Recommended Tools & Helpful Items

Personal Safety Gear

Drill Driver Multi Bit Set

Clamps

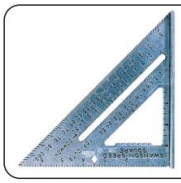
Circular Saw

Miter Saw

Jig Saw

Screws

1 1/2"
2"
2 1/2"
3"
3 1/2"
5"



Speed Square

Wood Glue

Wood Glue

Tape Measure

Framing Hammer

Kreg Jig

Pocket Hole Screws

1"
1 1/2"
2"
2 1/2"

Level

Drill

Staples Gun

Sander

Sander

If you're new to DIY woodworking and plan to continue, I recommend investing in high-quality tools and starting with the basics. This investment will pay off in the long run. By clicking on the images above, you can visit Amazon.com to get detailed information about each tool.

Saw horses

You can choose the materials that are suitable for the project you will build. I have added alternative links to some vehicles. Some are more affordable than others. However, I have carefully selected and listed them all according to the most preferred ones. You will always need it in the long run and it will do the job. I will be here to help you with your project or any questions you may have.

https://plansdiys.etsy.com

What this PDF file contains:

Page	Explanation
1:	Entry description
2-3:	Project description and necessary information
4-5-6:	Complete cut list and list of tools
7:	Actual and nominal dimensions, imperial metric conversion chart
8-9:	Important notes and tips
10:	Wood painting information
11-12:	General dimensions
13-22:	Assembly Process
23:	Completion of the project and general framework

How to Build a Patio Sofa

How to Build a Patio Sofa

The construction of this patio sofa is simple. It has a beautiful style that suits your living space. The screws we will use will provide durability. Building this patio sofa will be both funny and budget-friendly. Please read carefully to learn how to make a patio sofa. In this plan, you will have patio sofa plans, dimensions, and detailed instructions. Please review them carefully so you will understand when to cut and organize the pieces. The patio sofa-building process starts with legs and supports. Hardwood or pressure-treated boards are a popular choice, as well as red cedar, tik, white oak and pine. Pressure-treated timber is less stained, durable, and budget-friendly.

1) Starts by checking the list of tools to use for your DIY patio sofa. After collecting the missing tools, focus on purchasing materials.

2) Measure and cut all the pieces and prepare them. Measure the length twice before doing your cuts. Make sure to label each one.

Tips: Drill pilot holes in wood pieces using a power drill for easy connections.

3) Follow the project details for assembling the wood pieces.

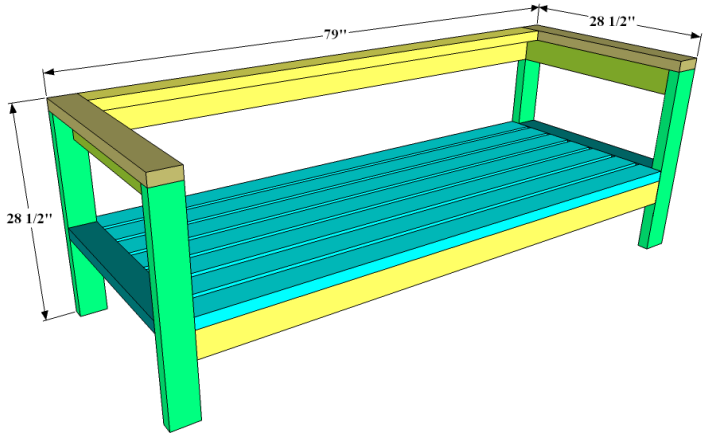
4) We will use 2", 2 1/2", and 5" thin wood screw and optional 2 1/2" or 2" Kreg Jig screws

5) You will secure use wood glue to the contact surface.

6) Fill any gaps and frame nail holes with wood putty.

7) Sand the entire Project with 150-220 grit or more sandpaper and dust pf before painting or staining your finished Project.

How to Build a Patio Sofa



Cut List

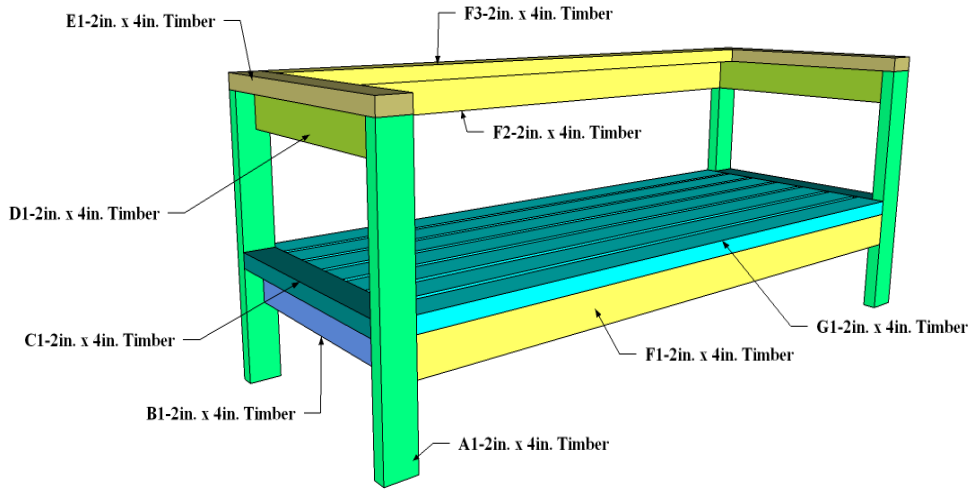
A1 -	4 – 2 x 4 x 27″	legs	9'
B1-	5 – 2 x 4 x 25 1/2″	lower support pieces between legs	10' 7 1/2"
C1 -	2– 2 x 4 x 25 1/2″	middle support pieces between legs	4' 3"
D1 -	2– 2 x 4 x 25 1/2″	upper support part between legs	4' 3"
E1 -	2– 2 x 4 x 28 1/2″	upper right and left parts	4' 9"
F1-F2-F3	4– 2 x 4 x 72″	front and back support parts between legs	12'
G1 -	7– 2 x 4 x 72″	sitting boards	42'

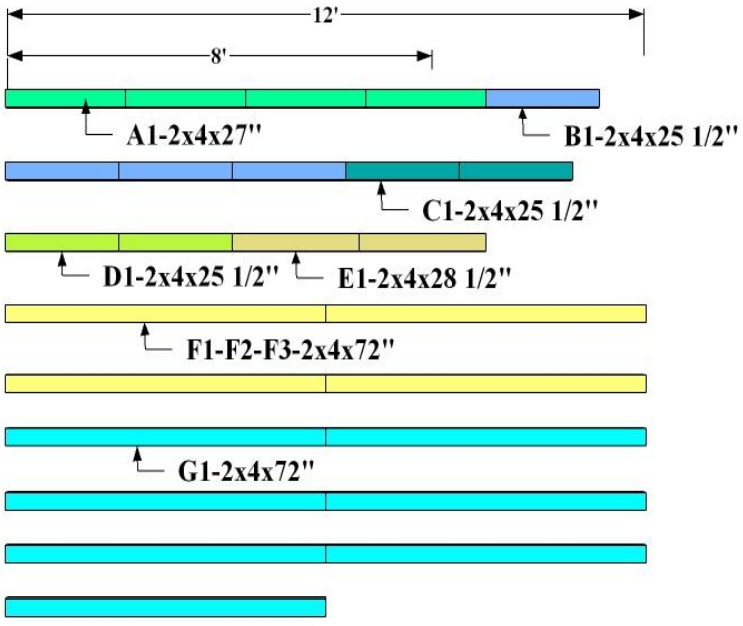
Total: 2x4x86' 10 1/2''

3 Pieces 2x4x12' and 1 Piece 2x4x8' Pressure treated timber (red cedar, tik, white oak and pine)

If you are going to screw using Kreg Jig, you can use 2" or 2 1/2" Pocket Hole Screws in all of the joints. For this, you will need 75 2 1/2" pocket hole screws, 30 1/2" wood screws, and 25 5" or 4 1/2" wood screws as needed. If all the screws are going to be regular wood screws, you will need 80 2" or 2 1/2" wood screws and 25 5" or 4 1/2" wood screws. You don't need to use all the screws you bought. I used more screws to make it stronger. However, you can reduce the number depending on the situation. It will be useful for you to review the General Screwing Information file.

Cutting Diagram





Recommended tool list

- Tape measure
- Pencil
- Safety Glasses
- Ear Protection
- Milter saw or circular saw
- Drill, driver
- Countersink drill bit, speed square
- Wood glue
- 2 1/2" wood screw.If you have it, it can be 2". 5" wood screw.If you have it, it can be 4 1/2" (2" or 1/2" Kreg Jig screw-Optional)
- Sanding, air compressor
- Stain/preferred paint coating:
  Water-Based Pre-Stain Wood Conditioner
  Water-Based Wood Stain mixed:
  Desert Sand and Pure White
  Water-Based polyacrylic
  * Coloring preferences are optional.

Use of Dowel for Screw Space

Measure the Screw Head Diameter: Typically, a 2-inch screw will have a head diameter of approximately 1/4 inch (0.25 inch) to 1/2 inch (0.5 inch). Measure this diameter with a caliper.

Choose the Dowel Head Size:

You should choose a dowel head that is slightly larger than the diameter of the screw head, so that it completely covers the screw. For example, if the screw head diameter is 0.4 inches, a 0.5 inch dowel head would be a good choice. If the screw head is larger, say 0.5 inches, then you can use a 5/8 inch dowel head.

Dowel Depth: The depth of the dowel should be deep enough to completely hide the screw head in order to cover the screw head. In most cases, a dowel that is 1/4 to 3/8 inch deep will be sufficient. If you are unsure of the measurements, a standard 3/8 inch or 1/2 inch dowel head is usually common and will do the job.

If you are going to use dowels to fill the gaps, you will need as many dowels as there are screws. Adjust the length of the dowels so that they come out of the gap and cut the remaining parts. Then sand to remove any roughness. Repeat this after each screwing to avoid difficulties later. I recommend that you review the General Screwing Information file for all these screwing and other operations.

Imperial / Metric Conversion Chart

inch	inch	mm
1/32	0.0312	0.794
1/16	0.0625	1.588
3/32	0.0938	2.383
1/8	0.1250	3.175
5/32	0.1563	3.970
3/16	0.1875	4.763
1/4	0.2500	6.350
5/16	0.3125	7.938
3/8	0.3750	9.525
7/16	0.4375	11.11
1/2	0.5000	12.70
9/16	0.5625	14.29
5/8	0.6250	15.88
11/16	0.6875	17.46
3/4	0.7500	19.05
7/8	0.8750	22.23
1	1.000	25.40
1 1/8	1.125	28.58
1 1/4	1.250	31.75
1 3/8	1.375	34.93
1 1/2	1.500	38.10
1 5/8	1.625	41.28
1 3/4	1.750	44.45

inch	inch	mm
1 7/8	1.875	47.63
2	2.000	50.80
2 1/4	2.250	57.15
2 3/8	2.375	60.33
2 1/2	2.500	63.50
2 5/8	2.625	66.68
2 3/4	2.750	69.85
2 7/8	2.875	73.03
3	3.000	76.20
3 1/4	3.250	82.55
3 1/2	3.500	88.90
3 3/4	3.750	95.25
4	4.000	101.60
4 1/4	4.250	107.95
4 1/2	4.500	114.30
4 3/4	4.750	120.65
5	5.000	127.00
5 1/4	5.250	133.35
5 1/2	5.500	139.70
5 3/4	5.750	146.05
6	6.000	152.40
6 1/4	6.250	158.75
6 1/2	6.500	165.10

inch	inch	mm
6 3/4	6.750	171.45
7	7.000	177.80
7 1/4	7.250	184.15
7 1/2	7.500	190.50
7 3/4	7.750	196.85
8	8.000	203.20
8 1/4	8.250	209.55
8 1/2	8.500	215.90
8 3/4	8.750	222.25
9	9.000	228.60
9 1/4	9.250	234.95
9 1/2	9.500	241.30
9 3/4	9.750	247.65
10	10.00	254.00
10 1/4	10.250	260.35
10 1/2	10.500	266.70
10 3/4	10.750	273.05
11	11.000	279.40
12	12.000	304.80
14	14.000	355.60
16	16.000	406.40
18	18.000	457.20
20	20.000	508.00

Nominal Size	Actual Size
1x2	3/4" x 1-1/2"
1x3	3/4" x 2-1/2"
1x4	3/4" x 3-1/2"
1x6	3/4" x 5-1/2"
1x8	3/4" x 7-1/4"
1x10	3/4" x 9-1/4"
1x12	3/4" x 11-1/4"
2x2	1-1/2" x 1-1/2"
2x3	1-1/2" x 2-1/2"
2x4	1-1/2" x 3-1/2"
2x6	1-1/2" x 5-1/2"
2x8	1-1/2" x 7-1/4"
2x10	1-1/2" x 9-1/4"
2x12	1-1/2" x 11-1/4"
4x4	3-1/2" x 3-1/2"
4x6	3-1/2" x 5-1/2"
6x6	5-1/2" x 5-1/2"

Important Notes:

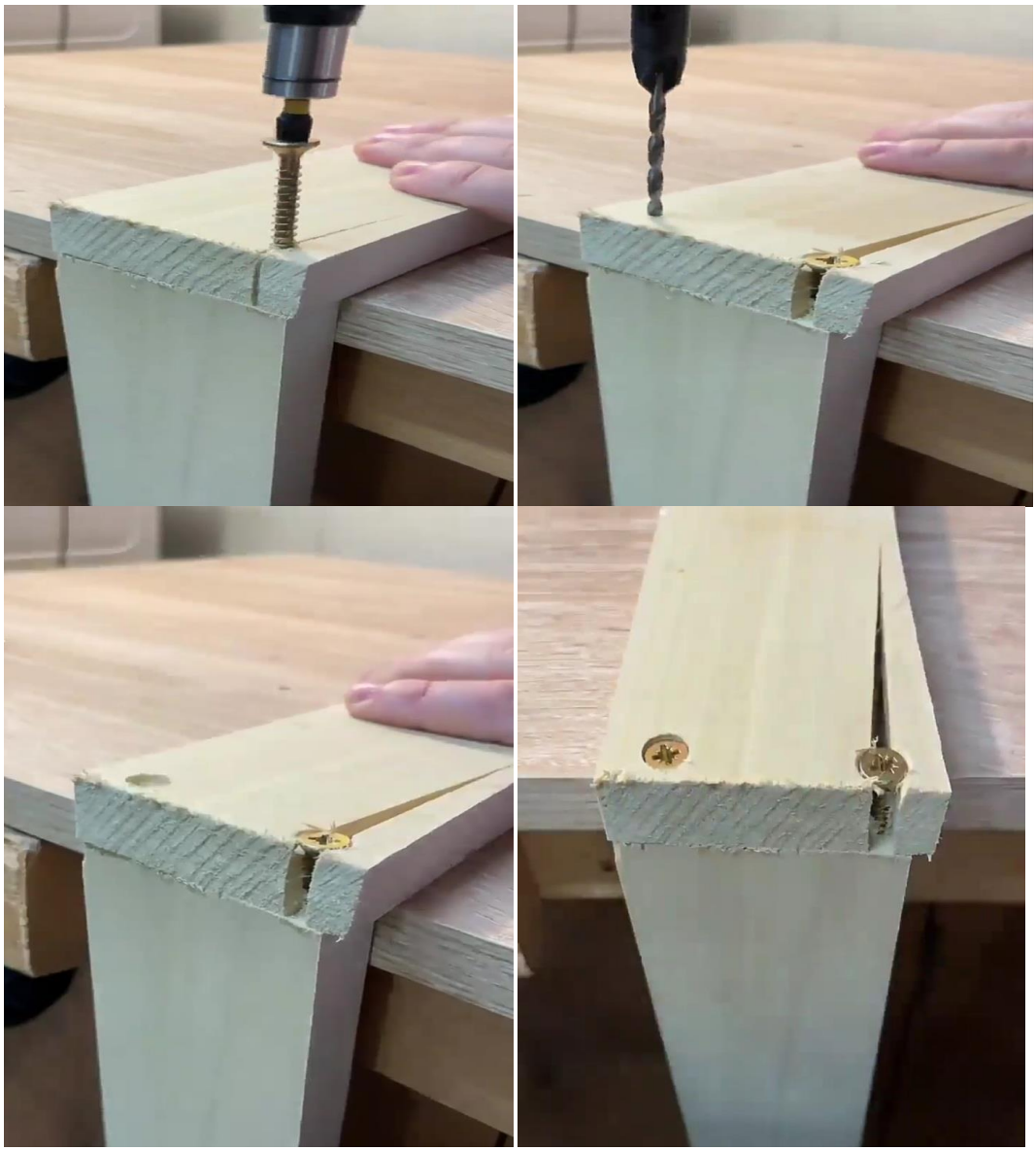
Use a countersink drill bit to pre-drill ALL holes before inserting screws to avoid splitting the wood and make the screw heads sit flush with the wood.

There may be slight differences in the path of the screws to avoid encountering two screws that are close together.

Before you put the screw on the tip of the drill while doing the screwing operations, you should make a circle on the top of the wood for the screw entry by drawing a circle with the drill bit itself. If you do this, the piece of wood will not crack.

Tips:

To screw any wood screw without damaging the wood, you can heat the screw with a lighter for 4-5 seconds and then screw it in.



Instead of screwing directly as shown in the picture, it is a much better method to first insert a wood drill rod into the tip of the drill and drill a screw hole by drilling the wood. Then you can do the screwing process without damaging the wood.

Wood painting information:

First, sand the wood with 150 grit or higher sandpaper to achieve a smooth, even surface before staining. Thoroughly remove all dust from the wood by using a vacuum with a hose attachment, then wipe clean with a damp cloth. Then wiping clean with a damp cloth. First, apply Pre-Stain Wood Conditioner to the boards.

Apply the Pre-Stain Wood Conditioner and allow it to penetrate the wood for just 1-5 minutes, then remove excess conditioner that has not soaked into the wood with a clean rag

Apply Water Based Wood Stain to all of the wood. You can the color Desert Sand mixed for 1 x 3 boards and the color Pure White mixed for the left and right legs. What I love about the water-based stain is 1) how easy clean-up is… 2) how little odor the stain has… 3) the colors. You can get everything from bold, colorful shades to neutral wood tones to light, creamy cottage and ocean-inspired stains.

Apply the stain using a foam brush, and allow it to penetrate the wood no longer than 3 minutes. It is very fast-drying, so work in small sections! Wipe the wood with a clean cloth to remove any stain that has not soaked into the wood. Allow the stain to dry 24 hours before applying a protective finish.

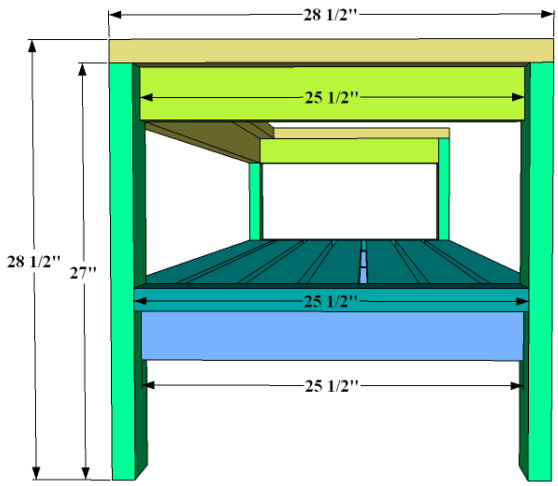
Tip: It will be easier to wear a pair of gloves while wiping the excess stain to keep our hands clean than to wash our hands.

After the stain has dried 24 hours, apply a thin coat of Water Based Polycrylic (I used the clear matte finish) using a brush. Allow to dry at least 2 hours, then sand with a very fine 220 grit sandpaper and remove all dust. Apply a second and third coat, drying and sanding in between each layer. The wood will need 3 hours to dry before handling and 24 hours before it will be fully cured.

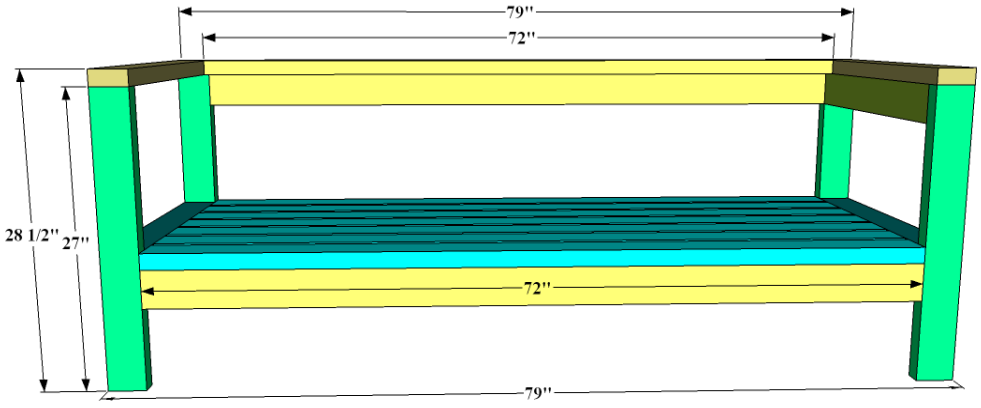
If you've ever used polyurethane on top of white paint and seen the yellow stains that appeared once the poly dried, you know how important it is to make sure you're using the right topcoat.

General Dimensions:

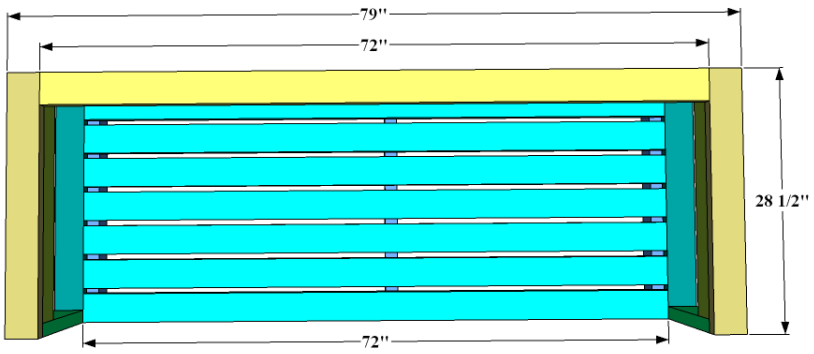
Side View:



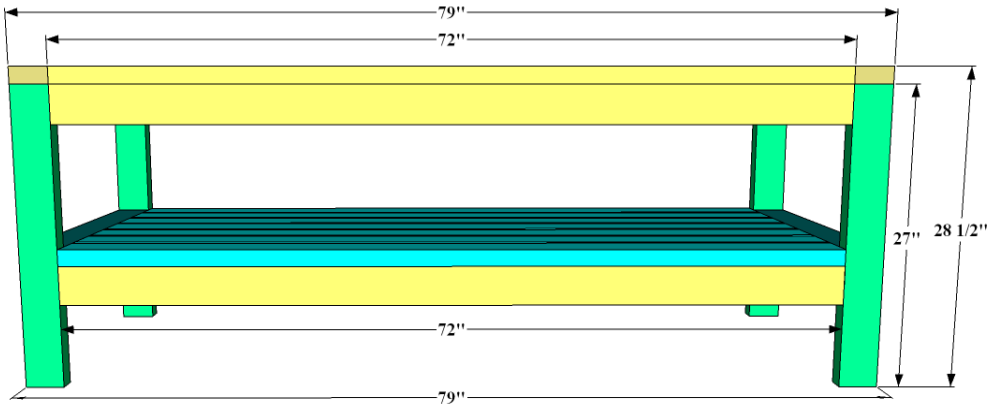
Front View:



Top View:



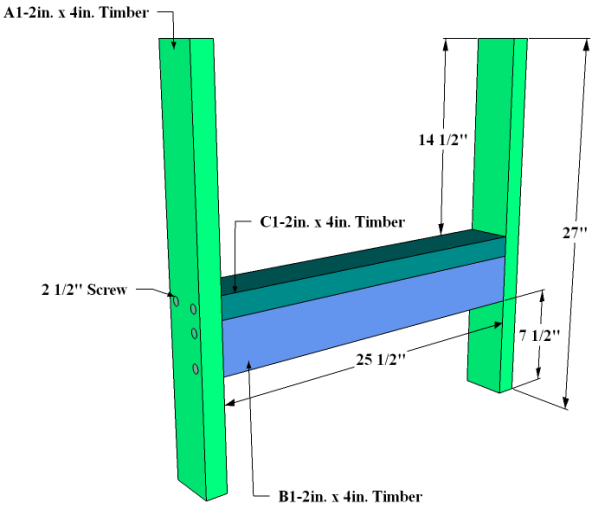
Back View:

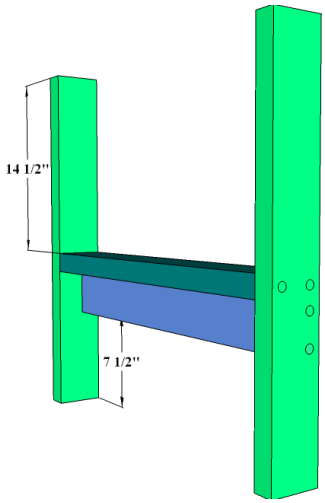


Assembly Process:

Step 1:

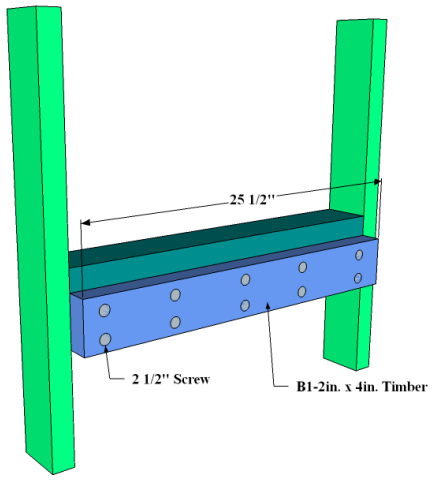
First we measure and mark 7 1/2" from the bottom of the A1 feet to the top. Then, just above the marked place, we place the B1 piece as in the picture and paste it. Then we place the C1 piece horizontally just above the B1 piece and glue it. After the drying process is completed, we stick the other A1 foot on the ends of the B1 and C1 parts in the same way. We are screwing from the outside of both feet as in the picture. We use 2 1/2" screws here.





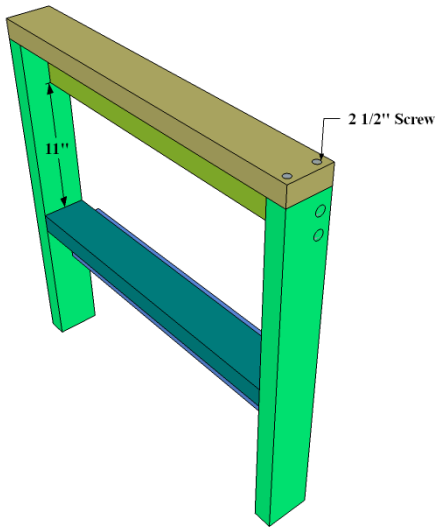
Step 2:

Now we glue the second piece of B1 on top of the first one, and after the wood glue dries, we screw it as in the picture. It is important that the screwings are frequent and numerous in order to be strong.

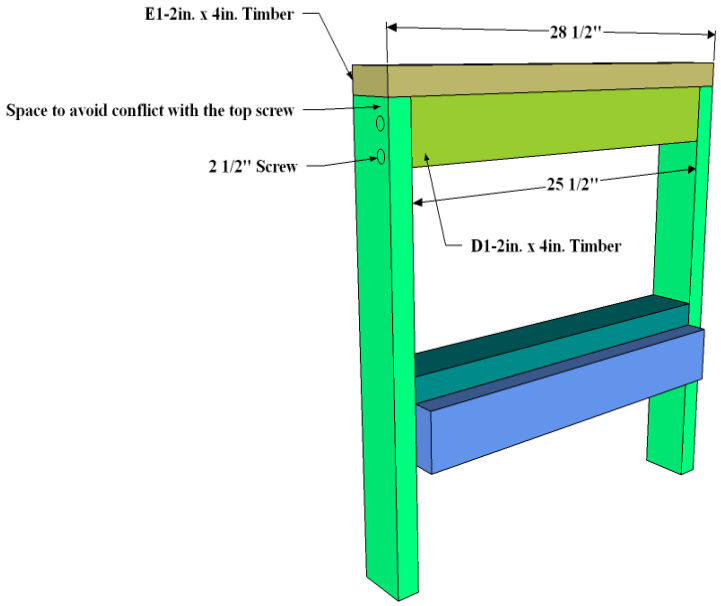


Step 3:

Now we stick the E1 piece on top of the A1 legs so that it coincides with the right and left ends and screw it from the top.



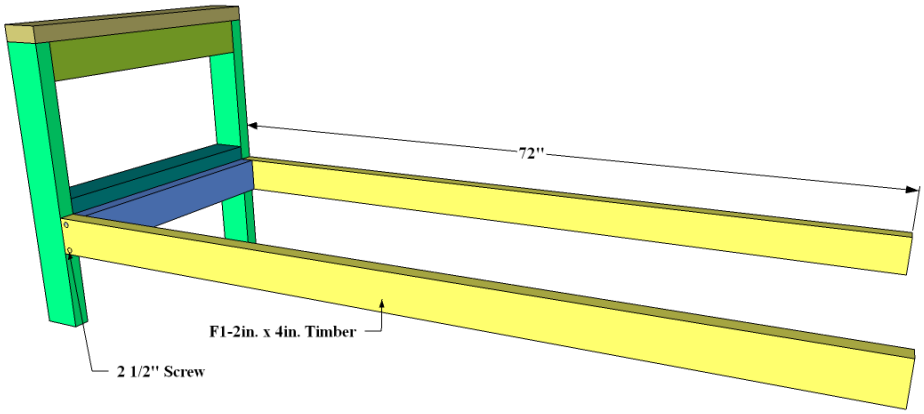
Then we place the D1 piece under the E1 piece as in the picture and screw it from the sides. When screwing in from the sides, it is good to leave some space so that the top screw does not overlap with the previous screw.



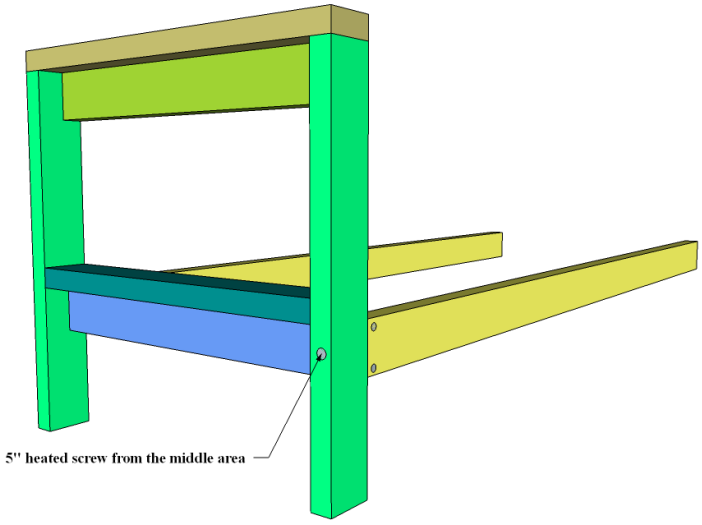
Now we have completed the first leg, and now we are making the second leg ready by repeating the operations we have done so far.

Step 4:

Now we glue the F1 pieces to the front and back ends of the second B1 piece as in the picture. After drying, we screw it with 2 of 2 1/2" screws from the outside of the F1 parts. It will make our job easier to put the ends of the F1 pieces on a piece with the same height.

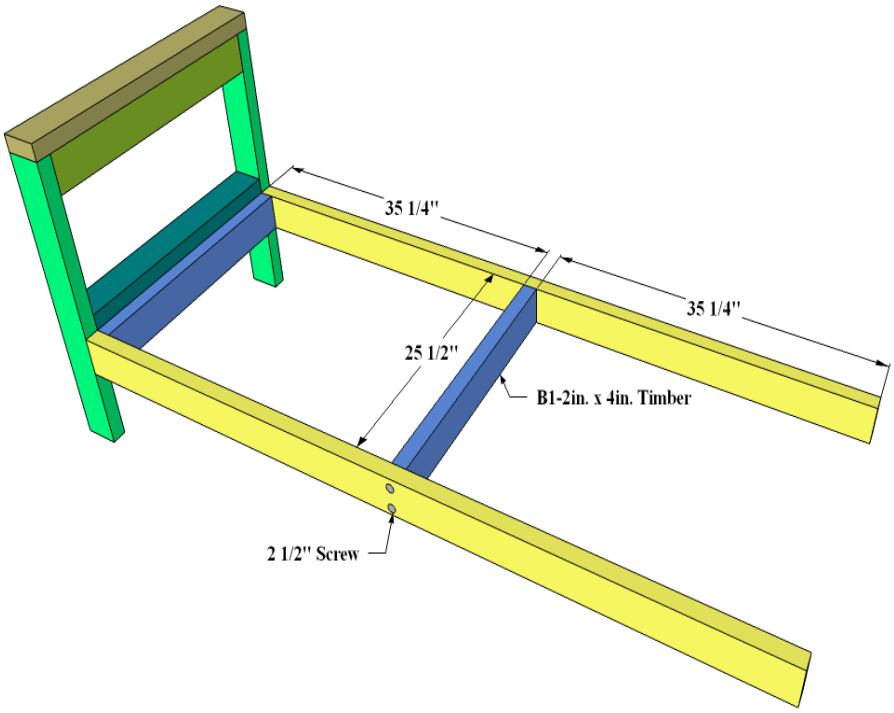


Then, we make one more screwing from the outside of the A1 feet to coincide with the middle of the F1 part to make it more robust. We use a 5" screw here and if we heat this screw carefully for 4-5 seconds with a lighter and screw it in, it will prevent it from damaging the wood.



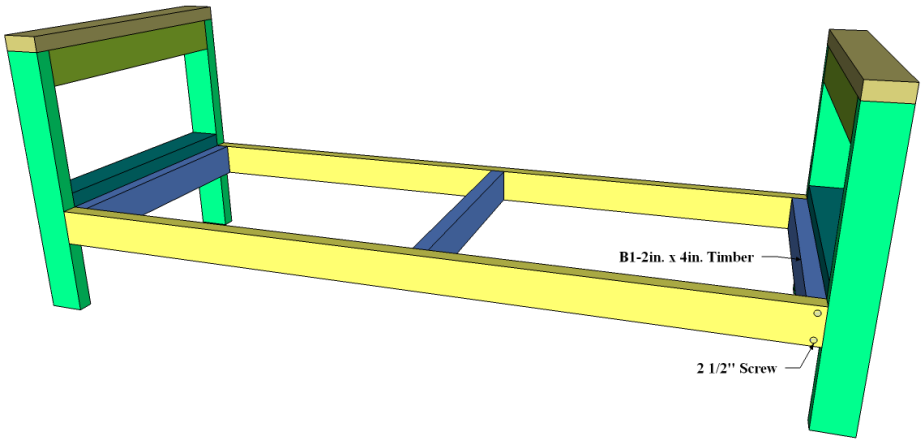
Step 5:

Now we measure and mark a distance of 35 1/4' from the right and left ends of the F1 piece to the inside. We glue the third piece of B1 to the middle part. After it dries, we screw it from the outside.

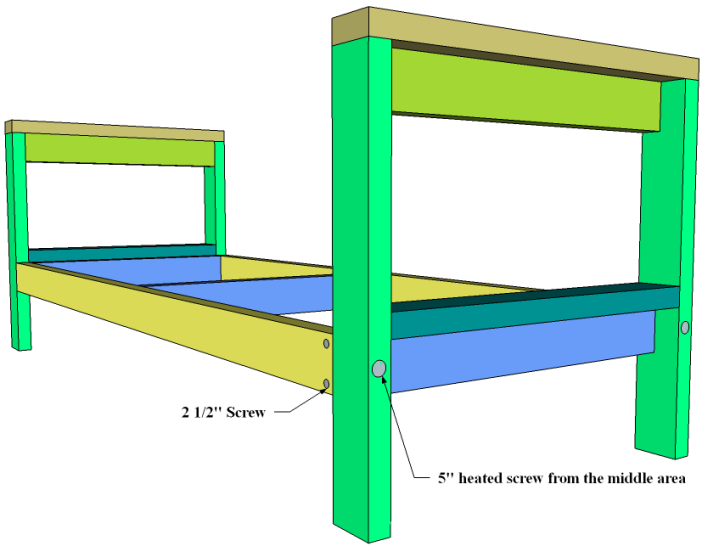


Step 6:

Now we place the second leg, which we completed before, between the F1 parts as in the picture. After drying, we screw it from the outer part of the F1 parts and integrate them with the B1 parts.

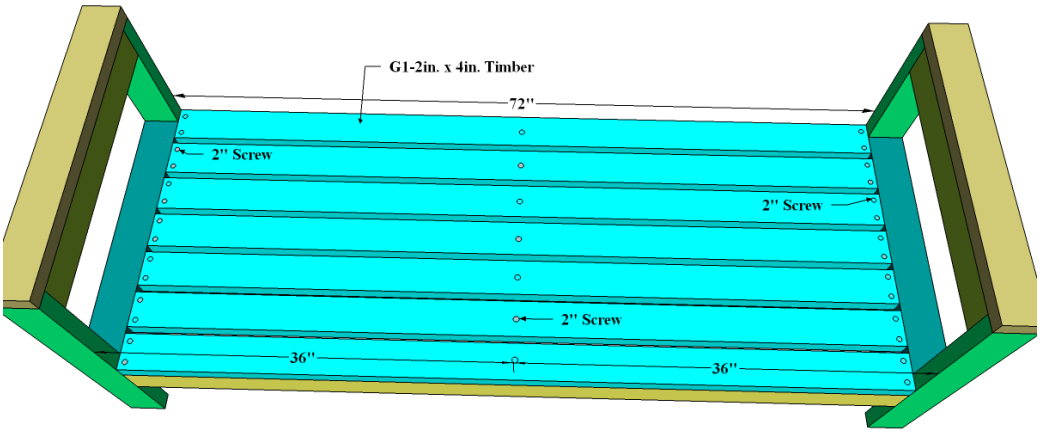


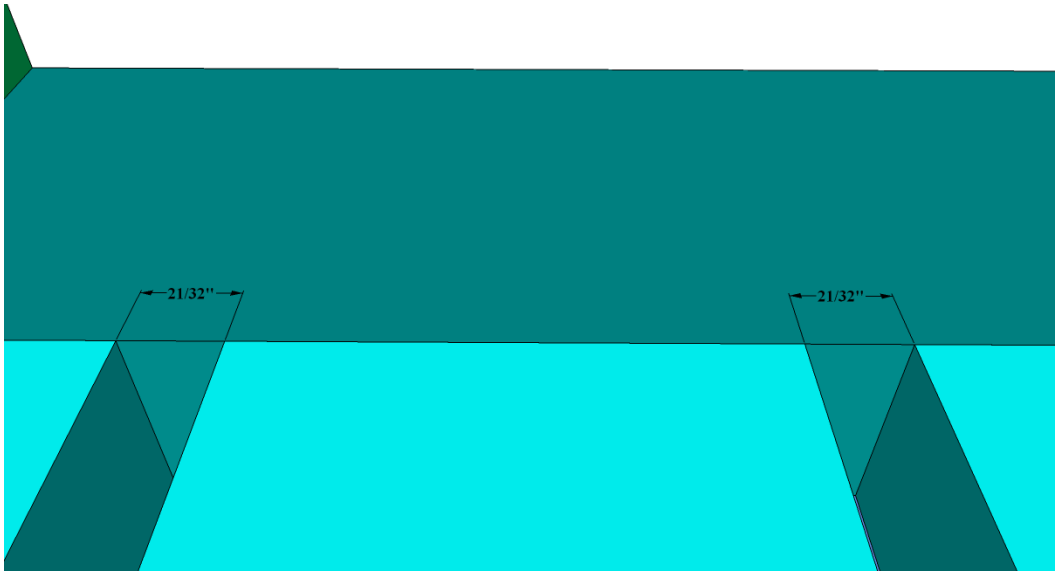
Then, we make one more screwing from the outside of the A1 feet to coincide with the middle of the F1 part to make it more robust. We use a 5" screw here and if we heat this screw carefully for 4-5 seconds with a lighter and screw it in, it will prevent it from damaging the wood.



Step 7:

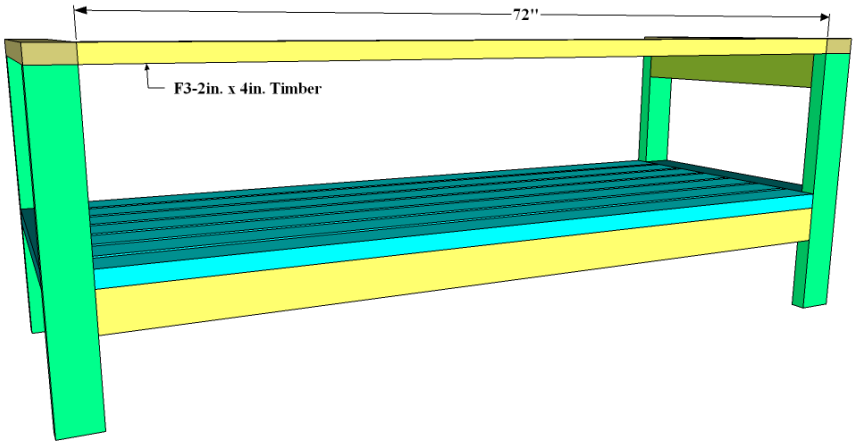
Now, starting from the front or rear end, we place the G1 boards aligned with the outside of the A1 legs and glue them to the junction areas. Then we place the other G1 boards with a 21/32" (0.66") gap between them and glue them completely to the second B1 and middle brace B1 pieces. After the drying process is completed, we screw it from the right, left and middle parts to the lower B1 parts as in the picture. It would be better to use 2" screws here.

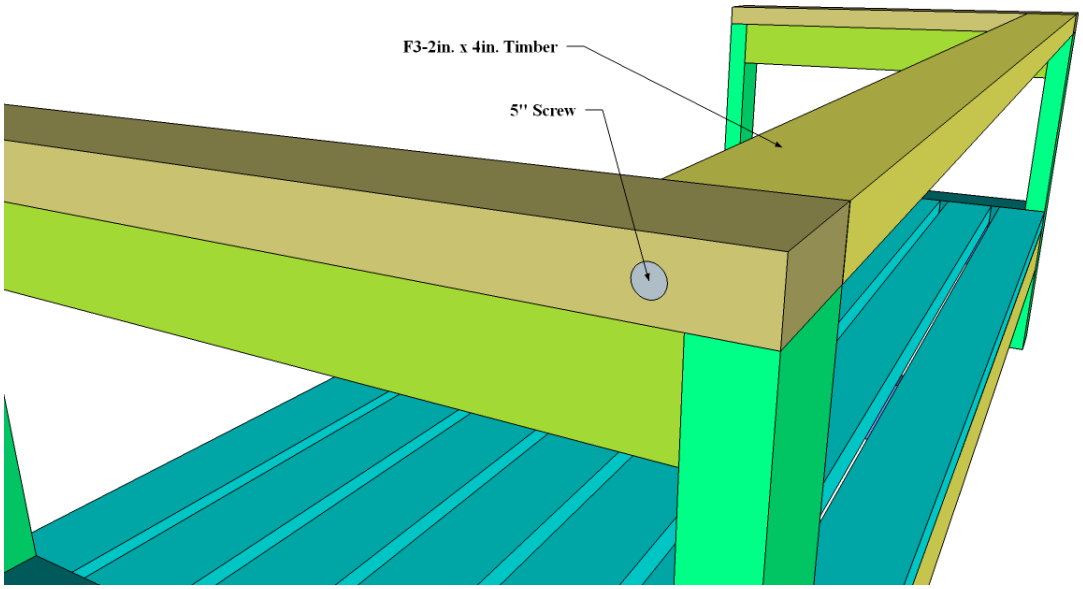




Step 8:

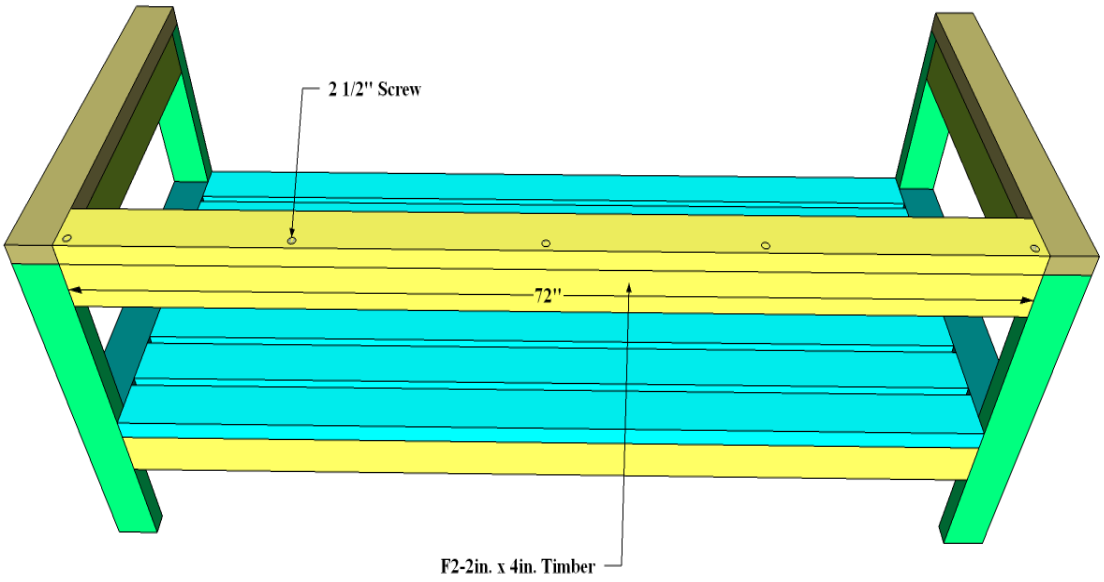
Now we place the F3 piece between the E1 pieces and glue it. After it dries, we screw the E1 piece from the outside as in the picture. Here we use 5" screws. To avoid damaging the wood, it will be helpful to heat the screw with a lighter for 3-4 seconds before screwing in.



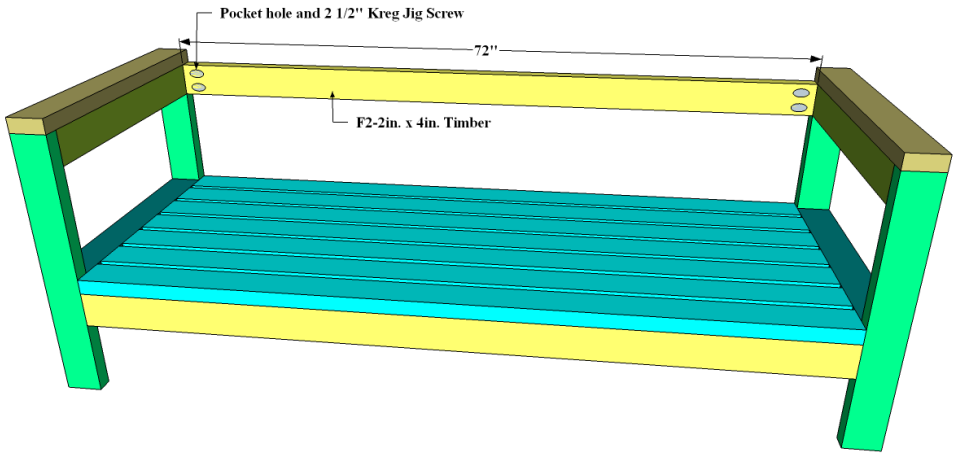


Step 9:

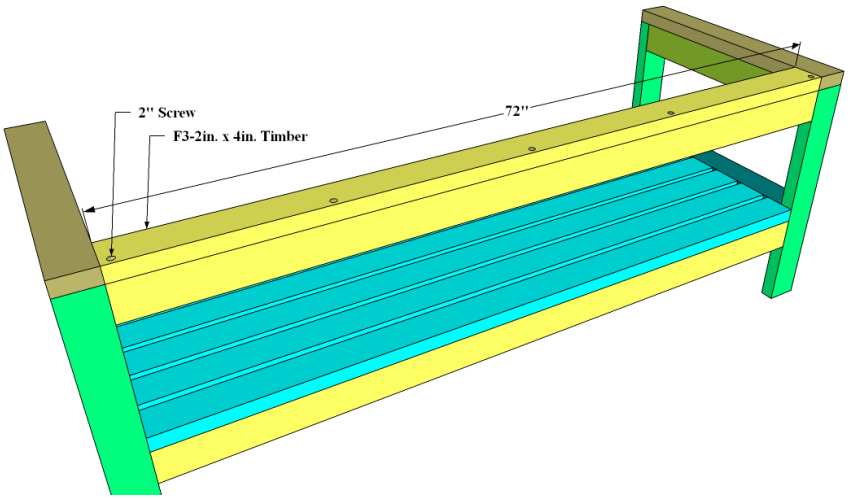
Now we align the F2 pieces under the F3 pieces, place it as in the picture and paste it. After it dries, we screw it from the outside of the F3 part using 5 or more screws as in the picture.



If you wish, you can place the F2 part first. First, we will drill pocket holes from the right and left ends of the F2 piece. For this, we adjust your Kreg Jig apparatus according to 1 1/2" wood and open the pocket holes. Then we place it between the E1 parts and screw it using 2 1/2" Kreg Jig screws.



Then we place the upper F3 part as in the picture and screw it to the lower F2 part. Then we screw it from the outer middle part of the E1 part to the F3 part, as we did in the previous process.



We complete our patio sofa project.

My first priority is your satisfaction.

I really put a lot of time and effort into this job. If you want to support me, you can evaluate my project by visiting my PlansDIYs Etsy store. The reviews you will make are very important for the development of my business.

https://plansdiys.etsy.com

In addition, you can buy all products in my store with a 50% discount with the ''BIGSALE50'' code special for you.

I hope it has been an enjoyable wood-building project.

I wish you happy days!