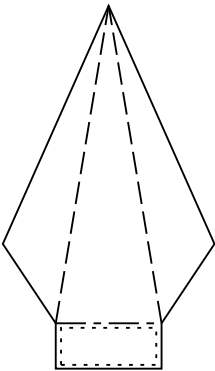


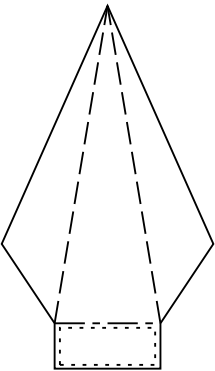
Tiered Pocket-Petal Dahlia

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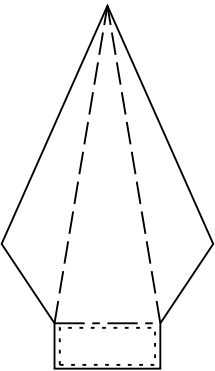
O06 | cut 1
28.00 x 48.00 mm



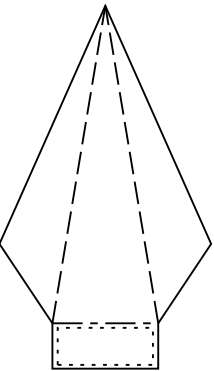
O07 | cut 1
28.00 x 48.00 mm



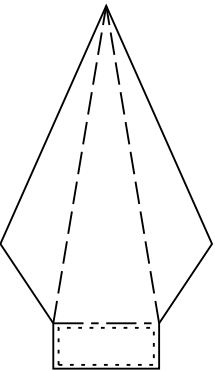
O08 | cut 1
28.00 x 48.00 mm



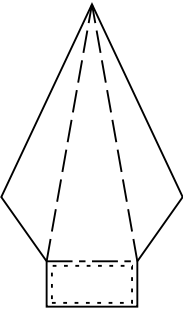
O09 | cut 1
28.00 x 48.00 mm



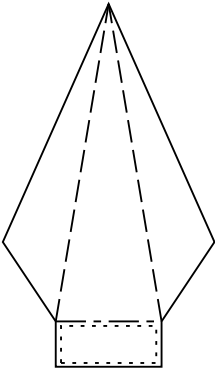
O10 | cut 1
28.00 x 48.00 mm



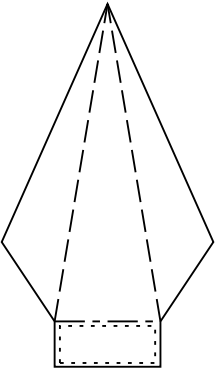
M02 | cut 1
24.00 x 40.00 mm



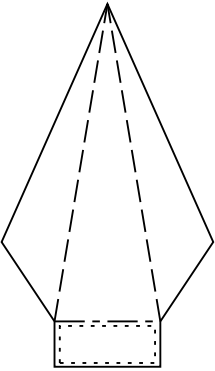
O01 | cut 1
28.00 x 48.00 mm



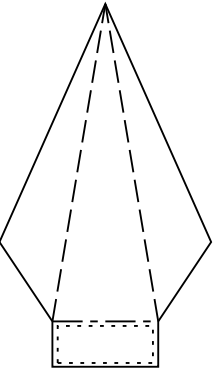
O02 | cut 1
28.00 x 48.00 mm



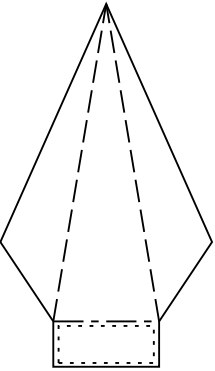
O03 | cut 1
28.00 x 48.00 mm



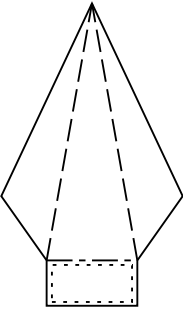
O04 | cut 1
28.00 x 48.00 mm



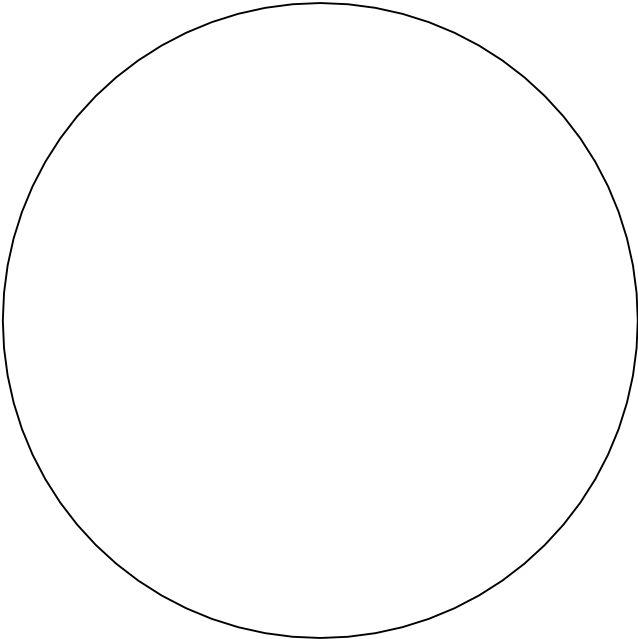
O05 | cut 1
28.00 x 48.00 mm



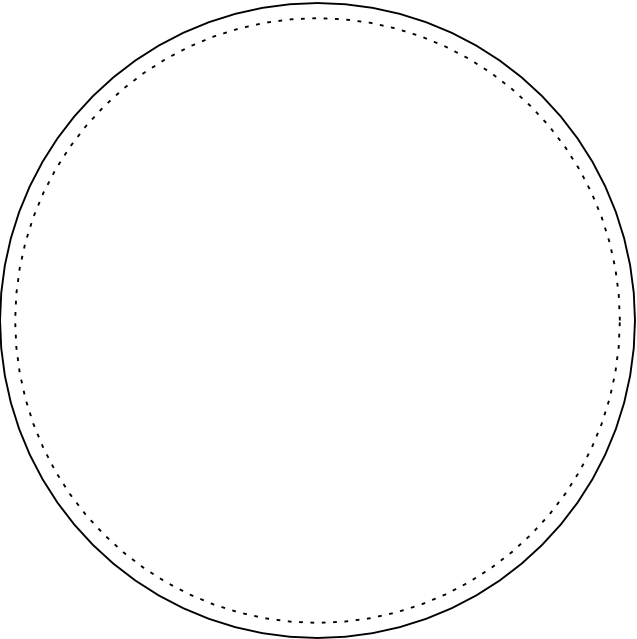
M01 | cut 1
24.00 x 40.00 mm



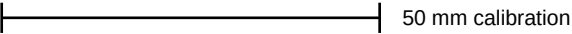
B1 | cut 1
84.00 x 84.00 mm



B2 | cut 1
84.00 x 84.00 mm



Solid: cut | Dashed: valley | Dash-dot: mountain | Dotted: glue

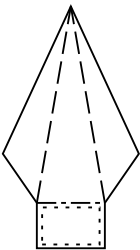


Print at 100% / Actual size. Do not fit to page. Original paper craft template.

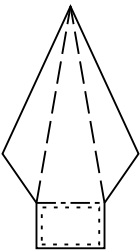
Tiered Pocket-Petal Dahlia

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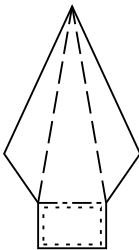
I04 | cut 1
18.00 x 32.00 mm



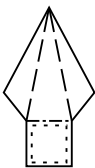
I05 | cut 1
18.00 x 32.00 mm



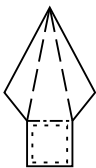
I06 | cut 1
18.00 x 32.00 mm



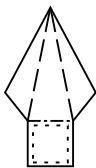
C01 | cut 1
12.00 x 21.00 mm



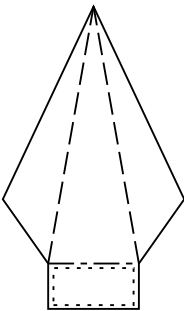
C02 | cut 1
12.00 x 21.00 mm



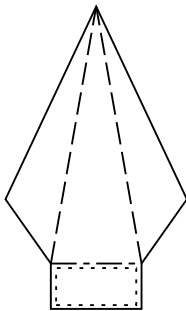
C03 | cut 1
12.00 x 21.00 mm



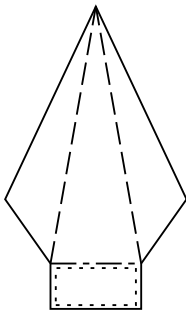
M07 | cut 1
24.00 x 40.00 mm



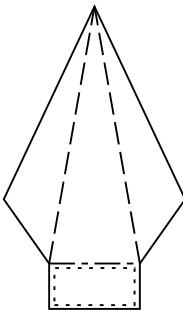
M08 | cut 1
24.00 x 40.00 mm



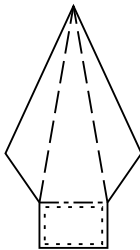
M09 | cut 1
24.00 x 40.00 mm



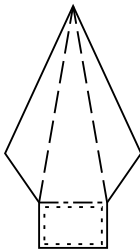
M10 | cut 1
24.00 x 40.00 mm



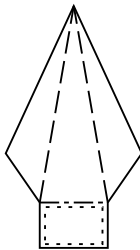
I01 | cut 1
18.00 x 32.00 mm



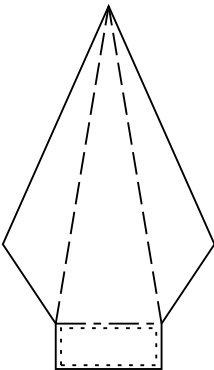
I02 | cut 1
18.00 x 32.00 mm



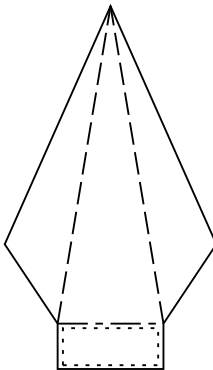
I03 | cut 1
18.00 x 32.00 mm



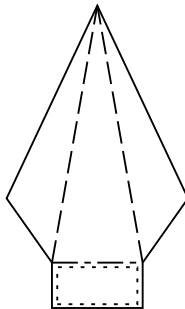
O11 | cut 1
28.00 x 48.00 mm



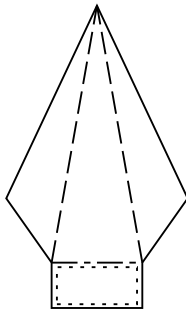
O12 | cut 1
28.00 x 48.00 mm



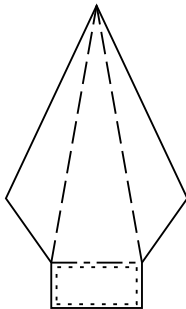
M03 | cut 1
24.00 x 40.00 mm



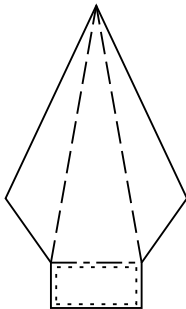
M04 | cut 1
24.00 x 40.00 mm



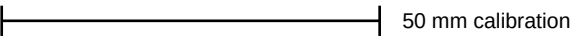
M05 | cut 1
24.00 x 40.00 mm



M06 | cut 1
24.00 x 40.00 mm



Solid: cut | Dashed: valley | Dash-dot: mountain | Dotted: glue



Print at 100% / Actual size. Do not fit to page. Original paper craft template.

Tiered Pocket-Petal Dahlia

dahlia / 1.0.1 / Letter / Assembly instructions

Finished size: Nominal illustrated paper envelope: 139.9 wide x 139.9 deep x 23.5 high mm (XYZ), including both support planes and all petals/tabs; support diameter 84 mm. Includes the disclosed 0.5 mm base-plane separation

Materials: 120-160 gsm coloured petal paper; 220-250 gsm green cardstock for two base discs; Scissors or craft knife and cutting mat; Scoring tool, ruler, pencil and protractor; PVA paper glue and a book for pressing the base

Original folded-pocket construction with four structurally graded tiers; a stylized dahlia, not a smooth botanical surface.

All central triangles, wing facets and integral root tabs have exact flat-to-shaped rigid-face correspondence. The pockets remain open at the root; no invisible seam tabs or extra cuts are needed.

The mesh idealizes paper and glue as zero thickness; the laminated base is represented by two planes 0.5 mm apart. Core-tab overlaps share a plane in the preview. Real stock, crease spring-back and glue thickness slightly alter heights and spacing.

Every petal mounts directly on the support rather than floating on an unlisted riser. Wing angles are forming targets, not a continuous folding simulation.

Physical printing, cutting and assembly remain pending.

Part inventory (cut each instance once):

B1: Lower support disc

B2: Upper mounting disc

O01: O01 pocket petal

O02: O02 pocket petal

O03: O03 pocket petal

O04: O04 pocket petal

O05: O05 pocket petal

O06: O06 pocket petal

O07: O07 pocket petal

O08: O08 pocket petal

O09: O09 pocket petal

O10: O10 pocket petal

O11: O11 pocket petal

O12: O12 pocket petal

M01: M01 pocket petal

M02: M02 pocket petal

M03: M03 pocket petal

M04: M04 pocket petal

M05: M05 pocket petal

Tiered Pocket-Petal Dahlia

dahlia / 1.0.1 / Letter / Assembly instructions continued

M06: M06 pocket petal

M07: M07 pocket petal

M08: M08 pocket petal

M09: M09 pocket petal

M10: M10 pocket petal

I01: I01 pocket petal

I02: I02 pocket petal

I03: I03 pocket petal

I04: I04 pocket petal

I05: I05 pocket petal

I06: I06 pocket petal

C01: C01 pocket petal

C02: C02 pocket petal

C03: C03 pocket petal

1. Cut and score [B1, B2]: Print at 100 percent and check the 50 mm ruler. Cut two 84 mm support discs and 31 separate petals. Score the three marked hinges on each petal; do not cut them. Use 120-160 gsm paper for petals and 220-250 gsm card for both discs. Keep the part IDs grouped by tier.

2. Laminate the support [B1, B2]: Spread a thin glue film over the reverse of B2 within its marked 80 mm circle. Align B2 exactly over B1; press flat under a book until dry. On the top face lightly pencil concentric root circles of radius 30, 20, 10 and 3 mm from the centre, plus a reference ray. All petal mounting tabs attach to this same face.

3. Fold tier O pockets [O01, O02, O03, O04, O05, O06, O07, O08, O09, O10, O11, O12]: Form 12 tier O petals, each with a 42 mm centre line and 14 mm root edge. With the coloured side facing you, valley-fold both long diagonal hinges so each wing stands 65 degrees above the central triangle (115 degree inside angle). Leave the root opening and pointed outer end unglued. Mountain-fold the 6 mm root tab by 18 degrees behind the central triangle. When the tab lies flat, the petal centre line rises 18 degrees. Use a protractor; pinch only the scored hinges.

4. Mount tier O [B2, O01, O02, O03, O04, O05, O06, O07, O08, O09, O10, O11, O12]: Place O01 with its root-edge midpoint on the 30 mm radius circle, 0 degrees counterclockwise from the reference ray viewed from above. Point the tip radially outward. Add the remaining IDs counterclockwise every 30 degrees. Each 6 mm tab points inward and is glued underside-down to B2; keep all pocket wings free. The tip centre should be about 13.0 mm above the mounting face. Dry this tier before the next. Lift adjacent loose wings gently to reach the tabs; do not glue one tier to another.

5. Fold tier M pockets [M01, M02, M03, M04, M05, M06, M07, M08, M09, M10]: Form 10 tier M petals, each with a 34 mm centre line and 12 mm root edge. With the coloured side facing you, valley-fold both long diagonal hinges so each wing stands 65 degrees above the central triangle (115 degree inside angle). Leave the root opening and pointed outer end unglued. Mountain-fold the 6 mm root tab by 38 degrees behind the central triangle. When the tab lies flat, the petal centre line rises 38 degrees. Use a protractor; pinch only the scored hinges.

6. Mount tier M [B2, M01, M02, M03, M04, M05, M06, M07, M08, M09, M10]: Place M01 with its root-edge midpoint on the 20 mm radius circle, 15 degrees counterclockwise from the reference ray viewed from above. Point the tip radially outward. Add the remaining IDs

Tiered Pocket-Petal Dahlia

dahlia / 1.0.1 / Letter / Assembly instructions continued

counterclockwise every 36 degrees. Each 6 mm tab points inward and is glued underside-down to B2; keep all pocket wings free. The tip centre should be about 20.9 mm above the mounting face. Dry this tier before the next. Lift adjacent loose wings gently to reach the tabs; do not glue one tier to another.

7. Fold tier I pockets [I01, I02, I03, I04, I05, I06]: Form 6 tier I petals, each with a 26 mm centre line and 9 mm root edge. With the coloured side facing you, valley-fold both long diagonal hinges so each wing stands 65 degrees above the central triangle (115 degree inside angle). Leave the root opening and pointed outer end unglued. Mountain-fold the 6 mm root tab by 62 degrees behind the central triangle. When the tab lies flat, the petal centre line rises 62 degrees. Use a protractor; pinch only the scored hinges.

8. Mount tier I [B2, I01, I02, I03, I04, I05, I06]: Place I01 with its root-edge midpoint on the 10 mm radius circle, 33 degrees counterclockwise from the reference ray viewed from above. Point the tip radially outward. Add the remaining IDs counterclockwise every 60 degrees. Each 6 mm tab points inward and is glued underside-down to B2; keep all pocket wings free. The tip centre should be about 23.0 mm above the mounting face. Dry this tier before the next. Lift adjacent loose wings gently to reach the tabs; do not glue one tier to another.

9. Fold tier C pockets [C01, C02, C03]: Form 3 tier C petals, each with a 15 mm centre line and 6 mm root edge. With the coloured side facing you, valley-fold both long diagonal hinges so each wing stands 65 degrees above the central triangle (115 degree inside angle). Leave the root opening and pointed outer end unglued. Mountain-fold the 6 mm root tab by 75 degrees behind the central triangle. When the tab lies flat, the petal centre line rises 75 degrees. Use a protractor; pinch only the scored hinges.

10. Mount tier C [B2, C01, C02, C03]: Place C01 with its root-edge midpoint on the 3 mm radius circle, 63 degrees counterclockwise from the reference ray viewed from above. Point the tip radially outward. Add the remaining IDs counterclockwise every 120 degrees. Each 6 mm tab points inward and is glued underside-down to B2; keep all pocket wings free. The tip centre should be about 14.5 mm above the mounting face. Dry this tier before the next. The three tiny core tabs overlap near the centre; glue each over the previous tab where they cross. Allow the completed flower to dry resting on its base.