Greene & Greene Inspired Keepsake Box

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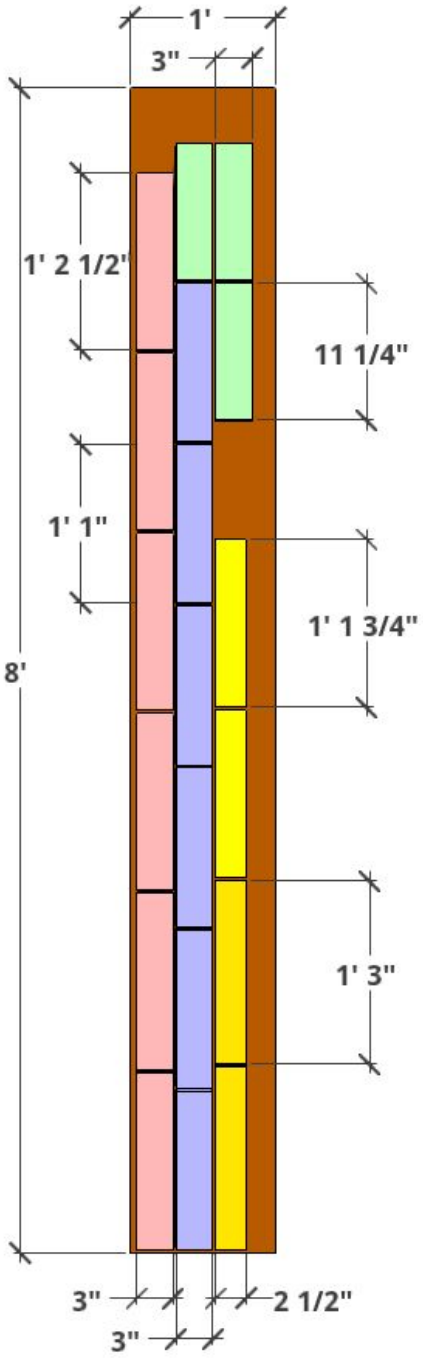
Cut List

Component	Quantity	Width	Length	Thickness
Box Walls	6	3”	14 ½”	4/4
Box Walls Side	6	3”	13”	4/4
Top Frame (Tongue)	2	2 ½”	13 ¾”	4/4
Top Frame (Groove)	2	2 ½”	15 ¾”	4/4
Top Panel	3	3”	11 ¼”	4/4
Bottom Panel	1	13 ¼”	11 ¾”	¼” plywood
Ebony Plugs	32	⅜”	⅜”	Varies

Note: Ebony plugs can be whatever thickness is easiest for you to cut. They’re decorative in the case of this box (but can still be used to cover up screws/used as dowels if you want)

You will also need hinges for the lid and some sort of latch, if desired. This whole box (sans plugs and plywood base) can be cut from a single 8’ long, 12” wide 4/4 board (although there’s not a whole lot of flexibility on usable material, so you need a really nice board).



This is an example diagram showing how to get all the cuts you need from a single 8' x 12" board.

1. Rip 3x 3 1/2" wide pieces from the board.

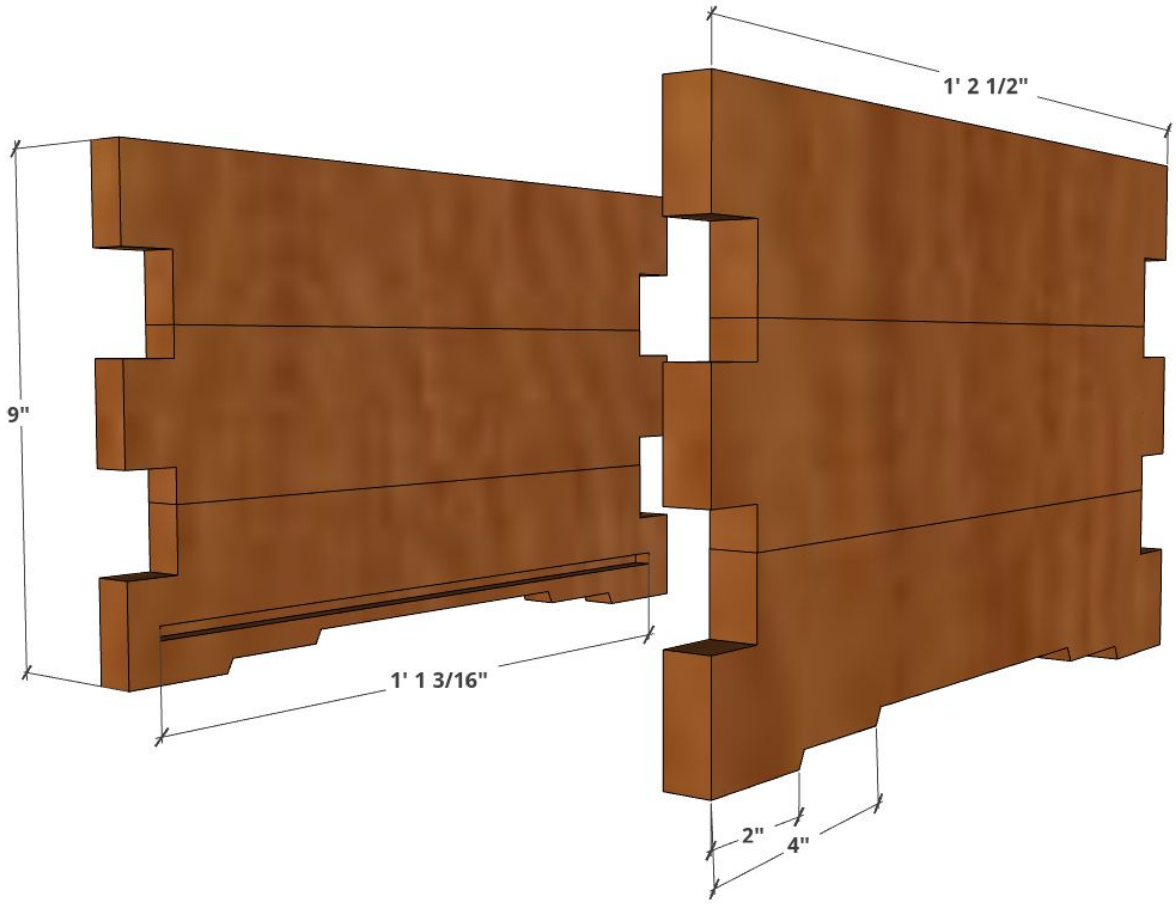
2. From there, up to a ¼" can be taken off of each rip to ensuring the edges are square. Each ripped piece should be reduced to 3" at this stage

3. Start cutting the pieces to final length, leaving a little wiggle room. The 2 ½" wide pieces can also be cut to final width at this stage

4. Ensure all the panel pieces and wall pieces are the same length by trimming off excess that was added in step 3

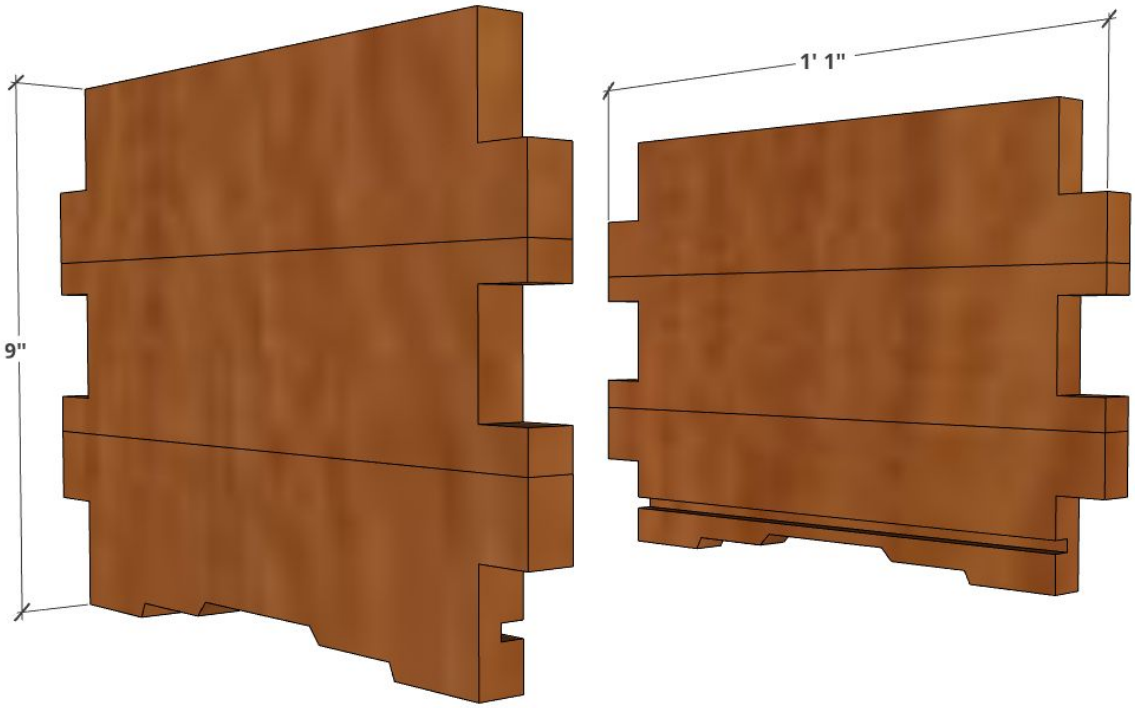
Color code:

Red	→ Box Walls
Blue	→ Box Walls Side
Orange	→ Top Frame (Groove)
Yellow	→ Top Frame (Tongue)
Green	→ Top Panel

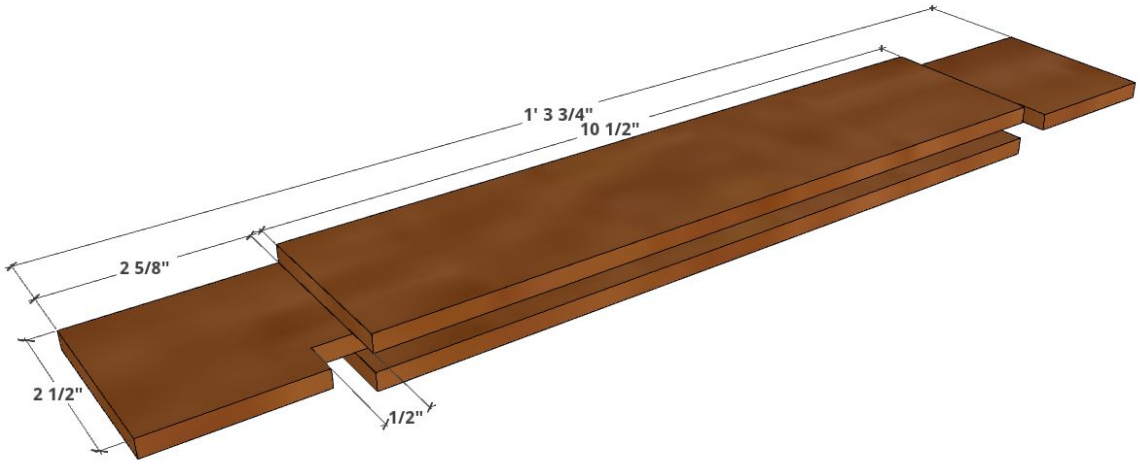


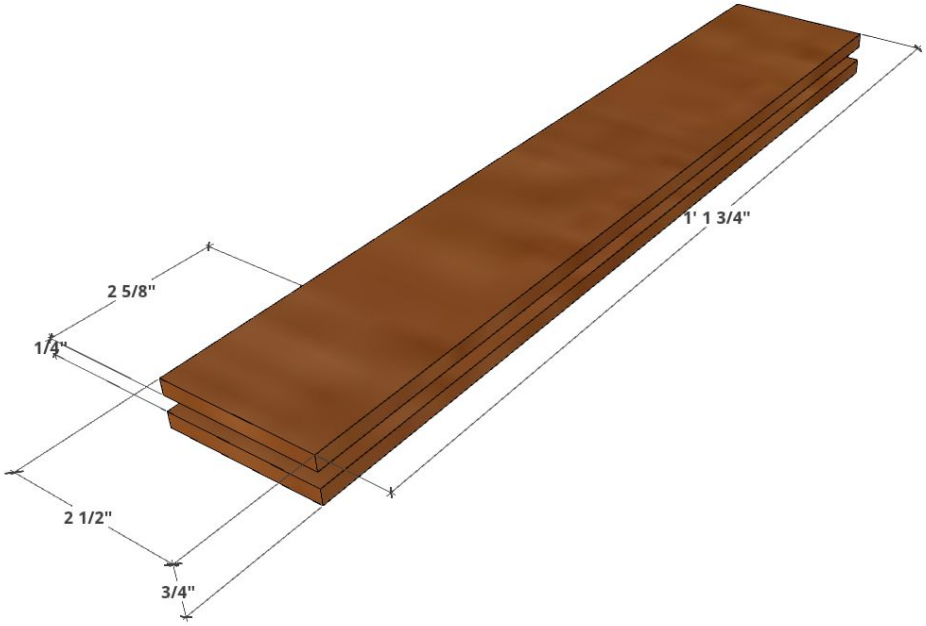
Box Wall construction. Each finger joint is 1/5 the width of the whole panel (in the above case, 9"). Here you can set up stops on your table saw to cut one of the dados, and then flip the piece to cut the other which ensure a symmetric finger joint (which is far more important than a perfectly-sized dado).

For the waterfall lift on the bottom, use the dado stack to cut out most of the material, and then angle it with whatever you choose. I used a dovetail saw to cut the angles, personally.



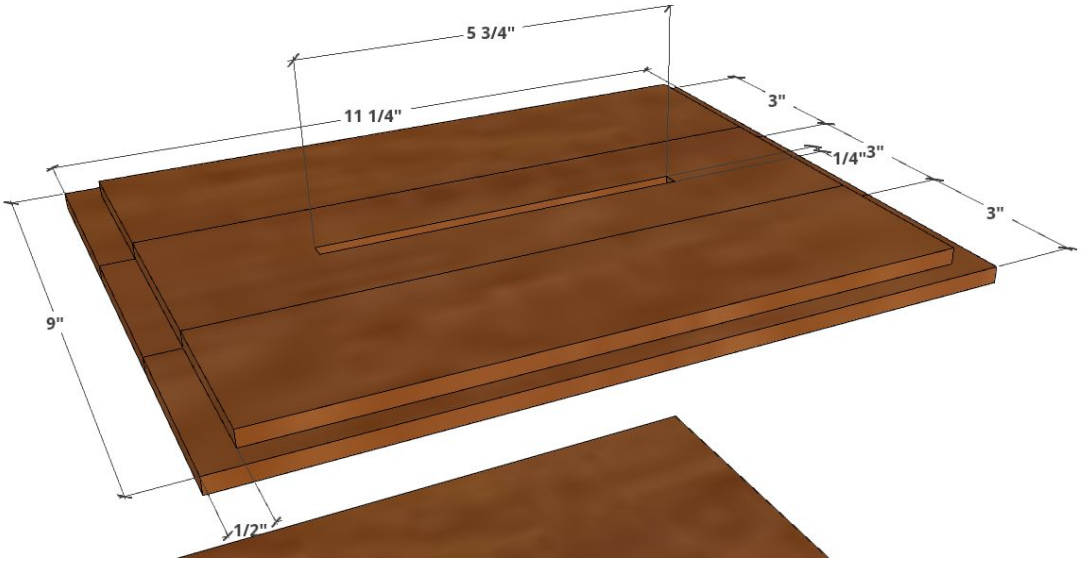
Box wall side construction. Same comments as previous construction, but be sure to carefully measure the finger joint widths by referencing it to the previous front and back walls.

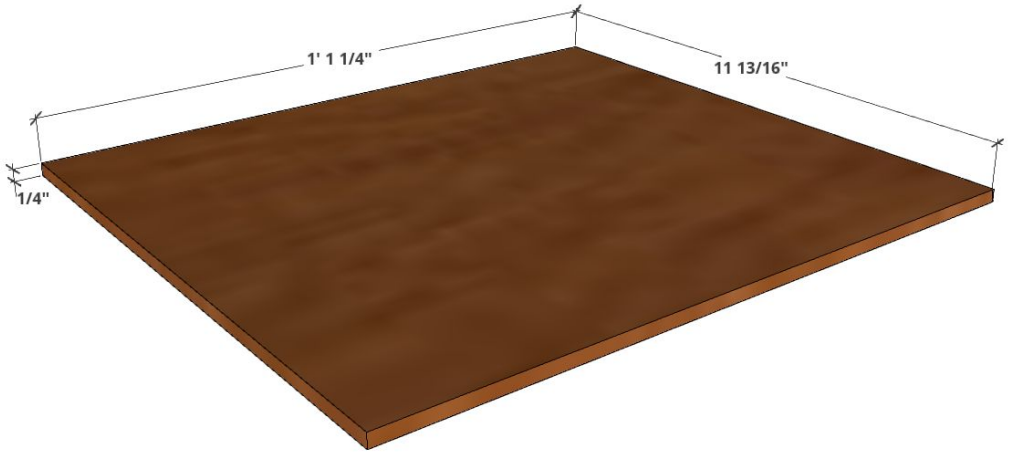




Top frame construction. Note the notch in the "tongue" portion of the frame. This is to allow for the square panel to properly sit. Alternatively, you can cut a notch into the panel at each corner to avoid cutting this portion out of the frame.

Before moving on, be sure to give the finger joints and bridle joints a soft roundover, which is a key design element in Greene & Green designs. I used a rasp to shape the joints and finish with sandpaper, but that was just a personal preference and is not the only way to do it!





Glue this panel up before cutting the tongues. The original intent of this design was as a envelope box for a wedding, so the middle slot is optional. If you add it in, also cut a larger width groove in the bottom (beneath the opening) to allow for envelopes to easily fall into the box.

The bottom panel is just a piece of ¼" plywood cut to size. You can dye this to match the wood you use, or just leave it as is, since it won't really be seen. If cut to the right size, you can leave this floating in the rabbets of the wall, since the box will keep it securely in place (and be sure to install it prior to gluing up the walls!)

For assembly, you can either glue the finger joint together or add some mechanical strength with dowels or screws. To prevent the chance of accidentally angling a screw while driving it in, I opted for dowels. I simply cut ¼" holes through the finger joints (carefully aligning them first) and drove in some pre-cut ¼" dowels (along with some glue).

Once assembled, you can cut the ebony plugs (I actually used Wenge, since it was easier and cheaper to source). To do this, first you need to cut your stock to some square dimensions, larger than ¼" x ¼". I went with ⅜". Once you have long pieces, you need to shape each of the plugs with a soft curve and then cut them to size.

To shape the plugs, use three different sandpaper grits: 220, 400, 1500. Take your square piece of stock, and swipe it back and forth a few times in a shallow arc on each grit. Once finished, polish it with a soft rag and some polishing compound, to give it a nice sheen.

To cut the plugs to size, you can use a simple handsaw jig (seen on the left in the image below) to cut the plugs to ~¼" thick (the thinner you cut them, the less material you need to chisel out in the next step).

The last step occurs after assembly. Here you need to cut small square holes to insert the ebony plugs. To do this, I recommend using some square chisels meant for a mortising machine (but dedicate them to this type of purpose... and get cheap ones). First, align the square chisel with the dowel you used earlier, and then hammer it to create an outline. Use this outline as a reference point for your normal chisels to take out the material so you can fit your plugs. The plugs will be slightly proud of the surface, so if you chisel out enough material to account for the full thickness of the plug you will ensure the plug doesn't "bottom out" in the hole.

Once the plugs are installed, you can install the lid and hinges if desired. I used barrel hinges, but there are many options that would look really nice, so use whatever you'd like.

To finish the box, I used Danish Oil since I thought it was the most pleasant of some test pieces I did (I compared it to boiled linseed oil and a wiping varnish). The final finish is a very subjective thing, so test out a few finishes on some scrap to see what you think looks the best!