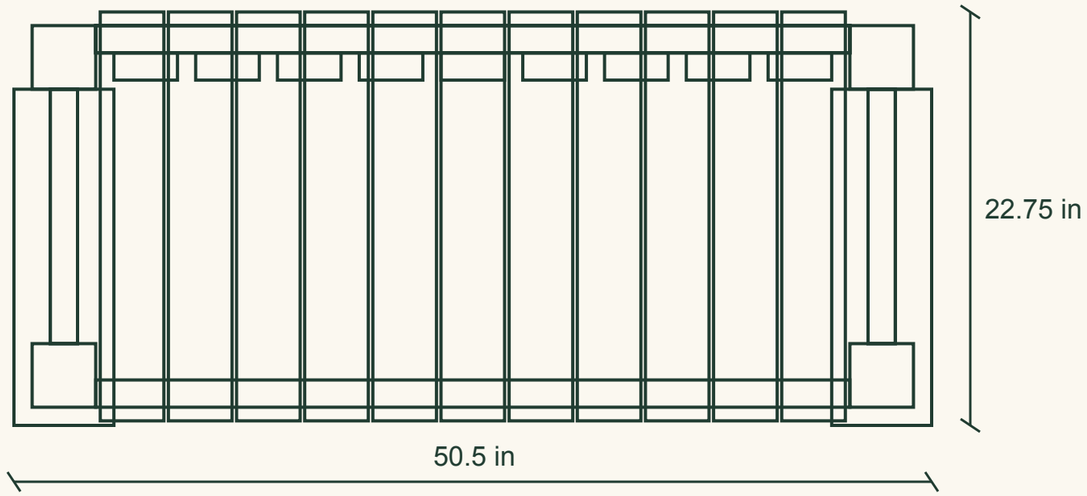
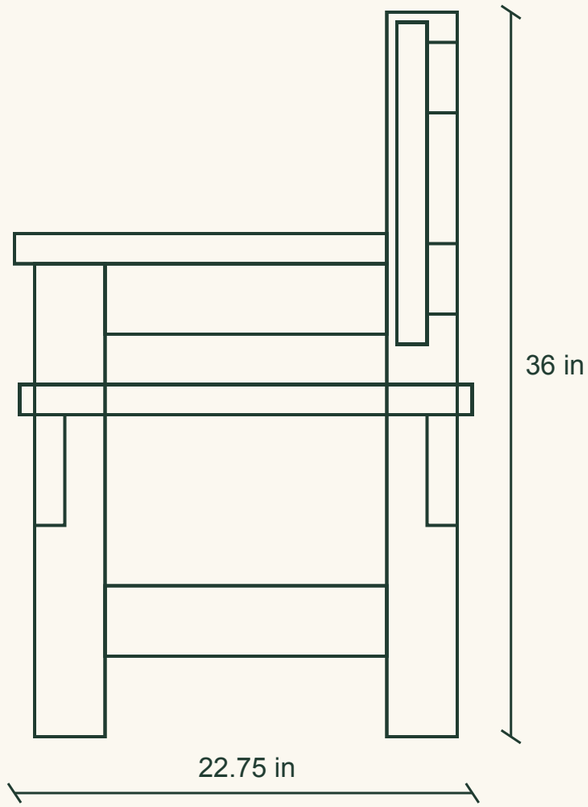
42 Build a Backed Garden Bench With Arms

01 / MEASURED VIEWS

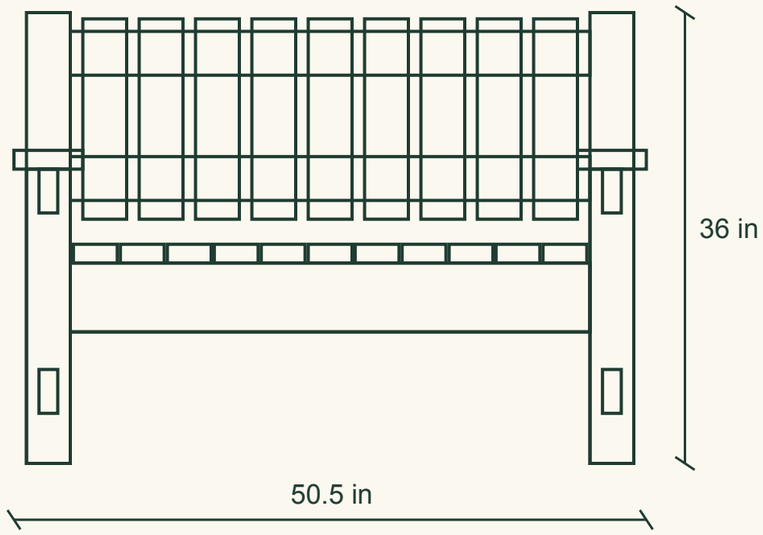
TOP



SIDE



FRONT



The origin is at the front-left-bottom corner of the overall outline: the front end of the left arm (y = 0), the outer edge of the left arm (x = 0) and the ground (z = 0). X is width, Y is depth from front to back and Z is height. The posts start at x = 1 and y = 1. All dimensions are inches.

Edge rounding, arm corner radii, pocket-hole bores and screws are not modeled. Slats are drawn as square boxes. The back is upright as drawn, with no recline. The drawing is a dimensional layout, not a structural analysis.

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02 / CUT LIST AND CONNECTION DETAILS

PART	QTY	FINISHED CUT / PURCHASED COMPONENT
F	2	Front post — 23.5 × 3.5 × 3.5 in
R	2	Rear post — 36 × 3.5 × 3.5 in
U	2	Arm rail (left and right) — 14 × 3.5 × 1.5 in
S	2	Low side rail (left and right) — 14 × 3.5 × 1.5 in
A	2	Arm — 18.5 × 5.5 × 1.5 in
P	2	Seat apron (front and rear) — 41.5 × 5.5 × 1.5 in
K	2	Back rail (lower and upper) — 41.5 × 3.5 × 1.5 in
T	11	Seat slat — 22.5 × 3.5 × 1.5 in
B	9	Back slat — 16 × 3.5 × 1.5 in

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03 / CONNECTIONS AND CRITICAL FEATURES

CONNECTION SCHEDULE

Pocket screws, 2.5 in, 2 per rail end into post side faces, 32 total. U and S to F and R: 16, holes on the seat-side face. P to the posts: 8, holes on the inner face. K to R: 8, holes on the rear face. U, S and K holes sit 1.0/2.5 in below the top edge; P holes 1.25/4.25. Clamp each rail flush before driving. Arm: 5 #10 × 3.5 in per A on its centerline, 2.75 in from either long edge, at 2, 3.5, 7, 11.5 and 16 in from the front end, into F and U; 10 total. Seat: 4 #10 × 2.5 in per T, 1.0/2.5 in from the left edge, 1.5/21 in from the front end; 44. Back: 4 per B at 3.25/13.25 in from the bottom end; 36.

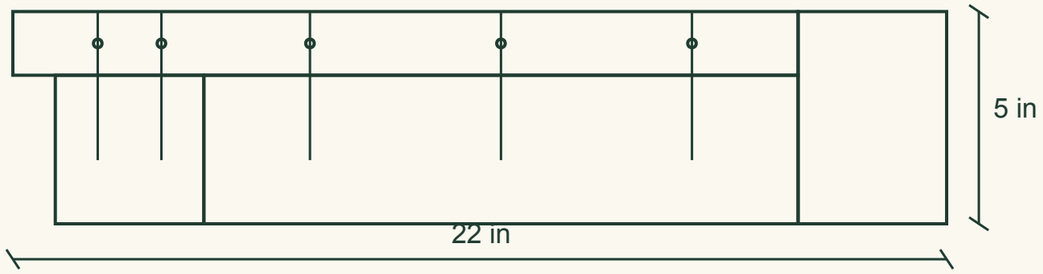
FIT AND LAYOUT CHECK

Clear between posts 41.5 in. Eleven 3.5 in T with twelve 0.25 in gaps. Nine 3.5 in B with ten 1.0 in gaps. Seat top 17.5 in, arm top 25 in, back 19.5 to 35.5 in. T overhangs each apron 0.75 in. A overhangs F 1 in at the front and each side and butts the R front face. B front face sits 0.5 in behind the R front face.

LIMITS

No load rating is assigned and none has been tested. Hold the bench from seating use until a qualified reviewer has checked the arm and back connections, racking, tipping, species, grade and fasteners. Seated use only, two places. Do not stand, climb, sit on the arms or back, or lift the bench by them.

FEATURE CHECK BEFORE ASSEMBLY

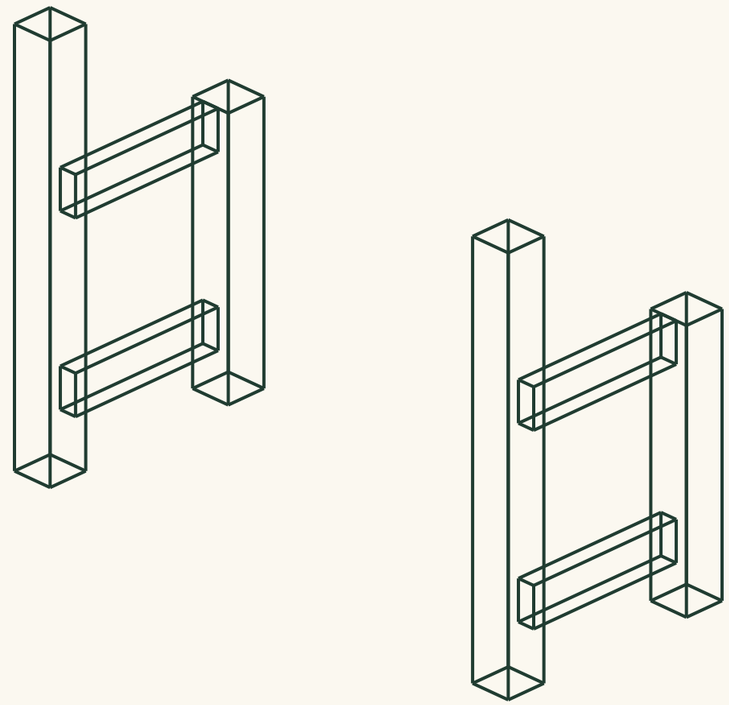


Side view of the arm joint, measured from the A front end. The view runs from 20 in above the floor (feature y = 0) to the A top at 25 in. A rests on the F top (1 to 4.5 in) and on the U top edge (4.5 to 18.5 in), and butts the R front face. The lines show the 3.5 in screw paths: 2 in of each screw enters F or U. Circles mark screw locations, not hole diameters. Confirm the clearance and pilot sizes from the chosen screw instructions. A reviewer must confirm whether the two F screws, which enter end grain, and the U pocket joints are adequate before use.

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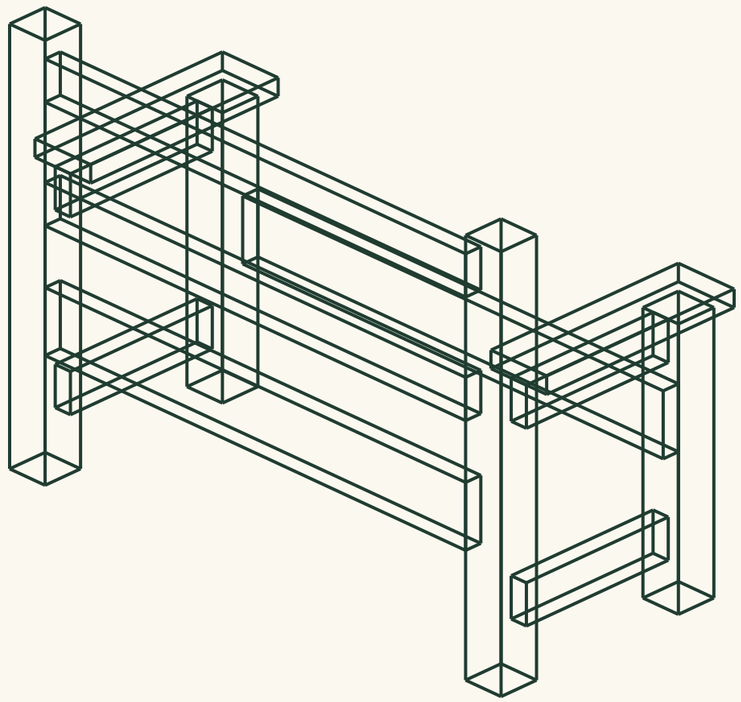
04 / ASSEMBLY STUDIES

STEP 8 / END FRAMES



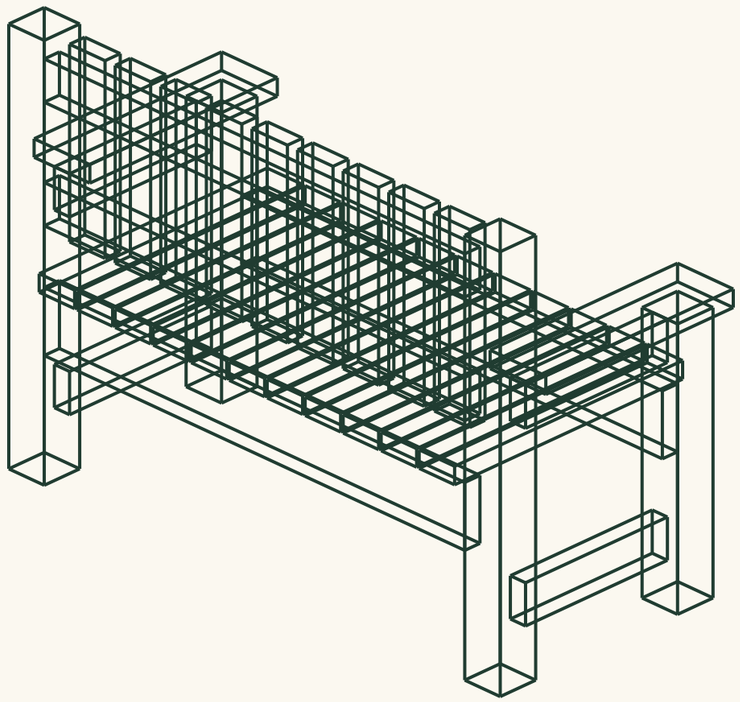
Each front post is tied to its rear post by the low side rail and the arm rail.

STEP 10 / FRAME AND ARMS



The aprons and back rails join the ends, and the arms sit on the front posts and arm rails.

STEP 12 / SEAT AND BACK



Eleven seat slats run front to back, and nine back slats stand on the back rails.

Original schematic studies show part relationships, not an operator or a photographed build. Use the numbered instructions for workholding, fastening and inspection.