Make an Accordion Paper Display

Eight miniature display panels made from two calibrated paper strips

These are original printable digital plans for adult paper crafts. Dimensions are calculated; every finished size is nominal. Paper thickness, printer scaling, adhesive, cutting accuracy and folding technique can change the fit. There has been no physical printing, cutting, folding, gluing, fit test or durability test. Work at a clear table, keep sharp edges and wet adhesive away from children, and use only materials and adhesives that are suitable for the intended craft according to their labels. Keep food, flame, heat and electrical loads away from these objects.

The project and its limits

An accordion display is a line of connected paper panels that folds back and forth. The folds make a compact stack that can open into a small zigzag or lay flat for a personal sequence of photos, sketches, quotes or travel memories. This version uses eight panels, each nominally 45 mm wide and 100 mm high, with no cutting machine or special binding equipment.

The complete unfolded face is 360 mm wide, so it is divided between two printable full-scale strips. Strip A has four panels plus a 10 mm joining tab, and strip B has four more panels. This is a craft display, not a protective photo album, a children's toy, a standing load-bearing object or a guaranteed self-supporting stand. Surface conditions and card weight affect how it balances. For unstable results, display it flat or against a support; never use it where it could fall on someone.

The goal is a clearly paced eight-panel composition. A viewer should be able to start at one end, follow the sequence across the folds, and close the display without tearing the joined section. Each panel has a useful content area smaller than its full dimensions, because you should leave a margin near the score.

Prepare paper and original artwork

Use two clean A4 or US Letter sheets of manageable folding cardstock, about 160-200 g/m2 as a starting range. Before choosing decoration, prepare scissors, a millimetre ruler, pencil, blunt scoring tool, scrap paper and a paper-safe adhesive according to its label. A light paper tape or craft glue can make the tab joint; if you use a tape, keep it out of the score itself.

Choose up to eight small pieces of your own artwork or ethically reusable prints. Ordinary flat paper and thin, lightweight prints are best. The sample guide suggests a content window of 35 x 80 mm centred inside each 45 x 100 mm panel; this leaves 5 mm side margins and 10 mm top/bottom margins. Nothing requires you to use all eight windows. If working with an original heirloom photo, do not glue or tape it onto a disposable craft surface: use a copy or an insert pocket made separately.

Print the two pattern pages separately at Actual Size or 100% with all automatic scaling disabled. Check each printed 50 mm reference bar with a physical ruler. If your printer clips a cut edge, do not patch the missing shape by guessing. Either reprint with correct settings or draw the dimension table using the ruler and a larger sheet.

Two measured strips

Strip A is 190 mm wide by 100 mm high: four 45 mm panels take 180 mm and a separate 10 mm joining tab occupies the last section. Vertical fold lines sit 45, 90, 135 and 180 mm from A's left cut edge. The 180 mm line separates panel four from the small tab; it is also where the connected eighth-panel sequence continues. Strip B is 180 mm wide by 100 mm high and has scores at 45, 90 and 135 mm from its left cut edge.

Once the 10 mm tab is adhered behind the first 10 mm of B, A contributes 180 mm of visible face and B contributes 180 mm, giving an unfolded display length of 360 mm. There are eight 45 mm panels. The bonded overlap is behind the front content area of panel five, not an extra ninth panel. Both strips are shown at full size in the accompanying vector pattern pages, each with solid cut lines and dashed scores.

Alternating fold directions are important. Working from left to right across the opened assembled strip, crease at the boundaries after panel 1, 2, 3, 4 (the joined tab), 5, 6 and 7. Alternate valley, mountain, valley, mountain, valley, mountain, valley, or reverse all directions consistently. Never make the joined tab into an unexpected extra panel.

Build the display

1. Check that each full-size strip fits completely inside the printed page. Use a ruler to read the 50 mm bar on the A and B sheets; correct any print-scale error before cutting.
2. Mark the first side as the display front. Decide the reading order from panel one to panel eight and sketch a small arrow on removable scrap paper. You can still alter the order later, but do not glue artworks until you know which side is intended to face out.
3. With both pattern pages flat, gently score all dashed vertical lines using the ruler and blunt tool. Avoid pressing so hard that the cardstock fibres are torn. You need a fold guide, not a slit.
4. Cut A to its 190 x 100 mm outer rectangle and B to its 180 x 100 mm rectangle. Keep A's last 10 mm tab; it is not waste.
5. Practice folding A at 45 mm one way, at 90 mm the other, at 135 mm the first way again and at 180 mm the other way: that fourth line is the hinge to the joining tab. Keep the edges aligned as you work, then open A flat again.
6. Fold B along its three score lines in the same alternating sequence that will continue the combined zigzag. The first scored line of B is the boundary between panels five and six; its direction must be opposite the seam fold between panels four and five.
7. Lay A and B side-by-side, fronts facing up, and place A's last 10 mm tab behind B's first 10 mm. The A score at 180 mm should meet B's beginning neatly. Do not overlap a full panel or bury the hinge under glue.
8. Use a thin coat of correctly labelled paper adhesive on the tab only, or a suitable narrow tape. Press the overlap along its full 100 mm height while keeping both strip edges straight. Let it set completely per the label before testing the fold.
9. Crease at the seam so panel four and panel five become a legitimate alternating hinge. A tab joint may feel stiffer than a single-card fold. Do not force it: if it wrinkles or peels, repair or recreate it before proceeding.

10. Fold the seven panel boundaries in alternating directions until the strip stacks into a nominal 45 x 100 mm packet. If the stack twists, re-open it and check that no two adjacent hinges fold the same way.
11. Unfold. Lay your own images inside the suggested 35 x 80 mm zones, safely clear of hinges; test that the decorated display still closes. Attach light materials with their own appropriate adhesive, and avoid saturating the cardstock.
12. Open the finished display on a flat, stable surface, adjusting its zigzag only while supported. If it topples, display it against a rigid backing or lay it flat. Record any fit, folding or decoration changes on the printable record.

Layout and quality checks

The most common error is treating the joining tab as a full panel. If your open length looks 370 mm, you likely left the 10 mm tab outside B instead of underneath it. The eight-panel face should sum to 360 mm, excluding any cut or adhesive tolerances. If the strip tears at a score, use less pressure and choose card with a more suitable folding behaviour; a score is not a cut.

A thicker illustration can create an uneven stack and stop a hinge closing. Maintain a clear strip next to each crease, avoid large glue areas, and consider using a flat photocopy of a treasured image instead of its original. Large or uneven decorations may make the display unstable: do not claim that a folded paper strip will reliably stand unaided.

A print error of 2 mm across 50 mm is proportionally significant; never mix a correctly printed strip A with a scaled strip B. The two are meant to have the same 45 mm panels. A quick ruler check of both strips is more useful than assuming identical settings because the printer remembers a previous job.

Personal variations

Instead of eight photographs, make a visual recipe of a favourite weekend, a sequence of tiny botanical drawings, or an illustrated list of places you have visited. A limited palette on each panel can guide the viewer across the folds. Adding captions in the 35 x 80 mm content zone preserves the movement at the hinge better than writing across multiple panel edges.

If you prefer six panels, do not silently cut through a joined section. Consider using just one four-panel strip first and keep the fold count in the maker record. The pattern and measurements here are for eight panels; redesigned sizes should be marked as variants rather than described as the verified original.

References, originality and limitations

Adobe Acrobat Help on print scaling: https://helpx.adobe.com/acrobat/desktop/print-documents/set-up-and-print-pdfs/page-size.html . Actual Size is used to help preserve the specified dimensions; a printer and the paper used still need to be checked by its operator.

Library of Congress paper-handling guidance: https://www.loc.gov/preservation/care/paper.html . Use this only as general background on paper handling, not as approval to attach anything to archival or irreplaceable photographs.

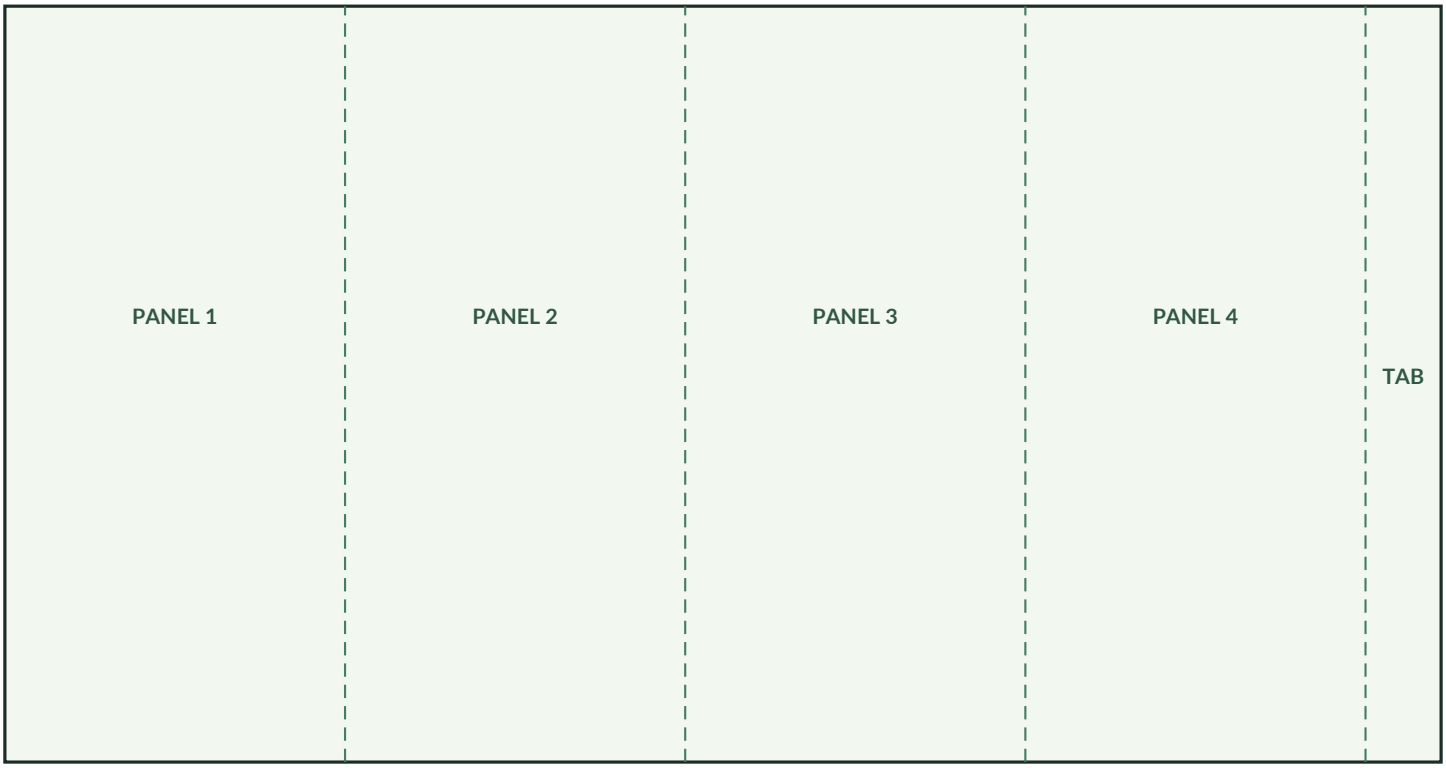
All text, fold layout and illustration are original Steadleaf Press digital education material. No licensed image asset, third-party paper template or existing photo is included. No physical cutting, standing-balance, folding, adhesive or

display trial was performed.

Printable diagrams and build record follow on the next pages.

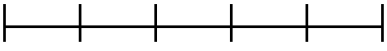
STP-MAKE-F028 / FULL-SIZE STRIP A

Solid cut border; green dashed fold lines. Strip A: 190 x 100 mm.



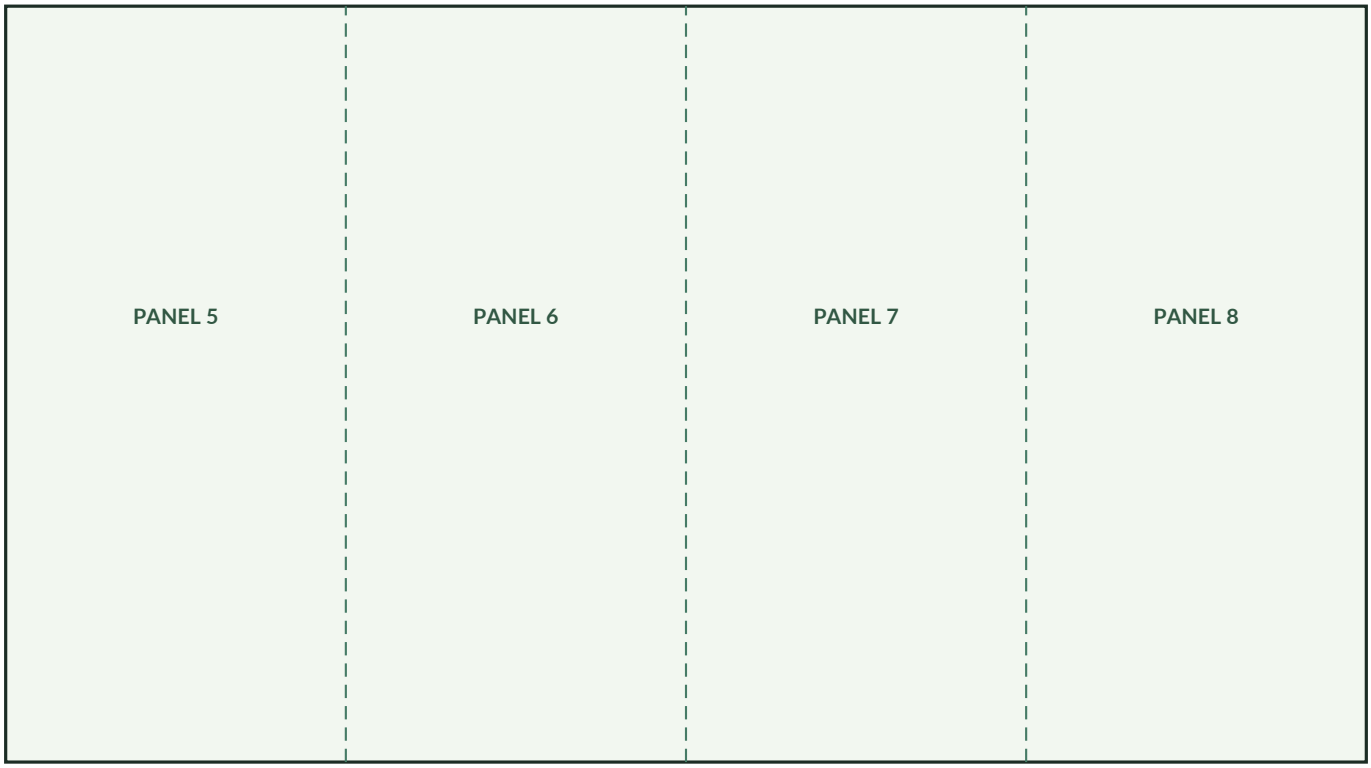
Strip A: 45+45+45+45+10 mm tab. Strip B: 45+45+45+45 mm. Glue A tab behind first 10 mm of B; eight 45 mm panels total.

50 mm SCALE CHECK - measure with a ruler; must equal 50 mm



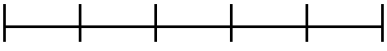
STP-MAKE-F028 / FULL-SIZE STRIP B

Solid cut border; green dashed fold lines. Strip B: 180 x 100 mm.



Strip A: 45+45+45+45+10 mm tab. Strip B: 45+45+45+45 mm. Glue A tab behind first 10 mm of B; eight 45 mm panels total.

50 mm SCALE CHECK - measure with a ruler; must equal 50 mm



STP-MAKE-F028 / MAKER RECORD / PAGE 1

Write your own readings and decisions; no physical trial was performed by Steadleaf Press.

A / B actual paper sizes

50 mm calibration on each print

Number and order of selected panel images

A-to-B join location and adhesive type

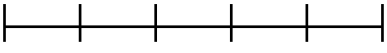
Alternating fold directions checked

Display mode: flat / supported zigzag

Adjustments for next copy

Record an actual observation only if you perform it yourself.

50 mm SCALE CHECK - measure with a ruler; must equal 50 mm



STP-MAKE-F028 / MAKER RECORD / PAGE 2

Write your own readings and decisions; no physical trial was performed by Steadleaf Press.

What changed from the full-size original?

How was each score/cut location measured?

Where did the paper bind, crack, wrinkle or slip?

What would you change for the next copy?

Date, version and initials

Safety or handling concern noticed by reader

Record an actual observation only if you perform it yourself.

50 mm SCALE CHECK - measure with a ruler; must equal 50 mm

