Fold a Sturdy Paper Gift Envelope

A neat, full-size envelope net with four scored hinges and a reusable paper closure

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 finished object

This guide makes a small, hand-folded paper gift envelope for a short handwritten note, a flat gift card, a paper keepsake or another thin insert. The centre panel is 110 mm wide and 80 mm high. That is the nominal outside size once the piece has been folded. Its useful pocket will be slightly smaller, especially at the side seams; it is not a postal envelope and is not intended for bulky objects.

The design is deliberately different from the separate folded keepsake box project. A box gives an object a base, walls and a lid; this envelope is a thin paper sleeve made from one continuous blank. You will cut one silhouette, crease four straight lines, attach the bottom flap to two side tabs, then close the upper flap without permanently gluing it shut.

Choose a flat insert no larger than about 100 mm wide by 70 mm high as an initial target, not a guaranteed capacity. Before any final glue, lay the actual insert inside the paper blank and test the folded arrangement. Turn the insert so its wider side runs across the 110 mm width. Reduce its size if the paper pulls, bows, catches or will not close freely.

Materials and safe setup

Choose one clean sheet of craft cardstock around 160-220 g/m2, preferably uncoated and easy to score. Heavier card may crack at folds and thinner paper may show glue or wrinkle; these ranges are suggestions rather than tested performance specifications. Prepare a ruler marked in millimetres, a pencil, ordinary scissors, a blunt capped ballpoint pen or bone folder for scoring, and paper-craft adhesive used as its label directs. A scrap sheet protects the table and provides a place for a first score.

Print the supplied pattern page on A4 or US Letter at 100% / Actual Size, with page fitting, shrinking, enlargement and borderless scaling turned off. Measure its 50 mm reference line with a real ruler. If the line is not 50 mm, the pattern cannot be used as dimensionally accurate; adjust print settings or draw the listed measurements by hand. Some printers have unprintable margins. Check that the entire outside cutting line is present before using the printout.

You can print directly on suitable cardstock or use the pattern as a reference to transfer the outline onto card. If transferring, align a straight edge to the panel before marking all four folds. Avoid a craft knife: scissors are sufficient for this project. Keep your cutting line visible and take small controlled cuts at the transitions between flaps.

Read the exact pattern

The full flat layout is 140 mm across its widest part and 185 mm from bottom tip to top tip. In the printed diagram, the pattern-coordinate origin sits at the lower left of that 140 x 185 mm bounding box. The central rectangle occupies x = 15-125 mm and y = 55-135 mm, giving 110 x 80 mm. Dashed strokes are fold/score marks; solid strokes are cuts. Do not cut the dashed lines.

The narrow left and right side tabs extend 15 mm outside the central rectangle, with outer edges trimmed near their ends to prevent loose corners. The lower flap extends 55 mm beneath the bottom panel fold and tapers to a 90 mm tip. The upper closure extends 50 mm beyond the top fold and tapers to a 70 mm outer edge. The diagram retains these four exact fold lines: x = 15 and 125 mm between y = 55 and 135; and y = 55 and 135 mm between x = 15 and 125.

It is easy to confuse the small outer tabs with the two vertical score lines. The scored lines at x = 15 and x = 125 are the panel edges, not the leftmost and rightmost cuts. The outer paper width is 140 mm where the side tabs are widest. Use the drawing, not a rough estimate of the flap shape, if you want the parts to overlap as intended.

Step-by-step build

1. Make a clean paper test layout before touching the final card. Inspect the diagram and note where the four folds converge at the corners.
2. Print at Actual Size and measure the 50 mm reference bar. If it is inaccurate, stop using that print for cutting. Hand-draft the given millimetre dimensions instead, or correct the print setting.
3. Mark the cutting outline, leaving all flaps as one piece. Check the outside overall dimensions: no more than 140 mm wide and exactly 185 mm from the low edge to the top edge in the original layout.
4. Before cutting free, score the four dashed centre-panel boundaries against a ruler using a blunt tool. Run the scorer gently once rather than pressing through the cardstock. Try your scoring method on scrap first.
5. Cut the continuous solid outline with scissors. At each flap corner, turn the paper rather than forcing the scissor tips. Keep the bottom and top extensions attached to the central panel.
6. Turn the cut blank so the side that will be the inside faces you. Fold the left and right tabs inward along their scored hinges, then open them again. Each should lie over the centre panel without tearing.
7. Fold the lower flap upward along the line at y = 55 mm. Its folded tip should reach about 55 mm up from the lower hinge, leaving about 25 mm before the upper hinge. Open it again.
8. Fold the upper flap downward along the line at y = 135 mm and reopen it. This is the non-permanent closure; it must not be glued to the pocket.
9. Re-fold both side tabs inward. Bring up the lower flap on top of them and check the overlap. The lower flap will form the front of the shallow paper pocket, with the central panel behind it.
10. Position the intended flat insert in the pocket without glue and close the top flap. Check that the insert stays within the panel, does not cross the fold lines, and is not pinched by the side tabs. Trim or choose a smaller insert if necessary.

11. Remove the insert. Place a narrow film of paper-safe adhesive only where the raised bottom flap overlaps each folded-in side tab. Keep the central interior, the opening and the top flap free of glue. If adhesive spreads beyond the tabs, wipe it off promptly as its label allows.
12. Hold the parts in their intended alignment until the adhesive has set according to the package directions. Use a clean slip of scrap paper inside while pressing if that prevents the pocket faces from accidentally sticking together; remove the slip before the glue sets.
13. Once dry, reopen the pocket and make sure the opening is clear. Slide the light flat insert in slowly rather than pushing into a corner. Close the upper flap and use a removable outside paper band or low-tack decorative seal if desired. Do not fix an adhesive seal to a valuable original photograph or document.
14. Write down the paper used, print calibration reading, actual insert size, and any adjustment on the maker record. Keep the record with the digital pattern so another copy can be made deliberately.

When the fit is not quite right

If a flap sticks out beyond the side, first check whether the intended centre-panel fold has been scored on the correct dashed line. If the seam wrinkles, the glue may be too wet or the tabs may be pulled out of line. Allow a fresh piece to dry flat without trying to hide the problem under more adhesive. If the paper cracks, a more flexible card or lighter scoring pressure may help; do not claim that another paper weight will always solve it.

A nominal 110 x 80 mm envelope may not accept every 100 x 70 mm insert: the diagonal corners, taper, paper thickness and overlapping adhesive all consume space. Trial-fitting on a dry digital-inspired blank is a step the reader may perform, not a result we have already observed. Do not attach rigid objects, attach a string hanger or ask the paper pocket to bear loads.

Ideas for small changes

A decorative border can be drawn on the central panel before cutting, but leave the score lines clear so the edges still fold freely. Two colours of cardstock can be compared on paper by holding small samples beside the insert; the source pattern and the calculated fold lengths need not change. For a special occasion, label the top flap instead of adding bulky embellishments around the opening.

To change the envelope size, do not scale one dimension without reconsidering the inset, flap overlap and tab width. If you deliberately print at a new percentage, record that all measurements scale together and the insert limit is no longer the original estimate. An enlarged pattern may cross the printable area. The safest basic variation is surface decoration, not an unreviewed structural redesign.

References, original work and limitations

Adobe Acrobat Help, "Choose a paper size" / printing page sizing: https://helpx.adobe.com/acrobat/desktop/print-documents/set-up-and-print-pdfs/page-size.html . This supports the distinction between Actual Size and fit-to-page printing, not any assurance that a printer will reproduce the pattern exactly.

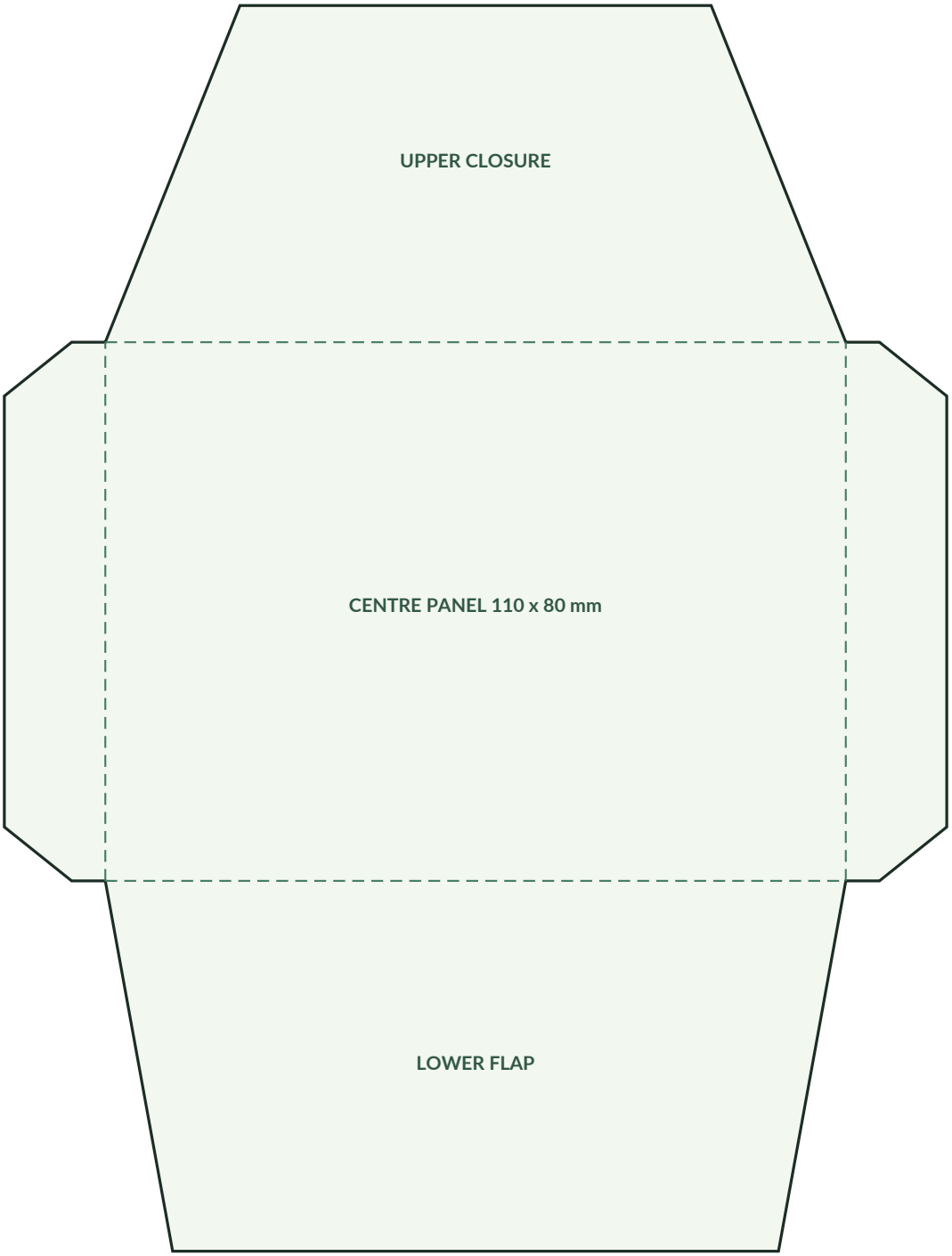
Library of Congress, "Care, Handling and Storage of Works on Paper": https://www.loc.gov/preservation/care/paper.html . General background on careful handling; its preservation guidance is not a recommendation to glue historic paper or a certification of this envelope.

This original Steadleaf Press text, vector cut diagram, front cover and worksheet were prepared for free digital instruction. The exact fold and fit dimensions are calculated from the design. No third-party templates or images were copied; no sample was physically built or tested. The reader is responsible for checking actual materials and fit.

Printable diagrams and build record follow on the next pages.

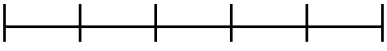
STP-MAKE-F027 / FULL-SIZE ENVELOPE NET

Solid = cut; green dashed = score. Print at 100% / Actual Size.



Bounding box: 140 x 185 mm. Panel: x15..125, y55..135. Side tabs: 15 mm each. Lower flap: 55 mm. Upper flap: 50 mm.

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



STP-MAKE-F027 / MAKER RECORD / PAGE 1

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

Paper/cardstock and weight

Print page size / actual-scale setting

Measured length of 50 mm calibration bar

Item width x height, before insertion

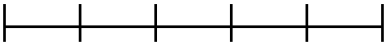
Dry-fold notes and side-tab clearance

Adhesive label and drying directions

Final handling notes / next changes

Record an actual observation only if you perform it yourself.

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



STP-MAKE-F027 / 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

