PO-009 Folding two-panel handling hurdle

Create a visible movable guide during supervised movement of birds; it is not a cage, quarantine pen or unattended boundary.

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

Read every step and identify the installed orientation. Make the component off-site with birds excluded.

Measure the actual receiving space, chosen commercial accessories and access route. Stop if the example does not fit; changing only one member can invalidate the assembly.

Reject split, warped, moldy or chemically contaminated stock. Keep exposed mesh cut ends and all sharp fasteners inaccessible to birds.

The drawing dimensions control; illustrations are not full-size templates. Allow a saw kerf between parts when laying out stock.

Use limits

No person may stand or sit on this component. No tested load rating is claimed.

A site-specific safe location and supervision are required; remove it if birds become trapped, peck damaged material, or cannot use their normal feed, water, shelter and escape routes.

Materials and finished cuts

Part	Qty	Size to cut	Material and detail
A Full-width horizontal rail	4	24 × 2 1/2 × 3/4 in 609.6 × 63.5 × 19.05 mm	Untreated sound straight softwood. Square ends; remove splinters.
B Between-rail stile	4	19 × 2 1/2 × 3/4 in 482.6 × 63.5 × 19.05 mm	Untreated sound straight softwood. Square ends; remove splinters.
C Smooth mesh panel	2	22 × 22 × 1/25 in 558.8 × 558.8 × 1.02 mm	Welded galvanized 1/2 in hardware cloth, 19-gauge product; inspect actual welds/coating. No universal predator-resistance claim.. All cut edges buried under battens.
D Horizontal mesh batten	4	24 × 1 1/2 × 3/4 in 609.6 × 38.1 × 19.05 mm	Untreated sound straight softwood. Square ends; remove splinters.
E Vertical mesh batten	4	21 × 1 1/2 × 3/4 in 533.4 × 38.1 × 19.05 mm	Untreated sound straight softwood. Square ends; remove splinters.

Hardware and consumables

8 × Flat corner brace with matched short screws. Four per frame

28 × #8 corrosion-resistant exterior wood screw 1 1/4 in (31.75 mm). Mesh battens. Use compatible coatings/metals and the maker's pilot-hole guidance; do not substitute drywall screws.

2 × Corrosion-resistant hinges with smooth-ended fasteners. Keep hinge knuckles on handler face

2 × Flexible hinge-gap guard. Fit to actual hinge and travel; no loose loops

Tools

Tape measure, square and pencil; Saw appropriate to material and work supports; Drill/driver, countersink and pilot bits selected for the screws; Clamps, sanding block and eye/hearing protection; dust control appropriate to the material

Primary context and design record

Context references; not design endorsements or certifications.

S3 · Small-Scale Poultry Housing · Penn State Extension

S2 · Build a Clean Routine · USDA APHIS Defend the Flock

S4 · Galvanized Hardware Cloth · Marco Specialty Steel

Assembly and first checks

The large drawing plates follow the instructions in this same PDF. Read the cut list and match part IDs before cutting. Print with automatic page orientation; use written dimensions rather than measuring the printed drawing.

01 Cut four A rails to 24 in and four B stiles to 19 in (482.6 mm) from actual 3/4 × 2 1/2 in stock, producing two equal 24 in square frames.

02 Lay each frame flat with B between the A rails. Clamp, compare diagonals and fit a flat metal corner brace at every rear corner.

03 Use the braces' short maker-matched screws; no point may protrude through the 3/4 in frame face.

04 Cut two C mesh sheets to 22 × 22 in (558.8 mm). Center one over each frame, providing 1 1/2 in overlap beyond the 19 in clear opening.

05 Cut four D battens 24 in long and four E battens 21 in long, all actual 3/4 × 1 1/2 in.

06 Fasten D across the upper and lower frame fronts, four 1 1/4 in screws per batten. Fit E between D at each side, three screws per E.

07 Check every wire edge is fully covered. The mesh must have no loop, projecting end or loose center that could snag a foot or wing.

08 Place frames side by side with a 1/4 in (6.4 mm) hinge gap. Fit two hinges at 4 and 20 in (101.6 and 508 mm) above the bottom on the handler side, with smooth-ended hardware.

09 Fold the panels toward the handler to check their travel; fit flexible hinge-gap covers using hardware suitable for the selected hinges so no accessible scissor point remains.

10 Set the hurdle on a level floor in a shallow V held by an adult handler. Do not attach ropes, create a narrowing trap or leave the hurdle standing unattended.

11 Move slowly behind birds with a wide clear destination; stop if a bird presses against mesh, flaps into it or attempts to jump.

12 After use fold it, clean/dry the lower edges and store out of bird reach; inspect the covered hinge gap before every reuse.

Acceptance and intermediate checks

Both frames remain 24 in square; clear wood openings are 19 × 19 in.

Mesh cut edges have 1 1/2 in overlap and are fully trapped by battens.

Hinges move freely, their gap is guarded, and no folded edge catches a handler's fingers.

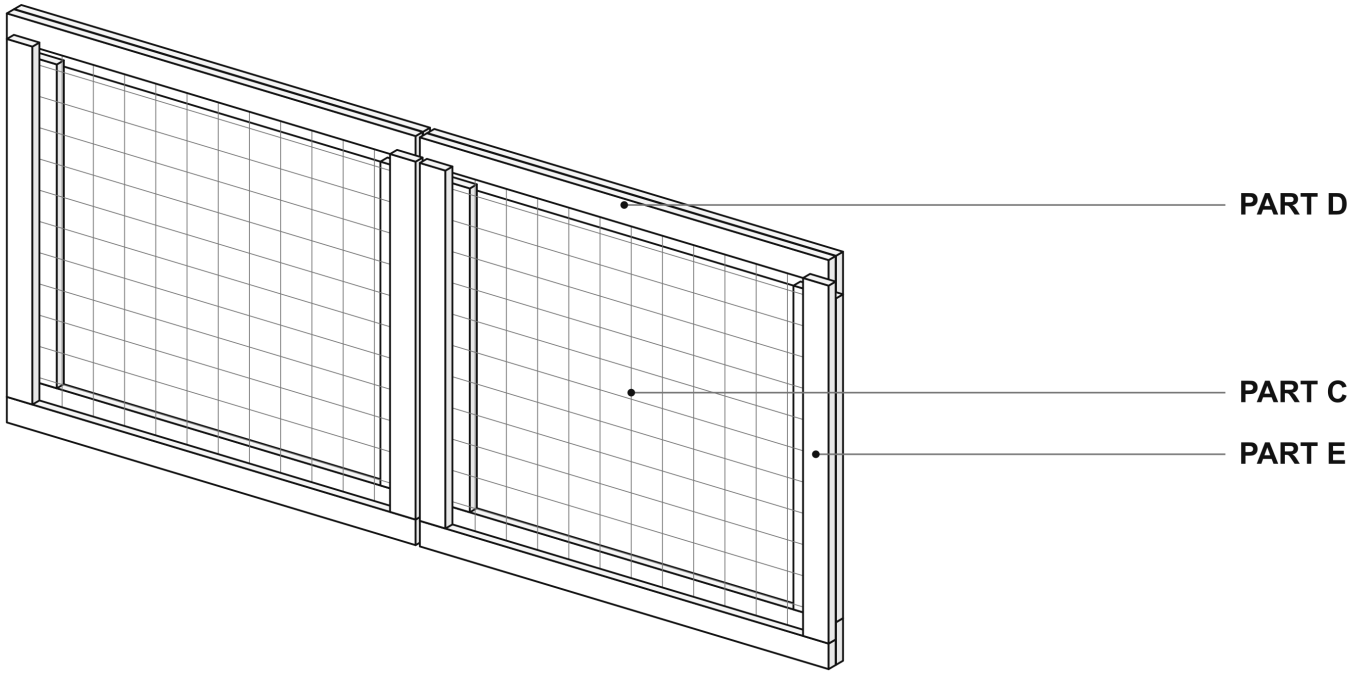
Used only by a present handler; it is not claimed to contain predators, chicks or airborne disease.

Cleaning and maintenance

Inspect before each use for splits, loose joints, protruding points and trapped debris. Remove accumulated litter or manure promptly. When cleaning is needed, move birds away, remove debris first, wash and use only a suitable label-directed product if disinfection is indicated; let the item dry before return. Recheck the fit after seasonal wood movement. Replace cracked panels, rusted fasteners or frayed liners instead of concealing damage. Sand accessible edges to a small smooth radius. Use a removable washable contact liner where specified. Any optional coating must be suitable for the intended animal-equipment use and fully cured according to its label before installation. Porous wood is not represented as a disinfectable food-contact surface.

PO-009 | ASSEMBLY GEOMETRY

Folding two-panel handling hurdle



Displayed schematic envelope (x × y × z):

48 1/4 in × 1.54 in × 24 in / 1225.5 × 39.1 × 609.6 mm

Part letters match the cut list. Hardware/anchors are described in the steps.

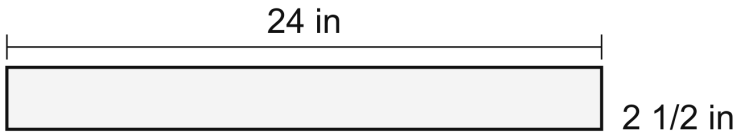
Original schematic • dimensions control • untested editorial draft

x = left/right; y = front/rear; z = height.

PO-009 | DIMENSIONED PARTS 1 OF 2

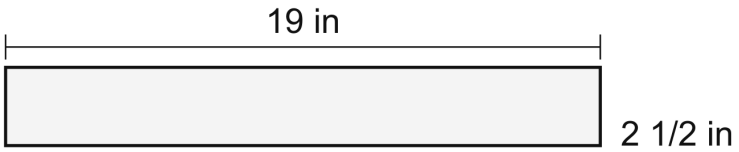
Finished sizes; allow for saw kerfs. Match part letters to the materials list.

A Full-width horizontal rail ×4



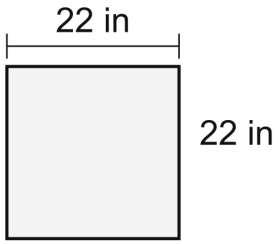
Metric face: 609.6 × 63.5 mm
Thickness: 3/4 in / 19.05 mm
Stock and special cuts: materials list.

B Between-rail stile ×4



Metric face: 482.6 × 63.5 mm
Thickness: 3/4 in / 19.05 mm
Stock and special cuts: materials list.

C Smooth mesh panel ×2



Metric face: 558.8 × 558.8 mm
19-gauge mesh; thickness is schematic.
Stock and special cuts: materials list.

D Horizontal mesh batten ×4



Metric face: 609.6 × 38.1 mm
Thickness: 3/4 in / 19.05 mm
Stock and special cuts: materials list.

Original B/W vector drawing • US inches control • unbuilt / untested

PO-009 | DIMENSIONED PARTS 2 OF 2

Finished sizes; allow for saw kerfs. Match part letters to the materials list.

E Vertical mesh batten ×4



Metric face: 533.4 × 38.1 mm
Thickness: 3/4 in / 19.05 mm
Stock and special cuts: materials list.

Original B/W vector drawing • US inches control • unbuilt / untested