DIY Wooden Bookends — Printable Plan V1.0

Project #19 | Wood Project Lab | Beginner | Two matching L-shaped bookends

Finished dimensions (each): 5½ in wide × 6 in deep × 6¾ in high. Dimensions assume nominal 1×6 = ¾ × 5½ in and nominal 1×2 = ¾ × 1½ in. Verify actual stock before cutting.

Cut list — makes two bookends

Part	Qty	Material / actual section	Cut length
Bases	2	1×6 pine / ¾ × 5½ in	6 in
Uprights	2	1×6 pine / ¾ × 5½ in	6 in
Inside cleats	2	1×2 pine / ¾ × 1½ in	5 in

Materials and tools

One 1×6 pine board at least 24 in long plus saw kerf; one 1×2 board at least 10 in long plus saw kerf; wood glue; eight #8 × 1¼ in wood screws total (four per bookend); optional felt pads; saw, drill/driver, appropriate pilot and countersink bits, square, tape, clamps, sandpaper, eye protection. Buy extra material for defects and test cuts.

Construction geometry

Use coordinates x across the 5½ in width (0–5½), y from front to back (0–6), z upward from the underside (0–6¾). Base: x 0–5½, y 0–6, z 0–¾. Upright: x 0–5½, y 5¼–6, z ¾–6¾. Cleat: x ¼–5¼, y 3¾–5¼, z ¾–1½. The upright rests on the base; its back face is flush with the back of the base. The cleat lies flat on the base and touches the front face of the upright.

Fastener locations — per bookend

From underside into cleat: two #8 × 1¼ in screws at x = 2 in and 3½ in, y = 4½ in. Screws travel upward through ¾ in base and approximately ½ in into the ¾ in thick cleat. **From back of upright into cleat:** two #8 × 1¼ in screws at x = 1¼ in and 4¼ in, z = 1 1/8 in. Screws travel forward through ¾ in upright and approximately ½ in into the cleat. The two screw pairs have different x positions to avoid collisions. Center and predrill carefully; countersink heads flush. Screw placement is a suggested layout, not a manufacturer-tested joint.

Assembly — seven steps

1. Measure and mark Mark two 6 in bases, two 6 in uprights, and two 5 in cleats. Check actual lumber thickness.

2. Cut the parts Make square 90° cuts. Label each piece and check lengths and edges.

3. Sand and dry-fit Smooth faces and break sharp edges. Position each upright on its base, flush at the rear. Place the cleat against the upright on the base.

4. Glue the joint Apply wood glue to the bottom edge of the upright and to the two mating faces of the cleat. Clamp at 90° and wipe away squeeze-out.

5. Secure the cleat from below With the assembly clamped, drill pilot and countersink holes at the two underside positions. Drive two #8 × 1¼ in screws through the base into the cleat.

6. Secure the cleat from behind Drill pilot and countersink holes at the two back-face positions. Drive two #8 × 1¼ in screws through the upright into the cleat. Check squareness and repeat for the second bookend.

7. Finish and use Let glue cure according to its label. Sand as needed; apply optional finish and felt pads. Place books on the bases so their weight helps resist tipping.

Use and safety

For ordinary indoor books on a level shelf. These are not freestanding load-bearing supports; very heavy books or a slick surface may cause sliding or tipping. Keep book weight on each base, and do not use as climbing supports. Wear eye protection; clamp small parts before drilling. No tested load rating is claimed.

Dimensional check

Overall height = ¾ in base + 6 in upright = 6¾ in. Overall depth = 6 in base. Overall width = 5½ in. The cleat fits between the upright and the front of the base, and its 5 in length leaves ¼ in clearance at each side. Each bookend uses four screws; the pair uses eight.

Publication note

Educational plans based on dimensional review, not a physically tested prototype. Do not substitute measurements or change the fastening layout without updating both the plan and article.