PO-005 Cleated low-access poultry ramp

Provide a removable inclined walking surface from a 12 in rise to a low existing doorway; this is not a human access ramp.

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 Ramp deck	1	48 × 12 × 3/4 in 1219.2 × 304.8 × 19.05 mm	Exterior-bond plywood, measured actual thickness. Square ends; remove splinters.
B Traction cleat	8	10 × 3/4 × 3/4 in 254 × 19.05 × 19.05 mm	Untreated sound straight softwood. Square ends; remove splinters.

Hardware and consumables

16 × #8 corrosion-resistant exterior wood screw 1 1/4 in (31.75 mm). Two per cleat. Use compatible coatings/metals and the maker's pilot-hole guidance; do not substitute drywall screws.

1 × Pair of manufacturer-specified removable ramp-retaining brackets. Fit and install to actual receiving sill; no generic fastener substitution

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

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 Measure the finished rise to the receiving sill. This example is only for a 12 in (304.8 mm) rise and a 48 in (1219.2 mm) deck; it needs about 46 1/2 in (1181 mm) horizontal space.

02 Cut A to 48 × 12 in. Reject delaminated plywood; the entire 12 in width remains intact at the ends.

03 Cut eight B cleats to 10 in (254 mm) from actual 3/4 in square stock. Ease all four long edges to remove sharp corners.

04 Mark cleat centerlines on A at 3, 9, 15, 21, 27, 33, 39 and 45 in (76.2 mm then 152.4 mm spacing) from the lower end.

05 Center each cleat across the width, leaving 1 in (25.4 mm) of deck exposed on either side. Clamp before drilling.

06 Drill two clearance holes through each cleat at 2 and 8 in (50.8 and 203.2 mm) from the cleat's left end. Pilot the deck below without breaking through its lower face.

07 Secure each cleat with two 1 1/4 in screws. The 1 1/2 in combined thickness must leave 1/4 in (6.4 mm) below each screw point.

08 Seal and cure the plywood edges using a suitable product; do not add slippery gloss to the walking face or coat it with abrasive loose grit.

09 Choose two bought ramp-retaining brackets that fit the existing sill and leave the walking surface clear. Install according to their instructions; the actual sill must support and retain the ramp without splitting.

10 Place the lower end on a firm, level pad; at a 12 in rise the deck angle is approximately 14.5 degrees. Check both upper brackets engage before releasing the deck.

11 Press at the lower and upper corners without birds to check rocking and sideways movement. Correct the base or retainers; do not wedge loose stones under a corner.

12 Observe the actual birds entering and leaving. Remove the ramp if they slip, jump around it or crowd at the opening; adapt the route rather than forcing use.

Acceptance and intermediate checks

Cleats are parallel, centered and spaced 6 in apart along the deck, with no fastening points through the bottom.

Installed rise is 12 in and both upper retainers engage fully; the ramp is not held only by friction.

All eight cleats are tight, upper/lower transitions have no toe-trapping gap, and the underside is clear of hidden cavities.

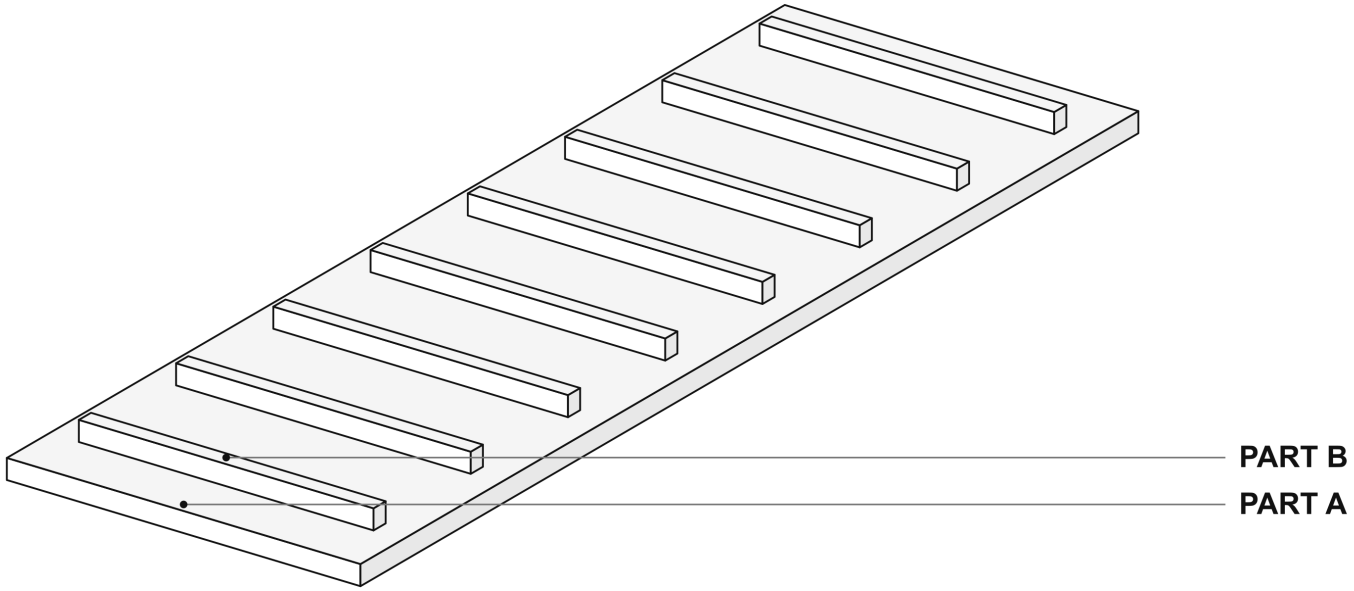
No person steps on the ramp; actual birds negotiate the approach under observation before routine use.

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-005 | ASSEMBLY GEOMETRY

Cleated low-access poultry ramp



Displayed schematic envelope (x × y × z):

12 in × 48 in × 1 1/2 in / 304.8 × 1219.2 × 38.1 mm

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

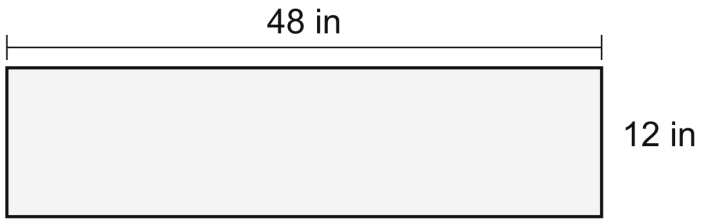
Original schematic • dimensions control • untested editorial draft

x = left/right; y = front/rear; z = height. Ramp shown flat before installation.

PO-005 | DIMENSIONED PARTS 1 OF 1

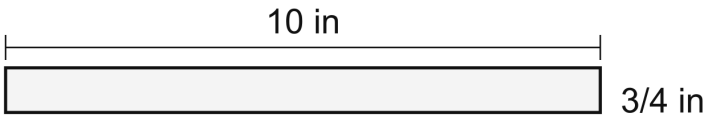
Finished sizes; allow for saw kerfs. Match part letters to the materials list.

A Ramp deck ×1



Metric face: 1219.2 × 304.8 mm
Thickness: 3/4 in / 19.05 mm
Stock and special cuts: materials list.

B Traction cleat ×8



Metric face: 254.0 × 19.0 mm
Thickness: 3/4 in / 19.05 mm
Stock and special cuts: materials list.

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