

Building Basic Cabinets

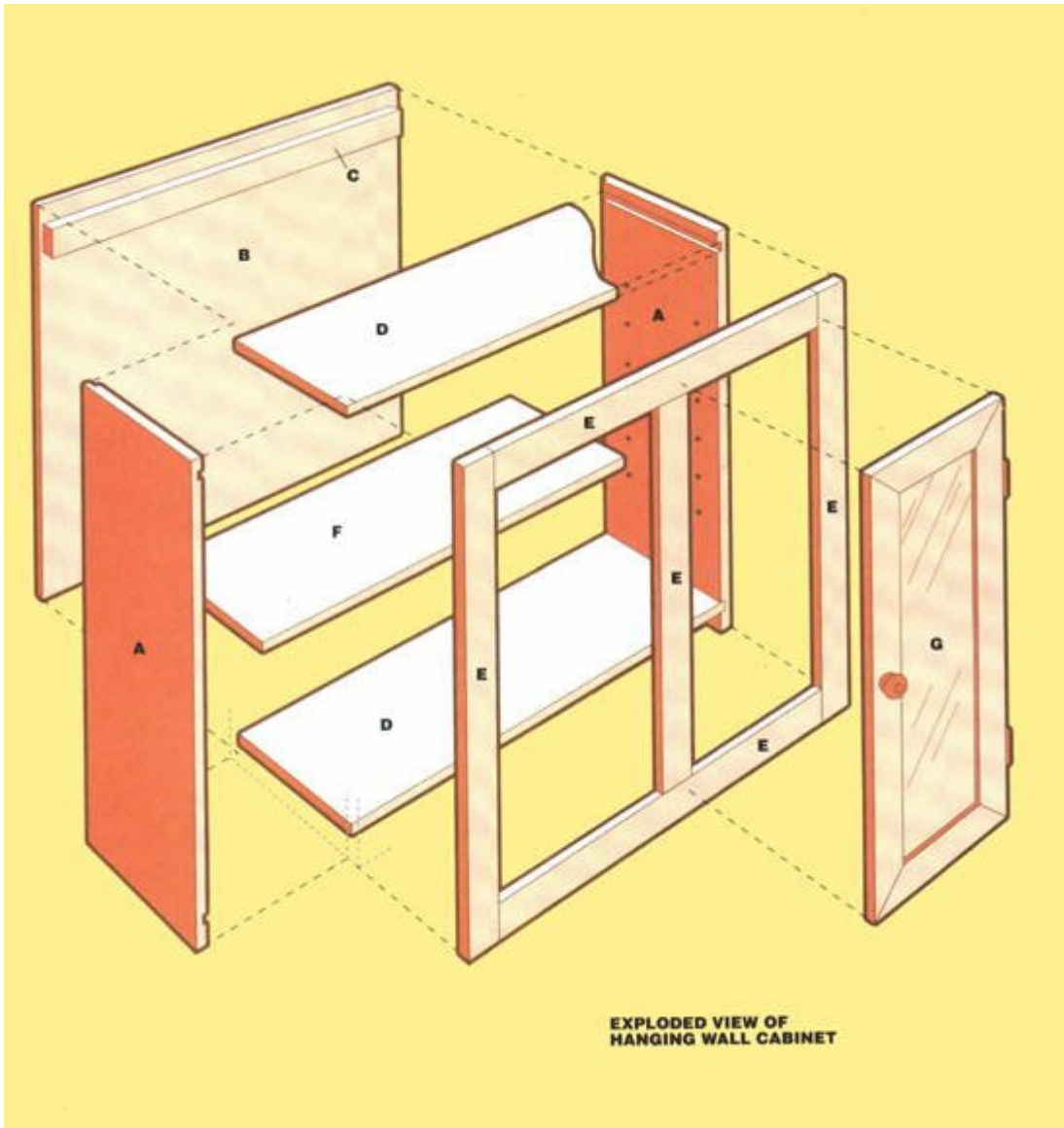


The simple base cabinet and hanging wall cabinet shown here use the same basic construction as professionally built kitchen cabinets, but because they are custom-designed, trimmed, and finished to blend into the room, they become permanent built-in features of your home.

These basic cabinets are built with oak plywood, which gives them the look of fine custom-made cabinets, but at a much reduced cost. The wall cabinet features glass-panel doors, purchased separately, that create an ideal display area for glassware or china. The base cabinet has extra-large drawers that are well suited for storing table linens.

You can use the methods shown here to build a single base cabinet with a wall cabinet above it, or several cabinets side by side (for a full wall of storage or display).

Everything You Need:
Tools: electronic stud finder cordless screwdriver hammer tape measure router with bits (3/4" straight, 1/4" rabbet) drill and bits right-angle drill guide pegboard scraps pipe clamps level
Materials: power-driver screws (3/4", 2 1/2", 3 1/2") wood glue finish nails (1", 2", 3", 4") shims utility knife pin-style shelf supports 2 × 4 brace 1 × 3 for ledger strip finishing materials drawer and door hardware trim or base shoe molding



Project as Shown

Key	Part	Material	Pieces	Size
A	Side panels	3/4" oak plywood	2	11 1/4" Ã? 30"
B	Back panel	1/4" oak plywood	1	30" Ã? 35 1/4"
C	Nailing strip	1 Ã? 3 oak	1	34 1/4"
D	Top, bottom panels	3/4" oak plywood	2	35 1/4" x 11 1/4"
E	Face frame	1 Ã? 3 oak		12 linear ft.
F	Shelves	3/4" oak plywood	2	9 3/4" Ã? 34 1/4"
G	Glass panel or overlay doors			



Side panels made from 3/4" plywood have 3/4"-wide, 3/8"-deep dados where bottom and top panels will fit and 1/4" wide rabbets where back panel will fit. Rows of parallel peg holes, 1 1/2" in from edges, will hold pin-style shelf supports.



Back panel made from 1/4" plywood has a 1 × 3 nailing strip mounted 1 1/2" below top edge of the back panel and set in 3/8" on each side. It is fastened with glue and 3/4" screws driven through the back panel.

How to Build & Install a Wall Cabinet



1. Measure and cut 3/4" plywood side panels, then cut rabbets and dados, using a router and a straightedge guide.



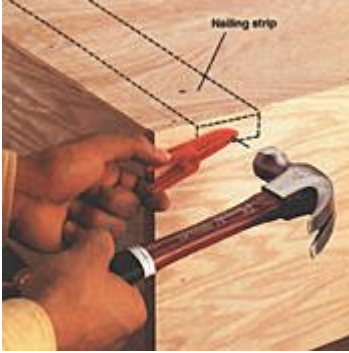
2. Drill two parallel rows of 1/4" holes for pin-style shelf supports on the inside face of each side panel. Use a right-angle drill guide, and a scrap of pegboard as a template to ensure that holes line up correctly.



3. Measure and cut 3/4" plywood top and bottom panels, then glue and clamp the side panels to the top and bottom panels to form dado joints. Reinforce the joints with 2" finish nails driven every 3".



4. Measure, cut, and attach 1 × 3 nailing strip to the back panel, using glue and 3/4" screws. Set the back panel into the rabbets at the back edges of the cabinet. Secure the back with 1 1/2" wire nails driven into the cabinet edges.



5. Drive 2" finish nails through the side panel and into the ends of the nailing strip.



6. Measure height and width between inside surfaces of cabinet, then cut 1 × 3 face frame rails 4 3/4" less than the width, and face frame stiles 4" longer than height. Clamp and glue rails between stiles, and reinforce joints by drilling pilot holes and driving 4" finish nails through the stiles into the rails.



7. Center the face frame on the cabinet so overhang on each side is equal, and top edge of the bottom rail is flush with bottom shelf surface. Attach the face frame with glue and 2" finish nails driven through pilot holes.



8. Fill nail holes, then sand and finish the cabinet.



9. Mark a level reference line on the wall where the bottom edge of the cabinet will be located — 54" above the floor is a standard height. Locate the wall studs, and mark their location below the reference line.



10. Position a temporary 1 × 3 ledger strip so top edge is flush with the reference line, then attach the strip to the wall at stud locations, using 2 1/2" screws.



11. Set cabinet on the temporary ledger, and brace it in position with a 2×4 . Drill counterbored pilot holes in the nailing strip at the top of the cabinet, and drive 3" screws into wall studs.



12. Use a level to make sure cabinet is plumb. If not, loosen screws slightly and shim behind the cabinet to adjust it to plumb. Tighten screws completely, then score shims with a utility knife and break off excess.



13. Remove temporary ledger and patch screw holes, then cut trim molding to cover gaps between cabinet and the walls. Drill pilot holes and attach trim with 1" finish nails.



14. Build and finish shelves with pin-style shelf supports. Build or purchase overlay doors, and attach them to the face frame. Sand and finish the cabinets, then attach hardware and install shelf support pins and adjustable shelves.