

Chapter 18

INTERIOR TRIM; HANGING DOORS

Now that most of the heavy work is out of the way, you can get started on putting up the interior trim. If you like to do cabinet work or jobs where fine measuring and cutting are required, you will enjoy this sort of work. If you prefer the rough sort of building where a slight error here and there is not important because it will soon be covered up, you will not be very happy with trim. Here, unfortunately, is something that cannot be

very well covered up but stands out like the proverbial sore thumb for all eyes to see. Anyway, try to do your best work on the trim and do not try to rush it. Another point—make it as simple as possible, unless you happen to have special skills.

You will need a fine-tooth back- or miter-saw for this job as well as a good miter box. This is minimum equipment. If you have special power tools, so much the better.

INTERIOR TRIM

Do not try to install trim until you are sure that the plaster (if plaster has been used for the interior walls) is pretty dry. Trim should be put together with tight joints and if the wood is going to do a lot of swelling and shrinking, you will never get a really tight seam anywhere. If the weather is damp, it might be best to hold off on this job until there is a dry spell or until you can get some sort of heating system going to keep the air dry.

Door Jambs

Door jambs come in three sections—two side pieces and a header. The side

jambs are usually grooved so that the header can be fitted between them.

There are two types of jambs that are in common use. One is made out of stock about 1 $\frac{3}{8}$ " thick with a rabbet that acts as the door stop. The other type is made out of thinner stock and has no rabbet. Instead, a stop bead made of wood is either nailed to the face of the jamb or nailed into a recess cut into the jamb. There is not a great deal to choose between these two jambs except, perhaps, that the heavier one is more solid and there is no chance that the stop bead can come loose. See Fig. 1.

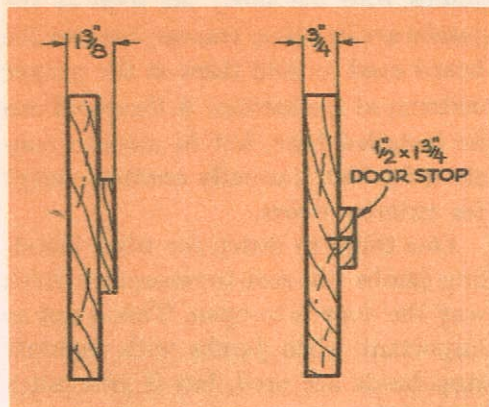


Fig. 1. Two door jambs. The heavy $1\frac{3}{8}$ " is usually preferred.

As soon as you get the door jambs, give them a priming coat of paint. If the interior wood is to be stained, then just prime the back of the trim.

The trick in getting a door jamb in place is to have it absolutely plumb. If it is not, you will have a hard time getting the door to hang properly. The first step is to assemble the three pieces of the jamb and nail the header to the side jambs. After this has been done, cut a piece of wood to fit the exact distance between the side jambs at the header and use it along the bottom of the opening to keep the side jambs an equal distance apart.

If the rough framing was done accurately, the door jamb will fit with a little clearance on each side. Put wood wedges into this space between the rough frame and the side jambs so that you will be able to get the jambs absolutely plumb and will have something to hold them that way until they

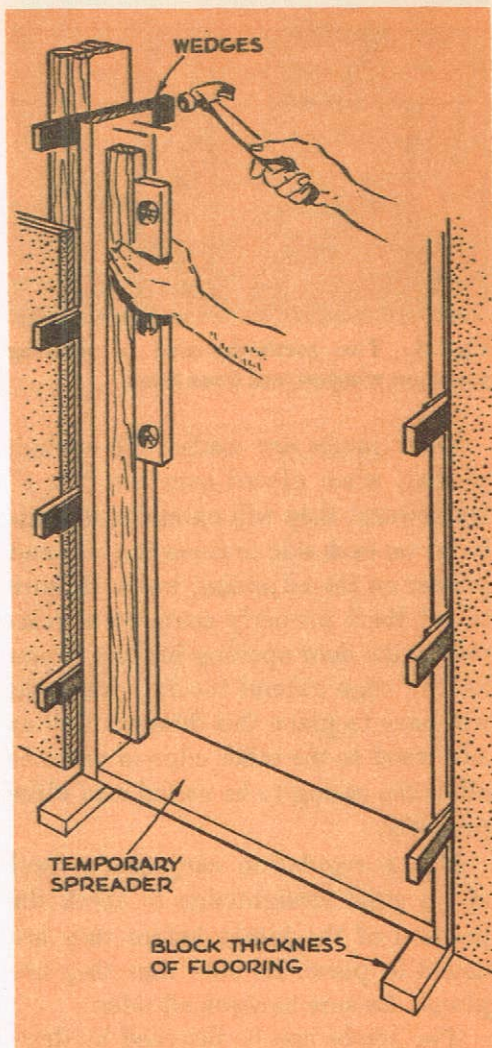


Fig. 2. Getting door jambs perfectly level by means of wood wedges and a level and straight edge.

are nailed in place. Be careful not to drive the wedges in too far as this will cause the sides of the jamb to buckle out and make it impossible to get the door to fit. See Fig. 2.

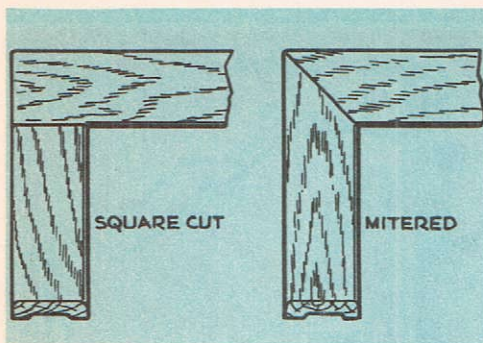


Fig. 3. Two methods used in making joints on window and door trim.

Door jambs are made wide enough so that, when placed over the 2" x 4" framework, they will extend sufficiently far on each side to cover the lath and plaster on the adjoining walls. Be sure to get them properly centered in relation to the door opening because if you let one edge extend too far over, you will have to plane this down as well as add wood to the other edge in order to allow the casing to be nailed into place properly.

Use a regulation carpenter's level and a good straightedge to check the position of the jambs before they are nailed in place. Be sure that they are plumb. Be sure to check all sides.

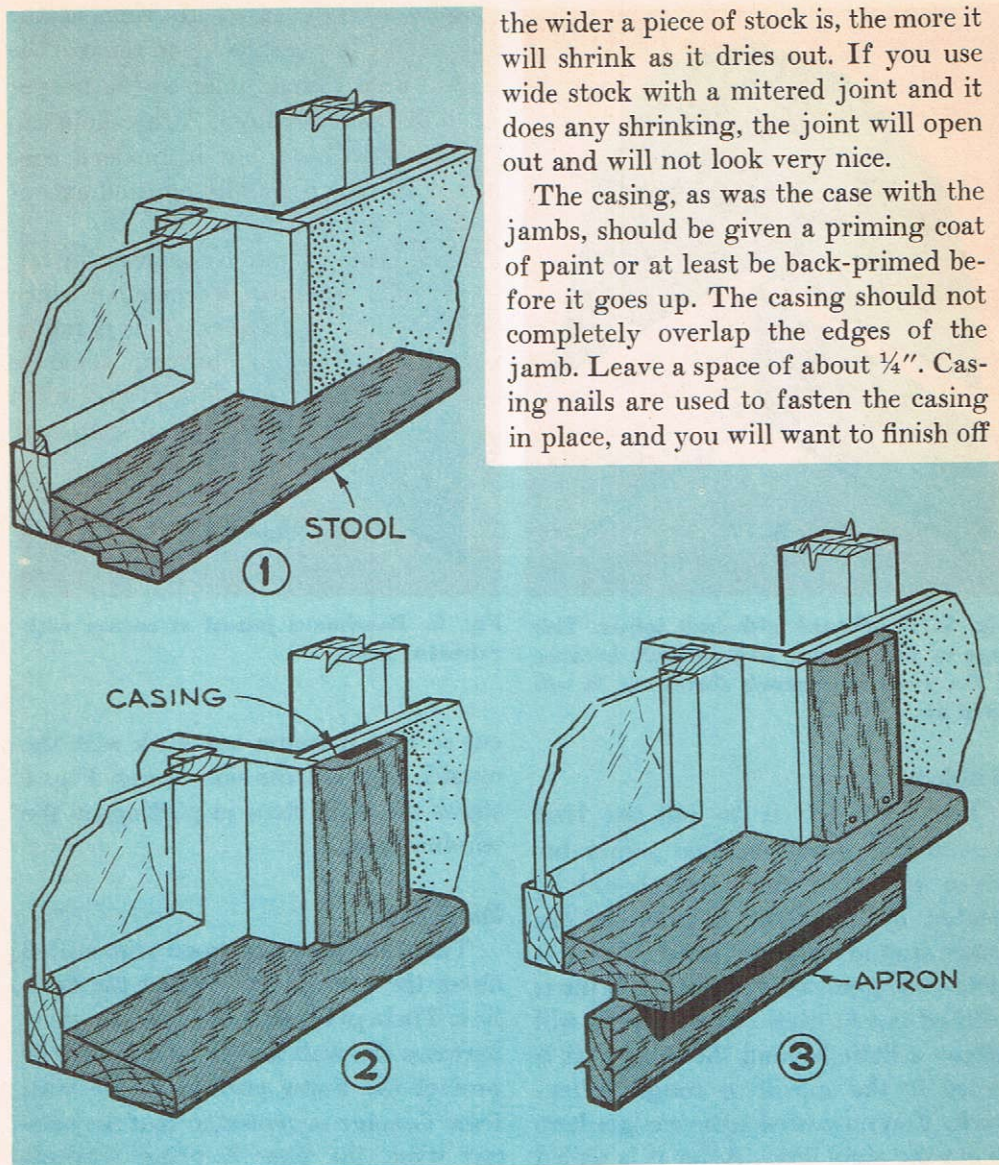
The jambs can be fastened by driving the nails right through their sides, through the shingles and into the rough framing of studding. Unless the opening is much too wide for the jambs, 16d casing nails will do the trick. Do not worry about the wood wedges. They can stay put and their ends can be cut off later with a saw. (Just be careful not to damage the sides of the

jambs with the saw.) As soon as the jambs are in place, you can remove the board used to hold them at the proper distance at the bottom. A threshold can be installed here, but in modern construction this is usually omitted except for exterior doors.

One thing to watch for when installing jambs—be sure to remember which way the door is to open. This is not so important when jambs with separate stop beads are used, but if you put a rabbeted jamb on wrong side to, you either have to take it down or else put up with a door that swings in when it should swing out. This is one of those little things that you can very easily forget.

The next project is to put the casing around the doorway. There are two ways to make the joints between the top pieces of casing and the side pieces. One way is with square-cut joints and the other is with mitered joints. Fig. 3 shows these two types. A square-cut joint is perfectly adequate and, if the joint is tight, will look perfectly all right. It is simple to make and should not cause any trouble. The mitered joint is a little more involved and requires very careful cutting and measuring if it is going to be tight.

The width of the trim used is more or less a matter of choice. The general emphasis these days is on narrow trim, but that does not mean a great deal. Of course, the trim must be wide enough so that it covers up the joint where the plaster or wallboard ends. If you use a square-cut joint, you can use any



the wider a piece of stock is, the more it will shrink as it dries out. If you use wide stock with a mitered joint and it does any shrinking, the joint will open out and will not look very nice.

The casing, as was the case with the jambs, should be given a priming coat of paint or at least be back-primed before it goes up. The casing should not completely overlap the edges of the jamb. Leave a space of about $\frac{1}{4}$ ". Casing nails are used to fasten the casing in place, and you will want to finish off

Fig. 4. Three steps in applying trim around window frames.

width trim you want. If you use a mitered joint, it is best not to use stock over 3" in width unless it is very well seasoned. The reason for this is that

each nail with a nail-set so as not to damage the casing with your hammer.

The two types of trim pictured in Fig. 3 are very simple to handle.

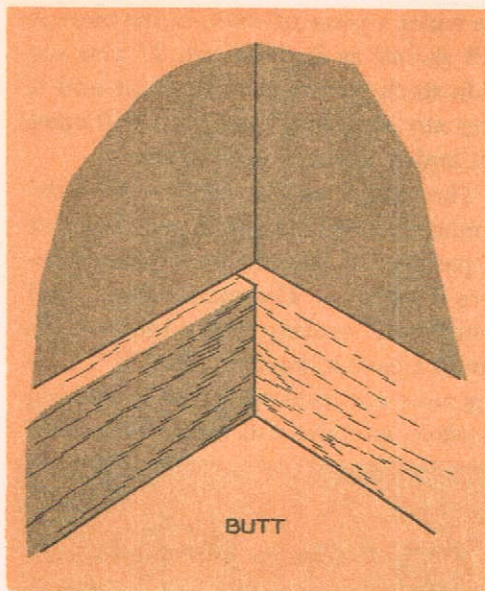


Fig. 5. Baseboard with butt joints. This type of joint is not very suitable because if the wood does much shrinking, it will open up.

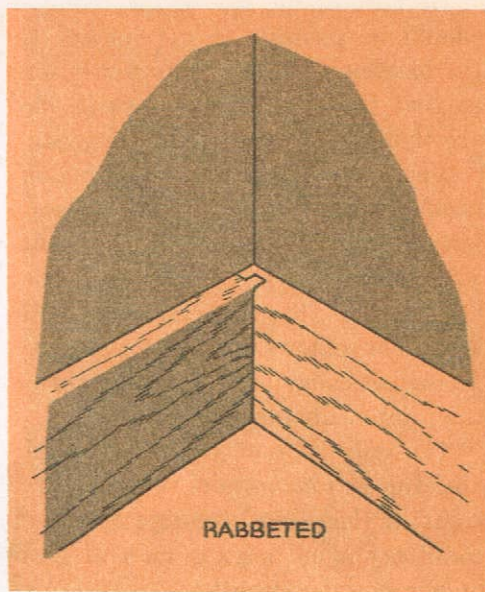


Fig. 6. Baseboard joined at corner with rabbeted joint.

Windows

The next job is to put the trim around the windows. The joints between pieces of this trim should be treated in the same manner as the joints around the door casing. The first piece that goes on is the stool. This is notched out at each end so that it will extend a little beyond the casing. It is nailed to the subsill or rough framework. You may need some wedges here to get the stool level. After it is nailed in place, the side casings go on. These two pieces should be cut to size, plumbed and then nailed into place. Check the head casing before you nail it on to be sure that it is level. The apron goes on next, and it should be

cut so that it comes out flush with the outside edges of the side casing. Fig. 4 shows the main steps in putting on the window trim.

Baseboards

These are pieces of wood trim nailed along the base of the wall at the floor line. Their purpose is to cover the joint between the wall and floor and also to protect the lower portion of the wall from damage or moisture that may occur when the floor is being washed. Sometimes the baseboard is called a mopboard.

The height of the baseboard is more or less a matter of personal choice. The best height is probably 6" or so, but it can be more or less if you prefer.

Because of the size of the rooms, it should be possible to get lumber for the baseboards that is sufficiently long so that the only joints you will have are those that occur at the corners.

There are three methods of making *inside* corner joints. Fig. 5 shows a butted joint, Fig. 6 shows a rabbeted joint, and Fig. 7 shows a mitered joint. Of the three, the rabbeted joint is the best. The other two are not so satisfactory because as the boards shrink, the joints will open up.

The only type of joint that is suitable for *outside* corners is the mitered joint; if the other two were used, you could not avoid having the end grain of one board exposed.

Baseboards are nailed directly to the wall studding with 8d casing nails. Two of these are used at each stud.

Before nailing the baseboard into position, examine Fig. 8 to see the relationship of the baseboard with the finished floor and the shoe mold.

Back-prime the baseboard before it is installed.

The base shoe, or shoe mold, is a strip of $\frac{1}{2}$ " or larger quarter-round trim nailed across the joint between the floor and the baseboard. Fig. 8 shows the correct method of nailing this strip of wood so that if either the baseboard or flooring shrink, there will be no open seam. The base shoe should never be nailed to the baseboard.

The base mold fits on the top of the baseboard. Sometimes the top of the baseboard is rounded off or milled out so that the base mold can be

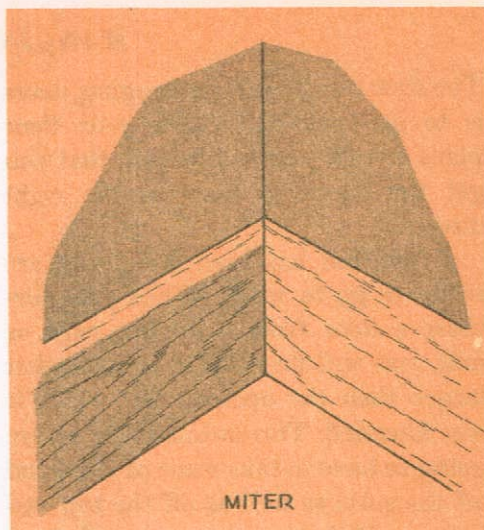


Fig. 7. Baseboards with mitered joints.

omitted. If present, it should be nailed to the studs. The nails should go in at an angle to draw it down tight against the baseboard.

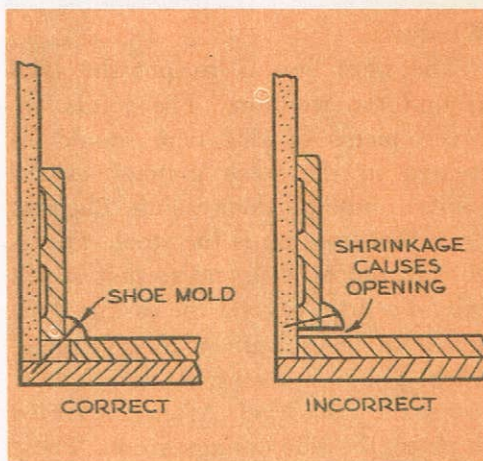


Fig. 8. Correct and incorrect way to nail shoe mold in place. When the correct method of nailing is used, shrinkage at the baseboard or flooring will not expose any unsightly and dust-collecting cracks.

HANGING DOORS

The first thing to do in hanging doors is to go back and check your floor plans so that you will be sure that you get the doors to open in the right direction.

After that has been done, you are ready to go to work. When you purchase a door from a lumber yard or mill, you will find that it is somewhat larger than the opening for which it was intended. This means that you are going to have to take some of the wood off the sides as well as off the top and bottom. If there is quite a lot of wood to be removed, you can use a saw. If you only have to take it down a little, use a plane. A jack plane 18 inches long is very good for this job. A short plane will not produce such an even

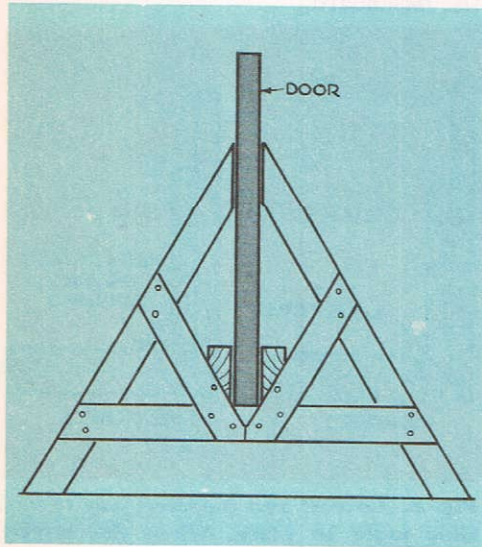


Fig. 9. A simple jig of this type will make it easy to hold a door on edge for fitting and planing.

job. Fig. 9 shows a simple jig that you can make to hold the door secure while you plane down the sides or ends.

Square off the bottom of the door and saw off the lugs or the end of the stiles that stick out beyond the bottom rail. Now hold the door in the opening and check to see how much must be removed. Next, plane down one edge of the door until it fits the frame. Then plane or saw down the top edge until it fits the head of the jamb. Now you can hold the door in the opening and scribe the other edge from the inside. There should be between $\frac{1}{16}$ " and $\frac{1}{8}$ " clearance between the door and the jamb on all sides. A 5¢ coin or a piece of cardboard will give you the approximate clearance necessary. If the finished flooring is already in place, $\frac{1}{8}$ " clearance at the bottom will be sufficient. If you have not put down the finished flooring as yet, it would be best to postpone taking any more wood off the door until you are sure of the exact measurements.

After the door has been fitted, the hinges are attached. You will need two loose-pin butt hinges for interior doors and three for the heavier exterior doors. The top hinge is usually set about 7" or so from the top of the door and the bottom hinge comes about 11" from the floor. If a third hinge is used, set it midway between the bottom and top hinges.

Take the lower hinge, place it on the edge of the door and mark the gain

that is to be cut out. The gain should be cut to a depth equal to the thickness of the hinge leaf. Do the same for the top hinge and then screw the leaves in place. Now put the door into the opening, wedge it into correct position and mark the jambs. To prevent the door from binding on the jamb, keep the ends of the hinge leaves about $\frac{1}{16}$ " away from the rabbet or stop. Cut in the gain on the jambs for the top and bottom hinge and then attach the leaves. Place the door back into place, drop the pins into place so that the two leaves are held together, and then check the door to see that it opens and closes freely without any binding.

The next step is to install the latch. You can use one of many types of latch. The most common types are mortised into the stile of the door. See Fig. 10.

After the door hinges and the latch have been installed, give the top and

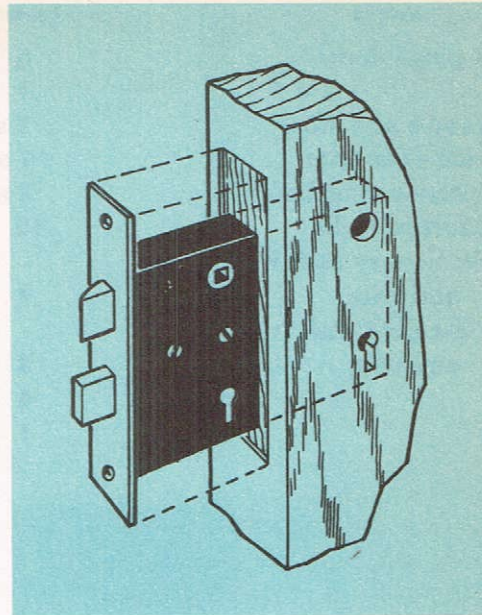


Fig. 10. Method of installing mortice lock in door.

bottom of the door a coat of aluminum paint to keep moisture out of the seams.

**MATERIALS LIST FOR INTERIOR TRIM, DOORS
AND WINDOWS FOR THE BASIC HOUSE**

<i>Material</i>	<i>Quantity</i>	<i>Dimensions</i>
Colonial pine base	300 feet	1" x 4"
Base molding and quarter-round	300 feet	
Flush door with frame and trim	1	3' x 6' 8" x 1 $\frac{3}{4}$ "
4-light fir door with jamb, sill and trim	1	2' 8" x 6' 8" x 1 $\frac{3}{4}$ "
2-light fir door with jamb, sill and trim	1	2' 10" x 6' 8" x 1 $\frac{3}{4}$ "
Brass hinges	9	

<i>Material</i>	<i>Quantity</i>	<i>Dimensions</i>
2-panel door	6	2' 6" x 6' 8" x 1 ³ / ₈ "
	1	2' 0" x 6' 8" x 1 ³ / ₈ "
Jambs and stops	7 sets	
Side door trim	7 sets	
Interior door hinges	7 sets	
Mortice locks	10	
Stationary sash with frame and trim	1	4' 2 ³ / ₈ " x 6' 5 ¹ / ₄ "
Casement sash with frame and trim	3	3' 2 ³ / ₁₆ " x 3' 1 ³ / ₄ "
	4	4' 2 ³ / ₈ " x 3' 1 ³ / ₄ "
	1	4' 2 ³ / ₈ " x 1' 6"