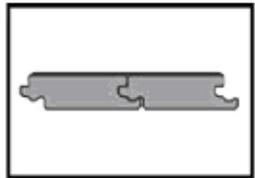


### Tools and Accessories

1. Safety glasses
2. Hammer and tapping block
3. Electric saw
4. Tape measure
5. Spacers
6. Square
7. Level
8. Pencil
9. Dust mask
10. 6-mil polyethylene moisture barrier (if necessary)
11. Moisture proof self-adhesive tape
12. Cork / Foam underlay
13. Moldings (Baseboards/Base Shoe)
14. Gloves

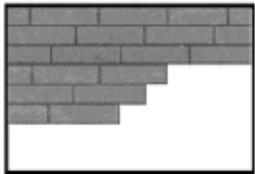


### Preliminary

- Remove wrapping and lay flooring panels out flat at room temperature for 48 hours. Check all panels for defects. Claims cannot be made for panels already laid. Ensure the surface to be covered with panels is clean, smooth, and level. Uneven areas must be leveled.
- Do not install over carpets. Remove carpet along with any residual adhesive material and install on smooth, firm surface.

### Moisture

- Do not install panels in bathrooms, shower rooms, or other rooms exposed to excessive moisture.

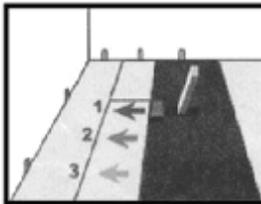


### Concrete Surfaces

- A Patch Test must be performed on concrete subfloors. If there is any evidence of moisture, the concrete must be treated with an appropriate sealer. Do NOT install laminate floor if patch test reveals moisture build up, until concrete is sealed.
- It is recommended that a moisture barrier (Poly) be placed over all concrete sub floors to protect against any possible moisture emissions.

### Moisture barrier

- To protect panel against moisture from surfaces where moisture is likely to occur, a moisture barrier must first be placed over the base surface. Use 6 —mil(0.2mm) polyethylene film. Overlap the edges of the polyethylene by a minimum of 8 inches and seal the junction with moisture proof self—adhesive tape. Use on concrete floors and all floors below grade or other areas where condensation or moisture emissions may occur.



### Radiant Heat Floors

- A moisture barrier should be installed over floors with radiant heat. Before laying the barrier, turn heat down to 15 C (60F) one week before. Keep the temperature below 27 C (80F) stall time.

### Underlayment

- Panels must be installed on top of underlayment. Use a good quality underlayment (Cork or High Density Foam). Underlayment seams should not overlap and should be taped with self adhesive tape. If installing both a moisture barrier and underlayment, place the underlayment on top of the moisture barrier, or use a reliable combination product if preferred.

### Sawing panels

- Wear protective mask, safety glasses and gloves when sawing panels. Always cut laminate panels with the decor side facing down.
- An electric circular saw or miter saw with a finishing blade is recommended.

### Moldings

- Transition moldings can be used for the following purposes.

	<b>Reducer:</b> Use in transition from laminate floor to linoleum or other type of hard surface.
	<b>T-Moulding:</b> Use in doorways, between rooms with adjacent floors, and expansion joints.
	<b>Stair Nosing:</b> Use at the edge of each step in a staircase.
	<b>End-molding:</b> Use for transition from laminate floor to other types of floor coverings.
	<b>Baseboard:</b> Use at base of wall. NOTE: Always fasten baseboard to the wall, never to the floor.

## Measurements

- Be sure to measure all floor surfaces with the required expansion gaps (see Expansion comments below). Panel tongues are 5mm and must be part of the measurement when considering expansion gap. If preferred you can cut off the tongue facing the expansion gap on the first row. It is also important to measure the room for squareness. If walls are not square, it is recommended that you use the longest, straightest wall as your reference line and draw perpendicular lines from it.

TIP: Draw your line at a distance from the wall more than width of the laminate panel so it is visible after your position your first row panels. It is recommended that all installed panels be at least 12 inches (30.5 cm) in length.

TIP: Measure the length of a row and cut the first panel of the row according to the length desired for the last panel of the row.

## Directions of Panels

- For appearance, panels are normally installed so the length direction of the panels is the same as the length direction of the room. This will also reduce the amount of cutting required.

## Preparation

- Measure doors for clearance of installed panels. Cut away doorframes and lambs at bottom if necessary. Remove existing baseboards. Surface should be clean, smooth and level. Subfloor must be level within 1/8" in 8ft. Any unevenness must be sanded down or filled with a cementitious patching compound. Any unevenness may prevent Laminate from locking properly.
- Measure the perimeter of the room to determine room's squareness, and the required width of the last row of panels. Allow for expansion gaps along each wall. Tongue and Groove panels are easily installed without glue. Simply attach the tongue on one panel to the groove side of the other panel and the panels will lock snugly together.
- Start with the first panel flat on the floor, décor surface up, and the groove side away from the wall. Insert the tongue of the second panel partially into the groove of the first, while holding the second panel at about a 20 angle from the floor. Press the second panel down and use a hammering block to lock firmly into place (reverse the procedure to release). Continue in similar fashion for the remaining panels.

TIP: After you have locked a few rows in place, you may find it easier to stand on the installed panels when setting the next row in place.

## Expansion

- Because changes in heat and humidity will cause laminate panels to expand and contract in both length and width, expansion spaces must be allowed on all sides of the installed floor. The use of spacers inserted between the panels and perimeter walls is recommended. The spacers should be removed after the panels are installed and before the molding are attached to the walls.
- For rooms up to 25 feet (7 meters) in width and 40 feet (12.2 meters) in length, allow for expansion between 3/8" and 5/8" (10mm to 16mm) along each wall.

## Expansion Joints

- For floors more than 25 feet (7.6 meters) wide or more than 40 feet (12.2 meters) long, and additional expansion joint must be inserted. Expansion joints are also required in doorway, and between adjoining rooms or areas where adjacent flooring is installed.

## **Pipes and Other Obstacles**

- When installing a laminate panel around a pipe or other obstacles, leave the same expansion gap as you would next to a wall. Measure and precut the affected panel. If there is condensation from the pipe, cut the panel so there is sufficient space to keep panel dry. It is recommended that you treat the exposed edge of the panel to protect it from pipe condensation.  
TIP: Fill the space around a pipe with caulking in order to protect the exposed (cut) edge of the panel.

## **Installation**

### **First Row**

- Measure the row before laying the first panel. Cut the first panel according to the length required for the last panel. (See Measurements above)
- Measure for straightness and cut the panels to make sure the inner edge of the first row of panels is secure before starting second row.  
TIP: Measure the last row for panel width first. Then cut first row panels to the same width as last row. Less than 2 inches is not recommended.
- Position the first row panels along one wall, leaving space for expansion between panels and the wall.
- Lock the ends of the panels together until the first row is finished.

### **Second Row**

- The first panel of the second row should be long enough so the ends of the second row panels reach past the seams of the first row panels.  
TIP: If the remaining section of the last panel of the first row is long enough, use it for the first panel of the second row.
- Line up the first panel of the second row so the outside end is even with the outside end of the first panel of the first row. Lock the long side in place and then tapping the end of the panel to slide it into firmly into place at its end.

### **Middle Rows**

- Lay each of the panels of the remaining middle rows in the same manner. In order to stagger the end seams of each panel, it is recommended that the length of the first panel of each row be varied.

### **Last Row**

- Because the width of the last row may be less than of the previous rows it may be necessary to cut the panels of the last row to the appropriate width (See TIP for first row).

## **Precautions**

- Caution: Wood dust can be hazardous to your health.
- Wood products including fiberboard and engineered wood products produce wood dust when sawn, sanded, or machined. Airborne wood dust can cause health problems and can also be explosive hazard. Power tools should be equipped with dust collectors, and precaution should be taken to prevent ignition. In the United States, the National Institute for Occupational Safety and Health (NIOSH) recommend limiting wood dust exposure to prevent the following health problems: eye and skin irritation allergy, reduced lung function, asthma, and nasal cancer. Use the appropriate NIOSH approved dust mask and safety glasses when sawing, sanding, or machining wood products. In countries outside the USA consult the relevant national occupational health and safety for the appropriate standard in protective equipment.