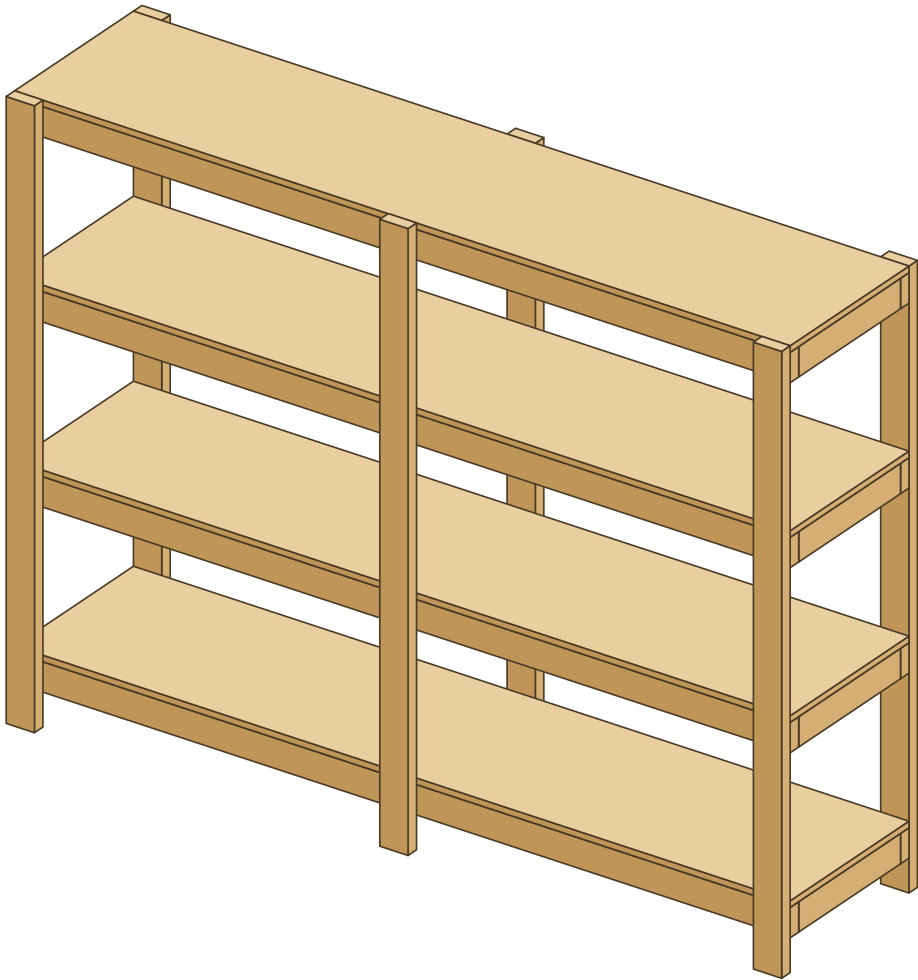


FREE PLAN

8 ft Long x 24" Deep x 6 ft Tall Garage Shelves, 4 Shelves

Step-by-step build plan with dimensioned drawings



Size	8'-0" long x 24" deep x 6'-0" tall
Shelves	4, each 21" x 8'-0" (56 sq ft in all), 17" clear between
Legs	6 2x4s, with a middle pair
Materials	2x4 lumber and 3/4" plywood
Plan ID	GS-96x24x72

Not engineered. Check local codes. Build at your own risk. These plans show one way to build this project. They are not reviewed by a licensed professional. You are responsible for checking local rules, your materials and your own safety.

Free vs Premium

This free plan has everything you need to build the shelves. The Premium plan adds the shopping list and the cut planning for every board and sheet, so you buy the right materials the first time.

What you get	Free	Premium
Step-by-step instructions	7 steps	11 steps
Cut length for every board (in the steps)	✓	✓
Front and end elevations with dimensions	✓	✓
3-D assembly figure for each build step	✓	✓
Exploded assembly view with part legend	—	✓
Full cut list table (part, qty, length, stock)	—	✓
Board-by-board cutting diagram for 8 ft stock	—	✓
Plywood sheet layout (4x8)	—	✓
Shopping list: boards, sheets and screws to buy	—	✓
Loading, add-ons, finish and care	—	✓

Get the Premium plan — \$19.99

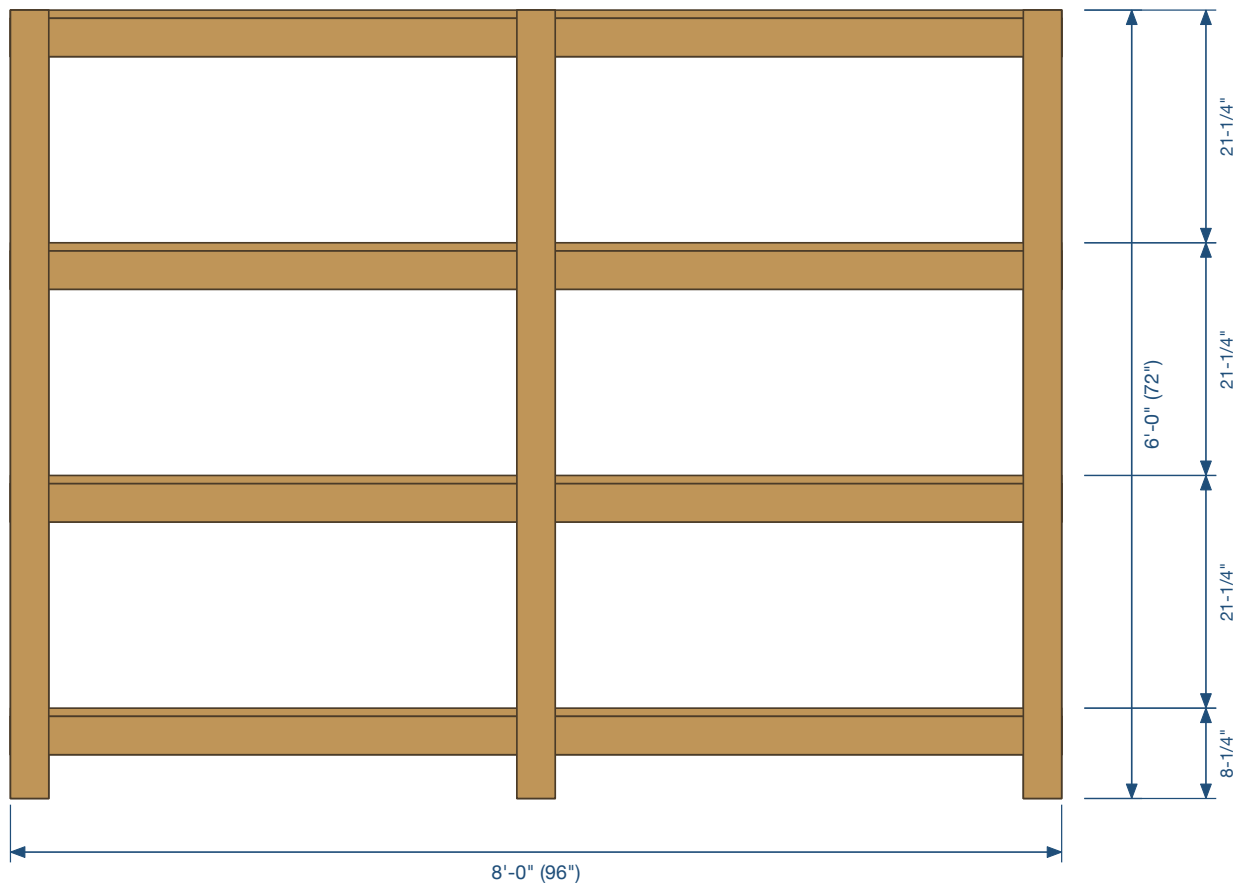
One-time purchase. Instant PDF download.

Need a different size?

We generate this plan for other lengths, depths, heights and shelf counts too, with the cut list and shopping list recalculated for the new size.

Drawings · front elevation

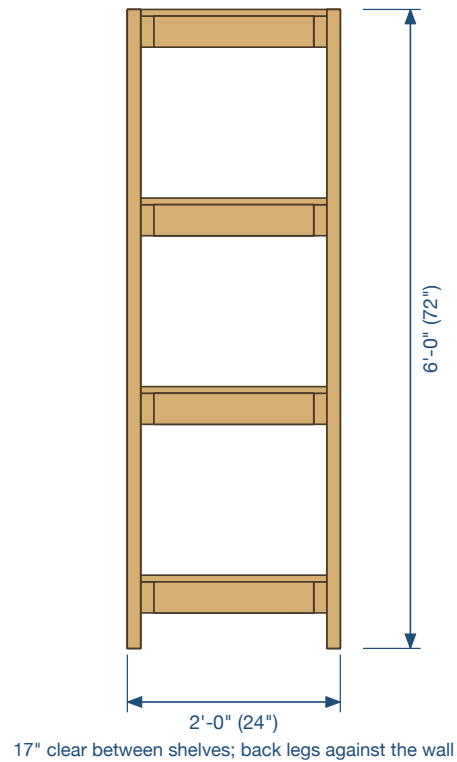
FRONT ELEVATION (shelf spacing measured deck top to deck top)



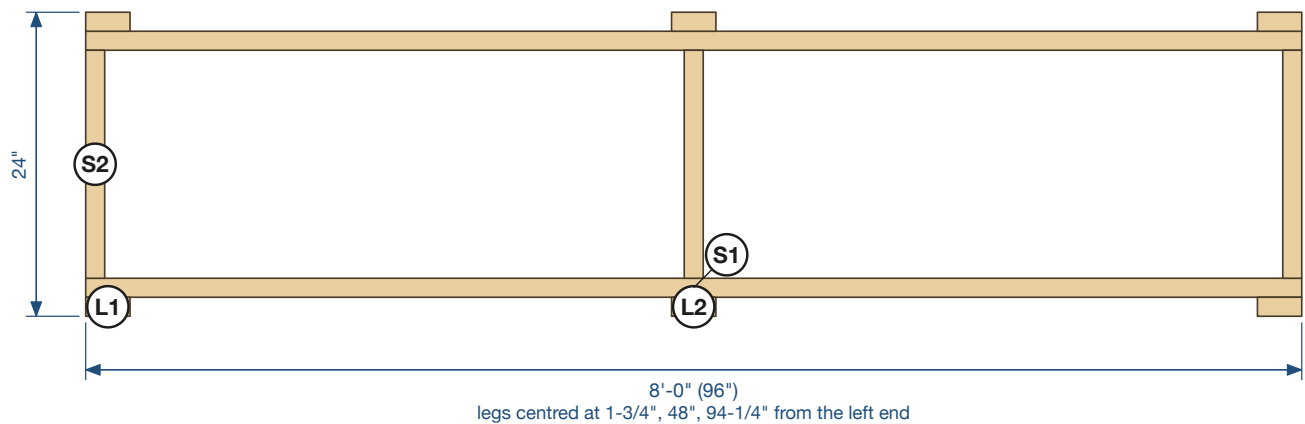
Drawings are not to scale. Build from the written dimensions.

Drawings · end elevation and shelf frame

RIGHT END ELEVATION



ONE SHELF FRAME AND THE LEGS (from above, deck removed; all 4 frames are the same)



Part key

Every part has a code. The first letter is the assembly: S shelf frames, L legs, P plywood decks.

Part	Name	Stock
S1	Shelf long rail	2x4
S2	Shelf cross rail	2x4
L1	Corner leg	2x4
L2	Middle leg	2x4
P1	Shelf deck	3/4" plywood

Build steps

1 Cut the parts

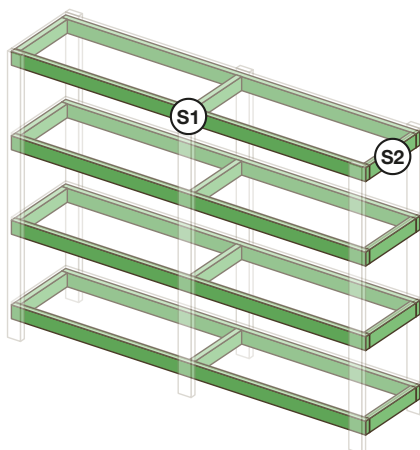
Cut every 2x4 to length and label each piece with its part code.

- 8 x shelf long rail (S1) — 2x4, cut to 96" — a full 8'-0" board
- 12 x shelf cross rail (S2) — 2x4, cut to 18"
- 4 x corner leg (L1) — 2x4, cut to 72"
- 2 x middle leg (L2) — 2x4, cut to 72"

Check each board for crown (the bow along its edge) and keep the crown up on the long rails, so the load straightens it.

2 Build the shelf frames

- Build 4 identical frames. For each one, lay two shelf long rails (S1) on edge on a flat floor, 21" apart outside to outside.
- Fit the shelf cross rails (S2) between them: one flush with each end, and one centred 48" from the left end.
- Drive 2 #9 x 3" screws through the long rails into each cross rail end. Check that both diagonals read 8'-2-1/4" before the screws go in at the last corner.



Green: parts added in this step. Faint outline: parts added later.

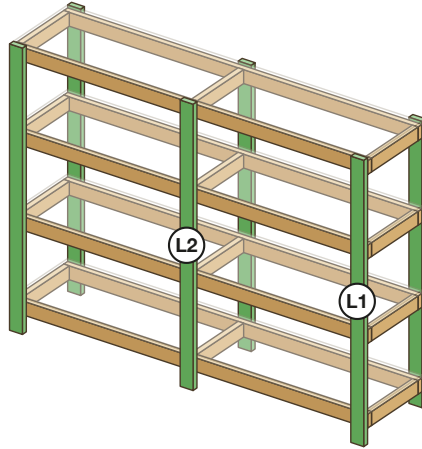
3 Mark the legs

- Line up all 6 legs (L1, L2), 6'-0" long, with their bottom ends flush, and clamp them together.
- Mark the underside of each shelf frame across all of them at once, measured from the bottom end: 4", 25-1/4", 46-1/2", 67-3/4".
- That leaves 17" of clear height between shelves. Move the marks now if you want a taller space for big bins: keep the top frame at the top of the legs.

Build steps (continued)

4 Fit the back legs

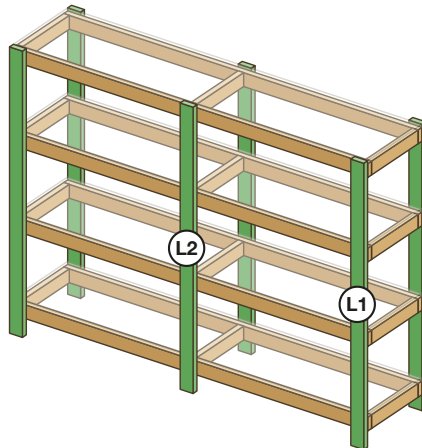
- With a helper, stand the shelf frames on their front edges on the floor, in a row, back rails up.
- Lay the back legs across the back rails: one flush with each end and one centred over each middle cross rail, bottoms all one way, every frame on its mark.
- Square each leg to the rails and drive 3 #9 x 2-1/2" screws through the leg into every rail it crosses.



Green: parts added in this step. Faint outline: parts added later.

5 Fit the front legs

- Tip the unit over so it lies on the back legs, front rails up.
- Screw the front legs to the front rails the same way, matching the back legs position for position.
- Measure both diagonals of the front face; they should match within 1/4". Push the frame square before the last screws go in.

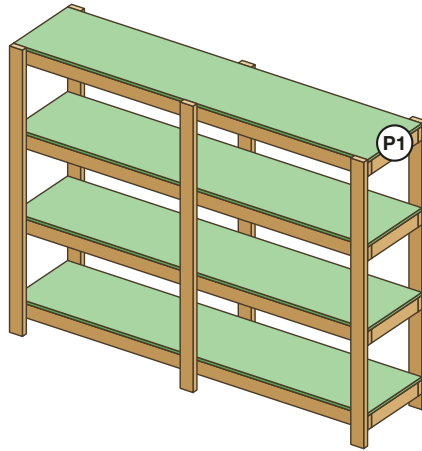


Green: parts added in this step. Faint outline: parts added later.

Build steps (continued)

6 Stand it up and fit the shelf decks

- Stand the unit up where it will live, against the wall, and shim under a leg if the floor slopes.
- Rip the plywood into 4 shelf decks (P1), 21" x 96". They fit between the front and back legs, so there are no notches to cut.
- Lay a deck on each frame, flush with the ends, and screw it down every 8" into the long rails and into each cross rail with #8 x 1-1/4" screws.



Green: parts added in this step. Faint outline: parts added later.

7 Anchor it to the wall

- Do this before you load a single shelf. A tall, loaded shelf unit can tip forward.
- Find the wall studs behind the unit with a stud finder and mark them on the top back rail.
- Drive 2 #10 x 3-1/2" screws through the top back rail into every stud it crosses (12 screws for this length). On masonry, use concrete screws or sleeve anchors instead.

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About this plan

Not engineered. Check local codes. Build at your own risk.

All dimensions, the cut list and the shopping list in this plan are calculated from the size you chose. They were not test-built at this exact size. Measure your actual lumber before cutting, because dressed sizes vary between mills and stores.

Lumber and plywood sheets can be heavy. Lift with help, wear eye protection when cutting, and follow your tool manufacturer's instructions.

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