

VII. FITTING FLOORING TO THE ROOM

There are several methods that can be utilized to fit resilient sheet floor covering to the room. The most common methods are:

- Freehand fitting
- Direct scribing
- Pattern scribing

A. FREEHAND FITTING

The freehand method of fitting is normally utilized when floor molding is applied to straight walls and for short areas (such as door trim, pipes, and other irregular areas) that require net fitting.

Roll the flooring out in the room (on a diagonal if the job is one piece and the distance between the walls measures less than the width of the flooring material); handle the flooring carefully to avoid folding or creasing. Align the flooring, to the longest, most visible wall in the room. Balance the design in the room keeping any lines in the design as far from walls as possible. Complete the fitting process by following these steps:

- First, make relief cuts at all outside corners. Keep the knife horizontal with the floor and cut from the top of the material down to the floor/wall juncture until the flooring lays flat (Figure 53).

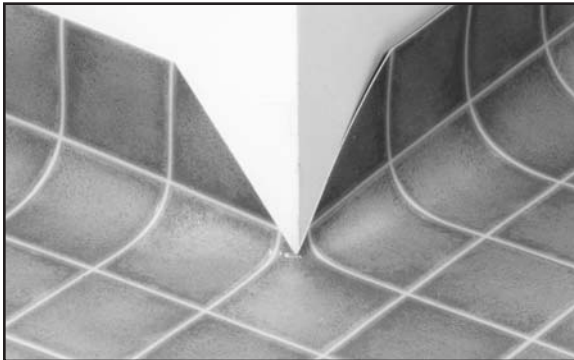


Fig. 53. Make relief cuts at all outside corners.

- Next, make relief cuts at all inside corners by trimming diagonally across the material (Figure 54). Trim the flooring gradually until it fits snugly into the corner juncture.

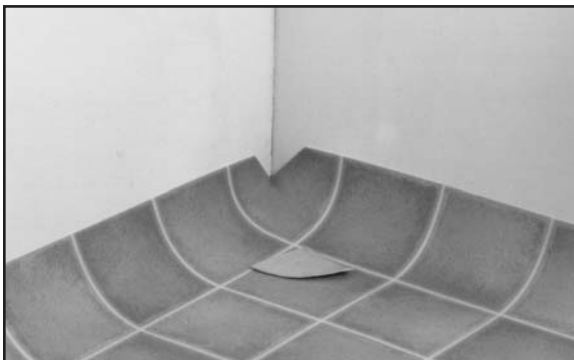


Fig. 54. Gradually trim off pieces of flooring

- Trim the material lapped up straight walls (Figure 55). If a floor molding will be used, trim the floor covering about 1/8" (3.2mm) short of the baseboard. Net fitting can be obtained, if required, by placing the side of the knife blade against the wall with the tip of the knife blade at the floor wall juncture and trimming slowly. Unless one has considerable experience with this type fitting, it is advisable to trim off small amounts of flooring at a time until the desired net fit is achieved.

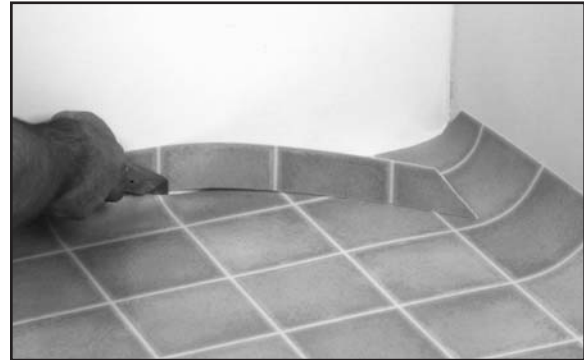


Fig. 55. Trim flooring to fit.

- At pipes or other irregular shaped objects, push the flooring into a right angle at the floor/object juncture and cut with a utility knife to the floor (Figure 56); make the cut in a grout line in the design whenever possible. Make small relief cuts around the pipe or object until the flooring lays flat without tearing (Figure 57). Trim the excess flooring net to the pipe or object (Figure 58).



Fig. 56. Make cut to floor/object juncture.



Fig. 57. Make relief cuts around pipe or object.



Fig. 58. Trim excess flooring net to the pipe or object.

- At doorways, which are usually very irregular, the preferred fitting method is to undercut the door trim, cut the flooring slightly long and slide it under the trim. If this is not possible, the fitting procedure is similar to that explained previously. At all places of the door trim where it changes shape, cut from the top of the flooring down to the trim/floor juncture (Figure 59). Complete the fitting process by trimming off the excess flooring to obtain a net fit (Figure 60).



Fig. 59. Make relief cuts from top of flooring to trim/floor juncture.

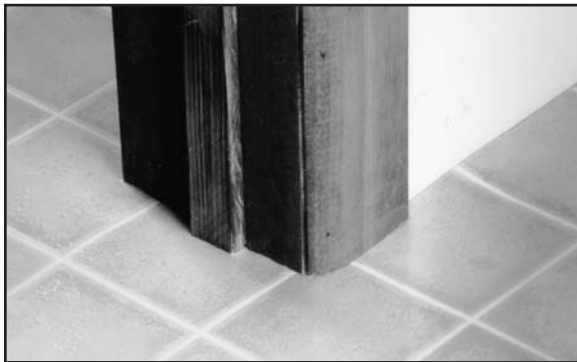


Fig. 60. Trim off excess flooring for a net fit.

B. DIRECT SCRIBING

Direct scribing is an accurate method of fitting resilient sheet flooring. However, it can only be used on installations with seams. A scribing tool (dividers or bar scriber) is held at a right angle to the edge of the

sheet to be fitted and the wall outline is transferred to the flooring material. The flooring is shifted back and forth until 3 sides of the room are fitted and one side of the sheet is open for seaming.

Position the flooring in the room square with the walls. The side opposite the seam should be flat on the floor with the ends lapped up the walls (Figure 61).

Scribe the wall opposite the seam first. The setting of the scriber is arbitrary. However, the tip of the scriber and the marking pin must be set far enough apart so that the flooring, when trimmed, will fit to the wall in all places. Normally, the scriber should be set for the shortest possible distance to increase accuracy in scribing (Figure 62).

Hold the scriber perpendicular to the edge of the sheet and transfer the wall outline to the flooring material. Any offsets on the wall must be marked on the flooring material.

Once the wall has been scribed, the excess flooring material should be trimmed off following the scribe mark. Shift the flooring against the wall for a snug fit. The flooring will now be lapped up the wall at both ends.



Fig. 61. Position the flooring so both ends lap up the walls.

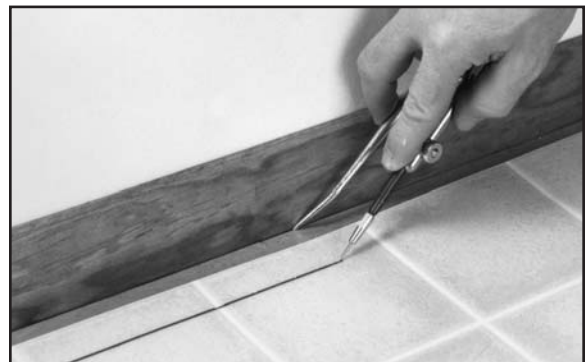


Fig. 62. Position flooring as close to wall as possible. Use shortest scriber setting possible.

To scribe and fit the ends, 2 marks will be required. Draw a pencil line on the subfloor following the selvage on the seam side of the sheet (Figure 63). The second mark is a perpendicular line (cross line) on the floor covering in the approximate middle of the sheet.

Extend the line onto the subfloor (Figure 64).

Shift the material toward one end until the opposite end falls clear of the wall. Be certain that the selvage of the flooring remains aligned with the pencil line on the subfloor at the selvage. Set the scribe for the distance between the perpendicular marks made on the subfloor and flooring material (Figure 65). With this setting, scribe the wall and any obstructions along the wall. The same procedure is used to fit the opposite side of the sheet.



Fig. 63. Draw a pencil line along selvage.

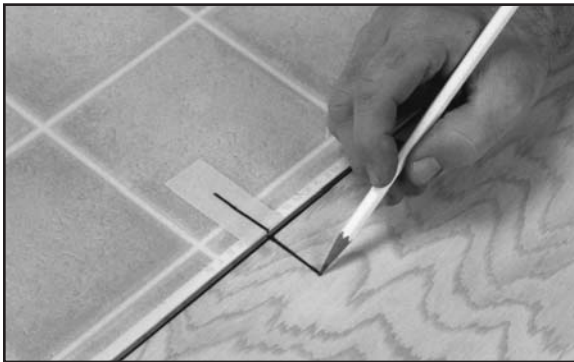


Fig. 64. Make a perpendicular line on flooring extending onto subfloor.

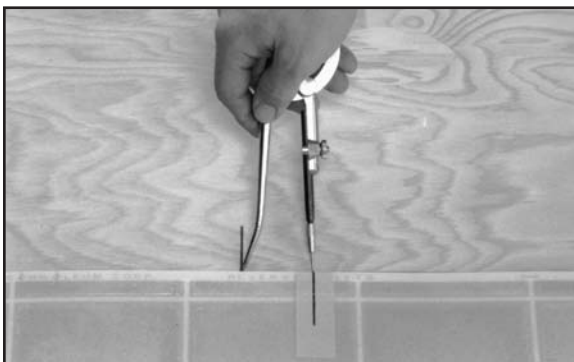


Fig. 65. Set scribe for distance between 2 lines.

If there is a doorway with trim on the wall being scribed, set marks will be required at each offset on the trim pieces (Figure 66). The trim should be scribed using the same scribe setting as used for wall areas.

If there is a pipe extending up through the floor, follow this procedure for an accurate fit:

- Use the scribe to make a mark on the flooring in front of the pipe (Figure 67).
- Make set marks on each side of the pipe which extend to the scribe mark (Figure 68).



Fig. 66. Make set marks at each offset on trim pieces.

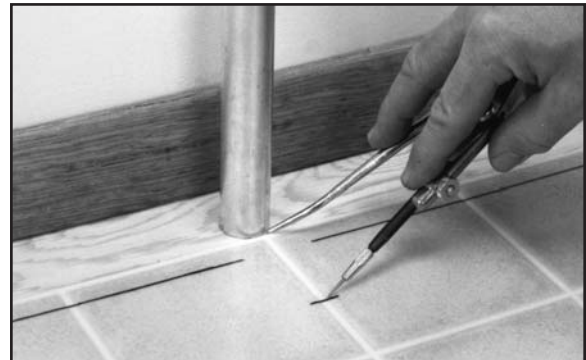


Fig. 67. Mark the flooring in front of the pipe with the scribe.



Fig. 68. Extend set marks on each side of pipe to scribe mark in front of pipe.

- Set the scribe the width of the set marks (Figure 69).
- Use the scribe to make a mark on the flooring toward the back side of the pipe from the first mark made from the front of the pipe. There will now be a square marked on the flooring. Next, draw a line diagonally across the square from each corner to form an X in the center.

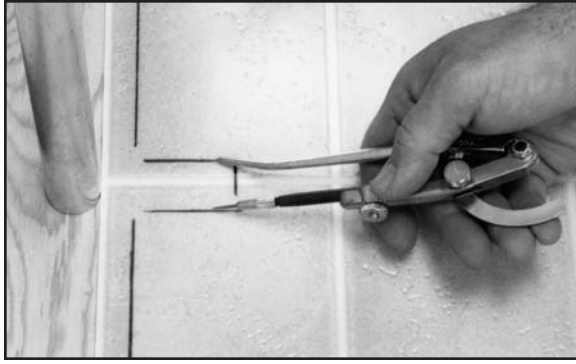


Fig. 69. Set scriber width of set marks.

- Set the scriber from the center of the X to one side of the square (one-half the distance of the square). Scribe a circle with one leg placed on the center of the X mark (Figure 70). Cut out the circle and make a seam (cut) from the back of the pipe to the edge of the flooring.

The second sheet must now be installed (assuming the job is a 2 piece installation). If the design is an overall with no match required, fit the 3 sides as previously described allowing for proper overlap of flooring material in order to make the seam.



Fig. 70. Scribe a circle with one leg on the center of the X mark.

When installing the flooring with a pattern, it will be necessary to match the design at the seam. Lay the flooring out in the room according to matching instructions (reverse or do-no-reverse sheets for seaming) so that it is flat and free of obstructions. Both ends should be lapped up the walls and the selvage of the second sheet overlapping the first sheet installed. The amount of overlap is arbitrary. Align grout lines in the design that run perpendicular to the seam. Measure the distance between the seam line (grout line) on the top sheet and the seam line on the bottom sheet. Adjust each end of the sheet to the same distance (Figure 71). This measurement becomes the scriber setting. Set the scriber to this measurement, scribe the wall outline onto the flooring, trim off the excess material and slide the sheet toward the wall for a precise fit. The sheets will be overlapped and the design matched for seaming.

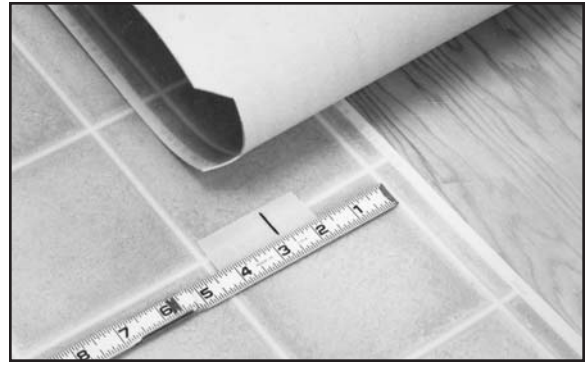


Fig. 71. Align perpendicular lines; adjust each end of the sheet to the same distance to acquire a design match.

The ends of the sheet must now be fitted. Center a strip of masking tape under the selvage and draw a pencil line on the tape following the selvage. Additionally, place a strip of masking tape perpendicular to the line made at the selvage approximately in the middle of the seam. Make a set mark on the tape extending across both sheets of flooring. Slide the flooring (keep selvage aligned with pencil line on tape) until one end falls free of the wall. Follow the procedure for fitting the ends of the sheet as detailed earlier in this section.

C. PATTERN SCRIBING

Pattern scribing is an accurate method of fitting when resilient sheet flooring is being installed in rooms or intricate places where no floor molding will be used and the floor covering must be net fitted. When properly executed, pattern scribing will consistently produce perfect net fits.

The steps for the pattern scribe fitting method are:

1. Lay out felt paper.
2. Scribe room outline onto felt.
3. Position felt on floor covering.
4. Transcribe room outline from felt to flooring.

Step 1: Lay out the felt paper

Asphalt saturated felt paper is the most popular type of material used for pattern scribing. However, other non-saturated types are available and work well. Whatever material is used, it must be flexible, lay flat, and be dimensionally stable.

The felt should be rough cut to the room perimeter allowing a 1/4" (6.4mm) gap between walls or other vertical surfaces to be fitted. Cut the number of felt strips required for the first sheet of flooring to be installed 1/2" (12.8mm) shorter than the length of the room. This allows for a 1/4" (6.4mm) gap at each end of the room. Position the felt with end curl down (Figure 72) maintaining a 1/4" (6.4mm) gap between the ends and sides of the felt strips at walls. Trim the felt, where required, maintaining 1/4" (6.4mm) gap between it and all areas to be fitted (Figure 73).

In order to keep the felt in place on the subfloor, cut out several oblong windows approximately 2" x 4" (5.1cm x 10.2cm) in each piece of felt (Figure 74). Use wide masking tape to fasten the felt to the subfloor so it will not shift during scribing.

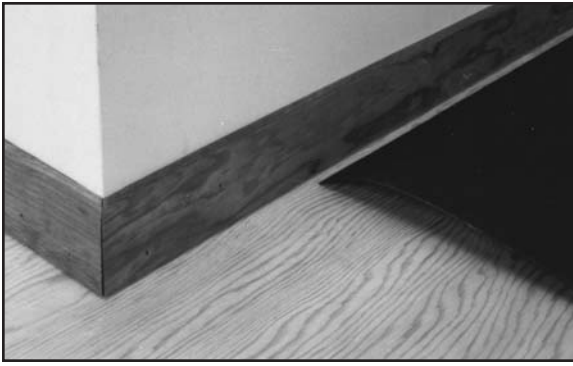


Fig. 72. Lay out felt with end curl down.

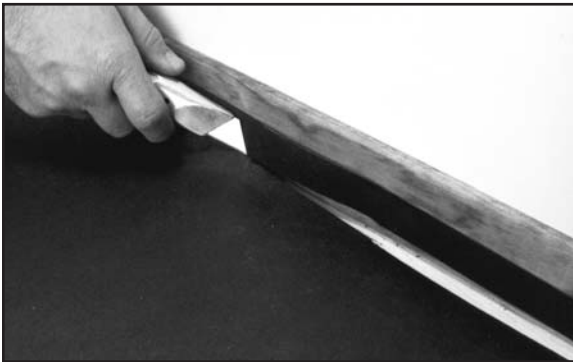


Fig. 73. Allow 1/4" (6.4mm) in spacing between felt and areas to be fitted.



Fig. 74. Cut out oblong windows to tape felt in place on subfloor.

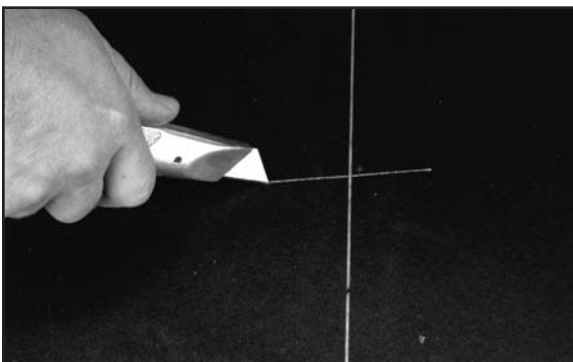


Fig. 75. Make light cuts across felt seams.

Reference marks should now be made on the felt so that the individual strips can be accurately aligned side-by-side on the floor covering. Do this by making light cuts every few feet across the seams in felt strips with a utility knife (Figure 75).

Step 2: Scribing room outline to felt

To scribe the room outline onto the felt, set the legs of the dividers to the desired width (normally approximately 1" or 2.5cm). Make a reference mark of the setting on the felt (Figure 76) so the dividers can be reset if necessary.

Start at an inside or outside corner and begin scribing the wall outline on the felt. The dividers must always be held perpendicular to the area being scribed, whether straight or curved (see example in Figure 77).

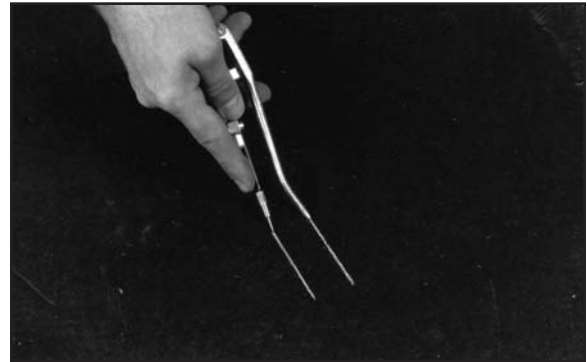


Fig. 76. Make reference marks of divider setting on felt.

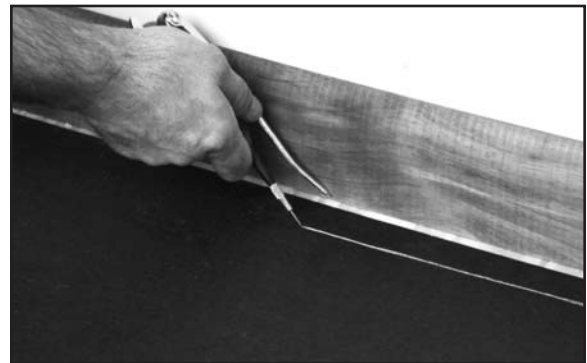


Fig. 77. Dividers must be held perpendicular to walls.

At doorways or other irregular shaped objects, place start/stop set marks at each corner of the molding onto the felt using a small square or straightedge as shown in Figure 78. Then hold the dividers perpendicular and scribe each piece of trim as shown in Figure 79.

There is another method of scribing straight areas which is accurate and saves time. This method requires a short, flexible straightedge (or any other type of thin, straight metal). Place the straightedge against the wall and score the felt with a sharp pin (most dividers have removable legs containing the sharp pin) as shown in Figure 80. The advantage of using this method is that when the score marks are transcribed to the flooring from the felt, a sharp utility knife can be used following the straightedge. The flooring is trimmed to size in one operation.

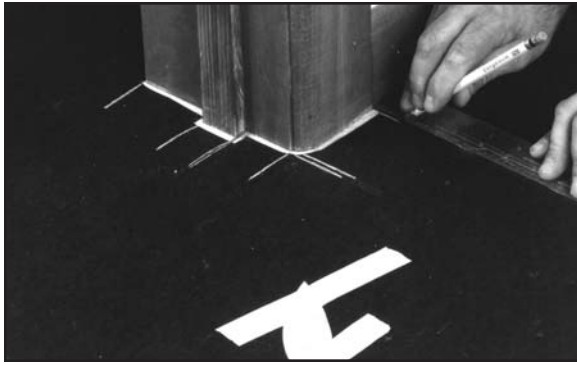


Fig. 78. Make set marks for each piece of molding.

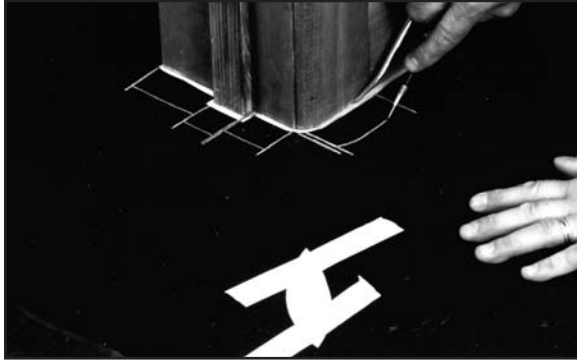


Fig. 79. Scribe each piece of molding.

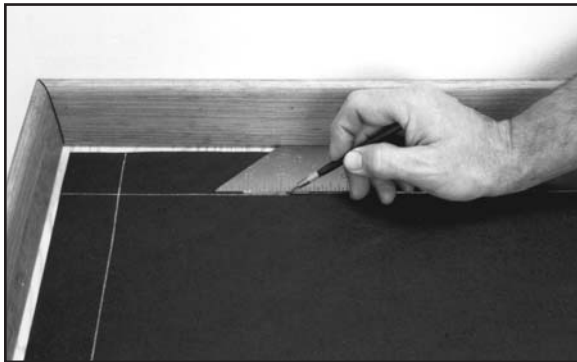


Fig. 80. Score felt with marking pin from dividers.

Step 3: Position felt on floor covering

After scribing the room outline onto the felt, pick up each individual piece and position it on the flooring.

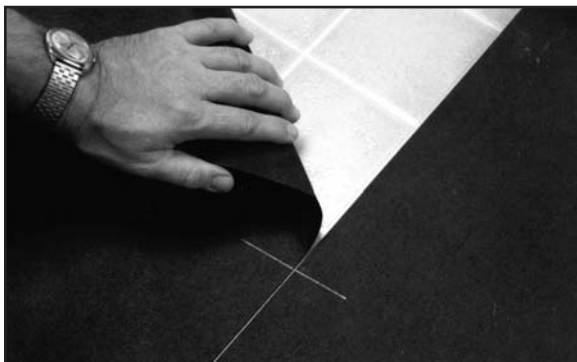


Fig. 81. Place felt seams together by aligning light cut marks.

Each strip of felt will be accurately aligned by placing the reference marks (light cuts across felt seams) together (Figure 81). Adjust the felt pattern on the flooring so the design runs straight in the room.

Step 4: Transcribe room outline from felt to flooring

Before transcribing the room outline from the felt to the flooring material, check the setting on the dividers. They must be set precisely as they were when the felt was scribed. To transcribe from felt to flooring, follow the scribed line on the felt with the blunt leg of the dividers and at the same time apply enough pressure against the other leg to score the surface of the flooring (Figure 82). At curved areas, take special care that the dividers are held perpendicular with the scribe marks on the felt.

At doorways, extend set marks from the felt to the floor covering (Figure 83). Then transcribe all score marks of the door molding from the felt to the flooring (Figure 84).

An accurate way to trim straight walls is to place a straightedge along the score marks on the flooring and trim off excess material with a utility knife following the straightedge. If a metal straightedge was used to scribe straight walls onto the felt, then it must be used to transcribe the wall outline onto the flooring. Position one side of the straightedge on the score mark on the felt and trim off the excess flooring with a straight blade utility knife following the opposite side of the straightedge (Figure 85).



Fig. 82. Apply enough pressure against marking pin to score flooring surface.

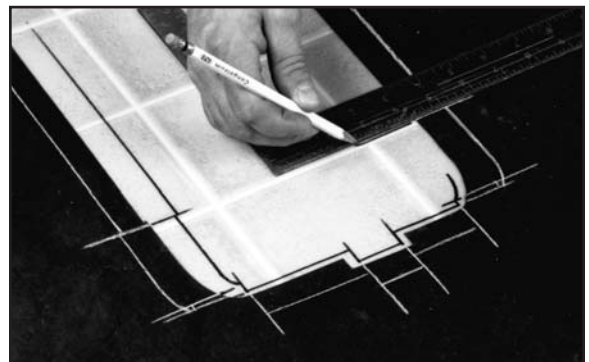


Fig. 83. Extend set marks from felt to flooring.

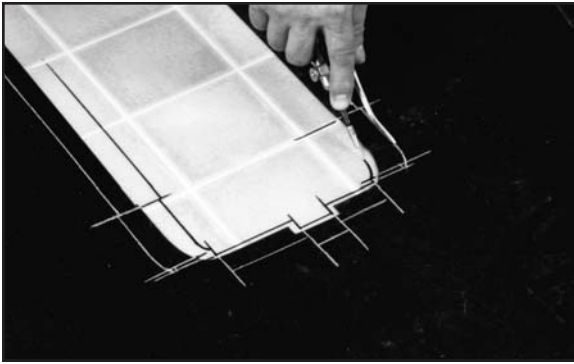


Fig. 84. Transcribe score marks on felt of door molding to floor covering.

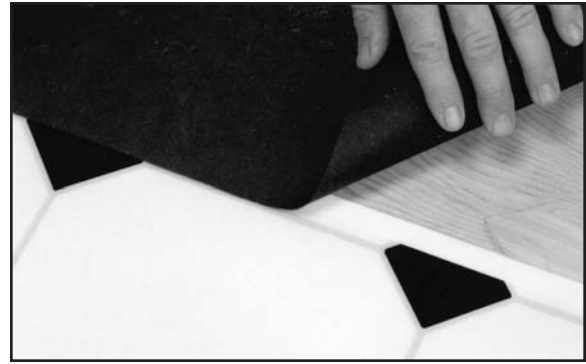


Fig. 87. Lay the edge of the felt where the seam will be made in the design.

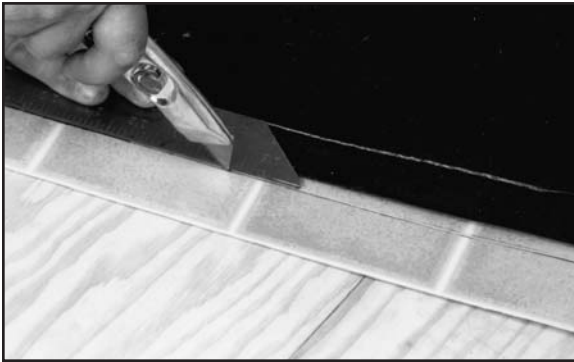


Fig. 85. Lay one side of straightedge on felt score marks. Trim off excess flooring following opposite side of straightedge.

The next step is to secure the felt to the subfloor. Then mark or score the felt in places where elements of the design intersect the seam line. (See Figures 88 and 89).



Fig. 88. Design with mortar joints: score felt where joints run perpendicular to seam.

Seamed Installations

When more than one sheet of flooring is required, it will be necessary to mark the felt so the design on the next sheet of flooring can be matched to the first sheet already in place (overall design is an exception).

The first step is to lay the edge of a strip of felt on the previous sheet installed at the desired seam location. If the design has a grout line, position the edge of the felt even with one side of the line as shown in Figure 86. If the design does not have a continuous grout line, such as in Figure 87, lay the edge of the felt in the design where the seam will be made.



Fig. 86. Lay edge of felt even with one side of grout line.

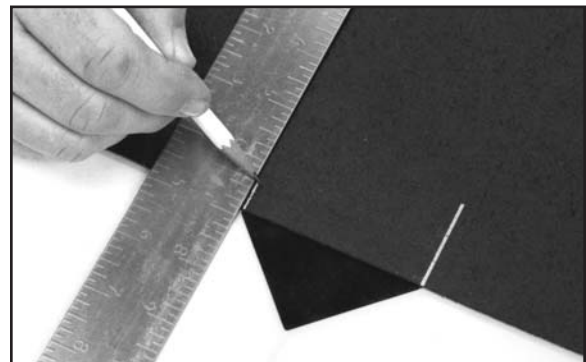


Fig. 89. Score design elements which intersect seam line.

It is not necessary to mark the felt continuously along the entire seam; make a series of marks approximately every three feet. After the edge of the felt has been marked for design matching, lay out the other strips and scribe the wall outlines onto the felt as detailed previously.

After scribing has been completed, position the felt pattern on the floor covering. Be certain the edge of the felt is placed exactly on the corresponding location in the design on the new sheet as marked on the

installed sheet. Match the marks on the felt with corresponding parts of the design in the second sheet of flooring as shown in Figures 90 and 91.



Fig. 90. Match design with mortar joints.

After matching the felt to the flooring, fasten it in place. Scribe and trim this sheet as detailed for the first sheet.

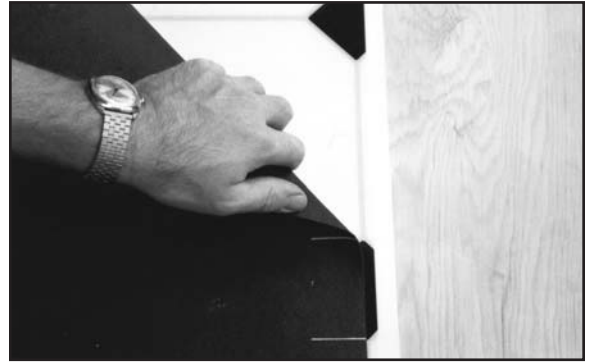


Fig. 91. Match design with lines that intersect seam.