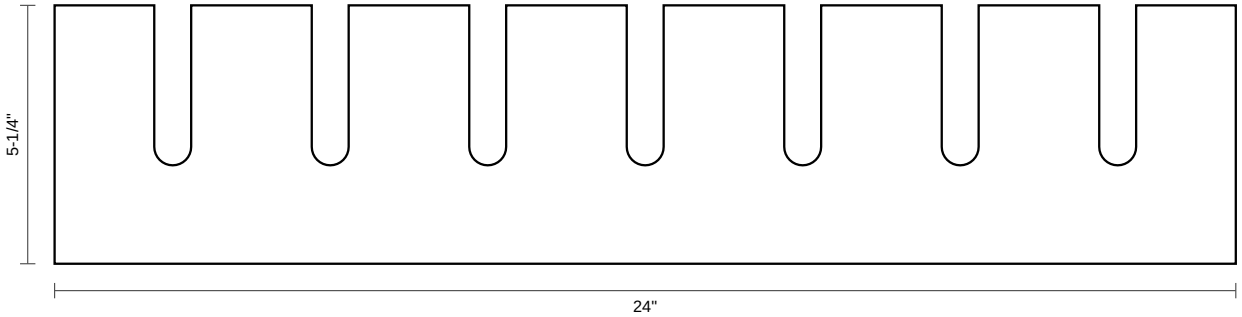
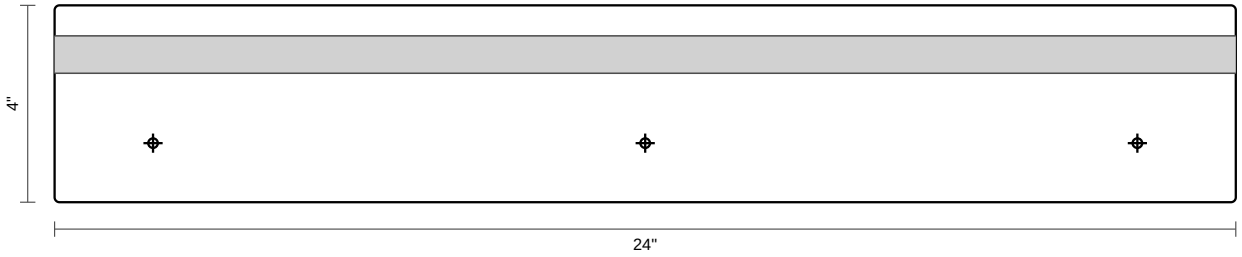
Clamp Rack

24" wall rack with seven 3/4" slots for bar, pipe and F-clamps, hung from a dadoed backboard.

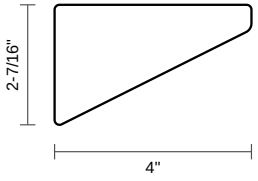
Slotted shelf - 3/4" stock



Back - 3/4" stock



Gusset (make 2) - 3/4" stock



Machine & stock

CNC router, 1/4" end mill. The back's through-dado is 1/4" deep and runs out both ends.

The shelf is 5-1/4" deep: 1/4" sits in the dado, leaving 5" out from the wall.

Hardware

Three #10 x 2-1/2" screws into studs; 1-1/4" screws for the gussets.

Steps

1. Machine the back (dado, screw holes, profile), the shelf and the two gussets.

2. Glue and screw the shelf into the dado, slots facing out.

3. Glue and screw a gusset under each end of the shelf, tight to the back and the shelf.

4. Screw the back to studs through the three holes below the shelf.

VCarve toolpaths (in this order)

Holes, layer DRILL_0.190_THRU: 0.190" diameter, through. Drilling toolpath with a matching bit, or spot the centers and drill by hand.

Pocket, layer POCKET_0.250: cut depth 0.250", 1/4" end mill. Select every vector on the layer together so islands are left standing.

Profile, Outside, layer PROFILE_OUTSIDE_0.750: cut depth 0.750" (through), 1/4" end mill, with tabs.

Files

dxf/clamp-rack.dxf

Plan view, drawn at about 1:3.9. Grey = pocket (depth noted), dashed = underside pocket, light fill = through cut. Cut files are full size.