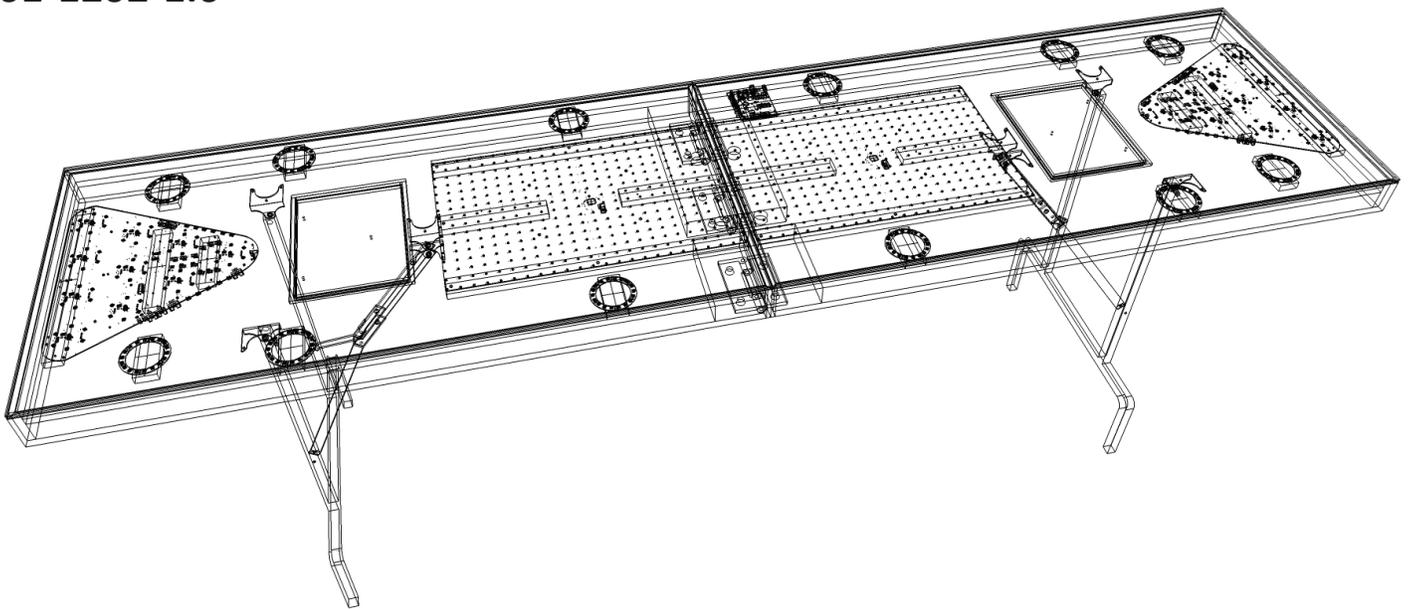




Table Construction Guide

RaveTable Interactive Beer Pong Table

001-1202-1.0



IMPORTANT:

Read through this construction guide carefully before building this product. Pay close attention to the complete table layout.

Ensure that you follow all proper safety instructions that adhere to the power tools that you will be using to construct this table.

Failure to obey any safety warnings of the tools that you are using to construct this table may result in serious injury.

Introduction

This instruction manual will guide you through the steps of constructing a folding table for the RaveTable Interactive LED Beer Pong Table Kit. The table has been designed in such a way that it balances the least amount of materials needed (reducing cost, weight, etc) while still maintaining rigidity and durability.

The following knowledge and skills will help aid you through this project:

- Knowing how to operate power tools (saws, nail guns, drills, etc)
- Knowing how to utilize a tape measure
- Knowing how to sand, paint and finish wood
- Knowing the basics of assembling and securing wooden parts together

This manual recommends a wood-glue/brad-nail combination to secure the parts in place. You can substitute appropriate sized screws instead of brad-nails if that is easier for you, however, always apply wood glue to pieces that are joined together as it will reinforce the joint and add a lot more rigidity to the overall finished table.

The measurements in this guide are metric, however, you can easily convert the metric units to imperial units with the conversion table below. You may notice that some of the hardware is listed in its imperial form and that is due to this table being designed in Canada, where much of our hardware (such as screws) are still labeled in Imperial units.

Unit	Converted Value
1 Inch	25.4mm
1mm	0.03937 Inches

Construction Guide Bill of Materials

Part (Hardware)	Vendor	Qty per Table
Toggle Latch	Amazon	1
Folding Table Legs	Home Depot	1
3" Door Hinges	Home Depot	2
Carpenters Wood Glue	Home Depot	1
Screws - #8 - 1.5"	Home Depot	10
Screws - #10 - 1"	Home Depot	24
1" 18ga Brad Nails	Home Depot	100
3/4" 18ga Brad Nails	Home Depot	100
9.5mm (3/8") Part Sheet of Plywood (Only <i>P4</i> uses this size)	Home Depot	1
12.7mm (1/2") Full Sheet of Plywood	Home Depot	1
3mm (1/8") Frosted Acrylic Sheet (Cut to 1220x610mm (48"x24"))	Local Plastic Dealer	2

The acrylic is listed in this Bill of Materials (BOM) but won't be installed in this construction manual. The acrylic is fitted and installed at the end of the "*Electronic Installation Manual*".

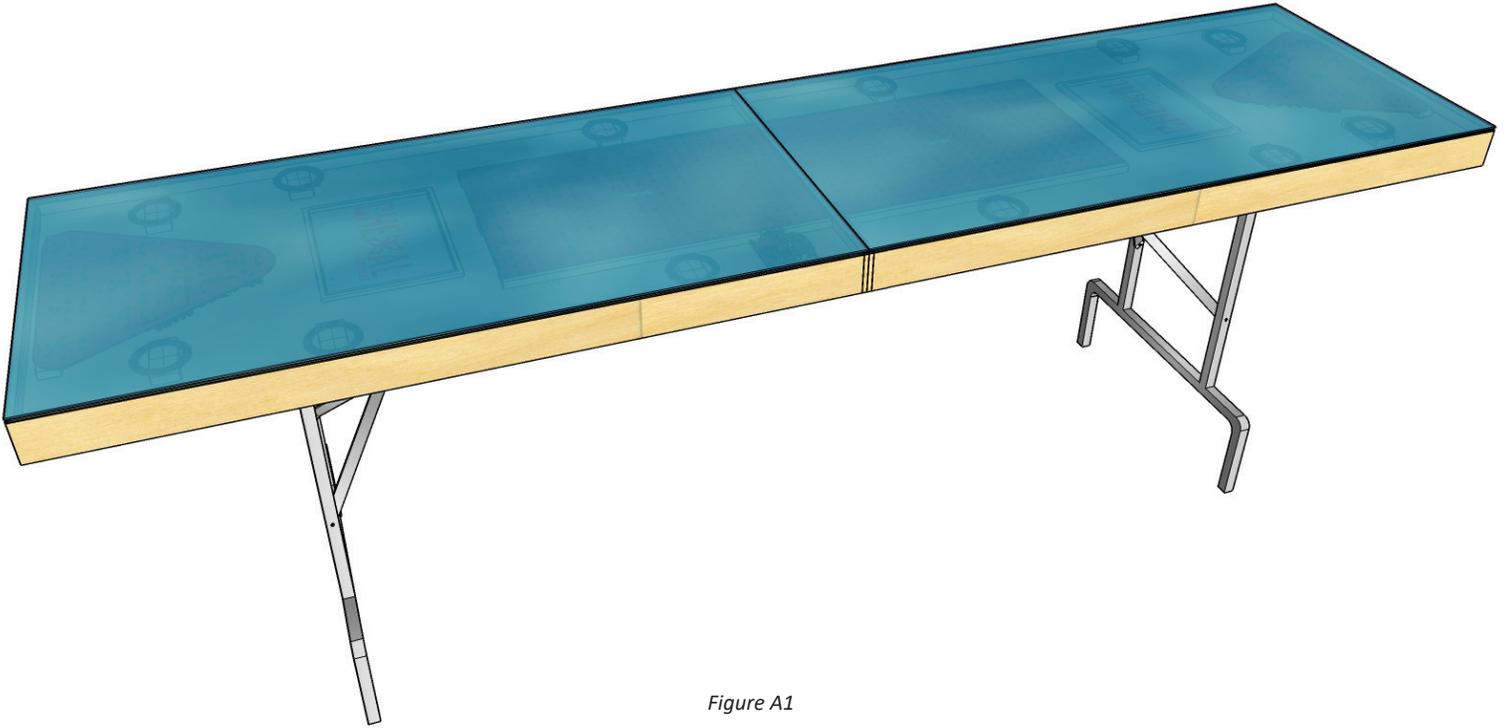


Figure A1

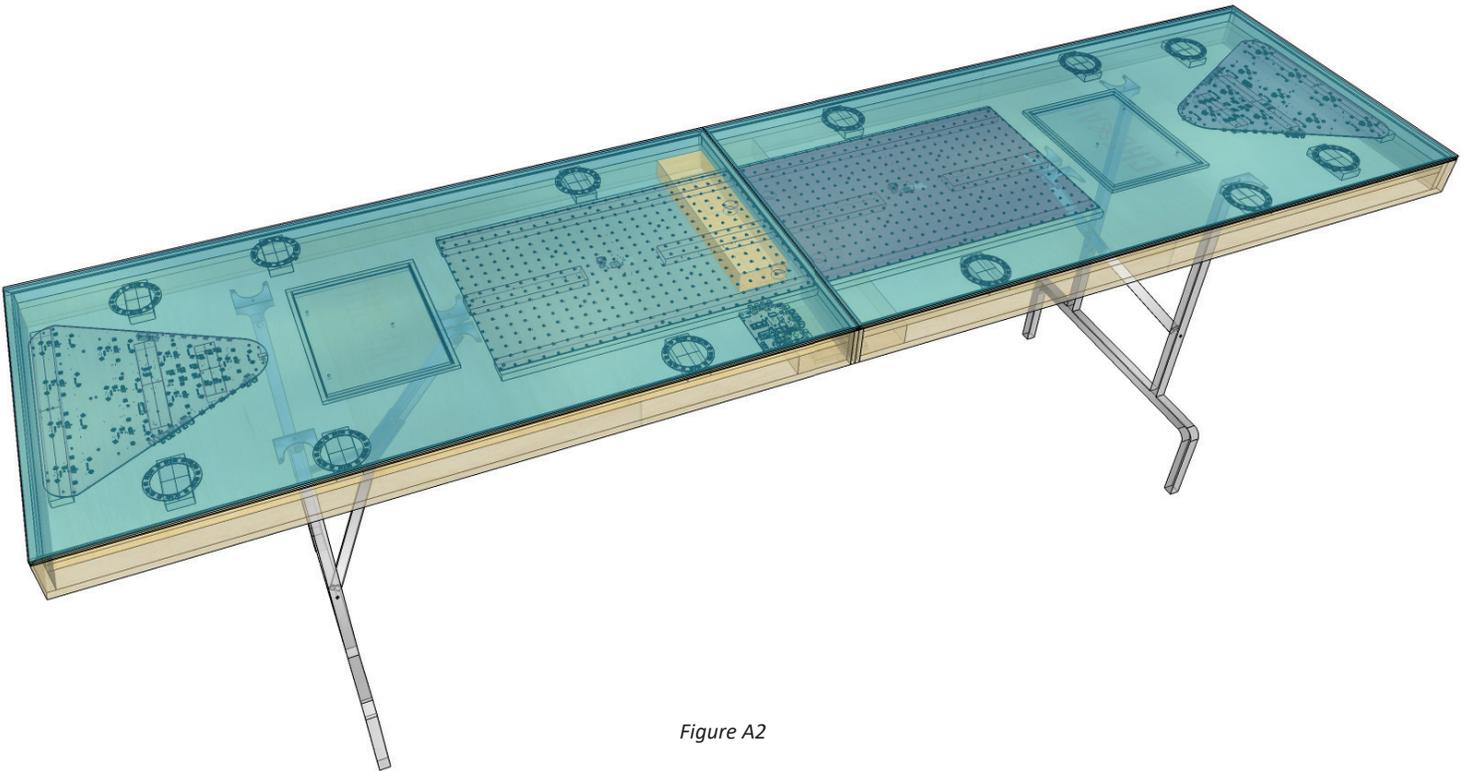


Figure A2

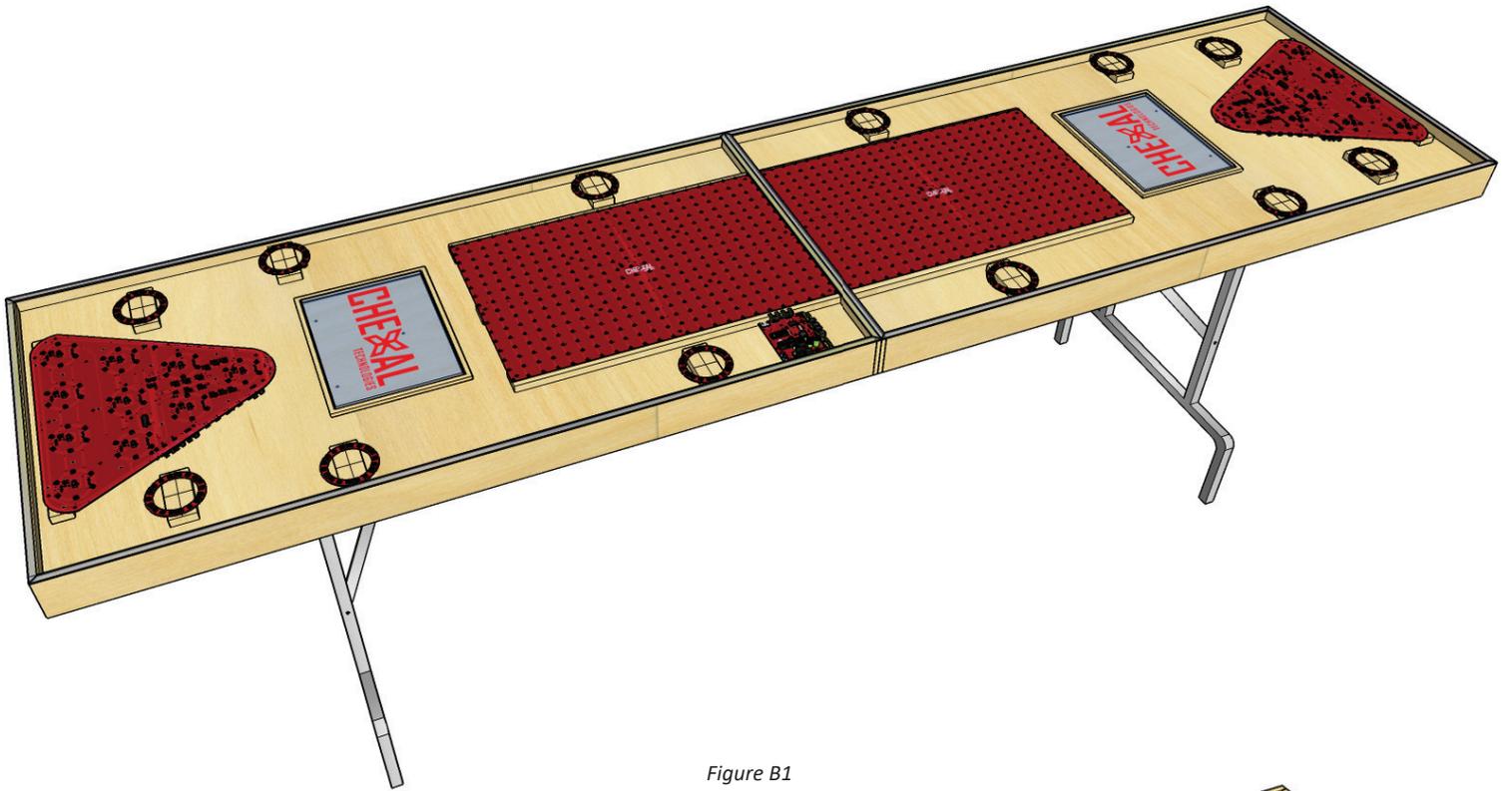


Figure B1

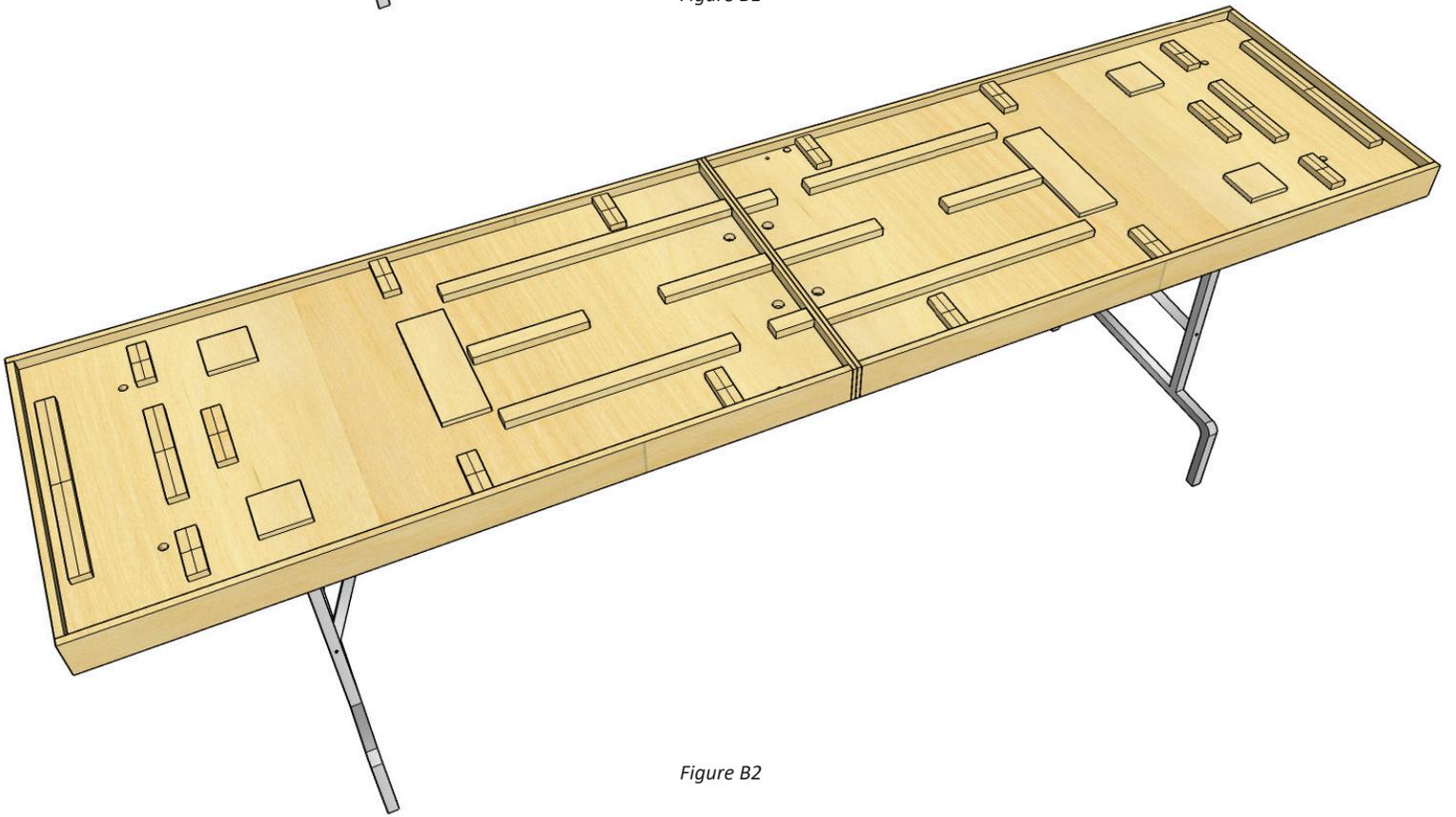


Figure B2

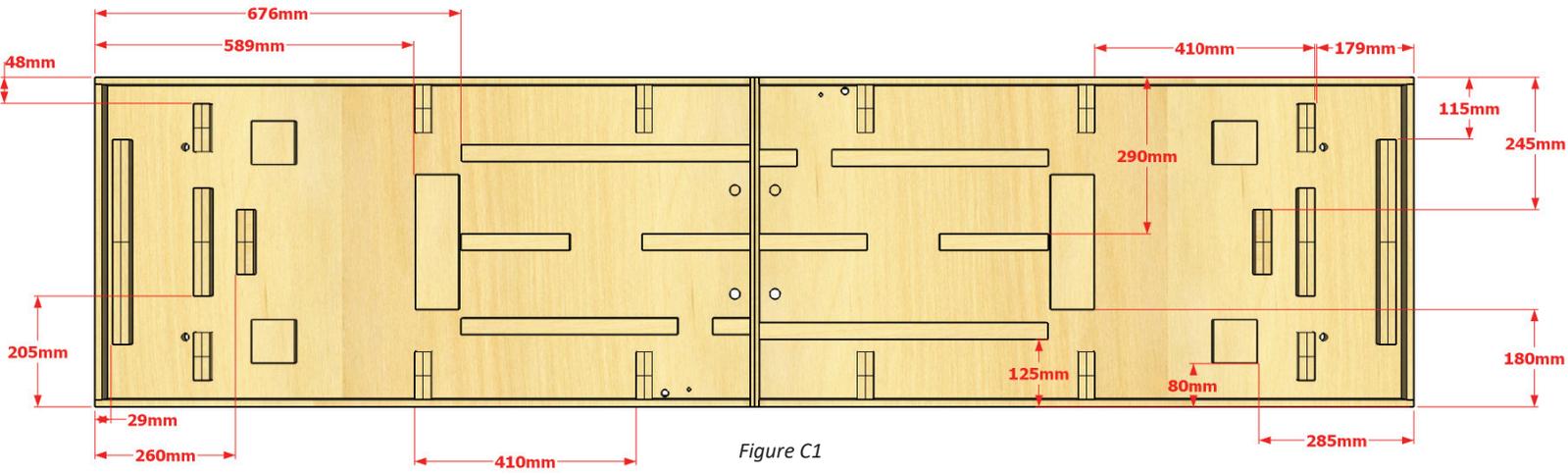


Figure C1

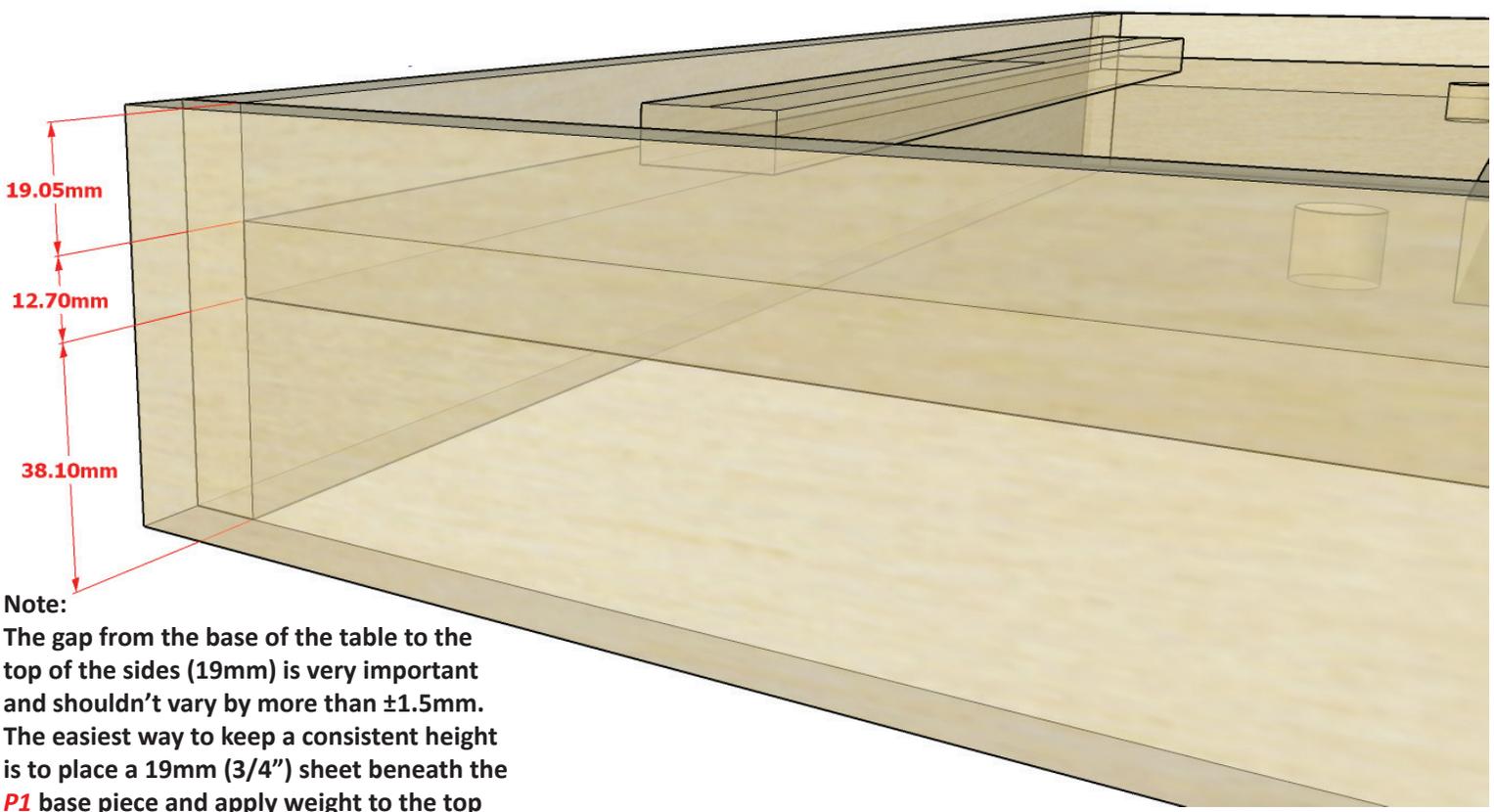


Figure C2

Note:
The gap from the base of the table to the top of the sides (19mm) is very important and shouldn't vary by more than ± 1.5 mm. The easiest way to keep a consistent height is to place a 19mm (3/4") sheet beneath the **P1** base piece and apply weight to the top of **P1** as you are securing the sides (**P2**, **P3** & **P4**) to it. This is demonstrated in **Step #1**.

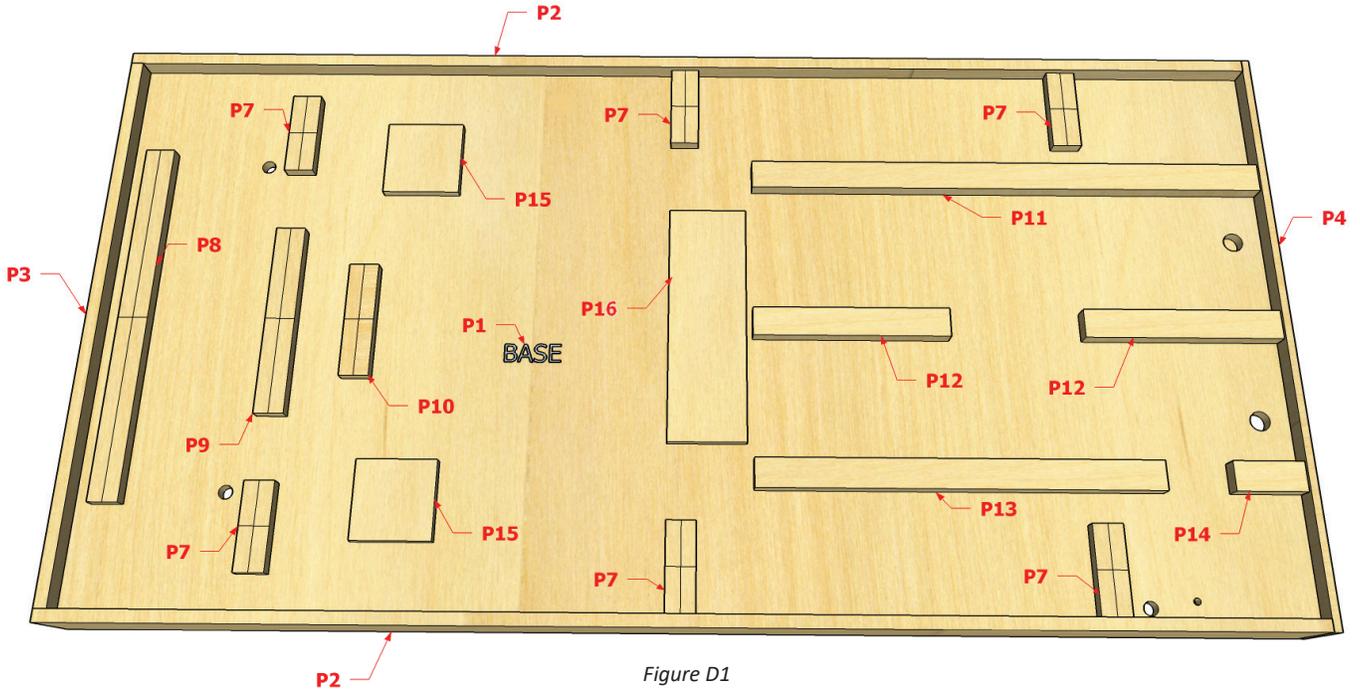


Figure D1

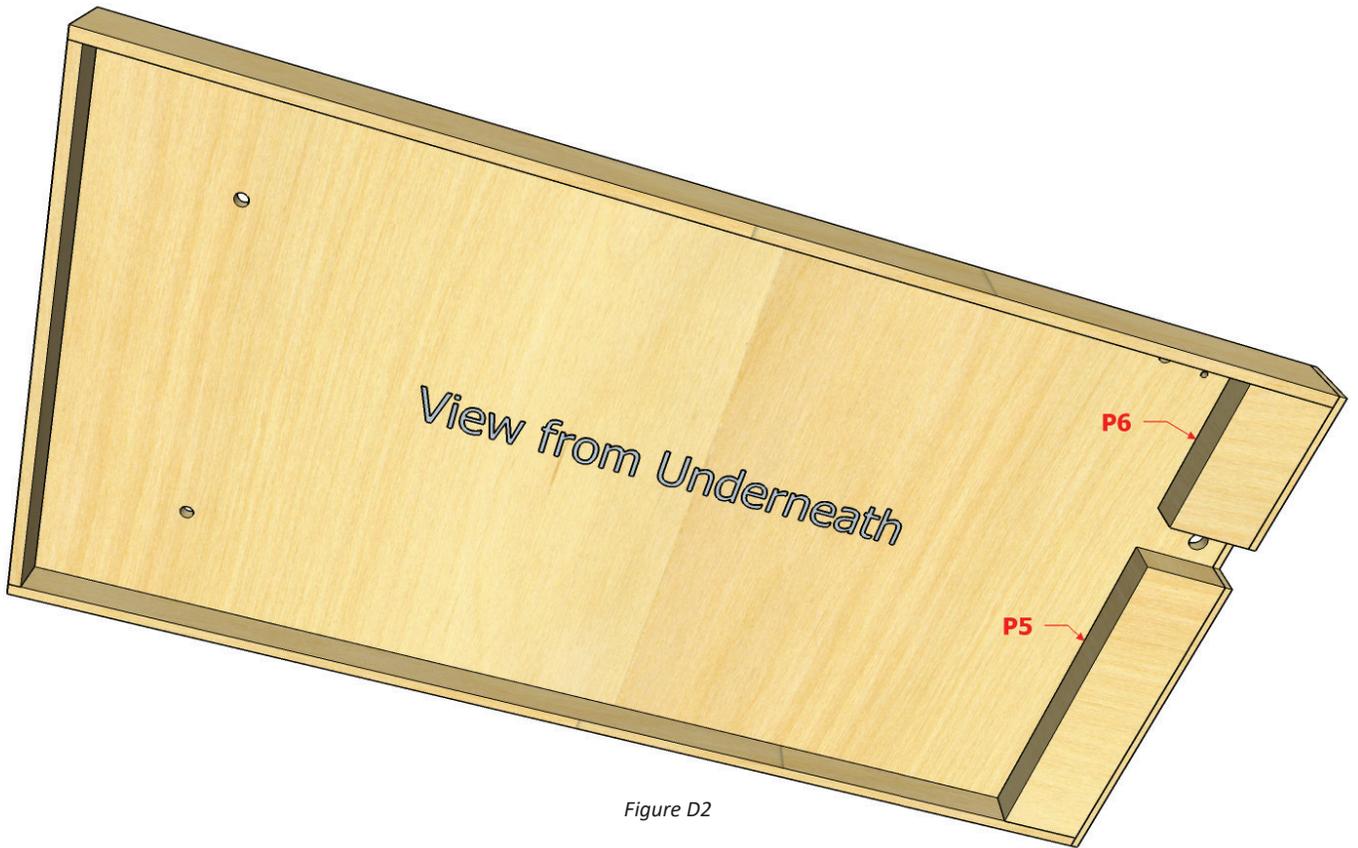


Figure D2

Hardware Assembly Instructions

Before beginning this assembly section, navigate to the “Parts” section (*page 12*) to get the dimensions of each part and the amount of pieces needed to build this table. After cutting out each part, make sure to drill out the holes in the *P1* parts as well as cut out the slots for each of the *P4* pieces. Refer to the “Construction Guide BOM” on *page 1* and make sure that you have all of the miscellaneous hardware such as the hinges, screws and table legs.

Once you have acquired all of the parts in the BOM and cut out the lumber for the table, you are ready to proceed with the assembly instructions listed below. Happy building!

1

Lay down a 19mm (3/4”) sheet that is smaller in length and width than *P1*, onto a flat surface. Place *P1* centered on top of the 19mm spacer sheet and apply weight on top of *P1* to keep it pressed flat against the spacer sheet. This will maintain the all important 19mm gap that we need for the top of the table. The spacer sheet will be removed once we have all four sides attached to *P1*.

Ensure that *P1* is aligned the same way as it is pictured in *Figure 1.3*.

Once *P1* is centered on top of the spacer sheet, apply wood glue to the back edge of *P1*. We will then place *P3* up against the back edge of *P1* and nail it into place, making sure that *P3* is flush against both sides of *P1*.

Make sure that *P3* is not hitting the 19mm spacer and that it is flat against the work surface, ensuring a 19mm gap.



Figure 1.1



Figure 1.2

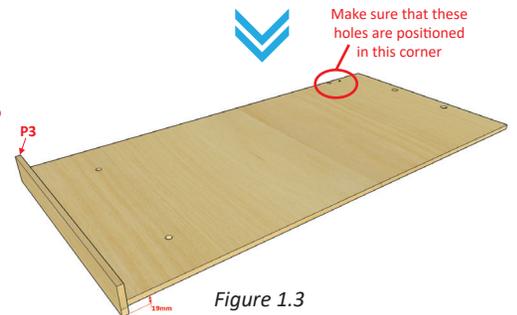


Figure 1.3

2

Apply wood glue to one outer edge of *P1* and line up *P2* flush with *P3* (the other end of *P1* will also be flush). With *P2* lined up, nail it into place.

Repeat this same process for the other side.

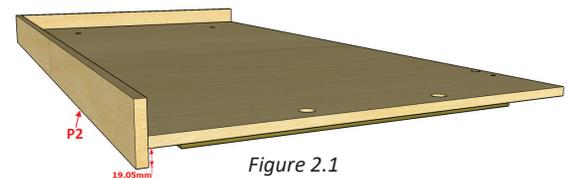


Figure 2.1



Figure 2.2

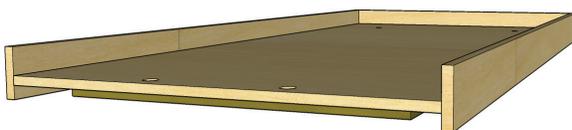


Figure 2.3

3

Glue *P4* to the front-face of *P1*. Make sure that all sides are flush (*P1*, *P2* & *P3*) to *P4* and then nail it into place.

Once *P4* is secured, you can lift the table section off of the spacer sheet and you should have a perfect 19mm gap.

Before creating the second half of the table, proceed to *step #4* and read through it thoroughly.



Figure 3.3



Figure 3.1



Figure 3.2

4

Repeat *steps #1 - #3* to create the second half of the table but be sure to mirror *P4* from how it is installed in the first half. Refer to *Figure 4.1* to see what the end result should look like.

In *Figure 4.2*, it shows *P5* and *P6* already installed underneath the table. Just ignore this as we haven't installed them yet (we will in *Step #6*), they are just in the image to provide clarity.

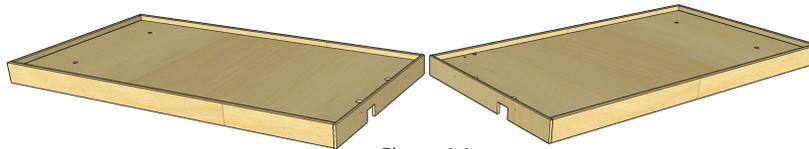


Figure 4.1

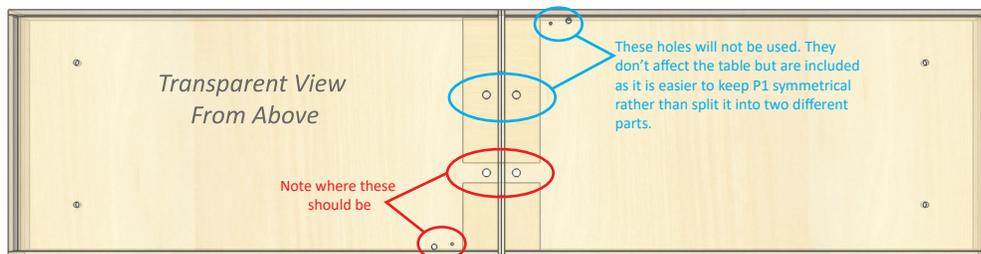


Figure 4.2

5

Install the parts **P8**, **P9** & **P10** according to the dimensions in *Figure 5.1* (Refer to *page 5* for part labels).
 Install the parts **P7** according to the dimensions in *Figure 5.2*.
 Install the parts **P11**, **P12**, **P13**, **P14**, **P15** & **P16** according to the dimensions in *Figure 5.3*.
 If you are using a different model of folding table legs, check *Step #7* before installing **P15** and **P16**.

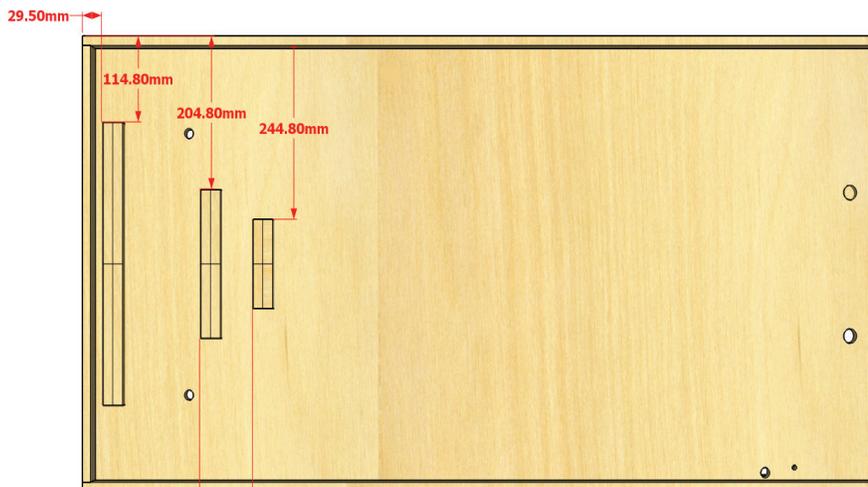


Figure 5.1

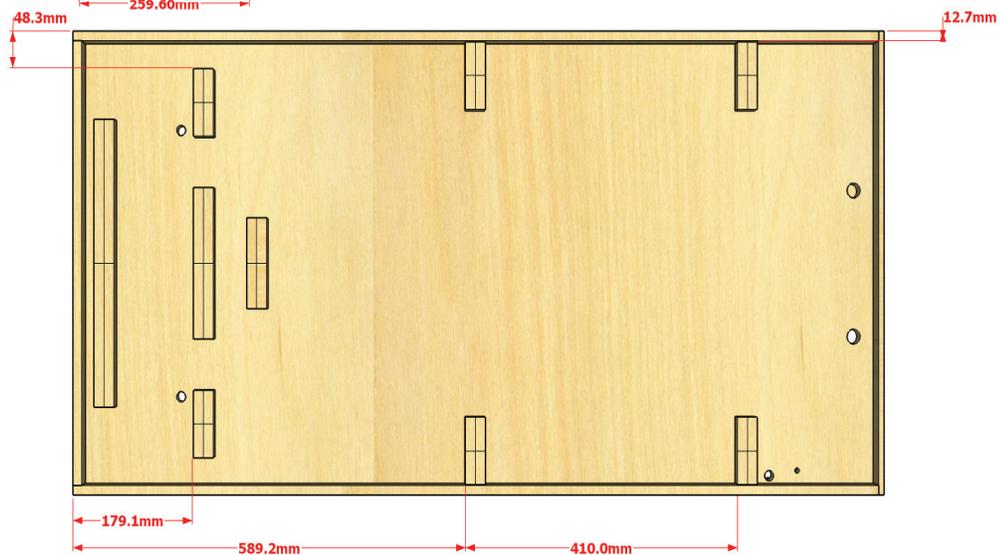


Figure 5.2

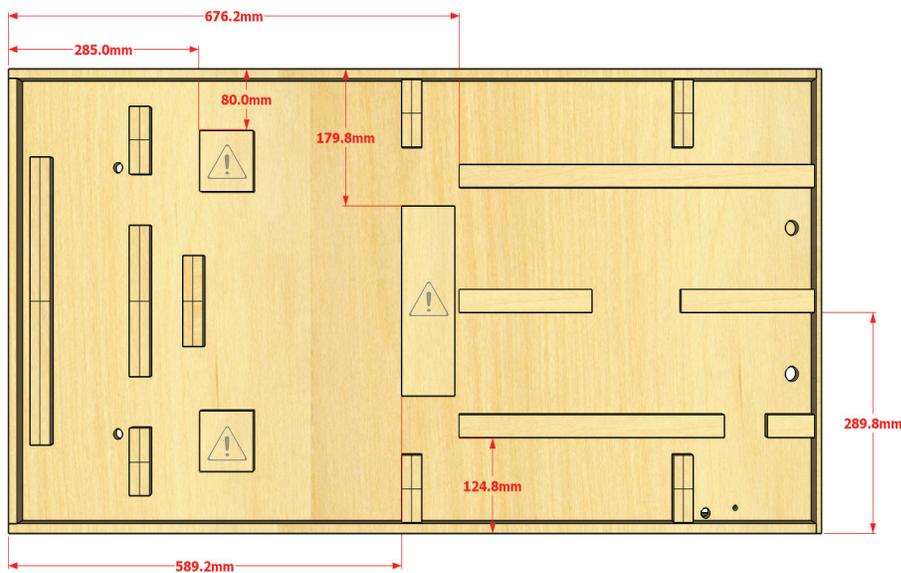


Figure 5.3



If you are using a different model of folding table legs, check *Step #7* before installing **P15** and **P16**.

6

Flip each table section over so that the bottom is facing up. Install **P5** and **P6** by applying wood glue to each side of the parts that will press up against the outer walls on the table sections.

While holding each part in place, secure **P5** with three #8 - 1.5" screws that are inserted from the top of the table sections and are evenly spaced apart. Then secure **P6** with two #8 - 1.5" screws (refer to *Figure 6.3* and *Figure 6.4*).

Repeat this process for the second table section and with both table sections lined up against each other, the end result of this step should look similar to *Figure 6.5*.



Figure 6.5

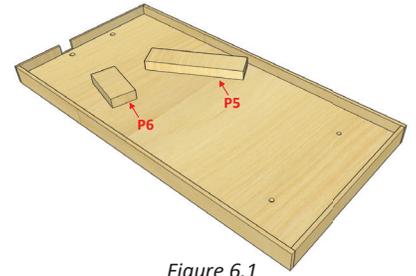


Figure 6.1

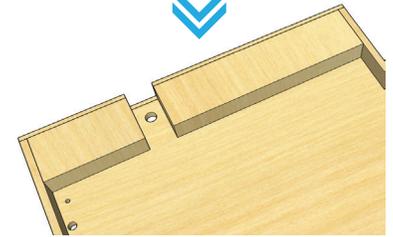


Figure 6.2

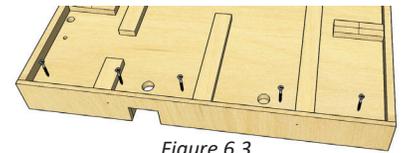


Figure 6.3

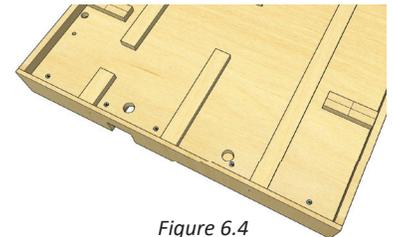


Figure 6.4

7

Install the table legs for each table section according to *Figure 7.1*. The table legs are brought in 300mm (12") from the back end of each table section and are centered width-wise.

The table legs should be secured into **P1** and anchored into the **P15** and **P16** leg support parts with #10 - 1" screws.

If you are using a different model of folding table legs, you may need to adjust the **P15** and **P16** part locations to match your table leg layout (refer to *Figure 7.2* for clarity).

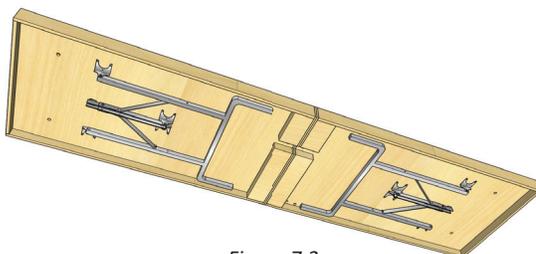


Figure 7.3

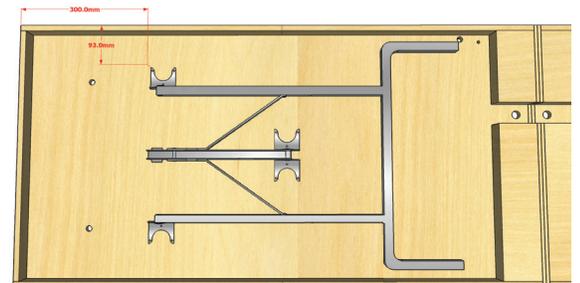


Figure 7.1

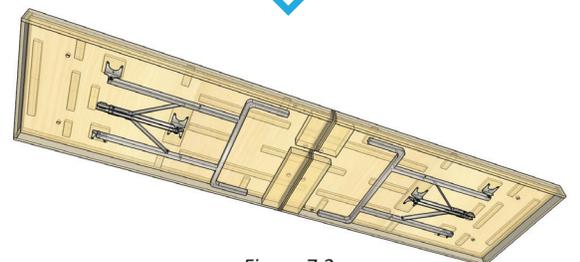


Figure 7.2

8

With both table sections pressed up against one another, place the hinges inset 30mm from the outer edge of the table. Before securing the hinges in place, ensure that the table sections are pressed tight against each other (use clamps to hold them together if you have them).

Then ensure that the middle of the hinge is placed directly above the seam that connects both table sections and secure it into place (the hinges should have screws included with them).

The hinges should span across the **P15** and **P16** parts on the table to ensure a strong, sturdy joint.

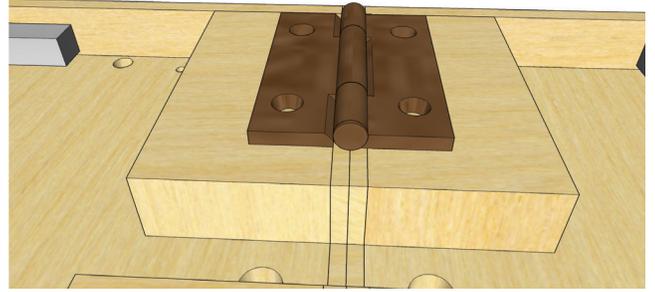


Figure 8.1

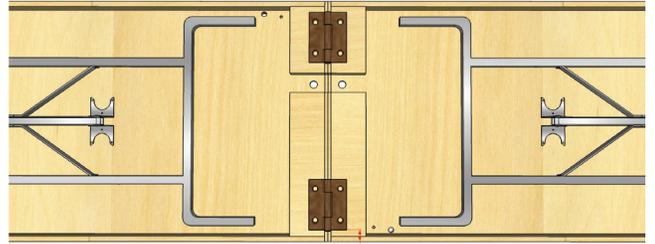


Figure 8.2

9

Fold the table in half and screw in four #8 - 1.5" screws (hole location is listed in *Figure 9.4*). Make sure that when the table is unfolded, the screw heads will line up and press on each other. Sink these screws far into the table so that approximately 1.5mm (1/16") is protruding out from **P4**.

Ensure that the screws are anchoring into the **P1** base part or the **P5/P6** parts underneath the table. Either part will ensure strong enough support. These screws will allow you to ensure that the table top is level across the mid-section fold between the two halves.

Unfold the table and stand it up. Each screw head should be pressing against the screw that was installed on the other section, directly across from it. If the table is over-folding and creating a slump in the middle, fold it back up and unscrew each screw about one quarter turn. Unfold the table again and repeat the same process if necessary until the table is level.

If the table isn't folding in enough, simply drive the screws in deeper (one quarter turn at a time) until the table is level.

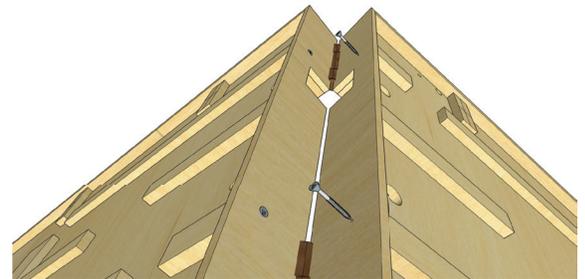


Figure 9.1

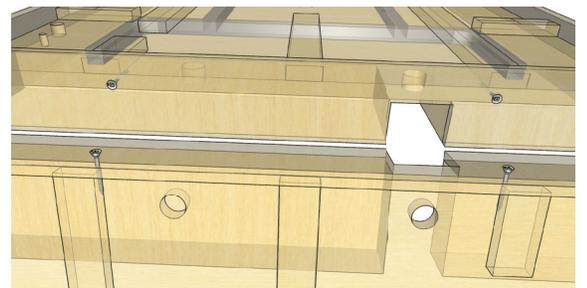


Figure 9.2



Screw heads press on one another

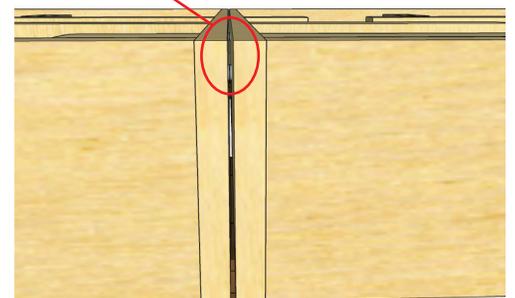


Figure 9.3



Figure 9.4

10

Congratulations! You have finished building the RaveTable frame.

At this point, add any miscellaneous hardware to the table as you see fit. A handle and a latch for when the table is folded is a really good idea.

You can then expand on that and add bottle openers, ping-pong ball holders, etc. if you would like.

Now you just have to install the electronics and you'll have a fully operational table!

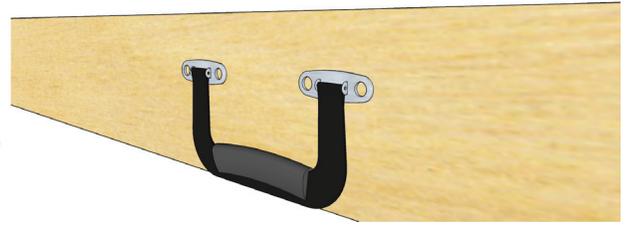


Figure 10.1



Make sure to anchor the screws into P1

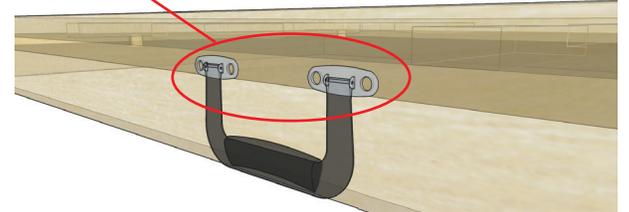


Figure 10.2

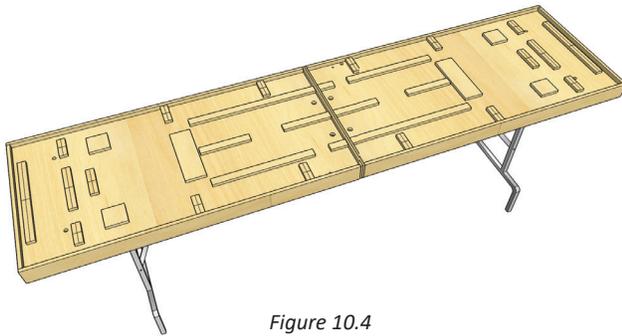


Figure 10.4

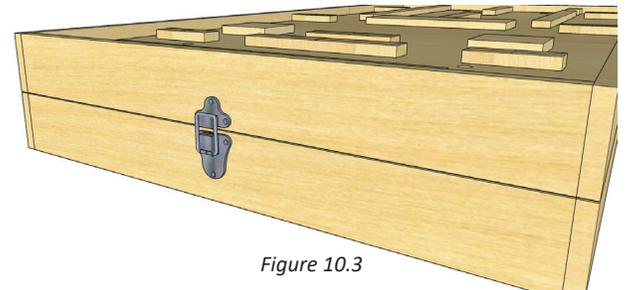
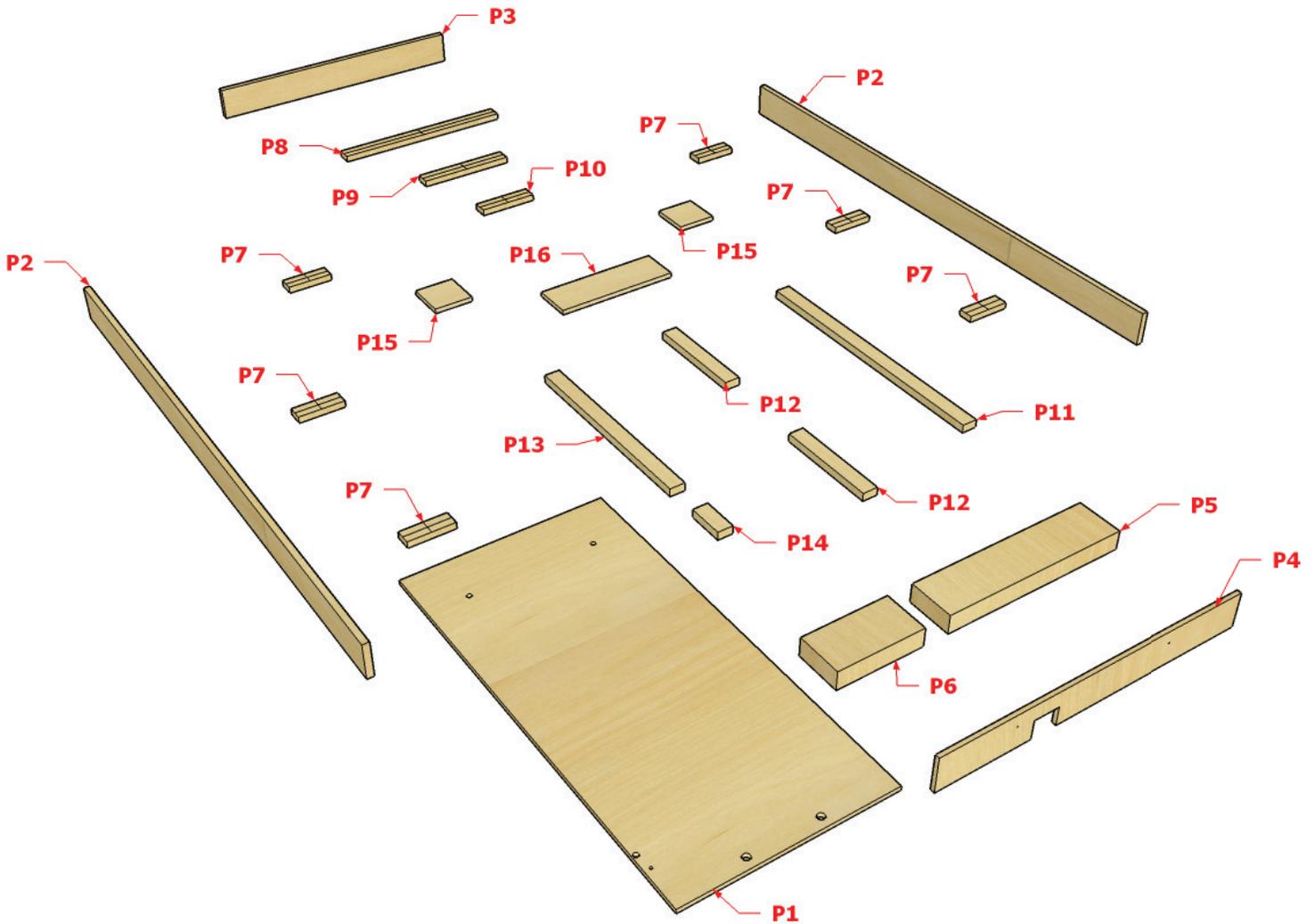


Figure 10.3

Now that you have finished constructing the table, please download the *“Electronic Installation Guide”* and review the steps to install the RaveTable Interactive LED Beer Pong Table Kit into your newly constructed table frame! Congratulations on finishing this build, take a quick moment to celebrate!



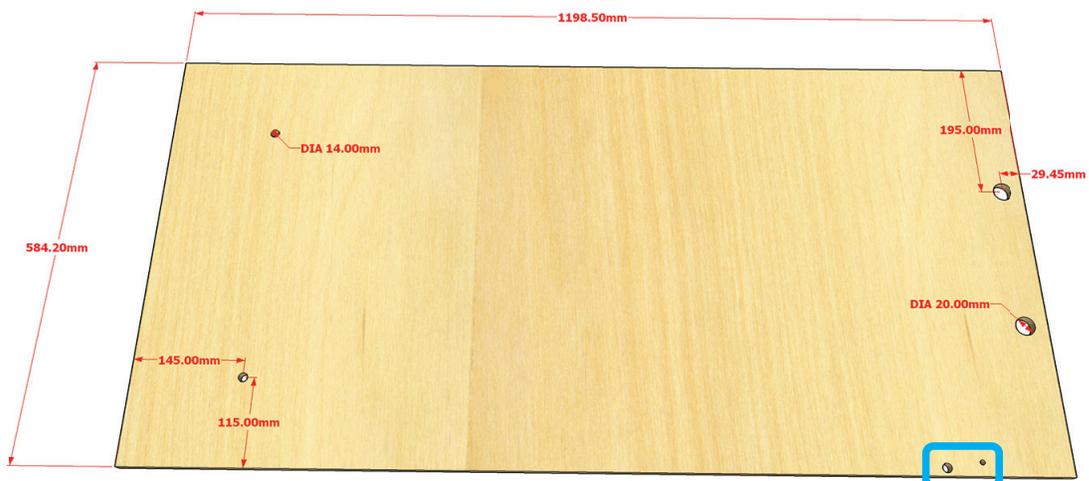
Parts



Part #	Material	Length (mm)	Width (mm)	Thickness (mm)	Qty	Notes
P1	Plywood	1199	584	12.7	2	Base support for both table sections
P2	Plywood	1211	70	12.7	4	Outer side walls for each table section
P3	Plywood	584	70	12.7	2	End walls for each table section
P4	Plywood	610	70	8.0 or 9.5	2	Center panels at table fold; Can be 8mm or 9.5mm thickness
P5	2x4 Lumber	364	89	38.1	2	Hinge Support Brace; A standard "2x4" cut to 364mm long
P6	2x4 Lumber	170	89	38.1	2	Hinge Support Brace; A standard "2x4" cut to 170mm long
P7	Plywood	90	30	12.7	14	RGB Ring support brackets
P8	Plywood	380	30	12.7	2	RGB Pod Rack end support bracket
P9	Plywood	200	30	12.7	2	RGB Pod Rack center support bracket
P10	Plywood	120	30	12.7	2	RGB Pod Rack front support bracket
P11	Plywood	535	30	12.7	2	LED Grid Support (Long)
P12	Plywood	200	30	12.7	4	LED Grid Support (Short)
P13	Plywood	400	30	12.7	2	Grid Support (Split #1)
P14	Plywood	70	30	12.7	2	Grid Support (Split #2)
P15	Plywood	80	80	12.7	4	Outer table leg supports
P16	Plywood	250	80	12.7	2	Inner table leg supports
P17	Frosted Acrylic	1220	610	3	2	One frosted acrylic top piece for each table-half

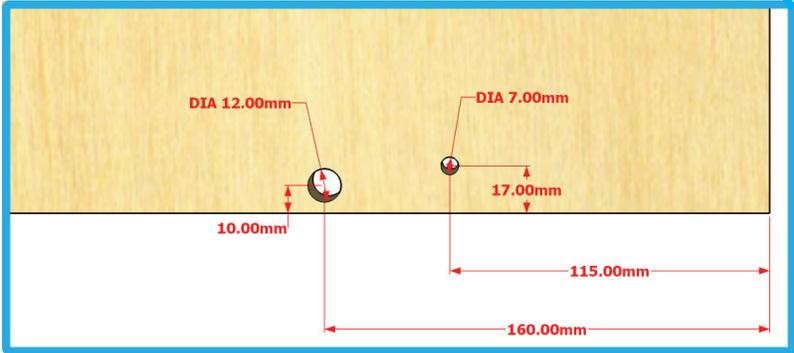
All parts are rounded to one whole number except for "Thickness"

P1 - 2pcs



Base Support

1198.5mm x 584.2mm x 12.7mm



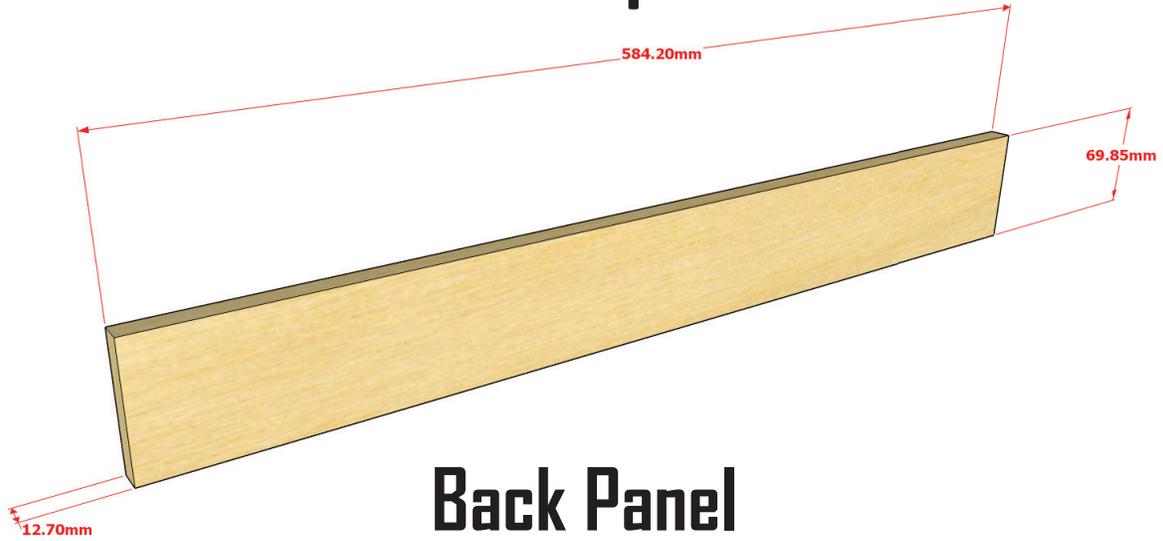
P2 - 4pcs



Side Panel

1211.2mm x 69.9mm x 12.7mm

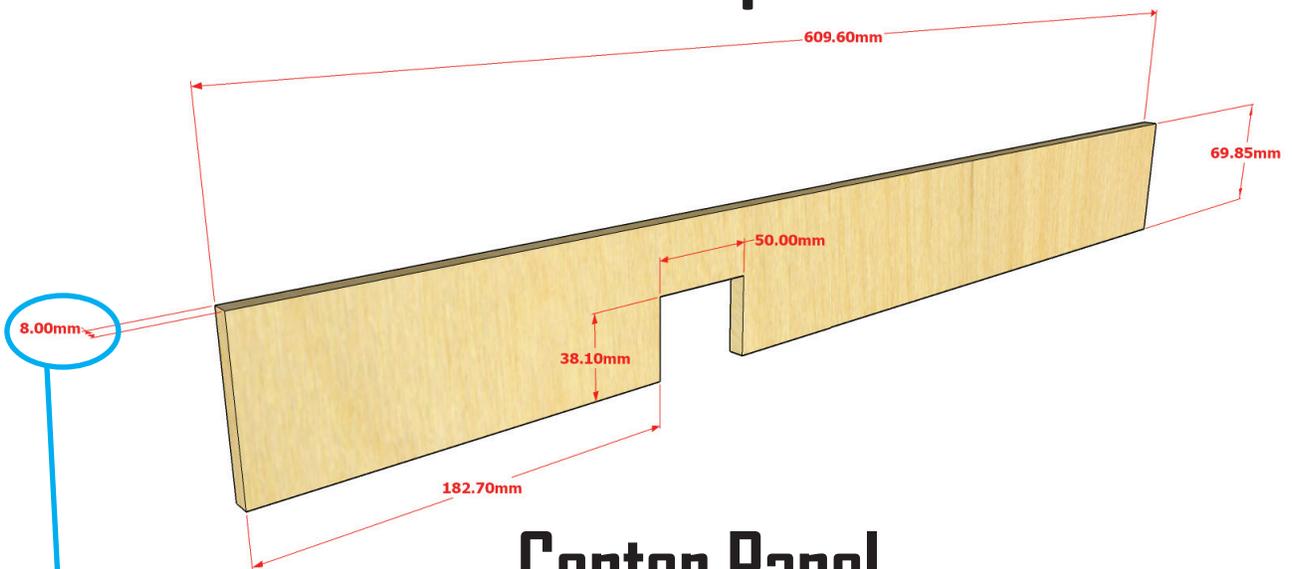
P3 - 2pcs



Back Panel

584.2mm x 69.9mm x 12.7mm

P4 - 2pcs

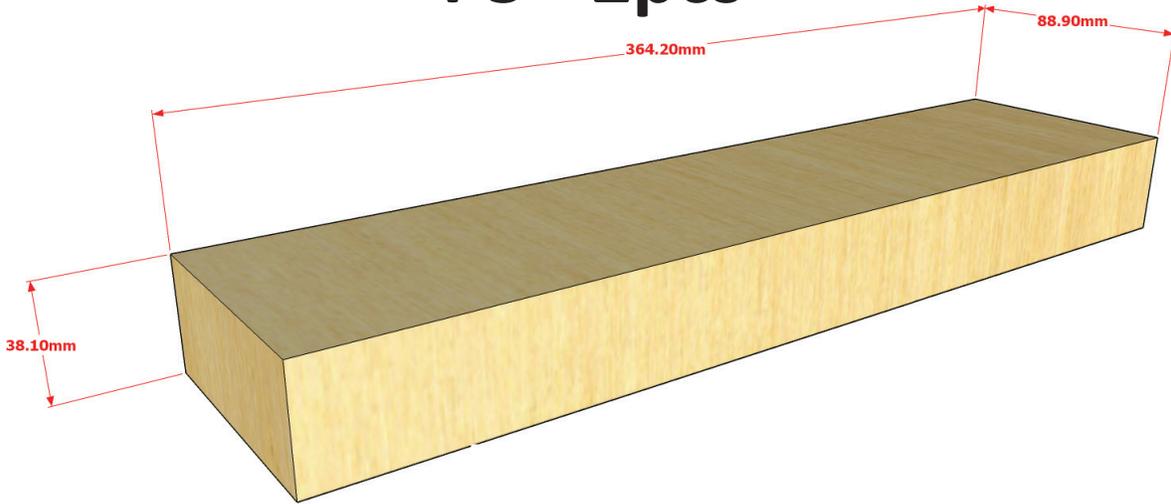


Center Panel

609.6mm x 69.9mm x 8mm

Note: Although the instructions here call for 8mm, 9.5mm (3/8") plywood will work just fine.

P5 - 2pcs

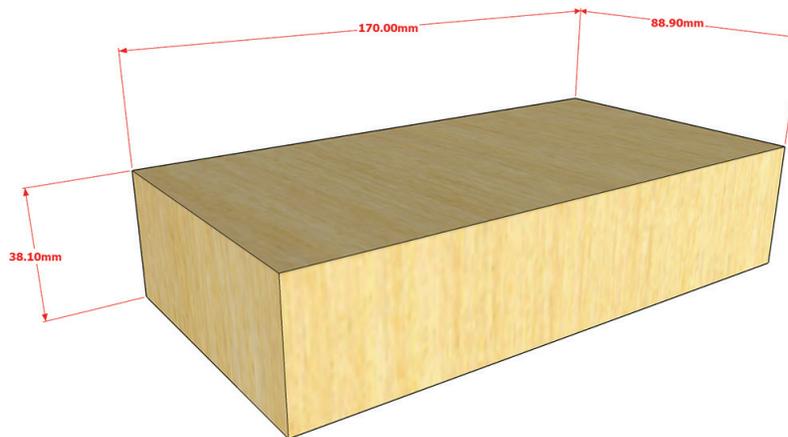


Hinge Support (Large)

364.2mm x 88.9mm x 38.1mm

Note: This piece is just a 364mm length cut off of a "2x4" piece of lumber.

P6 - 2pcs

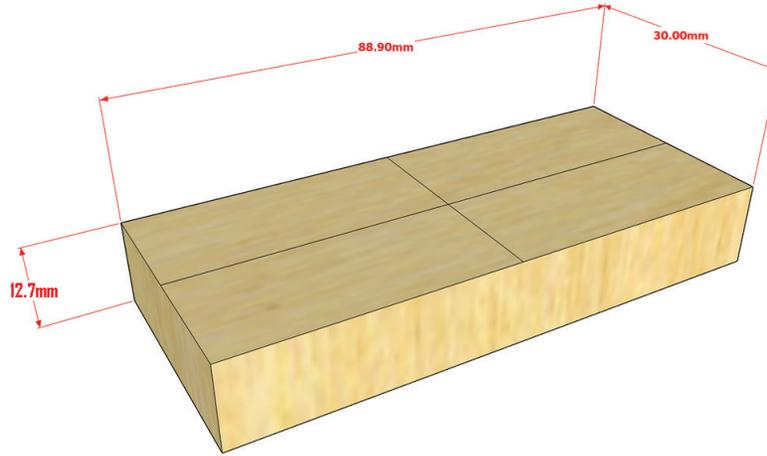


Hinge Support (Small)

170mm x 88.9mm x 38.1mm

Note: This piece is just a 170mm length cut off of a "2x4" piece of lumber.

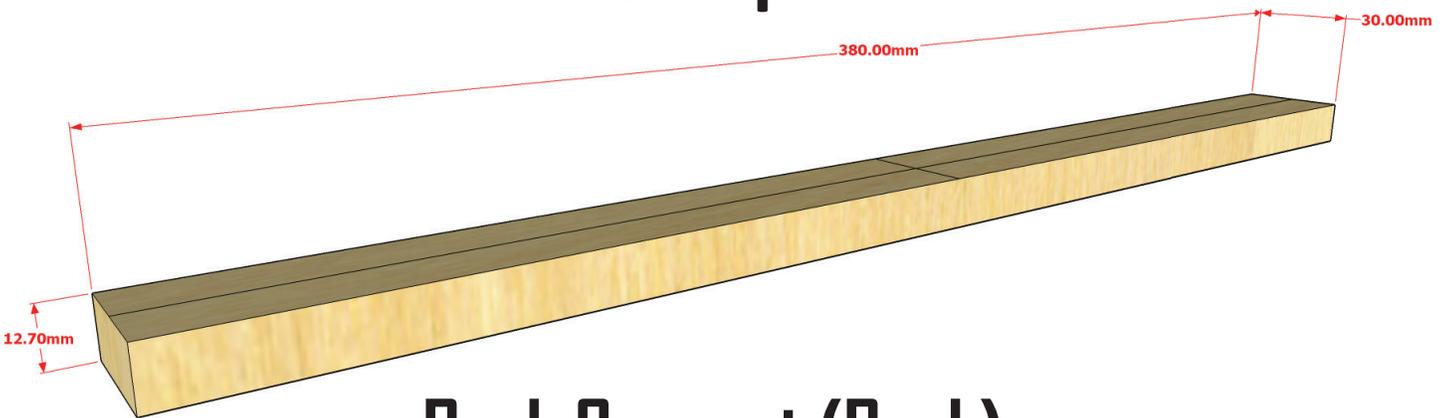
P7 - 14pcs



RGB Ring Support

88.9mm x 30mm x 12.7mm

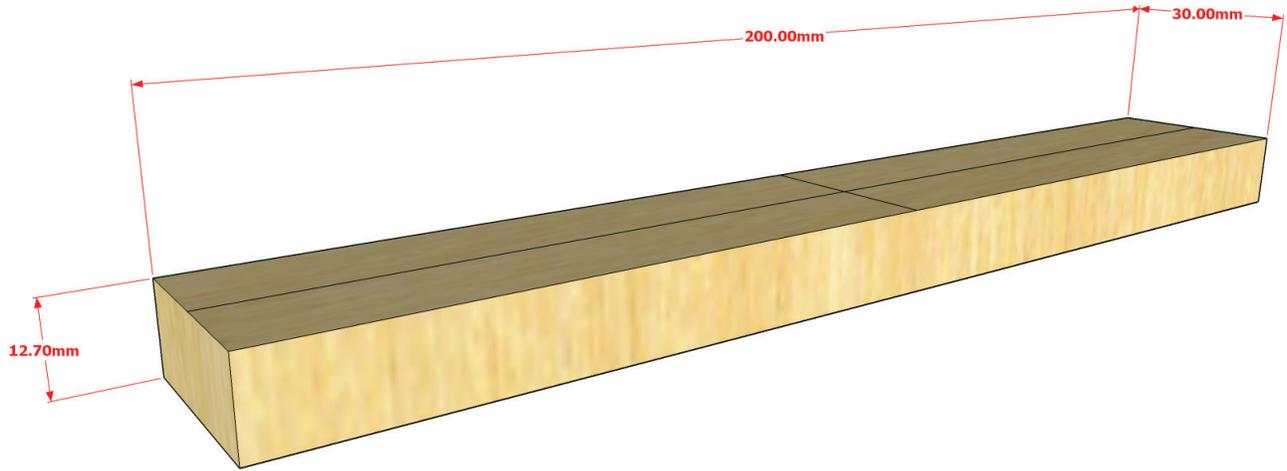
P8 - 2pcs



Rack Support (Back)

380mm x 30mm x 12.7mm

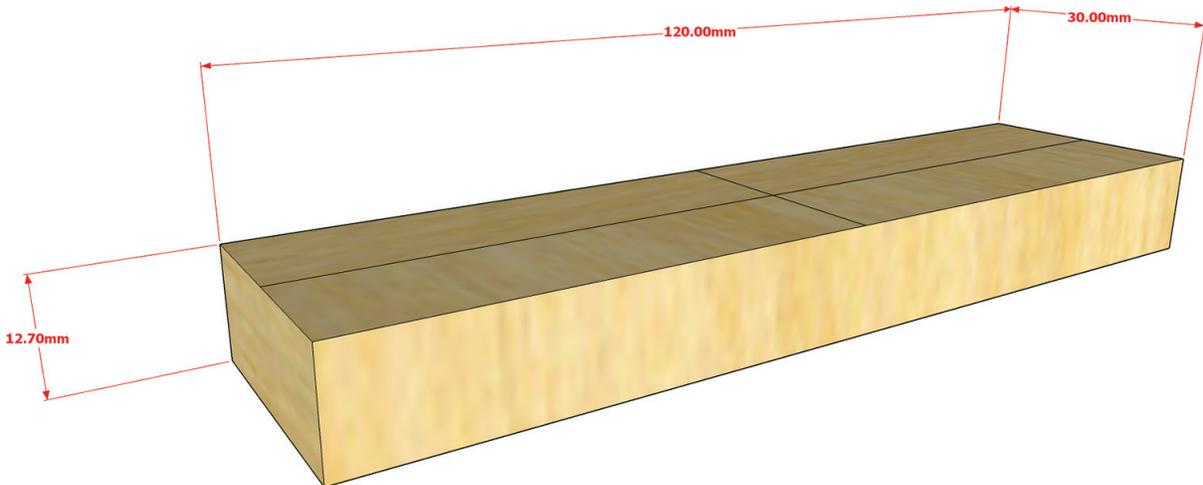
P9 - 2pcs



Rack Support (Center)

200mm x 30mm x 12.7mm

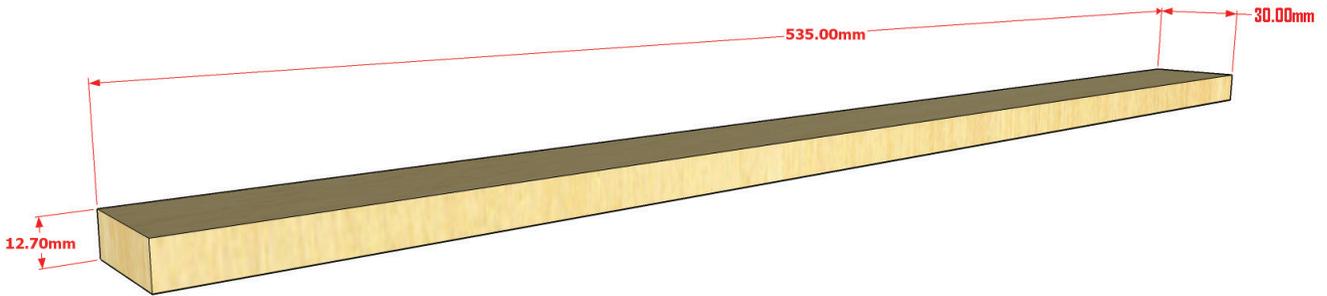
P10 - 2pcs



Rack Support (Front)

120mm x 30mm x 12.7mm

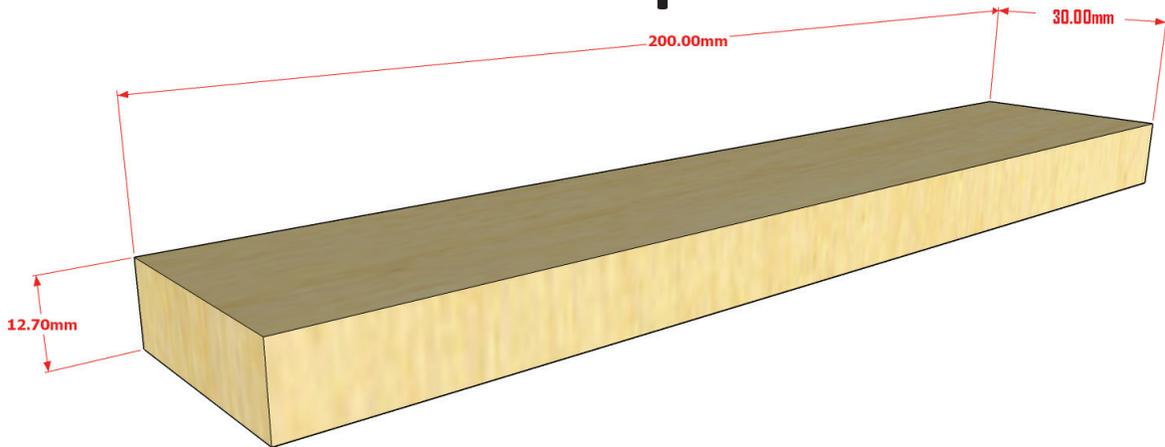
P11 - 2pcs



Grid Support (Long)

535mm x 30mm x 12.7mm

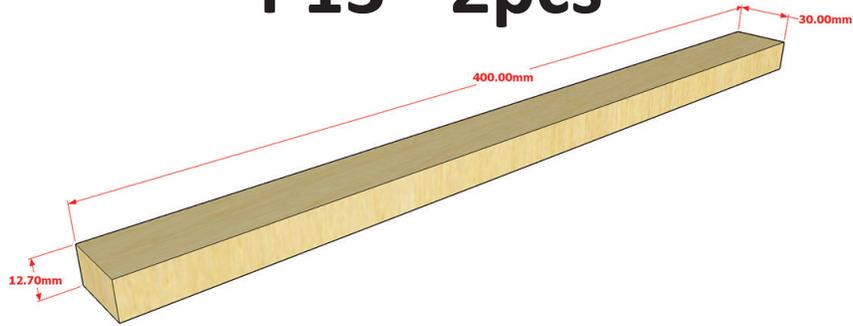
P12 - 4pcs



Grid Support (Short)

200mm x 30mm x 12.7mm

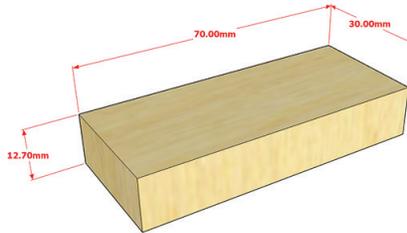
P13 - 2pcs



Grid Support (Split #1)

400mm x 30mm x 12.7mm

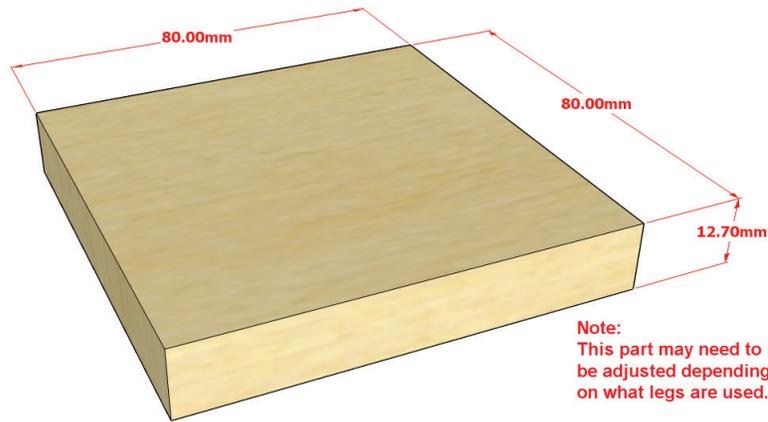
P14 - 2pcs



Grid Support (Split #2)

70mm x 30mm x 12.7mm

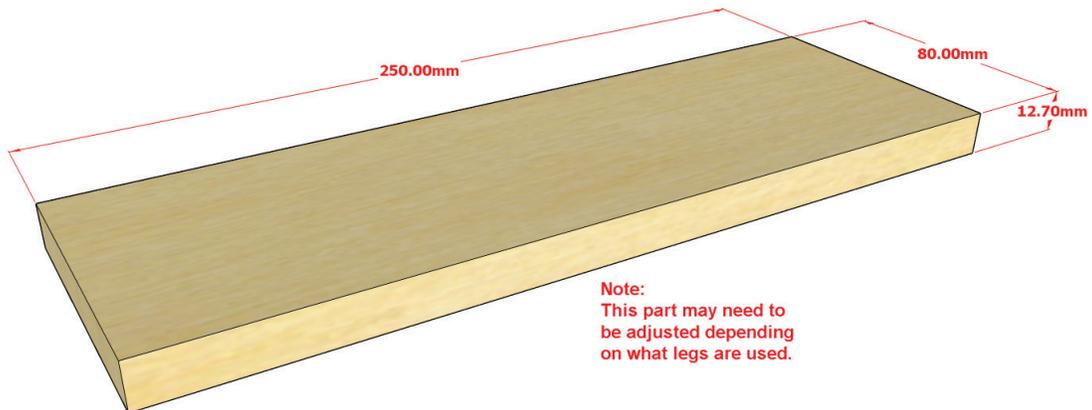
P15 - 4pcs



Outer Table Leg Supports

80mm x 80mm x 12.7mm

P16 - 2pcs



Inner Table Leg Supports

250mm x 80mm x 12.7mm