

Outfitting a Clothes Closet

If your clothes have that shelf and pole at their limit, a more complex system can help you put more clothes into less space

BY GARY M. KATZ

Clothes closets used to be really simple. A single shelf with a pole high enough to keep long dresses off the floor seemed to be all anyone ever needed. Maybe people didn't have as many clothes then, or maybe space wasn't at such a premium. These days, though, people are demanding much more from their closets (photo facing page).

That good old shelf and pole might be all you need

The most common closet-shelf arrangement in American households is probably still a single shelf and pole (photo right). With this system, the shelf is installed at 68 in. with the pole at about 66 in. from the floor, which is high enough to keep even the longest hanging clothes, such as coats and dresses, off the carpet.

I make most single-shelf arrangements out of medium-density fiberboard (MDF), and the layout is simple. First, I mark the shelf height of 68 in. and draw a level line on the back wall of the closet. Then I measure and cut the cleat for the back wall. The side-wall cleats have to hold the closet pole, so I cut them long enough to catch a stud for solid support. I make the cleats out of 1x4 so that they are wide enough to attach the rosettes that I install to hold the closet pole (inset photo left).

Back in the closet, I hold the back-wall cleat to the level line, and I attach the cleat with two 8d finish nails at each stud. Next, I level the side cleats with a torpedo level and then shoot them into place. The closet shelf



is now ready to be dropped into place on top of the cleats.

For any span greater than 44 in., I install a shelf-and-pole bracket midspan, using a 10-in. piece of cleat stock as a backer block to hold the bracket away from the wall (inset photo right). If there is no stud for securing the backer block, I use screws driven into drywall fasteners that will be hidden by the

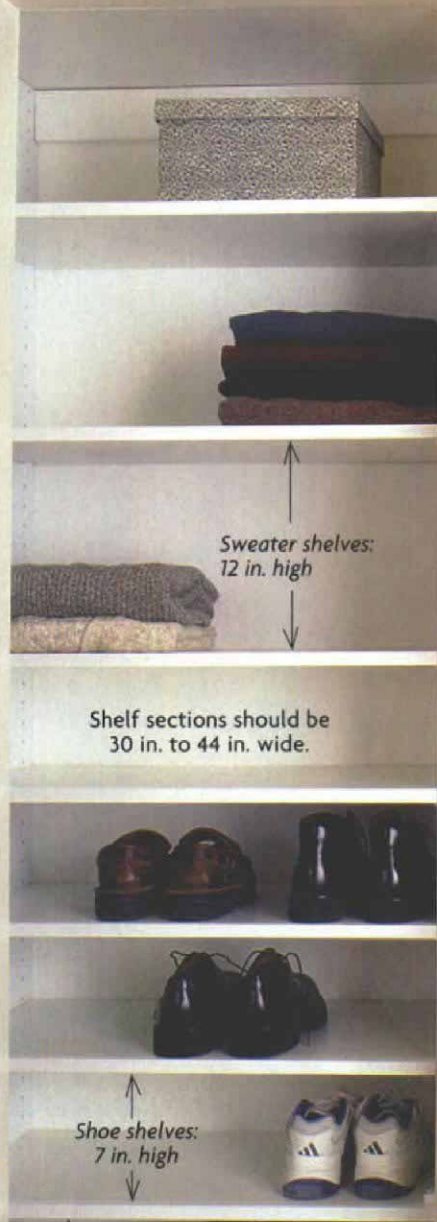
bracket. The bracket is then screwed to the cleat, to the backer block and to the shelf.

On the side cleats, I center the pole rosettes the same distance from the back cleat as the hook on the support bracket, usually 11½ in. to 12 in., depending on the bracket. Next, I measure and cut a wooden dowel for the closet pole and drop it into place. A screw driven into the pole through the support

SIZING UP CLOTHES STORAGE

A well-organized closet makes the most out of available space with single-pole as well as double-pole hanging areas and different-size shelves for a variety of purposes.

Minimum distance between shelf and pole: 1 1/4 in.



Hanging clothes need 24 in. to any adjacent walls or shelving.

bracket completes the installation. I always predrill so that the screw doesn't split the pole.

Planning lets you maximize storage and production

These days, most homeowners want to make the most of clothes storage in their closets, so the old shelf-and-pole system won't do. Besides the single shelf and pole, which is needed for long, hanging items such as dresses and coats, other closet-storage arrangements include a double pole for shorter hanging items, such as pants and shirts, and banks of shelves for shoes and sweaters.

I try to incorporate a section of each type of storage in every closet. In general, I keep each section to between 30 in. and 44 in. Anything shorter is too narrow to be of much use, and anything longer requires additional support.

One of the first things I look at is the type of closet being outfitted. With a reach-in closet (usually 22 in. to 36 in. deep), the storage sections all have to fit on the back wall of the closet. In these cases, I try to divide the closet into three equal spaces. For example, an 8-ft. wide closet can be split into three 32-in. sections. If a reach-in closet is less than 7 ft. wide, I often leave out one section, depending on the client's needs.

Walk-in closets, on the other hand, are bigger and deeper and have storage on more than one wall. Shelving options in these closets are less restricted. Walk-in closets come in many shapes and sizes, from large rooms that double as dressing rooms to deep, narrow spaces with L-shaped shelving. Most walk-in closets I work on are 5 ft. to 6 ft. deep. If a closet is to have storage on both side walls, it should be at least 6 ft. wide.

The homeowner's needs also play a part in determining the width of each storage section. For example, if a client has only a few long dresses or coats, I may opt to keep the single pole smaller to maximize the space for other sections.

Finally, I keep layouts as simple as possible, and I try to standardize the sizes of the various sections for all the closets throughout the home. Keeping section sizes the same from closet to closet allows me to set repetitive stops on my chopsaw and to cut shelving kits (dividers, cleats, shelves and poles) for several closets at once.

MDF shelves are not adjustable

For new construction or for unfinished closet walls, I usually go with MDF shelving, and the first step is always careful layout (photo above). (MDF shelving and closet



MDF shelving has to be laid out on the wall. Because MDF shelving is supported on permanently mounted cleats, the entire layout is done on the unfinished closet walls.

walls are usually painted at the same time, covering any pencil marks I might leave.)

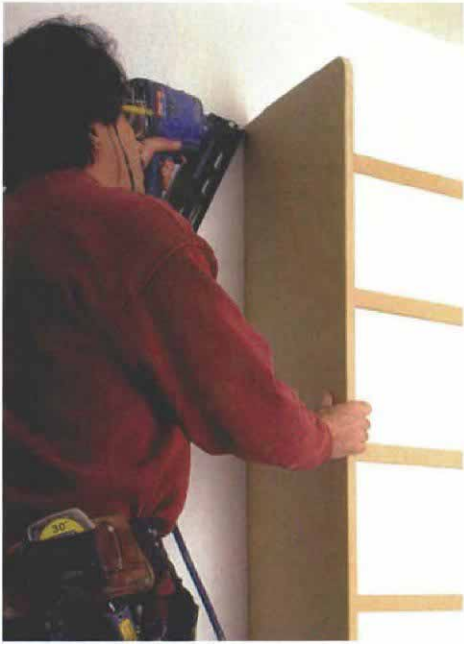
I begin by drawing a plumb line for each vertical divider that separates areas of shelving and hanging clothes. I put an X on the side of the line where the $\frac{3}{4}$ -in. thick divider will land. Then I draw level lines for each shelf. The disadvantage to this system is that the cleats are permanently installed, so spaces between shelves must be predetermined.

I cut the cleats, dividers and shelves for the entire closet. Again, any cleat that carries a closet pole is made of 1x4, but I use 1x2 for cleats that support only shelves. I make my

dividers 14 in. to 16 in. wide and cut the top corners at a slight radius for a nicer look. I usually cut the bottom of the MDF dividers at a 45° angle, leaving only 1 in. of the divider on the floor. This 1-in. bearing surface gives ample support without making a hassle for the flooring contractor, and it gives me a place to end the baseboard at each divider. A laminate trimmer fitted with a $\frac{1}{8}$ -in. round-over bit eases the sharp edges on the dividers.

Start in a corner

After cutting, I stack all the cleats and dividers in the closet under the spot where



Dividers are nailed to the cleats. Vertical dividers with the bottoms angled for minimal flooring interference are nailed to the ends of the cleats to hold them in place until they can be locked in by the top shelf.



Shelves stabilize the dividers. Each shelf is nailed to the cleats permanently to help hold the dividers straight and square to the wall.



Wooden biscuit connects the corner. A dry-fit wooden biscuit is inserted to keep the top shelf at the same level where two legs join in a corner (photo above).

Ready for the painter. With the top shelf nailed in to lock all the dividers in place (photo left), the last items to be installed are the rosettes and closet poles. The shelves will be painted at the same time as the closet walls.

they will be installed. Then I begin in one corner, installing the cleats on the lines that I drew.

When the first set of cleats is secured, I nail the first divider into the ends of the cleat and install the next set of cleats. This process is continued until all the dividers and wall cleats have been installed (photo top left, p. 109). Next, I glue and nail cleats onto the dividers for each shelf. I cut these cleats so that they end about 1/2 in. short of the front edge of the divider for a neat, clean look.

Once all the cleats and dividers are in, I cut and install the shelving. At this point, the dividers are still fairly flimsy, but the shelves help to hold them in place and keep them square to the wall. I install the shelves nearest to the floor first, nailing through the ends and the back edge into the cleats below. I then work my way up each section, nailing the shelves to the cleats as I go (photo top right, p. 109). Because the spacing of MDF shelves is determined ahead of time and because the shelves get caulked in and painted after the installation, I nail every shelf in place permanently.

I leave the top shelf for last. In most closets, the top shelf will turn a corner. You can buy aluminum H-clips that join the shelves at the corner, but these clips are unsightly even after everything on the interior of the closet is painted. Instead, I use a dry-fit wooden biscuit to join the inside corner (inset photo, p. 109). With the shelf in place, I shoot a nail every foot or so along the back edge as well as a single nail into each divider along the front edge.

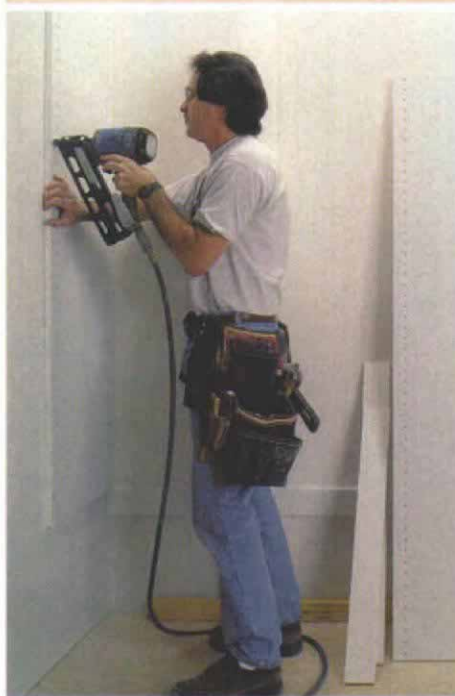
The last things to go in are the closet poles. I locate and install the rosettes and then cut each pole long enough so that it fits snugly into the rosettes, but not enough to push the dividers out of line (bottom photo, p. 109).

No detailed layout for prefinished shelving

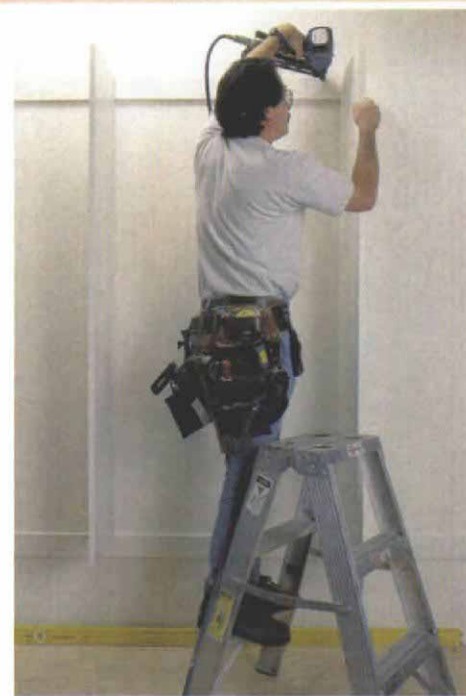
When I'm asked to put a shelving system into an existing closet that has been painted, I opt for prefinished shelving, usually melamine. Heavy layout lines can't be drawn on the finished walls, so to avoid unsightly marks and blemishes, I let cleat and shelf sizes determine where the dividers are located. Also, because the shelving is prefinished, any cut edges that will be seen have to be edgebanded. With careful planning, I can minimize or eliminate edgebanding.

Most prefinished dividers have predrilled holes that accept shelf supports, eliminating the need for divider cleats. Unless the client requests dividers ran all the way to the floor,

PREFINISHED SHELF SYSTEM



Prefinished dividers are set on a ledger. A 1x4 ledger, 16 in. from the floor, is attached to the closet wall to keep prefinished dividers off the floor.



The divider sets the height of the cleat. With a level ledger and dividers cut to the same length, the cleat for the top shelf is set flush to the top of the divider.



The only measurement in the closet. Other than the initial measurement for the ledger, the only measurement that needs to be taken is for the width of the remaining space. All other measurements are predetermined.



Gadgets for prefinished shelving. Special pieces sold by shelving manufacturers help with installation. Shelf-attachment brackets (photo left) eliminate weak end-grain fastening. When screws are used, decorative end caps cover the heads (photo center). Oval-shaped steel closet poles hang on brackets that slip into predrilled holes (photo right).



Topping off a well-fitted closet. The top shelf goes in last and is attached to the cleat in the back and to the dividers in the front to tie the shelving system together.

I support the dividers on a 1x4 ledger along the wall 16 in. off the floor.

I cut all the dividers the same, and I cut extra dividers to hold shelves and poles on the side walls. I cut the shelves for all but the last section to the predetermined lengths. I also cut lengths of cleat for each section to hold the tops of the dividers and the top shelf.

I begin by setting the side-wall dividers on the ledger and nailing them to the wall (photo top left, p. 110). Next, I nail the first top cleat to the wall. A divider is placed on the ledger and held against the cleat to set its height (photo top right, p. 110). After the cleat is secured, the top-rear corner of the divider is nailed to the end of the cleat. The next top cleats and dividers are now nailed into place until I'm left with the last section. Up to this point, I have not made a single measurement or pencil mark in the closet except for the height and length of the ledger.

I measure and cut the top cleat and shelves for the last section and nail the cleat into place (bottom photo, p. 110). The bottom shelf in each section squares and stabilizes the dividers, so it is attached permanently with special fasteners sold with the shelving material (photo top left, p. 111). The back edge of the shelf is nailed to the ledger.

Near midheight of the divider, I set shelf-support brackets and lay in a single shelf. I predrill and drive a 1½-in. screw through the divider and into this shelf to stabilize the middle of the divider. Small decorative caps cover the screws (photo top center, p. 111). With the shelf holding the divider straight, I install corner brackets that secure the dividers to the back wall. Corner brackets also join the dividers to the top cleats.

After the dividers are secured and stabilized, I can space the rest of the shelves on the adjustable supports according to my client's wishes. Next come the poles. With prefinished shelving systems, I use brackets that hold oval-shaped chrome-plated steel poles (photo top right, p. 111). The brackets pop into the predrilled holes, and the pole stock is cut to length with a hacksaw. If I don't think that the dividers have been stabilized adequately, I can run a cleat and shelf at every pole to keep the dividers from bulging and weakening. The final step is putting in the top shelf, which I nail or screw along the back edge as well as into the front corners of each divider (bottom photo, p. 111). □

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Wire shelving: a do-it-yourselfer alternative



Poles take the place of dividers. Metal poles with plastic clips support the front edge of wire shelving. Here, shelf heights are taken from the pole.

One type of closet shelving gaining popularity today is wire shelving, especially among homeowners who like to do their own work. This product is prefinished and simple to install with few tools. Also, the open nature of wire shelving lets air circulate around clothes. Many building-supply outlets sell wire-shelving kits for standard-size closets, and many of these kits don't require cutting.

Admittedly, I haven't installed a whole lot of wire shelving, but when I have, I found that the instructions were always vague and misleading, so here's how I approach a wire-shelving installation.

In place of cleats, wire shelving is attached to the wall with plastic clips. Instead of solid dividers, the front edge of wire shelving is supported by poles also equipped with plastic clips. After screwing clips to the pole at whatever height I want the shelves, I use the poles to transfer shelf heights to the wall (photo left).

I then rest the back edge of the shelf against the wall and mark between the wires where I want the clips to fall. I put clips every 8 in. to 10 in., enough to support most clothing. With a level at the



Shelves snap onto the wall first. After clips are screwed to the wall, the shelving is snapped in and left hanging.

height mark, I now mark the exact location of all the clips. The clips are screwed into the framing wherever possible, and the rest go in with drywall anchors.

The shelving is prepared by first cutting it to length (if necessary) with either a hacksaw or with bolt cutters. Tiny flexible plastic caps slip over all the cut wire ends. The back edges of the shelves can now be snapped onto the clips, leaving the shelves hanging in place (photo right).

Wherever a shelf meets an adjacent wall, I install a special bracket that holds the front edge of the shelf. With the magnet of my torpedo level stuck to the shelf, I rotate the shelf into place and install the bracket. Next, I snap the shelves into the pole clips (photo left, facing page) and work on the shelving for any adjacent walls. Angled support brackets hold shelves level where they meet a shelf on an adjacent wall (photo right, facing page). Closet poles can be hung from any shelf with factory-made pole brackets, but special shelving with heavy wire on the outer edge is designed specifically for hanging clothes.

—G. M. K.



Clips on the poles hold the fronts of the shelves. While clipped to the wall, the shelves pivot up and snap to the poles.



Angle braces support the shelves. Braces that snap into the wire shelving and screw to the wall reinforce long spans and support the shelves' ends where they meet in a corner.