THE BUILDERS CHALLENGE SEASON 10 BUILD PLANS





Inspired by the "Chumash" Media Console designed and built by Jory Brigham, the Season 10 "anniversary build" comes with mid-century modern flare like our most popular build yet and is a throwback to our Season 1 media console build.

CHALLENGE RUNS OCTOBER 3-25TH

Recommended Tools & Supplies

- Circular Saw
- Drill or Driver
- Router (optional)
- Table Saw (circular saw can be used instead)
- Jig Saw (optional)
- Clamps
- Joinery jig (optional)
- 2" Forstner Bit
- Wood Glue
- 1/8" downward spiral bit (optional)
- Round over bit (optional)



Recommended Materials

For this build there are so many options for construction that you will want to look at the steps and decide what material you will want to use for each component. Widths and lengths are provided and are based around readily available lumber dimensions. For example, the carcass shell is 1.50" thick and can be made by butt joining 2x10" boards to a 18-1/2" width or laminating 3/4" sheet goods like Jory's build. There's no wrong answer and goes into the personality of your build and budget!

Cut List

Main Carcass

(can be made from laminated plywood, whole lumber or jointed 2x10's)

• Two (2) 1-1/2" x 18-1/2" x 80" panels

Cut down into:

- Two (2) 18-1/2" x 64-1/2"
- o Two (2) 18-1/2" x 14"
- One (1) 1-1/2" x 11" x 16" for middle support

Carcass Add Ons

- One (1) 34" x 30" x 15-1/4" for middle shelf
- Two (2) scrap ¾" x 11 for backer board support

Drawer Materials

(Materials for 2 drawers)

- Four (4) 3/4" x 30" x 5" for drawer fronts and backs
- Four (4) 3/4" x 14-1/4" x 5" for drawer sides
- Two (2) 15-3/4" x 30" 1/8" underlayment for drawer bottom (*trim to fit inset into drawer box*)

Door Slide

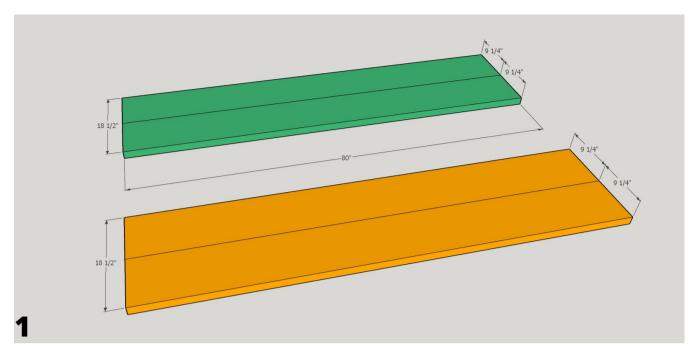
- One (1) 3/4" x 10-7/8" x 30-3/4" for door panel
- One (1) 1/8" x 11-1/2" x 27-1/2" underlayment for door insert

Leg Assembly

- Two (2) 1-1/2" x 3-1/2" x 53-7/8" for lateral leg support
- Four (4) 1-1/2" x 3-1/2" x 14-3/8" for legs
- Four (4) 3/4" x 4-1/2" x 10-1/2" for middle support assembly
- Four (4) 2" x 3" dowels for leg attachment

Backer Board

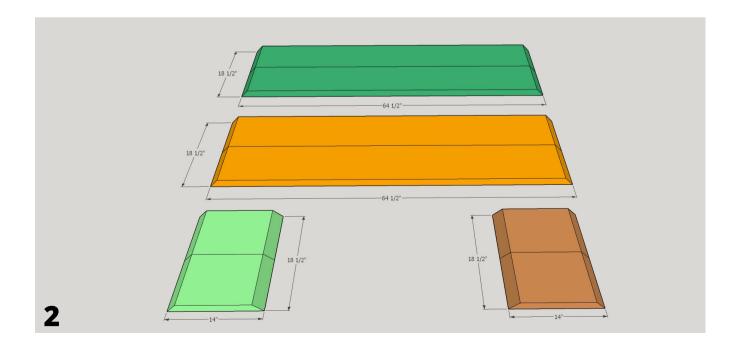
• Two (2) 1/8" x 11" x 30-3/4" for underlayment backer board



Step 1 - Carcass Top & Bottom

The carcass of the media console is 1.50" thick. Jory's original build used laminated 3/4" OSB board, but you can use butt joined 2x10's, edge banded plywood or any other material you want!

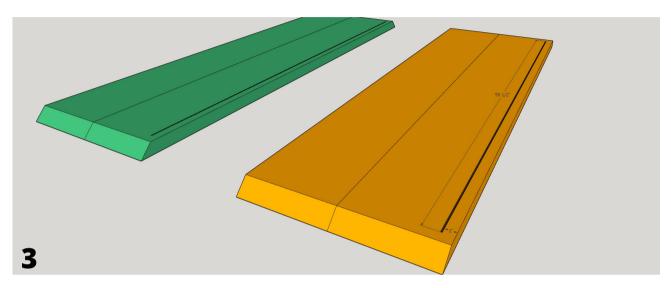
- Prep two separate pieces of 1.50" material to 18.50" x 80"
- Make sure you identify which piece and side will be the visible top



Step 2 - Carcass Miters

Using a circular saw, track saw or table saw, set the miter to 45 degrees. We've left an 1-1/2" of wiggle room with material so if you don't get the cuts right the first time, all is not lost!

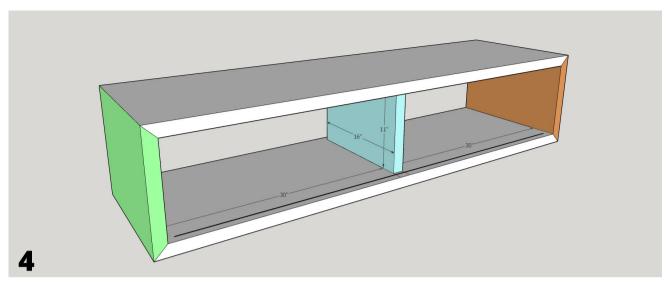
- With your 45 degree miter cut each 80" piece into 64-1/2" and 14" pieces
- The outer dimensions will be the 64-1/2" and 14"



Step 3 - Sliding Door Track

For the sliding door track you can use a circular saw or track saw with a guide or a router with a guide and an <u>1/8" downward spiral bit.</u>

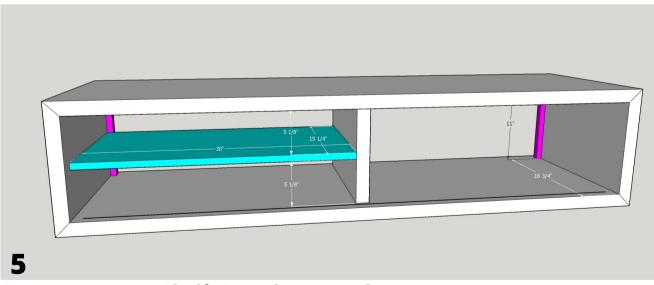
- Set your guide so the cut is 1" in from the outer edge on both the top and bottom pieces
- For the bottom piece the depth needs to be cut at 1/4"
- For the top piece the depth needs to be cut at 1/2"
- Test fit a scrap piece of 1/8" underlayment for fit. It may require more than one adjusted pass for the piece to slide easily
- Try this out on a scrape piece first



Step 4 - Carcass Assembly

The center post for the carcass can be made from scrap of the original 18.50"x80" glue up. Cut it down to 11" x 16".

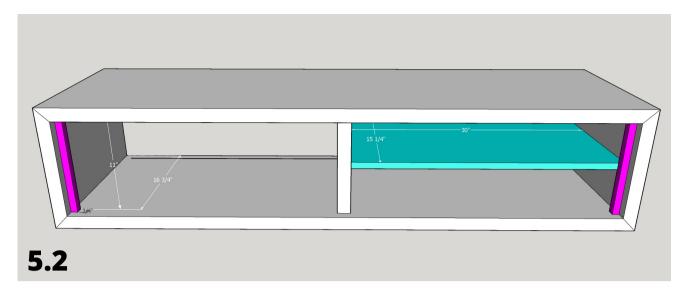
- Attach the 11"x16" center post first to the bottom, inset 1-1/2" from the front edge (and 1" from the back edge) and check for squareness
- Attach the top and sides along the 45 degree miters
- Pro Tip* lay the carcass on it's back and then clamp it up with a ratcheting tie down strap for a tight fit



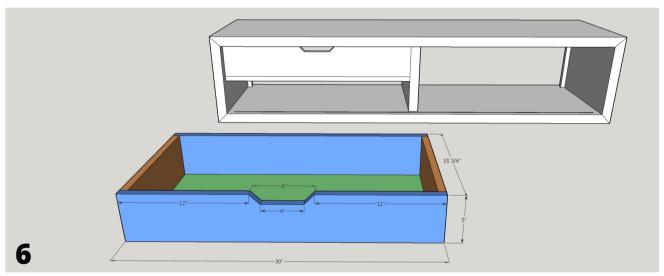
Step 5 - Drawer Shelf & Backer Board Frame

Once the glue up of the carcass has dried, using 3/4" plywood or glued up boards add a shelf to one of the sides with a 30"x 15.25" dimension.

• Centering the shelf should leave 5-1/8" on either side and leave 3/4" short for the backer board



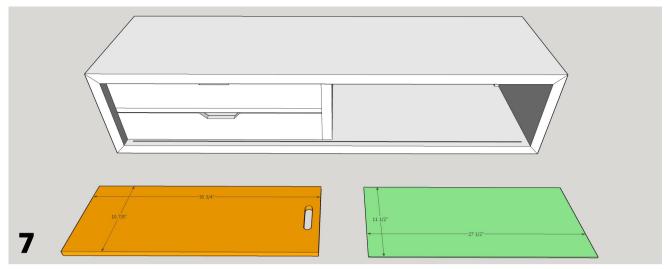
• From scrap wood cut a piece of 11" x 3/4" x 3/4" and attach to the back of the carcass inset 1" from the back, these will be used for the backer board



Step 6 - Drawer Assembly

Build a pair of drawers that fit inside the 30"x15.75"x5-1/8" drawer boxes. If you use drawer slides you will need to adjust to fit.

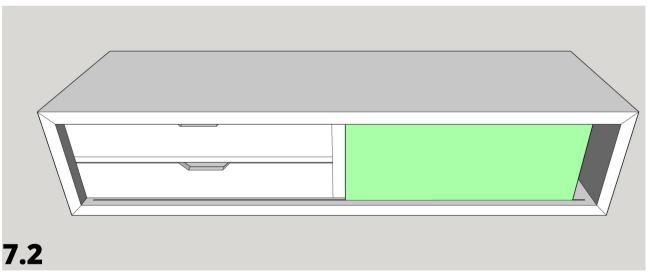
Need some drawer building tips? Check out <u>Adam's Drawer Building</u>
 <u>Technique</u> or <u>Tamar's Drawhhherrrr (she's from NY) technique</u>!

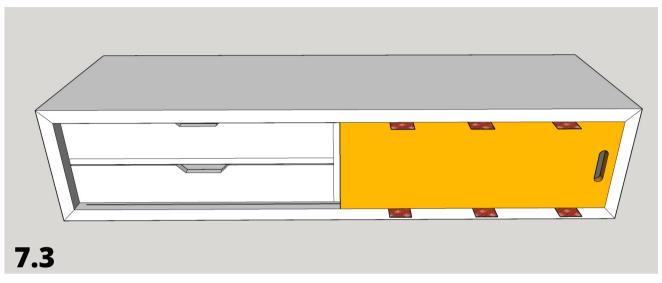


Step 7 - Sliding Door

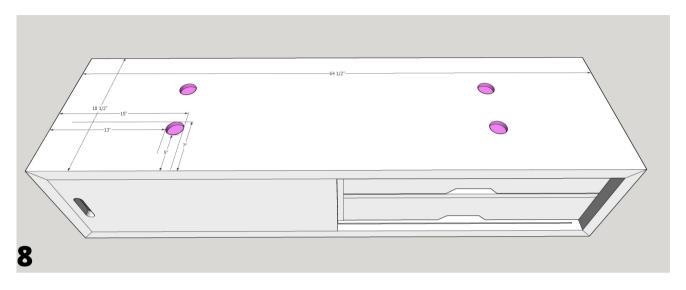
You can choose to swap out this step for a cabinet door, but the slider adds a unique element and a chance to add some texture like a sculpted panel to the door face.

• Cut a piece of 1/8" underlayment to 11-1/2" x 27-1/2" and slide it into the grooves you previously cut into the top and bottom. The top should be a deeper groove to slide up into and then drop into the bottom slot while still remaining in both tracks. Start with a little extra and then cut down as needed for the best fit





- Cut a 3/4" piece of material to 10-7/8" x 30-3/4"
- Using a jig saw or a router, cut a hand hold
- Attach to 1/8" underlayment backer allowing for slight spacing from the top and bottom so the door can slide
- Pro-Tip use playing cards to evenly space the door face while drying
- Pro-Tip this is an excellent piece of material to show off the Cove Cutting Technique Jory uses on his drawer fronts

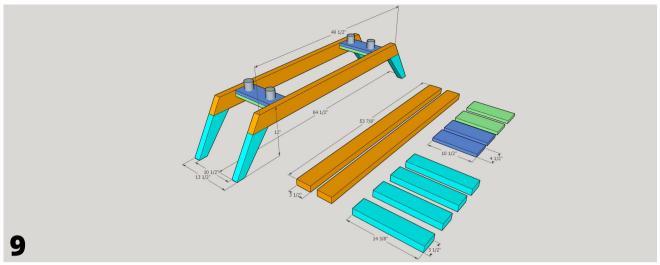


Step 8 - Leg Post Mounts

For this build we used 2" dowels to attach the carcass to the legs. You can change how you assemble, but using this technique you will need a <u>2"</u>

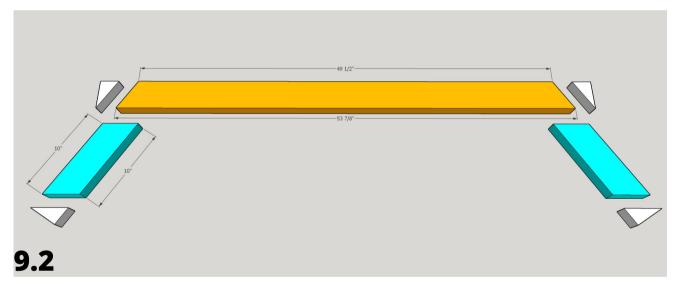
Forstner bit and drill to add these 1/2" holes to the bottom of the carcass.

- The holes will be spaced 6" off the front and back and 14" off the sides with a 36-1/2" on center spacing from the left holes to the right
- If you're nervous about accuracy, wait until the legs are assembled, then trace the dowel placement on to the carcass and then cut the holes



Step 9 - Leg Assembly

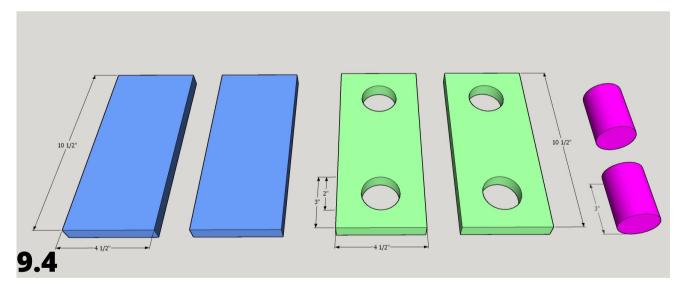
The legs are designed using 2x4 dimensions for easy material sourcing, but would look great made out of walnut and rounded over with a **round over router bit** for a great Mid Century Modern feel.



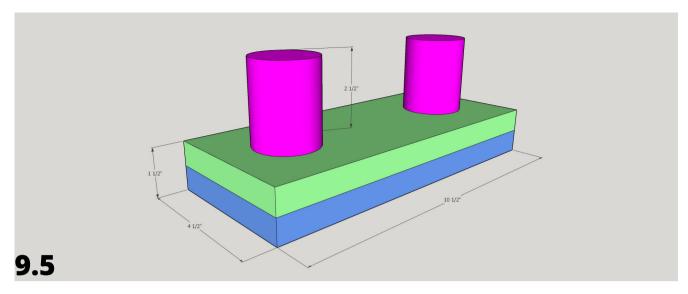
- Using a miter saw or circular saw with a square, cut the lateral support to 53-7/8" (longest end to end) at a 32 degree miter cut.
- Using the same 32 degree angle, cut a pair of feet with length of 10" from edge to edge.



- To achieve a tapered leg, use a table saw or circular saw with guide and cut 2" on center from the bottom to the top inside corner of each leg.
- If you need some help and want to try a taper jig on the table saw, check out **Tamar's jig tutorial!**
- Attach to lateral leg piece



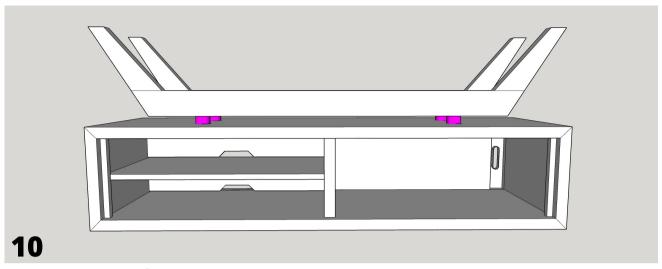
- For the middle supports cut 4 pieces of 3/4" material to 10-1/2" x 4-1/2". On two of the pieces use the 2" forstner bit again and cut a pair of holes 1" off from the end and centered 1" off from the sides.
- These holes need to be accurate based on the holes you pre-drilled into the bottom of the carcass



- Pre-drill the bottom two pieces without holes if you're using pocket joinery to attach pieces and then glue and sandwhich the top and bottom pieces together
- Cut a pair of2" dowels to 3" then glue into place

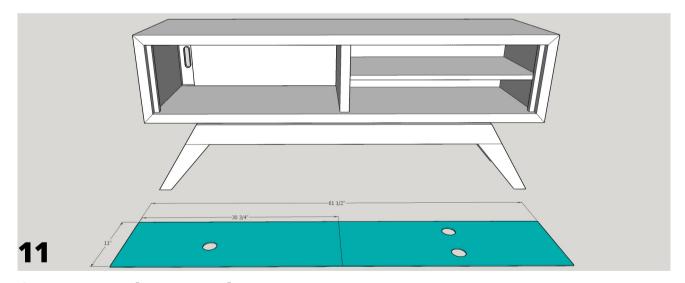


- Attach to inside of legs using preferred method of joinery
- Be sure the middle supports line up with the dowel holes pre-drilled on the bottom of the carcass. The holes should be 36-1/2" on center



Step 10 - Attach Legs to Base

• If you did not pre-drill the 2" holes, line up your leg base to the carcass and pre-drill. If you're concerned that wood glue won't be strong enough to secure the 2" dowels, drill pilot holes through the center of the 1/2" dowel holes and then screw down through inside of console into the dowels to secure.



Step 11 - Backer Board

Use a piece of 1/8" underlayment for the backer. If you don't buy a full sheet they sell 2'x4' panels that you can split and attach the seam in the middle.

- Cut a piece of 1/8" underlayment to 11" x 61-1/2" or a pair to 11" x 30-3/4" and attach to the center post and inserts from step 5
- Add holes for electronic componets