Build a Layered Paper Rosette

Two offset petal rings, three original circles, and a precise low-relief assembly

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.

A paper flower made from repeatable shapes

This guide builds a layered decorative rosette, a flat-backed arrangement of paper petals placed in two overlapping rings. It is an individual craft object, not a fresh flower substitute, an outdoor decoration or a heat-resistant table item. Its most useful feature is repeatable geometry: a reader can cut the same shapes several times, arrange them before gluing and leave a record of colour and placement.

The original pattern has twelve large outer petals, eight smaller inner petals, a 70 mm diameter back disc, a 48 mm diameter middle disc and a 22 mm centre disc. Every large petal measures 18 x 38 mm at its bounding box, with an 8 mm foot reserved for attachment. Every small petal measures 16 x 28 mm, with a 7 mm foot. The template uses gently rounded pointed shapes, not knife-sharp ends; all dimensions are calculated digital paths.

The outer ring has 12 equally spaced positions at 30 degrees around its circle; the inner ring has 8 positions at 45 degrees. You can offset the upper ring by about 22.5 degrees so that its tips do not visually stack directly above the lower ring. Exact placement is aesthetic rather than a load specification. The final outer span can vary with petal curvature, overlap, glue and paper behaviour.

Materials and why the dimensions matter

Choose clean expendable decorative paper that can be cut safely with ordinary scissors. A lightweight or medium paper around 120-180 gsm is an optional starting point, not a guarantee. Two different paper colours can make the layers legible. Heavier card may resist a slight curve; very thin paper may show wet glue. Select label-appropriate paper adhesive and use a clean dry work surface.

Gather a millimetre ruler, pencil, safe scissors, blunt crease tool if useful, scrap paper, and a shallow tray to collect the twenty petal pieces. No heated glue gun, knife blade, needle, wire, pin or specialised punch is required. Keep adhesive away from original photographs, collectible documents, food, children and animals.

The full-size pattern is split across two original A4 or Letter printable pages to avoid scaling. Page 1 carries twelve separate outer-petal outlines in a 3 by 4 grid, and page 2 carries eight small petals and the three discs. Each page has an independent 50 mm calibration bar. Print at Actual Size / 100% and inspect all shape outlines for cropping before cutting or transferring. If you use a pattern as a tracing master, remember that the master itself is not an observed trial with your chosen paper.

Read the three circles and two rings

The back disc has a nominal diameter of 70 mm (radius 35 mm) and receives the twelve large petal feet. The middle disc is 48 mm across (radius 24 mm) and carries eight smaller feet. The separate 22 mm centre circle can hide the inner petal joins. These three circles do different jobs: backing, second layer support, and decorative finish. Gluing only a few petal tips to the centre cannot replace their own foot connections.

Place the outer petal feet around a working ring about 25 mm from the centre, aiming to keep enough of each 8 mm foot on the back disc. The nominal petal extends outward from its foot; its visible length after attachment is at most about 30 mm before curvature or overlap changes it. Lay the twelve shapes clockwise at equal angles, but allow small controlled overlaps if their widths meet.

For the inner ring, place the small petal feet starting at about radius 15 mm on the 48 mm middle disc, so each 7 mm attachment foot remains against that disc. Space eight positions at 45 degrees, optionally offsetting them relative to the outer ring. Then attach the loaded 48 mm disc over the back disc at the common centre. Put the 22 mm circle over the centre joints only after checking the paper layers sit as intended. This is a decorative low-relief stack, not an engineered joint.

Assemble the original rosette

1. Print both shape sheets in the paper size you actually use. Select Actual Size, check both 50 mm bars separately and refuse any clipped outlines. If necessary transfer the printed measurements to larger expendable material using a ruler.

2. Choose an obvious front and back for each coloured paper. On the back of each original cutting page label LARGE (18 x 38 mm), SMALL (16 x 28 mm) and circles 70, 48, 22 mm so you do not mix diameters.

3. Carefully cut twelve large petal shapes using scissors. Count the pieces into one pile of twelve before making any centre pieces. Do not cut through their bottom 8 mm attachment region.

4. Cut eight small petals and count them separately. Keep the lower 7 mm of each as a flat foot. If a petal has a torn point, make a new one rather than hiding it under wet adhesive.

5. Cut the back disc 70 mm, middle disc 48 mm and cover disc 22 mm in diameter. Keep their geometric centres visibly marked on scrap backing or the reverse; these centre marks are alignment aids, not pinholes.

6. Before any glue, arrange the twelve large petal feet around the 70 mm disc at 30-degree intervals. Use clock-face spacing as a visual guide; the original design has exactly twelve nominal positions. The petal tips should radiate outward, not point inward over the centre.

7. Adjust the circle of outer petals until their feet lie on the backing and their tips make a balanced edge. A little overlap is acceptable. Work with all twelve pieces present before fixing one; otherwise spacing may be lost near the last petal.

8. If a gentle curve is wanted, ease the free 30 mm of each large petal with fingertips. Keep the 8 mm attachment foot flat for bonding. Do not drag a scissor blade along the paper or force a brittle coating.

9. One at a time, apply a SMALL amount of label-appropriate craft adhesive to the back of each outer 8 mm foot, attach it to the back disc in the dry-fit position, and allow the adhesive to set without moving the central alignment.
10. On the 48 mm middle disc, dry arrange eight small petals around the centre in 45-degree steps. Keep their 7 mm feet on this second disc and curve only the remaining 21 mm if desired. Rotate the full ring relative to the outer ring to separate the tips visually.
11. Attach the eight small feet to the 48 mm disc with a very thin adhesive layer. Let the adhesive dry fully per the label. Do not try to force a perfect dome; these are thin paper layers rather than structural supports.
12. Place the assembled 48 mm circle at the centre of the 70 mm backing. Check symmetry before applying a modest amount of suitable glue to the backs of the two discs where they actually contact. Do not flood the paper with glue.
13. After the second layer is stable, place the 22 mm finishing disc over the visible central joins. This small circle should hide the overlap but should not need to carry any hanging weight. Let the whole object dry supported and flat.
14. Record the paper weight if known, both calibration readings, piece counts 12+8+3, perceived symmetry, glue product and any changes. If you intend to mount a rosette, glue it to a disposable card backing for decorative display only rather than adding a sharp fastening.

Diagnose uneven layers before changing the pattern

If one side appears crowded, check the count of twelve and eight before trimming petals. A missing petal or one glued prematurely can make the final gap look larger than the rest. Lift and rearrange only while the adhesive label permits; if the bond is already dry, cutting a fresh backing is safer than tearing paper from the disc.

If the petals curl unevenly, compare grain and coating across the sheets. Curving every petal more aggressively does not necessarily make the rosette symmetrical. If the centre disc puckers from glue, use less liquid and let the replacement layers dry in a stable position. The two discs can sit flat even when petals are deliberately shallow-relief rather than raised.

A single flower shape has no guaranteed diameter after construction. The rough outer radius is the 25 mm foot-position distance plus the remaining exposed petal length; overlapping, taper, curve and adhesive alter that. Do not promise a certain finished dimension, water resistance, permanence, load bearing or colourfastness on the strength of this vector diagram.

Change colours without changing the construction

Use a different colour for the eight inner petals to distinguish the ring, or alternate two colours around the twelve outer positions. A contrasting 22 mm centre disc can act as a focal point. If you add a paper-written message, keep the lettering on a separate flat card rather than trying to write on glue-softened petals.

To make a smaller rosette, recalculate all the petal and disc sizes with the same ratio and check that each resized foot still has enough actual bonding area for the selected paper. Simply setting the print driver to Fit without measuring the 50 mm bar is not a controlled redesign. Label personal variations and do not assume the original calculated dimensions apply unchanged.

Use the finished piece only as a dry decorative paper accent. Keep it away from heat, lit candles, wet surfaces, small children and pets. It is not a brooch, toy, hair accessory or hanging load support. A paper decoration needs no endorsement or safety certificate to be useful for a low-risk greeting-card project, but it should not be described as protective or heatproof.

Sources, originality and clear limitations

Adobe Acrobat Help, Adjust page size for printing PDFs: https://helpx.adobe.com/acrobat/desktop/print-documents/set-up-and-print-pdfs/page-size.html . Supports actual-size printer settings, not physical fit assurance.

University of Brighton Visual Communication Technical Resource, Grain Direction: https://blogs.brighton.ac.uk/viscommtech/bookarts/worksheets-for-bookbinders/grain-direction/ . General explanation of paper fibre direction and folding, not a rosette endorsement.

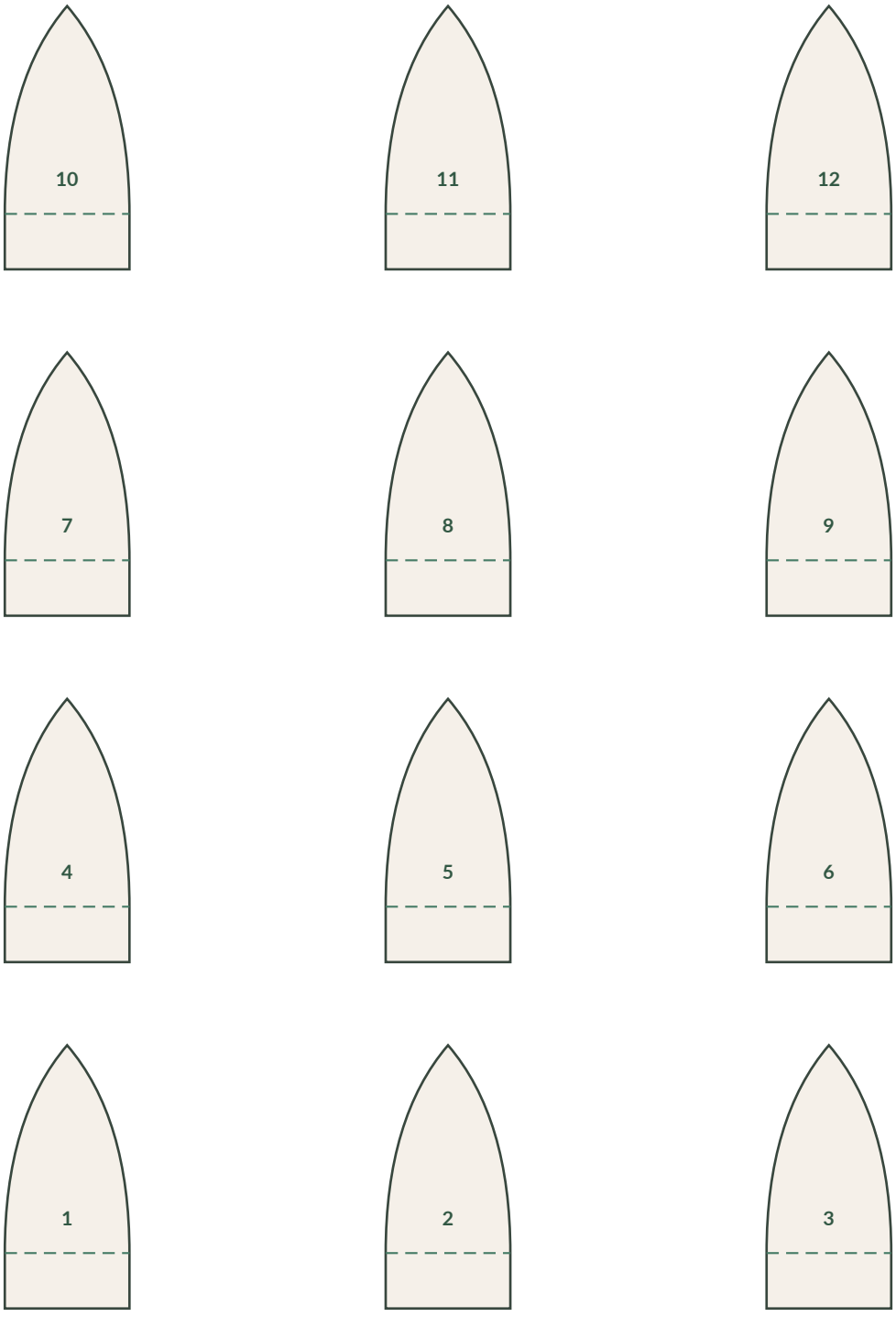
Health Canada, Arts and crafts safety: https://www.canada.ca/en/health-canada/services/home-garden-safety/use-arts-crafts-materials-safely.html . General material label and safety handling information.

All outer/inner petal outlines, three disc sizes, original positioning scheme, teaching manuscript, cover art and record pages were created as original Steadleaf Press digital work. No third-party flower template or picture has been reproduced. The publisher has not physically cut, curled, glued, displayed, load-tested or certified a sample rosette.

Printable diagrams and build record follow on the next pages.

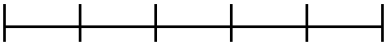
STP-MAKE-F034 / 12 FULL-SIZE OUTER PETALS

Cut on solid lines. Each large petal has an 18 x 38 mm bounding box, bottom 8 mm foot.



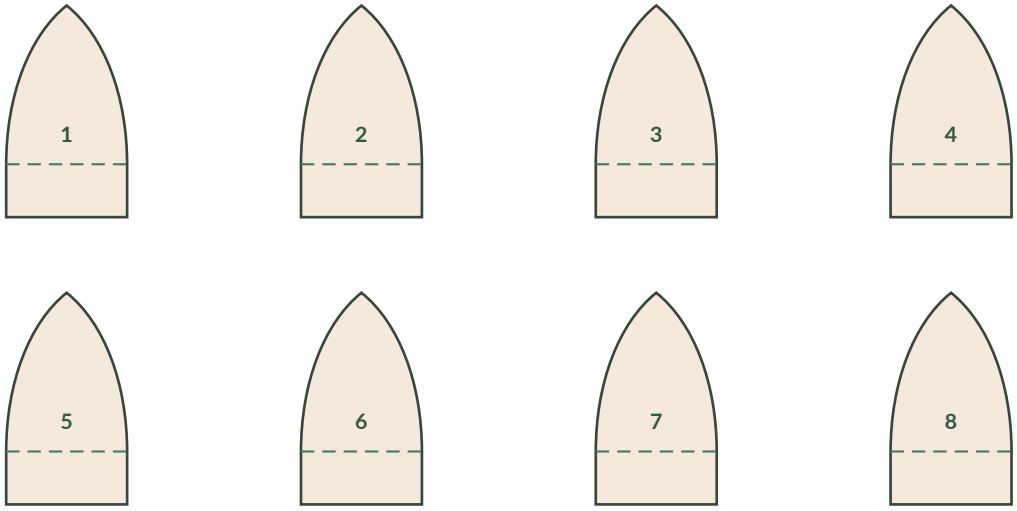
Exactly 12 identical outer petals. Each 18 x 38 mm. Lower 8 mm is a glue FOOT, remaining 30 mm may be curved gently; foot stays flat.

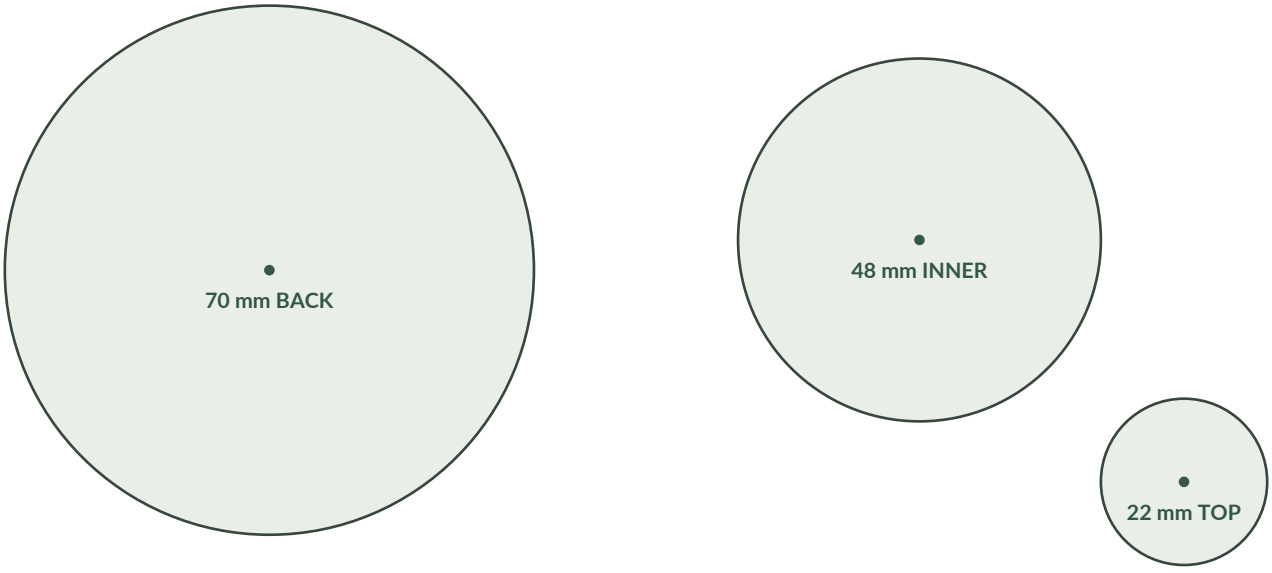
50 mm SCALE CHECK - measure with a ruler; must equal 50 mm



STP-MAKE-F034 / 8 INNER PETALS AND 3 CIRCLES

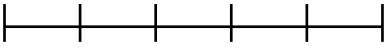
Cut solid outlines. Small petal 16 x 28 mm with 7 mm foot. Discs 70, 48 and 22 mm.





INNER: 8 petals 16 x 28 mm, 7 mm flat feet. CIRCLES: back 70 mm, middle 48 mm, centre 22 mm. Place 12 outer at 30 degrees, 8 inner at 45 degrees.

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



STP-MAKE-F034 / MAKER RECORD / PAGE 1

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

Actual Size / 50 mm readings on BOTH pattern pages

Paper, coating and colour for outer / inner / discs

Outer petal count 12 and 18 x 38 mm dimensions

Inner petal count 8 and 16 x 28 mm dimensions

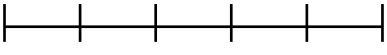
Discs 70 mm, 48 mm, 22 mm and centre marks

30-degree outer / 45-degree inner placement method

Adhesive details, alignment notes and untested limits

Record an actual observation only if you perform it yourself.

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



STP-MAKE-F034 / 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

