

Building a Craftsman-Style Hutch

Behind the pleasing proportions lies a simple assembly of boxes, frames, and mail-order components

BY REX ALEXANDER

Rob and Theresa Barry wanted to turn their dining-room closet into a Craftsman-style hutch. Their budget didn't allow for a complete custom-cabinet job, so to keep down costs, I combined custom-cabinet work with factory-made components.

Although this approach costs less than a custom job, Craftsman-style details are still important (sidebar p. 65). And a big project like this needs to be broken down into manageable steps.

The hutch looks and functions like a single unit, but it is actually nine separate cabinets (drawing pp. 66-67). I designed the hutch this way

Inspiration and interpretation

so that I could handle and install the cabinets easily myself.

Draw the cabinets before you build them



Before setting foot in the shop, I drew the entire project to scale on $\frac{1}{4}$ -in. graph paper. I began with a front elevation, which helped me to arrive at the most pleasing arrangement of drawers, doors, face frames, and trim.

Next, on separate sheets, I drew and dimensioned each cabinet box and its face frame. At this time, each cabinet was color-coded to organize the cutlists for sheet goods and face frames.

Nearly all the case construction was done with $\frac{3}{4}$ -in. melamine-coated particleboard. MCP is



Simple square-edged trim wraps around the hutch at ceiling and cabinet transitions.

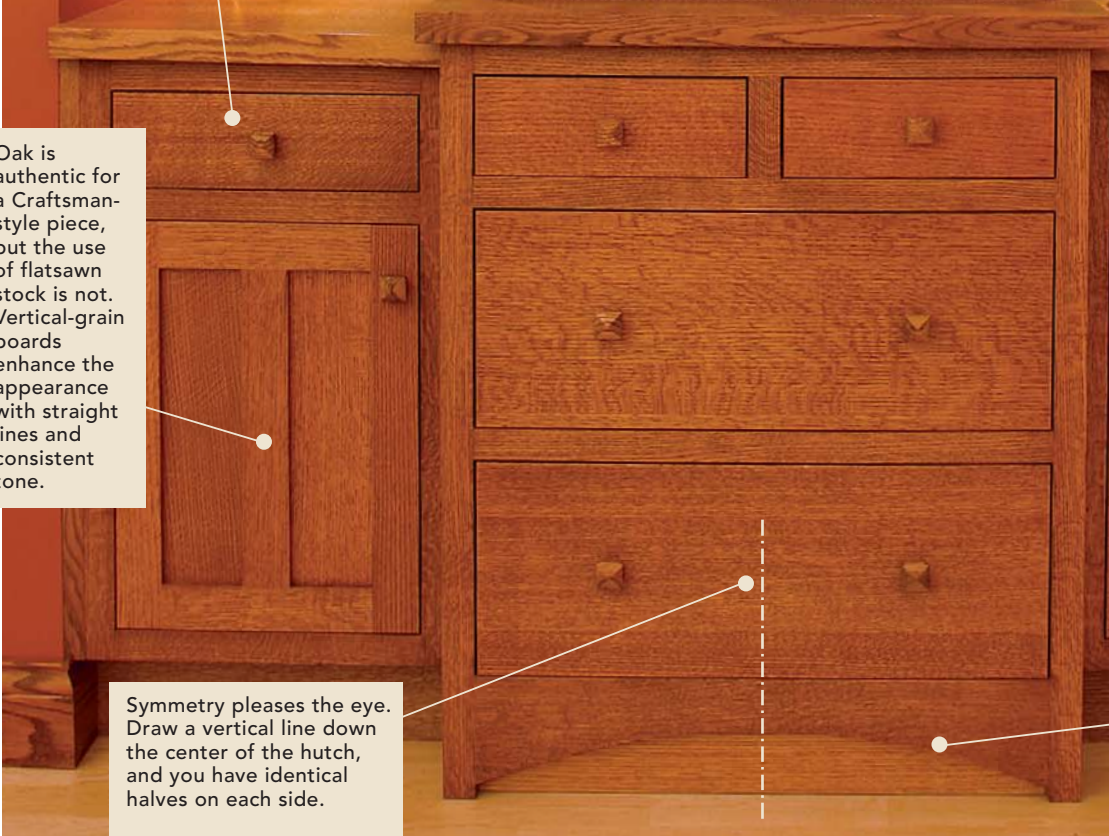


Modern hardware improves door and drawer operation without compromising Craftsman style. Concealed cup hinges replace traditional butt hinges, and drawer slides work more smoothly than wooden runners.

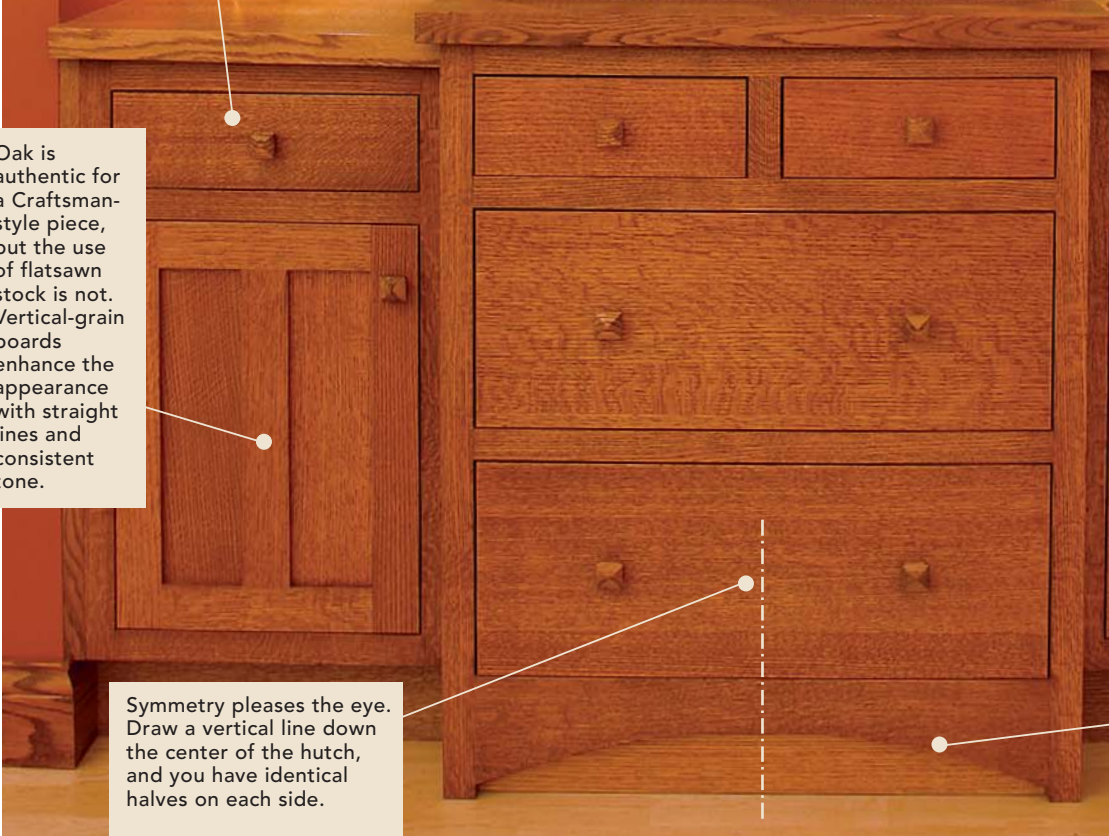
inexpensive, and its durable white coating is an ideal finished surface for the inside of a cabinet. The only two cabinets that required more expensive oak-veneered plywood were the center base cabinet and the glass-door cabinet. The glass-door cabinet has sides made of two layers of $\frac{3}{4}$ -in. oak plywood. These double-layer sides bring the cabinet's interior surface flush with the inner edge of the face frame, as on the side cabinets. On the center base cabinet, only a strip of oak plywood was used to cover the sides of this deeper cabinet (drawings pp. 66-67).

Cases and face frames use basic joinery

As shown in the drawings on pp. 66-67, I assembled the MCP cases by rabbeting the sides to



Oak is authentic for a Craftsman-style piece, but the use of flatsawn stock is not. Vertical-grain boards enhance the appearance with straight lines and consistent tone.



Symmetry pleases the eye. Draw a vertical line down the center of the hutch, and you have identical halves on each side.

bring Craftsman style up to date



Low-voltage lights provide task and accent lighting. These compact halogen "puck" lights are designed for undercabinet installation.



Pyramid pulls originally were crafted by hand; today, they're available in different sizes and wood species.

Inset doors and drawer fronts lie flush with face frames.

Subtle curves soften a rectangular composition.

It's not difficult to understand the timeless appeal of Craftsman-style furniture. The lines are clean. The proportions are pleasing. The arrangement of doors, drawers, and shelves presents us with rectangles that stack and overlap, conveying the sensible strength of building blocks. But there are also some gentle curves to soften this geometry of straight lines and right angles.

You'll find these distinctive characteristics in the author's hutch (left) and in antique Craftsman-style furniture like the Gustav Stickley oak secretary shown below. Even though a century separates these two cabinetmaking projects, they share a number of details, including pyramid-shaped pulls, glass doors, and open shelves that effectively break up expanses of solid wood. Both projects are made up of three vertical sections, and the author has given his hutch more of a furniture feel by pulling the center section forward.

This 1903 Gustav Stickley secretary features the bold lines and spare use of curves that sparked a furniture-making boom in the early 20th century and remains popular today.



hold the top and bottom. Before assembling each case, I drilled holes in the sides for shelf supports. Cabinet backs simply can be glued and nailed in place. For wall-hung cabinets, I generally use heavier 1/2-in. plywood or MCP backs to provide extra support when fastening the cabinet through the back. Base cabinets get 3/4-in. backs.

I used regular Titebond glue on the cabinet joinery, except where the slippery surfaces of MCP join each other. Here, Titebond melamine glue has a stronger bond.

The last step in cabinet assembly is to build and attach the oak

face frames. I used a biscuit joiner and inserted two small (FF) biscuits at each face-frame joint; then I attached the face frames to the cases with larger (#20) biscuits (bottom drawing, p. 66).

Factory-made doors and drawers go in quickly

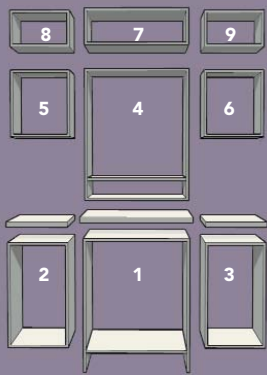
If you've done a good job ordering doors and drawers, the next steps can happen quickly. I saved time by ordering finished doors that were already drilled to receive cup hinges (sidebar p. 67). I used a simple shopmade jig to drill holes in the case sides for hinge baseplates.

One half of each drawer slide attaches to the side of the drawer box; the other half is screwed to the case side. A self-centering Vix bit does a great job of drilling pilot holes for slide-installation screws.

I used double-sided tape to keep each drawer front correctly aligned on the drawer box. Then I fastened the fronts in place by driving screws from inside each drawer. Four screws per drawer did the job.

Putting the puzzle together

After I completed the cabinets in my shop, they were delivered to



DIVIDE A BIG PROJECT INTO MANAGEABLE PARTS

- The hutch actually consists of nine cabinets and three solid-wood countertops (drawing left). These parts are built separately and assembled in the order shown at left.
- Using mail-order doors and drawers eliminates the most time-consuming part of the project. You need to build only cabinet cases, face frames, and countertops.
- Apply stain and finish to countertops, face frames, and other wood parts before the final installation. You also can order doors and drawer fronts with finish applied.

the home and installed to look like a single unit.

I installed the center base cabinet first by shimming and leveling it into place, then screwing it to the back wall. On each side of this center unit, I installed 5-in.-high toe kicks that are made from oak plywood. The toe kicks serve as the front supports for the two base cabinets that flank the center unit. A cleat that is screwed to the back wall supports the rear of each of the side base cabinets.

With all three of the base cabinets in place, I scribed and installed each countertop. Then I installed the center glass-door unit, screwing it to the center base cabinet and to the wall. The flanking middle cabinets were placed on temporary plywood spacers before being attached permanently.

Simple, square-edged wood trim was attached next. To avoid using any visible fasteners on the face, I used biscuit joinery to connect the mitered corners, and then I screwed on the trim from inside the cabinets. I placed the smallest cabinets on top and attached them with screws from the bottom. To finish up the hutch, I installed the square-edged crown molding the same way that I had fit the other trim. □

Rex Alexander builds cabinets and plays the banjo in Brethren, Mich. Photos by Chris Green, except where noted.



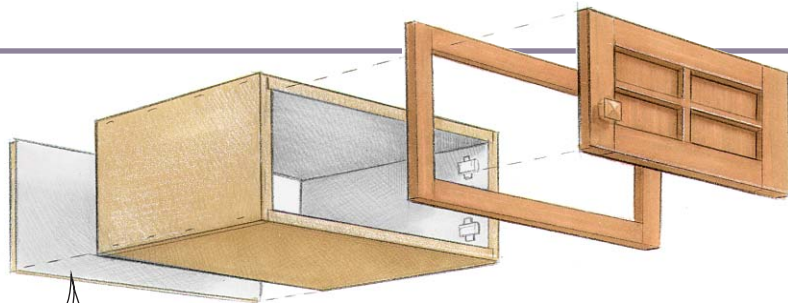
Case joinery is simple. Cut a $\frac{3}{8}$ -in. by $\frac{3}{4}$ -in. rabbet in the case side for the top and bottom panels.

Face-frame joinery relies on biscuits. Two small side-by-side biscuits hold each face-frame joint together. Biscuits (two to three per side) also attach the face frames to the cases.

And now the easy part: ordering doors and drawers

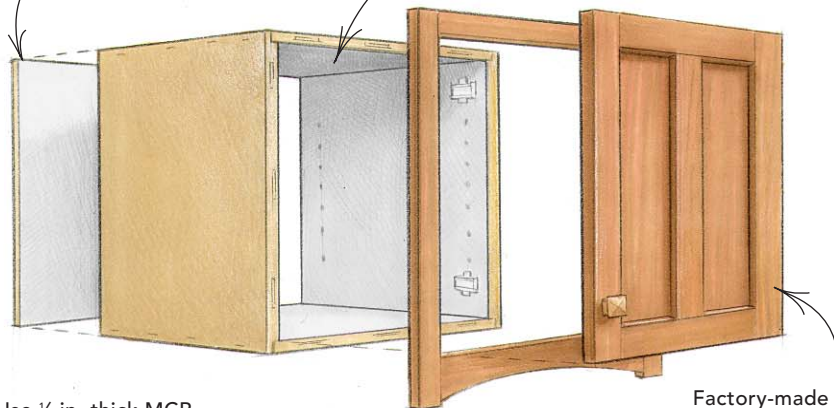
Using factory-made doors, drawer boxes, and drawer fronts allows you to build custom cabinets more quickly and affordably. You can get just about any size you want. You also can specify wood species, door and drawer design, edge and panel profiles, and other details. I've found the quality to be excellent, and prices are hard to beat. The real challenge is to get all the specifications right. Here are the major guidelines that I typically follow.

- Allow for $\frac{3}{2}$ -in. clearance around doors and drawer fronts by subtracting $\frac{3}{16}$ in. from the height and width of the opening.
- Size the drawer box $\frac{3}{8}$ in. less in height and 1 in. less in width than the finished opening. Drawer-box depth should be 1 in. less than the depth of the cabinet.
- If you plan to install cup hinges, let the factory bore holes in the doors for hinge installation. The 35-mm-dia. holes are bored 6 mm from the door's edge for inset doors, 5 mm for overlay doors.
- Consider having the factory apply finish to the doors and drawer fronts if you can supply a finished sample for the manufacturer to match.



Use $\frac{1}{2}$ -in.-thick MCP back on wall cabinets.

Melamine-coated particleboard (MCP) is an inexpensive composite panel that provides a durable finished surface for cabinet interiors.

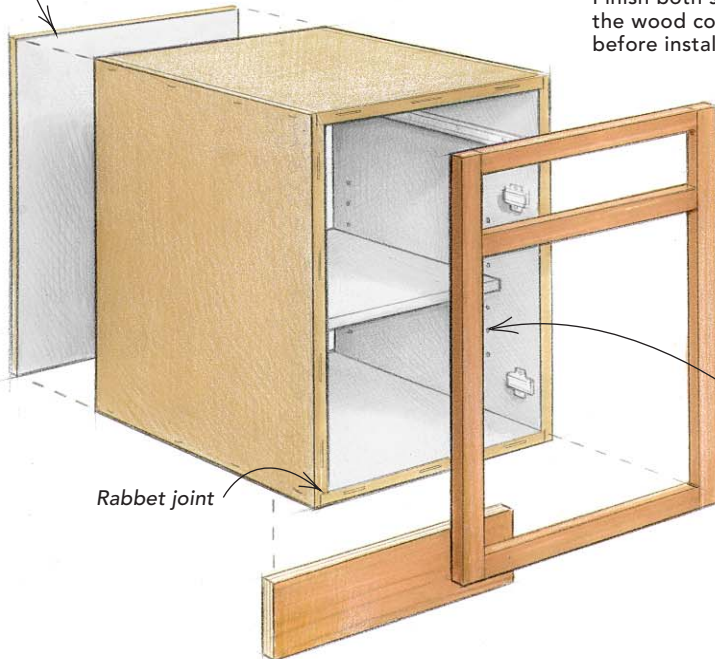


Use $\frac{1}{4}$ -in.-thick MCP back on base cabinets.

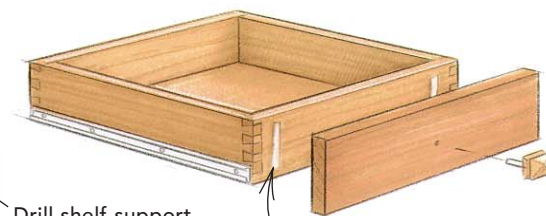
Factory-made doors can be ordered in any size and in a wide variety of styles.



Finish both sides of the wood countertop before installation.



Rabbit joint



Drill shelf-support holes before assembling the cases.

Double-sided tape secures drawer fronts to boxes until they're screwed in place.

SOURCES

CABINET DOORS AND DRAWERS

WalzCraft Industries
800-237-1326
www.walzcraft.com

Scherr's Cabinet and Doors Inc.
701-839-3384
www.scherrs.com

CABINET HARDWARE, SUPPLIES, AND LIGHTING

Rockler Woodworking
& Hardware
800-279-4441
www.rocklerpro.com

Woodworker's Supply
800-645-9292
www.woodworker.com

Lee Valley Tools
800-871-8158
www.leevalley.com