HO-006 Folding tabletop privacy screen

Provide a movable visual divider on a level work surface while folding flat for storage.

Original bounded component build. Dimensions describe this example, not an approved structural, occupied-building or universal fit design.

US inches/feet control; metric figures are references. No physical build, load certification or animal trial performed.

Before cutting

Read the whole assembly and inspect its receiving space before cutting. Measure actual sheet thickness; nominal lumber labels do not control these joints.

Set aside straight, clean stock and allow it to acclimate. Keep fingers clear of blades, clamp work and use tool-appropriate eye/hearing protection.

Dry-fit moving pieces before final fastening; stop if a proposed dimensional substitution changes clearances. Purchased hardware dimensions and hole patterns below must match the actual item.

Materials and actual cuts

Part	Qty	Actual size	Material and special cut
A Opaque panel	2	24 x 18 x 1/2 in 609.60 x 457.20 x 12.70 mm	W: untreated sound wood/plywood. Square ends; remove all splinters and burrs.
B Hinge-edge cleat	2	18 x 1 1/2 x 3/4 in 457.20 x 38.10 x 19.05 mm	W: untreated sound wood/plywood. Square ends; remove all splinters and burrs.
C Cross foot	2	6 x 1 1/2 x 3/4 in 152.40 x 38.10 x 19.05 mm	W: untreated sound wood/plywood. Square ends; remove all splinters and burrs.

Hardware and tools

8 x #8 x 1 in wood screw. Four per hinge-edge cleat

3 x 2 in-high x 1 1/2 in-open surface butt hinge, two holes per leaf. Four screws per hinge; actual hole template controls

12 x #6 x 3/4 in wood screw. Hinges into B

4 x #8 x 1 3/4 in wood screw. Two per outer cross foot into piloted panel bottom

Tape, square, pencil; clamped saw setup appropriate to the material; drill/driver and depth stop; countersink for wood fasteners; files/sanding block; clamps. Specific additional tools are noted in the steps.

Measured assembly reference

Coordinates refer to the illustrated pose: x left/right, y front/rear, z up. Positions are inches from the front-left underside datum. A negative position projects beyond that datum. The size vector gives the part orientation before any stated rotation; it is not a substitute for its cut profile.

Part / instance	Origin x, y, z	Size dx, dy, dz / rotation
A / 1	0, 0, 3/4 in 0.00, 0.00, 19.05 mm	24 x 1/2 x 18 in Rotation x/y/z: 0.0000, 0.0000, 0.0000 deg
A / 2	24 1/8, 0, 3/4 in 612.77, 0.00, 19.05 mm	24 x 1/2 x 18 in Rotation x/y/z: 0.0000, 0.0000, 0.0000 deg
B / 1	22 1/2, 1/2, 3/4 in 571.50, 12.70, 19.05 mm	1 1/2 x 3/4 x 18 in Rotation x/y/z: 0.0000, 0.0000, 0.0000 deg

Part / instance	Origin x, y, z	Size dx, dy, dz / rotation
B / 2	24 1/8, 1/2, 3/4 in 612.77, 12.70, 19.05 mm	1 1/2 x 3/4 x 18 in Rotation x/y/z: 0.0000, 0.0000, 0.0000 deg
C / 1	2, -2 3/4, 0 in 50.80, -69.85, 0.00 mm	1 1/2 x 6 x 3/4 in Rotation x/y/z: 0.0000, 0.0000, 0.0000 deg
C / 2	44 5/8, -2 3/4, 0 in 1133.47, -69.85, 0.00 mm	1 1/2 x 6 x 3/4 in Rotation x/y/z: 0.0000, 0.0000, 0.0000 deg

Numbered assembly

01. Make a tabletop visual screen only. The drawing shows the panels laid out flat before folding; normal standing use is with an open L, not one unsupported straight wall.

02. Cut two A 24 x 18 x 1/2 in panels, two B 18 x 1 1/2 x 3/4 in cleats, and two C 6 x 1 1/2 x 3/4 in outer feet. Ease exposed panel corners to 1/4 in radius.

03. Lay A face down with a 1/8 in gap between their meeting 18 in edges. Fit one B flush with each meeting edge on the back.

04. Secure each B through A with four #8 x 1 in screws at 3,7,11,15 in above the panel bottom, centered in B width. Pilot and countersink on A's front.

05. Position three 2 in-high x 1 1/2 in-open surface butt hinges across the back gap, hinge centers 3,9,15 in above the panel bottom. Use actual four-hole leaves as the drill template.

06. Fasten each hinge with four #6 x 3/4 in screws total, two into each B. Keep screws in the 3/4 in cleats, not the thin panel edge; verify all hinge knuckles share one straight axis.

07. Set one C cross foot under the outer end of each panel,2 in in from that panel's free edge. Feet run front/rear, centered 3 in each side of its panel midplane. There is deliberately no hinge-end foot to collide when the wings form an L.

08. Fasten upward through each C using two #8 x 1 3/4 in screws,3/8 and 1 1/8 in across the 1 1/2 in foot width, into the exact 1/2 in panel-bottom centerline. Pilot with a depth stop to 1 in into A; reject any split panel edge.

09. Support the panels while first folding. Stop if feet collide before the desired fold; the feet are removable for flat storage rather than forced through each other.

10. Open to approximately 90 degrees on a level table. Both outer feet must sit flat. Check the hinge axis remains vertical and there is no exposed point; the L and outer feet work together as the footprint.

11. Lift only by both solid panel bottoms, never by one wing. Remove any table clutter that could catch a foot when the screen is moved.

12. Push gently from several directions and remove the unit if it rocks or falls too easily in the actual location. No wind, impact or child-containment performance is claimed.

Acceptance and intermediate checks

Cleats are flush to the hinge edges and remain parallel.

Hinges are coaxial, with 1/8 in example panel gap.

Both outer cross feet contact the table in the open L without hinge-end foot collisions.

No hardware projects through a front face; feet can be removed before storage folding.

Use and maintenance

Visual divider only. Not for floors, wind exposure, children's enclosures or guarding machinery.

Fold and move under adult control; keep fingers out of the hinge gap.

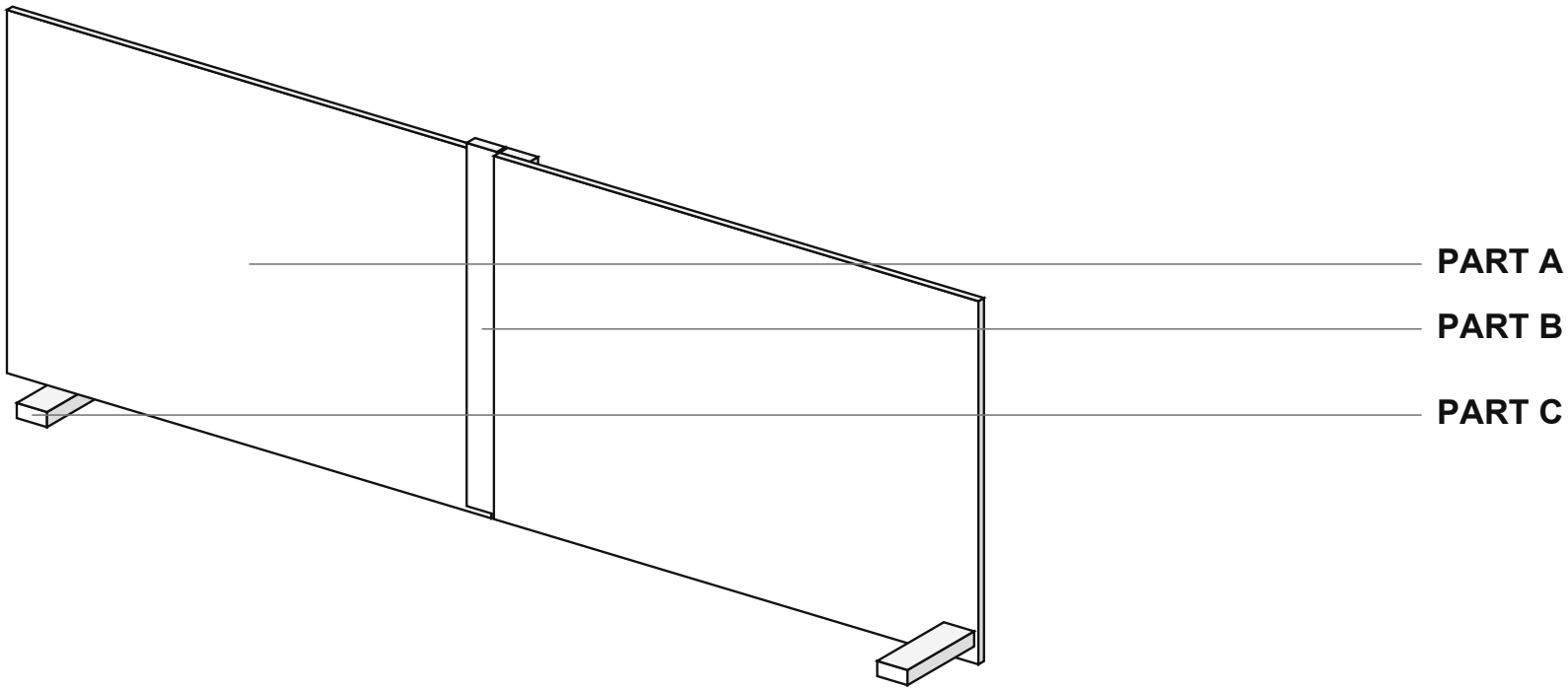
Inspect before each use for loose fasteners, cracked stock, damaged liners and a change in fit. Stop if a moving part binds or any sharp edge is exposed. Remove debris before washing. Keep birds and food away during cleaning; follow the actual material/product cleaning instructions and dry completely before reuse. Recheck screw seating after humidity changes. Replace damaged parts rather than hiding cracks with coating. No pressure, load, impact, disease-control or preservation performance is certified.

Primary context references

S4: Purdue University Extension, Wood drying: FNR-37. https://extension.purdue.edu/extmedia/FNR/FNR-37.html

HO-006 | ASSEMBLY AND ORIENTATION

x = left/right; y = front/rear; z = height. Match part letters to the cut list.



Displayed envelope (width x depth x height):

48 1/8 in x 6 in x 18 3/4 in

Metric: 1222.4 x 152.4 x 476.2 mm

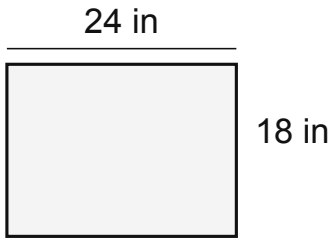
Locate joints and hardware using the numbered steps; view is not a full-size pattern.

Original B/W vector drawing - dimensions control - unbuilt / untested

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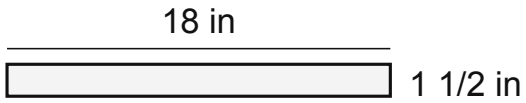
Actual dimensions; labels identify any stock blanks. Allow for saw kerfs between pieces.

A Opaque panel x2



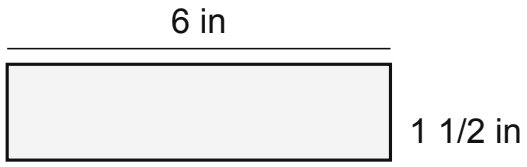
Face: 609.6 x 457.2 mm
Thickness: 1/2 in / 12.70 mm
Special cuts: see cut list and steps.

B Hinge-edge cleat x2



Face: 457.2 x 38.1 mm
Thickness: 3/4 in / 19.05 mm
Special cuts: see cut list and steps.

C Cross foot x2



Face: 152.4 x 38.1 mm
Thickness: 3/4 in / 19.05 mm
Special cuts: see cut list and steps.

Original B/W vector drawing - dimensions control - unbuilt / untested