PO-013 Two-carton egg collection carrier

Carry two closed commercial egg cartons in a washable-lined rigid carrier; eggs are protected by their cartons rather than wood holes.

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 Bottom	1	18 × 12 × 1/2 in 457.2 × 304.8 × 12.7 mm	Exterior-bond plywood, measured actual thickness. Square ends; remove splinters.
B Full-depth side	2	12 × 4 × 1/2 in 304.8 × 101.6 × 12.7 mm	Exterior-bond plywood, measured actual thickness. Square ends; remove splinters.
C Front	1	17 × 4 × 1/2 in 431.8 × 101.6 × 12.7 mm	Exterior-bond plywood, measured actual thickness. Square ends; remove splinters.
D Back	1	17 × 4 × 1/2 in 431.8 × 101.6 × 12.7 mm	Exterior-bond plywood, measured actual thickness. Square ends; remove splinters.

Hardware and consumables

24 × #8 corrosion-resistant exterior wood screw 1 1/4 in (31.75 mm). Wood joints. Use compatible coatings/metals and the maker's pilot-hole guidance; do not substitute drywall screws.

2 × Low-profile carry pull with two mounting holes. Outside B only

4 × Short smooth-head through-bolt with washers and capped nut. Fit 1/2 in panel and actual pull; no point exposed

Removable washable liner, 16 7/8 × 10 7/8 in maximum

Two commercial egg cartons selected to actual fit

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 two actual closed cartons before cutting; both must fit inside 17 × 11 in (431.8 × 279.4 mm) without crushing. This example assumes two cartons each no larger than 12 × 5 in.

02 Cut A to 18 × 12 in (457.2 × 304.8 mm) and both B sides to 12 × 4 in (304.8 × 101.6 mm) from actual 1/2 in plywood.

03 Cut C and D to 17 × 4 in. Dry-fit them between B on top of A; the outside footprint remains 18 × 12 in.

04 Mark four bottom screw positions below each side wall, spaced evenly with the outer positions 1 in (25.4 mm) from the ends.

05 Clamp each B square and attach upward through A with four 1 1/4 in screws per B. Keep the screw line centered in the wall's 1/2 in edge.

06 Attach C and D through A with four 1 1/4 in screws each, then add two side-to-end screws at each corner, at 1 and 3 in above A.

07 Fit two low-profile bought pulls at the outside centers of B. Use short through-bolts, broad smooth internal washers and capped nuts rather than long exposed points.

08 Fit a removable washable liner no larger than 16 7/8 × 10 7/8 in (428.6 × 276.2 mm). Its edges must not curl beneath the cartons.

09 Seal/cure plywood edges as appropriate for an equipment carrier. Wood is not the egg contact surface; keep cartons closed and do not place loose eggs directly on the liner.

10 Set both empty cartons in the carrier and lift using both pulls. Confirm neither carton jams under a pull fitting or slides outside a retaining wall.

11 Carry slowly with both hands, keeping the tray level. Do not stack another loaded carrier on top or use it as a stool.

12 Separate clean egg-handling equipment from manure tools. Remove the liner to clean and dry it, and replace damaged cartons rather than treating this carrier as a sanitizing system.

Acceptance and intermediate checks

Walls stand on A; inside floor is 17 × 11 in and total height is 4 1/2 in (114.3 mm).

All 24 wood screws are buried; four handle bolts have smooth internal hardware.

Two actual closed cartons fit without pressure and both pulls remain accessible.

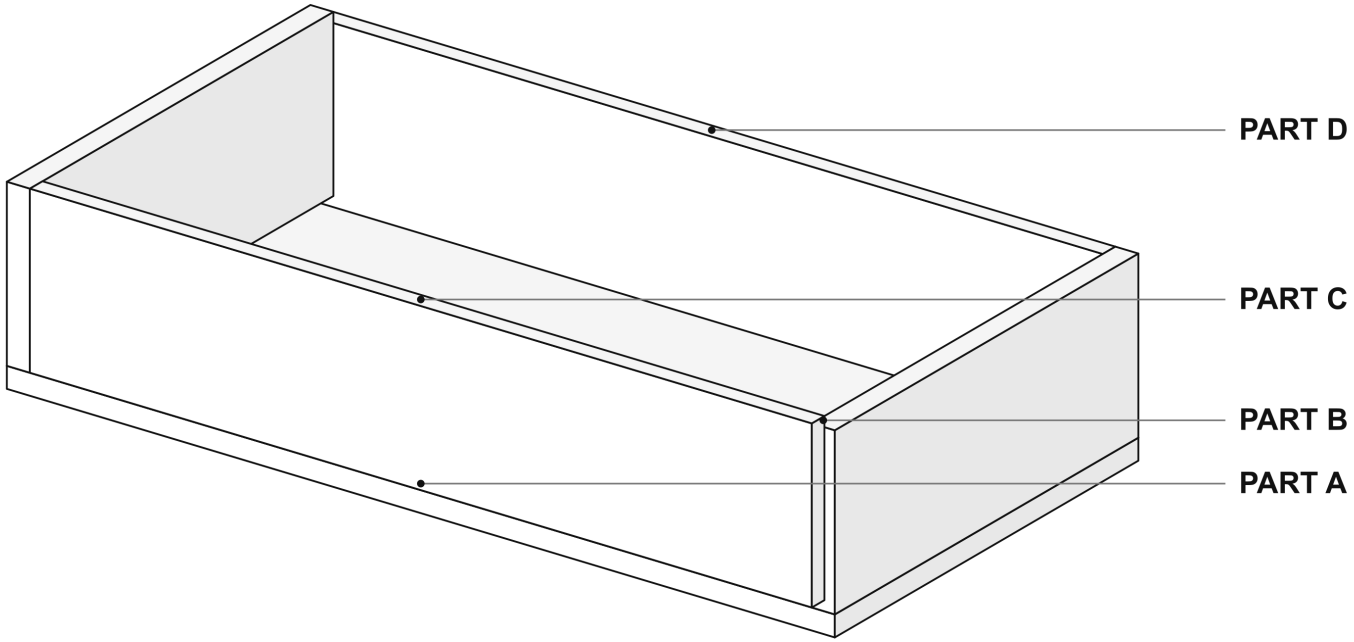
Liner can be removed to dry; no direct loose-egg contact, stacking load or sanitation certification is implied.

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-013 | ASSEMBLY GEOMETRY

Two-carton egg collection carrier



Displayed schematic envelope (x × y × z):

18 in × 12 in × 4 1/2 in / 457.2 × 304.8 × 114.3 mm

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

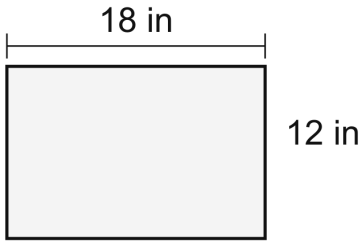
Original schematic • dimensions control • untested editorial draft

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

PO-013 | DIMENSIONED PARTS 1 OF 1

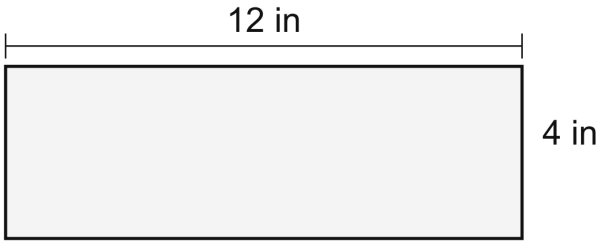
Finished sizes; allow for saw kerfs. Match part letters to the materials list.

A Bottom ×1



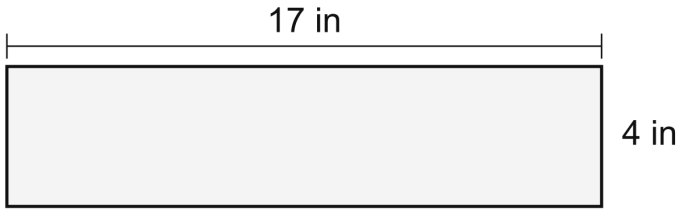
Metric face: 457.2 × 304.8 mm
Thickness: 1/2 in / 12.70 mm
Stock and special cuts: materials list.

B Full-depth side ×2



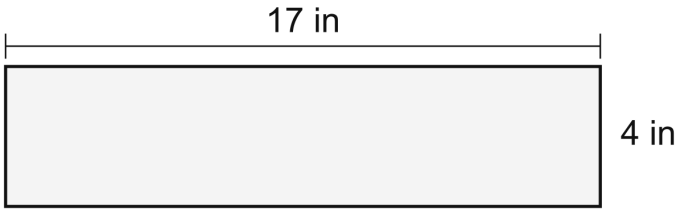
Metric face: 304.8 × 101.6 mm
Thickness: 1/2 in / 12.70 mm
Stock and special cuts: materials list.

C Front ×1



Metric face: 431.8 × 101.6 mm
Thickness: 1/2 in / 12.70 mm
Stock and special cuts: materials list.

D Back ×1



Metric face: 431.8 × 101.6 mm
Thickness: 1/2 in / 12.70 mm
Stock and special cuts: materials list.

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