Crosscut Sled

Difficulty

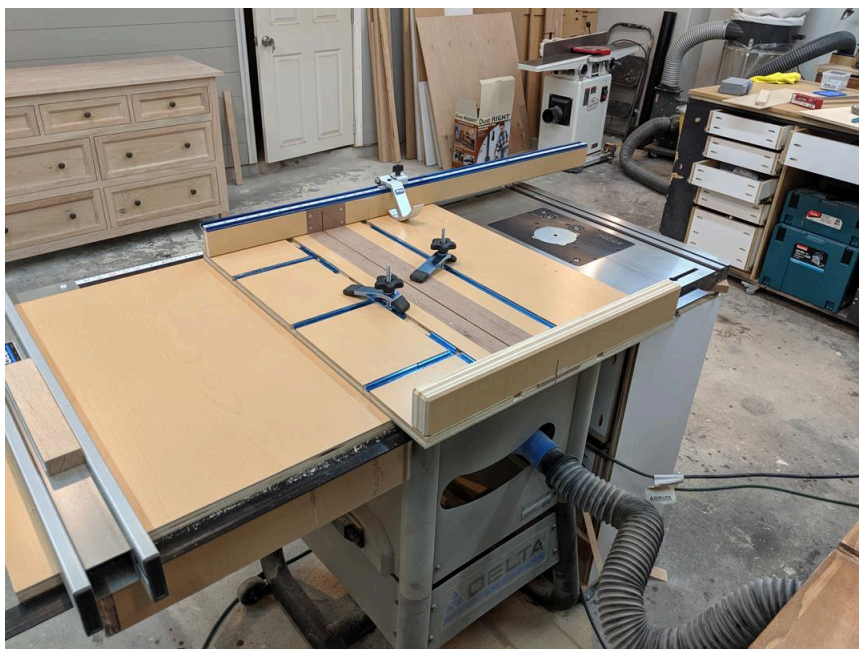
Moderate

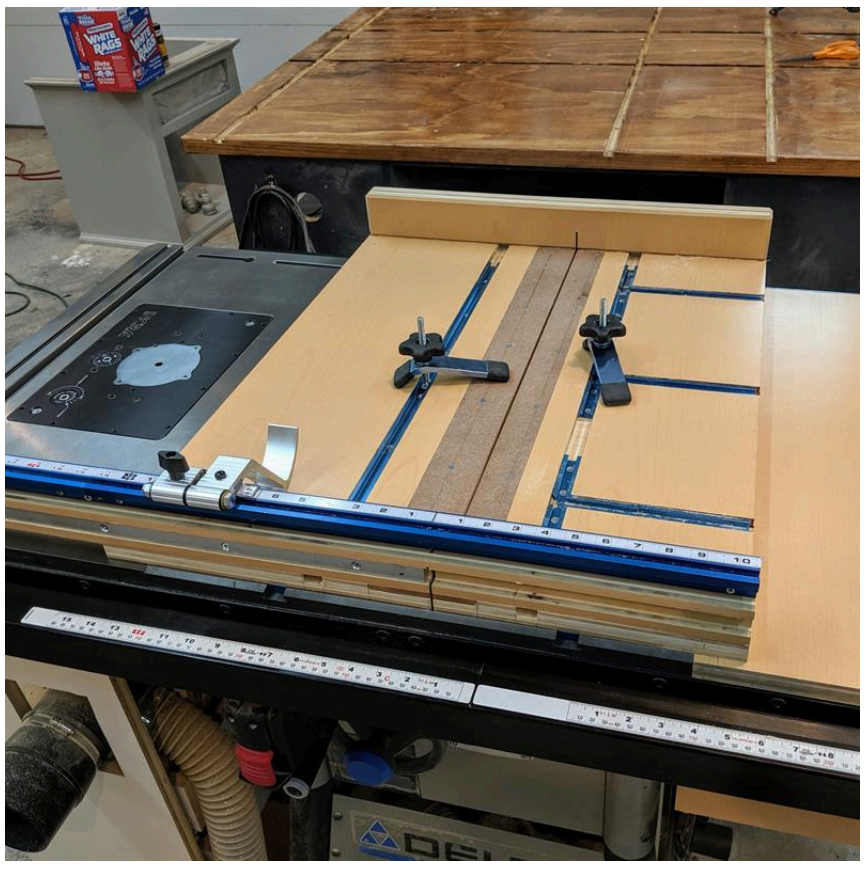
This crosscut sled is a versatile sled that features Kreg Top Trak, Extension fence and T-Track.

I designed this fence to fit my Delta 36-725 but the dimensions can be adusted for any table saw.

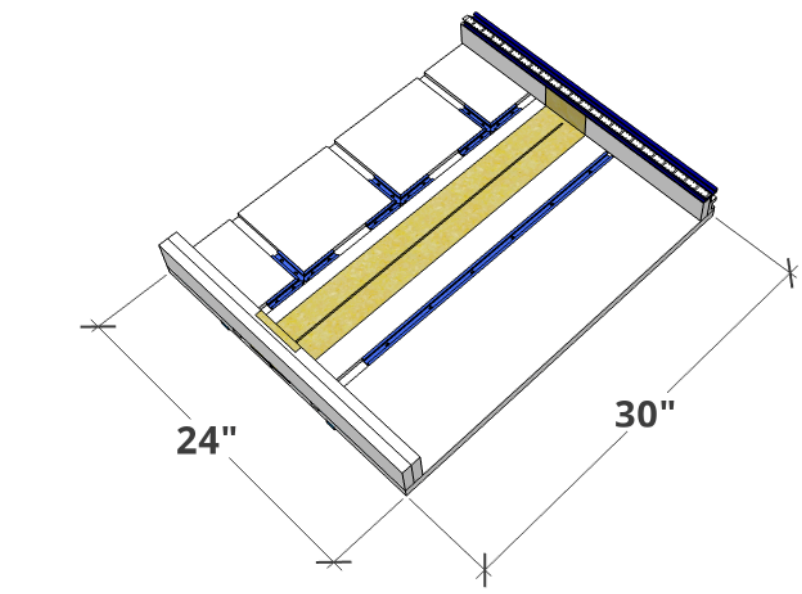
Follow me on Instagram for more details:

https://www.instagram.com/castor_woodworks

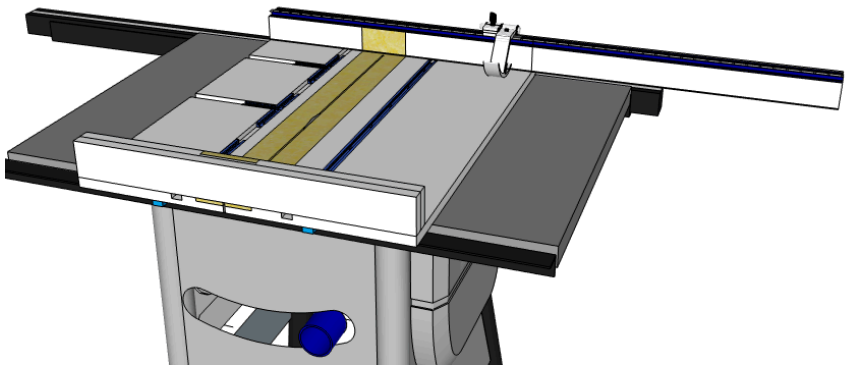








grade Now



Tools

Other Tools

Jointer

Miter Saw

Square

Table Saw

Tape Measure

Clamps

Drill (cordless)

Glue Gun

Hammer

Router

Router Table

Materials

Wood Products

1 Plywood , 3/4" Thick , Half Sheet

Hardware & Supplies

1 Kreg Top Trak

3 Rockler T-Track Intersection Kit

1 Rockler 2 Ft. Universal T-Track

2 Rockler 24" Aluminum Miter Bar

1 Kreg KMS7303 30-Inch Jig And Fixture Bar

1 Kreg KMS8000 Precision Trak And Stops Kit

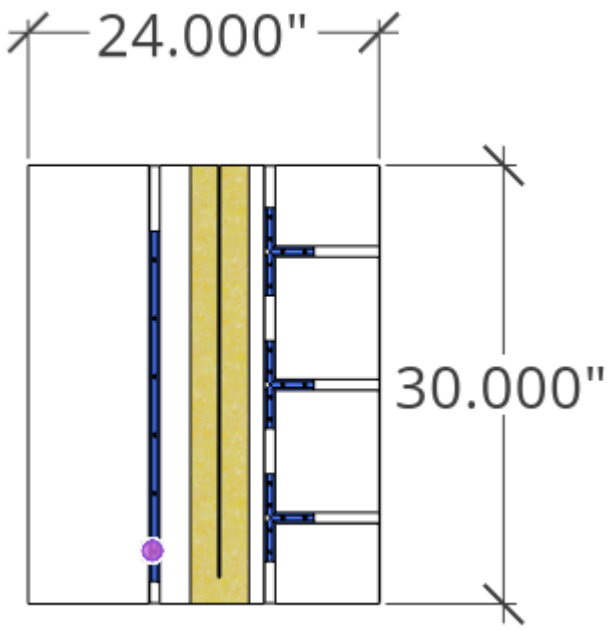
1 Gorilla 2 Part Epoxy, 5 Minute Set, .85 Ounce Syringe, Clear

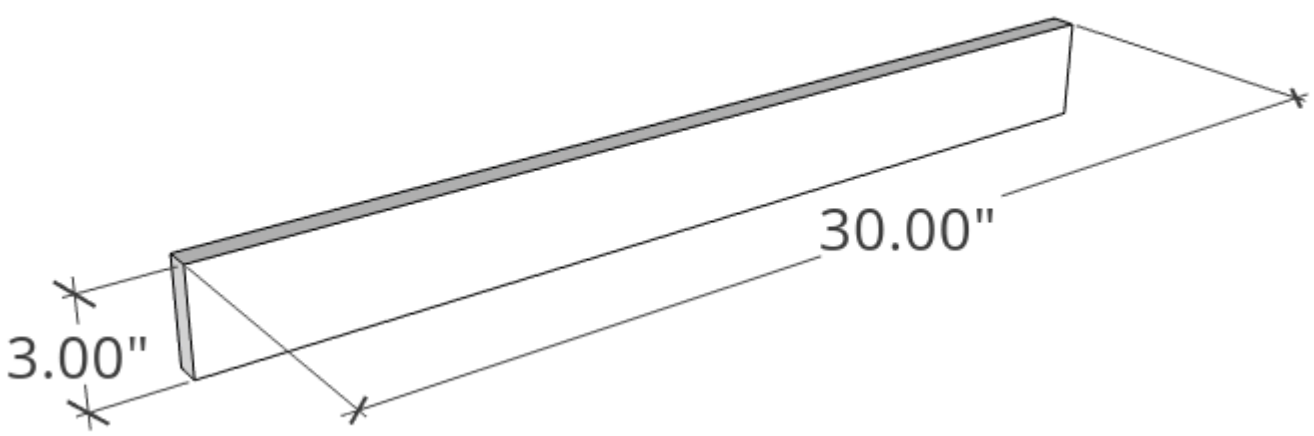
1 Bob Smith Industries BSI-157H Maxi Cure/Insta-Set Combo Pack (3 Oz. Combined)

Cut List & Parts

1 Sled Base , 3/4" X 24" X 30"

6 Fence Parts , 3/4" X 24" X 3"





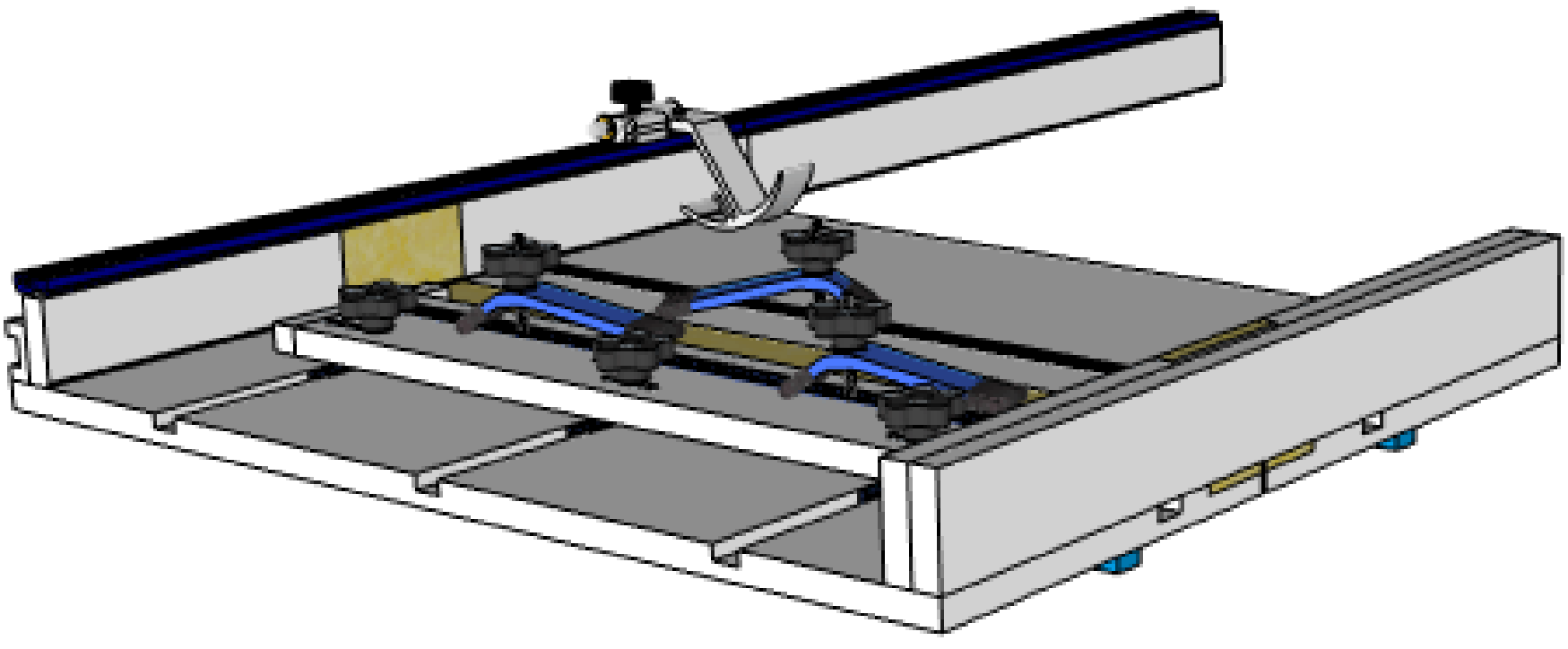
Directions

1 Review the Entire Plan

Please review all the steps prior to beginning. It will help make the process faster and more enjoyable. Keep in mind that in order for a crosscut sled to function properly you must be precise with your cuts and alignment of the fence. I didn't not include the steps for the zero clearance inserts. If you would like more information on that please let me know.

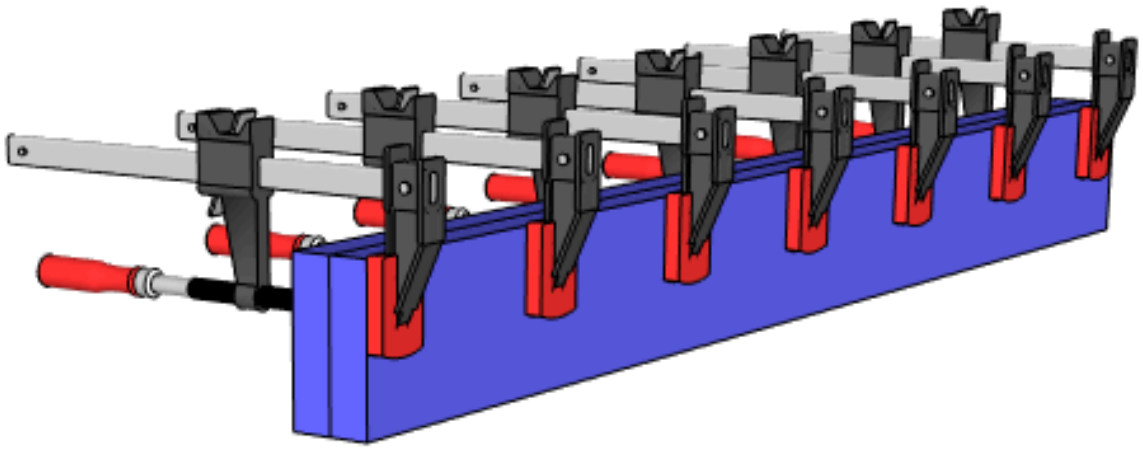
2 Complete Cut List

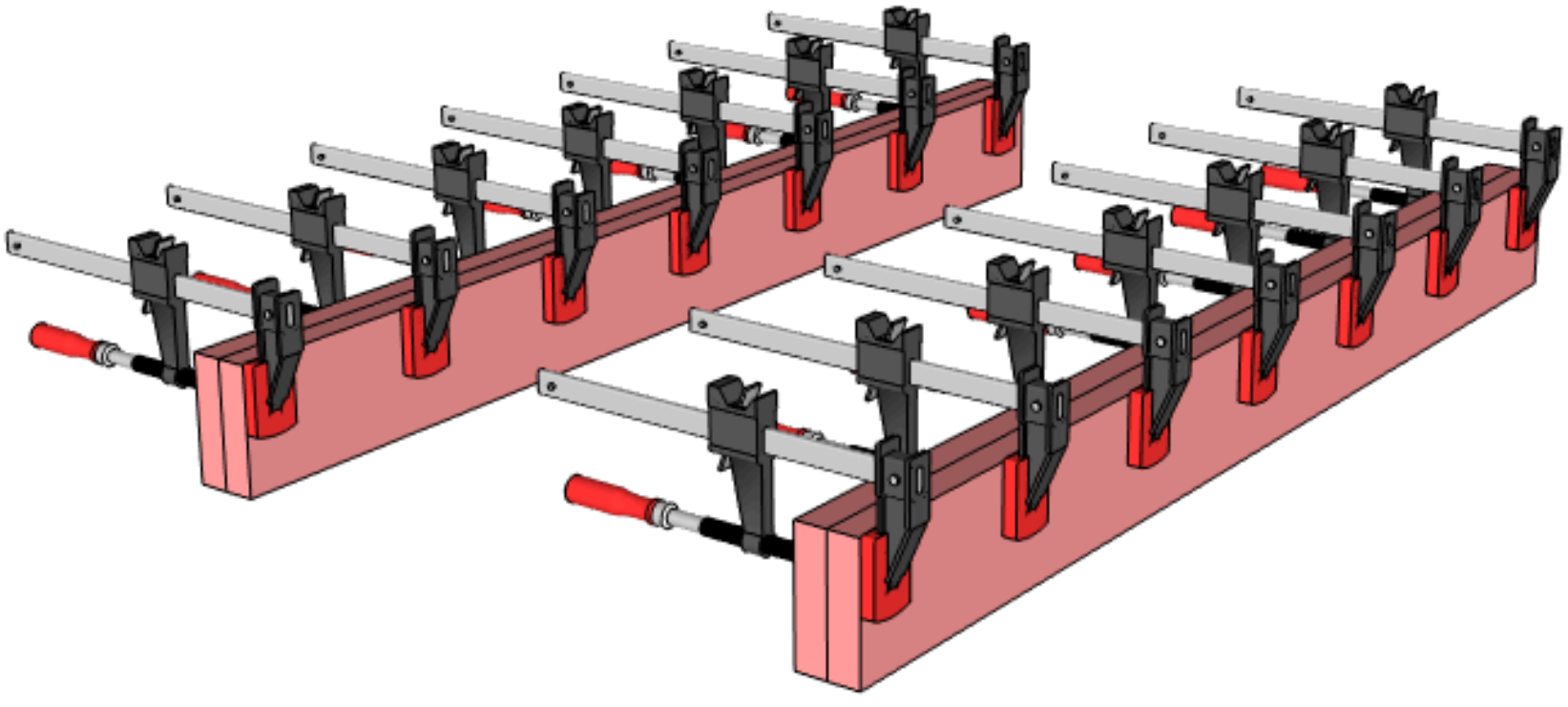
Use the cut-list to break down 3/4" plywood to the specified dimensions. You could also use MDF just make sure you the stock you use is nice and flat.



3 Glue up fences

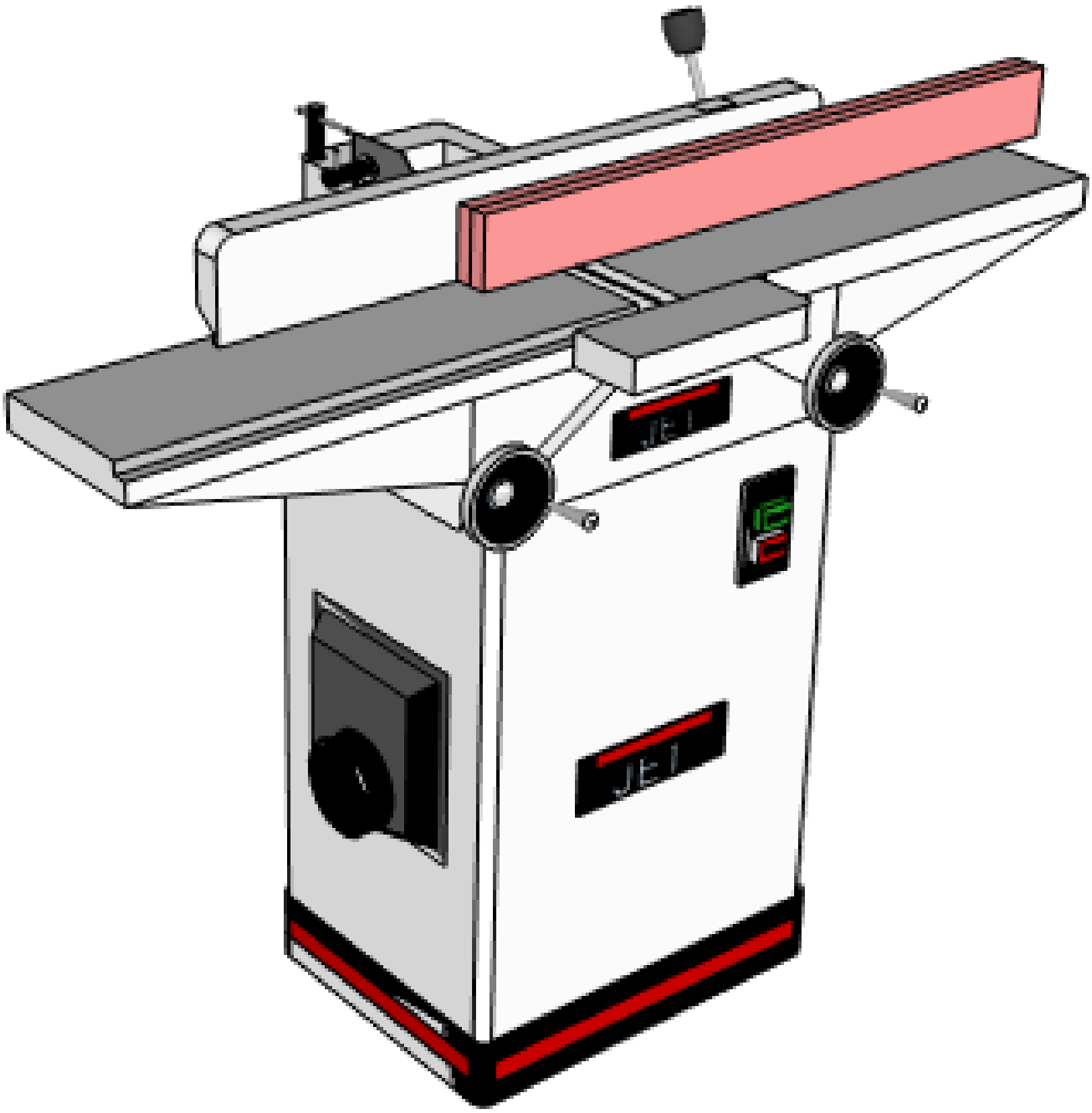
Glue up two pieces of your fence parts together with a good bit of glue and several clamps to ensure even clamping pressure. You should have 3 fences. Two will be your front fences(colored red) and one will be the back fence(colored blue).





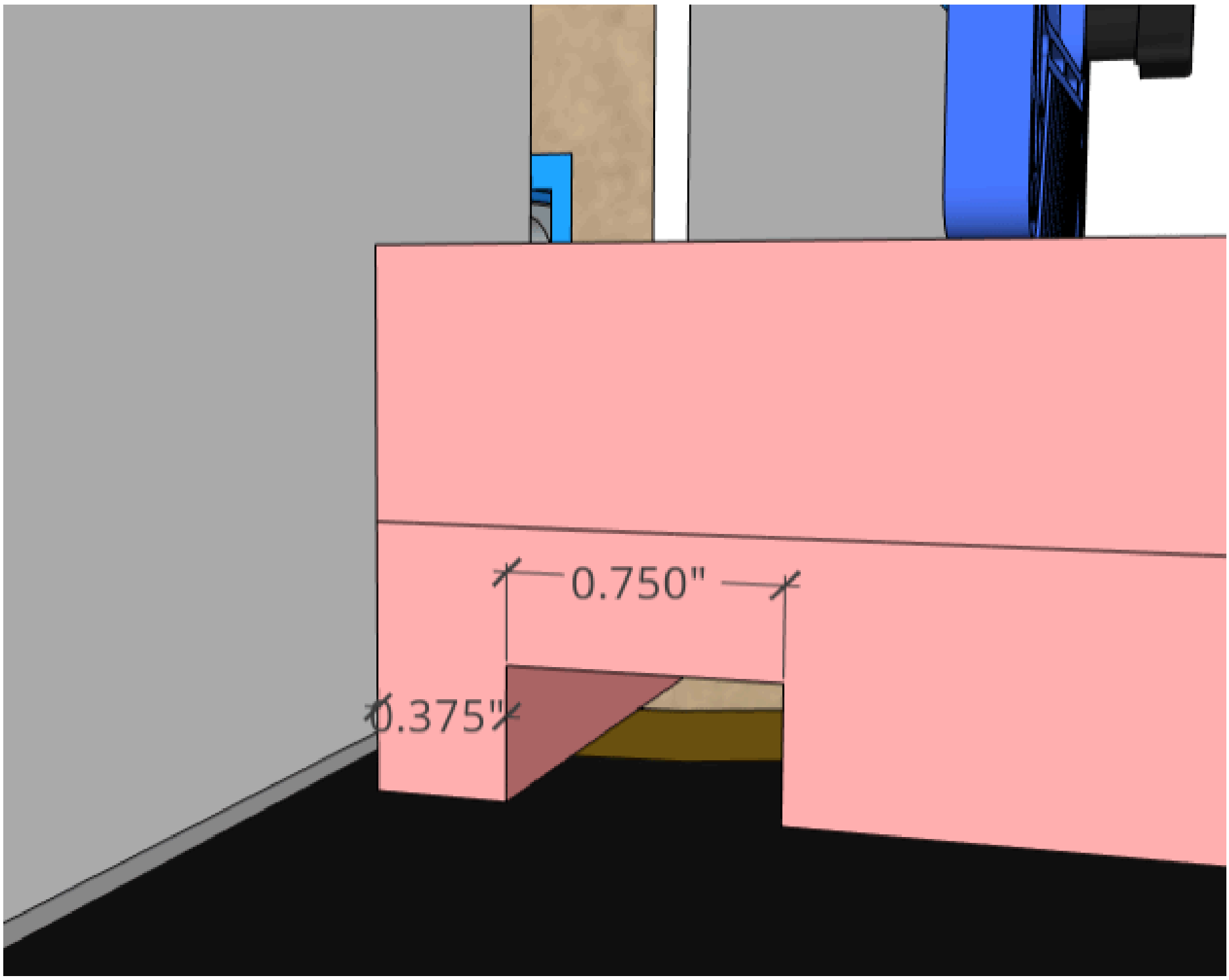
4 Joint fences

Joint the fences with a jointer so you have one straight edge.



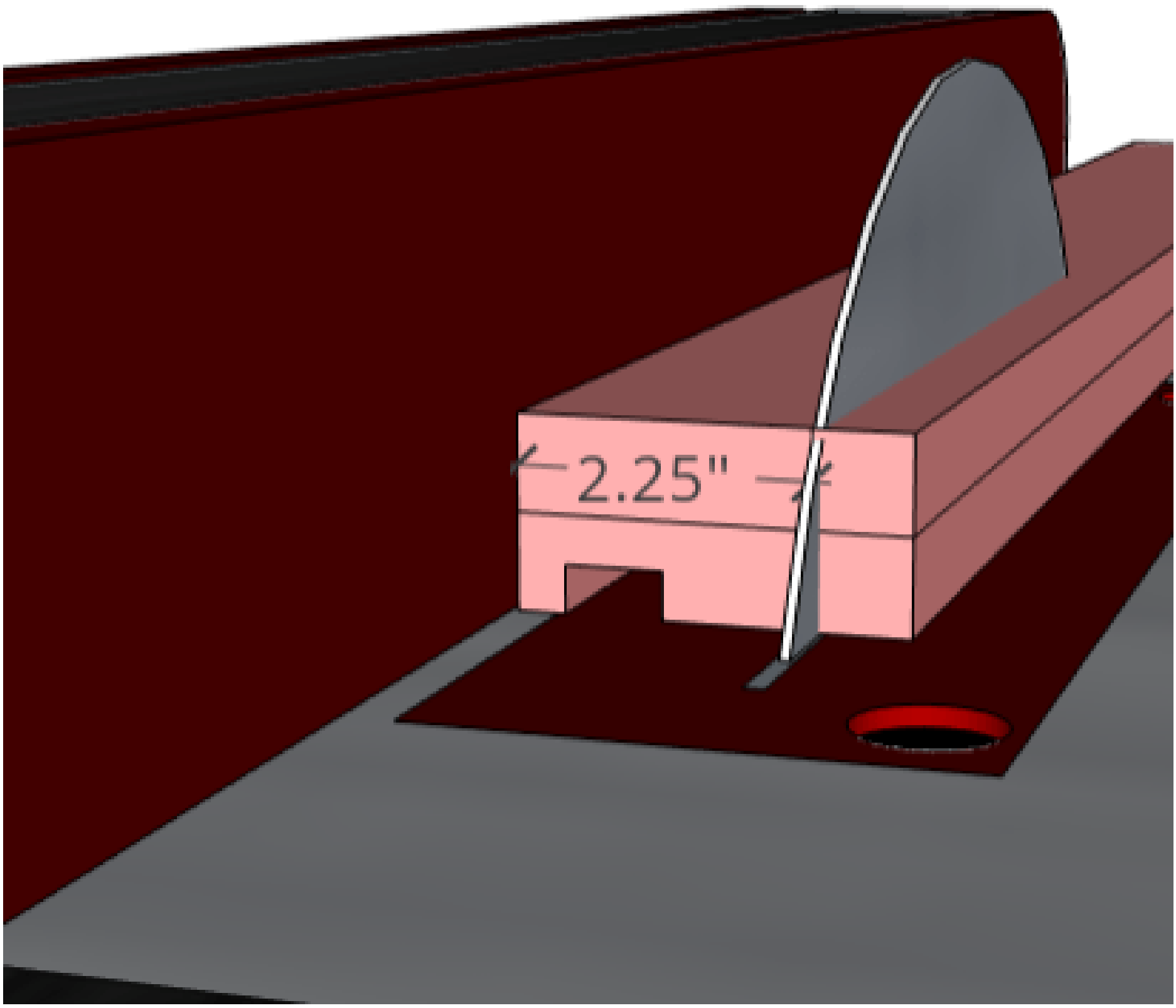
5 Cut groves in fences

Take your front fences and cut a 3/4" groove 3/8" away from the jointed edge. Make sure you use the same jointed edge on both front fences. The purpose of this groove is to allow one of the extension fences to be attached when needed.



6 Trim Front fences to final size

Take your front fences and cut them to 2 1/4" width on the Table saw. Make sure to use the jointed edge. This is the height the Kreg Swing Stops need to function properly.

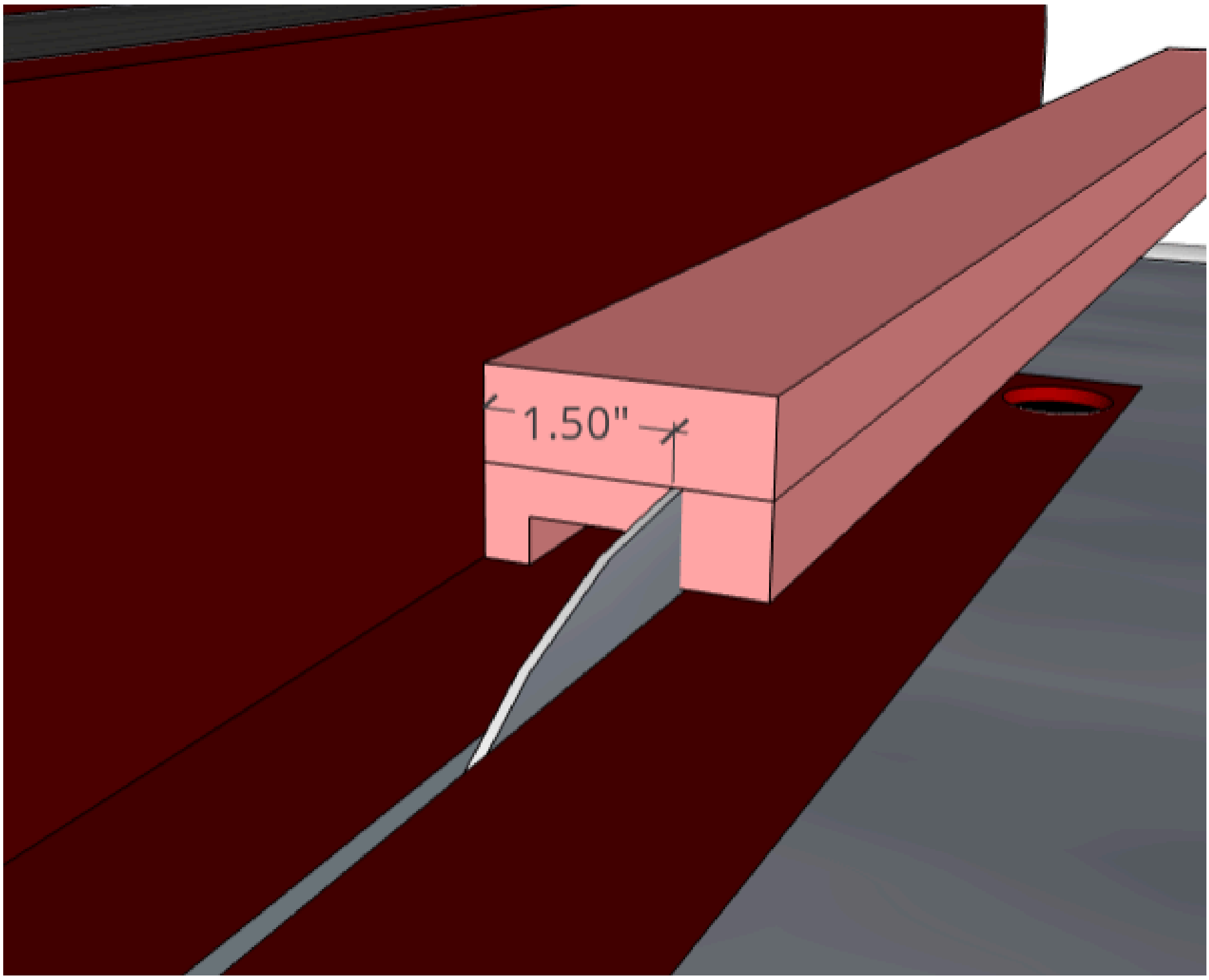


7 Cut front fence for Top Trak

Next you need to cut away some of the front fences so that the Top Track can sit properly.

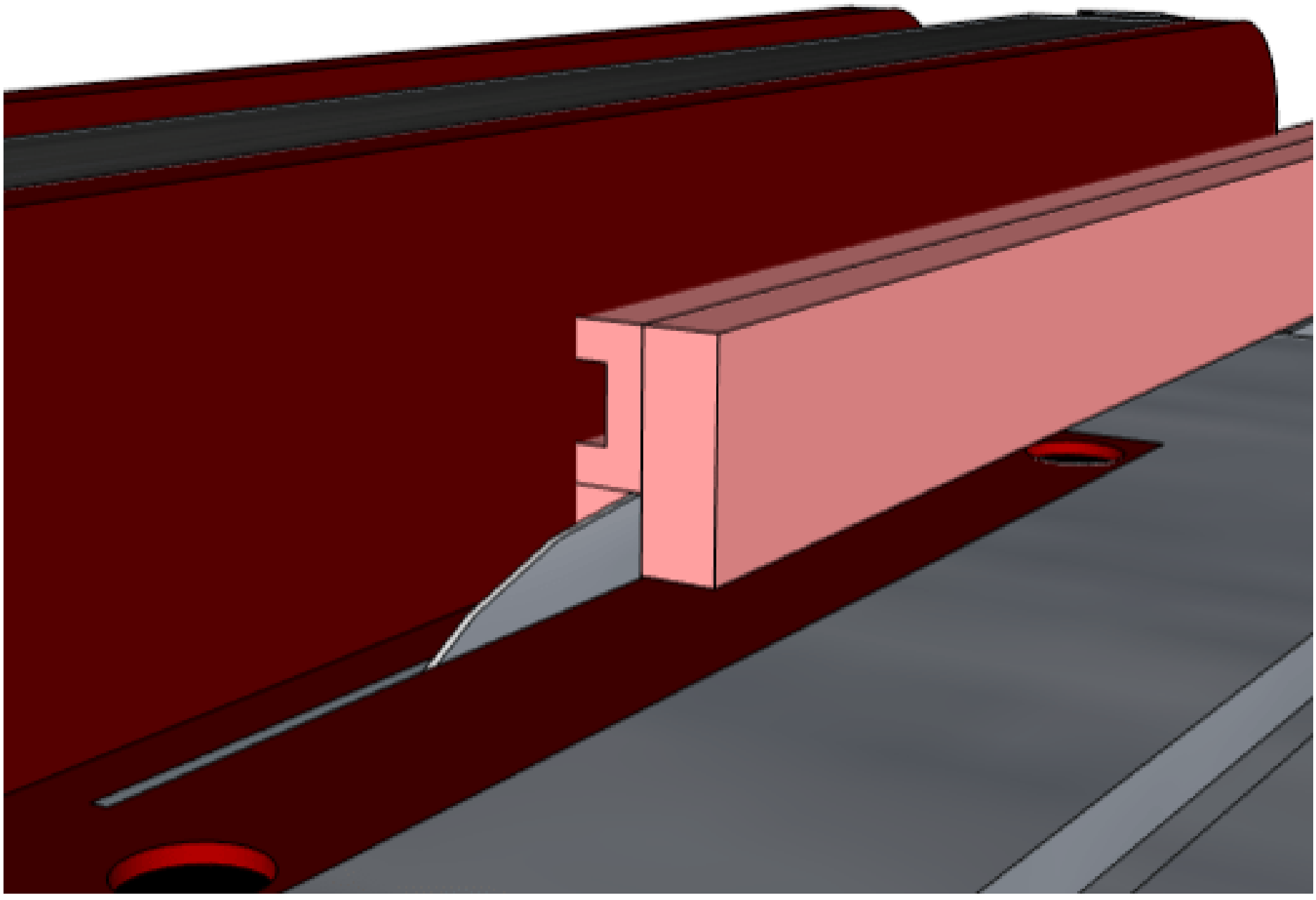
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Cut a 3/4" deep cut that is 1 1/2" away from the jointed edge.



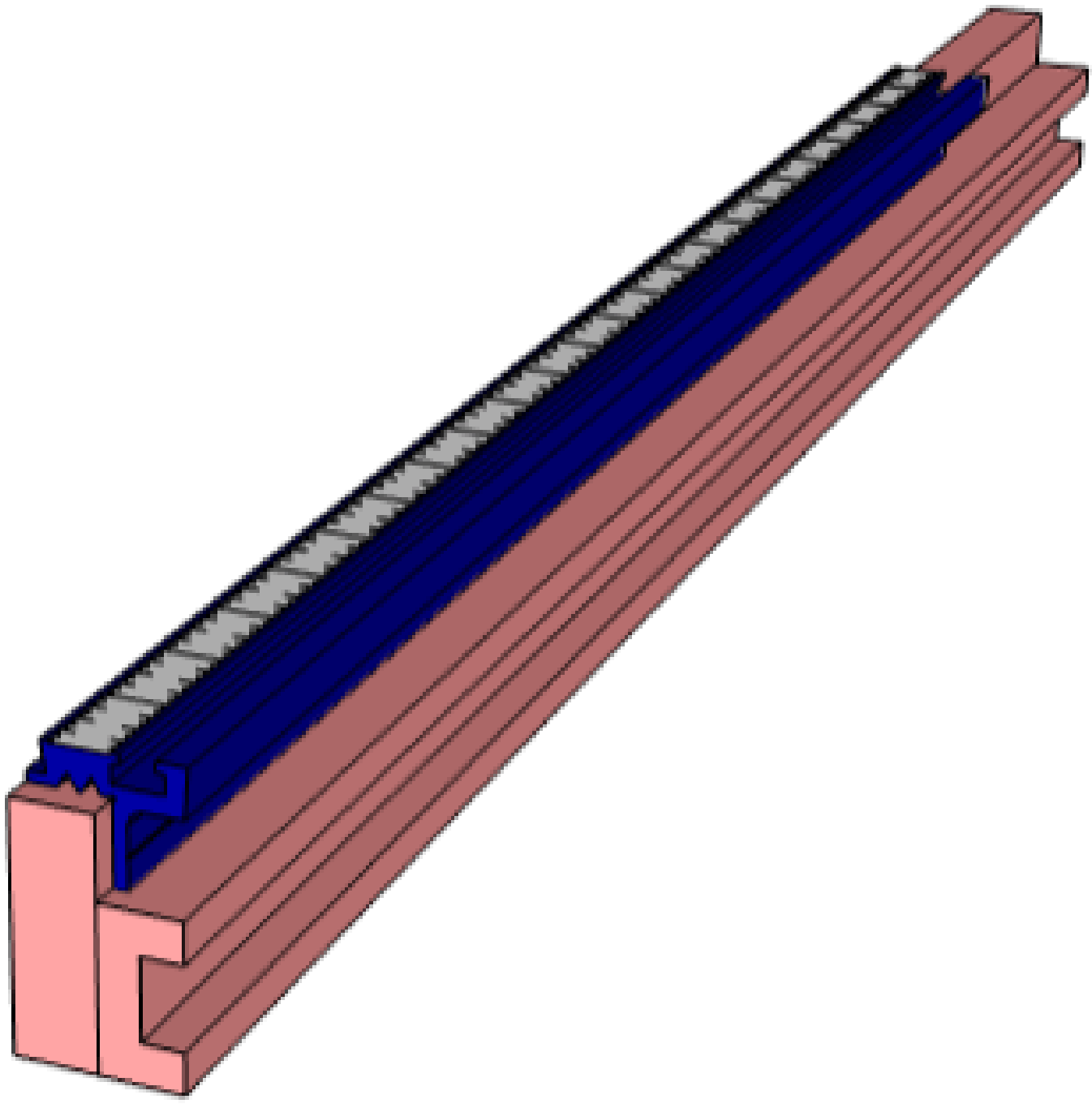
8 Cut the rabbet

Flip the front fences 90 degrees. Move the fence in to 5/8" and make a pass to create a rabbet. Make sure the side with the groove is what is riding along the fence of the table saw.



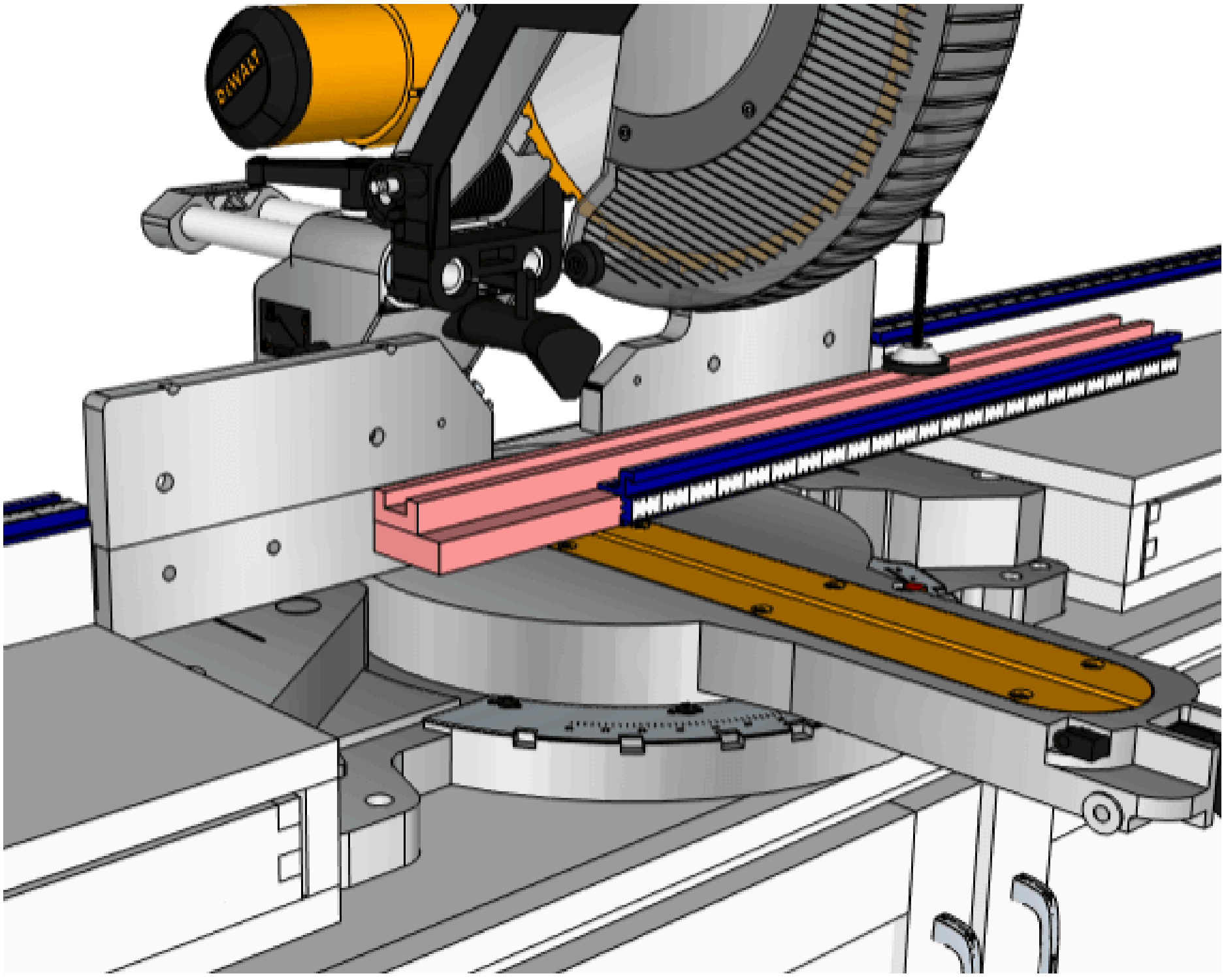
9 Attach Top Trak

Attach one of the 24" Kreg Top Trake sections to each of the front fences with the provided screws. Make sure they are sitting flush and the fences are straight when attaching. Don't worry about getting the Top Trak to align to the edges. yet those will be trimmed up later.



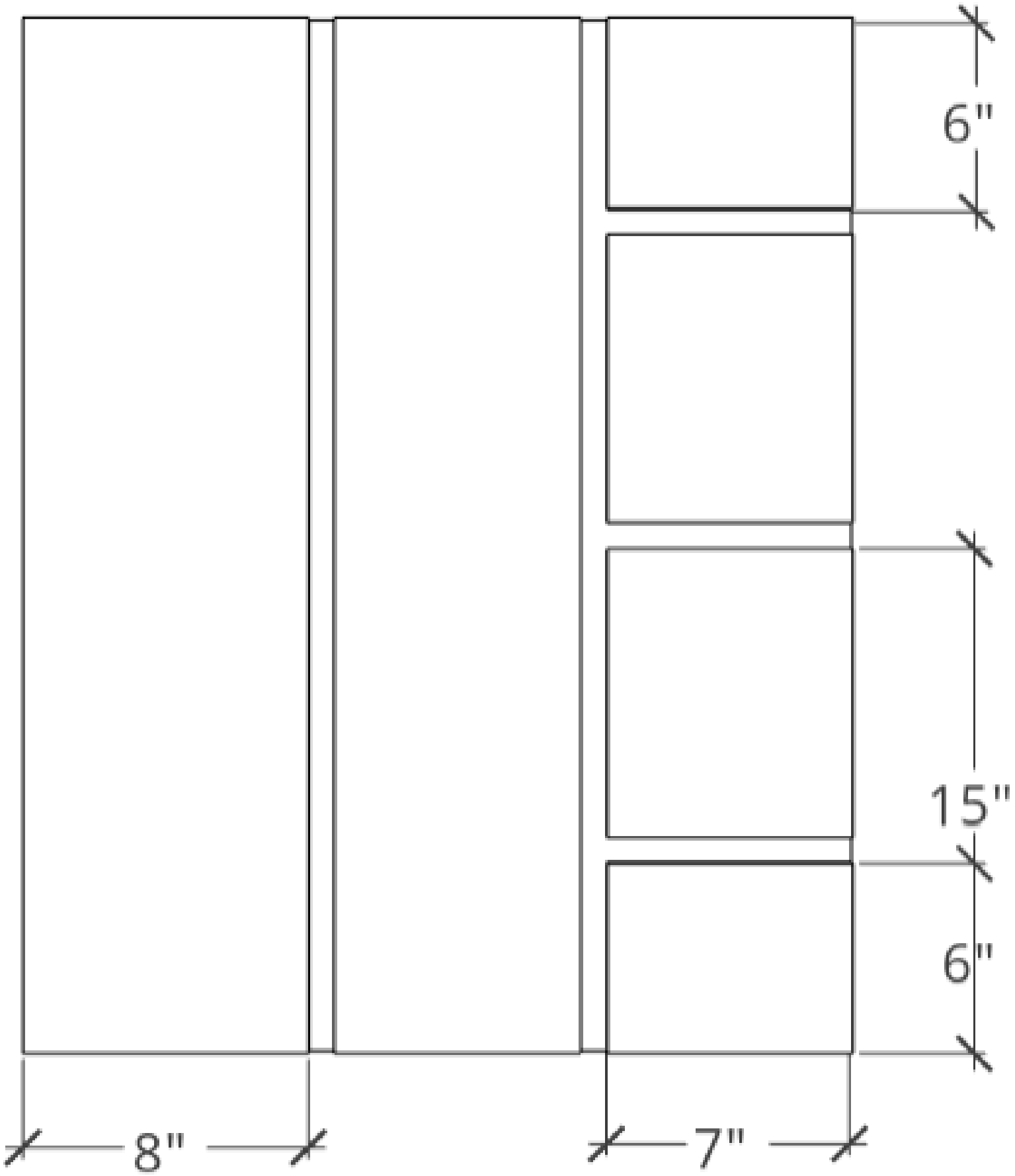
10 Trim Fences to final size

The next step is crucial to allow the fences to work together flawlessly. Cut each of the front fences to 24" in length. You need to make sure your miter saw is square so that the two front fences butt up together perfectly. Your miter saw can cut through the Top Trak just make sure to go slowly.



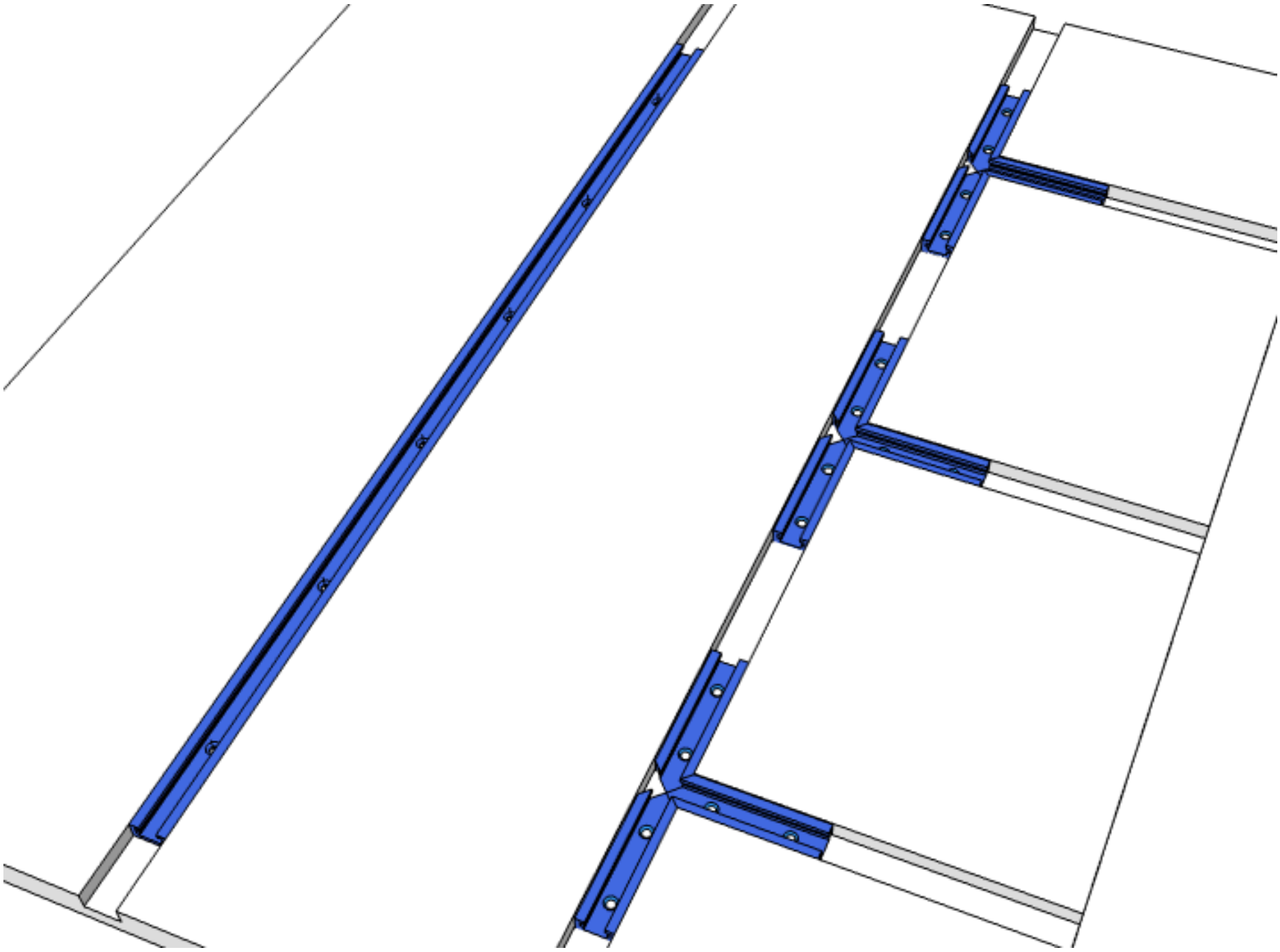
11 Cut Groves in Sled base (Optional)

Take your sled base and cut 3/4" grooves based on the attached image. Make sure the groves are a little over 3/8" deep. You can make these cuts with a Router or dado stack on your table saw. These grooves allow for t-track. You do not need to add t-track its just an option.



12 Attaching T-track

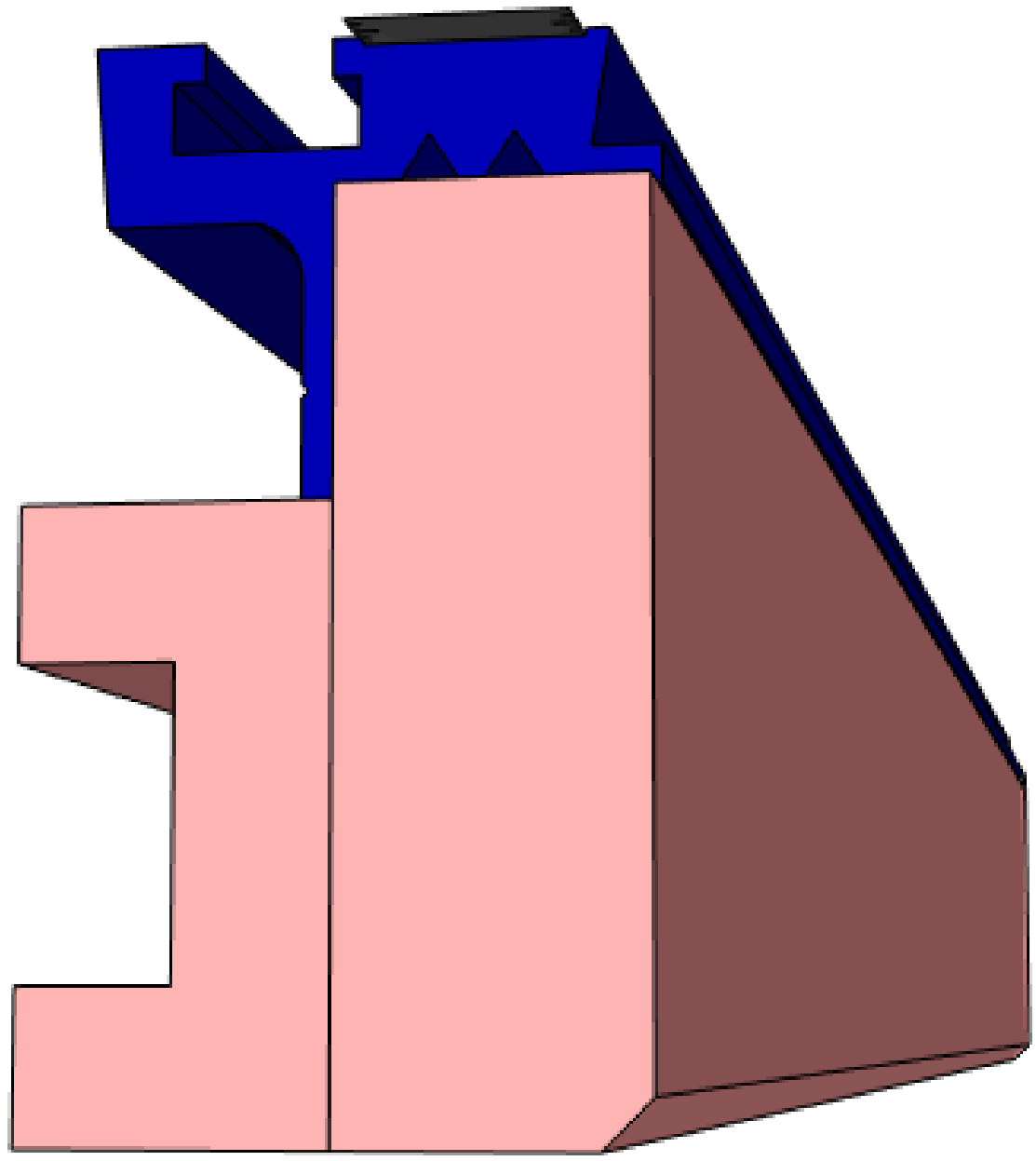
If you are adding t-track apply some 5-min epoxy to the groves then install the track. For the groves that intersect use the Rockler T-Track Intersection Kits. It helps to avoid cutting the miters on the miter saw. The piece of track on the right side should be about 24" to allow for use of hold down clamps.



13 Cut chamfer on fences

Add a chamfer to the fences so that dust does not collect against the fence potentially causing inaccuracies in your cuts.

You can make the cut on a router table or with a trim router.

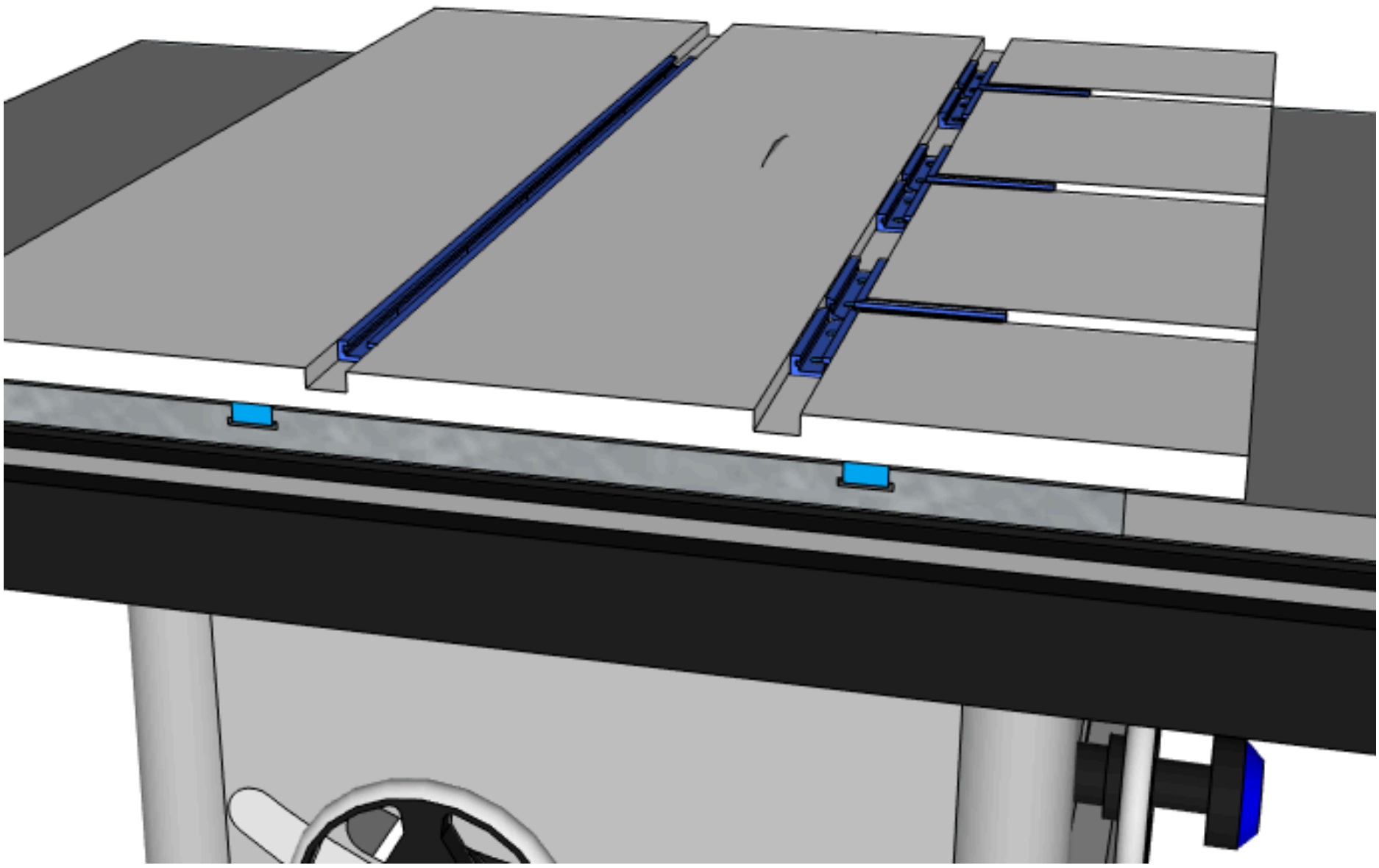


14 Ready for assembly

Your crosscut sled is ready for assembly! Pay close attention to the following steps because they are the most important.

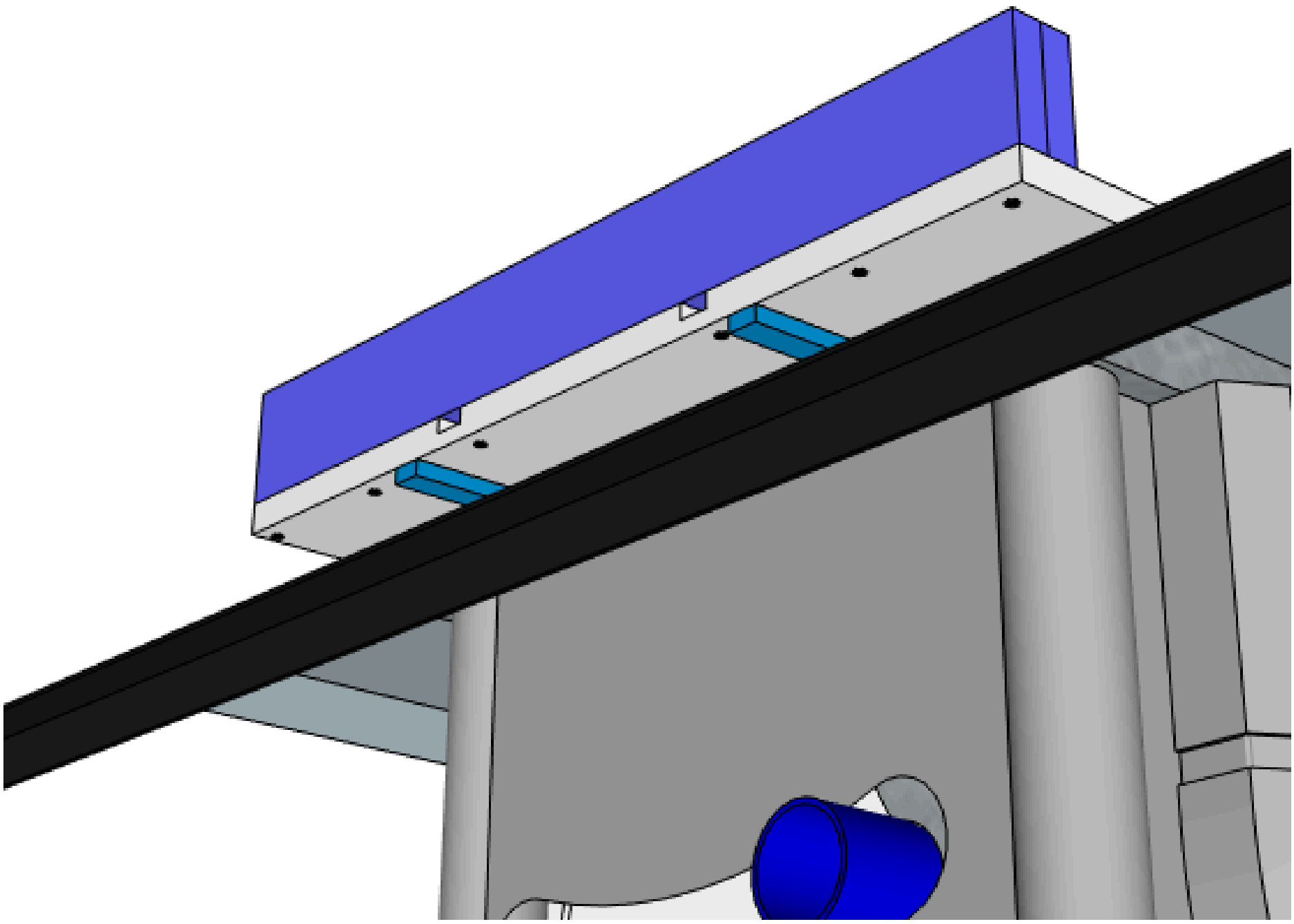
15 Attach Miter bars to Sled base

Place a few washers in the miter slots of your table saw. Position the miter gauges on the washers to elevate the bars above the table saw base. Apply some CA glue to the bars and position your table saw fence at 11". Carefully lower the sled base onto the miter bars ensuring that everything lines up properly. Attach the miter bars with the provided screws.



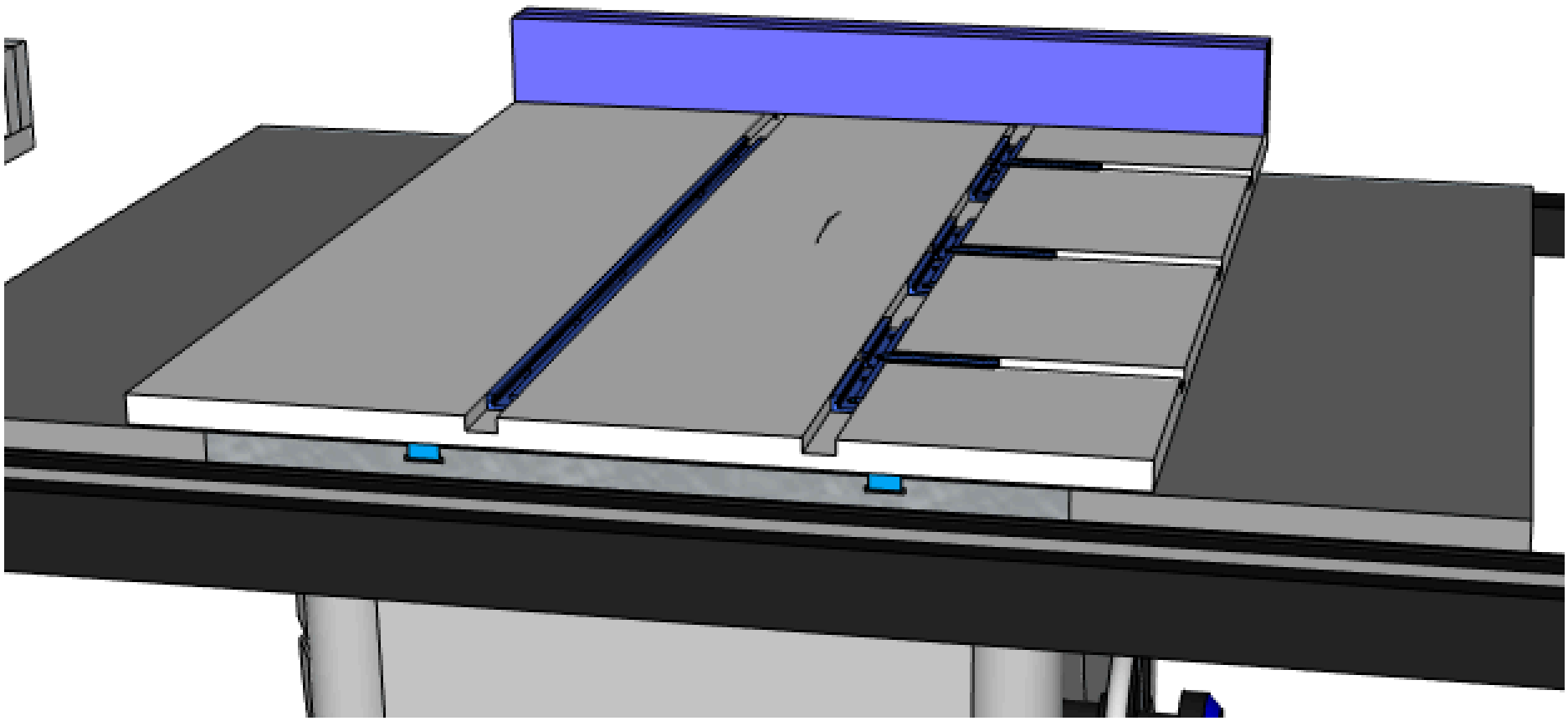
16 Attach the back fence

Attach the back fence to the sled with 6 1-1/2" drywall screws. Make sure to clamp the fence down and pre-drill with a chamfer bit so that the screw sits slightly shy of the sled base so that it doesn't catch when the sled slides.



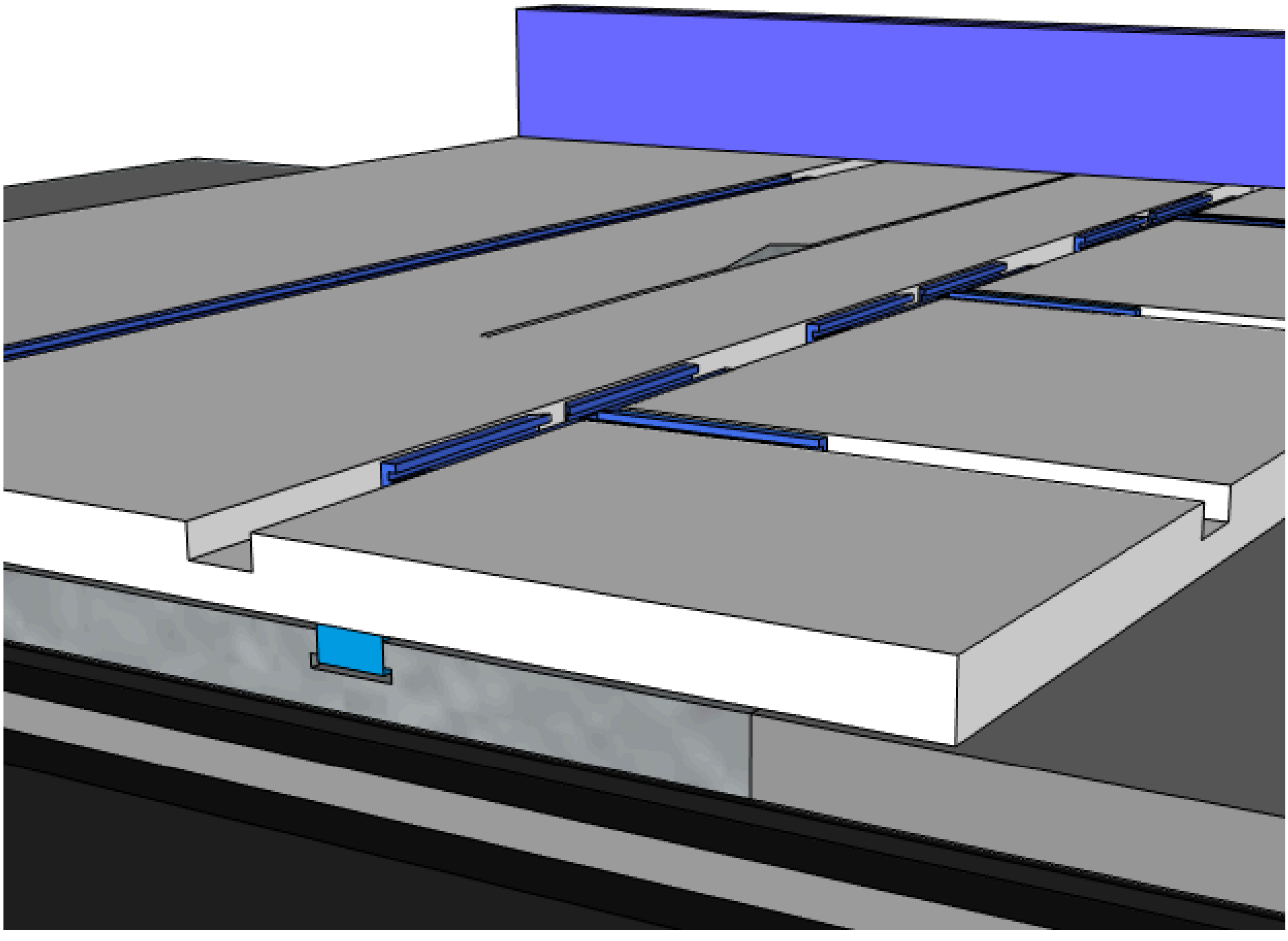
17 Testing the fit

At this point you are ready to start squaring up your crosscut sled. Before you start make sure you test the fit of sled. Slide it back and forth and make sure there is no side to side play and that the sled slides smoothly.



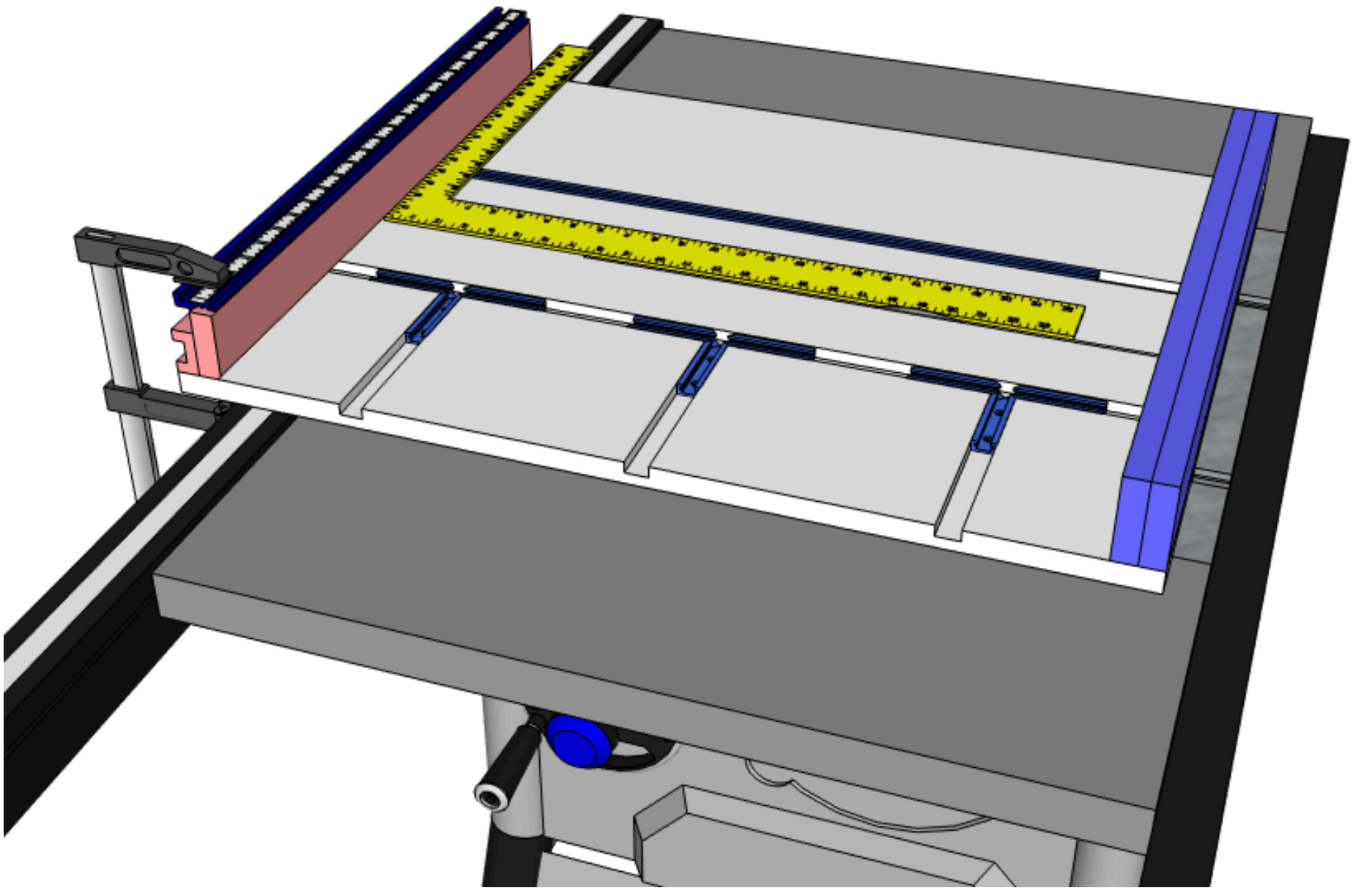
18 Start the cut

Lay your sled on the table saw and raise the blade slowly until the blade protrudes from the sled top. Push the sled about 3/4 of the way in and shut off the saw. This still will help you to square up the fence.



19 Attaching front fence

Take one ofthe front fences and clamp it to the sled base. Attach one screw to the right side of sled base to secure the fence in place and act as pivot. Use a framing square to help get the fence square to the blade. Once you are comfortable with the squareness of the fence attach another screw on the right side of the sled to hold it in place.

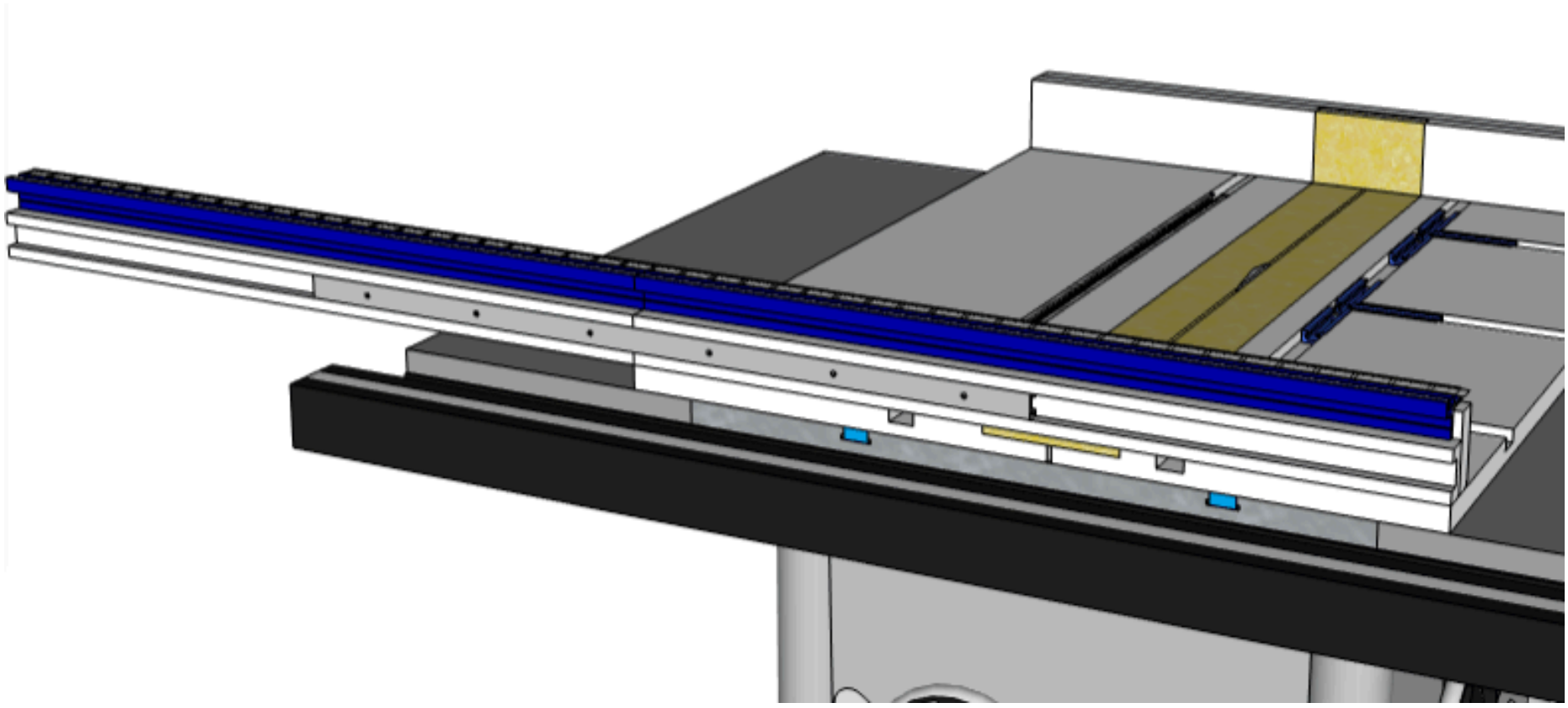


20 Perform the five cut method

In order to test the squareness of the sled you need to conduct the five cut method. Many people have done this method and a a simple google search will help you achieve this.

21 Attach extension fence

Attach the Fixture bar to the second front fence with some #6-1/2" screws. Slide the extension fence onto the other fence and make sure the traks are touching correctly. Attach the Fixture bar to the front fence with more screws and your fence is good to go.



22 Apply tape to Top Trak

Apply the tape to the Trak and dial in the saw, you should have about 13" of cut capacity to the left of the blade and about 11" to the right. The extension fence can be attached to either side giving you a lot of versatility with your cuts.