

Coffee table 42"x 24"



1 - Tools and Material list

Tools for wood:

Table saw
miter saw / jig saw
Jointer
Planer
Sander
Biscuit joiner
Drill or driver
3/8" drill clamps
Chalk
Leveling tool
Dust mask and safety glasses
Paint brush
damp and dry cotton cloth

Tools for metal:

Gloves
Welding machine and protection
Grinder
Cut off wheel
Chop Saw (for metal)
Screw gun/drill
Metal driving bit
Paint brush

Materials and cut list:

table top:

2" lumber cut to 6" x 42", quantity: 4
or
2" solid wood board cut to 42" x 24", quantity: 1

table stand:

Bolts 1/4" x 2" x Ø15, quantity: 6
Bolts 1/4" x 3" x Ø15, quantity: 4
square rubber base: 2" x 2", quantity: 4
degreaser
black spray and clear coat paint for metal
2" x 2" tube cut to 16", quantity: 6
1" x 1" tube cut to 34", quantity: 2

table base:

1 1/2" lumber cut to 4" x 42", quantity: 4
or
1 1/2" lumber cut to 16" x 42", quantity: 1
1" metal tubes cut to 16", quantity: 2
Bolts 1/4" x 1 1/2" x Ø15, quantity: 6

wood finish:

Sandpaper 120-grit, 180-grit and 220-grit
Polyurethane
wood conditioner

2- Preparing the lumber

if you use scraps of wood:

Choose a bit bigger sizes to have the right dimensions after milling and preparing the lumber.

Mill the lumber:

if the boards are warped, do this for step for each piece apart: keep a downward pressure to flatten both faces using a jig saw over a jointer.

Mill the boards at 2" thick

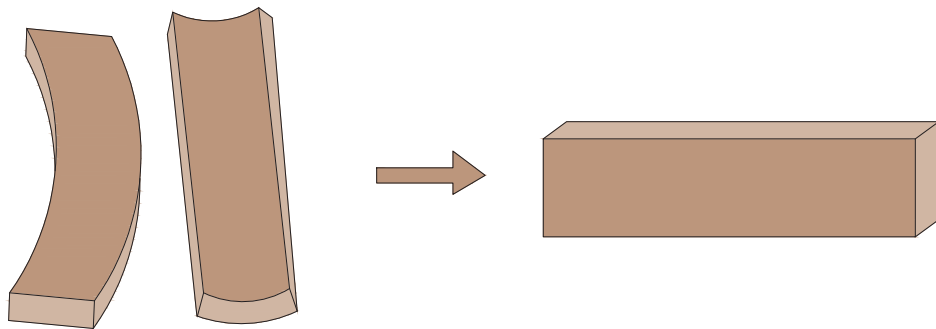
Rip to width, joint the edges straight and square using a table saw and cut to their final width of 6".

Place the boards on a flat surface and arrange for length trimming.

Any crook in the board should face down.

Square the ends and cut parts to length.

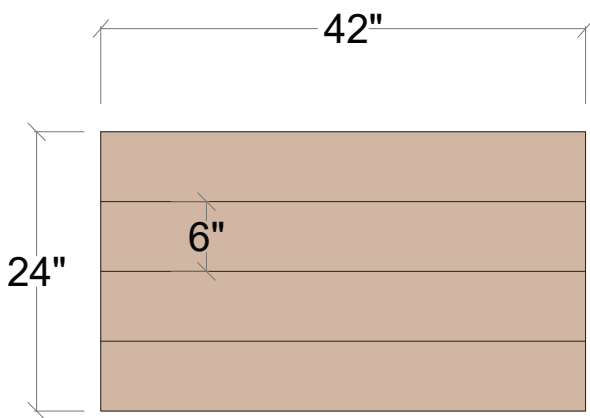
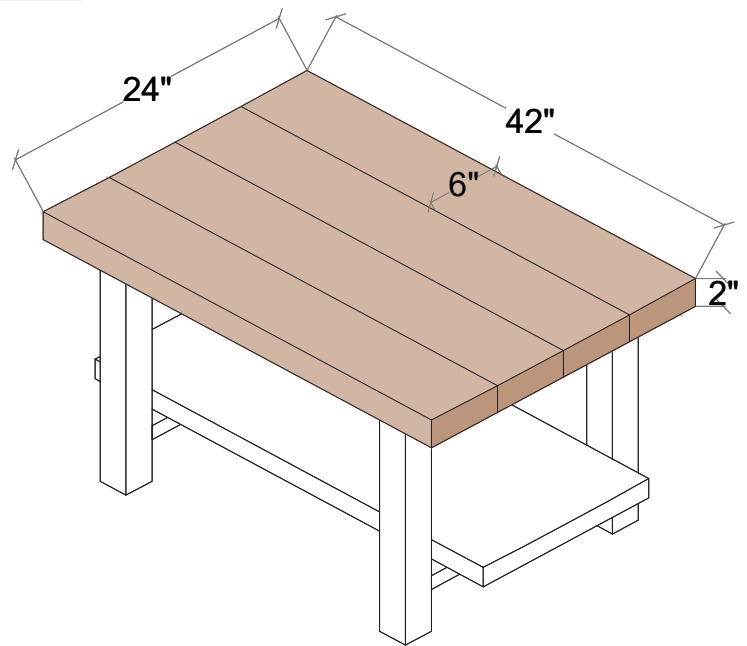
Work from long to short (to avoid cutting a piece too short.)



3 - Table top

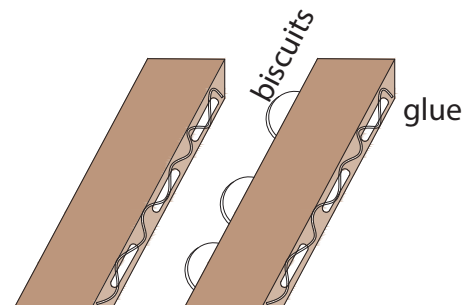
Dimensions and quantities of lumber for the top are as below:

2" lumber cut to 6" x 42", quantity: 4
or
2" solid wood board cut to 42" x 24",
quantity" 1



top plan

If you have: 2" lumber cut to 6" x 42", quantity: 4
Use Biscuits for Alignment:
Make a tight mortise joint on each of the 2" sides of the
lumber (every 8" apart).
Spread glue on each side of the boards, use clamping
pressure and secure the lumber. Scrape glue excess
then wait a few hours until dry.



FINISH: to get a raw wood look

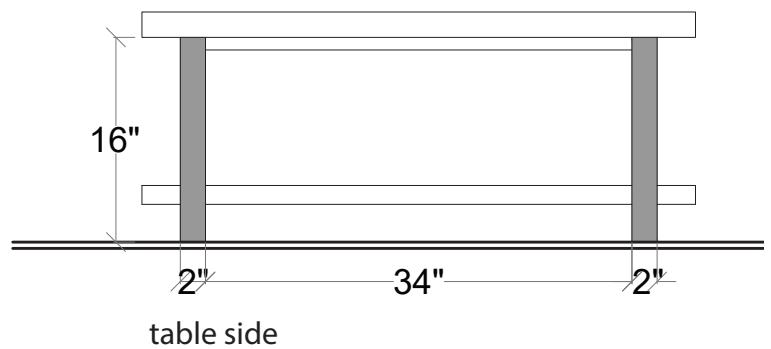
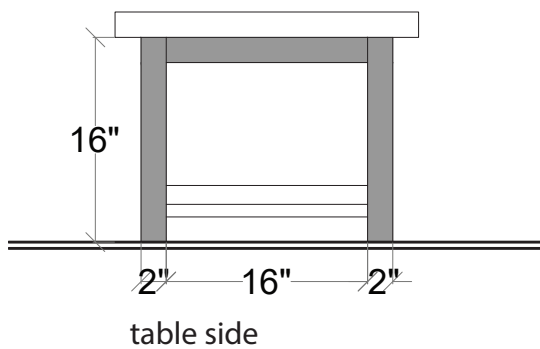
- Sand the wood lightly, always working with the grain.
- Use 120-grit sandpaper and continue with finer 180-grit sandpaper.
- Brush a coat of wood conditioner onto the wood to allow the stain to soak in and wait from 15 minutes to 2 hours maximum.
- Apply wood stain to the surface using a paintbrush or clean cotton cloth and wait for 10 minutes to allow the stain to soak into the wood.
- Wipe off all the excess stain with a dry cloth. Wait overnight for the stain to dry completely.
- Apply an even coat of polyurethane onto the surface, back and forth in the direction of the wood grain and wait to dry overnight.
- Sand lightly with 220-grit sandpaper.
- Clean the surface with a damp cloth, dry the surface, then brush on a second coat of polyurethane.

4.1 - Table stand

Dimensions and quantities of metal for the stands are as below:

2" x 2" tube cut to 16", quantity: 6

Bolts 1/4" x 3" x Ø15, quantity: 4



Cut the metal bars using the dimensions above as a reference.

Drill 2 of Ø15 holes onto each of the horizontal metal 2" tube and weld the bars using the drawings above as a reference , do this for both sides.

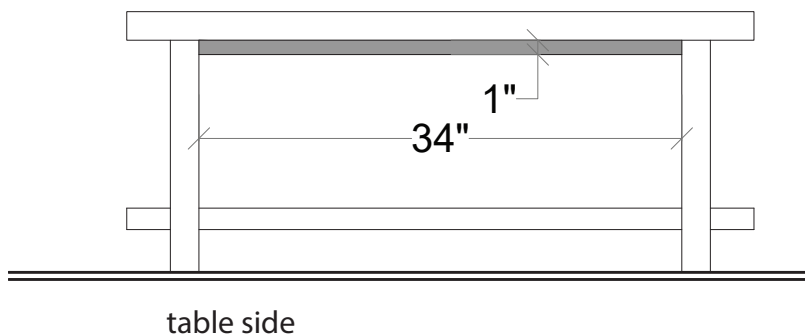
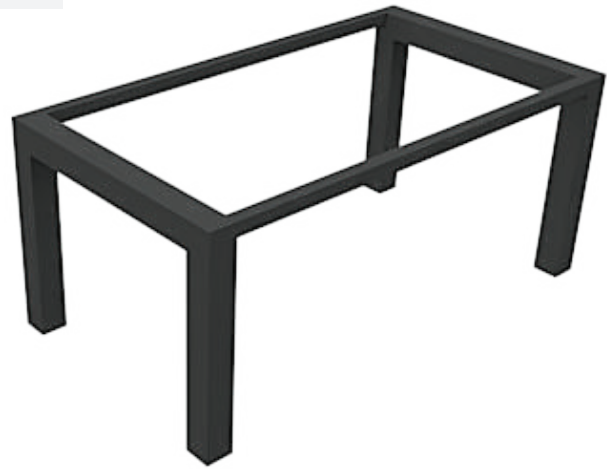
Clean up and smooth out any slag with a grinder.



4.2 - Table stand

Dimensions and quantities of metal for the stands are as below:

1"x1" tube cut to 34", quantity: 2
Bolts 1/4"x 2"x Ø15, quantity: 6

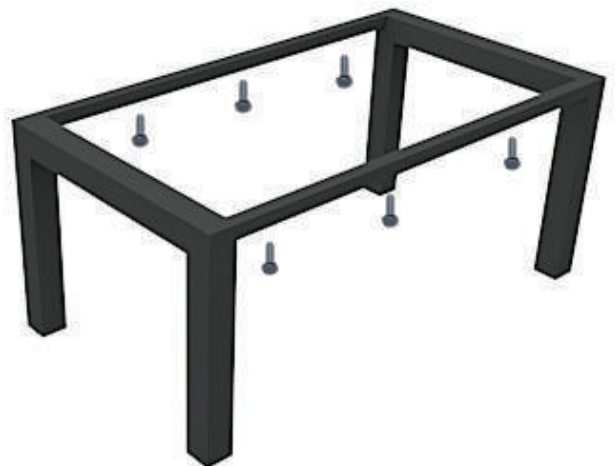


Cut the metal bars using the dimensions above as a reference.

Drill 3 of Ø15 holes onto each of the horizontal metal 1" tubes.

Weld all the metal using the drawings above as a reference.

Clean up and smooth out any slag with a grinder.



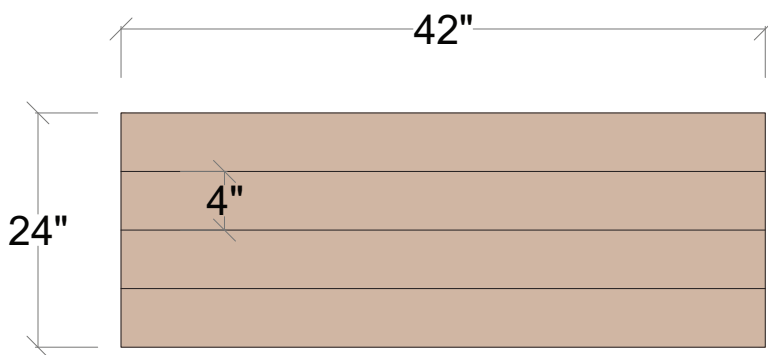
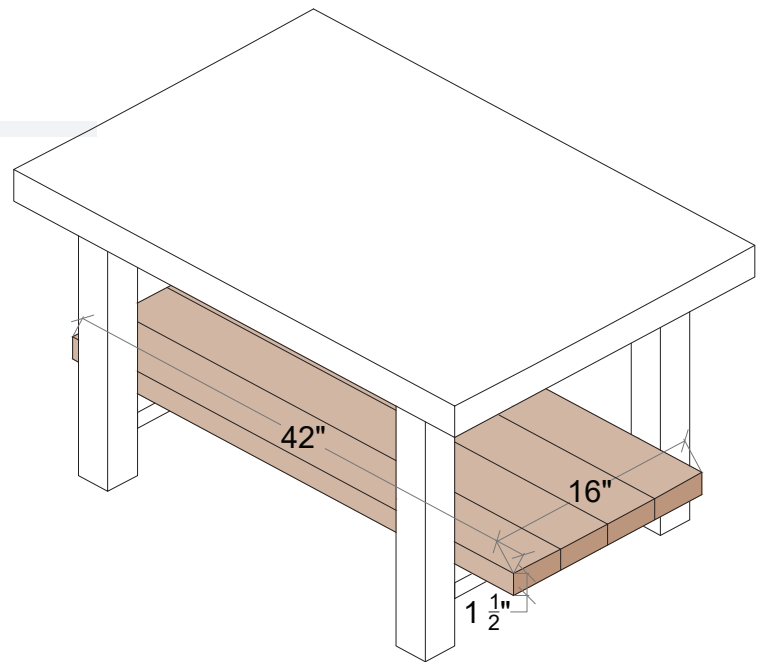
5.2 - Table base

Dimensions and quantities of lumber for the base are as below:

1 1/2" lumber cut to 4" x 42", quantity: 4

or

1 1/2" lumber cut to 16" x 42", quantity: 1



base plan

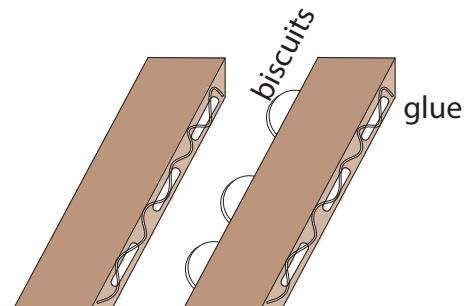


If you have: 1 1/2" lumber cut to 4" x 42", quantity: 4

Use Biscuits for Alignment:

Make a tight mortise joint on each of the 2" sides of the lumber (every 8" apart).

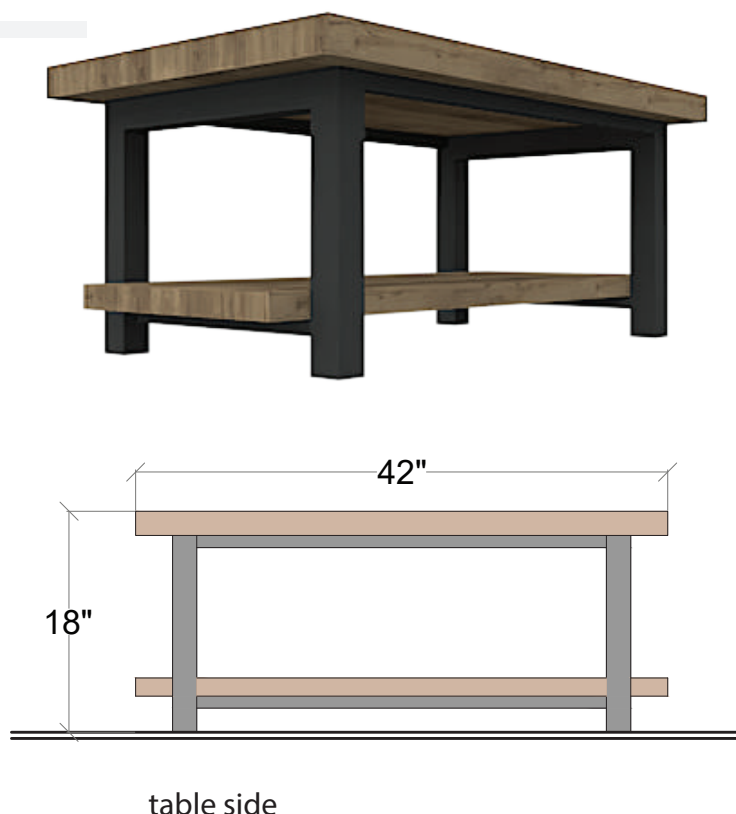
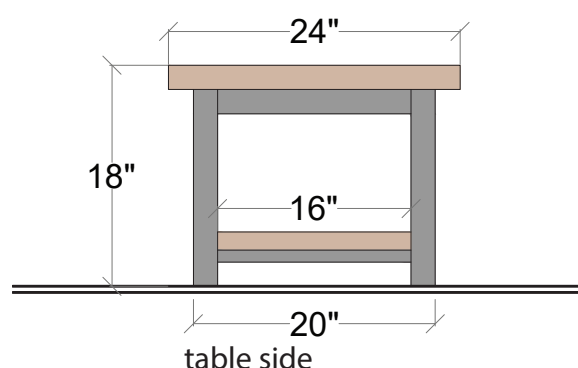
Spread glue on each side of the boards, use clamping pressure and secure the lumber. Scrape glue excess then wait a few hours until dry.



FINISH: to get a raw wood look

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- Sand lightly with 220-grit sandpaper.
- Clean the surface with a damp cloth, dry the surface, then brush on a second coat of polyurethane.

6 - Assembly and levelling



Assemble the wood table top onto the metal stand using: Bolts 1/4"x 3"x Ø15 and Bolts 1/4"x 2"x Ø15.

Assemble the wood table base onto the metal stand using: Bolts 1/4"x 1 1/2"x Ø15.

Level the table legs:

Hold your table on a work surface so the four legs are on the ground.

Check that the surface is flat by using a leveling tool.

If the table is not levelled, glue a thin cork or rubber that is cut to the size at the bottom of the table leg.

Install rubber base at the bottom of the stands.
square rubber base: 2" x 2", quantity: 4

