

feature project

Welsh Cupboard

Create your own reproduction of this Colonial-era furniture piece.

Kitchen dressers, commonly called Welsh cupboards, long have held historic importance in American and European homes. With their ample shelves and clean lines, these pieces are being revitalized today as elegant open storage for china and linens, as well as household items in other rooms. There are countless variations on this classic, but we have given you one that focuses on simple details, such as paneling and cove moulding.



TOOL LIST (for both projects)

- router with 1/4-inch- and 1/2-inch-radius roundover bits
- table saw
- miter saw
- jigsaw
- power sander
- power drill and bits
- Kreg ProPack Pocket Hole System or Kreg Mini Kit
- air compressor and brad nailer (optional)
- clamps
- hammer
- nail set
- framing square
- tape measure
- pencil

General (for both the base and upper cabinets):

Set all nails and fill all holes and voids with wood filler. Allow glue **squeeze-out** to dry to a soft bead, then scrape clean with a sharp chisel. Attach all parts with 1 1/4-inch brads and glue, unless stated otherwise. Precut all parts to length except trim, nosing, and cove trim.

Base Cabinet Instructions:

Step 1: Construct the end and back assemblies (see Figure 1).

a. Construct end frame assemblies according to dimensions shown in Figure 1 using 1 1/4-inch pocket hole screws and glue. Use a framing square to square the assembly. Attach the plywood end panel to the end frame assembly



Before chucking the step drill in your drill to cut the pocket hole, check that the stop collar is in the correct location. Position the collar so that the drill tip is about 1/8 inch back from the bottom of the jig or set to the manufacturer's specifications for the hole you are drilling.

with one edge flush with the outside edge of the front side stile using 1-inch brads and glue. (**Note:** The end assemblies are mirror images.)

b. On the inside faces of the back and end panels, mark the locations of the shelf cleats.

c. Attach each end assembly to the back panel with the back stile overlapping the end edge of the plywood; secure with 2-inch brads and glue. Check the alignment with a framing square to ensure square corners.

d. Attach shelf cleats to back and end assemblies with 1-inch brads and glue; align top edges of the cleats with the shelf cleat markings from Step 1b.

Step 2: Attach shelves and vertical dividers (see Figure 2).

a. Use brads and glue to attach the top shelf to the upper shelf cleats. Glue and clamp

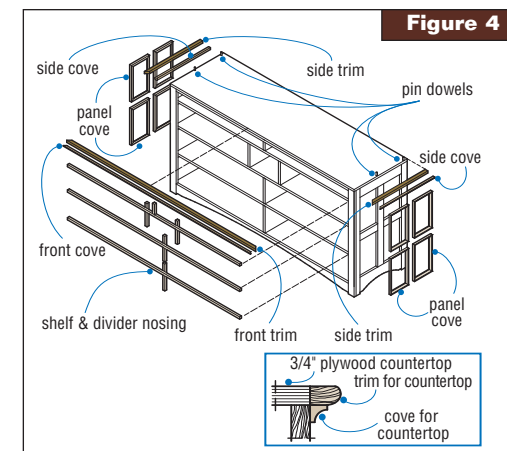
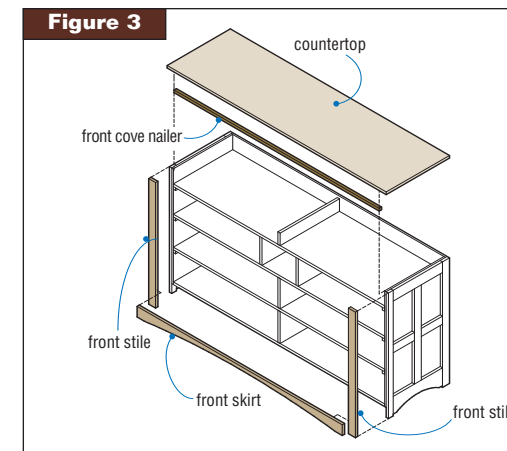
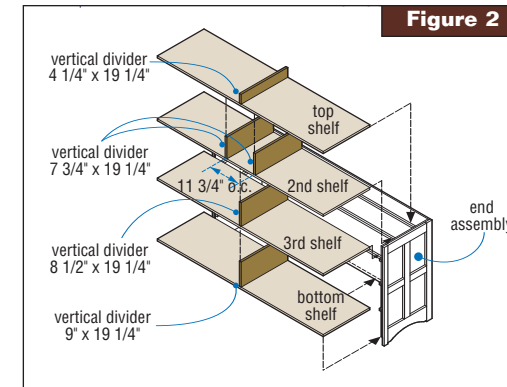
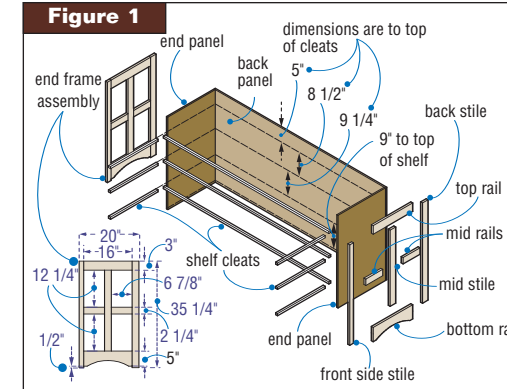


Glue can make the project pieces slippery, so hold the dividers firmly in place with two clamps while you drive the brads. That way, you'll be sure to align the dividers properly.

the 4 1/4-inch-tall vertical divider to the center of the shelf, and drive brads through the back panel and from the underside of the shelf to secure.

b. Using the same procedure, install the second shelf and the two 7 3/4-inch-tall vertical dividers. Measure and mark 5 1/2 inches in each direction from the centerline of the shelf, and

Base Cabinet



BASE CABINET CUT LIST

(See Cutting Diagrams for more information.)

Part Name	Material	Size (in inches)	Qty.
back stile	1 x 3 poplar	3/4 x 2 1/4 x 35 1/4	2
front side stile	1 x 2 poplar	3/4 x 1 1/2 x 35 1/4	2
top rail	1 x 8 poplar	3/4 x 3 x 16	2
bottom rail	1 x 3 poplar	3/4 x 5 x 16	2
mid rail	1 x 3 poplar	3/4 x 2 1/4 x 6 1/2	4
mid stile	1 x 6 poplar	3/4 x 2 1/4 x 26 3/4	2
end panel	1/2-inch plywood	1/2 x 19 1/4 x 32 1/2	2
back panel	1 1/2-inch plywood	1 1/2 x 32 1/2 x 69 1/2	1
shelf cleat (rear)	1 x 8 poplar	3/4 x 3/4 x 67	3
shelf cleat (end)	1 x 8 poplar	3/4 x 3/4 x 19 1/4	6
vertical divider	3/4-inch plywood	3/4 x 4 1/4 x 19 1/4	1
vertical divider	3/4-inch plywood	3/4 x 7 3/4 x 19 1/4*	2
vertical divider	3/4-inch plywood	3/4 x 8 1/2 x 19 1/4*	1
vertical divider	3/4-inch plywood	3/4 x 9 x 19 1/4*	1
top shelf	3/4-inch plywood	3/4 x 19 1/4 x 68 1/2	1
second shelf	3/4-inch plywood	3/4 x 19 1/4 x 68 1/2	1
third shelf	3/4-inch plywood	3/4 x 19 1/4 x 68 1/2	1
bottom shelf	3/4-inch plywood	3/4 x 19 1/4 x 68 1/2	1
countertop	3/4-inch plywood	3/4 x 20 1/2 x 71	1
front cove nailer	1 x 8 poplar	3/4 x 3/4 x 66 1/2	1
front stile	1 x 6 poplar	3/4 x 2 1/4 x 35 1/4	2
front skirt	1 x 8 poplar	3/4 x 3 x 66 1/2	1
side trim	1 x 2 poplar	3/4 x 1 1/4 x 21 1/2**	2
front trim	1 x 2 poplar	3/4 x 1 1/4 x 73**	1
side cove	pine cove moulding	1 1/6 x 1 1/6 x 21 1/4**	2
front cove	pine cove moulding	1 1/6 x 1 1/6 x 72 1/2**	1
(1) shelf nosing	1 x 2 poplar	3/4 x 3/4 x 66 1/2	3
(2) divider nosing	1 x 2 poplar	3/4 x 3/4 x 3 1/2	1
(3) divider nosing	1 x 2 poplar	3/4 x 3/4 x 7 3/4	2
(4) divider nosing	1 x 2 poplar	3/4 x 3/4 x 8 1/2	1
(5) divider nosing	1 x 2 poplar	3/4 x 3/4 x 9	1
panel cove	pine cove moulding	1 1/6 x 1 1/6 x 12 3/8**	16
panel cove	pine cove moulding	1 1/6 x 1 1/6 x 6 7/8**	16

*Cut a 3/4- x 3/4-inch notch into the top back corner to fit around shelf cleats. **Miter and cut to fit.

align the inside faces of the vertical dividers along those guidelines.

c. Install the third shelf and the 8 1/2-inch-tall vertical divider.

d. Install the bottom shelf and the 9-inch-tall vertical divider.

Step 3: Attach the countertop and front frame pieces (see Figure 3).

a. Use brads and glue to attach the countertop to the base cabinet assembly flush with the top outside edges.

b. Attach the front cove nailer under the countertop, flush with the front edge.

c. Attach the front stiles to the forward edges of the end assemblies, flush with the top ends and outside faces.

d. Cut the poplar blank for the front



Another way you can check for square is to use a tape measure to check the diagonals on the interior of the frame. Equal diagonals indicate that all four corners are squared.

skirt. At the centerline (33 1/4 inches from the ends), measure up 2 inches from the bottom edge, and mark. Drive a brad at this mark, and then drive one 2 1/4 inches from each end, just above the bottom edge. Bend the lattice piece around the center nail and under the end nails to form an arc. Scribe a line along the bent lattice, and cut with a jigsaw. Sand the

edge smooth, and use brads and glue to attach the skirt to the base assembly.

Step 4: Install trim pieces and nosing to the base cabinet. Attach cove trim, shelf nosing, and divider nosing (see Figure 4).

a. Rip the 1 x 2 poplar stock for the trim pieces. Route the top of one edge with a 1/4-inch-radius roundover bit and the bottom of the same edge with a 1/2-inch-radius roundover bit. Sand the edge until smooth and rounded. Attach flush with the top edge of the countertop using 2-inch brads and glue, as shown in the detail illustration in Figure 4.

b. Attach the cove trim under the trim pieces using 1-inch brads and glue.

c. Attach the shelf nosing and divider nosing parts, as shown in Figure 4.

d. Attach panel cove trim to end assemblies with 1-inch brads and glue.

Step 5: Nail furniture glides into the bottom of the front and back stiles of the end assemblies.

LOWE'S SHOPPING LIST

BASE CABINET

Lumber (for base cabinet only)

- 2 (8-foot-long) 1 x 2s, poplar
- 3 (8-foot-long) 1 x 6s, poplar
- 2 (8-foot-long) 1 x 8s, poplar
- 1 (48- x 48-inch) piece of 1/2-inch-thick birch plywood
- 3 (48- x 96-inch) sheets of 3/4-inch-thick birch plywood
- 1 (48- x 96-inch) sheet of 1 1/2-inch-thick Arauco plywood
- 5 (8-foot-long) 5/8-inch-square pieces of pine cove moulding
- 1 (8-foot-long) 1/4- x 1 1/2-inch piece of pine lattice

Hardware (for base cabinet only)

- 1 box (1 1/4-inch) Kreg pocket screws (fine thread)
- 1 box (1-inch) brads
- 1 box (1 1/4-inch) brads
- 1 box (2-inch) brads
- 1 package of (3/4-inch) nail-on furniture glides
- wood glue
- wood filler

Upper Cabinet Instructions:

Step 1: Attach pine paneling to back panel, and construct end assemblies (see Figure 1).

a. Clamp a 3/4- x 3/4-inch piece of stock to the inside face of the plywood back panel,

flush with the top edge. This will help align the paneling uniformly, leaving a 3/4-inch reveal of the plywood.

b. Center a piece of plank paneling on back panel parallel to side edges. Attach with 5/8-inch brads and glue. Work outward from center to attach remaining paneling. Trim end pieces flush with the side edges of the back panel.

c. Construct the end assembly as shown, with the mid side rail centered on the inside of the frame, using 1 1/4-inch pocket hole screws and glue. Use a framing square to square the assembly. Using 1-inch brads and glue, attach the end panels to each assembly with one edge flush with the outside edge of the front side stile. (**Note:** The end assemblies are mirror images. You'll want to make sure the frame alignment is correct so that the front side stiles end up in the correct position.)

Step 2: Attach end assemblies to back assembly (see Figure 2).

a. Mark the location of the shelf cleats on the inside of the back and end assemblies.

b. Glue each of the end assemblies to the back panel with the back side stile overlapping the end edge of the back panel and its bottom edge flush with the bottom edge of the back panel. Secure with 2-inch brads and glue. Use a framing square to ensure 90-degree corners. (See Figure 2 for joint detail.) (**Note:** The upper edge of the back panel should be 3/8 inch higher than each of the end assemblies.)

Step 3: Attach the top and face frame parts (see Figure 2).

a. Attach top onto the combined back and end assemblies with outside edges and surfaces flush. Secure with brads and glue.

b. Glue and nail the front stiles to the forward edges of the end assemblies, with outside surfaces and edges flush.

c. With the same technique you used to create the arc contour on the front skirt for the base cabinet, mark and cut the curved front rail for the upper cabinet. (See detail illustration in Figure 2.) Use 1 1/4-inch pocket screws and glue to attach it to the front stiles, securing it to the front edge of the top.

Step 4: Attach shelves, dividers, nosing, and stiffener (see Figure 3).

a. Center and attach the center divider

by gluing it in place and then nailing through top and back panel assembly. Attach the end and rear shelf cleats according to the markings from Step 2a using 1-inch brads and glue.

LOWE'S SHOPPING LIST

UPPER CABINET

Lumber (for upper cabinet only)

- 3 (6-foot-long) 1 x 2s, poplar
- 1 (8-foot-long) 1 x 2, poplar
- 2 (8-foot-long) 1 x 3s, poplar
- 1 (10-foot-long) 1 x 3, poplar
- 2 (8-foot-long) 1 x 6s, poplar
- 1 (48- x 96-inch) sheet of 3/4-inch-thick birch plywood
- 1 (48- x 96-inch) sheet of 1 1/2-inch-thick Arauco plywood
- 2 packages of (96-inch-long) 5/16 x 3 3/16 mini pickwick pine plank paneling
- 4 (8-foot-long) 5/8-inch-square pieces of pine cove moulding
- 1 (8-foot-long) 1/4- x 1 1/2-inch piece of pine lattice

Hardware (for upper cabinet only)

- 1 box (1 1/4-inch) Kreg pocket screws (fine thread)
- 1 box (5/8-inch) brads
- 1 box (1-inch) brads
- 1 box (1 1/4-inch) brads
- 1 box (2-inch) brads
- 1 package (2-inch-long) 3/8-inch-diameter pin dowels
- 2 packages of doweling center sets
- 1 package of 3-inch mending plates
- wood glue
- wood filler

b. Attach the shelf nosing pieces to the front edges of the shelves, as shown.

c. Install lower shelf and short shelves on shelf cleats, securing with brads and glue.

d. Attach stiffener flush with bottom edge of back panel, using 1-inch brads and glue.

e. Attach the center divider nosing to the center divider.

Step 5: Attach trim and cove parts (see Figure 4).

a. Rip stock for trim. Route the top of one edge with a 1/4-inch-radius roundover bit, and route the bottom of the same edge with a 1/2-inch-radius roundover bit. Sand edge until smooth. Attach trim to cabinet, as shown in Figure 4.

b. Use 1-inch brads and glue to attach cove pieces under the trim.

Upper Cabinet

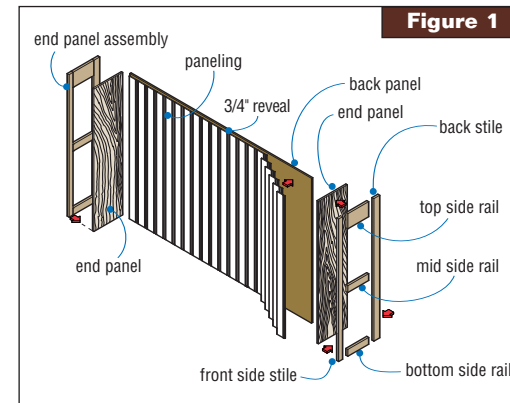


Figure 1

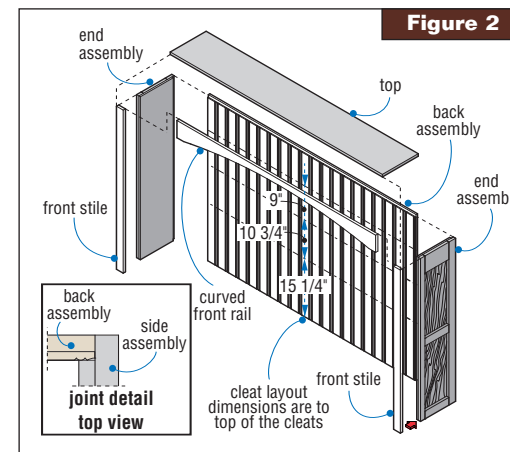


Figure 2

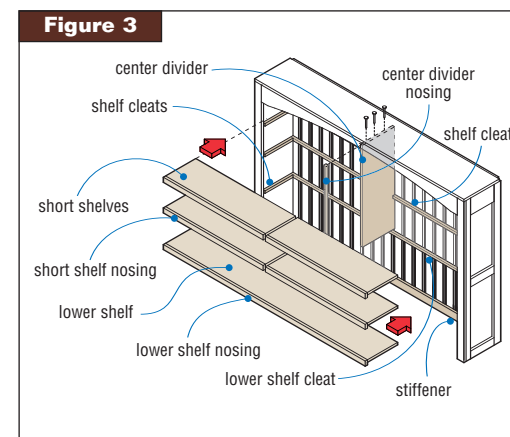


Figure 3

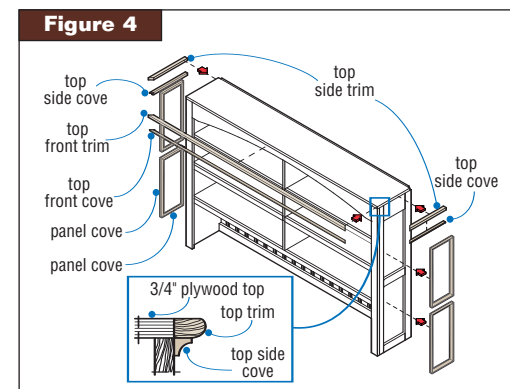


Figure 4

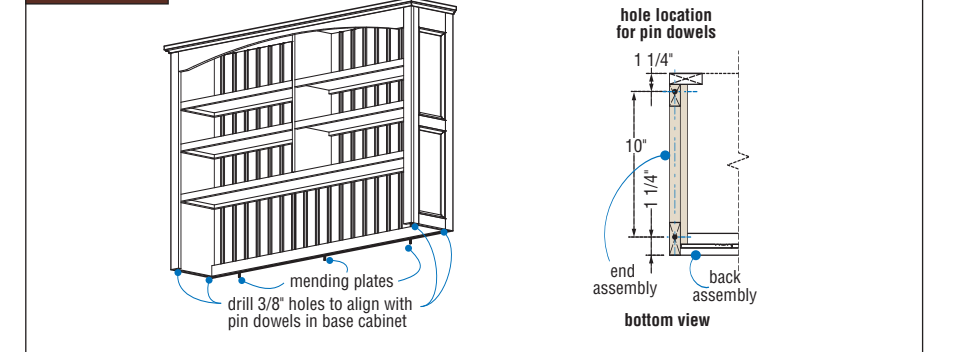
c. Cut and fit the panel cove pieces to the end panel assemblies. Secure with 1-inch brads and glue.

Step 6: Per the bottom view illustration in Figure 5, drill 1-inch-deep holes with a 5/8-inch diameter in the bottom edge of the upper cabinet, and drill matching holes in the countertop of the base cabinet. (To aid in transferring the hole locations, insert four 5/8-inch doweling centers into

the holes of the upper cabinet. Carefully set the upper cabinet on the base cabinet with the back and side edges flush. Doweling centers will mark the center of the dowel holes on the base cabinet.)

Step 7: Sand each cabinet smooth, and finish as desired. Set the upper cabinet onto the base using pin dowels to align. Secure with mending plates fastened to the back panels where they meet. ■

Figure 5



UPPER CABINET CUT LIST

(See Cutting Diagrams for more information.)

Part Name	Material	Size (in inches)	Qty.
back panel	1 1/2-inch plywood	1 1/2 x 48 x 69 1/2	1
paneling	pine plank paneling	5/16 x 3 3/16 x 47 1/4	20
end panel	1 1/2-inch plywood	1 1/2 x 11 x 47 1/4	2
back stile	1 x 3 poplar	3/4 x 2 1/4 x 47 1/4	2
front side stile	1 x 2 poplar	3/4 x 1 1/2 x 47 1/4	2
top side rail	1 x 6 poplar	3/4 x 5 x 8	2
mid side rail	1 x 3 poplar	3/4 x 2 1/4 x 8	2
bottom side rail	1 x 3 poplar	3/4 x 2 1/4 x 8	2
front stile	1 x 3 poplar	3/4 x 2 1/4 x 47 1/4	2
curved front rail	1 x 6 poplar	3/4 x 5 x 66 1/2*	1
top	3/4-inch plywood	3/4 x 12 x 71	1
stiffener	1 x 3 poplar	3/4 x 2 1/4 x 68 1/2	1
lower shelf cleat	1 x 6 poplar	3/4 x 3/4 x 68 1/2	1
lower shelf nosing	1 x 2 poplar	3/4 x 1 1/2 x 68 1/2**	1
lower shelf	3/4-inch plywood	3/4 x 10 1/4 x 68 1/2	1
short shelf nosing	1 x 2 poplar	3/4 x 1 1/2 x 33 3/4**	4
short shelf	3/4-inch plywood	3/4 x 10 1/4 x 33 3/4	4
shelf cleat (rear)	1 x 6 poplar	3/4 x 3/4 x 33 3/4	4
shelf cleat (end)	1 x 6 poplar	3/4 x 3/4 x 9 1/2	6
center divider nosing	1 x 6 poplar	3/4 x 3/4 x 31 1/4	1
center divider	3/4-inch plywood	3/4 x 10 1/4 x 31 1/4	1
top side trim	1 x 6 poplar	3/4 x 1 1/4 x 13 1/4*	2
top side cove	pine cove moulding	1 1/16 x 1 1/16 x 13 1/4*	2
top front trim	1 x 6 poplar	3/4 x 1 1/4 x 73*	1
top front cove	pine cove moulding	1 1/16 x 1 1/16 x 72 1/2*	1
panel cove	pine cove moulding	1 1/16 x 1 1/16 x 18 1/8*	8
panel cove	pine cove moulding	1 1/16 x 1 1/16 x 8*	8

*Miter and cut to fit. **Cut to fit.