

COLOR VARIATION:

This flooring is not a natural product and color variations are to be expected. For best visual effect, shuffle planks from several cartons and do not install boards varying greatly in color next to each other.

SUBFLOOR PREPARATION:

Subfloor should be level, dry, and free of imperfections. An uneven subfloor can make the floor feel unstable and cause premature damage.



READ THESE INSTRUCTIONS THOROUGHLY BEFORE BEGINNING INSTALLATION. IN ADDITION TO THESE INSTRUCTIONS, WE RECOMMEND THAT THE INSTALLER FOLLOW ALL INSTALLATION GUIDELINES AS SET FORTH BY THE NATIONAL WOOD FLOORING ASSOCIATION (NWF).

If the following instructions leave any unanswered questions or if additional information is required, please contact manufacturer through your dealers.

FLOORING MATERIAL SHOULD BE INSPECTED PRIOR TO INSTALLATION

Responsibility for the suitability of Manufacturer and accompanying products for each individual installation cannot be assumed by Manufacturer, since Manufacturer has no control over the installer's proper application. **Should an individual plank be doubtful as to appearance or dimension, the installer should not use this piece.**

PRE-INSTALLATION JOBSITE REQUIREMENTS

Manufacturer cannot be held responsible for site conditions. Carefully examine the flooring prior to installation for grade, color, finish and quality. Ensure adequate lighting for proper inspection. **If flooring is not acceptable, contact your dealer immediately and arrange for replacement.** Manufacturer cannot accept responsibility for flooring installed with visible defects. Prior to installation of any flooring, the installer must ensure that the jobsite and subfloor meet the requirements of these instructions. Manufacturer is not responsible for flooring failure resulting from unsatisfactory jobsite and/or subfloor conditions.

Flooring should be one of the last items installed in any new construction or remodel project. All work involving water or moisture should be completed before flooring installation.

Crawl spaces must be a minimum of 18" (46 cm) from the ground to the underside of the joists. A ground cover of 6-20 mil black polyethylene film is essential as a vapor barrier with joints lapped 6" (15 cm) and sealed with moisture resistant tape. The crawlspace should have perimeter venting equal to a minimum of 1.5% of the crawl space square footage. These vents should be properly located to foster cross ventilation. Where necessary, local regulations prevail.

PRE-INSTALLATION SUBFLOOR REQUIREMENTS

All Subfloor must be:

- Dry and will remain dry: Subfloor must remain dry year-round. Moisture content of wood sub floors must not exceed 11%. Concrete must be tested for moisture content using the Anhydrous Calcium Chloride test method, a non-invasive moisture meter, or a pin/probe moisture meter.
- Structurally sound.
- Clean: Thoroughly swept and free of all debris.
- Level: Flat to 3/16" per 10' radius.

Wood subfloors must be dry and well secured. Nail or screw every 6" along joists to avoid squeaking. If not level, sand down high spots and fill low spots with a Portland Based leveling patch.

Concrete subfloors must be fully cured, at least 60 days old, and should have minimum 6-mil polyfilm between concrete and ground. Subfloor should be flat and level within 3/16" per 10' radius. If necessary, grind high spots down and level low spots with a Portland leveling compound.

All concrete should be tested for moisture prior to installation using the Anhydrous Calcium Chloride test method, a non-invasive moisture meter, or a pin/probe meter. When using a Calcium Chloride Test, the result must not exceed 3 lbs per 1000 sqft in a 24 hour-period.

A moisture test must be performed to ensure that the concrete slab is dry. Remember, a concrete slab on/below grade that measures dry today may become moist in the future due to rising ground water. Installing a moisture barrier now may be viewed as an insurance policy against concrete becoming wet in the future. Manufacturer is not responsible for site related moisture issues.

A minimum of a 6-mil polyfilm moisture barrier system is required between concrete and Rigid Core Vinyl Flooring.

RADIANT HEAT

Rigid Core Vinyl Flooring is compatible with a concrete subfloor with an in-floor (embedded) radiant heating system. The heating system must be 1 1/2" below the surface layer of the concrete slab. Prior to flooring installation, the heating system must be operated at normal living temperatures for 14 days. Additionally, for 24 hours before, during, and after installation, the heating unit must be turned off. Radiant heat systems must have failsafe capabilities to ensure surface temperatures do not exceed 80°F (~27 °C).

Use of electric heating mats and other heating units directly underneath rigid core vinyl flooring can void warranty.

INSTALLATION TOOLS

For all installation methods:

- Tape Measure
- Tapping block (trimmed piece of flooring)
- Pencil
- Pry bar or pull bar
- Chalk line
- Wood or plastic spacers (5/16" to 3/8")
- Crosscut power saw
- 3M Blue Tape
- Acceptable subfloor types:
 - CDX Underlayment Grade Plywood (at least 1/2" thick)
 - Underlayment grade particle board
 - OSB (at least 3/4" thick)
 - Concrete Slab

STARTING YOUR INSTALLATION

Make sure your subfloor is tested for moisture first and is properly prepared.

Work from several open boxes of flooring and “dry lay” the floor before permanently laying the floor. This will allow you to select the varying grains & colors and to arrange them in a harmonious pattern. It also allows you the opportunity to select very dark/light pieces for use in hidden areas in order to create a more uniform floor. Remember, it is the installers’ responsibility to determine the expectations of what the finished floor will look like with the end user first and then to pull out pieces that do not meet those expectations.

Begin installation next to an outside wall. This is usually the straightest and best reference for establishing a straight working line. Establish this line by measuring an equal distance from the wall at both ends and snapping a chalk line. The distance you measure from the wall should be the width of a plank plus about 3/8" for expansion space. You may need to scribe cut the first row of planks to match the wall in order to make a straight working line if the wall is not straight.

You may want to position a few rows before starting installation to conflict your layout decision and working line. When laying flooring, stagger end joints from row to row by at least 6". When cutting the last plank in a row to fit, you can rise the cut-off end to begin the next row. If cut-off end is 6" in length or less, discard it and instead cut a new plank at a random length and use it to start the next row. Always begin each row from the same side of the rooms. When near a wall, you can use a pry bar to pry close the side and end joints.

INSTALLATION INSTRUCTIONS

Inspection: Prior to installation, inspect planks in daylight for visible faults/damage. Check if subfloor/site conditions comply with the specifications described in these instructions. If you are not satisfied, do not install and contact your supplier.

Before Laying: Measure the room at right angle to the direction of the planks. For best visual effect, planks in the final row should be at least 2 inches wide (half width of plank minimum). For this purpose, planks in the first row can be cut to smaller size. Shuffle planks in order to obtain a pleasant blend of shades. Lay planks preferably following the direction of the main source of light.

Expansion Gaps: Provide 5/16" to 3/8" (8mm-10mm) expansion gaps to the walls and other fixed objects. Areas greater than 900 sqft (100 m²) or 30 feet (10 m) in either direction, transitions between rooms, and asymmetrical areas require extra expansion gaps utilizing a T-Mold.

INSTALLING THE FIRST ROW:

1. Starting from the LEFT with the tongue facing the wall, carefully place the first board in place. Use spacers along the wall allowing required expansion gap (5/16" to 3/8" or 8mm to 10mm). **(Figure 1)**
2. Align the next piece by overlapping the end of the first board so that the joint is tight when the board lays flat. Some slight adjustment of the board may be necessary to assure a tight fit. Place spacers against wall to restrain movement and maintain expansion gap.
3. Continue in this manner until reaching the final plank in the first row.
4. Cut the final board piece to length, allowing for the required expansion gap.
5. Place spacers against wall to restrain movement and maintain expansion gap.

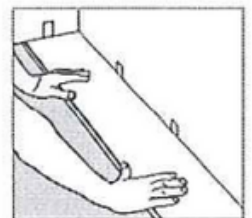


Figure 1

CONTINUING INSTALLATION

1. Begin the second row with the cut piece from the first row. **(Figure 2)** If the cut piece is shorter than 8" (20cm), do not use it. Instead, begin with a new board to the left as necessary to align the edges of the end joint of the first row..
 2. Position the first board in place by angling it up slightly, pushing forward and interlocking the side tongue. **(Figure 3)** Slide the board to the left as necessary to align the edges of the end joint.
 3. Carefully push the board down until the tongue and groove lock together on the side and ends. **(Figure 4)**
 4. A slight tap with a tapping block is necessary to complete the interlock.
 5. Restrain the movement of the board by inserting a spacer in the expansion gap at the end of the board.
 6. Install the remaining boards and rows in the same manner. **(Figures 3 & 4)**
 7. Cut the last board to size allowing for the required expansion gap. Place spacers against wall to restrain movement and maintain expansion gap. If necessary, complete the tight fit by tapping the board into place with a pull bar.
 8. Whenever practical, use cut pieces from previous rows as the starter board to reduce waste.
 9. Maintain 6" spacing between end joints after the first four rows for best appearance.
- Continually check for gaps between boards before moving on to the next.

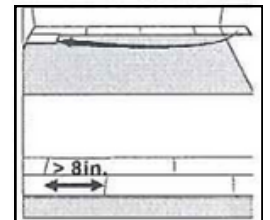


Figure 2

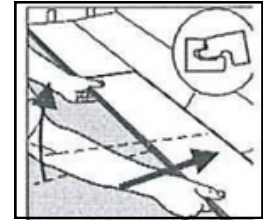


Figure 3

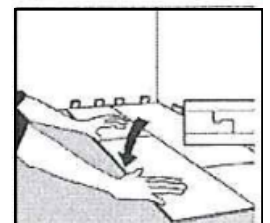


Figure 4

INSTALLING THE FINAL ROW:

1. The last row may need to be cut lengthwise (ripped).
2. Place the last row of planks to be fit on top of the last row of installed planks. Use a piece of plank as a scribe to trace the contour of the wall.
3. Mark where the board will be cut. If the fit of the wall is simple and straight, simply measure for the correct fit and cut.
4. After boards are cut, position planks and tighten the fit using the pull bar.

INSTALLING UNDER A DOOR JAMB:

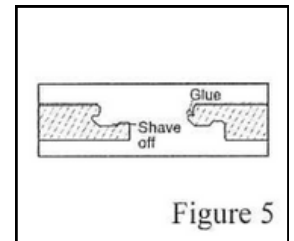
1. Installation under moldings (such as door jambs) may require that the top lip of the groove on the end be reduced in size.

2. Using a small plane or knife plane, carefully shave off the ledge of the groove.

(Figure 5)

3. After the groove ledge has been trimmed, place the board in place and tighten with a pull bar to test for fit. The installer must be sure that the required expansion gap has been maintained and the flooring is not pinched.
4. If fit is not correct, re-trim as necessary.
5. Place a bead of wood glue on the bottom lip of the groove.
6. Insert the tongue into the groove and tighten the fit with a pull bar. Hold the board in place with painters tape (3M Scotch-Blue 2080 Tape) until the glue is dry. Do not use masking tape or duct tape as they may damage the floors finish.

- Flooring should be one of the last items installed in a project. In order to protect the floors while other trades are finishing their work prior to final cleanup and turnover to the owner, use rosin paper and only use 3M Scotch-Blue 2080 Tape to hold the rosin paper to the floor (other blue tapes may damage the finish). Clean the floor thoroughly before laying the rosin paper to ensure that no debris is trapped underneath. DO NOT USE plastic film or other non-breathing coverings as this can cause the floor to become damaged from humidity buildups.



- Remove expansion spacers and reinstall base and/or quarter round moldings to cover the expansion space.
- Dust mop or vacuum your floor to remove any dirt or debris.
- Install any transition pieces that may be needed (reducers, T-moldings, nosing, etc).

CARE & MAINTENANCE

All spills should be cleaned up immediately. Routinely vacuum, sweep and / or dust floors using standard cleaning equipment.

DO NOT use treated dust mops. For heavier duty cleaning, use a damp mop with clean water or a neutral pH-based cleanser diluted in water. Avoid any cleaners that contain bleach, washing liquid or general cleaning products, unless it has been specified on the bottle that it is suitable for rigid core vinyl flooring. Using incorrect cleaners can damage the flooring, causing discoloration and deterioration of the protective wear layer.

DO NOT use harsh cleaners or chemicals on your flooring. Oil and petroleum based products can result in surface staining.

DO NOT use abrasive scrubbing tools or vacuums with a beater bar.

DO NOT use electric brooms with hard plastic bottoms without padding. Avoid steam cleaners at all costs.

Use doormats at entrance ways to protect floor from discoloring and prevent dirt and dust. DO NOT allow pets with unclipped nails to scratch or damage the floor.

Compression forces of heavy objects on the flooring (static loads) should not exceed 200 kgs per square centimeter.

Rolling loads should not exceed 90 kilograms for flooring for commercial use and 60 kilograms for flooring for residential use.

Avoid exposure to direct sunlight for prolonged periods of time. Close blinds or drapes during peak sunlight hours. Fit heavy furniture and appliances with floor protectors will help prevent them leaving a dent behind.

When moving heavy furniture or appliances, lifting them is highly recommended. Attempting to drag heavy items at the minimum, will most likely leave a scuff mark, or worse, tear the floor.

If it's too heavy to lift, please try to add a protective layer over the floor such as plywood, carpet or bed sheets and then drag it over to move it. The protective layer helps distribute the weight and reduce denting or scratching.

Be aware of sharp edges as they can scratch and gouge the floor's surface.

It's a good idea to save a few planks in case of accidental damage. Planks can be replaced or repaired by a flooring professional.