



Basic Pine Bookshelf Plans

6 feet tall x 48 inches wide x 11 1/4 inches deep | Beginner-friendly woodworking plan

Project summary: This plan builds a sturdy, practical pine bookshelf using common 1x12 pine boards, a simple face frame, and a 1/4 inch plywood back. The finished bookcase is sized for a home office, living room, bedroom, or workshop library.

Overall finished size: **72 in H x 48 in W x 11 1/4 in D**. The plan uses two side panels, a top, a bottom, five shelf panels, a pine face frame, and a plywood back. The center shelf can be fixed for strength, while the other shelves may be fixed or adjustable depending on your skill level and tools.

Finished Dimensions

Part	Finished Dimension
Overall height	72 in
Overall width	48 in
Overall depth	11 1/4 in
Interior shelf span	46 1/2 in between side panels
Typical shelf opening	About 11 to 12 in depending on shelf placement

Recommended Materials

Qty	Material	Use
6	1x12 x 8 ft pine boards	Sides, top, bottom, and shelves
4	1x2 x 8 ft pine boards	Face frame and shelf front trim
1	1/4 in plywood panel, 4 ft x 8 ft	Back panel, cut to 48 in x 72 in
1 box	1 1/4 in wood screws or trim screws	Shelves, top, bottom, and face frame
1 box	1 in brads or narrow crown staples	Back panel
1	Wood glue	All permanent joints
As needed	Sandpaper: 80, 120, 180, 220 grit	Surface prep
As desired	Stain, paint, or clear topcoat	Finish

Cut Sheet

Part	Qty	Material	Cut Size	Notes
Side panels	2	1x12 pine	72 in	Full height left and right sides
Top panel	1	1x12 pine	46 1/2 in	Fits between side panels

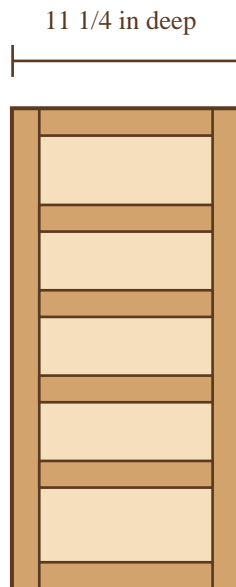
Part	Qty	Material	Cut Size	Notes
Bottom panel	1	1x12 pine	46 1/2 in	Fits between side panels
Shelves	5	1x12 pine	46 1/2 in	Use one fixed center shelf for extra strength
Back panel	1	1/4 in plywood	48 in x 72 in	Square the case before attaching
Face frame stiles	2	1x2 pine	72 in	Front left and right vertical trim
Face frame top/bottom rails	2	1x2 pine	45 in	Fits between stiles
Shelf front trim	5	1x2 pine	46 1/2 in	Optional but helps stiffen shelf fronts

Board buying note: Pine boards vary. Standard 1x12 boards are usually 3/4 in thick and about 11 1/4 in wide. Check every board for bow, cup, twist, and large loose knots before buying. Pick the straightest boards for the sides and shelves.

Schematics



Front View - 48 in wide x 72 in tall



Side View - standard 1x12 pine depth

Shelf Layout

A simple layout is to install the bottom panel flush between the sides, install a fixed center shelf at approximately 36 inches from the bottom, and space the remaining shelves evenly. For heavier books, keep openings shorter and consider adding a 1x2 front edge to every shelf.

Assembly Steps

- 1. Mill and inspect the boards:** Cut all parts to length. Sand the inside faces before assembly, because they are harder to reach later.
- 2. Mark shelf locations:** Lay both side panels side by side with the front edges aligned. Mark the top, bottom, center shelf, and remaining shelf locations across both boards at the same time.
- 3. Build the outer case:** Attach the top and bottom panels between the side panels using glue and screws. Clamp if possible and check for square.
- 4. Install the center shelf:** Install the center shelf first. This locks the case together and reduces racking. Glue and screw through the sides into the shelf ends.
- 5. Install remaining shelves:** Install the remaining fixed shelves, or drill shelf-pin holes if you prefer adjustable shelves. Keep the shelf spacing consistent.
- 6. Attach the face frame:** Glue and nail or screw the 1x2 stiles and rails to the front. Add 1x2 trim to shelf fronts to reduce sag and give the bookcase a finished look.
- 7. Square and attach the back:** Measure diagonally corner to corner. When both measurements match, the case is square. Attach the 1/4 inch plywood back with glue and brads or staples.
- 8. Sand and finish:** Break sharp edges with 180 grit. Finish with stain and polyurethane, paint, or a clear water-based topcoat.

Safety and Anti-Tip Note

A 72 inch tall bookshelf must be anchored to the wall, especially in a home with children, pets, or heavy books. Use a proper anti-tip furniture strap or secure the bookcase through the upper back rail into wall studs. Do not rely on drywall anchors alone for a loaded bookcase.

Tool List

Tool	Purpose
Miter saw or circular saw with guide	Cut boards to length
Drill/driver	Pre-drill and drive screws
Clamps	Hold case square during assembly
Tape measure and square	Accurate layout
Brad nailer or hammer and finish nails	Face frame and back panel
Sander	Surface preparation

Optional Upgrades

For a more furniture-grade version, cut 3/8 inch dados into the side panels for the shelves, use pocket screws on the face frame, add a thicker top cap, or install adjustable shelf pins. For a rustic Black Hut Woodworking look, stain the pine medium brown and finish with satin polyurethane.

Finishing Recommendation

Pine can blotch when stained. For the cleanest result, sand evenly, apply pre-stain conditioner, test stain on scrap, and use two or three thin coats of polyurethane. A medium brown stain gives pine a warmer rustic look while still showing the grain.