## CHAPTER 7

## PARQUET INSTALLATION

## Part I - Acceptable Jobsite Conditions and Jobsite Checklist

A. Refer to Chapter 1

## Part II - Acclimation Guidelines

A. See Chapter 2 and Appendix B.

## Part III - Appropriate Grade Levels

A. Solid parquet wood floors can be installed successfully above grade level or on grade, but are not recommended for installation below grade.
B. The entire flooring level is considered to be BELOW GRADE where soil is present along any perimeter wall and is more than 3 " above the installed wood flooring level. Ground should be sloped away from the house for proper drainage. (Follow local building codes.)


## Part IV - Subfloors - Wood Joist Systems

A. See Chapter 4.
B. Parquet cannot be installed directly to solid board subfloors. For parquet installations, board subfloors must have additional underlayment.

## Part V - Subfloors - Concrete Slab

A. See Chapters 5-6.

## Part VI - Parquet Installation Methods

A. Follow manufacturer's recommendations.

1. The styles and types of block and parquet flooring, as well as the recommended procedures for application, vary somewhat among manufacturers. Detailed installation instructions are usually provided with the flooring or are available from the manufacturer or distributor.
B. Test wood subflooring for moisture according to moisture testing procedures. (See Chapter 3.)
C. Test concrete for moisture according to moisture testing procedures in Chapter 3. Moisture indicators should be within the adhesive and flooring manufacturers' specifications.
D. A minimum expansion space of $1 / 2^{\prime \prime}$ must be left around the perimeter and all vertical obstructions.
E. Some $3 / 4$ " parquet is appropriate for nail-down installation, as long as the pattern continues to have an exposed side tongue in which to nail.
F. Lay blocks and/or individual pieces of parquet in adhesive.
G. Use the wood manufacturer's approved adhesive. Follow the spread rate, trowel size and installation procedure as recommended by the adhesive manufacturer.

## Part VII - Parquet Layouts

A. Square Layout from the Center of the Room (See Figure 7-1)

NOTE: For instructions on using the trammel point method to square a room and find the center point, see Appendix G, Trammel Point Method.

1. Start by snapping a chalk line through the center of the room (line $Y$ ). The next line $(X)$ must be exactly 90 degrees to line $Y$ to form a perfect square corner. To ensure this angle, do the following:
2. From the center point (A) of line $Y$, measure 4 feet along line $Y$ and mark that point (B).
3. From the same center point, measure 3 feet in the general direction of where line $X$ will be and scribe an arc.
4. Return to the original 4-foot mark on line $Y$ and measure 5 feet, scribing an arc that crosses (point C) the 3 -foot arc you made in the previous step.
5. Verify all measurements before proceeding.
6. If correct, snap a chalk line through the conjunction of the two arcs at point C and the center point of line Y . This will be line $X$, at an exact 90 -degree angle to line $Y$.

Figure 7-1


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> Figure 7-2: Creating $90^{\circ}$ working lines from the wall Start by snapping a chalk line $24^{1 / 2 / 2}$ from the starting wall, opposite the entrance doorway (Line $Y$ ). The next line $(X)$ must be exactly $90^{\circ}$ to Line $Y$ to form a perfect square corner. To ensure this angle: 1. Measure $24^{1 / 2} / 2^{\prime 2}$ along Line $Y$ from the right-angle wall and mark it Point A. From Point $A$, measure 4 feet along Line $Y$ and mark that Point $B$.
> 2. From Point $A$, measure 3 feet in the general direction of where line $X$ will be and scribe an arc.
> 3. From Point $B$ measure 5 feet, scribing an arc that crosses Point $C$. 4. Verify all measurements before proceeding. 5. If correct, snap a chalk line through Point $A$ and the conjunction of the two arcs at point $C$. This will be Line $X$, at an exact $90^{\circ}$ angle to Line $Y$


## B. Square Layout from the Wall (See Figure 7-2)

Square edge block or basket weave parquet can be laid wall to wall without centering the tiles on the room. The results will not be balanced but the tiles have no edge treatment to delineate the difference in tile sizes when unbalanced. More intricate patterns generally require the flooring to be centered.

1. Wall Line Layout
a. If the room dimensions allow, in at least two places from the corner, measure out and establish a chalk line parallel to and $24^{1 / 21}(62 \mathrm{~cm})$ away from the starting wall opposite the entrance doorway. The ${ }^{1 / 21}(12.7 \mathrm{~mm})$ is for expansion space.
b. Snap a second chalk line 90 degrees to the first chalk line using the method shown in Figure $7-2,24^{1} 2^{\prime \prime}(62 \mathrm{~cm})$ away from the right angle wall. The $1 / 2^{\prime \prime}$ is for expansion space.
c. Make any necessary adjustments to allow for walls out of square before proceeding.
C. Installation Using Wall Layout (See Figure 7-3)
2. Spread the Adhesive
a. After both chalk lines (at 90 degrees to each other and $241 / 2^{\prime \prime}(62 \mathrm{~cm})$ from the wall) have been snapped, start spreading the adhesive in the $24^{1 / 2 \prime}(62 \mathrm{~cm})$ wide area next to the starting wall.
b. Continue spreading the adhesive along the entire length of the starting wall. Be careful not to spread adhesive beyond the $24^{1 / 21}(62 \mathrm{~cm})$ chalk line.
3. Immediately lay the floor tiles on the newly spread adhesive
4. DO NOT lay the floor tiles on dry adhesive. If the adhesive becomes too dry, scrape up the old adhesive and spread more.
5. IMPORTANT: Stand or kneel on the subfloor during the installation to avoid shifting the tiles.
6. PROPER PLACEMENT OF THE FIRST FLOOR TILE IS THE KEY TO THE ENTIRE INSTALLATION. Carefully place a 12 " $\times 12$ " $(30 \times 30 \mathrm{~cm})$ parquet tile at the intersection of the two chalk lines. (See Figure 7-3.) Do not use the edge of the tongue for aligning the tile on the chalk lines.


Figure 7-3
When the starting area has been completed, including cutting to the wall, proceed to the second laying area, then to laying areas $3,4,5$, etc., repeating the installation procedure of the starting area.
6. Lay the second floor tile ahead of the first tile to fit $1 / 2^{\prime \prime}(12.7 \mathrm{~mm})$ from the starting wall. Gently lock in the tongue and groove between the first and second floor tiles.
7. Re-check to be sure both floor tiles are properly lined up with the chalk line. This is to assure a square starting area.
8. Continue laying the balance of the 12 " $\times 12$ " ( 30.48 cm ) floor tiles along the starting wall area. Put each floor tile in place and gently push the floor tiles together to interlock the tongue and groove. Align each floor tile squarely.
9. Do not push the floor tiles too strenuously as this could cause the first and second floor tiles to move. Simply realign them and proceed with the installation. Avoid hammering or forcing the floor tiles together as this may destroy the squareness of the floor tile.
10. After laying the floor tiles across the first $24^{1 / 2} 2^{\prime \prime}(30.48 \mathrm{~cm})$ starting area, trim the last floor tiles as needed to obtain the proper $1 / 2^{\prime \prime}(12.7 \mathrm{~mm})$ expansion space next to the walls. Use a small band or saber saw for final trimming. Firmly secure each floor tile when cutting with a saber saw..
11. Complete the installation
a. When the starting area has been completed, including cutting to the wall, proceed to the second laying area. (See Figures 7-3.)
b. Cut the last floor tiles to allow a $1 / 2^{\prime \prime}(12.7 \mathrm{~mm})$ expansion space from the end wall.
c. Proceed by laying areas $3,4,5$, etc., repeating the installation procedure of the starting area. Trim out each laying area before proceeding to the next area.
d. Maintain the $1 / 22^{\prime \prime}(12.7 \mathrm{~mm})$ expansion space around the perimeter of the room and around all fixed objects.
e. Allow a minimum of 24 hours drying time before moving furniture or walking on the newly laid parquet floor.

## D. Diagonal Layout (See Figure 7-4)



1. Establish a 45-degree working line:
2. From the center point, measure 4 feet down in each direction on lines $X$ and $Y$, which you have already determined by the method described above.
3. From each of these points, measure 4 feet and scribe an arc. The conjunction of these arcs creates points $D$ and $E$.
4. Snap a chalk line between points $D$ and $E$, and the center point. This line represents a 45degree angle.
D. Herringbone Layout

5. Use reference lines throughout the area that is being installed.
6. The multiple of the width should equal the exact length of the piece. If the width of the product varies, this will cause separations at the end of the herringbone pieces.
7. Herringbone parquet can be laid out parallel or at a 45-degree angle to the room. Regardless of direction, Herringbone parquet will require a centerline and two working lines (See Figure 75).
8. Begin by laying out a few alternating slats.
9. Snap lines $A \& B$ through the corners of the alternating slats (See Figure 7-5)
10. Measure the distance from Line A to Line B. Line C should be $1 / 2$ that distance and run parallel to Lines A \& B. The centerline of the room and the center of the pattern is represented by Line $C$.

Figure 7-6


## E. Herringbone Installation

1. To begin installation on working Line $B$ (See Figure 7-6), cut a square piece of plywood the size of the herringbone pattern. For example, if the herringbone pattern is 3 inches by 12 inches, cut a 12 " x 12 " square of plywood.
2. Fasten the piece of plywood at your starting point on Line B, with one corner of the square pointing in the direction of the pattern.
