

HART™



Sawhorse Desk

PROJECT PLAN

Finished Dimensions: 77"L x 30"W x 28-1/2"H

Skill Level: Intermediate

Materials

Item	Qty
1" x 6" x 8' Board*	3
1" x 4" x 8' Board* (we recommend pine, poplar, or red oak)	5
1" x 3" x 8' Board*	6
1" x 2" x 8' Board*	2
3/4" Finish Plywood*	1
Wood Glue	1 bottle
1" Wood Screws	1 box
1-1/4" Brad Nails	1 box
Sandpaper	1 pack

* Board dimensions are "nominal." Actual dimensions are smaller due to lumber industry standards. Cuts are actual length.

A select/premium board or plywood comes with a smoother surface finish. It is clear or has very few tight knots, and it will have straight and sharp edges. This grade of wood pairs well with other boards or panels better and requires

Tools Used



Miter Saw



Circular Saw



Drill/Driver



Impact Driver



Orbital Sander



Brad Nailer



Level



Drill Bits



Countersink Bit



Tape Measure


Carpenter's
Pencil


Chalk Reel Set



Safety Glasses



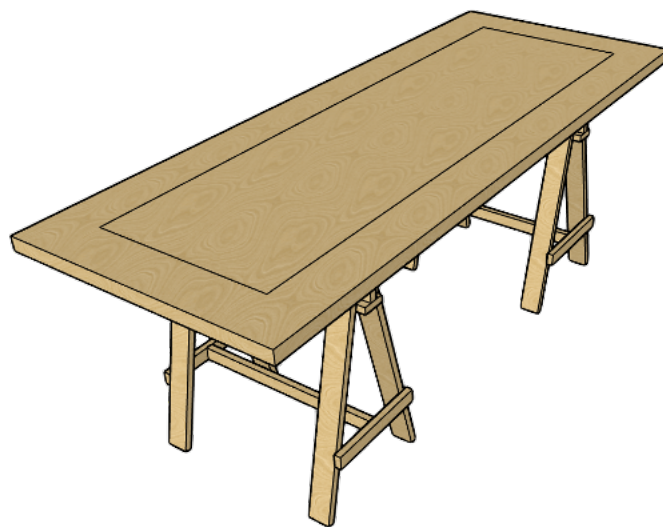
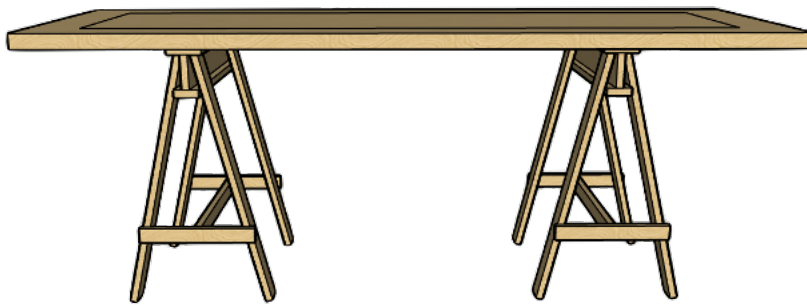
Work Gloves

Battery Tip: A 4.0Ah battery is recommended to be paired with high amp draw tools for maximum efficiency.

Lumber Cut List

Board*	Description	Cut To	Qty
1" x 4" x 8' Board*	Frame	30"	2
1" x 4" x 8' Board*	Frame	70"	2
1" x 6" x 8' Board*	Frame	77"	2
1" x 6" x 8' Board*	Frame	19-1/2"	2
3/4" Finish Plywood*	Desk Top	23" x 70"	1
1" x 4" x 8' Board*	I-Beam Top/Middle	24"	4
1" x 3" x 8' Board*	I-Beam Bottom	24"	2
1" x 3" x 8' Board*	Angled Legs	27"	8
1" x 2" x 8' Board*	Cross Supports	12"	4
1" x 2" x 8' Board*	Center Supports	22"	2

* Board dimensions are "nominal." Actual dimensions are smaller due to lumber industry standards. Cuts are actual length.



Assembly Instructions

Step 1

Using the 1x4, cut two (2) pieces at 30" and two (2) pieces at 70" with your miter saw or circular saw.

Step 2

Using the 1x6, cut two (2) pieces at 77" and two (2) pieces at 19-1/2".

Step 3

Measure and mark the 3/4" plywood at 23" x 70". Use a level or chalk line to draw a straight line. Then cut down the plywood using a circular saw.

Step 4

Lay your plywood sheet on a solid flat surface. Place your 1x4x70" pieces against the left and right sides, then place your 1x4x30" pieces against the top and bottom sides.

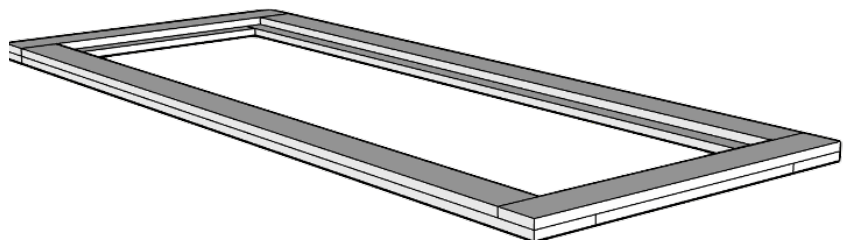
Step 5

Then place the 1x6x77" on top of the 1x4x70" lined up with the outside edge.

Step 6

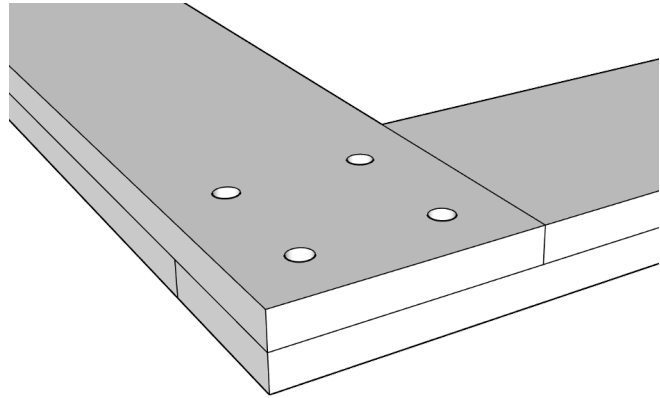
Finally, place the remaining 1x6x19-1/2" board on top of the 1x4x30" board and line up the outside edges.

Your assembly should look like the figure to the right (note: plywood sheet not shown in this figure).



Step 7

Once everything is aligned, mark the locations where you'll predrill for screws.



Step 8

Glue down all areas where the different pieces of lumber touch each other. Use your drill and 1" wood screws or a brad nailer with 1-1/4"



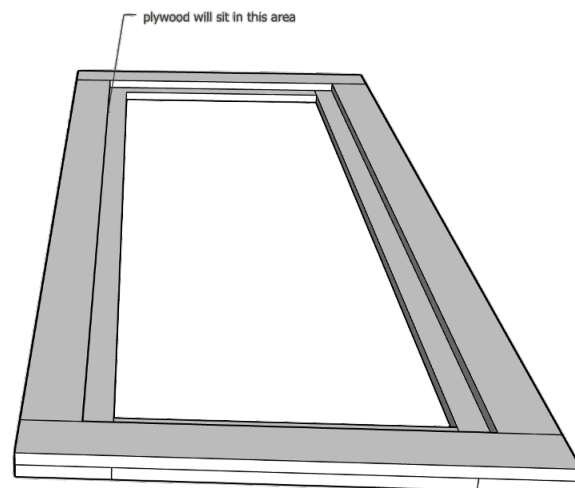
Tip - Rebuilding it surrounding the plywood would help keep the tabletop square.

Step 9

After the frame is screwed or nailed together, remove the plywood sheet. Flip over your assembled frame and lay it back down on the flat surface.

Step 10

Put glue along the plywood support area (the lip between the 1x6 and the 1x4) and set the plywood back in place.



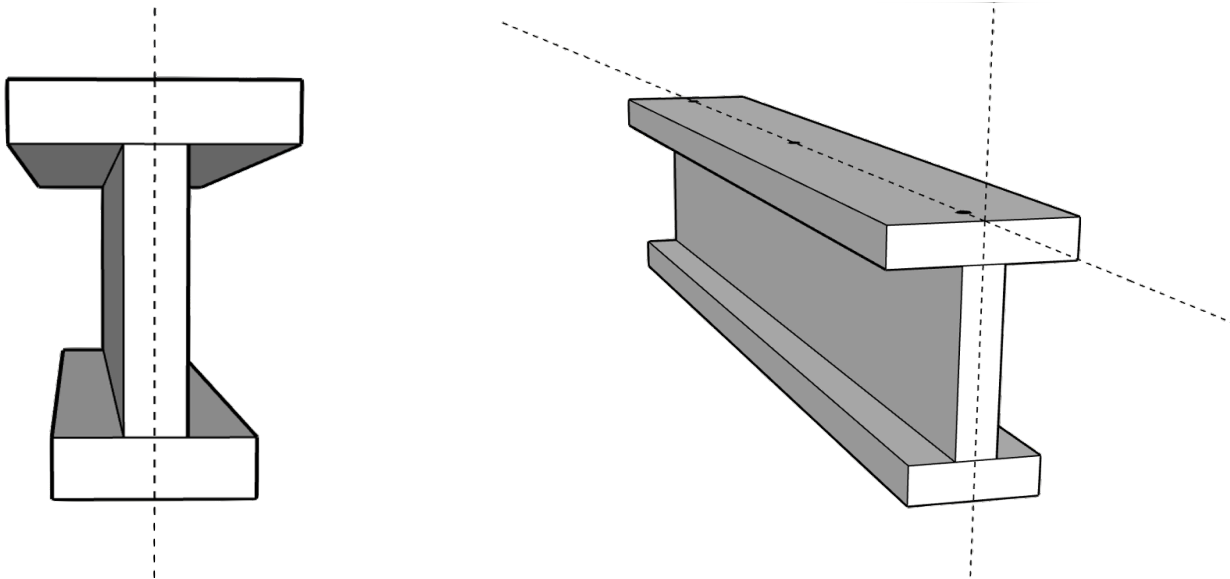
Step 11

Now you can fasten your plywood to the frame using a brad nailer or drill and screws.

 **Tip** - If you're not using a nail gun, screw into the plywood from the bottom instead.

Step 12

The next step is to build the desk's sawhorse legs. Take one (1) of your 24" 1x4 boards and mark the center at 1-3/4". On the other 24" 1x4 piece, mark center on end at 3/4". Use these two boards and the 24" 1x3 board and line up the points in an I-beam shape.



Step 13

Use a countersink bit to predrill evenly spaced holes placed 1" in from each end and in the center at 12". Screw together the top and bottom.

Step 14

Lay the I-beam on its side and mark in 1" from each end.

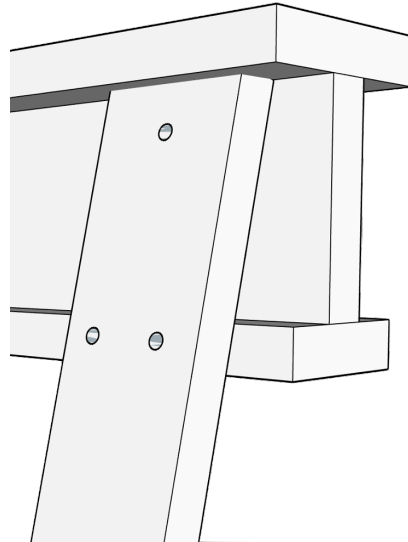
Step 15

Take the 27" 1x3 board and line it up with the 1" mark placed under the top of the I-beam (the top is the 1x4 side with the bottom as the smaller side).

Step 16

With the countersink bit, drill where screws are needed.

Place one (1) screw under the top of the I-beam and two screws (2) into the bottom support.

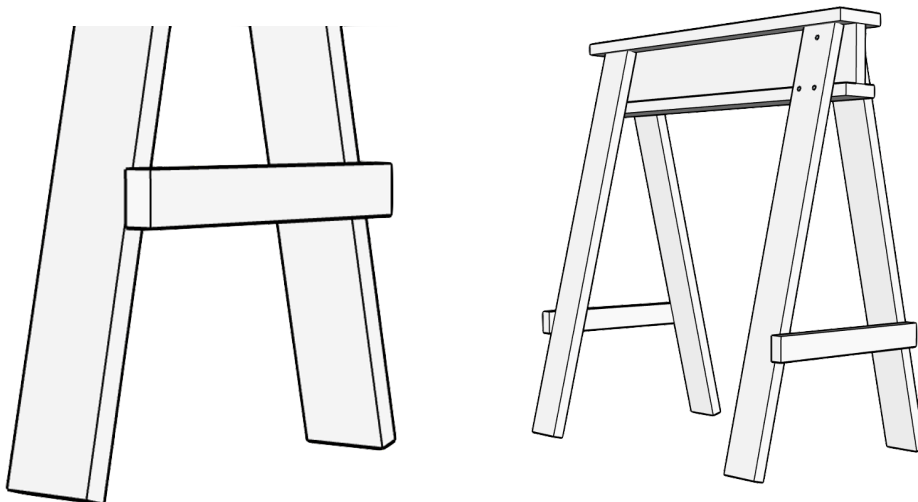


Step 17

Repeat steps 15 and 16 to create the other three (3) legs.

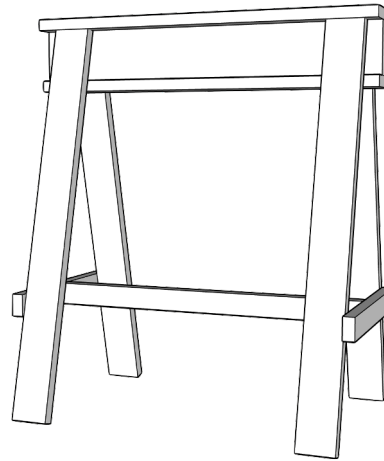
Step 18

Add the 12" 1x2 cross supports to each pair of legs.



Step 19

Then take one of your 22" 1x2s and place it in the center between each set of legs as a cross piece support.



Step 20

Repeat the steps for the other sawhorse leg.

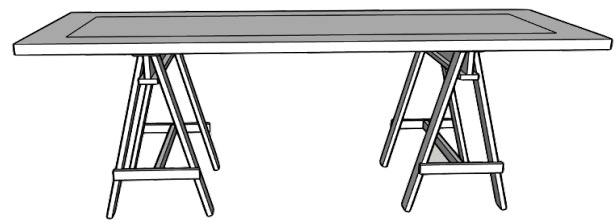
Step 21

Sand all surfaces down with an orbital sander.

Step 22

Set the sawhorse legs evenly apart and place the desktop on them.

Adjust the distance between the legs as desired.



Step 23

The sawhorse legs can be screwed to the desktop from underneath. If you prefer, the top can sit on top of the legs without screws.

Step 24

Paint or finish as desired.