



Build a Pair of Stackable Sawhorses

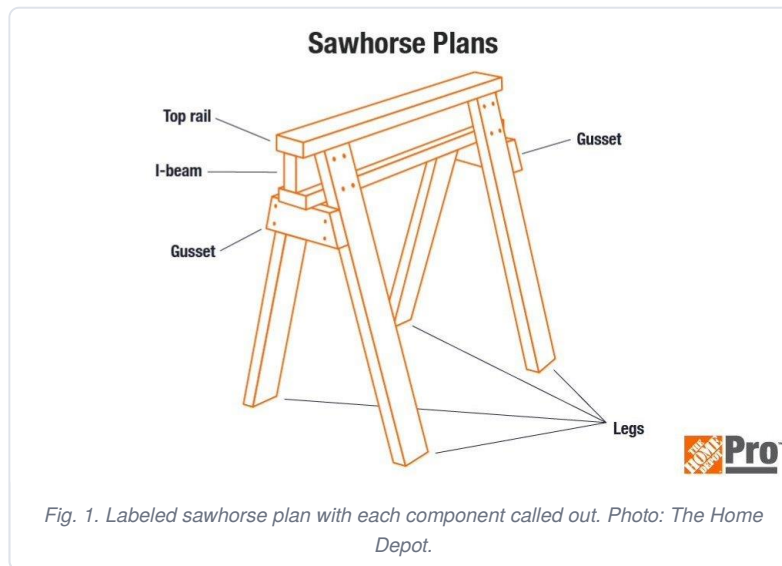
Five 2x4s, one pound of screws, under two hours

Sawhorses are the trestle you will find on almost every job site; they hold your work up off the ground, keep your hands clear of the blade, and give you a place to set tools. Five 2 in. x 4 in. x 8 ft. boards and a pound of screws gets you a matched pair that stacks for storage and takes a tabletop later.

Every measurement, angle, and screw location in this sheet comes straight from the Home Depot plan. Do not eyeball them; the sawhorse only stands square if the cuts are.

Safety first: Adult supervision required. Eye and ear protection on before the saw is plugged in. Clamp your work; never hold a short piece by hand while cutting. Know where the cord is before every cut.

What You Need



Tools

- Circular saw (a miter saw works if you would rather adjust the plan for one)
- Drill or impact driver with a 3/8 inch drill bit and a driver bit
- Two clamps
- 1 inch thick scrap wood for spacers

- Rafter square
- Tape measure
- Pencil

Materials

- Five 2 in. x 4 in. x 8 ft. boards. Use pressure treated lumber if the horses will live outdoors.
- One pound of 3 inch self drilling screws, roughly 60 of them. Get at least a 60 count box so you are not hunting for screws halfway through.
- Two additional 2 in. x 4 in. x 8 ft. boards if you want the worktable; that makes seven boards total.

Step 1: Measure, Mark and Cut the Legs



Fig. 2. Measuring a board before cutting it into a sawhorse leg. Photo: The Home Depot.

Four of the boards become legs, and all eight legs are cut the same way.

- Mark one line at 31-3/4 inches with your tape measure and rafter square.
- Set the saw bevel to 15 degrees and cut that line. Set the bevel back to zero as soon as the cut is done.
- Look at the angled end and find the long side and the short side.
- Lay the cut piece on top of another board with the long sides against each other and the angled ends flush. Mark a line off the square end onto the longer board. Repeat for the rest.
- Check that the saw is back at zero degrees and that the depth of cut is right, then cut each board.

You now have 8 legs, each with a 15 degree bevel on one end, plus four leftover pieces about 33 inches long. Set the leftovers aside; they become crossmembers.

Step 2: Cut the Gussets and Remaining Crossmembers



Fig. 3. Four gussets cut from the remaining board. Photo: The Home Depot.

The fifth board becomes the gussets. Gussets are what keep the horse from wobbling or folding under load.

- At one end of the remaining board, mark a 15 degree line across the face and cut it.
- Measure from the long point and mark at 9-1/4 inches.
- Mark an opposite 15 degree angle at that line; you are drawing a trapezoid.
- Cut out the trapezoid. That is one gusset.
- Repeat three more times for four gussets total.

You need six crossmembers for the next step; four of them are the leftovers from the legs.

Step 3: Assemble the I-Beam Crossmembers

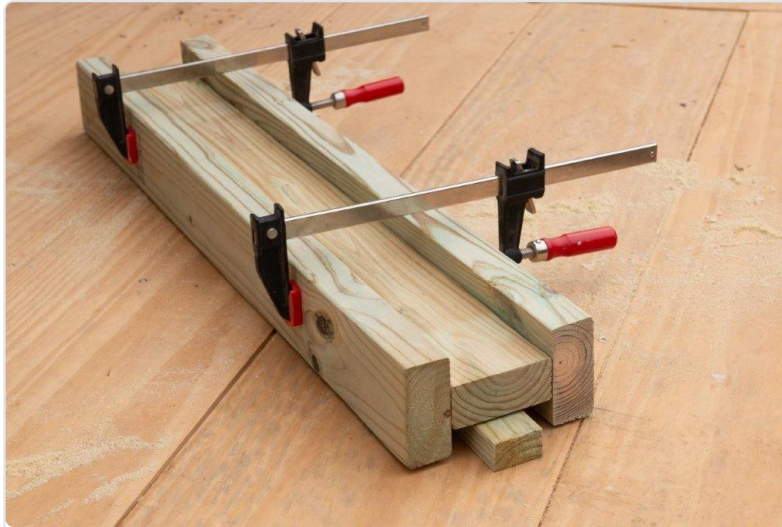


Fig. 4. I-beam pieces positioned and clamped before fastening. Photo: The Home Depot.

Three crossmembers make one I-beam, and the I-beam is what spreads the load along the top of the horse.

- Stand two crossmembers on edge on the floor with two 1 inch thick blocks between them.
- Lay the third crossmember flat on top of the blocks.
- Bring the edges flush and clamp the whole assembly together.
- Measure and mark screw locations at 2, 4 and 10 inches from each end on the two matching pieces.
- On one of the matching pieces, drive the screws normally.
- On the other piece, the one that ends up on top, use the 3/8 inch bit to drill a 3/4 inch deep hole at each screw location first, then drive the screws through those holes.

Build two I-beams, one per horse.

Pro tip: Sink those screws deep enough that a saw blade running across the top rail never touches steel.

Step 4: Attach the Legs



Fig. 5. Driving screws through the leg into the I-beam. Photo: The Home Depot.

- Lay an I-beam on its side and mark 2-1/2 inches in from each end on the top rail.
- Set the square end of a leg next to that mark, oriented so the beveled end will sit flat on the ground.
- The square end should have one corner touching the center of the I-beam and the end touching a lower edge of the top rail.
- The leg should rest on the top edge of the lower plate of the I-beam.
- Drive two screws through the leg at the top into the center part of the I-beam, and two more through the leg into the bottom plate.
- Do the two legs on one side, confirm they are secure and level, then do the other side. Repeat for the second horse.

Pro tip: Use a level to confirm every leg is attached at the same angle.

Step 5: Stand It Up and Adjust



Fig. 6. Standing the sawhorse up and checking for balance. Photo: The Home Depot.

Both horses should stand on their own now. Rock them back and forth. Push one side down and let go, and watch for wobble.

- One short leg: back out the top two screws on that leg, slip a shim in where it meets the I-beam, and drive the screws again.
- Rocking on two legs: find the longest legs and note how far off the floor the short ones sit. Set the saw to 15 degrees and trim that amount off the longest leg, or half that amount off each of the two longer legs.

If a leg looks wrong, check that it is screwed to the I-beam the same way as the others before you start cutting.

Step 6: Add the Gussets



Fig. 7. Screwing gussets to each side of the sawhorse. Photo: The Home Depot.

- Turn a horse on its side.
- Align a gusset so it touches the bottom plate of the I-beam and is centered across the legs. Head on, it should completely cover the edges of the I-beam and the legs.
- If you are not using self drilling screws, drill four 1/8 inch pilot holes, one near each corner.
- Drive a screw near each corner, through the gusset and into the leg.
- Repeat with the remaining gussets.

Step 7 (Optional): Notches for a Tabletop



Fig. 8. Finished sawhorse with notches cut for a tabletop. Photo: The Home Depot.

You have two working sawhorses at this point. Notching the top rails turns them into a table base.

Notch the top rails

- Mark a line 7-1/4 inches from the end of each top rail using the square.
- Set a scrap piece of 2x4 against the line, toward the center of the horse, to mark the notch thickness. That mark should be about 1/8 inch wider than the 2x4.
- Set the saw depth to 1-1/2 inches, the thickness of the top rail.
- Cut along each line and take out the four notches.

Notch the two extra boards

- Lay both boards on edge against each other, ends flush, and clamp them.
- Mark a line one foot from each end with the square.
- Use a scrap 2x4 to mark a second line parallel to the first, about 1/8 inch wider than the 2x4.
- Set the saw depth to two inches.
- Cut along each line, then make a series of relief cuts between the two lines.
- Knock the waste out with a hammer and chisel.

Move the horses about 6 feet apart and drop the notched boards into the rail notches. If you want the whole thing to move as one unit, drill pilot holes and drive screws below the surface. The result carries a sheet of 3/4 inch plywood as a tabletop or workbench without sagging.

Pro tip: For heavy loads or slick floors, screw lengths of 2x4 all the way around the legs, connecting each leg to its neighbor about one foot off the ground. That stops the legs from splaying out.

Finding Plans You Can Trust

This plan came off a manufacturer's how-to page, which is a good place to start. Most of what turns up in a search is not. Before you cut lumber based on something you found online, run it through these:

Finding quality content online: Five checks before you trust a plan.

1. Start with who made it, not with the search box. Tool makers, lumber suppliers, trade associations, and university extension services publish plans that somebody actually built and tested.
2. Look for real numbers. A trustworthy plan gives you dimensions, angles, depths, and fastener counts. Vague instructions mean nobody built it.
3. Check the date and the comments. An old plan is not automatically wrong, but a plan with unanswered "this does not work" replies underneath it is a warning.
4. Confirm it against a second, independent source. If two unrelated sites give the same critical measurement, you are probably fine; if they disagree, find a third before you cut.

5. Notice who profits. A page selling you the lumber can still be right, but verify the specs somewhere that is not trying to sell you anything.

Plans adapted from The Home Depot, "How to Build Stackable Sawhorses," used with permission for the ELEVATE 2026 National Jamboree Skilled Trades program area. Photographs courtesy of The Home Depot.