PO-025 Portable litter-transfer chute

Direct small amounts of removed litter into a receiving cart without carrying them across the clean feed area; not a bulk gravity conveyor.

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

Assembly illustration shows the chute flat; installed inclination uses actual supported heights, with no roof/foundation or human-bearing use.

No material-flow performance, load capacity or sanitation guarantee. Stop if any support, clamp or wood member moves.

Materials and finished cuts

Part	Qty	Size to cut	Material and detail
A Chute floor	1	36 × 16 × 1/2 in 914.4 × 406.4 × 12.7 mm	Exterior-bond plywood, measured actual thickness. Square ends; remove splinters.
B Sideboard	2	36 × 6 × 1/2 in 914.4 × 152.4 × 12.7 mm	Exterior-bond plywood, measured actual thickness. Square ends; remove splinters.
C Under-floor stiffener	2	36 × 1 1/2 × 3/4 in 914.4 × 38.1 × 19.05 mm	Untreated sound straight softwood. Square ends; remove splinters.

Hardware and consumables

22 × #8 corrosion-resistant exterior wood screw 1 1/4 in (31.75 mm). Ten stiffener screws and twelve wall screws. Use compatible coatings/metals and the maker's pilot-hole guidance; do not substitute drywall screws.

4 × Commercial clamp with nonmarring pads. Two per end, compatible with actual rigid supports

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.

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 actual receiving cart and transfer route. This example is 36 in (914.4 mm) long, with a 15 in (381 mm) clear trough; it is not a bridge to walk on.

02 Cut A to 36 × 16 in, B to 36 × 6 in and C stiffeners to 36 in long with actual 3/4 × 1 1/2 in cross-sections.

03 Lay C on their 3/4 in edges with left faces at x = 3 and 12 1/4 in (76.2 and 311.2 mm). Place A flat across them.

04 Mark five fastening points above each C at y = 2, 10, 18, 26 and 34 in. Pilot and attach A with ten 1 1/4 in screws downward into C.

05 Stand B on A at the full-length outer sides, leaving 15 in clear between. Clamp one side at a time.

06 Mark a centered wall screw line 1/4 in (6.4 mm) from each A edge. Attach upward through A with six 1 1/4 in screws per B, equally spaced from y = 2 to 34 in.

07 Sand the exposed lower/upper ends and cover no edge with loose tape or fraying material. Seal/cure plywood edges appropriately before use.

08 Set the upper and lower ends on existing rigid supports spanning the full width. For this example, limit the height difference to 12 in over the 36 in length; actual material may need manual movement even at this slope.

09 Use two commercial clamps at each support to retain the chute without crushing plywood. Keep clamp handles outside the travel and hand paths; do not rely on the chute's weight.

10 With no birds present, test the empty assembly and then a small handful of removed bedding. Stop if material hangs up, the receiving cart shifts, or supports/clamps move.

11 Guide material with a dedicated hand tool from the upper end; keep hands away from the receiving gap. Never reach underneath or use the chute for wet heavy manure loads.

12 Unclamp only when empty, remove organic matter into waste collection, wash as appropriate and dry both stiffeners and trough before storage outside the clean-equipment area.

Acceptance and intermediate checks

Two stiffeners are mounted edge-up, 1 1/2 in deep; all ten screws remain in them.

Clear trough is 15 in; sideboards stand 6 in above the 1/2 in floor.

Both full-width supports and all four clamps are stable; receiving cart cannot roll away.

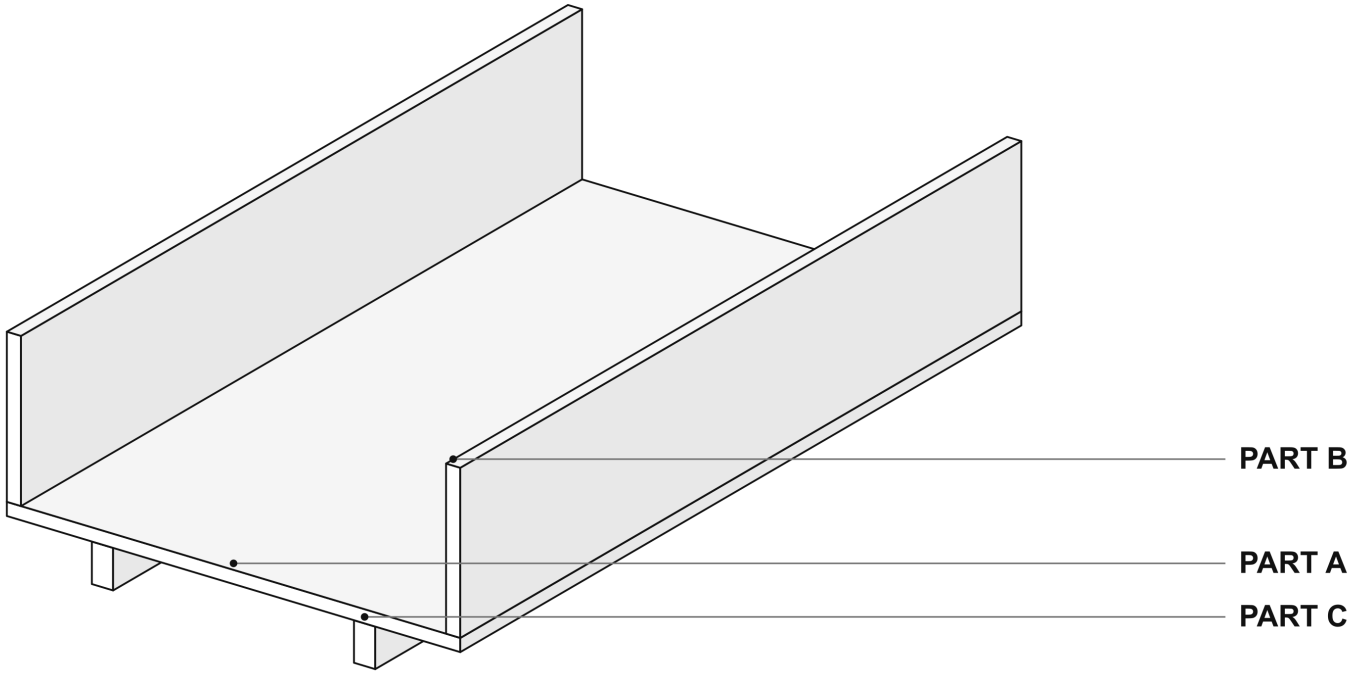
No person or heavy bulk load; birds excluded and no mixing of waste/clean-feed routes.

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-025 | ASSEMBLY GEOMETRY

Portable litter-transfer chute



Displayed schematic envelope (x × y × z):

16 in × 36 in × 8 in / 406.4 × 914.4 × 203.2 mm

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

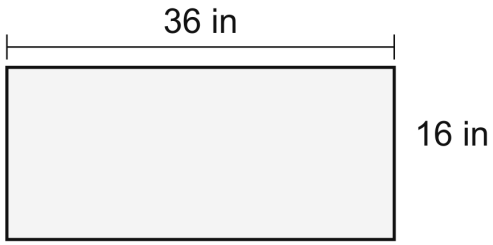
Original schematic • dimensions control • untested editorial draft

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

PO-025 | DIMENSIONED PARTS 1 OF 1

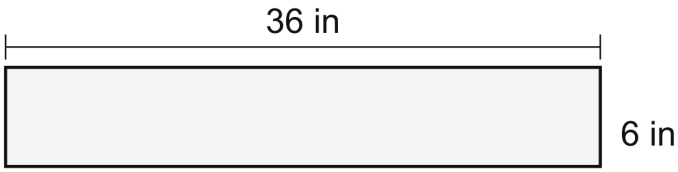
Finished sizes; allow for saw kerfs. Match part letters to the materials list.

A Chute floor ×1



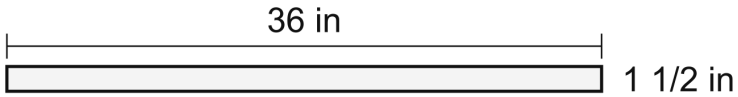
Metric face: 914.4 × 406.4 mm
Thickness: 1/2 in / 12.70 mm
Stock and special cuts: materials list.

B Sideboard ×2



Metric face: 914.4 × 152.4 mm
Thickness: 1/2 in / 12.70 mm
Stock and special cuts: materials list.

C Under-floor stiffener ×2



Metric face: 914.4 × 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