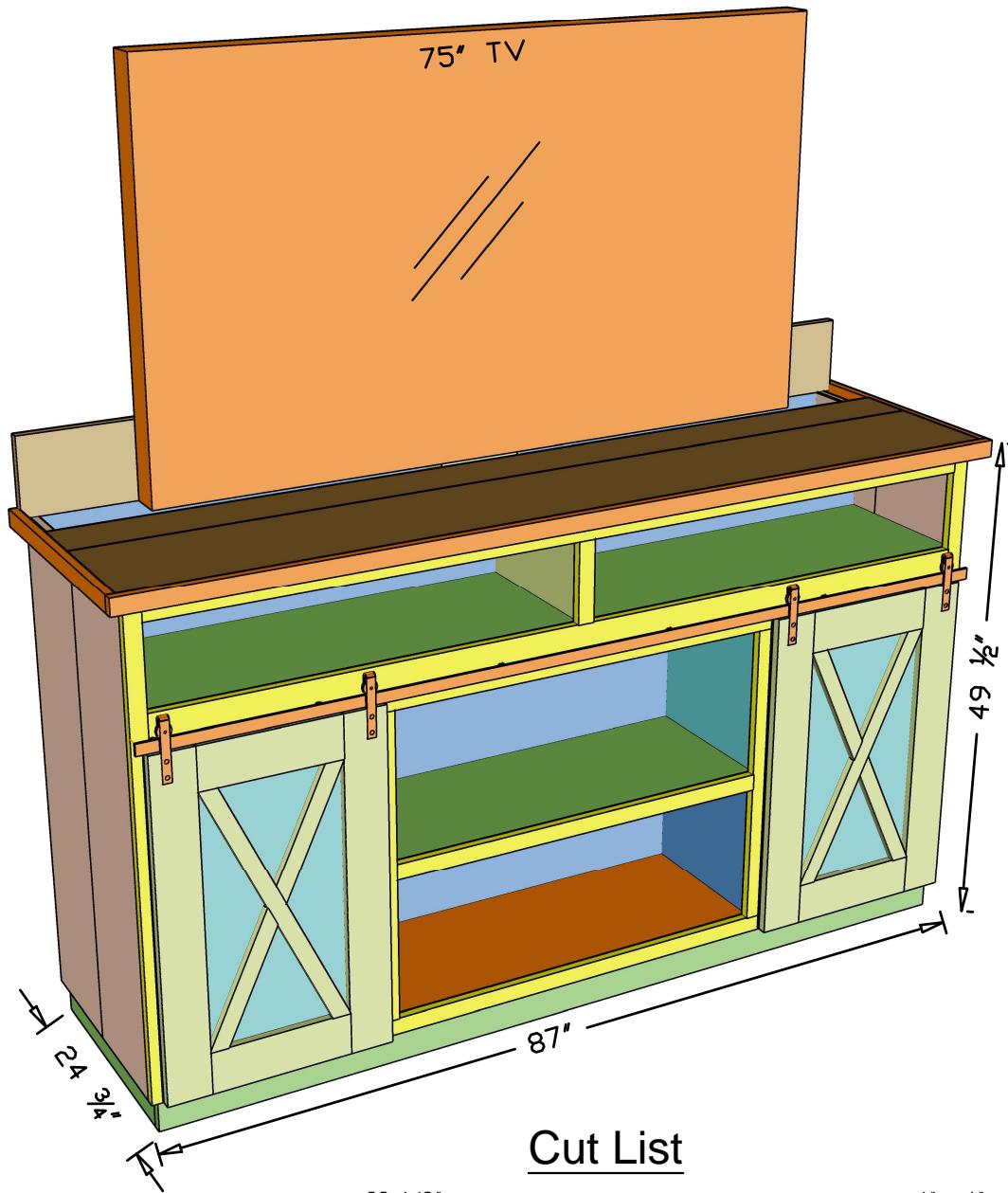




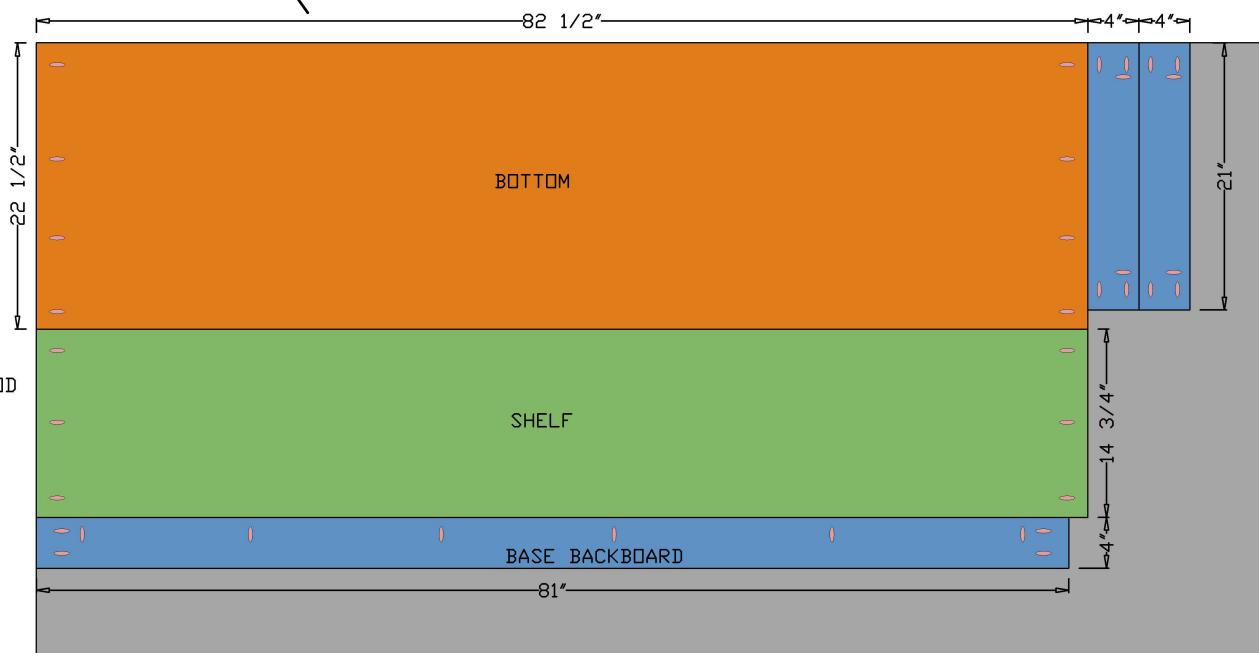
# MEDIA CONSOLE WITH TV LIFT

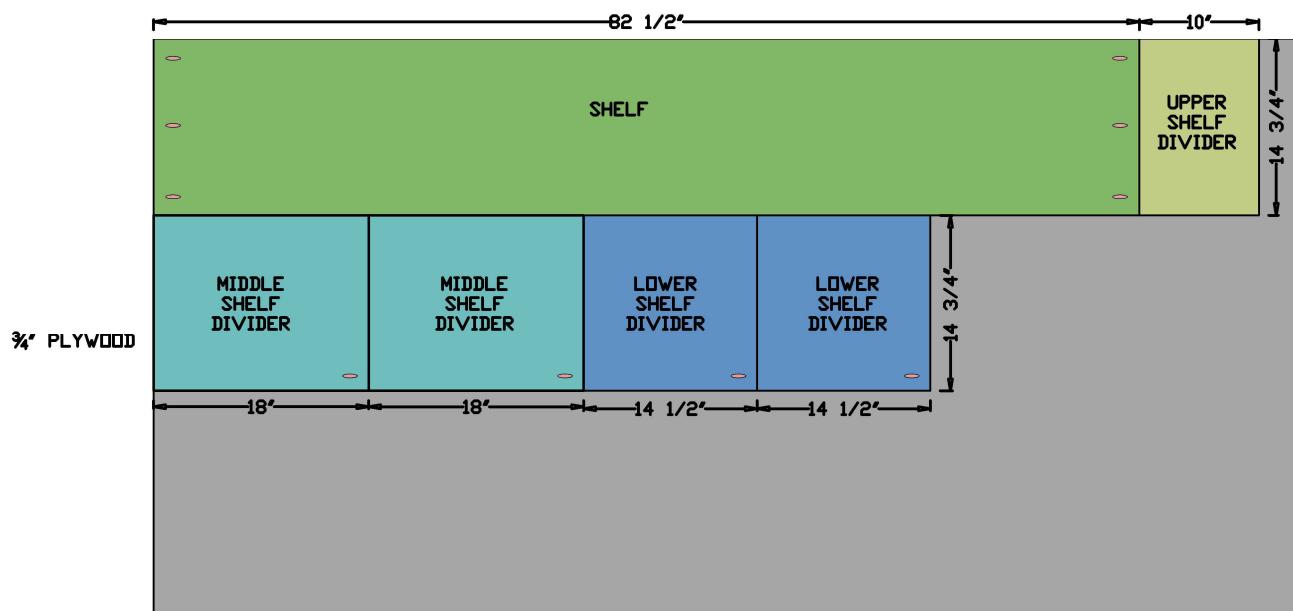
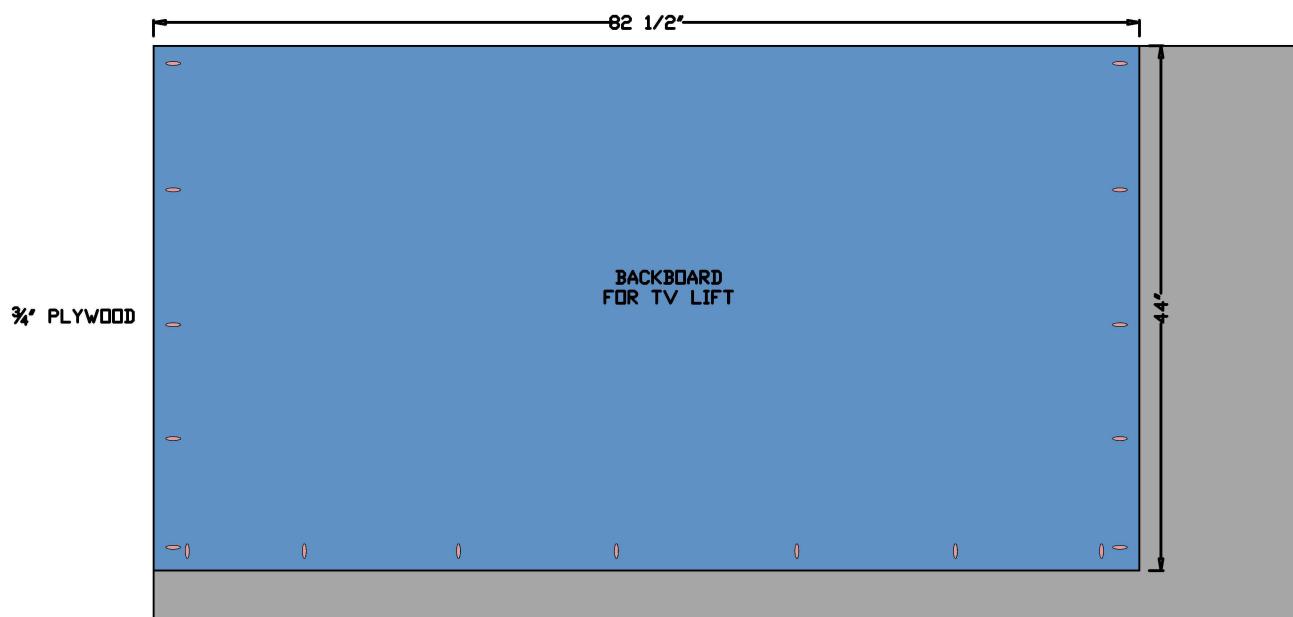
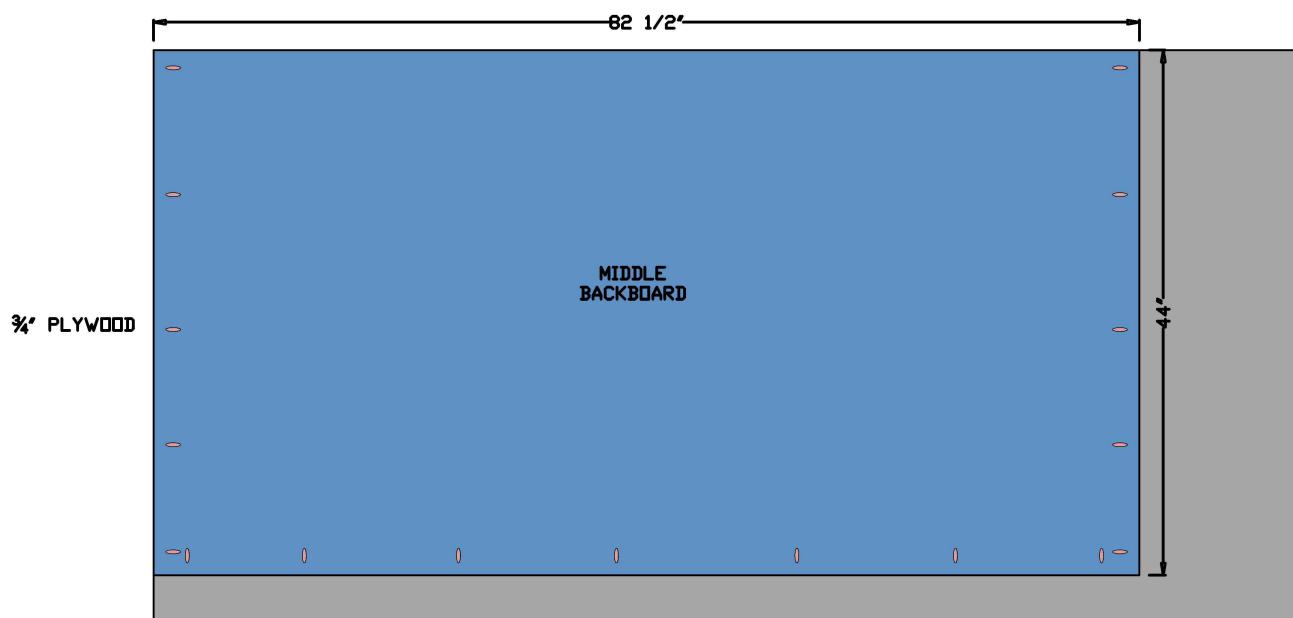
## Supplies

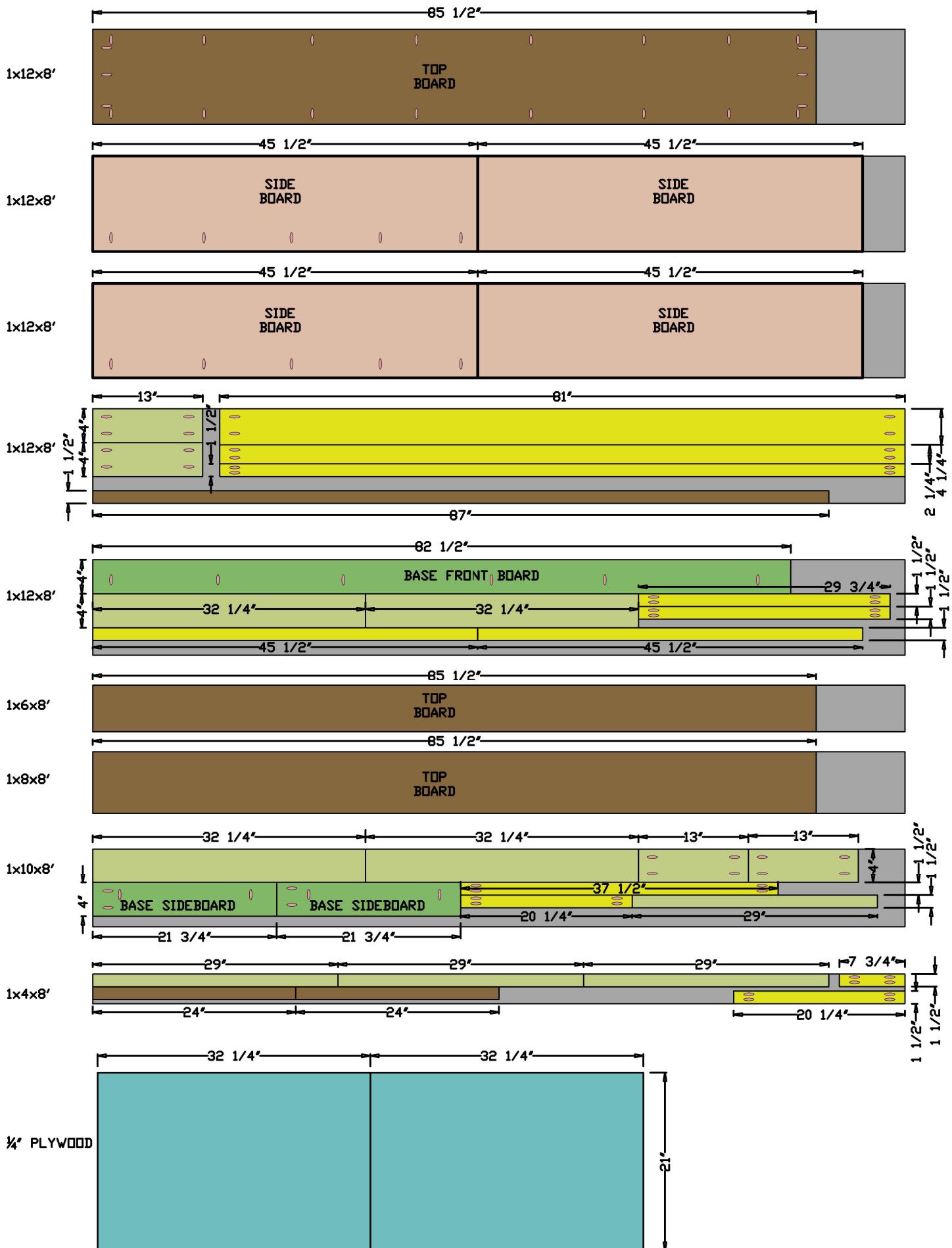
Item	Quantity	Description
4'x8' - $\frac{3}{4}$ " Plywood	4	
65" x 21" - $\frac{1}{4}$ " Plywood	1	
1x12x8'	5	Construction lumber
1x10x8'	1	Construction lumber
1x8x8'	1	Construction lumber
1x6x8'	1	Construction lumber
1x4x8'	1	Construction lumber
TV Lift 44" tall	1	
1 $\frac{1}{4}$ " Pocket Hole Screws		
1 $\frac{1}{4}$ " Brad Nails		
7' Super mini Sliding Barn Door Kit	1	
$\frac{1}{2}$ " Staples		



### Cut List

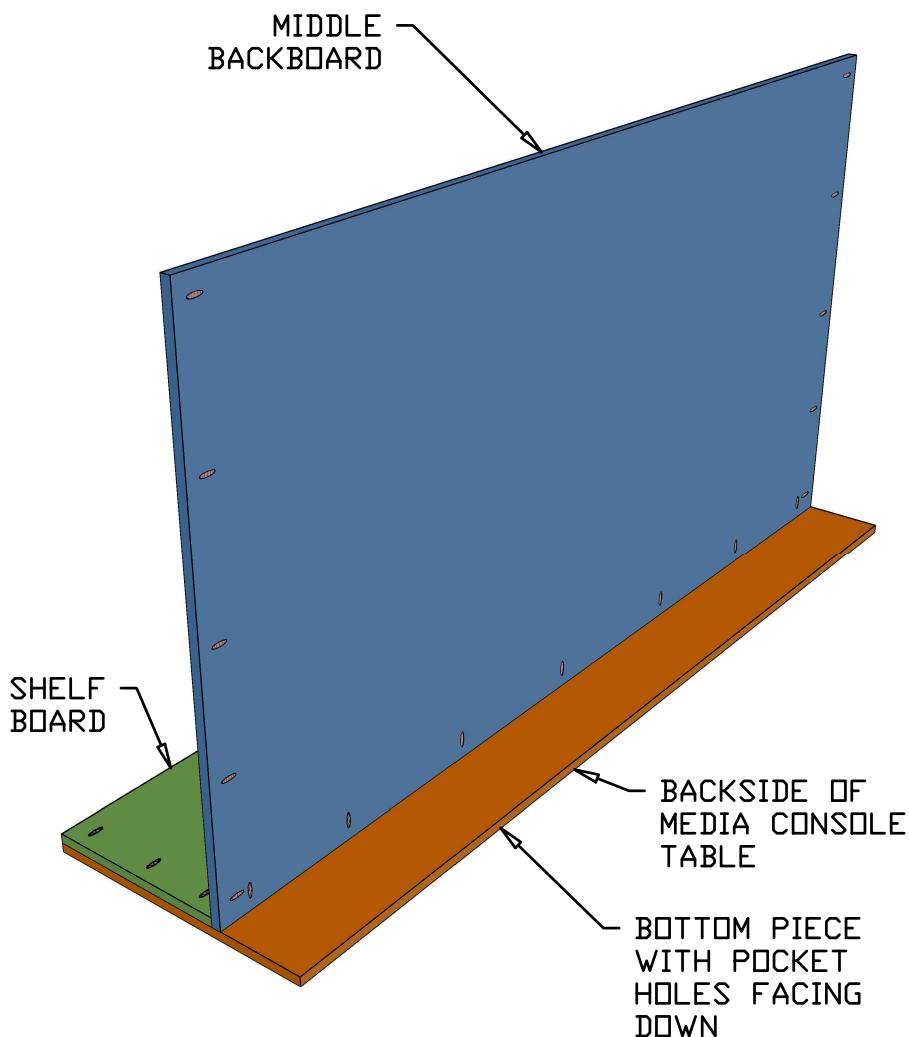
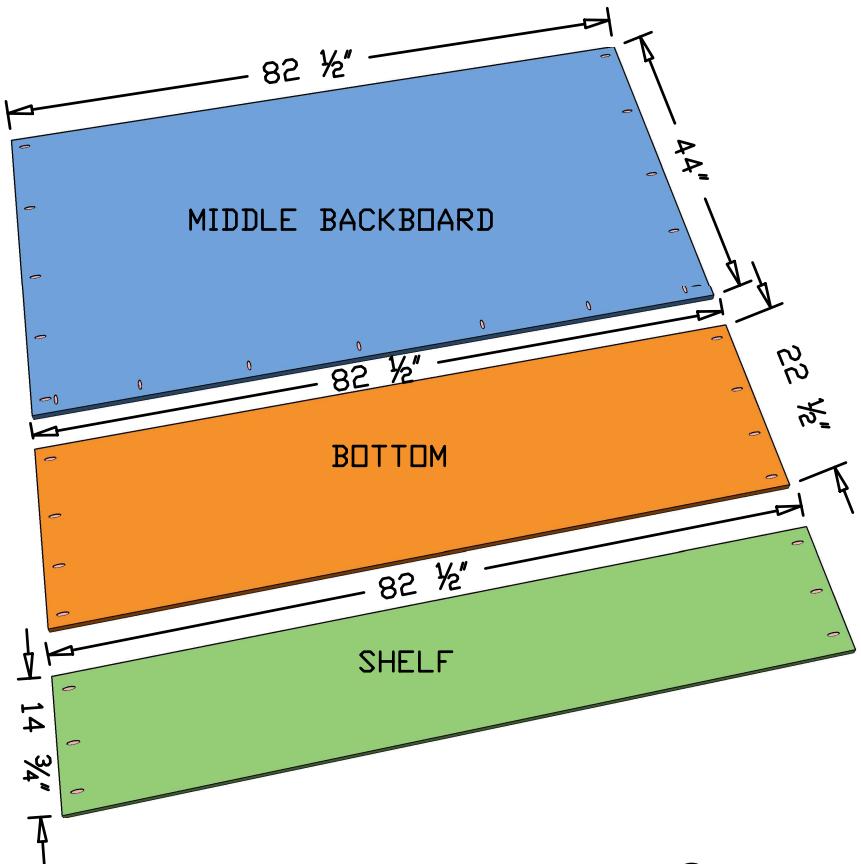






## Step 1

First, start by cutting the large pieces. Take 3/4" cabinet grade plywood and cut the bottom piece to 82 1/2" x 22 1/2" and one shelf piece to 82 1/2" x 14 3/4". Then cut a middle backboard to 82 1/2" x 44". This board is placed between the TV lift and the media console shelves. Next, drill pocket holes as shown in the picture having the Kreg Jig set to 3/4" wood thickness.



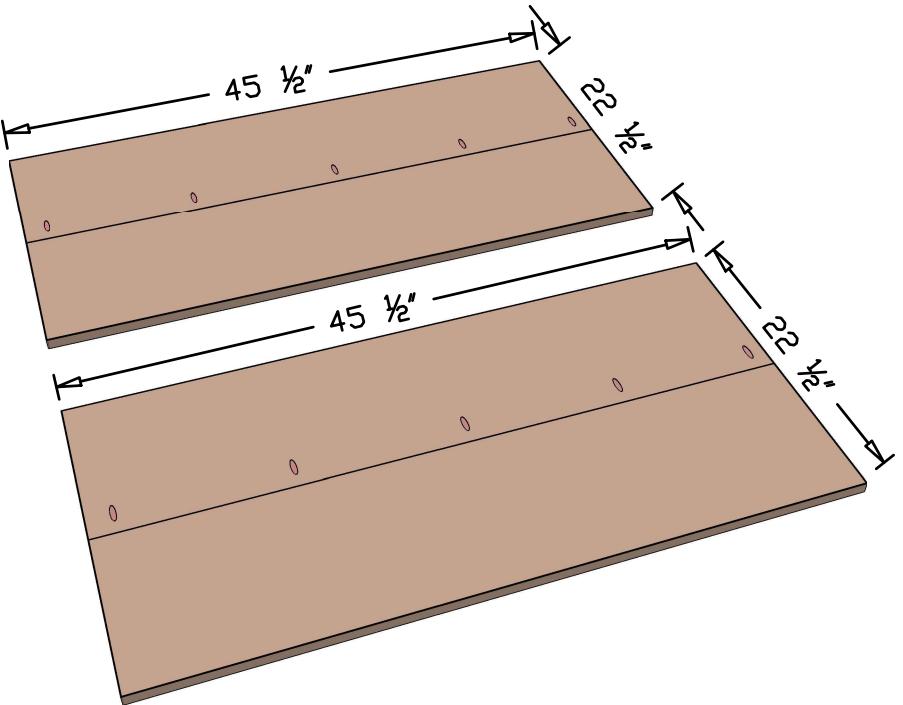
## Step 2

Place the bottom board on the floor with pocket holes facing down. Take the shelf board and clamp it temporarily to one side of the bottom board. Apply a strip of wood glue right next to the clamped shelf board.

Then place the middle backboard into the glue, having pocket holes facing to the back of the media console. Drive in 1 1/4" pocket holes screws attaching backboard to the bottom board. Once the backboard is attached, then unclamp the shelf board.

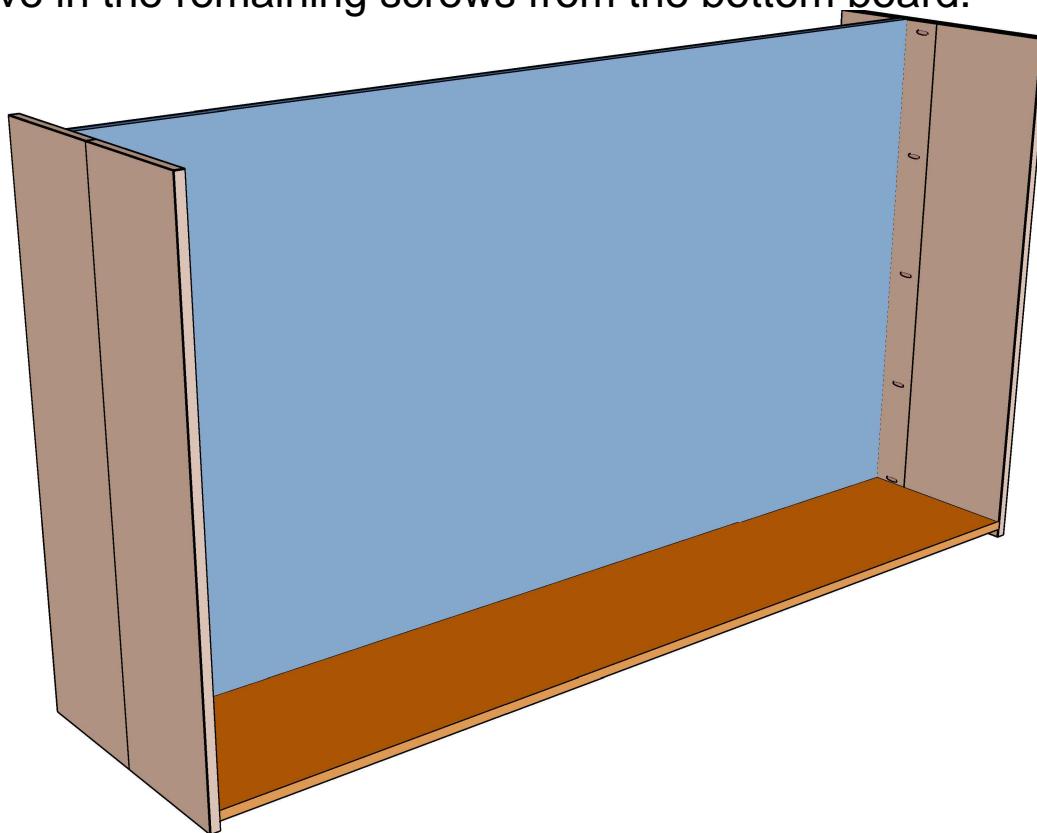
### Step 3

Next, take 1x12 board and cut four pieces to  $45 \frac{1}{2}$ " in length. Two of the boards will be used on the right side of the media console and two on the left. Drill pocket holes as shown in the picture and connect them together using wood glue and  $1 \frac{1}{4}$ " pocket hole screw.



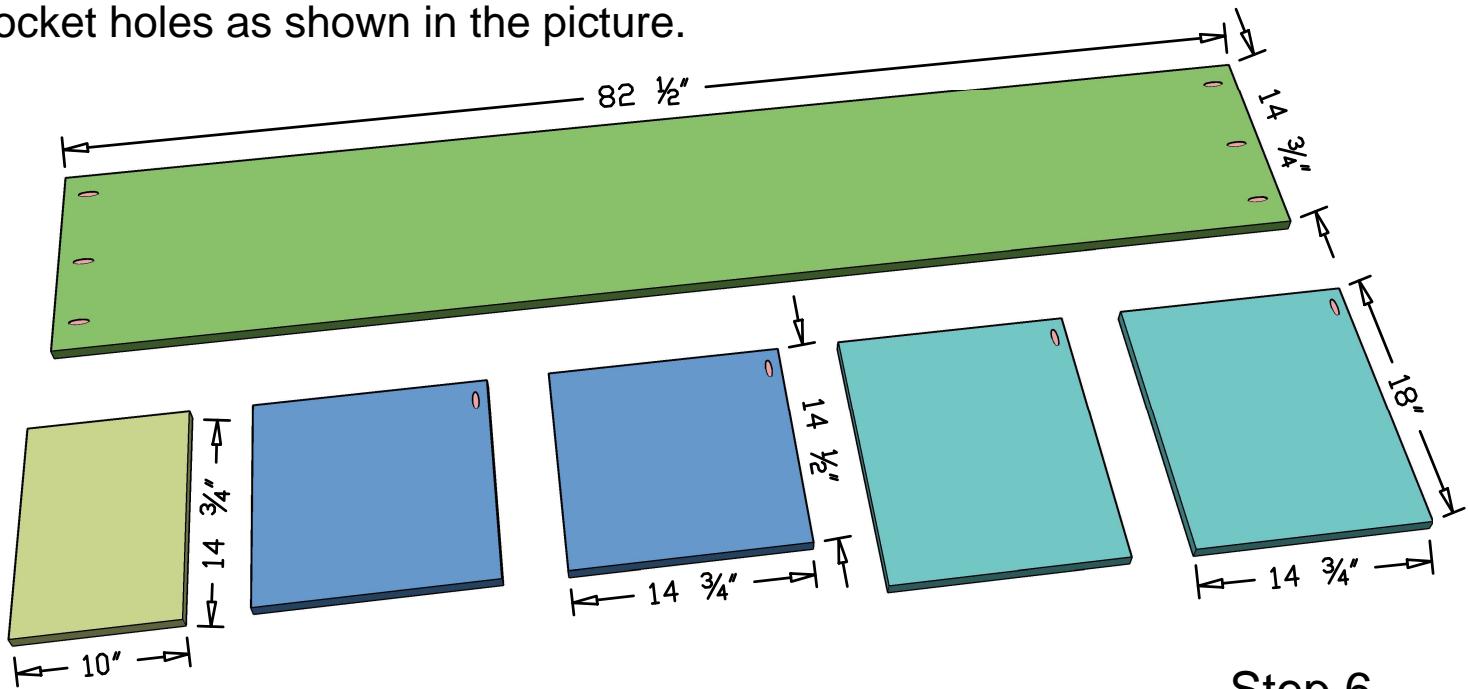
### Step 4

Now attach these sideboards to the media console with  $1 \frac{1}{4}$ " pocket hole screws and wood glue. The sideboard and the backboard should be flush at the top. This will make the sideboards  $\frac{3}{4}$ " lower than the bottom board. To make the sideboard attachment easier, raise the media console  $\frac{3}{4}$ " from the ground by placing it on a piece of  $\frac{3}{4}$ " plywood. Make sure that the sideboards are perfectly square to the bottom. Flip the console table on its back and drive in the remaining screws from the bottom board.



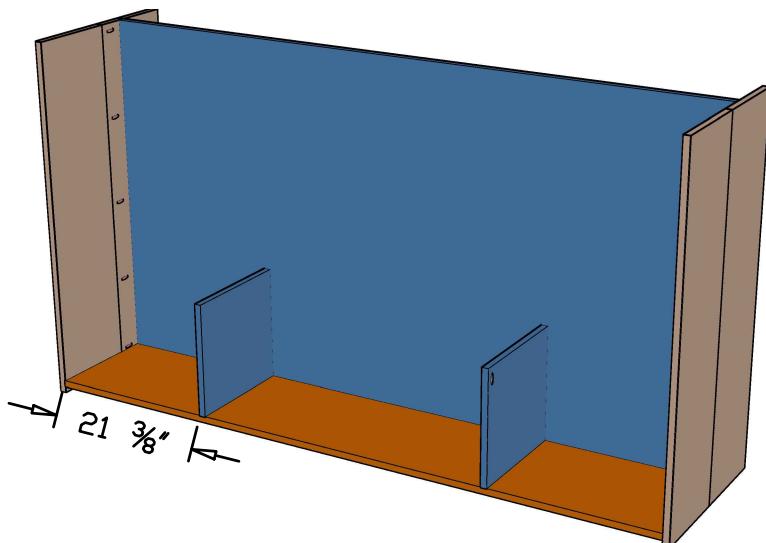
## Step 5

Next, cut all of the shelf boards for the media center. One of the shelf boards ( $82 \frac{1}{2}'' \times 14 \frac{3}{4}''$ ), that was used as a guide, is already cut from step 1. Take  $\frac{3}{4}$ " plywood and cut another  $82 \frac{1}{2}'' \times 14 \frac{3}{4}''$  board. Then cut one  $14 \frac{3}{4}'' \times 10''$ , two  $14 \frac{3}{4}'' \times 14 \frac{1}{2}''$ , and two  $14 \frac{3}{4}'' \times 18''$  boards. Next drill pocket holes as shown in the picture.



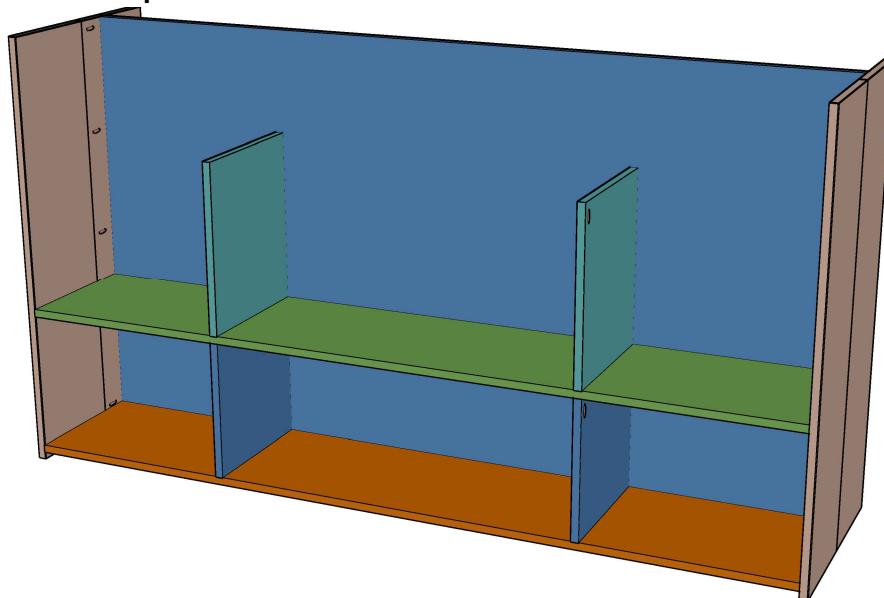
## Step 6

Start by attaching the shelf divider from the bottom of the media center working up. Measure  $21 \frac{3}{8}''$  from the left and  $21 \frac{3}{8}''$  from the right of the media center and mark on the bottom board and the backboard. This is where the shelf dividers will be set. Attach the  $14 \frac{1}{2}''$  tall shelf divider using wood glue and nail gun from the back of the media center. Then flip the media center on its back and nail the shelf from the bottom. The shelf board should only have one pocket hole in the front top.



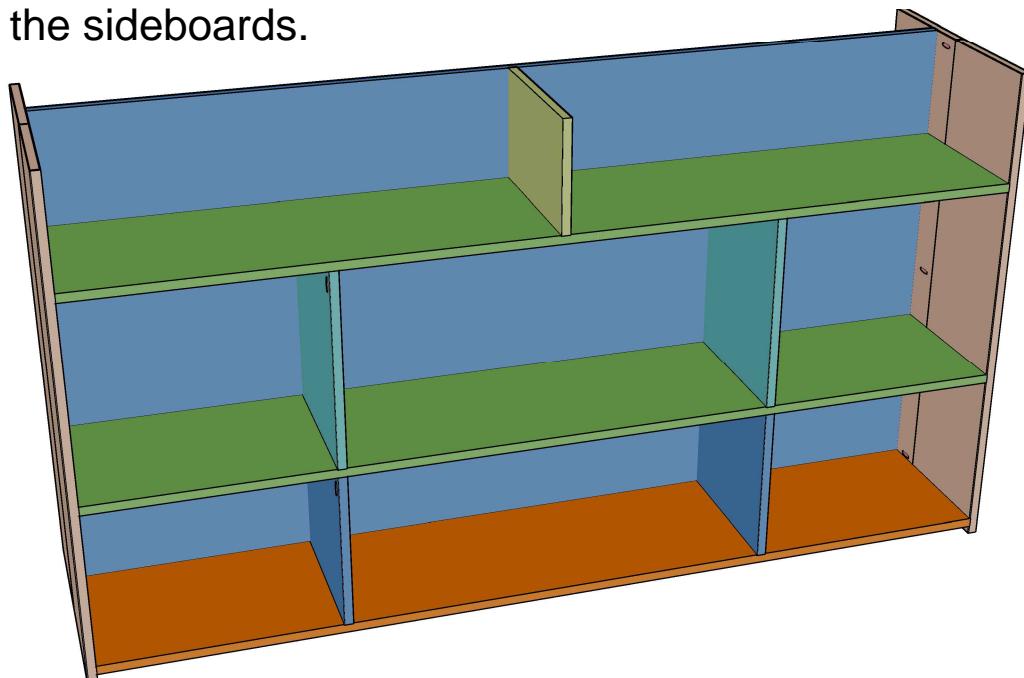
## Step 7

Take one of the 82 1/2" x 14 3/4" shelf boards and place it on the workbench with pocket holes facing down. Then measure 21 3/8" from both left and right sides, similar to step 6. Now attach both 18" high shelf divider at the 21 3/8" mark with wood glue and 1 1/4" brad nails using a nail gun. Slide in the shelf configuration, that you just made, inside the media console and attach the dividers from the back. Then attach the shelf boards to the sides with 1 1/4" pocket holes screws. Make sure that everything is squared and the shelf board is parallel to the bottom of the media console.



## Step 8

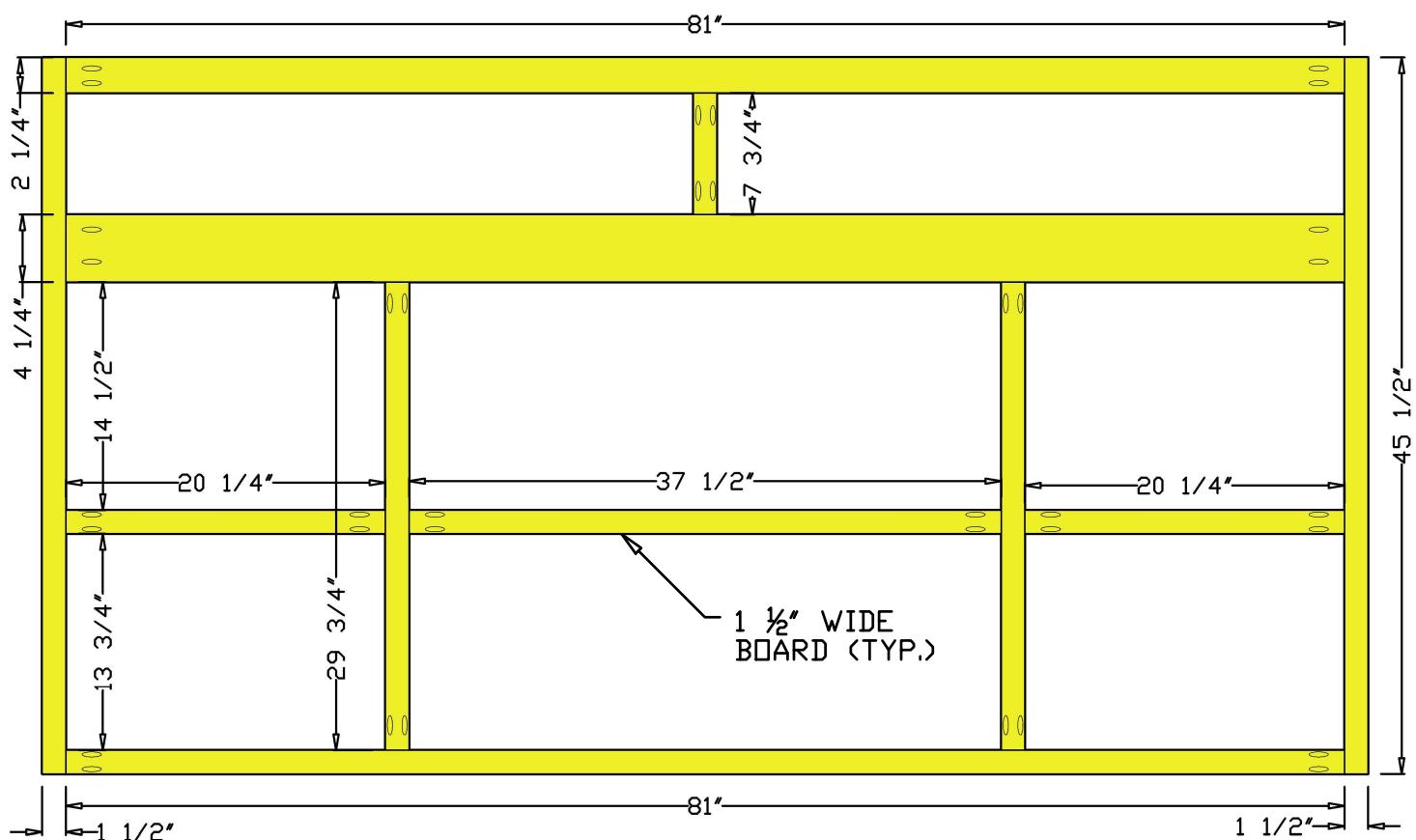
Similar to step 7, take the 82 1/2" x 14 3/4" shelf board and attach one 10" tall shelf divider in the center. Then slide it into the media center over the second set of shelf dividers that are already in place and attach from the back and to the sideboards.



## Step 9

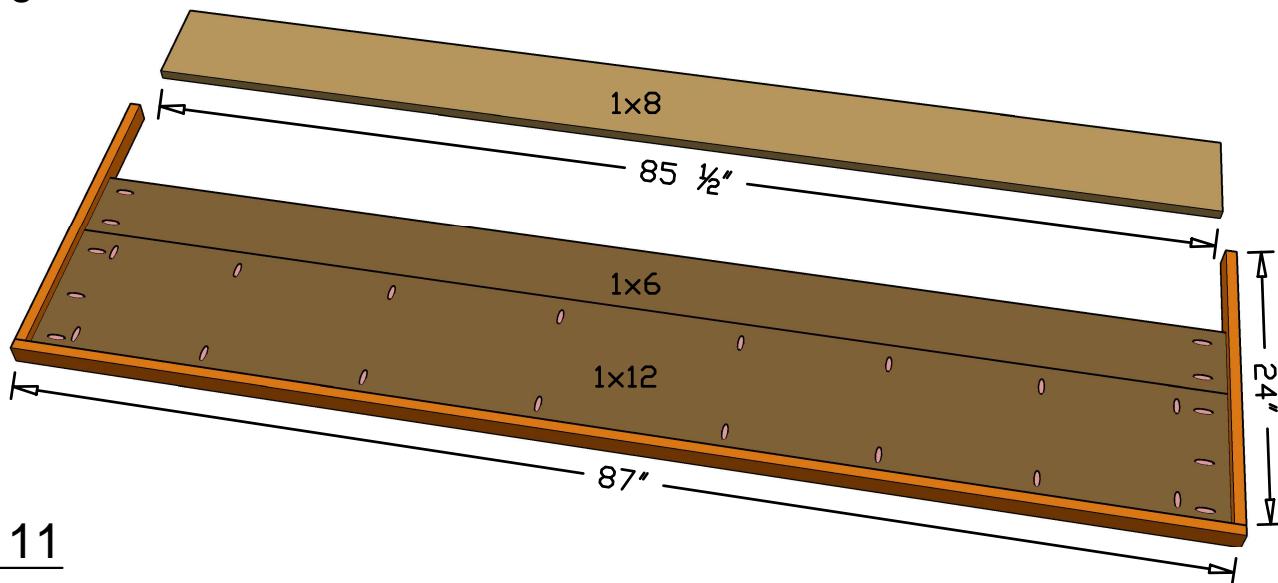
Use the picture or the cut sheet to cut all of the boards for the face frame. Most of these boards are  $1 \frac{1}{2}$ " wide. Then drill pocket holes as shown in the picture.

First, assemble the outer perimeter of the face frame with wood glue and  $\frac{1}{4}$ " pocket hole screws. Then hold the rectangular face frame against the front of the media console and mark the exact locations where the shelf boards are. This will help you to attach the frame board perfectly without any misalignments. When the face frame is complete, set it aside for staining. It will be attached to the media center once everything is stained and painted. .



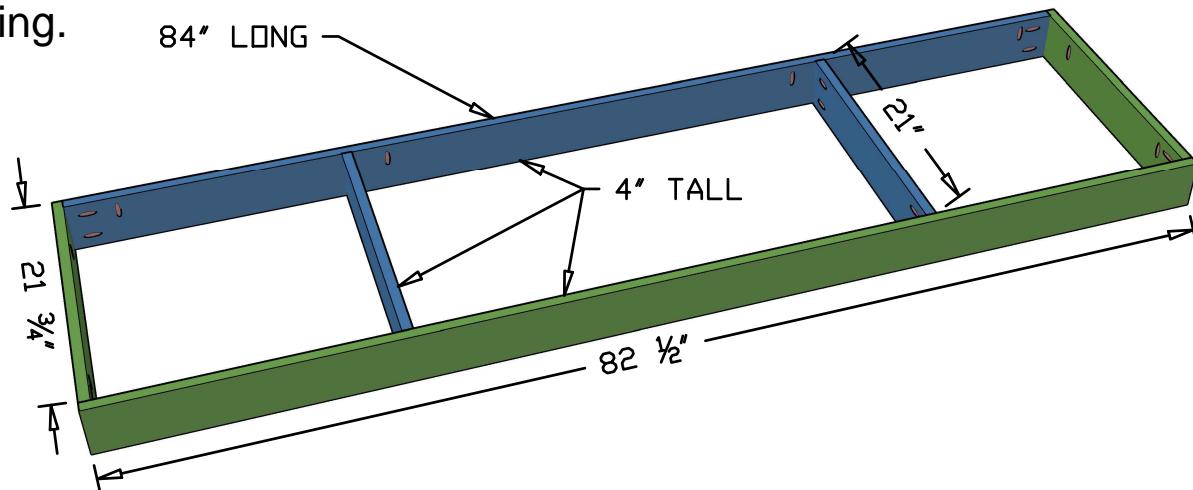
## Step 10

The top of the media console consists of three different board widths, but are the same overall length. The top also has a 1 1/2" wide trim around it. Take 1x12, 1x6, and 1x8 and cut them to 85 1/2" in length. The 1x8 board will be used as a lid to open and close for the TV lift. The other two boards will be glued together. For the trim, cut one board to 1 1/2" x 87" and two boards to 1 1/2" x 24". Drill pocket holes on the 1x12 and 1x6 boards as shown on the picture and attach them together with wood glue and 1 1/4" pocket holes screws. Then attach the 1 1/2" trim around it. Set it aside for staining. The board that will be used as a lid will be attached later as well.



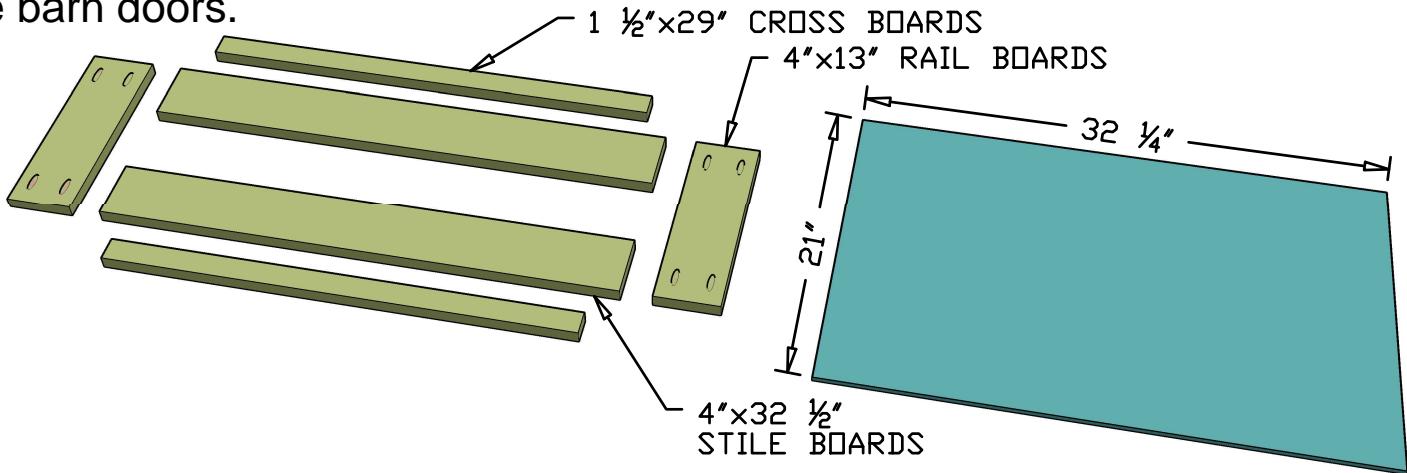
## Step 11

The front of the base will be made from solid wood for staining, but the back and inside dividers are made from  $\frac{3}{4}$ " plywood. Cut the front board to 82 1/2" x 4" and two sideboards to 21 3/4" x 4". Then cut the backboard using  $\frac{3}{4}$ " plywood to 81x4 and two middle divider boards to 21" x 4". Drill pocket holes as shown in the picture. Attach all of the boards together using wood glue and 1 1/4" pocket holes screws as shown in the picture. Set aside for staining.



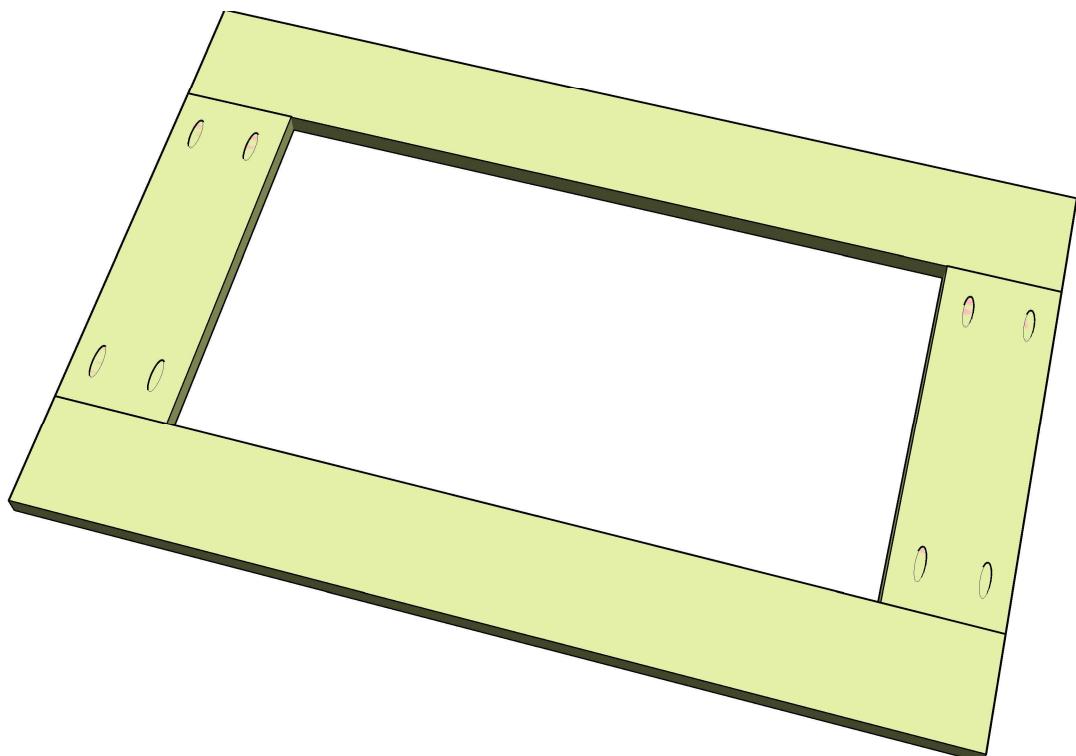
## Step 12

The barn doors consist of 4" wide frame, cross in the middle and a 1/4" plywood in the back. For both of the doors, cut four vertical stile board to 4" x 32 1/4" and cut four rail boards to 4" x 13". Then cut four 1 1/2" x 29" boards for the cross in the middle. The cross boards will be trimmed later at an angle in the next step. Next, drill pocket holes in all of the rail boards. Then take 1/4" plywood and cut two pieces to 32 1/4" x 21" for the back of the barn doors.



## Step 13

To assemble the pieces of a barn door, first, attach the rail boards to the stile boards using wood glue and 1 1/4" pocket hole screws. Make sure to clamp the boards together when driving in the screws. This will prevent boards from misaligning.



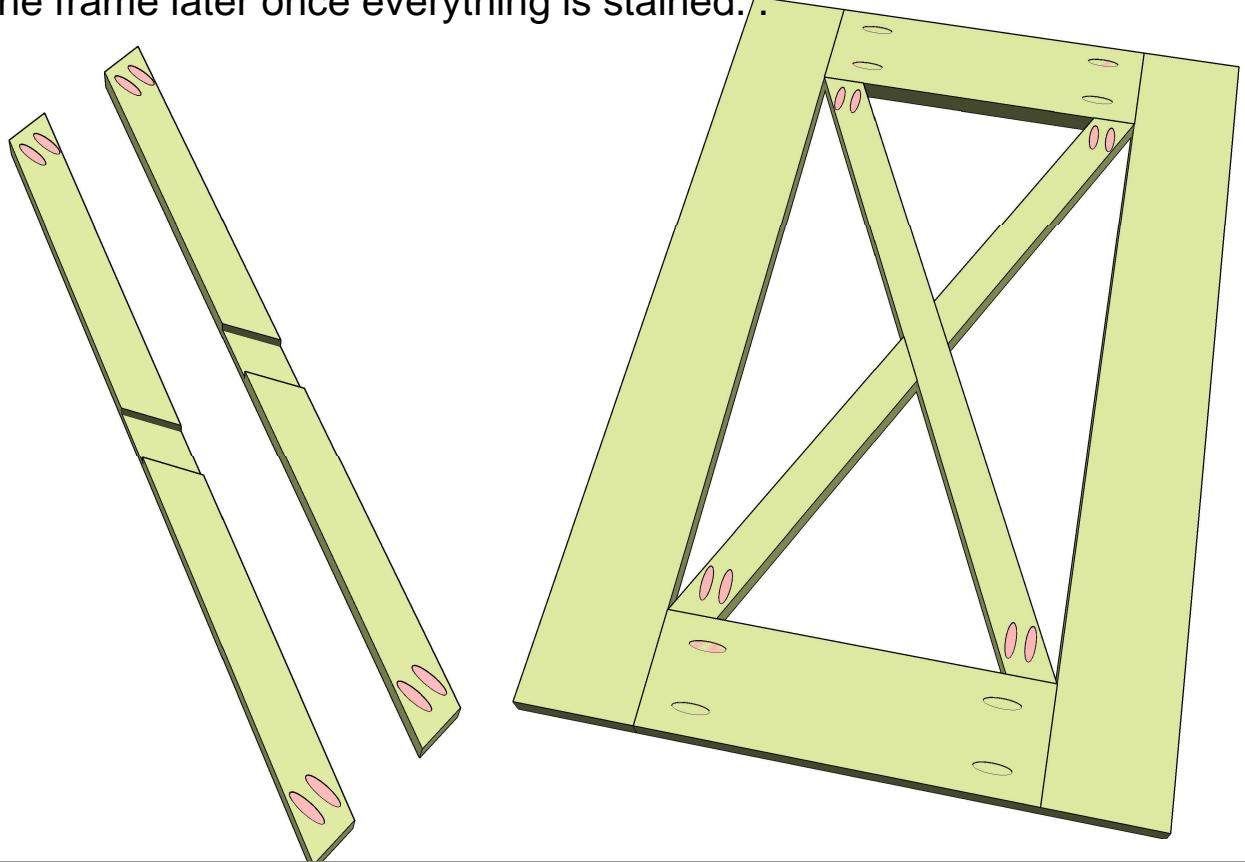
## Step 14

Once the perimeter frame of the barn door is assembled, take 1 1/2" x 29" board and lay it on top of the frame diagonally lining up with two corners of the frame. Draw cut lines on the board to make a cut for a perfect fit. Rotate the miter saw to match the angle of the line you drew and cut on both ends. Repeat the step to cut all of the cross boards.

Place both cross boards crossing each other over the frame and draw lines where the two boards intersect. There are two ways to cut the boards to make a cross. You could make a lap joint, which is stronger, or cut one of the boards into two sections at the intersection marks (this option is easier to make).

To make a lap joint use a miter saw and set the blade to stop halfway into the board (3/8"). Then cut through the intersection area by sliding the blade back and forth and shifting the board until you create a notch that is 3/8" deep and 1 ½ wide. Repeat the same with the other cross board. Use a wood chisel to clean and remove any high areas inside the lap joint.

Drill pocket holes on each end of the cross boards. Then apply wood glue in the lap joint and slide in the cross inside the frame. Clamp the cross to the frame and drive in the pocket hole screws on all four corners. The ¼" plywood would be attached to the frame later once everything is stained..



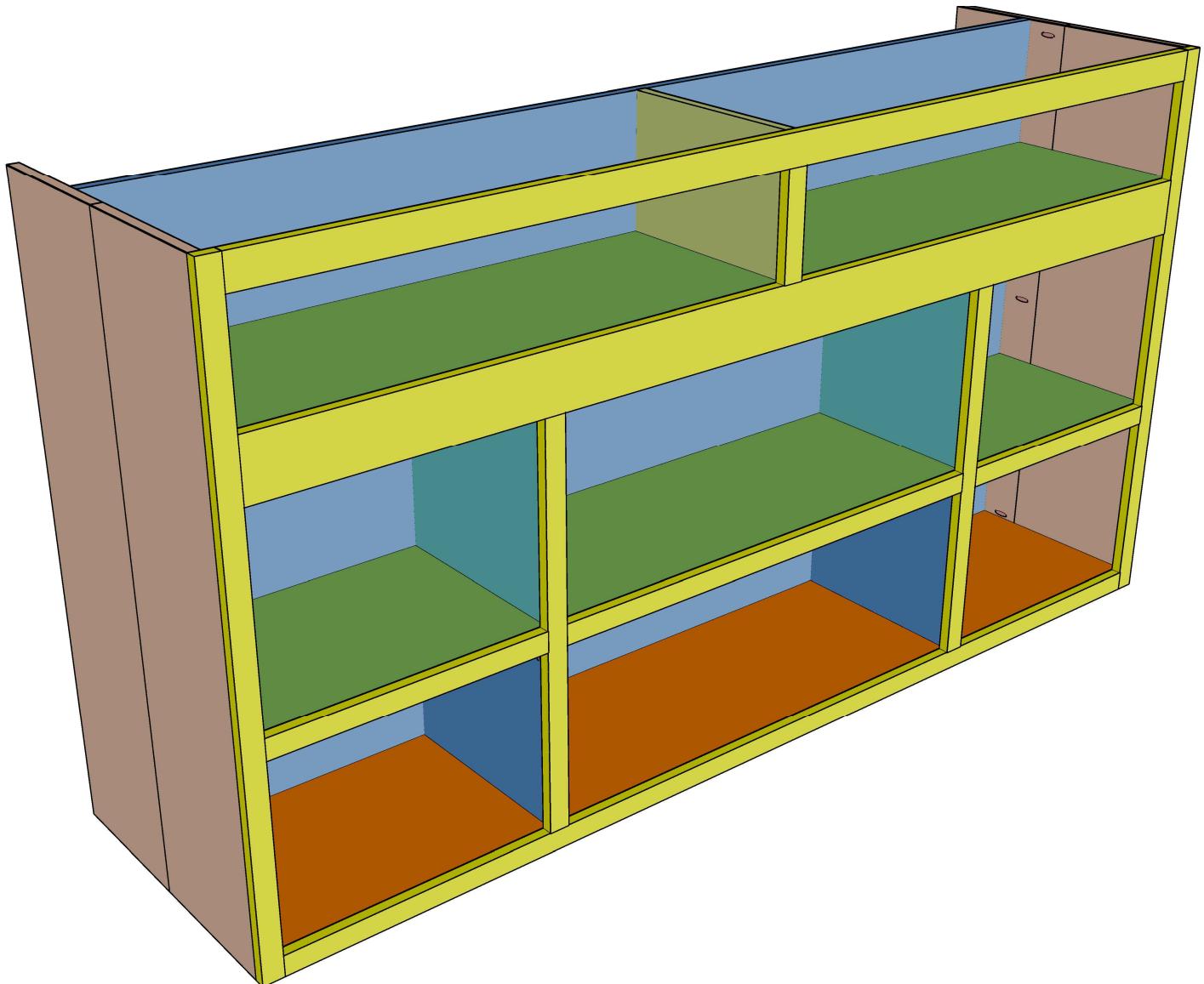
## Step 15

Now that all of the pieces are assembled, it's time to stain and paint. First, paint the inside of the shelves using a small paint roller. You might need to apply a few coats of paint for better wood protection.

To stain the solid wood board and  $\frac{1}{4}$ " plywood for the barn doors, first, apply a coat of pre-stain to prevent stain blotchiness. Then apply grey stain (or whatever stain you want) with a brush and wipe it off with a shop paper towel. Let the stain dry before applying a coat of polyurethane.

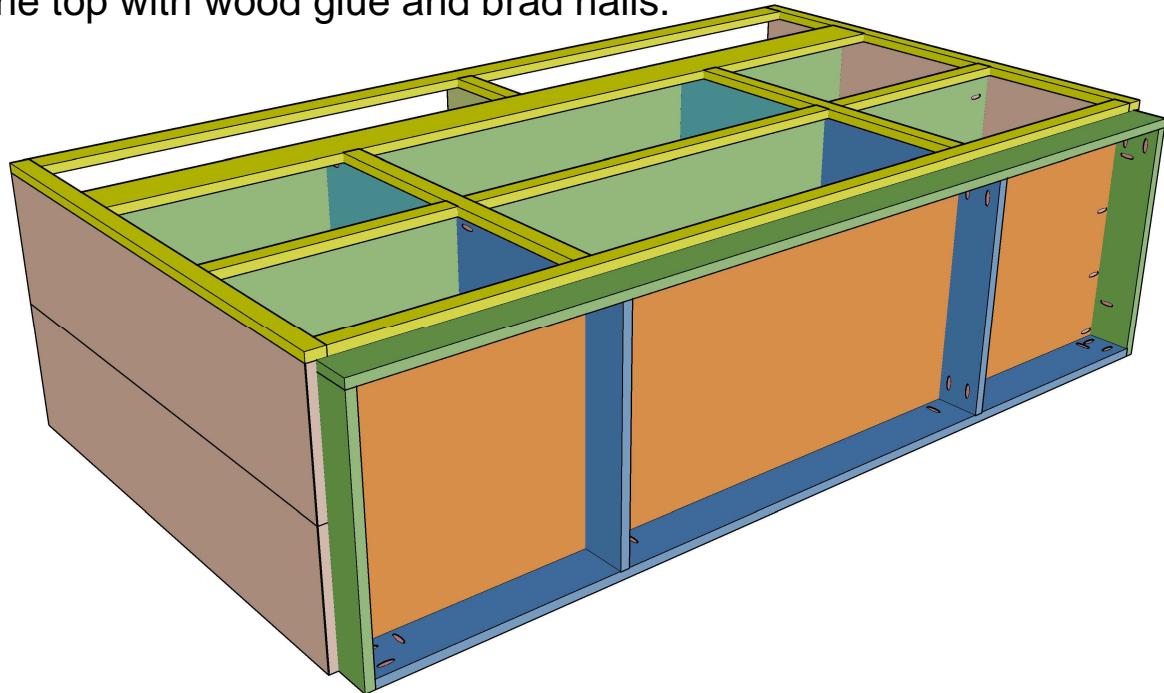
## Step 16

Now that everything is stained and painted, attach the face frame to the media console using wood glue and brad nails using a nail gun. Having the solid wood distressed with a cup brush for a rustic look makes the brad nails blend in and very hard to find, even though they are in front of the media center.



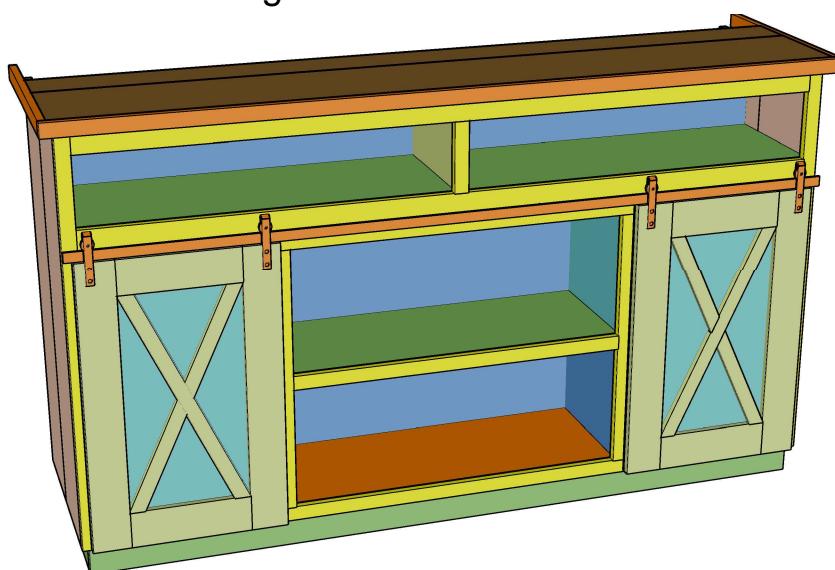
## Step 17

Flip the media console on its back and attach the base with pocket hole screws and wood glue. Next, place the top so that the back of the trim boards are flush with the back of the media center. Also, make sure the top is centered from left to right. Attach the top with wood glue and brad nails.



## Step 18

There are a few DIY methods out there explain how to make your own barn door sliding kits, you could see them here at Ana-White and Shanty-2-Chic websites. But I decided to buy a 7 foot long kit on Amazon to save time. Follow the installation instruction for the exact placement of the rail. The metal rail is attached to the media center with 2" screws. You might want to pre-drill the holes before driving the screws in. This will prevent the board from splitting or cracking. The rail needs to be installed leveled so that the doors will not slide down in one direction. Place the 1/4" plywood on the backside of the bard door and staple it using a staple gun. Then attach the rollers on both sides of the barn door. Hang the doors on the rail.



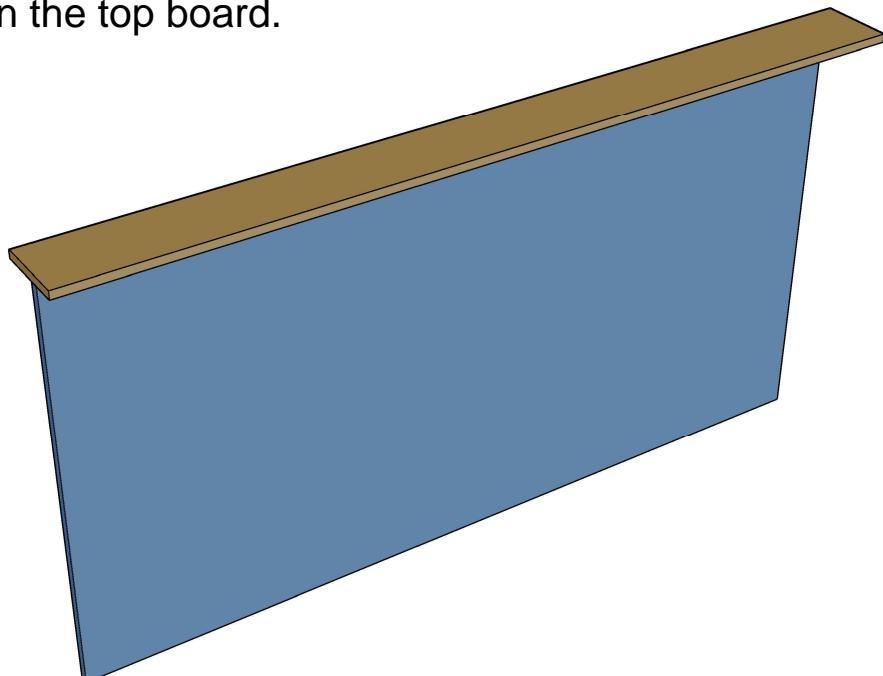
## Step 19

The last piece that needs to be cut is the backboard that holds the TV lift. Take  $\frac{3}{4}$ " plywood and cut 82 1/2" x 44" board and drill pocket holes on the bottom and sides. Next, attach the top lid board to the backboard with hinges for it to open and close.

I had a few extra cabinet door hinges from a previous project and I decided to use them here. If you are buying new hinges, it's a good idea to buy them black (that is if you're staining/painting darker color), this way it won't give off a slight glare when looking at it when opened.

Take the top board and drill four holes for the hinges. To install the hinges on the top board, you will need a 1 3/8" by 3/8" Shank Forstner Drill Bit and use full overlay frameless hinges.

The hinges you purchase usually come with a template. Place the template at the location where you want the hinges. Then using a nail, push down through the template x marks to make a little dent on the board. Remove the template and drill a 1 3/8" hole at the center of the mark using a Shank Forstner drill bit. Place the hinge inside the large hole and using a construction square make sure that the hinge is perfectly squared before pre-drilling the holes for the screws. Then pre-drill the screw holes using a self-centering hinge drill bit. Attach the hinge to the board with the screws that came with hinges. Repeat this step to install all the rest of the hinges on the top board.

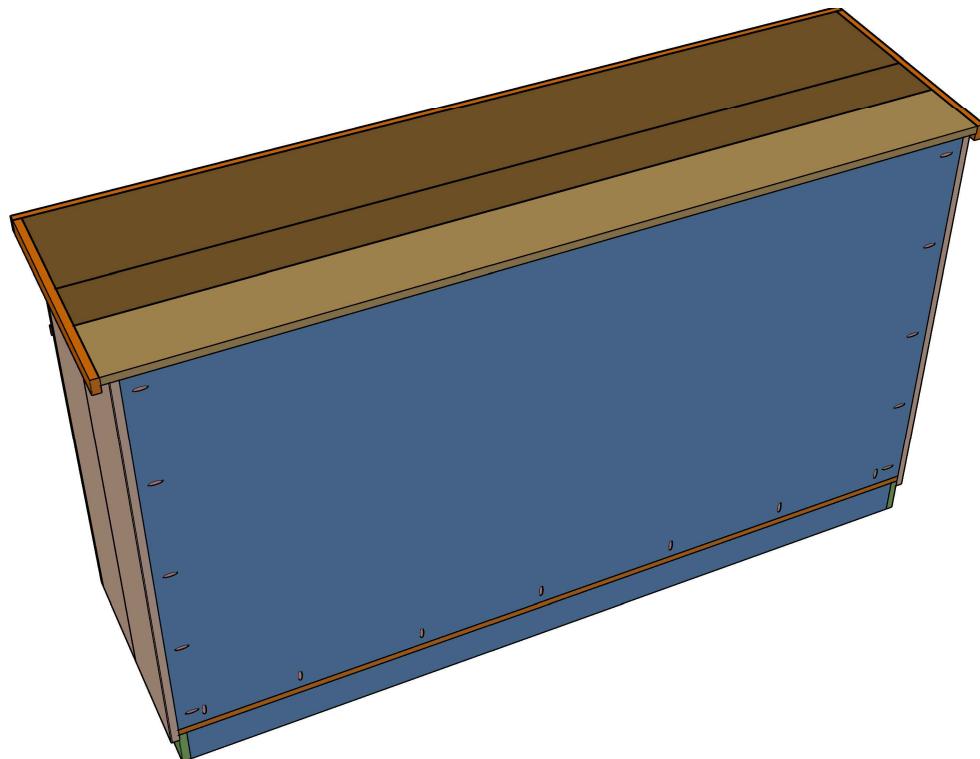
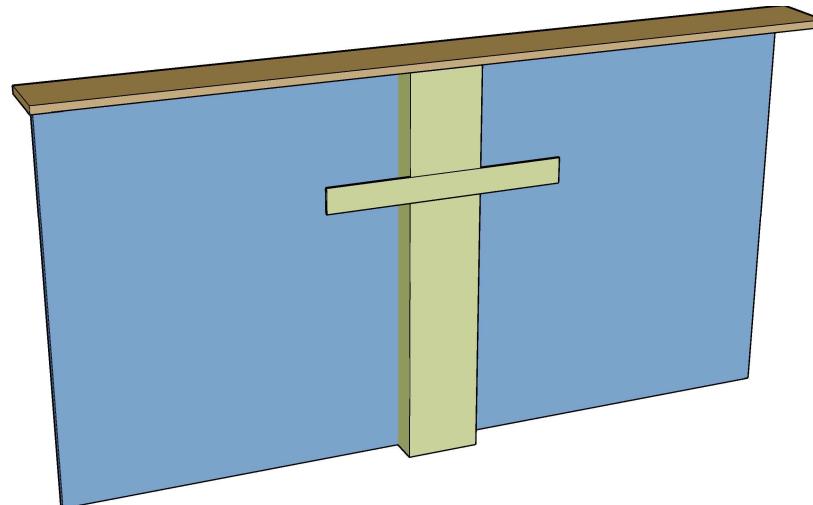


## Step 20

Lay the backboard on the floor and find the center of the board. Mark the exact location where to attach the TV lift. The TV lift should be flush with the bottom of the backboard so that most of the weight will be placed on the bottom board of the media center. Screws are there to hold the lift from tilting forward.

Once the TV lift is installed then attach the control box to the backboard. Then take a  $1 \frac{1}{2}$ " hole saw bit and drill a hole on the backboard to feed the power cable. The control box has an extra plug for your TV.

Now attach the backboard with the TV lift to the media center. Make any adjustments to the lid hinges for it to open and close seamlessly.



## Step 21

Slide the TV lift all the way up and then attach the TV to the TV lift with the screws that came in the package. You're done with the DIY Farmhouse Media Console with a TV Lift.

