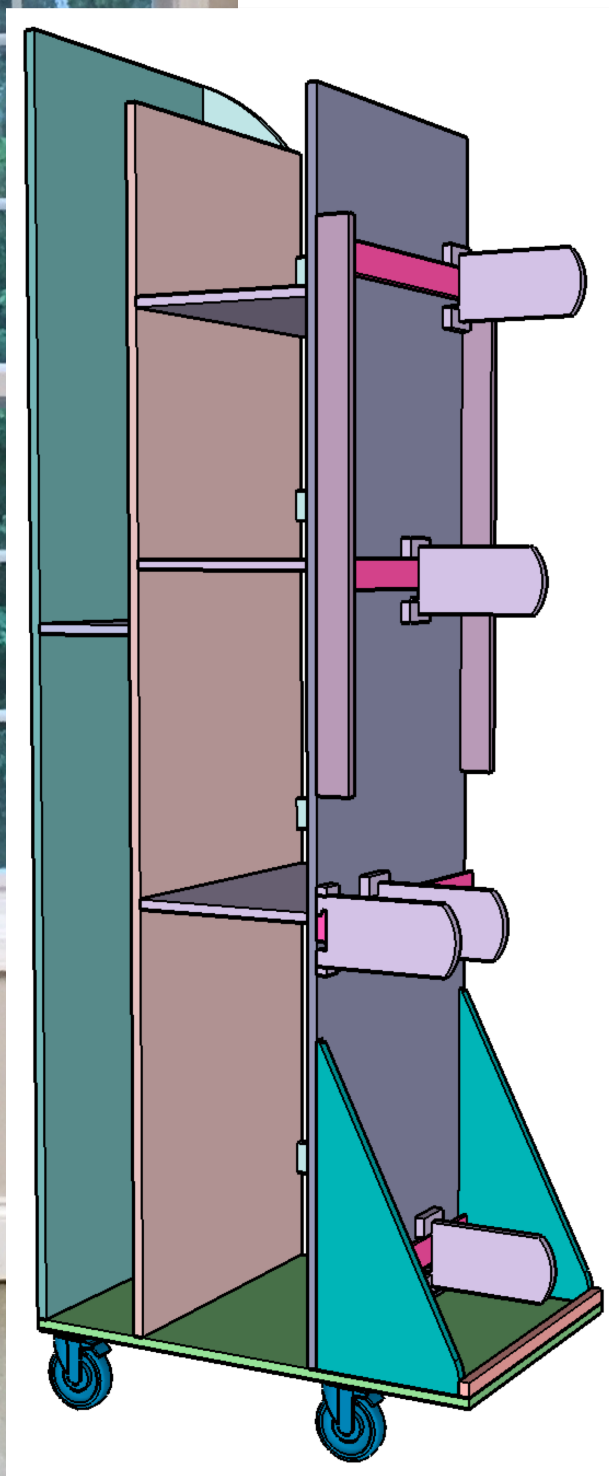
Lumber Storage Cart

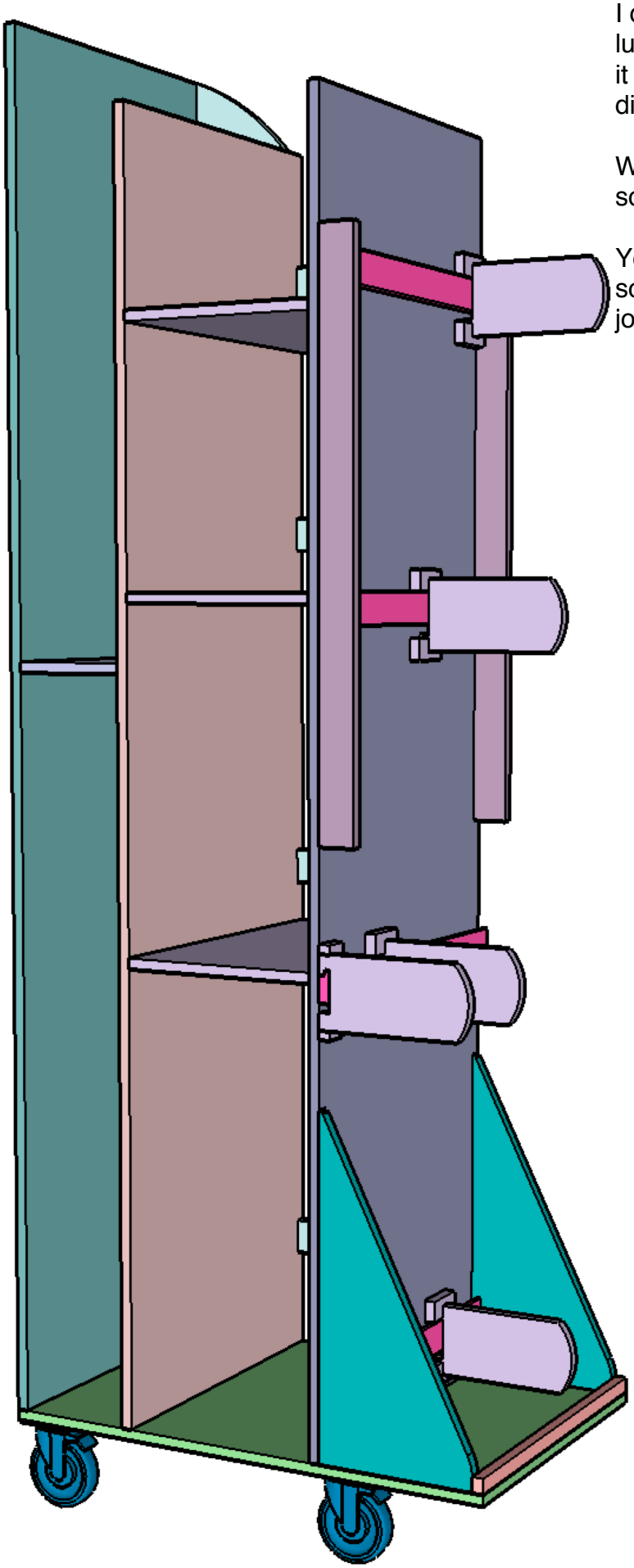


All parts are 3/4” plywood unless otherwise specified.

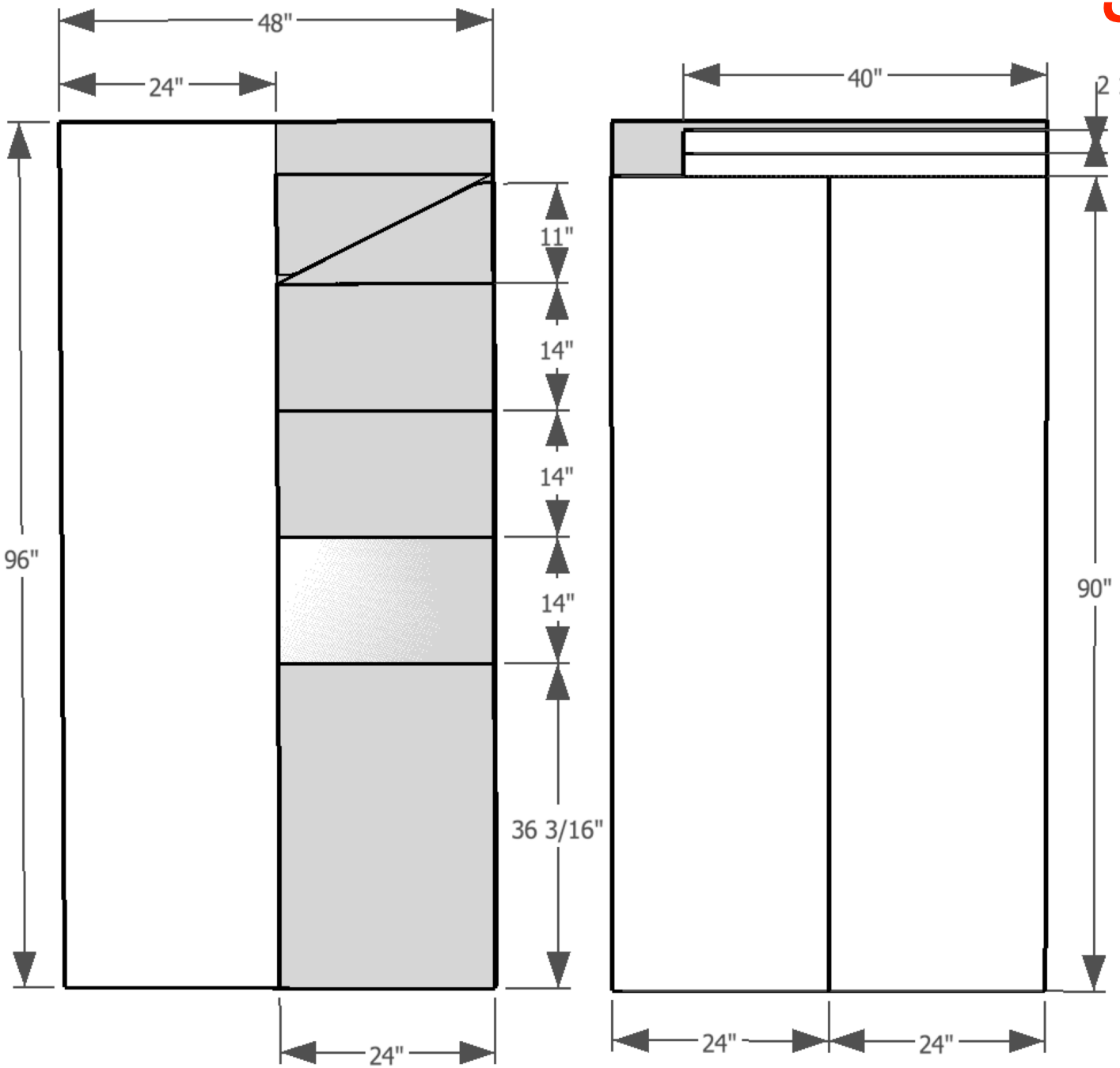
I did not use any glue when assembling my lumber cart because I anticipate that I may pull it apart in a few years and build something different.

Without glue, I will be able to simply remove the screws and then reuse the lumber.

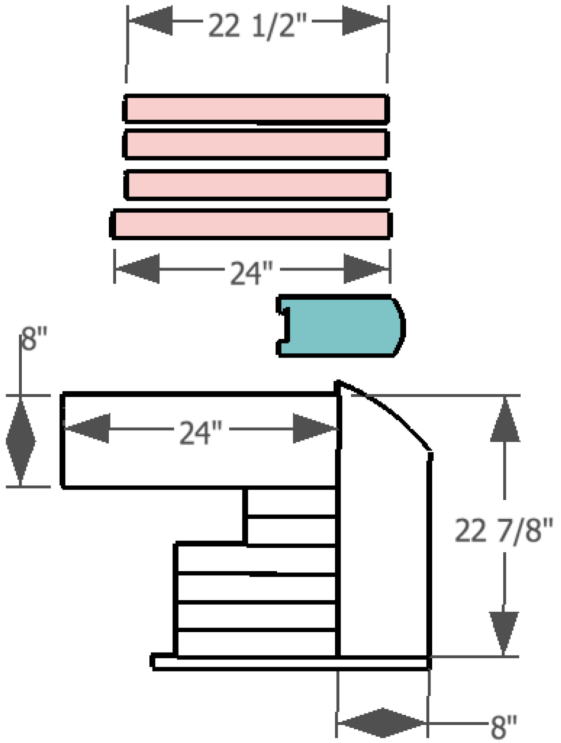
You may choose to use wood glue in addition to screws to add a little more strength to your joints.

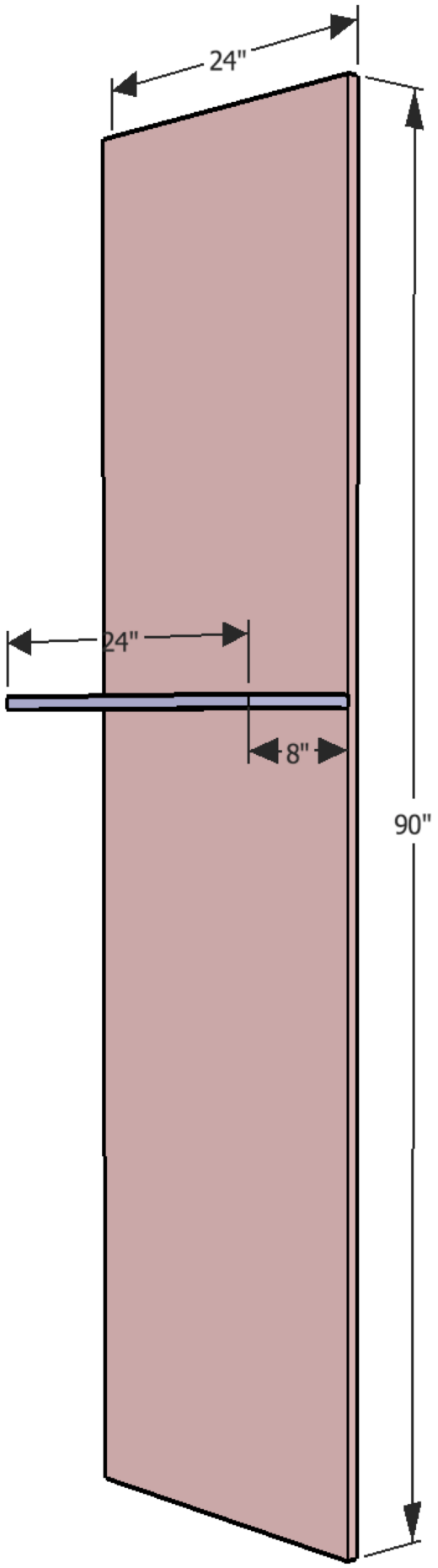


3/4” Plywood



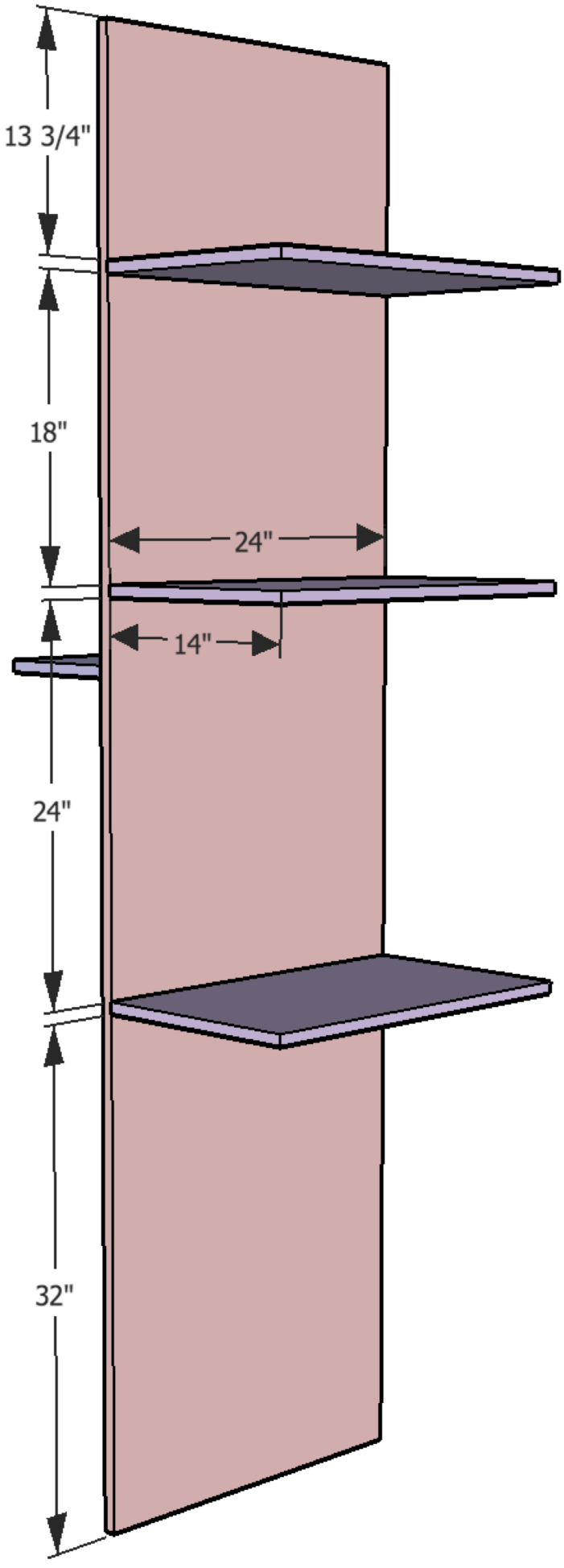
Pink parts are the cleats that will hold the brackets. These can be plywood or a solid wood.





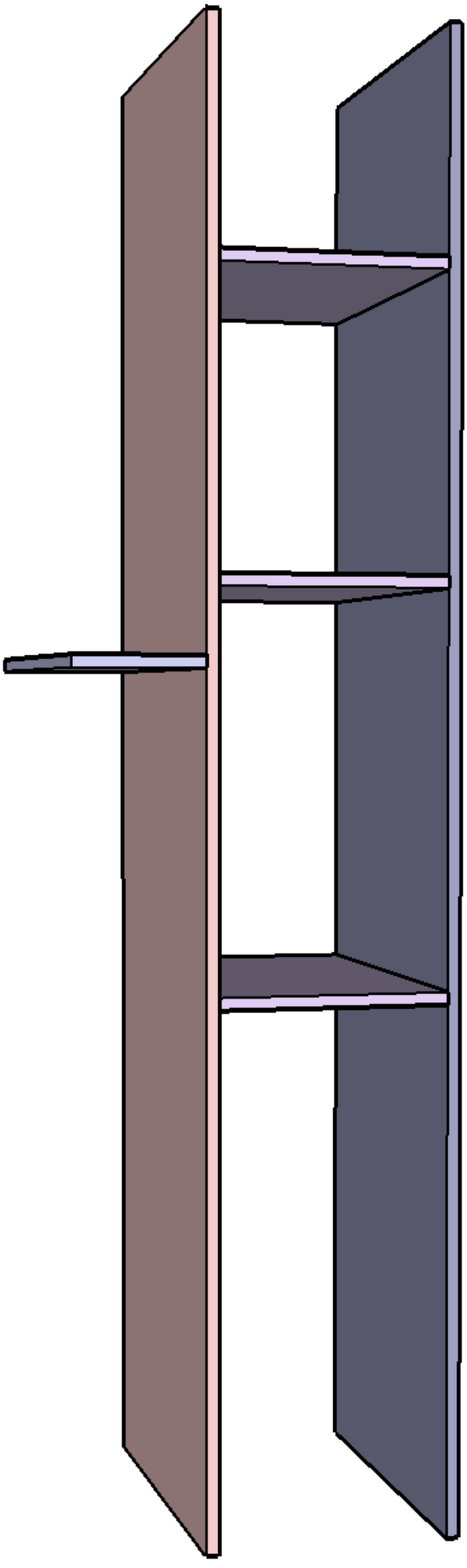
Attach 8x24” shelf to side 1. You could add more than one shelf. I placed one shelf at 52” from the bottom so I could store tall pieces in both compartments.

Use 1 3/4” wood screws to attach. (Glue optional)

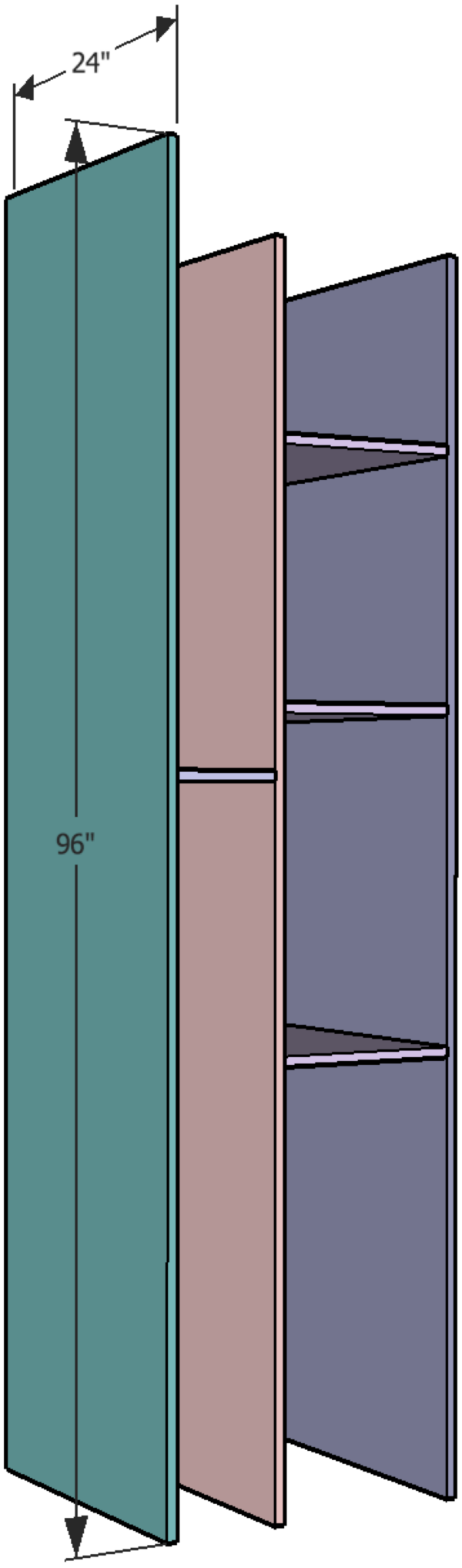


On the other side of Side 1, attach the 14x24 shelves. I positioned mine as shown but you can customize to your needs.

Use 1 3/4” wood screws to attach. (Glue Optional)



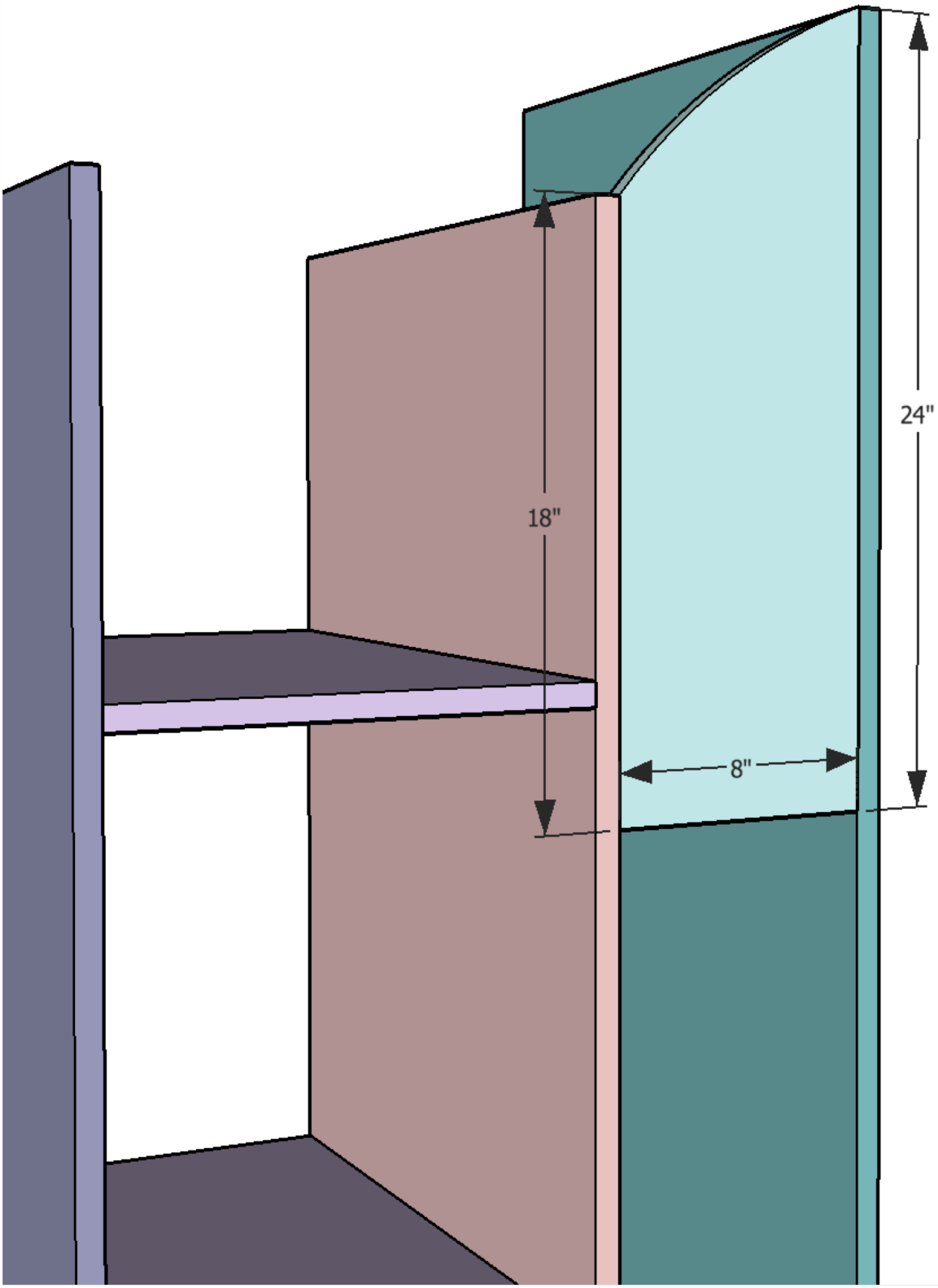
Attach Side 2 (24x90) to the other side of the 14” shelves with 1 3/4” wood screws.

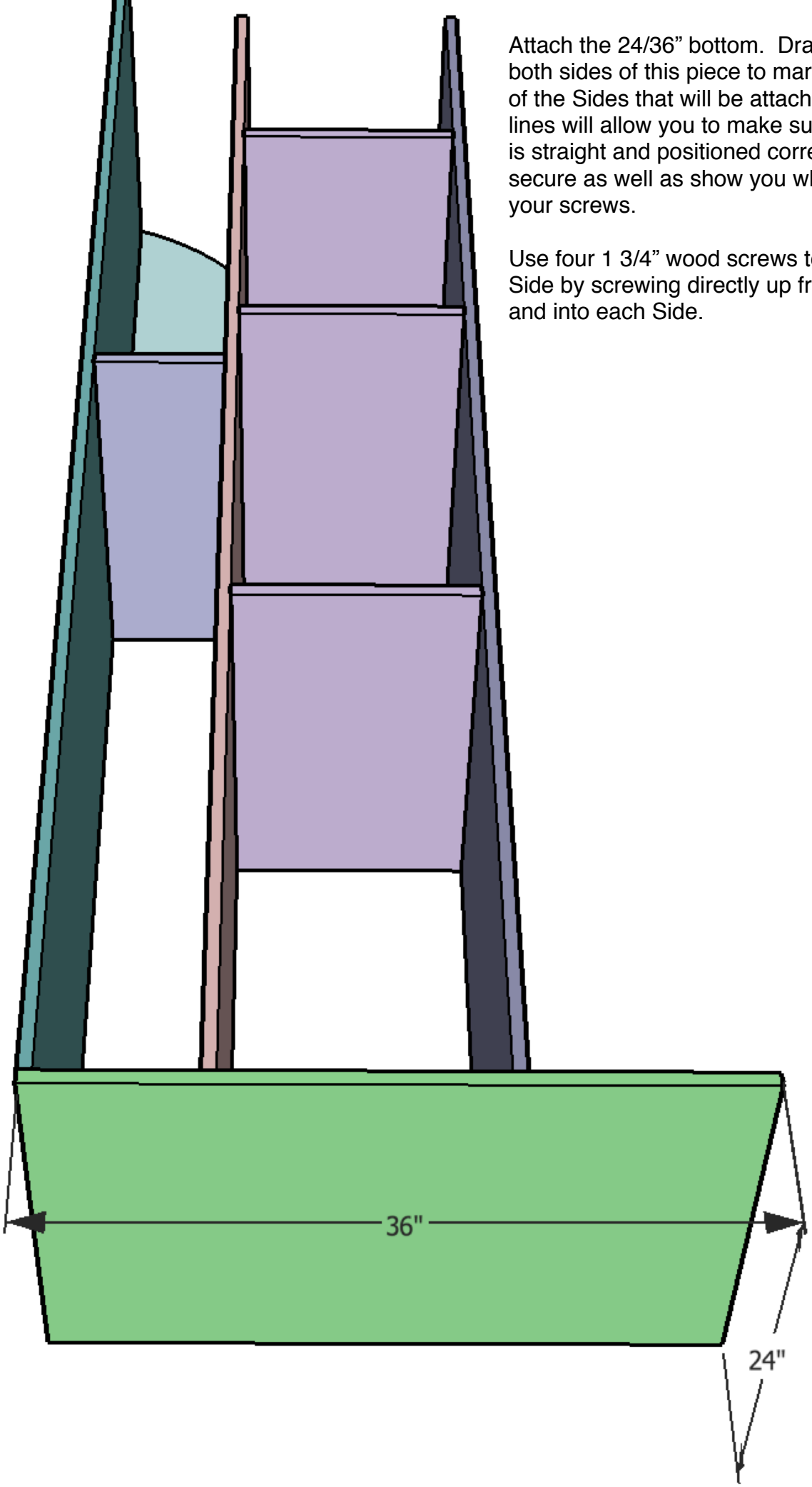


Attach Side 3 to the outside of the narrow shelf. This side is taller than Side 1 and 2 so make sure to measure up from the bottom to mark the location of your shelf.

Use three or four 1 3/4” wood screws to attach.

Use a jigsaw to cut an arch on a 8x24” piece of plywood to transition from the lower Side 2 to the higher Side 3.
Attach using 1 3/4” wood screws.

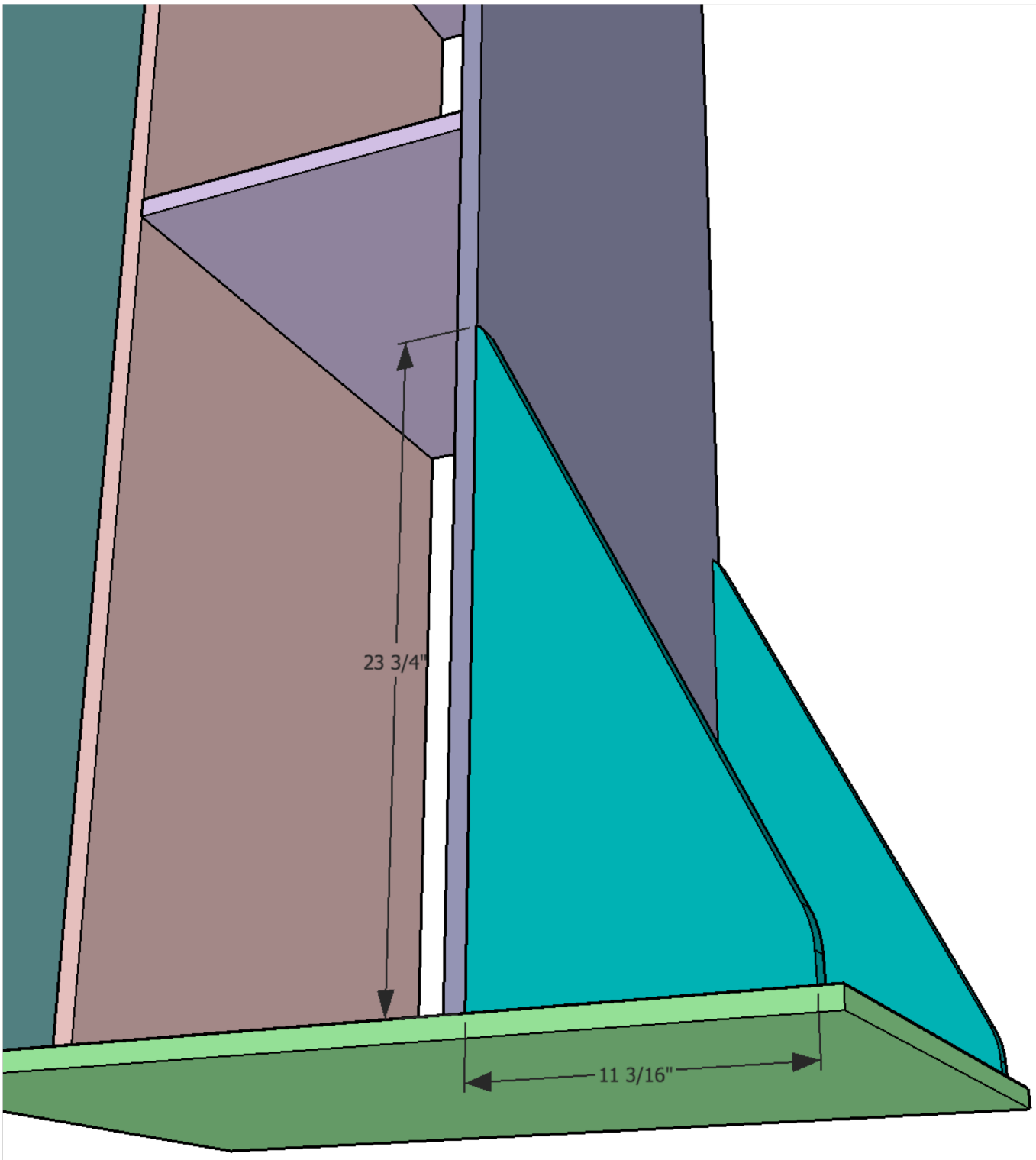


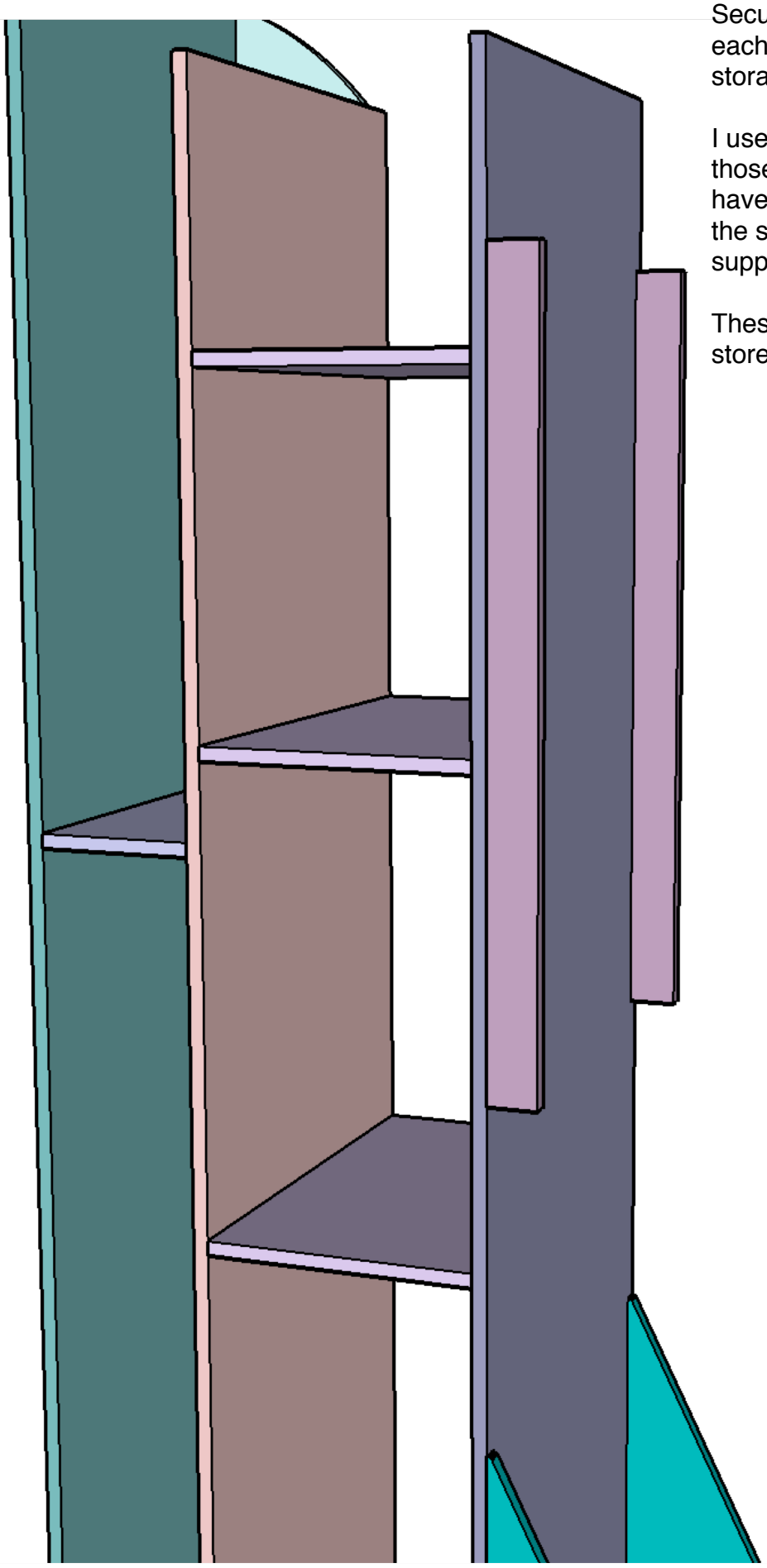


Attach the 24/36” bottom. Draw lines on both sides of this piece to mark the location of the Sides that will be attached. These lines will allow you to make sure each Side is straight and positioned correctly while you secure as well as show you where to locate your screws.

Use four 1 3/4” wood screws to attach each Side by screwing directly up from the bottom and into each Side.

Cut and round over the edges of the trangle supports.
Attach triangle pieces to the side platform.
Secure these angled pieces from the bottom and from the back with 1 3/4” wood screws.

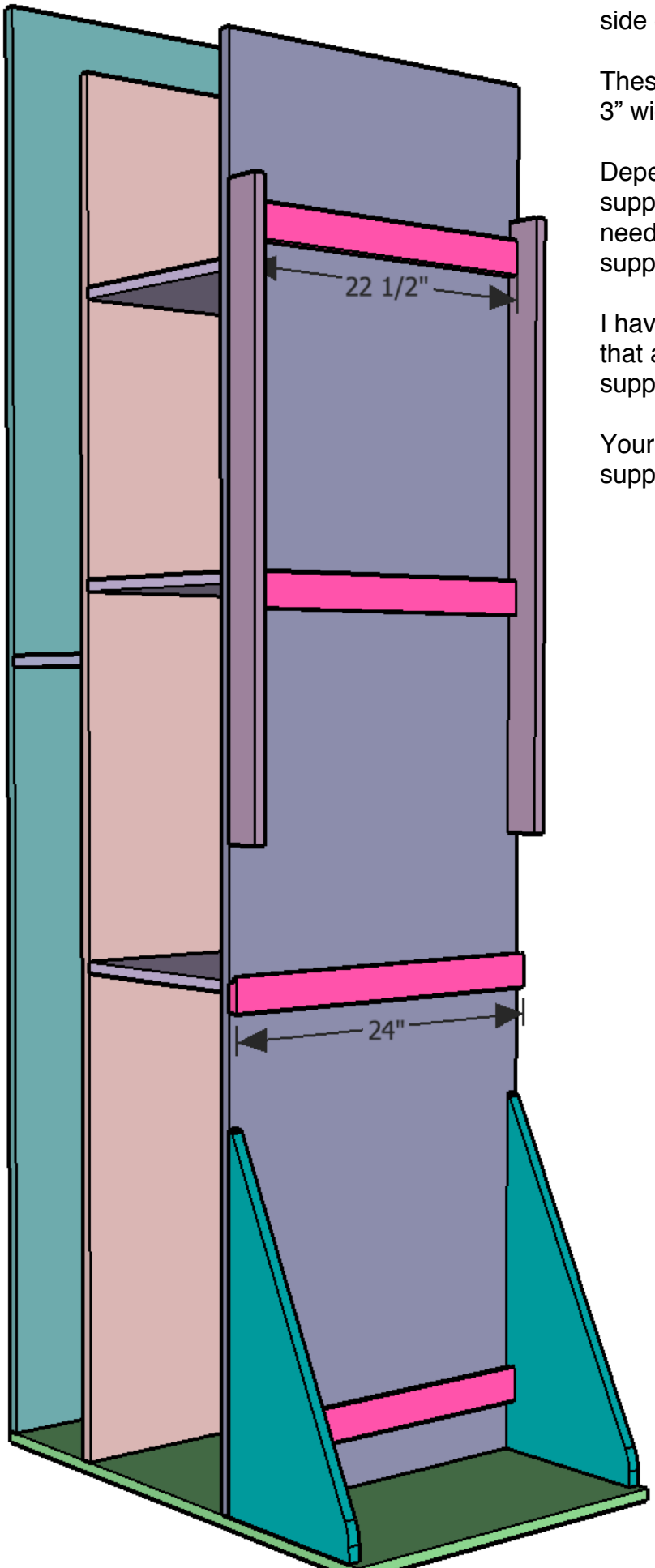




Secure a narrow piece of scrap plywood to each side of the outside of your side storage areas.

I used 1 1/2” pieces about 40” long because those were the scraps I had. You could have these “arms” extend the full length of the side storage area - above the triangle supports.

These little “arms” will help keep the wood stored in this area contained IN the cart.



Cut four (or you may choose to use more) side cleats

These can be plywood or hardwood, 2 1/2 - 3” wide. Mine are 1x3” poplar.

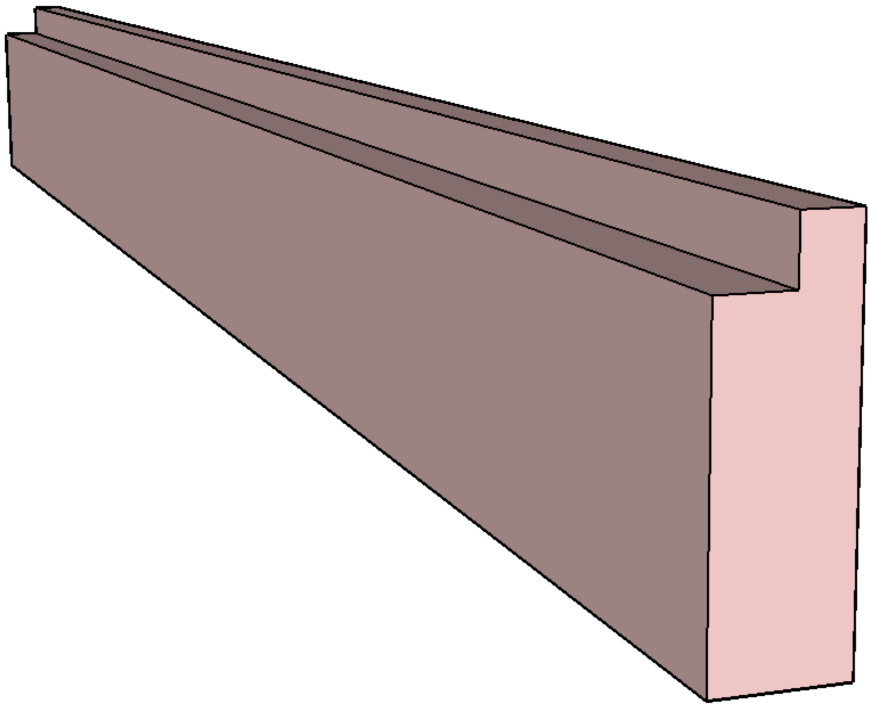
Depending on the length of your side support strips, some of these cleats may need to be shorter to fit inside these supports.

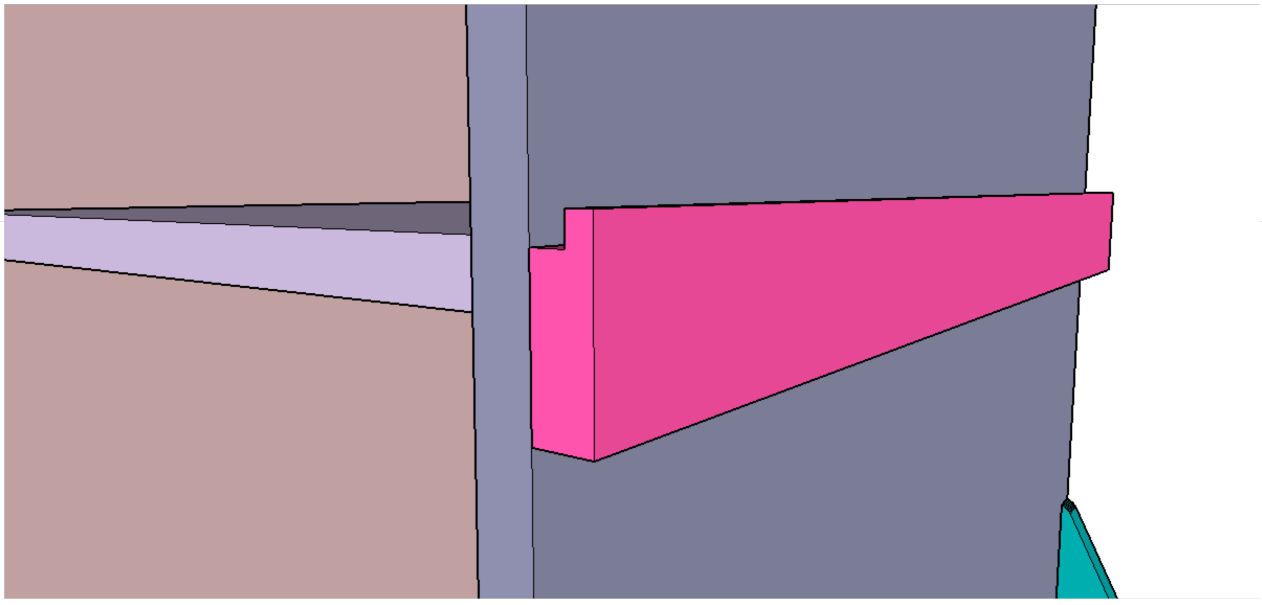
I have one full lengh cleat at 24” and three that are 22 1/2” to fit inside the side supports.

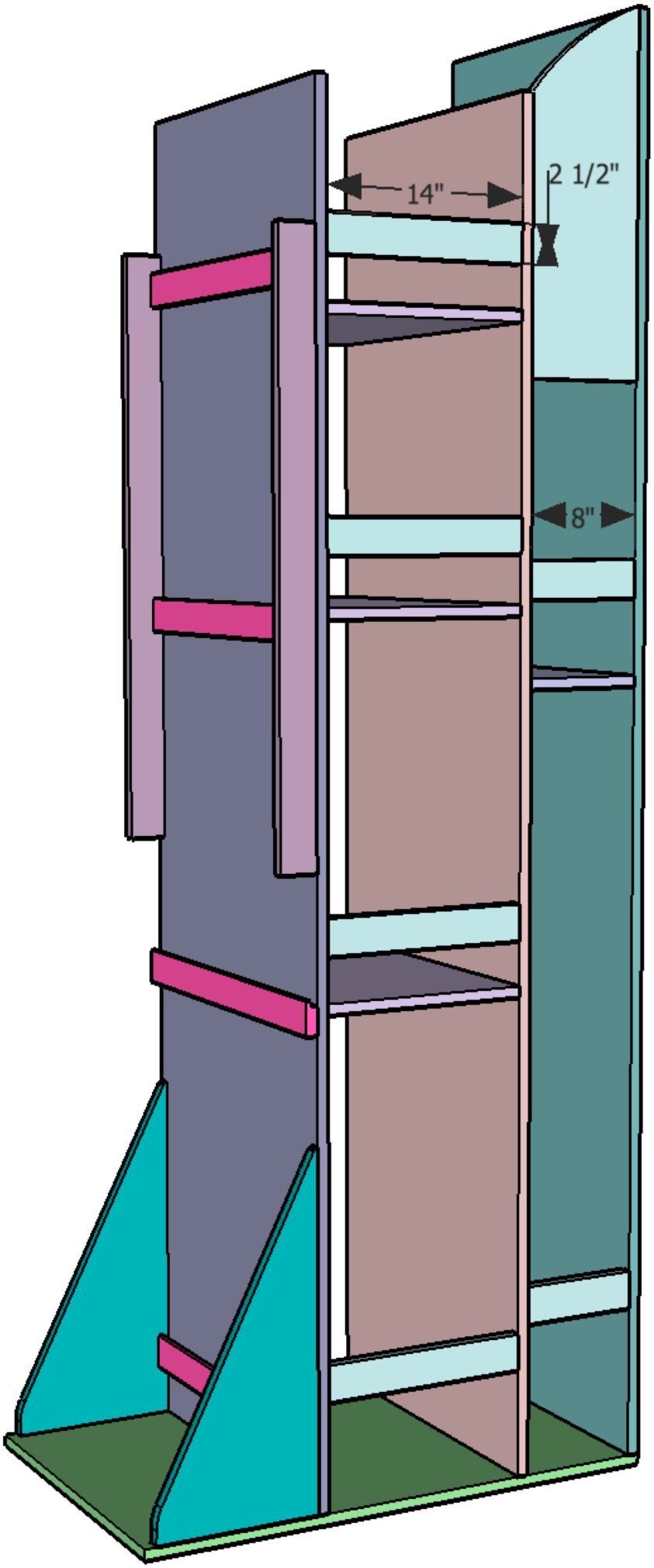
Yours will vary depending in the side support length you choose to use.

Use a tablesaw to cut out a rabbet in each of your side cleats. The rabbet is positioned at the top against the cart when you attach your cleats.

Attach your cleats using 1 1/4” wood screws so the screws don’t poke through the other side of the cart where you have wood storage.







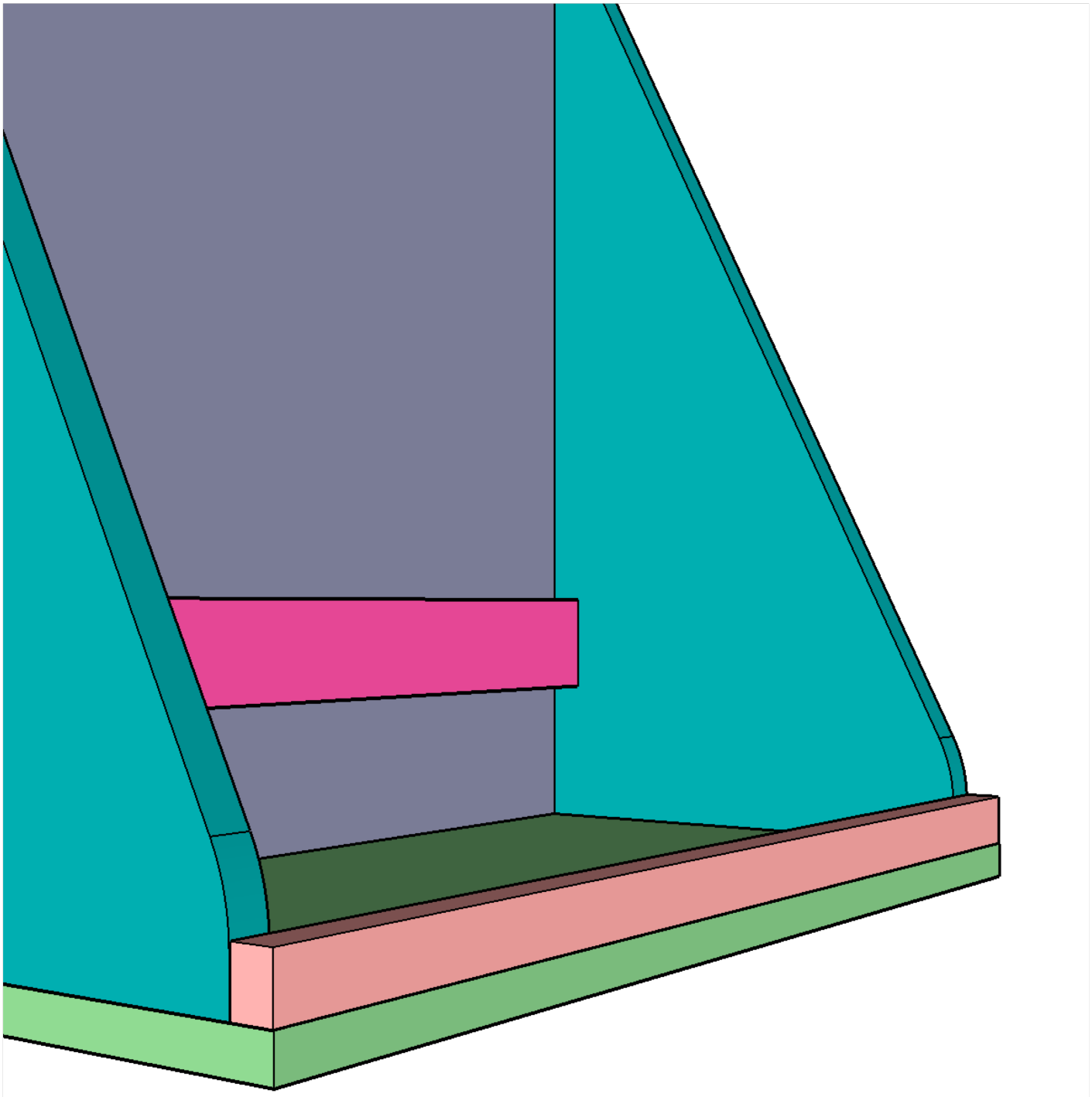
Attach back cleats to keep wood from pushing out the back and off the cart.

2 1/2” - 3” scrap pieces of plywood work great.

You can attach these with pocket hole screws or with 1 3/4” wood screws.

Secure a piece of scrap wood or plywood across the front of your side platform.
A 1x2 pine or 1 1/2” scrap of plywood will work.
Secure it to the side supports and to the bottom of the cart.

This ledge will help keep wood from sliding off your platform.

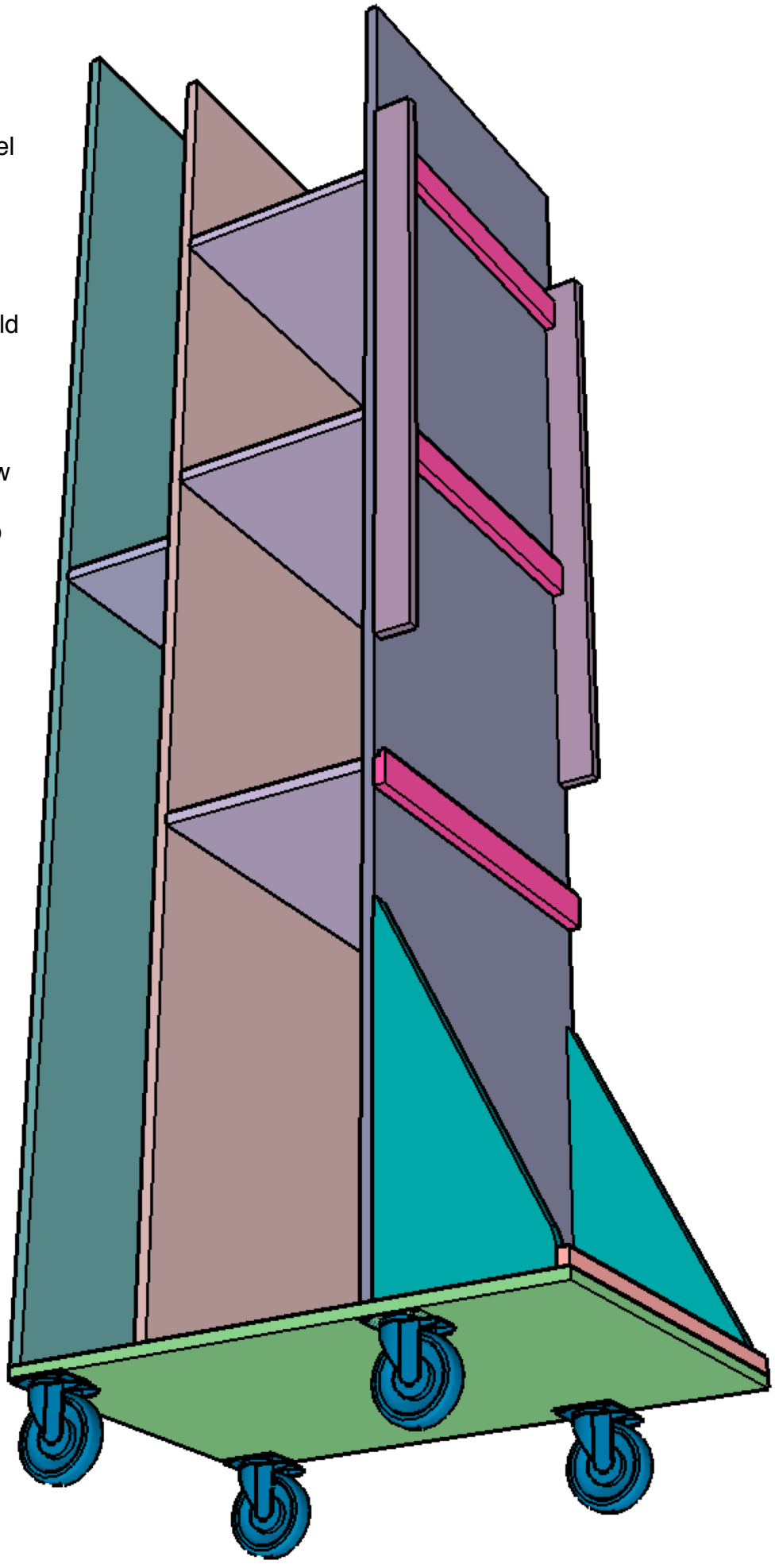


Add casters if you want your cart mobile.

I used four - 4” locking, swivel casters. It easy to move the cart around but locks it into place when desired.

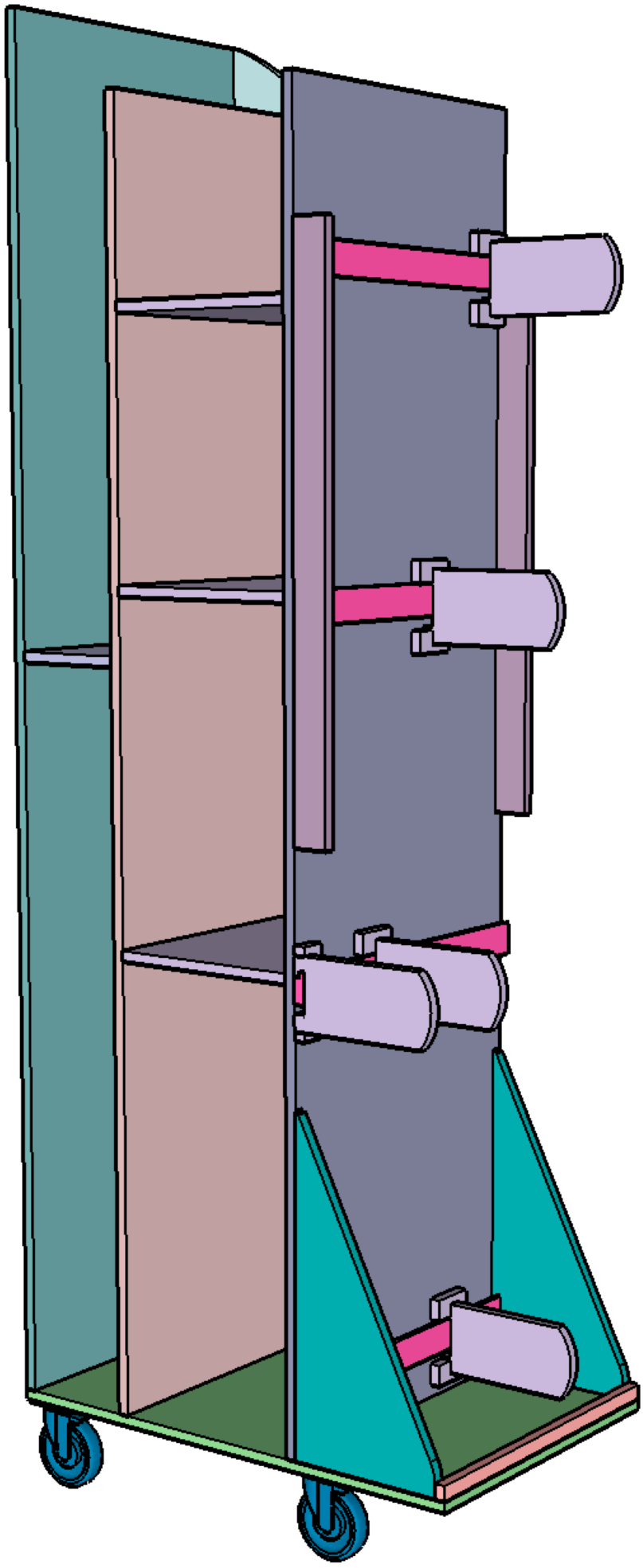
I used 3” wood screws in places where the screw would extend up into a Side or support.

I used 1” wood screws with washers to shorten the screw where I only had the 3/4” plywood bottom to screw up into.



Time for support brackets!

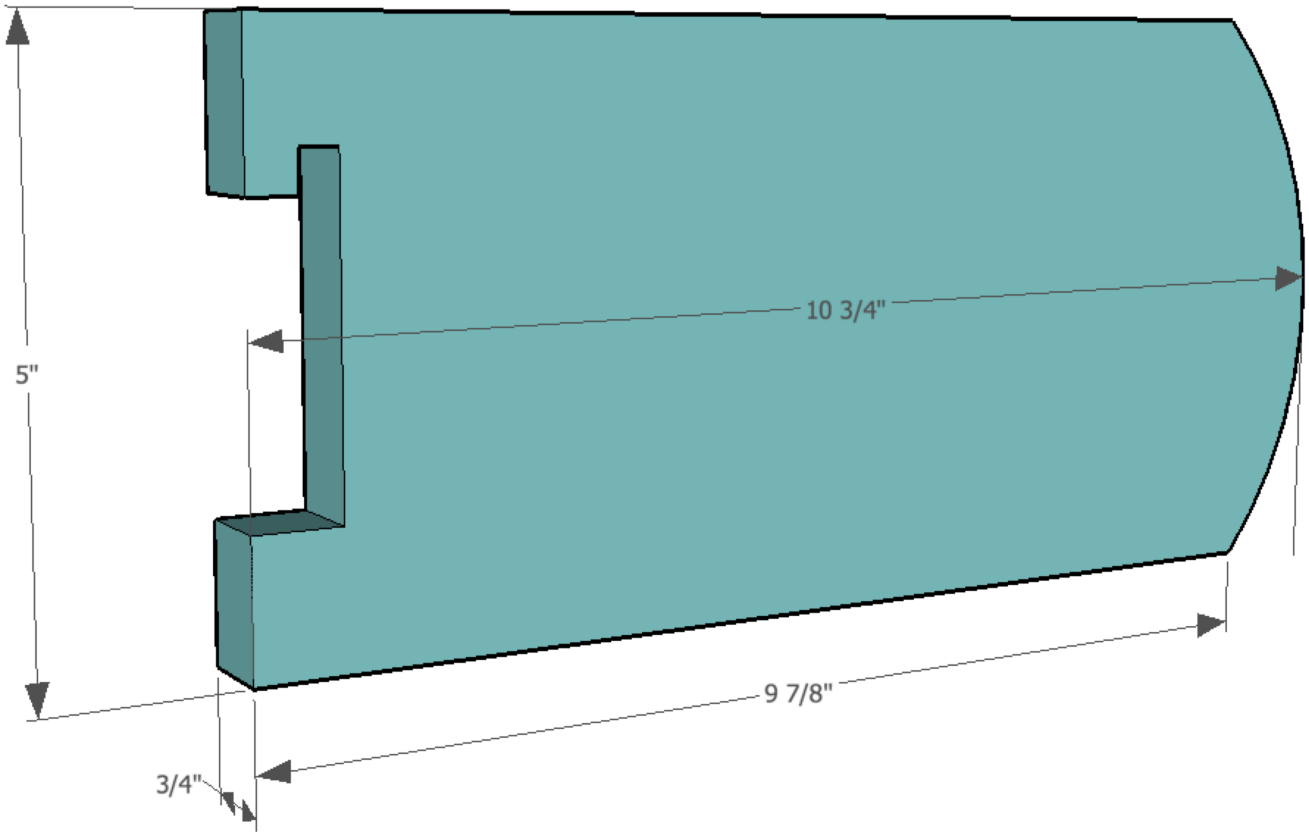
You may come up with a different design idea for your side support brackets and if you do, I'd love to see what you come up with!

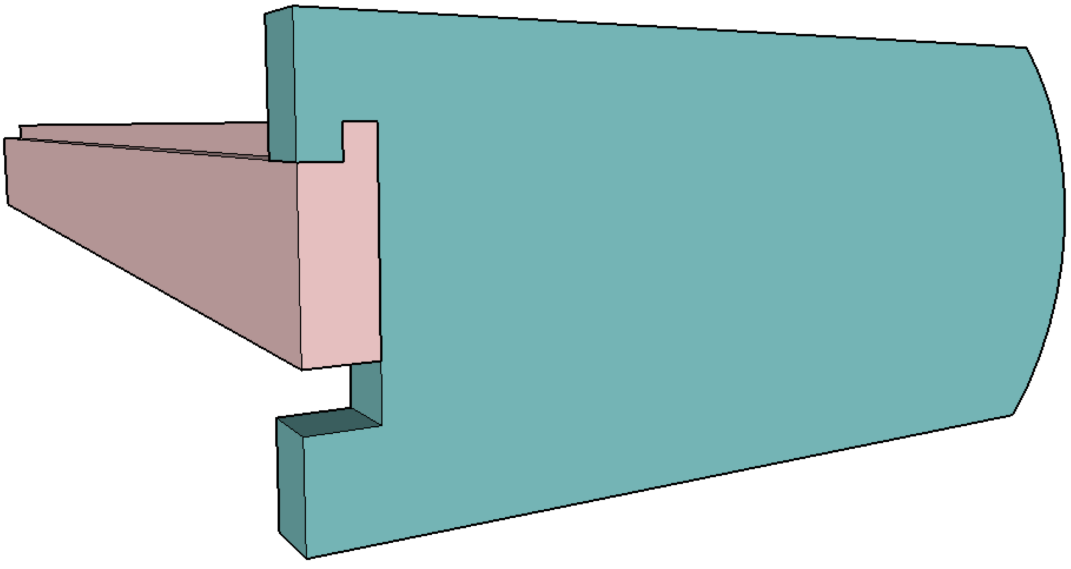


I used 3/4” plywood to make my brackets. You can modify the length and height of your brackets as desired.

It’s not necessary to round over the end either but it looks a little cleaner and removes sharp corners that are my #1 enemy.

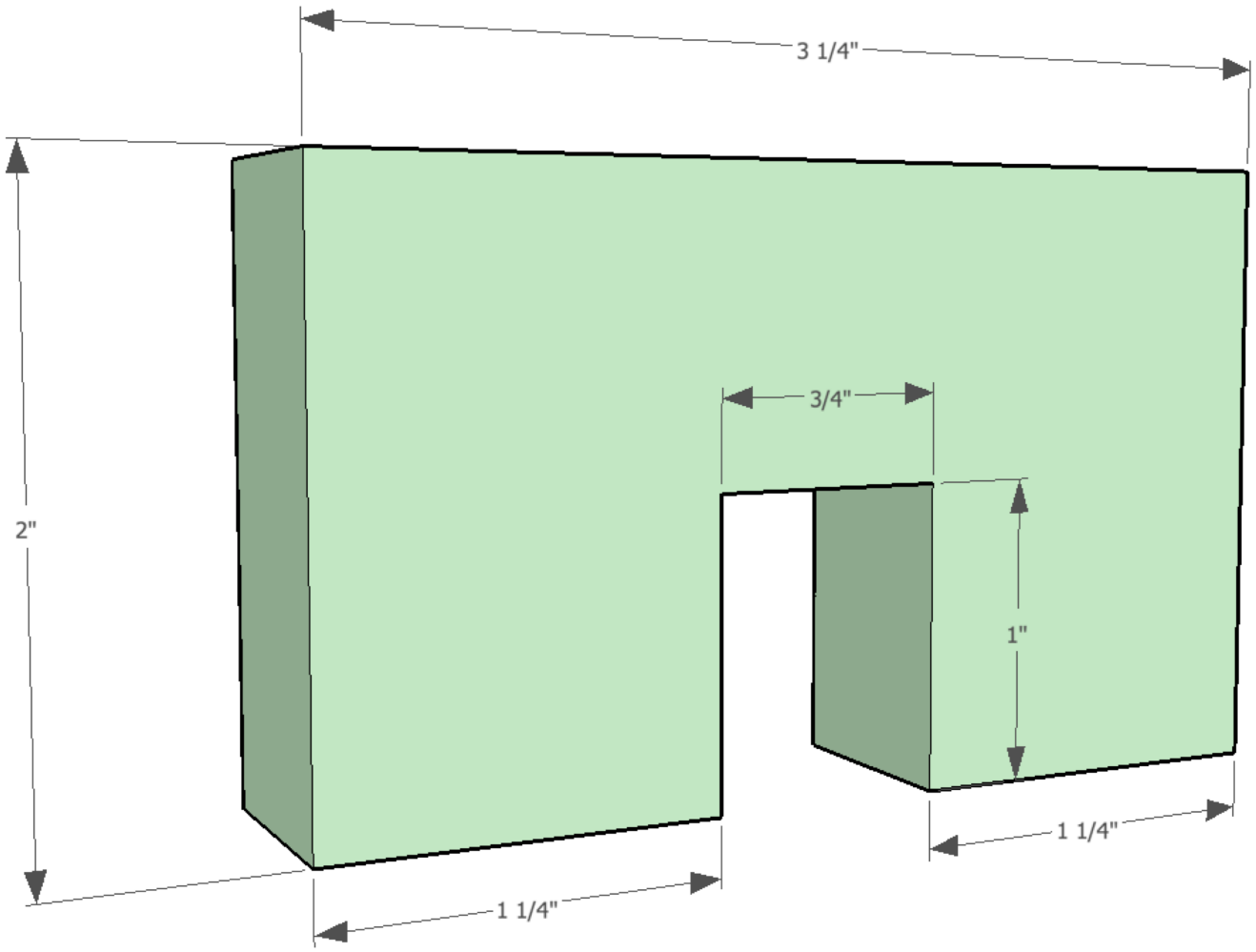
The size of your cutout notch will depend on the rabbet you cut our of your cleats. Do a test run to find the right fit for your bracket to slide onto your cleat and lock down into place in the rabbet.





Cut 2 bracket supports for each bracket.

I made mine out of 3/4” plywood.

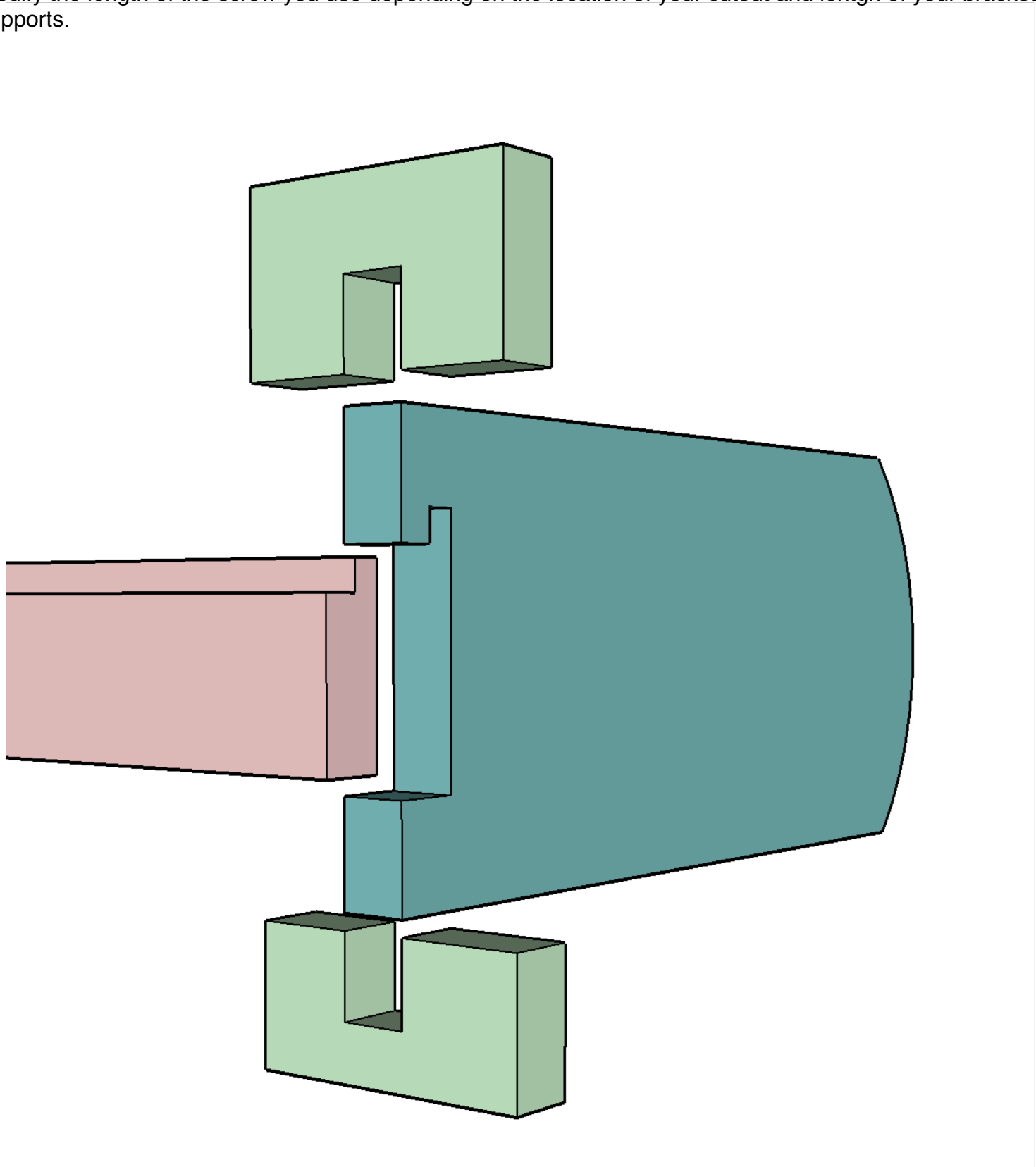


The bracket supports go on the top and bottom of the brackets allowing you to drive screws into the plywood cart side to lock the brackets into position.

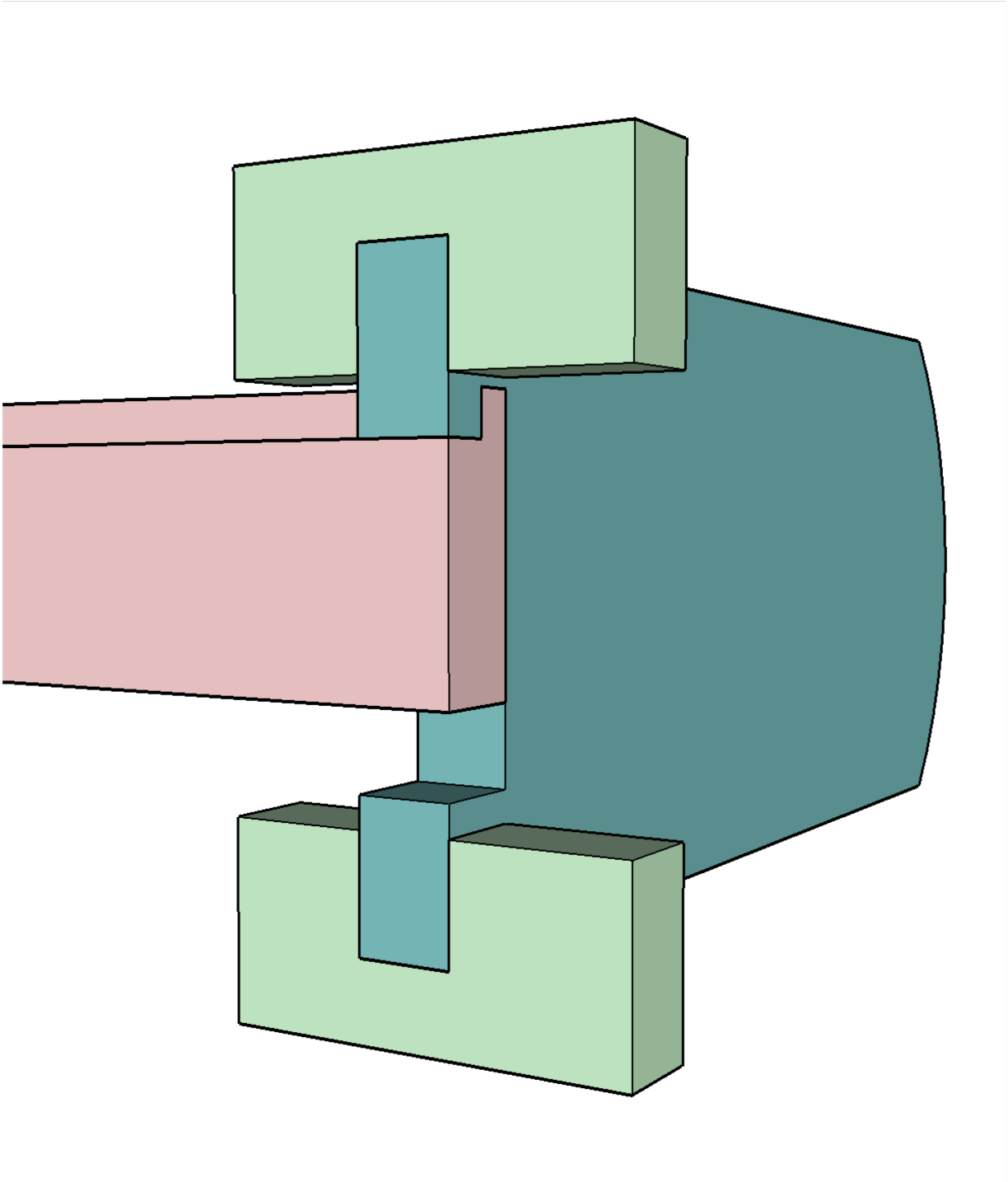
This allows you to securely hold the wood you are storing on the side platform in place and helps keeps it flat so it doesn't warp or bend.

You can keep each part seperate or glue and screw the bracket supports to the bracket. I did! It makes it easier to reposition the brackets if it's one piece, rather than three.

I used wood glue and 2" wood screws to secure my bracket supports to the brackets. You may need to modify the length of the screw you use depending on the location of your cutout and lentgh of your bracket supports.

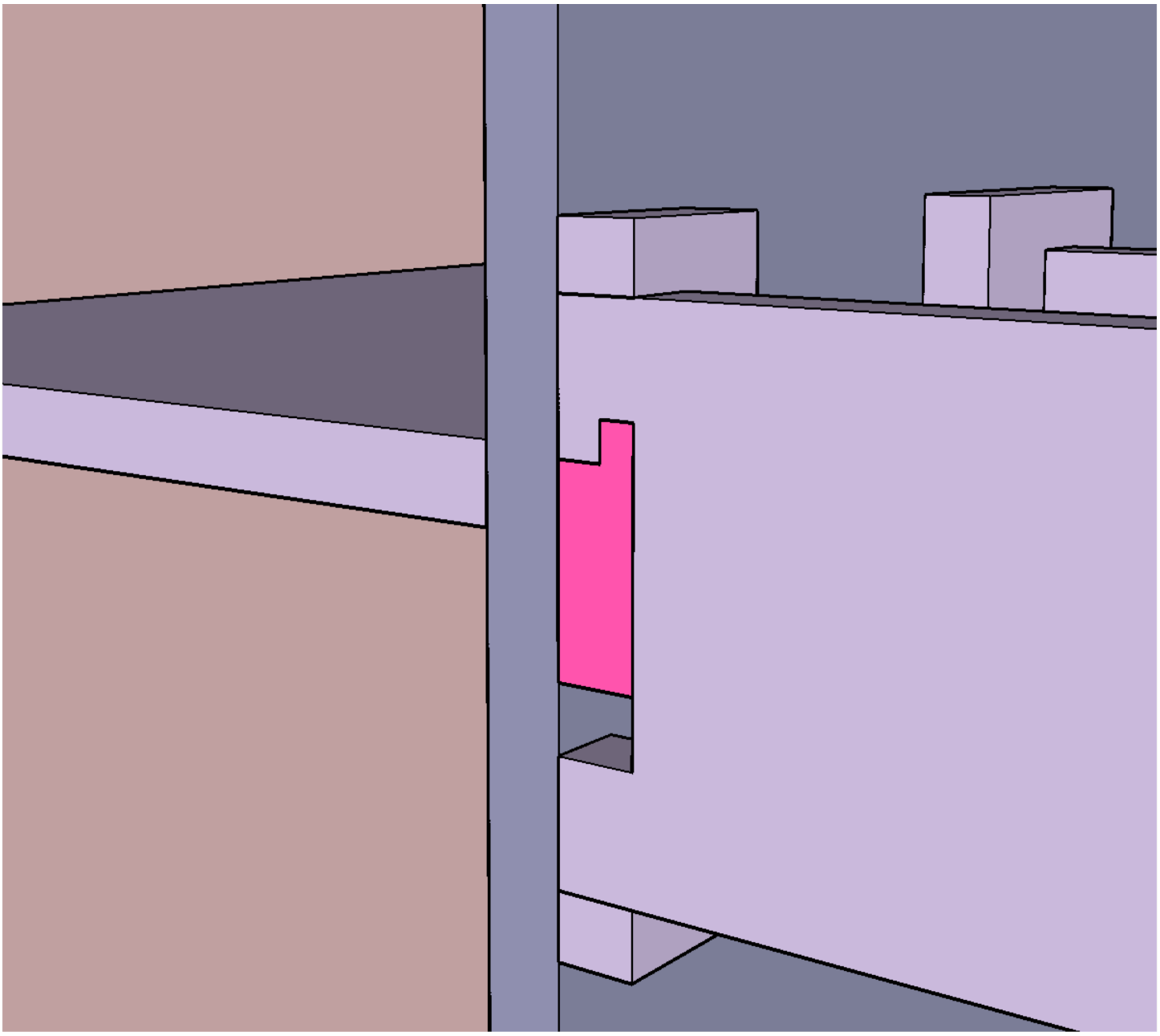


Brackets and bracket supports in place on the rabbeted cleat.



The bracket supports on each end of the cart will need to be cut so only half the support is used.

I glued and screwed mine together, waited for the glue to dry and then cut the supports flush with the brackets on my table saw.

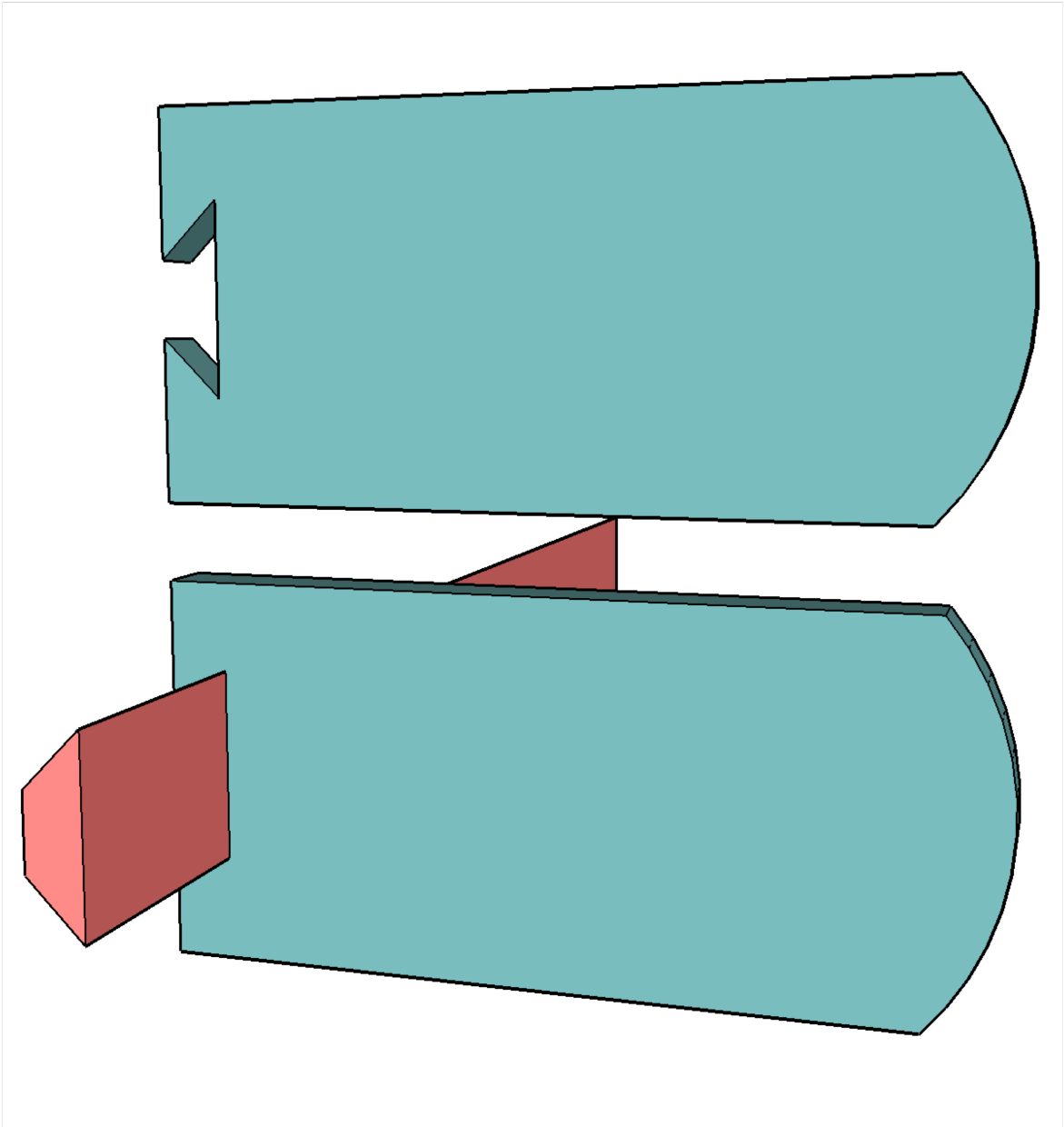


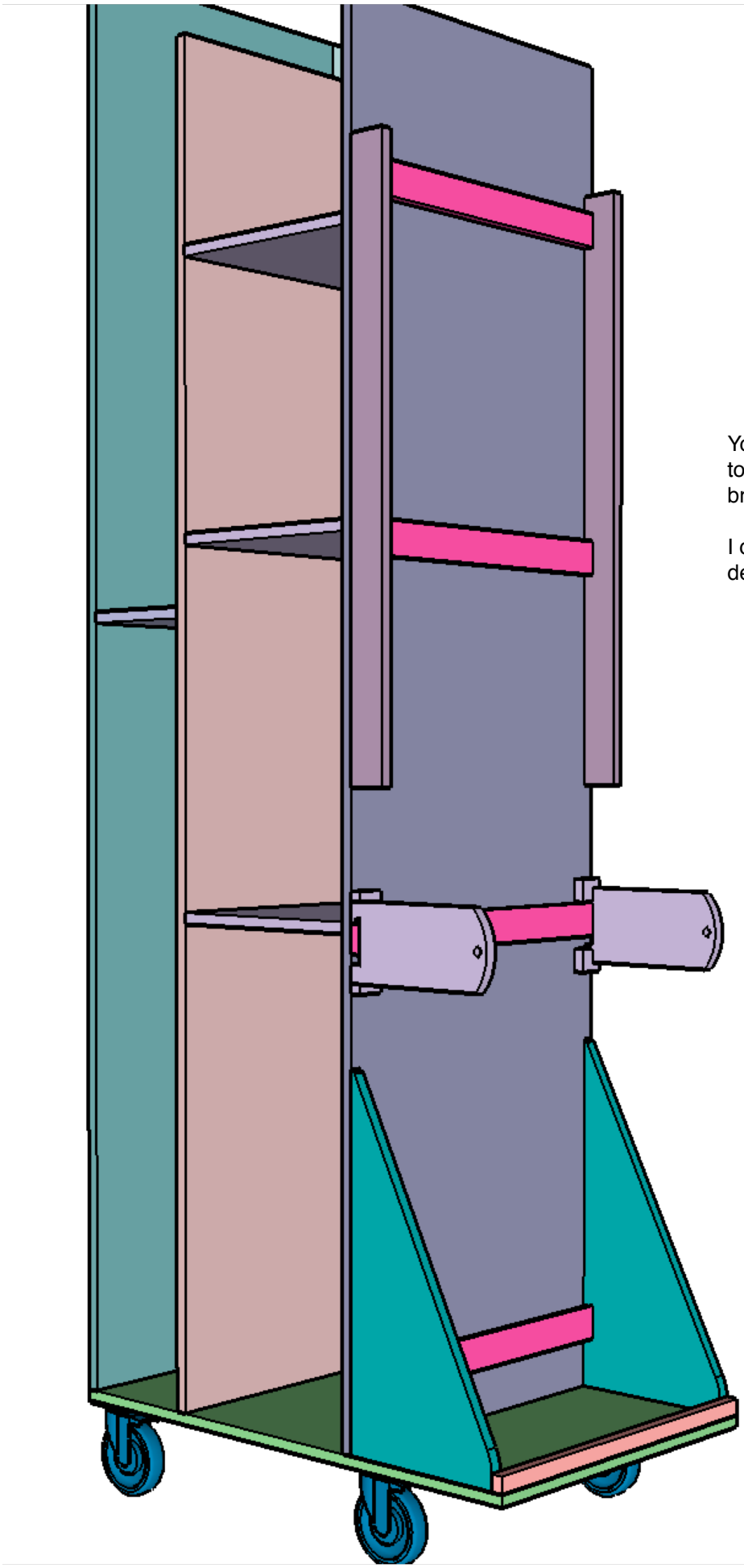
Alternate Bracket Design

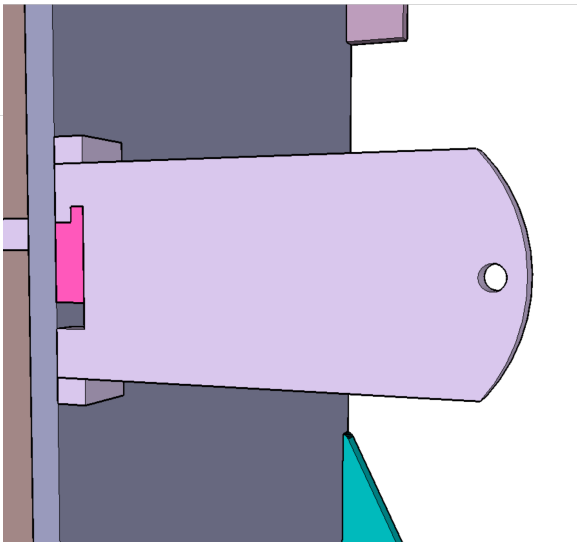
A double French Cleat would hold the bracket securely onto the cleat.
Adding bracket supports like we did in the half lap bracket in this plan would allow you to lock the position of the bracket in place.

The reason I didn't use this method is because you would have to move the stored wood in order to slide the brackets over any time you wanted to reposition them. It seemed more functional to be able to place the brackets where I want them without moving all the stored wood.

Either way, you have to remove the screws in the bracket supports in order to reposition the brackets and if there's wood squeezed in between the brackets you have to move that wood in order to get to the screws. It's a bit of a task, but worth the effort in order to secure vertically stored wood in a way that helps prevent wood from bending, bowing, twisting or warping.

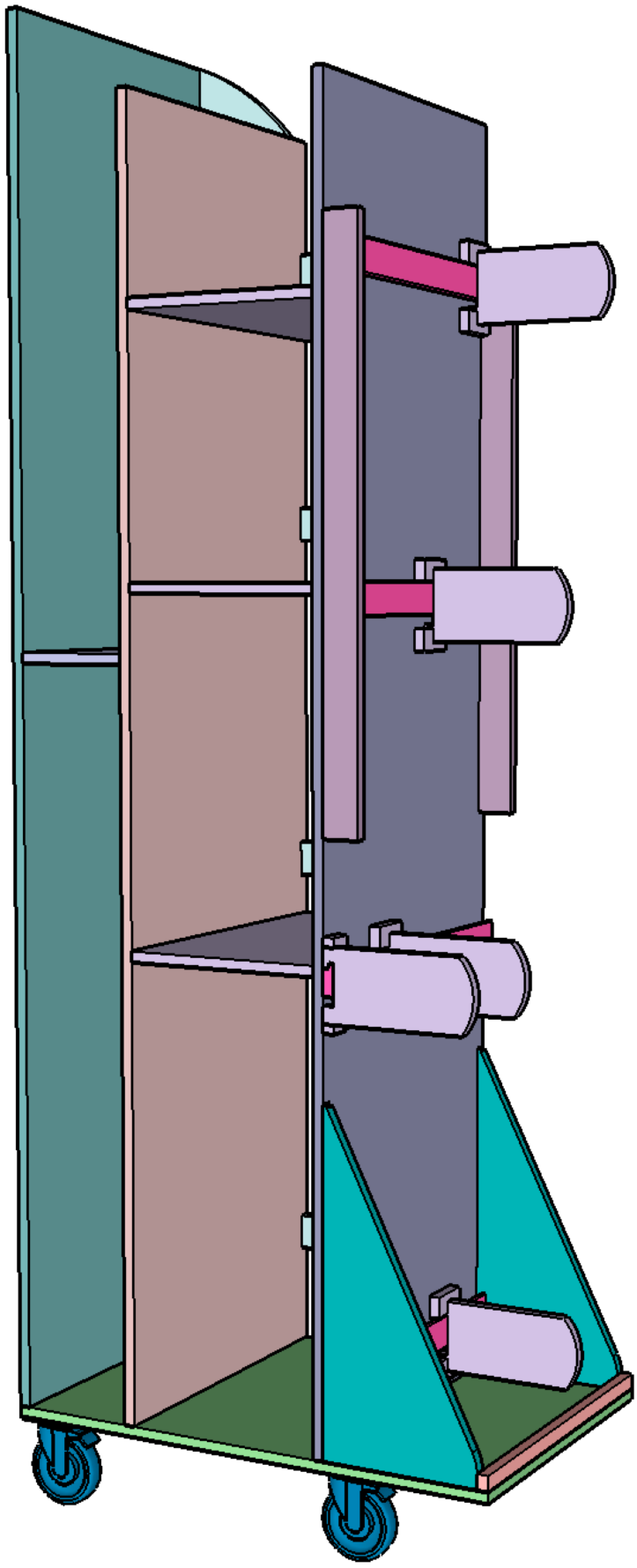






You may want to drill holes in the end of your brackets to enable you to secure a rope across the front of your brackets.

I drilled 1” diameter holes in my brackets — in case I decide I need a rope across the front at any time.



Additional building resources for this cart including photos and video of my lumber storage cart build can be found here:

http://sawdustgirl.com/2016/06/06/vertical-wood-storage-lumber-cart/

I'd love to see a photo of your lumber cart if you use Instagram or Twitter, tag me @SawdustGirl.

If you have any questions or suggestions regarding this plan, email me at Sandra@SawdustGirl.com.

Thanks!