GA-016 Single-pot isolation riser

Keep one newly acquired pot on a removable cleanable tray away from the main propagation bench.

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 Upper frame long rails	2	14 × 1 1/2 × 3/4 in 355.6 × 38.1 × 19.05 mm	1 × 2 in board sound untreated cedar or other durable untreated wood; no unknown salvage
P02 Upper frame end rails	2	11 × 1 1/2 × 3/4 in 279.4 × 38.1 × 19.05 mm	1 × 2 in board sound untreated cedar or other durable untreated wood; no unknown salvage
P03 Leg blocks	4	4 × 1 1/2 × 1 1/2 in 101.6 × 38.1 × 38.1 mm	2 × 2 in board sound untreated wood
P04 Pot support slats	5	14 × 1 1/2 × 3/4 in 355.6 × 38.1 × 19.05 mm	1 × 2 in board sound untreated cedar or other durable untreated wood; no unknown salvage

Hardware and consumables

8 #8 × 2-1/2 in exterior screws for the four flat-frame butt corners

8 #9 × 3 in exterior screws vertically through upper frame into the four leg ends

20 #8 × 1-1/4 in slat screws

1 removable 12 in commercial nonporous nursery saucer

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

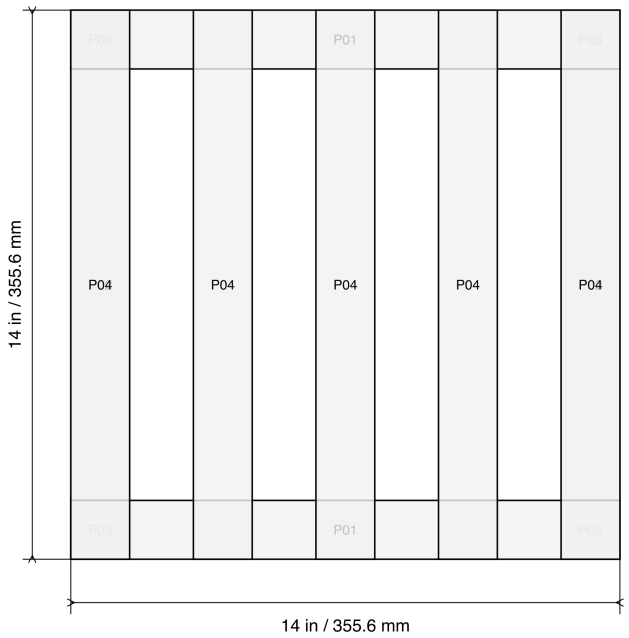
Context references; not design endorsements or certifications.

E02 · Seed and Seedling Biology · Penn State Extension · https://extension.psu.edu/seed-and-seedling-biology

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 single-pot isolation riser for this result: Keep one newly acquired pot on a removable cleanable tray away from the main propagation bench. Confirm the design reference before cutting: Riser outside 14 × 14 × 5-1/2 in (355.6 × 355.6 × 139.7 mm). 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 × 2 in board: actual 0.75 × 1.5 in (19.05 × 38.1 mm); 2 × 2 in board: actual 1.5 × 1.5 in (38.1 × 38.1 mm). 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: 2 Upper frame long rails 14 × 1.5 × 0.75 in (355.6 × 38.1 × 19.05 mm), mark P01; 2 Upper frame end rails 11 × 1.5 × 0.75 in (279.4 × 38.1 × 19.05 mm), mark P02; 4 Leg blocks 4 × 1.5 × 1.5 in (101.6 × 38.1 × 38.1 mm), mark P03; 5 Pot support slats 14 × 1.5 × 0.75 in (355.6 × 38.1 × 19.05 mm), mark P04. 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 Assemble the 14 × 14 in upper perimeter with 14 in rails outside and 11 in end rails between. Keep each rail flat with its 1-1/2 in face upward.

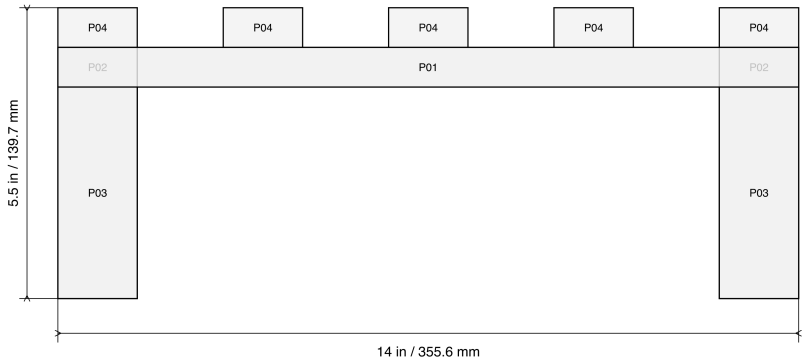
05 Predrill two horizontal holes per corner through the 1-1/2 in-wide front/rear rail into each end rail. Set their x centers at 3/8 and 1-1/8 in on the left, 12-7/8 and 13-5/8 in on the right, all at z = 4-3/8 in. Use eight #8 × 2-1/2 in screws; check square before tightening.

06 Stand a 4 in leg block beneath each corner. Their outer faces must be flush with the frame outside edges.

Complete the assembly

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FRONT — transparent assembly projection from y = 0; 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.
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07 Fasten each leg vertically from above with two #9 × 3 in screws, eight total. Their x centers are 3/4 in for left legs and 13-1/4 in for right legs; front y centers are 3/8 and 1-1/8 in, rear y centers 12-7/8 and 13-5/8 in. These differ from horizontal corner-screw x centers. Pilot through the 3/4 in frame into each leg end; no horizontal side screw into a leg ending below the frame.

08 Mark five top slat left edges at 0, 3-1/8, 6-1/4, 9-3/8 and 12-1/2 in. Lay them across the entire front-to-rear span.

09 Screw each slat to the front and rear rails with two 1-1/4 in screws per crossing. Sink heads flush and inspect underside points.

10 Set the removable saucer on the slats and center the actual pot inside it. Place the riser on a level hard surface separated from other pots.

11 Water the pot separately, empty standing water as needed for the crop, and inspect leaves/soil before moving the plant into the main growing area.

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

Riser outside 14 × 14 × 5-1/2 in (355.6 × 355.6 × 139.7 mm).

All four legs contact a flat floor and the saucer cannot bridge insecurely.

Operation

Physical separation is an observation aid, not pest-proof quarantine or disease treatment.

Cleaning and maintenance

Clean and dry the saucer between plants; inspect leg joints before moving.