



HOW-TO BOOKLET #3053

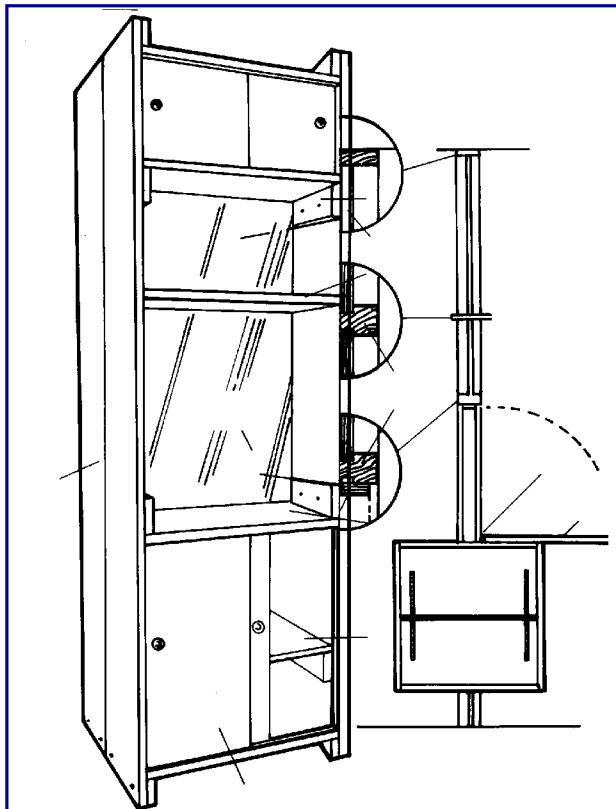
ROOM DIVIDERS



TOOL & MATERIAL CHECKLIST

- Materials (See Materials List)
- Hammer
- Screwdriver
- Square
- Jack Plane
- Rasp
- Saw
- Level
- Tape Measure
- Block Plane
- Sandpaper

Read This Entire How-To-Booklet for Specific Tools and Materials Not Noted in The Basics Listed Above.



Room dividers, as the name implies, are devices that give separation to rooms but still provide an “openness,” as a solid partition wall between rooms wouldn’t do. The location for room dividers can be between entrance doors and living rooms to create a hallway or foyer; between living and dining rooms to separate the two areas or between dining rooms and kitchens, also to separate the two areas.

Design of room dividers can be low or half walls (stub walls); open framing, such as a stud wall but with the vertical framing members spaced 4 feet apart or so and built from hardwood such as maple, oak, or birch. In this Booklet, we illustrate built-in room dividers.

For low walls and open framing, construction is with framing members nailed to the floor and ceiling (top and bottom plates) and the vertical members sandwiched between the plates. In a stub wall, the framing members are covered with gypsum-board and then finished. The top of the wall usually is capped with a piece of hardwood trim and finished with stain and varnish to create a narrow “top”.

Although the room divider designs we show how to build in this Booklet can be constructed with hand tools, a power saw would speed the project, especially when cutting certain joints. If you don't own a saw, you may be able to rent one at a rental outlet or have a millwork shop (or friend with a saw) make these cuts for you. The store where you purchase the materials may be equipped with a saw and will make the cuts.

ROOM DIVIDER WITH STORAGE

The upper plywood panels of this room divider unit may be painted with bright colors to create a flamboyant room divider (**Fig. 1**). Extensive storage is available in drawers and cabinets below in a base arrangement. In addition to the cabinets, two fold-down desk tops have been added. This room divider unit could be used between a living and dining area or dining room and kitchen. It would also make an excellent divider for a dual bedroom, such as a bedroom for two children. The desk tops may be used for study; they have plenty of storage for books, reference material, and personal effects below.

CONSTRUCTION SEQUENCE

Cut all parts to the sizes as indicated on the Materials List #1. Join the tops, sides, bottoms, and backs of all cabinets with glue and finishing nails. Use rabbet and butt joints as indicated in the drawings. Square up each assembly as the nails are driven and set.

Assemble the drawers by fastening sides and backs to bottoms, and then nail on the drawer fronts using glue blocks for added supports. Then install the drawer guides to fit the drawers. Use pin hinges to hang the doors on the door units, and install the metal standards for adjustable shelves in the door units.

Fill the nail holes and exposed plywood edges of the cabinets with wood filler. Sand the filler and wood smooth, using medium-grit abrasive paper.

It is best to paint the cabinets and plywood panels before you assemble the divider. Start with a flat undercoater, after sanding the wood, and follow the undercoater with one coat of semi-gloss enamel, sanding lightly between coats.

Cut or rout out the slots for the 2x4 partition posts with a dado head on a table saw. If you do not have access to a table saw, use a portable electric router, guided by a straightedge clamped in place.

You begin the partition assembly by nailing a 1x4-inch piece of wood 9 feet long to the ceiling. Then nail the first dadoed post to the wall (at a stud). Support the first cabinet at the desired height with a wood block beneath it. Drive the screws through the side of the cabinet into the post.

Slip the lower panel (once completely finished) into the slot with the bottom edge resting on the cabinet. Then nail the dadoed cross-member to the post. Insert the top panel and the next post into position, attaching them through the cabinet side with screws. Repeat this procedure for each section. Install each fold-down desk top with piano hinges. Note that each panel opposite the desk top is held in position with a 1/2-inch stop. This provides added support.

Give the posts and cross-members a coat of clear sealer, such as shellac. Then fill the nail holes with a filler tinted to match the wood. Finish the project with two coats of satin varnish. The door catches and pulls go on last.

Materials List #1

(see illustration on the next page)

Plywood-1/2"

2 pcs.	21 1/2" x 23"	for bottom of drawer units
2 pcs.	22 1/2" x 23"	for top of drawer units
2 pcs.	23" x 24"	for side of drawer units
2 pcs.	23" x 24"	for drawer fronts (to be cut for individual drawer front faces)
8 pcs.	4 3/4" x 22 1/2"	for drawer sides
4 pcs.	4 3/4" x 20 3/8"	for drawer backs
4 pcs.	10 3/4" x 22 1/2"	for drawer sides
2 pcs.	10 3/4" x 20 3/8"	for drawer backs
6 pcs.	20 3/8" x 22"	for drawer bottoms
2 pcs.	21" x 23"	for bottom of door units
2 pcs.	23" x 24"	for backs of door units
4 pcs.	22 1/4" x 23 1/4"	for sides of door units
2 pcs.	23" x 24"	for doors (to be cut vertically if desired)
2 pcs.	21 1/4" x 22 1/2"	for adjustable shelves
8 pcs.	23 1/4" x 23 1/2"	for panels

1x Stock

48 feet of 2x4 for standards and cross members
9 feet of 1x4 for nailing strip

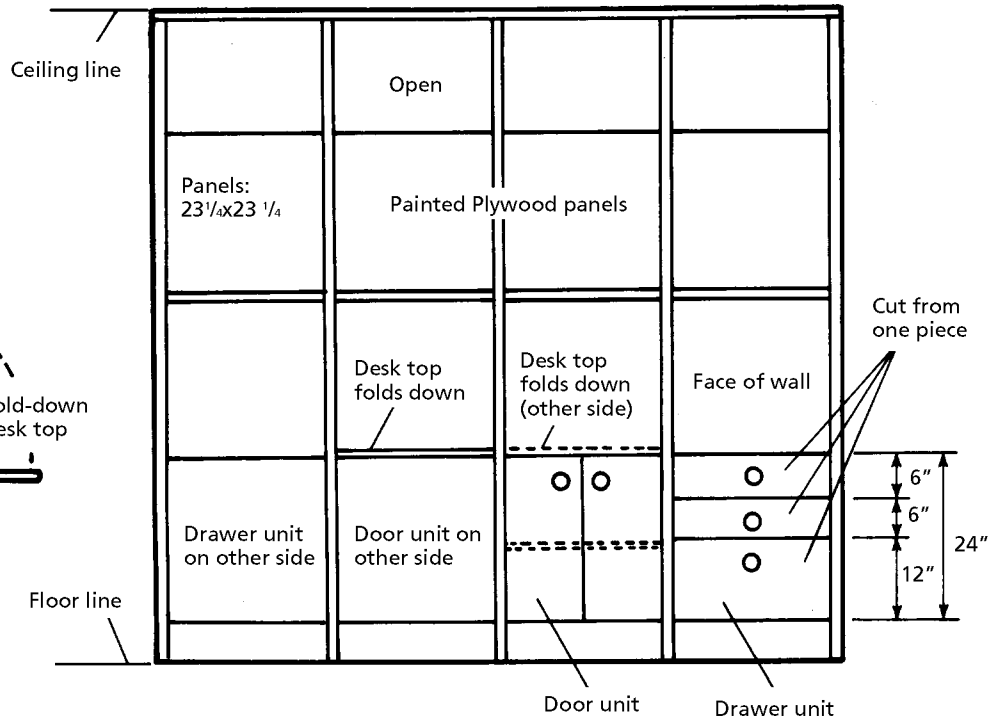
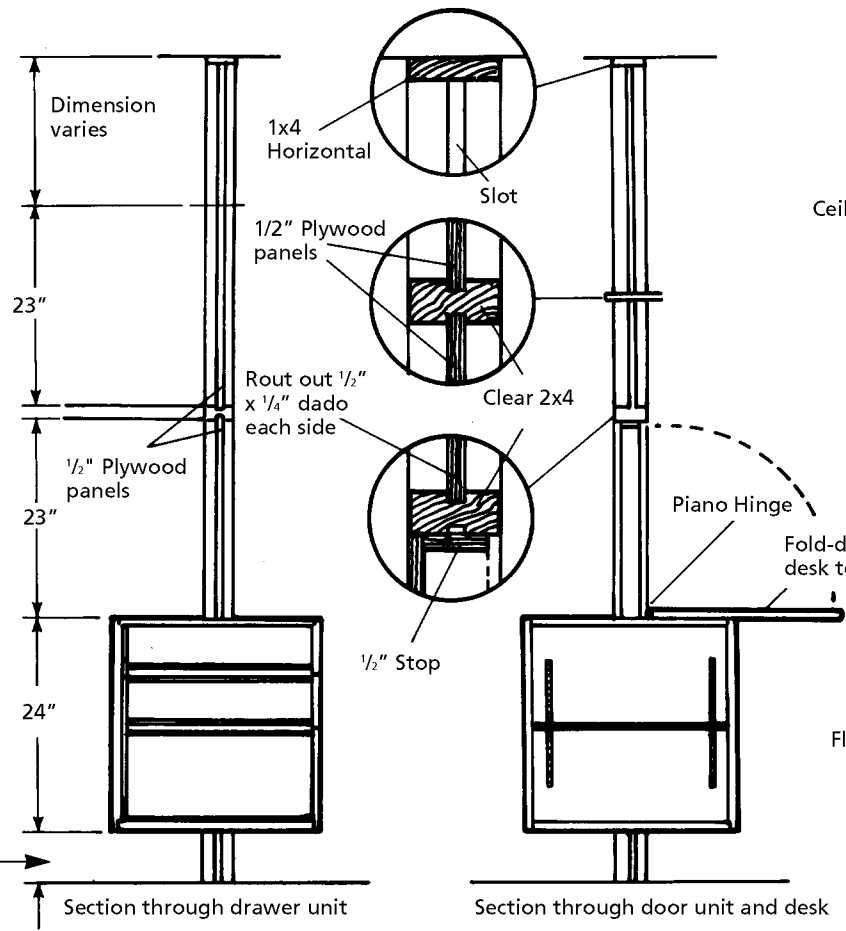
Misc. and Hardware

6d and 8d finishing nails, white glue, wood filler

Hardware:

drawer pulls
guides
hinges of your choice
piano hinges

Fig. 1



Dimension varies depending on desk height wanted

ADJUSTABLE/EXPANDABLE ROOM DIVIDER

You can build this room divider as a single unit 2 foot deep and 2 foot wide to give a sense of separation between rooms (Fig. 1). Or you can duplicate the units and link them together to form a larger divider for privacy.

CONSTRUCTION SEQUENCE

Start construction by cutting out all the parts, as detailed on the Materials List #2.

There are 12 shelves—6 on one side and 6 on the other side of the divider. Five of these shelves are fixed on each side—two each that form the bottoms and tops of the cabinets, and the one inside the lower cabinet. The shelf in the middle is movable. You can, of course, vary the shelf arrangement to suit your requirements for displaying large and small objects and knick-knacks that you want to showcase.

After cutting the parts to size, groove the centers of both faces of each 25 5/8-inch x 78-inch side. Use a table saw for these cuts, making the groove 5/16-inch wide and 1/4-inch deep. This allows for partitions when you add on more sections.

Cut the slots in the fixed shelves for the sliding doors and glue the cleats, for support, to the edges of the fixed shelves. Leave a gap between the cleats as a partition groove. Then cover the exposed edges with birch veneer tape. If you plan on painting the unit, you can cover the edges with a strip of screen molding.

For finger pulls, drill 3/4-inch holes in the sliding doors. Then assemble the shelves for one side of the unit, using clamps. Mark and drill the holes for the fasteners. Shelf hangers work well for the movable shelves; use 1 1/2-inch No. 10 round head screws to attach the fixed shelves to the sides.

With shelves on one side fastened in, screw on the hardboard partition using 1-inch No. 10 flathead screws. Add the finger pulls.

If you like, you can use decorative vinyl on the doors and partition, as in a narrow unit. If you use two sections, omit the partition.

And, as another alternative, you can replace the sliding hardboard cabinet doors with glass doors to show off your belongings on the storage shelves. The glass panels can be cut from double-strength glass with the edges sanded smooth. You can have finger holes drilled into the glass for door pulls. We suggest that you have a professional make the holes in the glass; the pro is equipped for this job.

If you have small children at home, we suggest that you use tempered safety glass for the door panels. This glass, if broken, does not shatter. It breaks like the glass windows in an automobile.

Sand and then give the wood a prime coat of sealer. Then, when the primer is dry, sand the unit lightly again with fine-grit sandpaper, and apply the top coat of finish. We suggest an enamel since it dries to a high, semi-gloss, or satin finish that is easy to keep clean. You may want to finish the divider with two top coats for a smooth job. If so, sand between coats.

Materials List #2

3/4" Birch plywood		
2 pcs.	23 5/8" x 78"	for sides
12 pcs.	22 1/2" x 11 5/8"	for fixed shelves
4 pcs.	11 5/8" x 22 3/16"	for removable shelves
Stock		
16 feet	1" x 3" birch	
16 pcs.	3/4" x 15 5/8" x 2 9/16"	birch or maple stock for cleats
1/4" Masonite		
1 pc.	22 13/16" x 75 3/8"	for partition
4 pcs.	11 1/2" x 10 5/16"	for small sliding doors
4 pcs.	11 1/2" x 23 3/16"	for large sliding doors
8 Finger pulls		
24 Shelf hangers		
1 1/2" No. 10 round head screws		
1" No. 10 flathead screws		
Birch veneer tape		

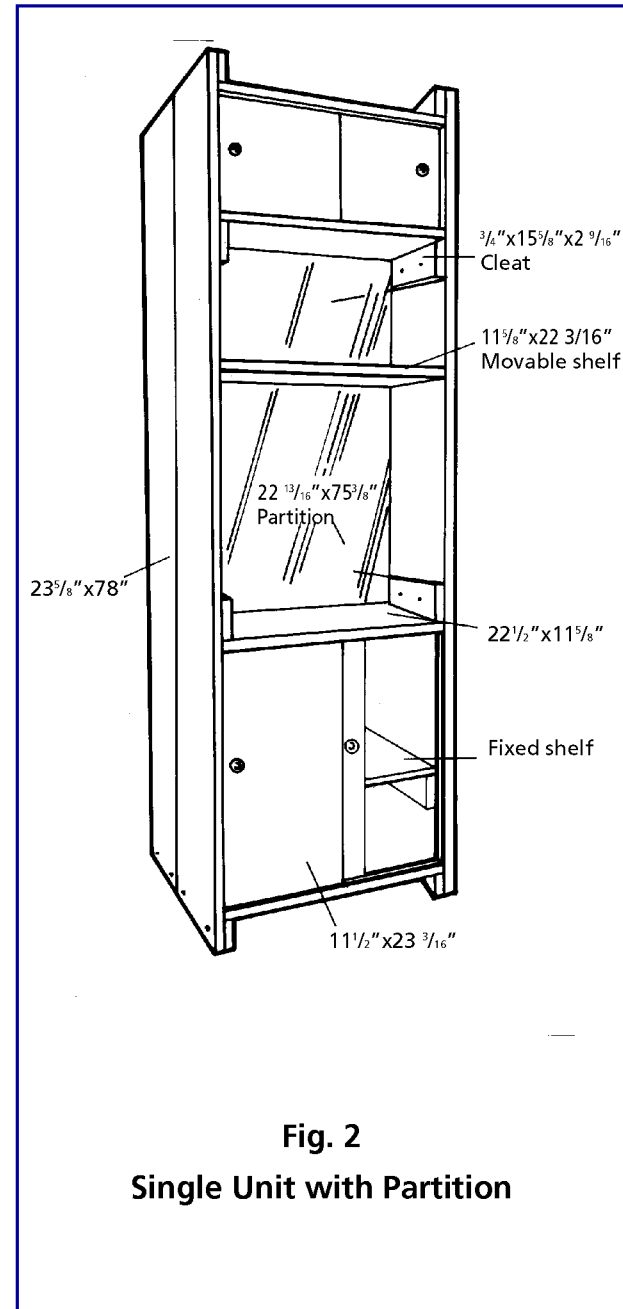


Fig. 2
Single Unit with Partition