PO-002 Low, removable wooden roost rack

Provide a removable wooden resting bar supported by broad floor feet; this is not a ladder or a nest box.

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 Floor foot	2	24 × 3 1/2 × 1 1/2 in 609.6 × 88.9 × 38.1 mm	Untreated sound straight softwood. Square ends; remove splinters.
B Upright	2	10 1/2 × 1 1/2 × 1 1/2 in 266.7 × 38.1 × 38.1 mm	Untreated sound straight softwood. Square ends; remove splinters.
C Roost bar	1	36 × 3 1/2 × 1 1/2 in 914.4 × 88.9 × 38.1 mm	Untreated sound straight softwood. Square ends; remove splinters.
D Between-upright tie	1	31 × 1 1/2 × 1 1/2 in 787.4 × 38.1 × 38.1 mm	Untreated sound straight softwood. Square ends; remove splinters.

Hardware and consumables

32 × #8 corrosion-resistant exterior wood screw 1 1/4 in (31.75 mm). Eight angles, four screws per angle [N1]

4 × #8 corrosion-resistant exterior wood screw 2 1/2 in (63.5 mm). Roost to uprights [N1]

8 × Corrosion-resistant 90-degree wood-connection angle with four usable holes. Two at each foot/upright joint and two at each tie end; holes must suit 1 1/4 in wood screws

N1 applies to every entry marked [N1]: Use compatible coatings/metals and the maker's pilot-hole guidance; do not substitute drywall screws.

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.

S1 · Caring for chickens in cold weather · University of Minnesota 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 Cut the two 24 in (609.6 mm) feet A from actual 1 1/2 × 3 1/2 in stock; place the wide faces flat on the floor.

02 Cut uprights B to 10 1/2 in (266.7 mm); reject knots at the future end connections.

03 Cut roost C to 36 in (914.4 mm). Ease its two upper long edges with sandpaper, retaining a broad flat top rather than a sharp corner.

04 On each foot mark an upright footprint 1 in (25.4 mm) from the outside x-edge and 10 1/4 in (260.4 mm) from the front end; the right-hand foot mirrors the left.

05 Clamp one upright square on each foot. Attach a metal angle on the front and rear of each upright using the selected angle's holes and 1 1/4 in screws; do not put a screw into the bird-contact top.

06 Set the feet with outside faces 36 in (914.4 mm) apart. Their upright inside faces must leave a 31 in (787.4 mm) gap for tie D.

07 Clamp D between the uprights with its lower edge 6 in (152.4 mm) above the floor. Use an angle below and an angle above at each end, keeping all metal below the resting surface.

08 Place C over the uprights with ends flush with the outside foot faces. Its underside is 12 in (304.8 mm) and its top 13 1/2 in (342.9 mm) above the floor.

09 Pilot and drive two 2 1/2 in screws down through C into each upright; position the pair along the upright grain, separated as far as the 1 1/2 in footprint allows without approaching an edge closer than 3/8 in.

10 Check all four foot ends sit on the same level floor. Push gently from each side with no birds present; correct rocking or loose angles rather than packing with loose scraps.

11 Install clear of nest entrances and feed/water. Check actual bird access and landing space under supervision; remove the rack if a bird cannot use it comfortably.

12 Lift the entire rack out for cleaning; do not drag the foot edges through wet bedding or use the tie as a carrying handle.

Acceptance and intermediate checks

At step 6, the two feet are parallel and the 31 in tie fits without forcing the uprights outward.

Before fastening C, its upper face is level and every angle screw remains buried within the stated wood thickness.

No rocking, split stock, sharp top edges or accessible screw points.

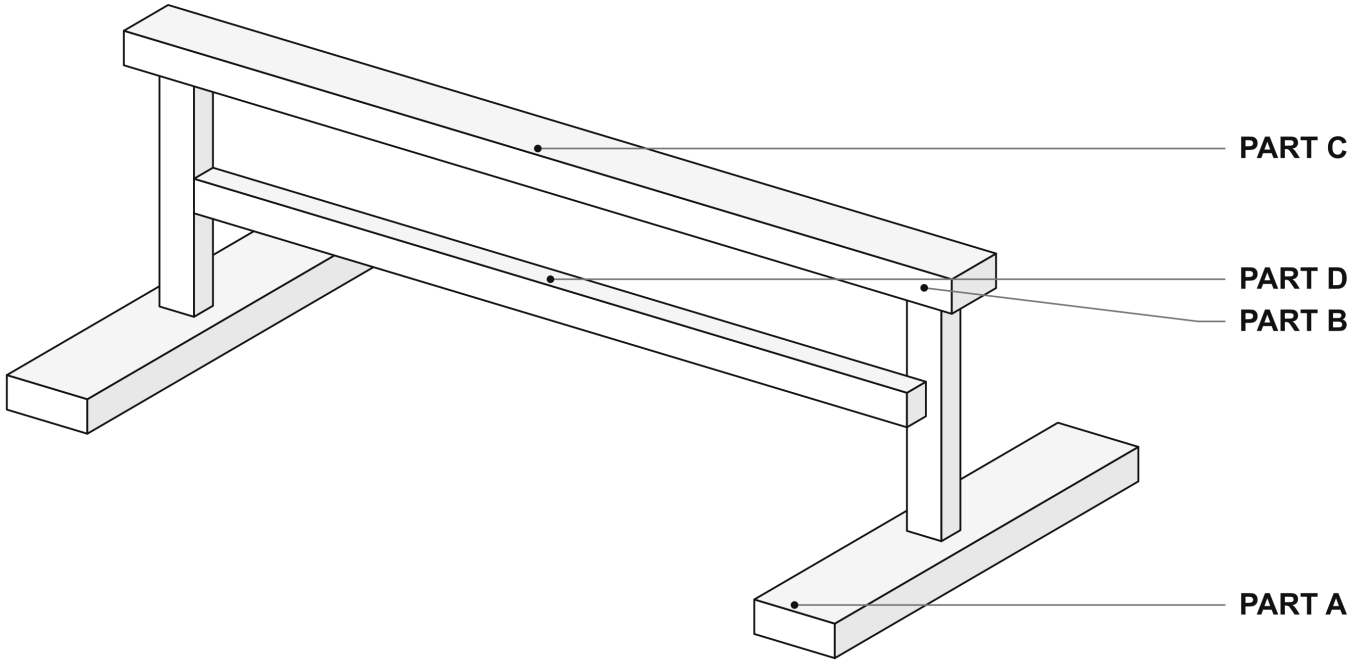
Landing area and headroom are clear; placement is appropriate to the actual birds. No flock capacity or tested load is claimed.

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-002 | ASSEMBLY GEOMETRY

Low, removable wooden roost rack



Displayed schematic envelope (x × y × z):

36 in × 24 in × 13 1/2 in / 914.4 × 609.6 × 342.9 mm

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

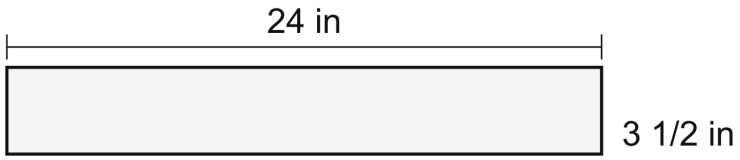
Original schematic • dimensions control • untested editorial draft

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

PO-002 | DIMENSIONED PARTS 1 OF 1

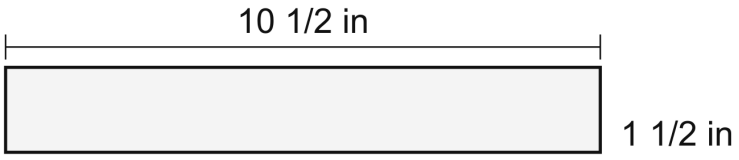
Finished sizes; allow for saw kerfs. Match part letters to the materials list.

A Floor foot ×2



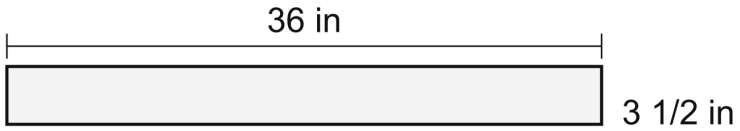
Metric face: 609.6 × 88.9 mm
Thickness: 1 1/2 in / 38.10 mm
Stock and special cuts: materials list.

B Upright ×2



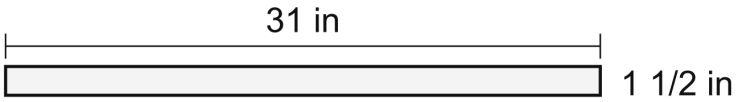
Metric face: 266.7 × 38.1 mm
Thickness: 1 1/2 in / 38.10 mm
Stock and special cuts: materials list.

C Roost bar ×1



Metric face: 914.4 × 88.9 mm
Thickness: 1 1/2 in / 38.10 mm
Stock and special cuts: materials list.

D Between-upright tie ×1



Metric face: 787.4 × 38.1 mm
Thickness: 1 1/2 in / 38.10 mm
Stock and special cuts: materials list.

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