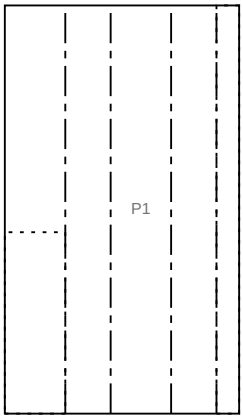
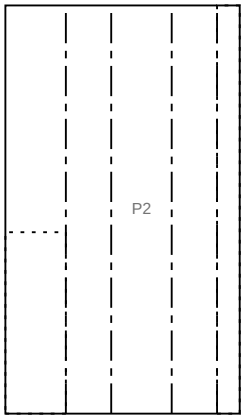
Slatted Park Bench

park-bench / 1.0.0 / Letter / Template page 1

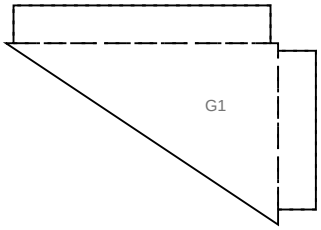
P1 | cut 1
31.00 x 54.00 mm



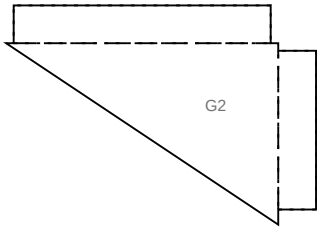
P2 | cut 1
31.00 x 54.00 mm



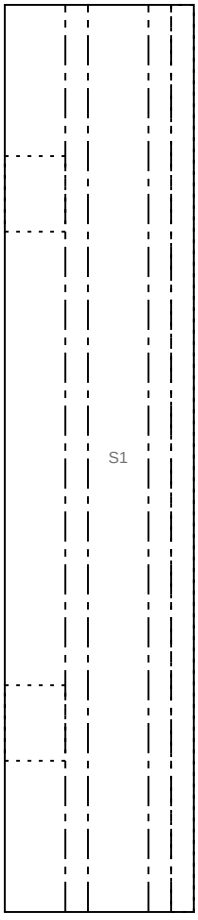
G1 | cut 1
41.00 x 29.00 mm



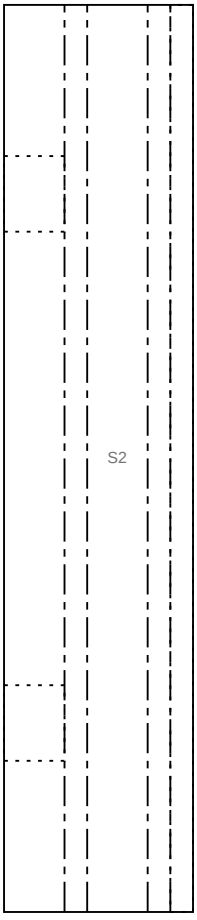
G2 | cut 1
41.00 x 29.00 mm



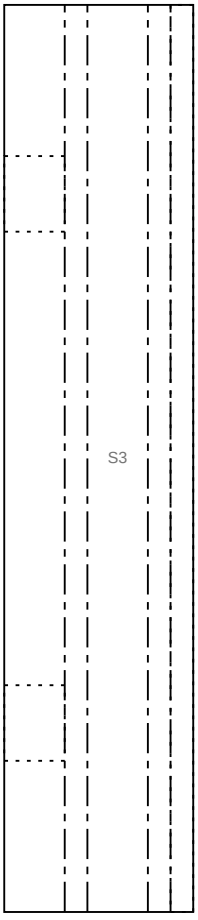
S1 | cut 1
25.00 x 120.00 mm



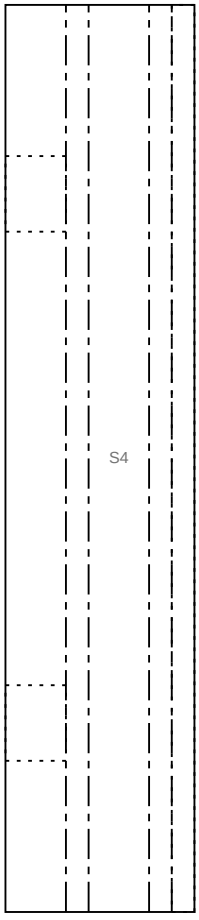
S2 | cut 1
25.00 x 120.00 mm



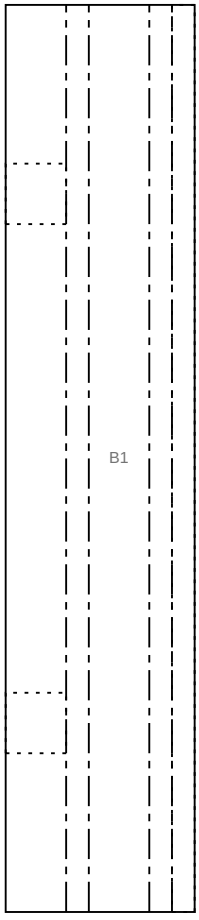
S3 | cut 1
25.00 x 120.00 mm



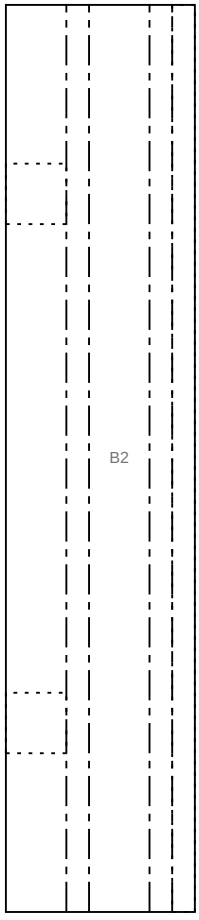
S4 | cut 1
25.00 x 120.00 mm



B1 | cut 1
25.00 x 120.00 mm



B2 | cut 1
25.00 x 120.00 mm



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

50 mm calibration

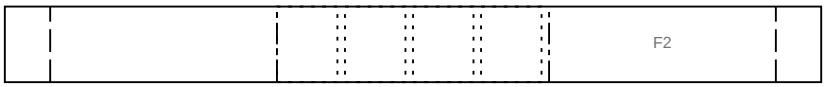
Print at 100% / Actual size. Do not fit to page. Original paper craft template.

snipfold.com/work/park-bench

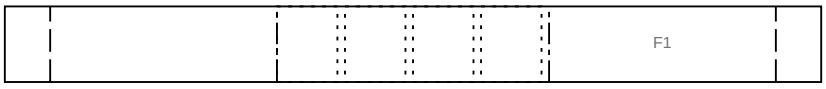
Slatted Park Bench

park-bench / 1.0.0 / Letter / Template page 2

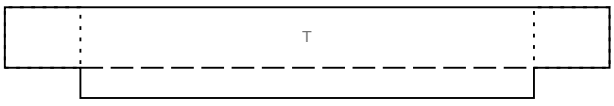
F2 | cut 1
108.00 x 10.00 mm



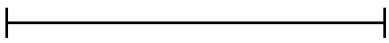
F1 | cut 1
108.00 x 10.00 mm



T | cut 1
80.00 x 12.00 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.

Slatted Park Bench

park-bench / 1.0.0 / Letter / Assembly instructions

Finished size: 120 x 48 x 60 mm; seat top 33 mm above table

Materials: 220-250 gsm cardstock; PVA craft glue; Scissors or craft knife and cutting mat; Metal ruler and blunt scoring tool; Small square; Tweezers or small clips for holding glue joints

Step-by-step guide with a 3D model: https://snipfold.com/work/park-bench. Not yet test-built in paper by SnipFold: measurements come from the digital model, so check the fit as you go.

Original 13-piece paper/glue construction: two folded frames, two tabbed triangular gussets, two hollow posts, four hollow seat slats, two hollow back slats and one returned stretcher. All paper components, including seam laps and gusset tabs, exist in both template and mesh.

Each folded face has exact flat-to-assembled vertex correspondence and unchanged edge lengths. No stretching, curved forming, hidden rods, filler or extra paper is required. Tube ends deliberately remain open; the back is vertical rather than reclined.

All folds turn 90 degrees. Tube seam laps lie against the inside of their first broad face. Glue-contact surfaces intentionally coincide in the zero-thickness mesh; actual cardstock and adhesive thickness, bend radii and springback are not simulated. Dry-fit the seams and outside post joints without shrinking the template.

Frame triangles lock the seat-to-rear-leg angle; the returned stretcher ties the frames laterally. Hollow slats stiffen the 60 mm clear span. Decorative miniature only: do not sit toys or weights on it and keep dry.

Part inventory (cut each instance once):

F1: Folded support frame

F2: Folded support frame

G1: Triangular frame brace

G2: Triangular frame brace

P1: Hollow back upright

P2: Hollow back upright

S1: Hollow seat slat

S2: Hollow seat slat

S3: Hollow seat slat

S4: Hollow seat slat

B1: Hollow back slat

B2: Hollow back slat

T: Returned lower stretcher

1. Print, cut and score [F1, F2, G1, G2, P1, P2, S1, S2, S3, S4, B1, B2, T]: Print at 100% actual size; check the 50 mm ruler. Cut all 13 numbered pieces once and score every marked fold before forming. Retain the integral tabs. Use 220-250 gsm cardstock throughout. All measurements below are millimetres. Define x along the 120 mm seat from its left end, y from the front toward the back, and z above the table.

2. Fold the support frames [F1, F2]: F1/F2 are 108 x 10 strips. Measure along the 108 mm direction and fold at 6, 36, 72 and 102: valley, mountain, mountain, valley, all 90 degrees from flat. Form each into a 36 mm horizontal bearing on two 30 mm vertical legs, with two 6 mm feet extending outward. The bearing glue marks face up. Stand F1 over x=20-30 and F2 over x=90-100; front legs are y=0, rear legs y=36, feet extend to y=-6 and y=42.

3. Lock both frames with triangular braces [G1, G2, F1, F2]: G1/G2 have a triangular web 36 mm along its top and 24 mm down its rear edge. Valley-fold both 5 mm tabs 90 degrees toward the same side of the web. Put G1 web against the x=20 side of F1 and G2 at x=90 of F2; tabs point toward increasing x, into the 10 mm frame width. Glue the top tab beneath the bearing over y=1-35 and the rear tab against the inside rear leg over z=8-29. Web corners are (y,z)=(0,30),(36,6),(36,30). Hold top and rear leg square until dry. These rigid triangles prevent each folded frame from racking front-to-back.

4. Close four seat beams [S1, S2, S3, S4]: S1-S4 each have a 25 x 120 blank. Across the 25 mm direction, mountain-fold at 8, 11, 19 and 22 mm, each 90 degrees. Make a rectangular tube 8 mm wide and 3 mm deep, open at both short ends. Glue the last 3 x 120 lap beneath the first 8 mm face. Press the seam with a ruler before closing fully; keep straight and let dry. The first face, bearing two glue rectangles, is the bottom. No end caps or internal packing are needed.

5. Attach the slatted seat [S1, S2, S3, S4, F1, F2]: Align every 120 mm slat end at x=0 and x=120. Glue their bottom marked zones x=20-30 and x=90-100 to the two frame bearings at z=30. S1 occupies y=0-8, S2 y=9-17, S3 y=18-26 and S4 y=27-35: leave three 1 mm open gaps and 1 mm of bearing behind S4. Slat tops are z=33. Keep frames parallel with a 60 mm clear gap between their inner edges; each slat overhangs the outside frame edge by 20 mm. Let the eight bearing joints dry on a level table.

6. Brace the frames across the back [T, F1, F2]: T has an 80 x 8 web and a central 60 x 4 lip; retain the two printed 10 x 4 corner notches. Fold the lip 90 degrees toward the front. Glue the marked 10 x 8 end zones onto the INSIDE rear legs: x=20-30 and 90-100, y=36, z=14-22, over the already bonded gusset tabs where they overlap. The lip spans only x=30-90 and projects forward to y=32 at z=14, stopping short of both gusset webs. This returned stretcher ties the frames together across the 60 mm clear gap. Press from both sides; let dry before adding posts.

7. Form and mount the back uprights [P1, P2, F1, F2]: P1/P2 are 31 x 54 blanks. Across 31 mm, mountain-fold at 8, 14, 22 and 28 mm, all 90 degrees. Close an 8 x 6 rectangular tube with the last 3 mm lap beneath the first face; ends stay open. Dry square. Glue the marked lower 24 mm of the first face onto the OUTSIDE rear leg: P1 at x=21-29, P2 x=91-99, both at y=36 with lower ends z=6 and upper ends z=60. Tubes project rearward to y=42. Center each post across its 10 mm leg, leaving 1 mm on each side. Hold vertical until the full 8 x 24 bond has dried.

8. Close and attach the back slats [B1, B2, P1, P2]: B1/B2 fold like the seat slats: 25 x 120 blanks, mountain folds at 8,11,19,22 across the width, 3 mm lap under the first face. Glue and dry the 8 x 3 tubes. Place their first broad faces against the FRONT of both posts at y=36; tubes project forward to y=33. Align ends at x=0 and 120. B1 spans heights z=39-47; B2 spans z=50-58, leaving a 3 mm gap. Glue the marked x=21-29 and 91-99 zones to the posts. Posts extend 2 mm above the top slat. Keep both slats horizontal until dry.

9. Check the dried miniature [F1, F2, G1, G2, P1, P2, S1, S2, S3, S4, B1, B2, T]: Let all bonds cure according to the glue label. Check 120 mm overall length, 48 mm front-to-back footprint including feet, 60 mm overall height and 33 mm seat top height. Confirm all four feet sit flat, seat gaps remain open, both gusset tabs are bonded and the stretcher and upright joints are firm. Handle by the support frames. This is an unloaded display miniature.