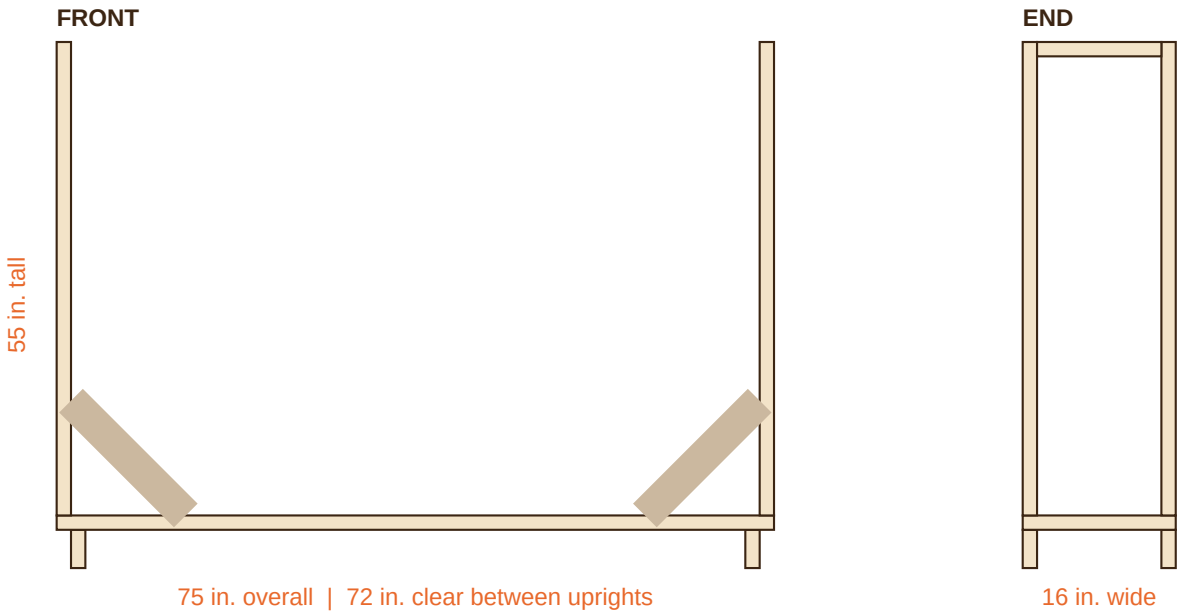
# DIY Welded Steel Firewood Rack

Holds a quarter cord (32 cubic feet) of 16-inch firewood. About 3 to 4 hours for a beginner welder.




## Materials

- About 42 ft of 1-1/2 in. square steel tube, 14 gauge (two 24 ft sticks)
- 4 steel plates 3 x 3 x 1/8 in. (feet)
- 4 plastic tube end caps, 1-1/2 in. (optional)
- Degreaser, metal primer and exterior enamel or a rust-preventive spray
- Tools: MIG or flux-core welder, chop saw or angle grinder, magnetic square, clamps, welding helmet, gloves and eye protection

## Cut list

| Part | Qty | Length | Notes |
|---|---|---|---|
| Base rails | 2 | 75 in. | Square ends |
| Base cross pieces | 3 | 13 in. | Square ends; base is 16 in. wide outside |
| Uprights | 4 | 49-1/2 in. | Square ends |
| Top cross pieces | 2 | 13 in. | Square ends |
| Legs | 4 | 4 in. | Square ends |
| Corner braces | 4 | about 17 in. | 45 degree ends, cut to fit |

## Steps

1. Cut every piece, grind the ends clean and wipe the steel with degreaser.
2. Weld the base. Lay the base rails on a flat surface and weld a 13 in. cross piece between them at each end and in the middle. Measure the diagonals; they should match.
3. Weld the uprights. Stand an upright on top of each base corner, flush with the outside, and tack it. Check it is plumb both ways, then weld all around.
4. Weld a 13 in. top cross piece between the tops of each end pair of uprights. That leaves 48 in. of stacking height.
5. Weld the corner braces flat against the outside faces of the upright and base rail at each corner, about 12 in. up and 12 in. in, where they stay clear of the wood.
6. Weld a 4 in. leg under each corner, just inside the end, and a 3 x 3 in. plate under each leg so the rack sits off wet ground.
7. Grind sharp edges, prime and paint. Cap the open tube ends.
8. Stack 16 in. splits bark side up, up to the top cross pieces. Full, it holds 32 cubic feet: a quarter cord.

Keep the rack at least 20 feet from your house, off the ground, with the sides open to the wind. Wear eye and hearing protection when cutting, and follow your tool makers' safety instructions. Need wood to fill it? Order seasoned firewood by the cord at woodforfire.com.