GA-041 Three-four-five garden layout square

Transfer a right-angle layout to garden paths and bed corners using a rigid 36 × 48 in reference.

Controlling dimensions: US inches and feet. Metric equivalents are references. Original editorial design; no physical build, animal trial or load certification is claimed.

Before marking and cutting

Measure the stated stock sections before cutting. Use the cut-list geometry, not scale measurements from the drawing.

US inch dimensions control; millimeter values are rounded conversions. Ordinary cut target ±1/16 in (1.6 mm); fit commercial accessories before boring attachment holes.

Use limits

Original bounded garden component, not an occupied structure.

No human standing, sitting, climbing, lifting or fall protection use. No stated safe working load.

Geometry and fastener quantities are editorially checked; no prototype build, wind test or crop trial is claimed.

Materials and finished cuts

Part	Qty	Size to cut	Material and detail
P01 Short arm	1	36 × 2 1/2 × 3/4 in 914.4 × 63.5 × 19.05 mm	1 × 3 in board sound untreated cedar or other durable untreated wood
P02 Long arm extension	1	45 1/2 × 2 1/2 × 3/4 in 1155.7 × 63.5 × 19.05 mm	1 × 3 in board sound untreated cedar or other durable untreated wood
P03 Corner gusset	1	8 × 8 × 3/4 in 203.2 × 203.2 × 19.05 mm	measured 3/4 in plywood exterior-bond plywood for protected non-food-contact fixtures

Hardware and consumables

8 #8 × 1-1/4 in screws for gusset: 4 into each arm

Wood glue; 60 in steel tape for diagonal verification

Tools

Tape measure and steel rule; Pencil, square and clamps; Saw suited to the stated stock; eye and hearing protection; Drill/driver, countersink and bits matched to fasteners; Sandpaper and edge file; gloves when handling cut mesh

Primary context and design record

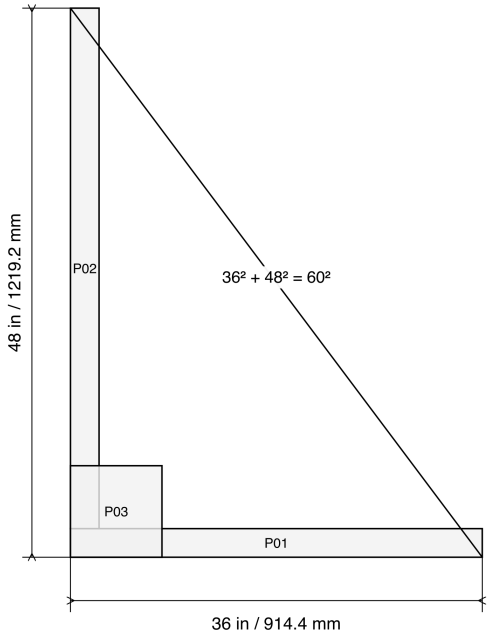
Context references; not design endorsements or certifications.

E01 · Raised bed gardens · University of Minnesota Extension ·
https://extension.umn.edu/garden-and-home/yard-and-garden/gardening-in-minnesota/raised-bed-gardens

Assembly and first checks

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PLAN — looking down; rear at top; controlling dimensions in inches



Part IDs refer to the finished cut list. Shapes are not load-rated. Read assembly before cutting.

Notches, holes, fittings and operating angles: see numbered steps and geometric annotations.

Original editorial draft • B/W vector • not physically built or tested • no implied Extension endorsement

01 Plan the three-four-five garden layout square for this result: Transfer a right-angle layout to garden paths and bed corners using a rigid 36 × 48 in reference. Confirm the design reference before cutting: Outside reference legs 36 and 48 in; diagonal 60 in within the reading accuracy of the tape. In the drawings x runs left to right, y runs front to rear and z runs upward.

02 Verify the required stock before laying out these parts: 1 × 3 in board: actual 0.75 × 2.5 in (19.05 × 63.5 mm); measured 3/4 in plywood: measured thickness 0.75 in. Reject split or twisted wood and unknown salvage; thinner stock requires recalculating the joints, not simply using the listed lengths.

03 Cut and label the finished parts: 1 Short arm 36 × 2.5 × 0.75 in (914.4 × 63.5 × 19.05 mm), mark P01; 1 Long arm extension 45.5 × 2.5 × 0.75 in (1155.7 × 63.5 × 19.05 mm), mark P02; 1 Corner gusset 8 × 8 × 0.75 in (203.2 × 203.2 × 19.05 mm), mark P03. Keep saw kerf outside each finished line. Rip only where the finished width is narrower than the actual stock; use a suitable guide and target ±1/16 in (1.6 mm) for ordinary cuts. Dowel triples mean length × diameter × diameter, not square dowel stock.

04 Lay the short arm along x = 0–36 in and long extension along y = 2-1/2–48 in with its end against the short arm. The outer reference legs are 36 and 48 in.

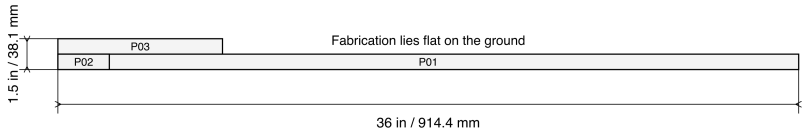
05 Place the 8 × 8 in gusset over the inside corner. Mark four screw centers above each arm, away from the common butt joint.

06 Clamp the two arms to a flat bench with their outside edges against straight fences. Leave the gusset loose while checking the geometry.

Complete the assembly

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FRONT — transparent assembly projection from y = 0; controlling dimensions in inches



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Notches, holes, fittings and operating angles: see numbered steps and geometric annotations.
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07 Measure from the short-arm outside end at (36,0) to the long-arm outside end at (0,48). Adjust until the diagonal is 60 in (1524 mm).

08 Apply glue only over the arm-contact areas beneath the gusset. Re-clamp, recheck 36/48/60 in and drill the eight pilots.

09 Drive eight 1-1/4 in screws through the gusset into the arms, with tips buried. Do not move the assembly until the glue cures.

10 Label the two outside edges REFERENCE and mark a witness line across the arm/gusset joints so later movement is visible.

11 Use on the ground to mark one corner at a time, checking the longer site diagonals separately. Do not use as a ladder, survey instrument or structural bracing.

12 Complete the acceptance checks below before putting the assembly into service. Record any changed stock thickness, fastener or equipment fit on the project sheet. The published geometry has not been physically built or load-tested.

Acceptance and intermediate checks

Outside reference legs 36 and 48 in; diagonal 60 in within the reading accuracy of the tape.

Arms lie flat and witness lines remain continuous after gentle handling.

Operation

A garden layout aid, not a legal boundary or construction survey.

Cleaning and maintenance

Store flat under cover and recheck the diagonal before each layout.