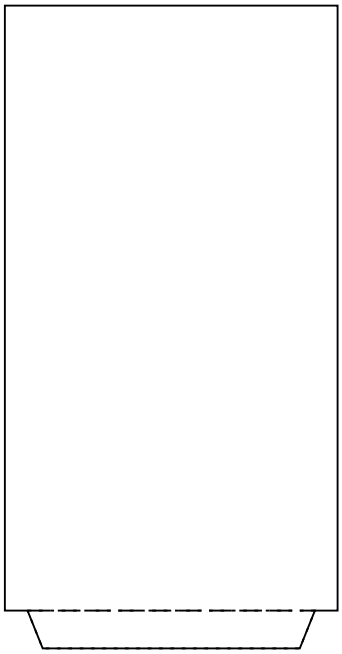
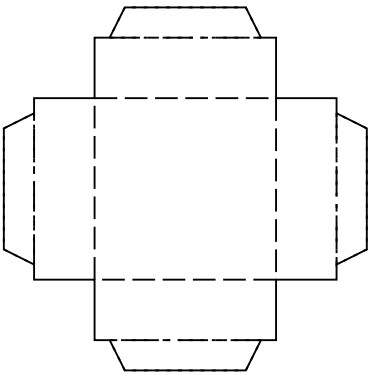
Stationary Sail Windmill

windmill / 1.0.0 / A4 / Template page 1

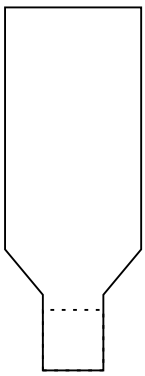
W2 | cut 1
44.00 x 85.00 mm



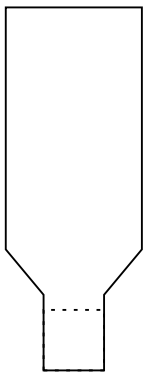
H1 | cut 1
48.00 x 48.00 mm



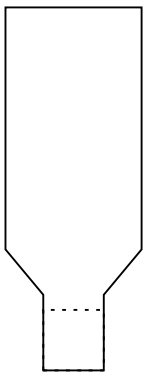
S1 | cut 1
18.00 x 48.00 mm



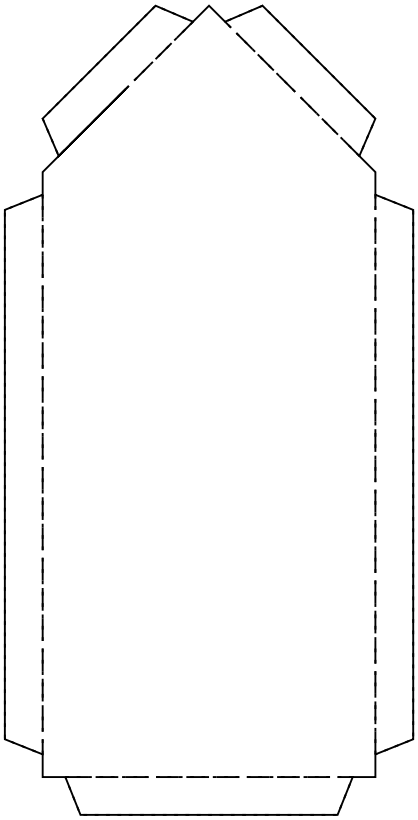
S2 | cut 1
18.00 x 48.00 mm



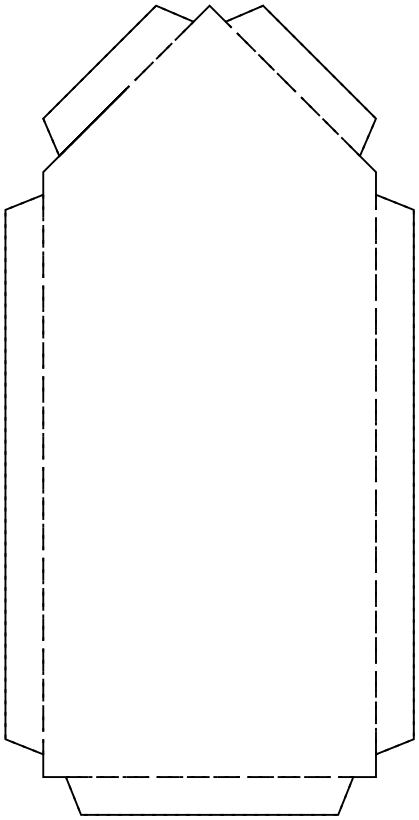
S3 | cut 1
18.00 x 48.00 mm



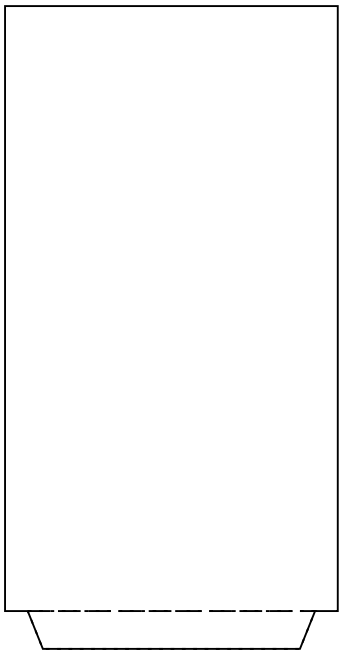
G1 | cut 1
54.00 x 107.00 mm



G2 | cut 1
54.00 x 107.00 mm



W1 | cut 1
44.00 x 85.00 mm



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

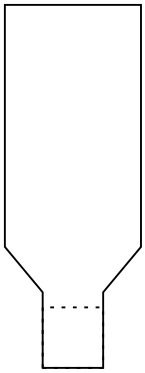
50 mm calibration

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

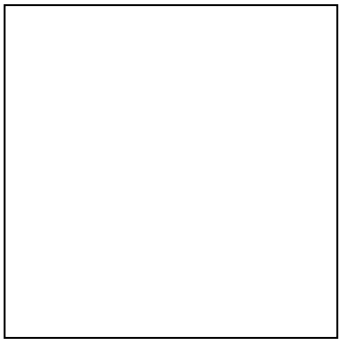
Stationary Sail Windmill

windmill / 1.0.0 / A4 / Template page 2

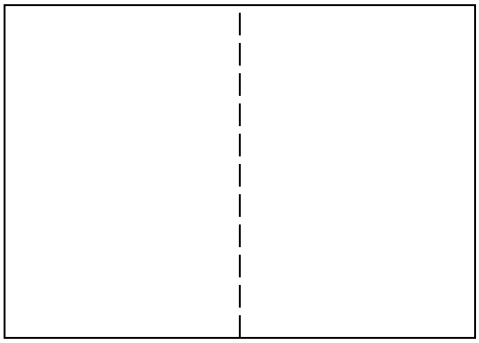
S4 | cut 1
18.00 x 48.00 mm



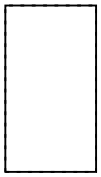
F1 | cut 1
44.00 x 44.00 mm



R1 | cut 1
62.23 x 44.00 mm



D1 | cut 1
12.00 x 22.00 mm



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

50 mm calibration

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

Stationary Sail Windmill

windmill / 1.0.0 / A4 / Assembly instructions

Finished size: 104 wide x 52 deep x 118 high mm; house footprint 44 x 44 mm

Materials: 200-240 gsm cardstock; Scissors; Ruler; Blunt scoring tool; PVA glue; Tweezers

Original twelve-piece paper construction. Physical printing, cutting and assembly pending.

Stationary decorative rotor: no axle, bearing, pin, motor or moving mechanism. Do not try to spin the sails.

Print at 100% and measure the 50 mm ruler. All structural parts are supplied, including floor, mounting hub and integral glue tabs. The door is an applied panel, not an opening.

Templates show the interior/back face. Valley folds close toward the printed face; mountain folds close away. Apply glue to the tab face touching the receiving panel. Color the reverse if desired.

All panels and tabs have exact face-to-net correspondence with unchanged edge lengths. Paper and glue thickness are idealized to zero; contact surfaces coincide. Real stiffness, clearances and drying strength require physical verification.

The hub is an open-back shallow box with unjoined corner edges; its four wall flanges secure it to the solid front wall. Sails remain flat and attach by 8 x 8 mm root patches. No hidden stiffeners are required by the design.

Part inventory (cut each instance once):

F1: Square floor

G1: Front gable wall

G2: Rear gable wall

W1: Left wall

W2: Right wall

R1: Pitched roof

H1: Fixed hub with four mounting flanges

S1: Upper sail

S2: Left sail

S3: Lower sail

S4: Right sail

D1: Applied door panel

1. Cut floor and wall pieces [F1, G1, G2, W1, W2]: Check print scale. Cut all five perimeters, retaining every 5 mm tab. Score the five tab hinges on each gable and the bottom hinge on each side wall. Keep the 44 x 44 mm floor flat.

2. Raise and glue the walls [F1, G1, G2, W1, W2]: Fold all wall tabs inward 90 degrees. Glue W1 and W2 bottom tabs onto the inside of opposite floor edges with 5 mm overlap. Fit G1 and G2 at the remaining ends: bottom tabs lie on the floor and vertical tabs lie inside the side walls. Align edges flush; the rectangular walls are 80 mm tall and gable apexes 102 mm tall. Leave the four sloping roof tabs dry. Hold square and let all eight floor/corner joints set.

3. Attach the door [D1, G1]: Cut D1 and glue its entire back to the outside of G1, centered horizontally. Leave its bottom edge 2 mm above the floor: door edges are 16 and 28 mm from the left corner. The door is a flat decoration.

4. Fold the mounting hub [H1]: Cut H1 with all four outer flanges. Score eight hinges. Valley-fold the four 8 mm walls 90 degrees toward the printed back of the 24 mm square face. Mountain-fold the four outer 4 mm flanges 90 degrees so they point outward parallel to the face. Corner edges meet without extra tabs; leave them unglued.

5. Mount the stationary hub [H1, G1]: On the outside front wall measure a center 22 mm from either side and 66 mm above the floor.

Stationary Sail Windmill

windmill / 1.0.0 / A4 / Assembly instructions continued

Center H1 there with its square face parallel to the wall and projecting 8 mm forward. The face spans heights 54 to 78 mm; outer flanges extend to 50 and 82 mm. Glue all four 4 mm flanges flat against G1. Support the wall from inside through the open roof and press until set. Let dry before adding sails.

6. Close the pitched roof [R1, G1, G2]: Score R1 down its central 44 mm ridge and valley-fold the printed underside 90 degrees from flat, leaving a 90 degree interior ridge angle. Each slope is 31.11 mm wide. Dry-fit with ridge on both apexes and all four outer edges flush with the walls. Glue one roof slope to the corresponding front and rear 5 mm sloping tabs; press while the other slope remains lifted. After setting, glue the other two tabs and lower the free slope. Hold gently until dry.

7. Glue the upper and lower sails [S1, S3, H1]: Cut the sails without folding. Apply glue only to each dotted 8 x 8 mm root patch. With H1 center as origin, aim S1 up and S3 down. Each narrow root begins 4 mm from center and reaches the hub edge at 12 mm; the broad tip is 52 mm from center. Keep roots centered on the vertical axis. Press each root flat to the front of H1 and let set. The lower tip remains 14 mm above the floor.

8. Complete the fixed four-sail rotor [S2, S4, H1]: Glue S2 left and S4 right using the same 8 x 8 mm root patches, 4 to 12 mm from hub center on the horizontal axis. All four sails lie in one plane 8 mm in front of the wall; roots do not overlap. Keep the broad blades flat, support root bonds until set and allow full drying before standing the house upright. Verify four secure attachments. This is a stationary display, not a working windmill. Physical assembly remains pending.