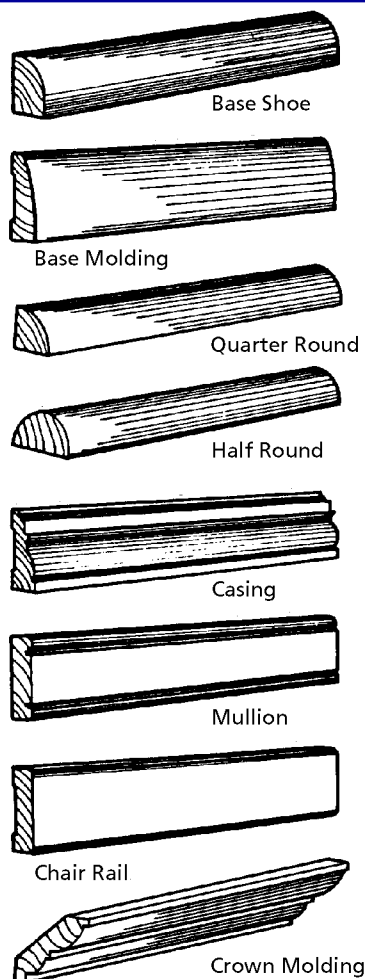




## HOW-TO BOOKLET #3043

# MOLDING MAGIC

Fig. 1



Standard moldings include these and the ones illustrated in Fig. 2. Other patterns also are available.

### TOOL & MATERIAL CHECKLIST

- |  |   |
|--|---|
| <input type="checkbox"/> Molding Selection | <input type="checkbox"/> Backsaw                  |
| <input type="checkbox"/> Miter Box         | <input type="checkbox"/> Hammer                   |
| <input type="checkbox"/> Block Plane       | <input type="checkbox"/> Sandpaper                |
| <input type="checkbox"/> Tape Measure      | <input type="checkbox"/> Combination Square       |
| <input type="checkbox"/> Finishing Nails   | <input type="checkbox"/> Nail Set                 |
| <input type="checkbox"/> Wood Putty        | <input type="checkbox"/> Wood Finishing Materials |



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

Whether finishing a room, installing paneling, coordinating new cabinets or book-cases, or just adding a nice decorative touch to a project, you should investigate the many kinds of molding available to complete the job.

Many standard molding shapes have evolved over the years for various uses, and most can be adapted to your special needs. Also, you can have custom molding made for you by a cabinet or millwork shop, and you can create your own molding designs with a router. Even flat pieces of wood can give decorative highlights to a piece of work.

### THE MOLDING BASICS

In essence, molding gives a project a decorative, cut-from-solid look, or it softens corners such as the junction of floors and walls or ceiling and walls.

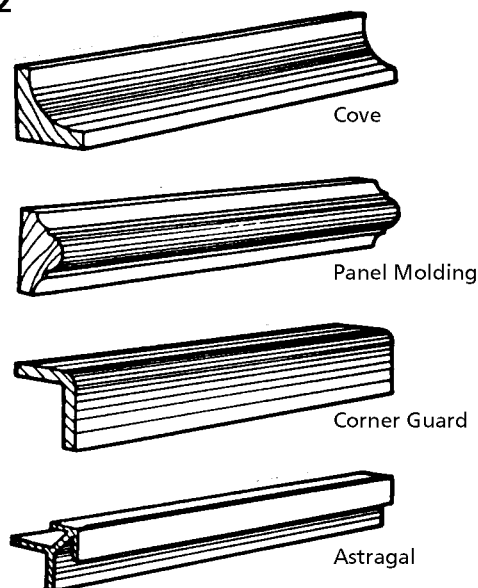
All that is involved in achieving these effects is to fasten molding to the face of the door, drawer, cabinet, or wall with brads, finishing nails, and/or glue. If joints are tight and nails well hidden, only extremely close scrutiny will reveal that molding had been used in 3-dimensional designs. And, of course, molding is almost always used to complete the trim around doorways, window openings, and at the bottom of walls at the floor (baseboard and quarter round).

Moldings are made in many different configurations. The molding may be softwood or hardwood; cedar, pine, fir, larch, and hemlock are commonly available at home center and building material outlets. As with lumber and plywood, availability sometimes depends on the region in which you reside. For example, redwood is more plentiful on the West Coast than in Florida.

You can buy standard, unfinished molding in any length up to 16' with lengths increasing in 2' increments—3', 5', and so on—if this length suits your purposes better. Also, buying random lengths is sometimes less costly.

Molding is made in nominal and actual sizes similar to board sizing, with the actual size being smaller than the nominal. For example, a piece of case molding nominally 3" wide would be about 2-5/8" wide in actual size. And, as with boards, this is something you must keep in mind when planning project dimensions.

Fig. 2



Techniques for milling molding are not perfect. Molding of the same nominal sizes will have fractional differences in the measurements. It is therefore suggested that you buy all molding from the same mill lot and that you hold the pieces up, superimposing one upon the others, to make sure that they are all the same size. Fractional differences in sizes can detract from the even appearance and professional-looking effect that you desire.

### STANDARD MOLDING

A number of standard molding styles have retained their popularity throughout the years (Figs. 1 & 2). Here is a description of these basic styles. While most of these have been designed to specific uses, there is no law against using them on a bookcase or cabinet or wherever you like if the molding fits into the overall design plan of your project.

**Base Shoe.** This is normally used with base molding where walls meet floors.

**Base Molding.** The molding used along the bottom of walls; base molding covers the gap between the base shoe and floor. It is available in many different styles.

**Crown Molding.** Crown molding is a very decorative molding used to cover the inside corner where walls meet ceilings.

**Quarter Round.** In cross-section, this looks like a quarter of a circle. It is most commonly used to finish corners.

**Half Round.** In cross-section and in the smaller sizes, this looks like a half circle. In the larger sizes, half round molding has an oval shape.

**Casing.** This probably is the molding most frequently used around the house. It is used to trim edges of doors and windows, and is a very popular molding for finishing cabinets.

**Mullion.** This fluted molding is used as vertical trim between windows.

**Chair Rail.** This molding was originally designed to protect walls from the backs of chairs. Today it is used for decorative purposes installed horizontally along a wall about 3' from the floor, though the height may vary.

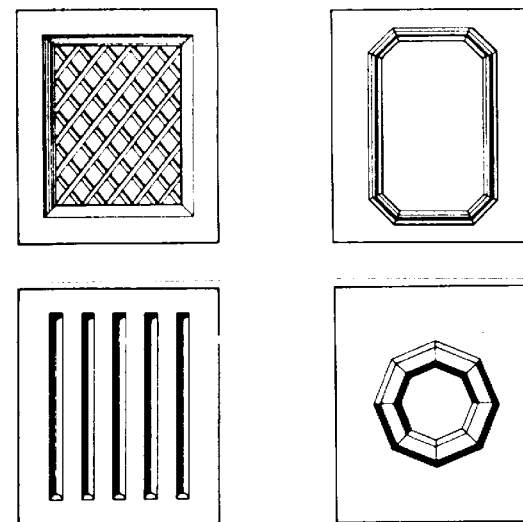
**Panel Molding.** This type of molding can come in handy if you cover anything—from a wall to cabinetry—with paneling. It will hide the seams and will make the panel edges appear inset.

**Corner Guard.** Also called outside corner trim. This is a decorative molding, available in a V shape, for covering outside corners of pieces.

**Cove.** Also called inside corner trim. This is a decorative molding used to cover inside corners.

**Astragal.** Another decorative molding, it is normally used to divide windows.

Fig. 3



**Molding designs** made from standard moldings shown in Fig. 4. Mounted on flat surfaces, molding gives a raised panel look.

**Specialty Moldings.** In addition to standard moldings, there is a wide variety of special-use moldings for sale. They come with a variety of surface finishes, including fancy scrollwork. Like most wood moldings, specialty moldings will be unfinished.

**Prefinished Moldings.** Some moldings are available prefinished. There are plastic moldings, which come in several colors including white and wood tones. The faces of prefinished molding is covered with a vinyl that is imprinted with various wood patterns. There also are moldings designed to be used with paneling; they mask the top and bottom edges and spaces between panels.

## WORKING WITH MOLDING

The miter is the most common joint required for joining pieces of molding (**Figs. 3 & 4**), so a good backsaw and miter box are essential. Once the molding is cut, you can fasten it with finishing nails, brads, and/or glue. If you use glue, use just enough so that the glue will adhere to the material but not so much that it will squeeze out when the piece is pressed into place.

Above all, you want to keep the glue off the molding face. Removing the glue when it is dry can affect the wood in terms of the way it colors the finish you will be using on the molding. If you are going to stain the trim and are not an expert painter, stain before installing then touch-up afterward.

Use as few nail fasteners as possible to hold the molding in position. Use a brad driver to push the brads in place, then a nail set (punch) to sink the heads of the fasteners slightly below the surface of the molding. Fill the holes with wood putty and sand smooth if you are going to paint the molding. If it is to be stained, apply the stain first then fill the holes with a matching color stick.

Sometimes molding must be sanded to remove minor imperfections. Do this very carefully so that you will not change the shape of the molding with the abrasive. Use a fine grit, close-coat sandpaper.

## THE ROUTER AND MOLDING

The versatility of a router is due to its variety of bits such as flutes, veining, core box, V-grooving, cove. The bits come in a range of diameters and shapes to help you make just about any cut you might need. When the decorative cuts and grooves are combined with molding, the possibilities for trimming a cabinet, bookcase, or other project increases dramatically.

The easiest way to make cuts or grooves in the face of a cabinet door, for example, is to use a jig of your own making with commercially available guides. The guides are simply rings of metal. They are made in various sizes to accommodate various bit sizes, and they screw to the base plate of the router with the bit projecting through them. The bits, of course, can be raised or lowered to cut to whatever depth wanted.

To use one of the guides, clamp a jig or board (a straightedge or a board cut to whatever shape you want) to the face of the material to be cut. Run the router along the material with the ring riding against the jig or the board.

If you have to make a fancy cutout on the router, it is good idea to make a paper pattern first. Divide the paper into 1" squares—or whatever size is most convenient—and then draw the outline you need on the squares. You can then cut out the pattern and tape it to the wood as a guide for routing or for marking the pattern directly into the wood.

Large, more complicated molding can be made up of smaller pieces of molding and lumber as shown in **Fig. 5** of a built-up crown molding. Attach pieces of 2x4 blocking to the wall and ceiling framing using 12d cc nails. Then secure the molding and lumber to the blocking with 4d finishing nails for smaller pieces and 6d finishing nails for larger pieces.

## TIPS ON CUTTING MOLDING

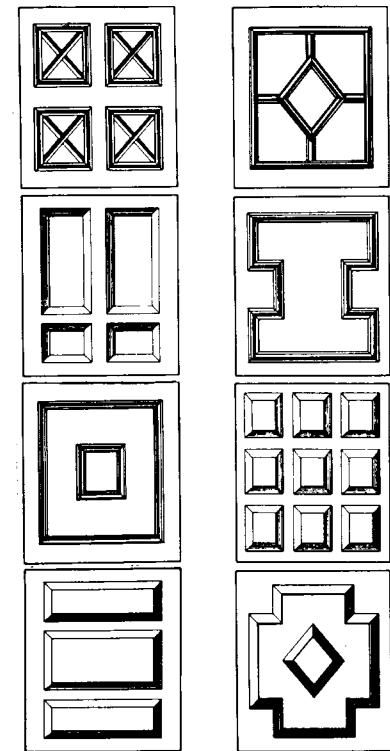
Using a miter box is quite simple, but you must take care to make the cuts in the right direction or

you may be left with a piece too short to recut. A good rule is to “measure twice and cut once.”

For baseboard molding, mark the point at which it is to be cut at the top and put the molding in the miter box right side up with its back against the back of the box.

Check the orientation of the molding in the miter box and the position of the saw before cutting. To protect the face of the molding from splintering, you can apply a piece of masking tape down the cut. Keep your saw blade sharp. Test fit the molding before fastening it. You can adjust the angle by shaving down any face that causes a gap in the joint—but do this cautiously since it shortens the molding.

**Fig. 4**



**Cove Cutting.** The procedure for cutting cove molding (Fig. 6) is essentially the same as for baseboard, except that the molding should be set in the box upside down so it can be seated firmly against the bottom and the back.

**Right Angle Butts.** When butting a piece of molding at a right angle to another piece of molding already in place, you must shape one piece to fit the contours of the other piece by making two cuts. First measure, mark, and cut the piece as if you were mitering it to fit into the corner.

Mark a second cutting line along the edge of the cut on the face and cut this following the curves with a coping saw held vertically (Fig. 7). The second cut shapes the piece to fit over the face of the molding it abutts.

For molding that is flush against a wall or other surface and meets at an inside corner (Fig. 8), right angle butts are usually easier and give a more professional looking joints than cutting at a 45-degree angle. This is because there is more tolerance in a right angle butt cut.

**Nailing.** Depending on the size of the molding, use 6 or 8d finishing nails to fasten on baseboard, ceiling, and casing molding. Use 4d finishing nails for base shoe and drive the nails into the flooring. Nail into studs and top and bottom plates to assure that the molding won't pull away from the wall. Tighten

corners with two 4d nails into the wall; on either side use one nail for base shoe molding.

**Lapped Joints.** If molding must be pieced along a wall, miter both pieces to make a smooth 45-degree joint that can be tied together with a single nail (Fig. 9). The miter cuts are made with the molding positioned straight up against the back of the miter box in the position that it would fit against the wall when installed.

**Around Windows.** Windows without sills can be framed like pictures with four pieces of casing, mitered at all corners. Windows with sills are trimmed on the sides and top with casing and on the bottom with a piece of window stool (the technical name for the sill) and an apron. Window jambs must be built out before the molding is attached, when a new surface has been put on a wall. You'll probably find it easier to "work around" the window with molding. Example: cut a vertical piece of molding and miter it. Fasten it in place. Measure and cut the top piece of molding and miter it to fit one side piece. Then miter the other end and fasten on the top piece. Measure and miter the second vertical piece and fit it to the top piece. You may have to use a block plane to make the miter fit perfectly as the first two pieces will almost automatically do. Just tack the pieces in place until you are satisfied with the miters.

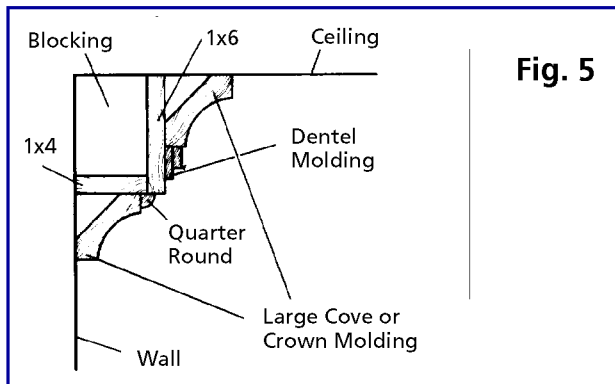


Fig. 5

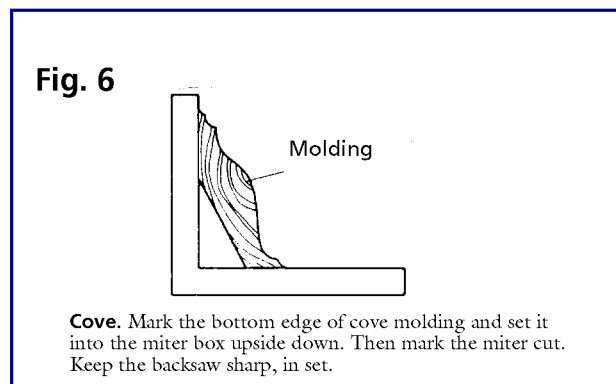


Fig. 6

**Cove.** Mark the bottom edge of cove molding and set it into the miter box upside down. Then mark the miter cut. Keep the backsaw sharp, in set.

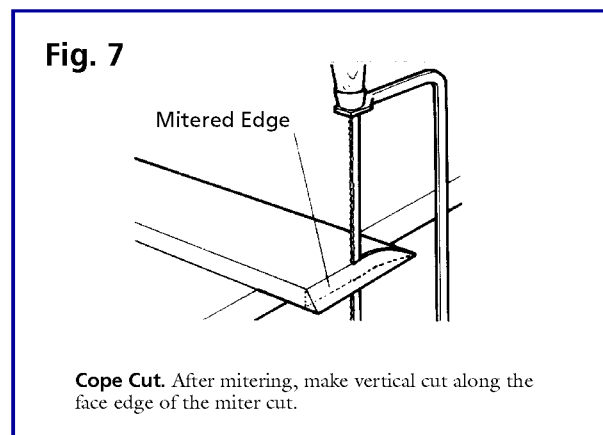


Fig. 7

**Cope Cut.** After mitering, make vertical cut along the face edge of the miter cut.

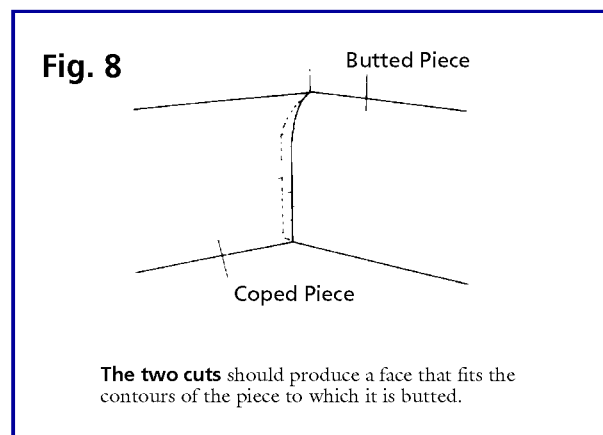


Fig. 8

**The two cuts** should produce a face that fits the contours of the piece to which it is butted.

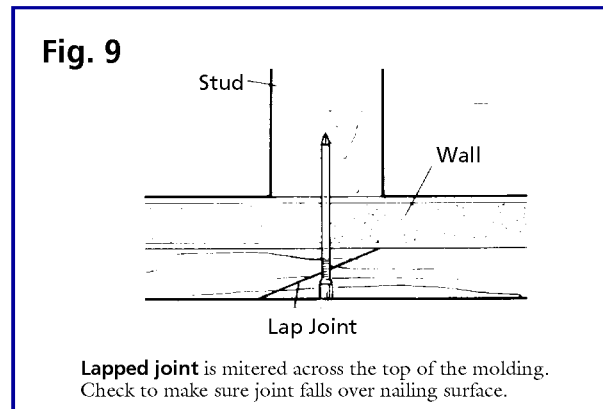


Fig. 9

**Lapped joint** is mitered across the top of the molding. Check to make sure joint falls over nailing surface.