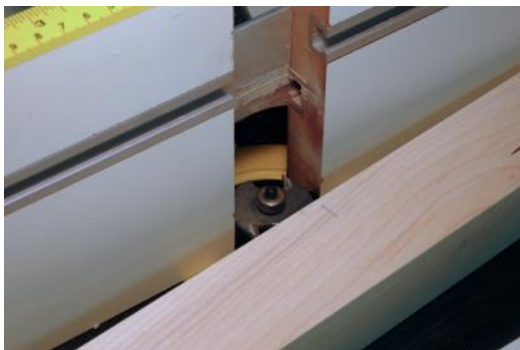


Figure C



Figure D

After all of the biscuit slots have been cut, apply glue to the biscuit slots and along the entire edge of one of the facing edges to be joined. Repeat these steps until all of your pieces have been glued together and place in clamps to hold while the glue dries. Do not use excessive clamping pressure as this may cause the glue to squeeze out of the joint and cause the glue joint to fail over time.

Completing the basic cutting board:

After the glued up assembly has thoroughly dried, remove it from the clamp and cut it to the final dimension. We are sizing this board to 18" by 12". We will use a panel-cutting sled on the table saw to make the cut square.

(See Figure E)

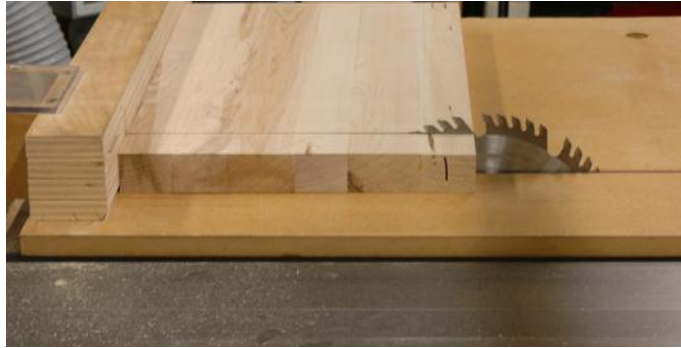


Figure E

After the cutting board has been cut down to the finished size, the corners will be rounded off with a small radius on them. Use a compass or radius gauge to lay out the radius on a piece of stock to make a template. A piece of 1/4" hardboard, MDF or plywood makes a perfect template. Cut the radius and sand the edge smooth to remove any saw tooth marks before using. Place the corner template on each edge and use a pencil to trace the radius onto each corner.

(See Figure F)



Figure F

Rough cut the corner to within 1/16" – 1/8" of the layout line using a jig saw, band saw or scroll saw.

(See Figure G)

Attach the corner template to one of the corners of the cutting board using double-sided tape (MLCS #9489/ 9493) to hold it in place while routing. Install the Flush Trimming router bit (MLCS #7805 or 7807) into your router and adjust the cutting depth so that the ball bearing guide on the router bit will follow along the edge of the corner template. Rout each corner of the cutting board moving the template to each corner as you go. (See Figure H)



Figure G



Figure H

Making the drip channel:

To create the drip channel to prevent any liquids from running over the edge of the cutting board, a template and a Top Mounted Bearing Dish Cutting router bit (MLCS #5516) will be used. The drip channel will be $\frac{3}{4}$ " wide and $\frac{1}{8}$ " deep, and it will be $\frac{3}{4}$ " in from the outside edge of the cutting board. Make this template out of $\frac{3}{4}$ " thick material that is 15" by 9" finished size. Center the template on the cutting board and secure in place with double-sided tape (MLCS #9489/ 9493). Make sure to use enough tape to hold the template in place and keep it from moving to cut a perfect drip channel. (See Figure I)



Figure I

A plunge router is not required, but will make cutting the drip channel easier. Install the top mounted dish cutting router bit into your router and adjust the cutting depth to 1/8" plus the depth of your template thickness. Lower the router bit so that the ball bearing guide is resting against your template. Turn on the router, plunge the router bit into the cutting board and move the router bit around the template in a counterclockwise direction (*going clockwise, the bit will want to walk the router away from the template, so be sure to use a counterclockwise direction as the bit want to pull the router toward the template*). After you have completed a full rotation of the template, remove the router and check for any inconsistencies in the cut. A second pass may be required to even out any variations in the cutting depth.
(See Figure J)



Figure J

The final step is to ease the top and bottom edges to remove and sharp edges. A 3/16" Round Over bit (MLCS #8651/ 6351) will be used to ease the edges. Install the router bit into your router and adjust the cutting depth to cut just the 3/16" radius profile and avoid cutting a fillet over the round over profile. Allow the guide bearing on the router bit to follow around the edge of the cutting board, making a full pass around both the top and bottom edges of the cutting board.
(See Figure K)





Preparing the cutting board for use:

A finish sanding and application of a food safe finish is all that is left to do. There are many food safe finishes that can be applied to the cutting board to make it safe and protect it for many years. Behlen's makes a salad bowl finish that is food safe and can be ordered from Penn State Industries, www.pennstateind.com, (Item #BEHFOODFIN) if you cannot find a product locally. Periodic maintenance of reapplying a coating of oil will keep your cutting board looking good and preserving it over time.