

ARMAC windcatcher - assembly sequence pack

Use with the separate full-scale fabrication template PDF. Dimensions in mm.

Frozen build baseline

Internal box: 430 W x 230 D x 190 H.

Apertures: 4 total, one centred in each face, each 150 x 60, aperture top edge 15 below lid.

Funnel: top opening 300 x 150, bottom opening 115 x 57.5, vertical drop 110.

Baffles: 4 local inlet plates only - 2 long-face and 2 short-face. No central cross-baffle.

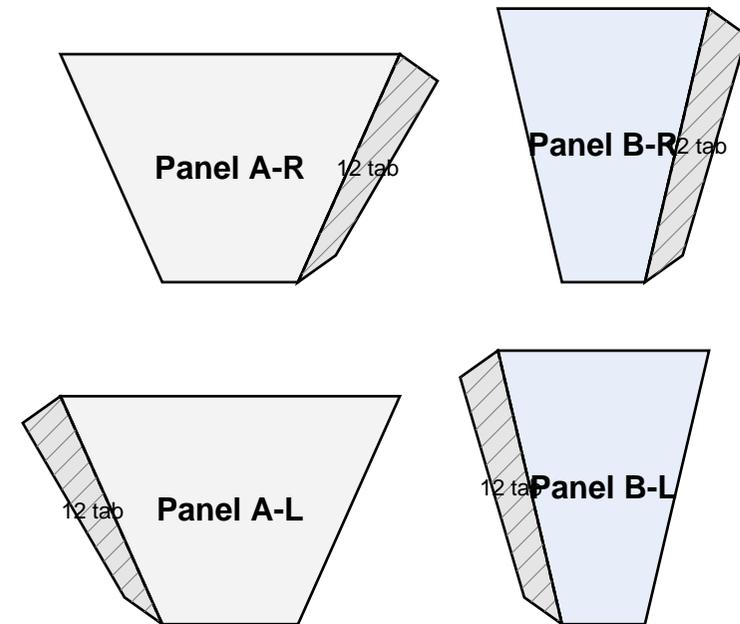
What this pack fixes

- It gives one explicit handed funnel sequence: A-R, B-R, A-L, B-L clockwise viewed from above.
- It states exactly which tab goes under which plain edge at each of the four seams.
- It gives a practical drilling sequence: clamp first, drill centre first, then adjacent holes, then ends.
- It aligns the baffle fold line with the aperture top edge so the baffles remain above the funnel rim plane.

Recommended build sequence

1. Print and cut the template pages at 100 percent. Make one right-hand and one left-hand copy of each funnel panel.
2. Mark and cut all 4 apertures in the box. Keep the 15 mm strip above each opening intact for baffle rivets.
3. Fold the 4 baffle flanges. Pre-drill the flange holes if desired.
4. Install the two long-face baffles first, then the two short-face baffles.
5. Assemble the funnel on the bench using the 4 seam joints J1 to J4 in the order shown on the next pages.
6. Lower the finished funnel into the box and support it independently - outlet collar, brackets, strap ring, or similar.

Parts key



A panels = long sides of funnel
B panels = short sides of funnel
R = template used as printed
L = second copy traced with
Hatched strip = 12 mm seam
Tabs always folded to the outside

Funnel assembly - handed parts and seam overlap logic

This page defines the exact edge-overlap order so the seam tabs are unambiguous.

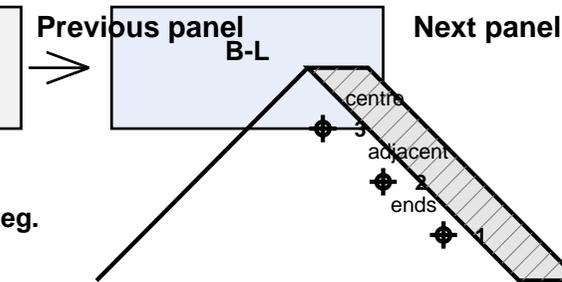
Clockwise panel sequence viewed from above



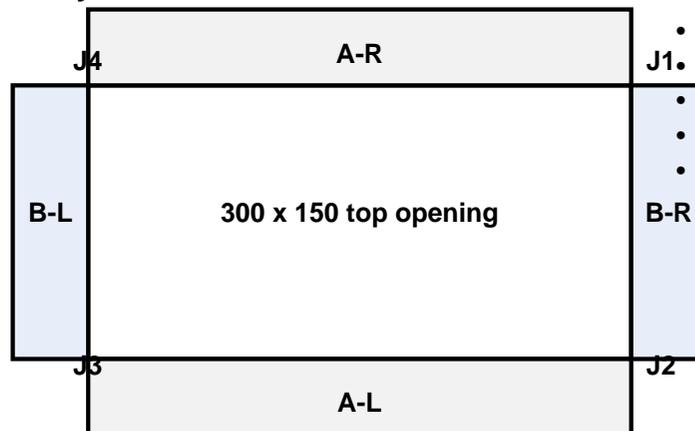
Make one right-hand and one left-hand copy of each panel type.
Right-hand = template as printed. Left-hand = second copy traced with stencil rotated 180 deg.
All tabs fold outward. Plain panel edge sits over the previous panel's tab.

- J1: A-R tab under B-R plain edge
- J2: B-R tab under A-L plain edge
- J3: A-L tab under B-L plain edge
- J4: B-L tab under A-R plain edge

Typical seam joint detail - tabs outside



Top-view assembly orientation



- J1 joins A-R to B-R.
- J2 joins B-R to A-L.
- J3 joins A-L to B-L.
- J4 closes the funnel by joining B-L back to A-R.
- Keep every seam tab on the outside for the smoothest interior.

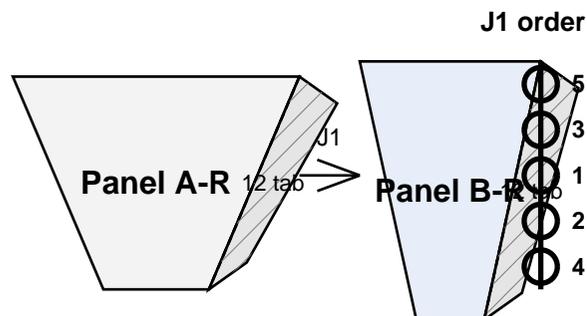
Bench rule for every seam

Clamp the plain edge over the tab, align top and bottom corners first, then drill/rivet centre first before the ends.

Funnel bench assembly - step-by-step sequence

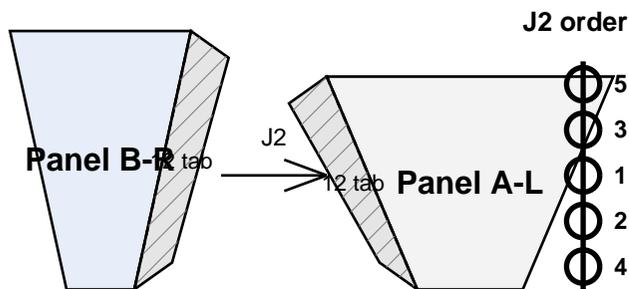
These steps assume one right-hand and one left-hand copy of each funnel panel.

Step 1 - Make the first corner



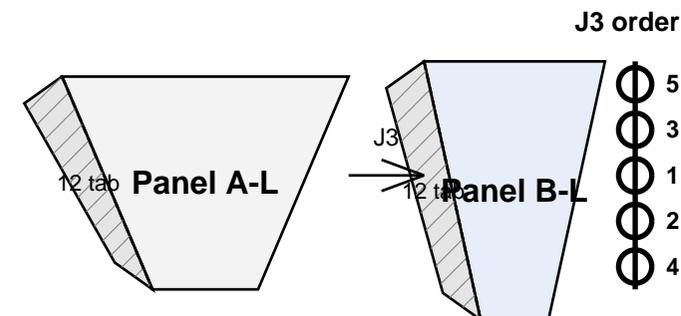
Fold the A-R tab outward. Set B-R over that tab. Match the top and bottom corners before drilling.

Step 2 - Add the second long side



Fold the B-R tab outward and overlap A-L on top of it. The assembly is now a U-shape.

Step 3 - Add the final short side

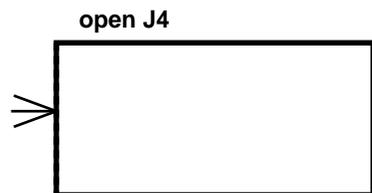


Fold the A-L tab outward and overlap B-L on top of it. Leave J4 open until the shell is standing true.

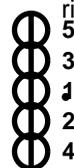
Step 4 - Close the funnel

Bring B-L to A-R to close J4.

Work from the small end first so the shell stays square.



J4 order



After J4 is drilled and clecoed or loosely riveted, sight down the funnel. If the top and bottom openings are not square and centred, adjust before fully setting the

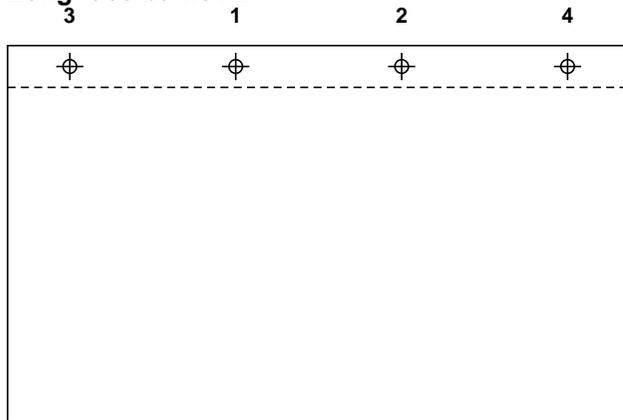
rivets.

Do not try to fix the funnel to the box walls. This geometry does not reach the walls cleanly. Support the funnel separately from the outlet or from dedicated brackets/straps.

Baffles - fold, hole order, and exact box-wall alignment

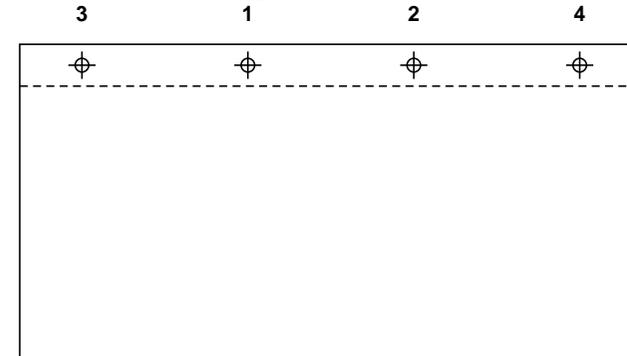
The baffle fold line aligns with the aperture top edge. The flange sits in the 15 mm strip above the aperture.

Long-face baffle x2



Fold on dashed line to form 10 mm flange. Install at about 45 deg downward/inward.
Recommended flange rivet order: 1 centre-left, 2 centre-right, 3 left outer, 4 right outer.

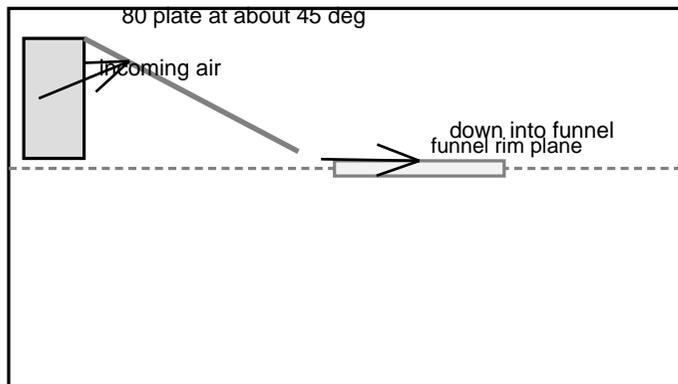
Short-face baffle x2



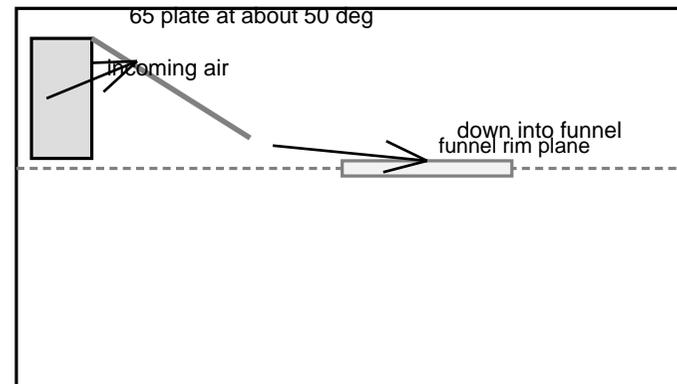
Fold on dashed line to form 10 mm flange. Install at about 50 deg downward/inward.
Recommended flange rivet order: 1 centre-left, 2 centre-right, 3 left outer, 4 right outer.

Exact installation alignment

Long face section



Short face section



Set-out rules

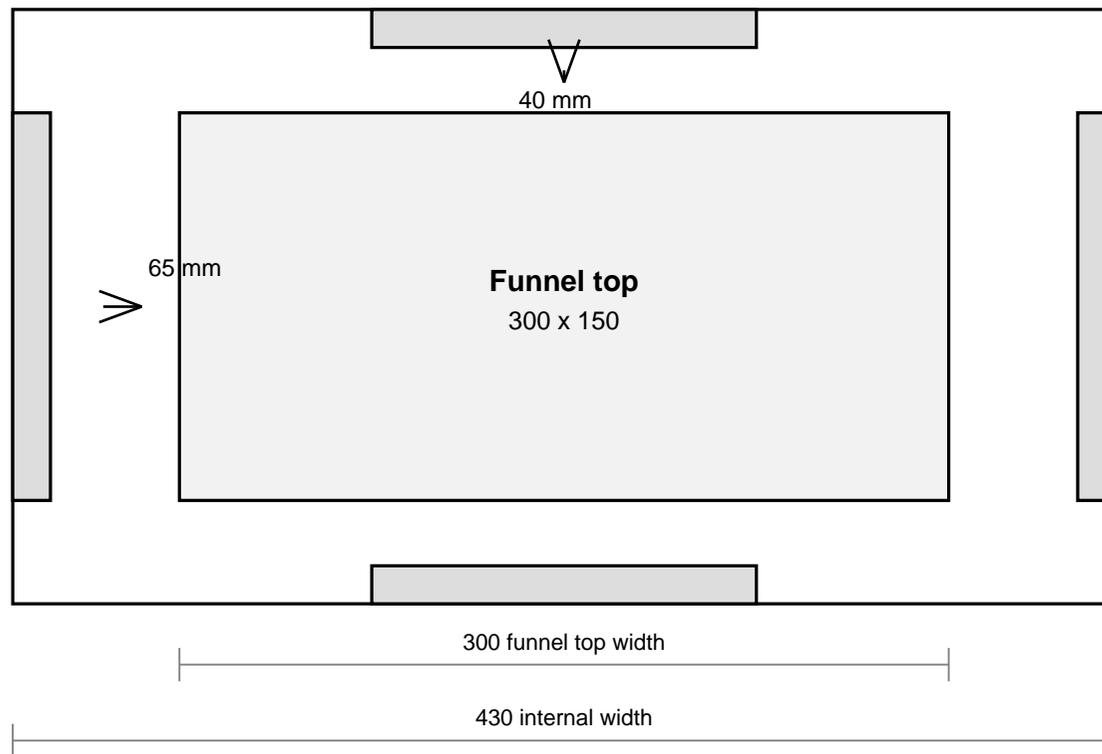
- Fold line = aperture top edge.
- Rivets go through the strip above the opening.
- Long-face pair first.
- Then the short-face pair.

Long-face baffles sit at about 45 deg downward/inward. Short-face baffles sit at about 50 deg downward/inward.

Box installation - order of work and final placement

This page combines the box plan, the baffle order, and the centred funnel location.

Top plan - box internal footprint and centred funnel



Installation order inside the box

- Mark the 4 centred 150 x 60 apertures and cut them first.
- Deburr all aperture edges before any internal work begins.
- Fit the two long-face baffles behind the long walls. Rivet each flange from the two middle holes outward.
- Fit the two short-face baffles behind the short walls using the same middle-out rivet order.
- Lower the assembled funnel into the box and centre it: 65 mm margin to each long wall and 40 mm margin to each short wall at the funnel top plane.
- Support the funnel independently - outlet collar, lid straps, or a small ring/bracket support.

230
internal
depth

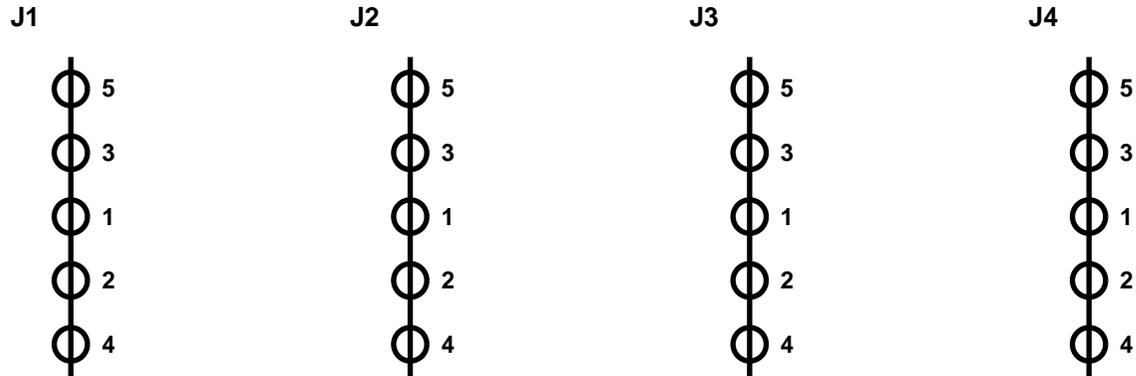
Final checks before setting rivets hard

- Sight through each aperture. The baffle must not touch the funnel top edge.
- Confirm the bottom of each aperture remains above the funnel rim plane by a small but visible gap.
- Confirm the funnel is not forced out of square by the baffles.
- Dry-fit the outlet/duct connection before committing to the final support method.

Quick rivet order sheet

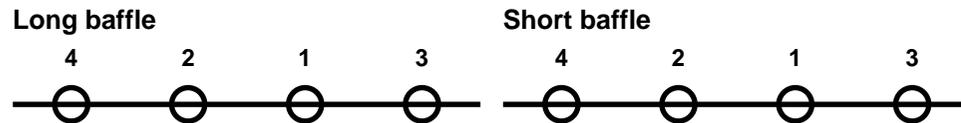
Use this on the bench so the drilling/riveting order stays consistent across all seams and flanges.

Funnel seams J1 to J4



For every funnel seam: clamp first, drill the centre hole first, add one hole above and one below, then finish with the end holes. This prevents twist and stops the corners from walking.

Baffle flange rivets



For each baffle flange: start with the two centre holes to lock the fold line level with the aperture top edge, then drill/rivet the outer holes. Do not start at one end or the plate will creep out of level.

Do not do these

- Do not rivet the funnel to the box walls just because tabs are available elsewhere. This funnel geometry was not sized for that.
- Do not fit the short-face baffles before the long-face pair.
- Do not set all rivets hard until the funnel is checked for square and centred over the outlet.
- Do not move the baffle fold line upward into the 15 mm top strip. The fold line belongs at the aperture top edge.

Support note

The funnel needs its own support strategy: outlet collar, ring support, or small brackets/straps. Choose the method that best matches the floor penetration and duct connection you finally use.