

General Information

It is important that flooring products maintain proper temperature before, during, and after installation in order to minimize dimensional changes. The subfloor, all flooring material, and the adhesive must be conditioned at a constant temperature between 65°F (18°C) and 85°F (29°C) for 48 hours prior to, during, and 48 hours after installation. Thereafter, maintain a room temperature between 55°F (13°C) and 100°F (38°C).

During installation, blend the planks by working out of multiple cartons to avoid laying too many identical lighter or darker panels adjacent to one another. For optimal results, it is best to fit the panels in the direction of the longest wall and parallel to the light source in the room. Avoid installing plank flooring using the "brick" method of staggering. It is best to use a random stagger of at least 8 inches (20 cm).

For additional questions or concerns, please call Mohawk Technical Service at 888.387.9881, option 3.

Tools and Materials

- Mohawk recommended LVT adhesive
- Mohawk recommended trowel
- 100 pound, 3 section roller
- Chalk line
- Carpenter square
- Utility knife
- · Cutting board
- Tape measure
- Moisture meter or Calcium Chloride Test Kit

Area Preparation

- Remove all furniture, appliances, and fixtures from the room.
- · Remove all binding strips or other restrictive molding from doorways, walls, etc.
- Undercut wood door casings where possible so that flooring can slide underneath.

Subfloor Preparation

Asbestos Warning

WARNING! DO NOT MECHANICALLY CHIP OR PULVERIZE EXISTING RESILIENT FLOORING, BACKING, LINING FELT, ASPHALTIC "CUTBACK" ADHESIVES OR OTHER ADHESIVES. Previously installed resilient floor covering products and the asphaltic or cutback adhesives used to install them may contain either asbestos fibers and/or crystalline silica. Avoid creating dust. Inhalation of asbestos or crystalline dust is a cancer and respiratory tract hazard. Smoking by individuals exposed to asbestos fibers greatly increases the risk of serious bodily harm. Unless positively certain that the previously installed product is a non-asbestos containing material, you must presume it contains asbestos. Regulations may require that the material be tested to determine asbestos content and may govern the removal and disposal of material. See current edition of the Resilient Floor Covering Institute (RFCI) publication "Recommended Work Practices for Removal of Resilient Floor Coverings" for detailed information and instructions on removing all resilient covering structures.



All subfloor surfaces must be flat, clean, dry, smooth, and free of movement. All surface imperfections should be filled and sanded with a portland cement-based latex patching compound.

Completely remove all residual adhesives on previously covered concrete floors or cover them with a cementitious underlayment intended for this purpose. Never use solvent-based adhesive removers.

Substrate must be flat, within 3/16" in 10' radius and/or 1/8" in 6' radius. Sand high areas or joints. Fill low areas with a high compressive strength portland-based compound.

Substrate must be dry. Select the appropriate moisture indicator test specifically designed for use with wood or concrete subfloors. Test and record moisture content results. DO NOT INSTALL FLOORING IF MOISTURE TEST RESULTS EXCEED RECOMMENDED LIMITS.

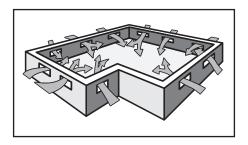
Concrete Subfloors

- 1. Concrete subfloors must be dry, smooth, and free from dust, solvent, paint, wax, grease, oil, asphalt sealing compounds or other materials. The surface must be hard, dense and free from powder or flaking.
- 2. New concrete slabs must be thoroughly dry (at least six weeks) and completely cured. Curing agents, surface hardeners and other additives may cause adhesive bonding failure. These should be removed by sanding or grinding.
- 3. All concrete slabs must be checked for moisture before installing material. Moisture emissions from subfloor cannot exceed 3 lbs. per 1,000 sq. ft. per 24 hours as measured with the calcium chloride test or in excess of 75% in situ relative humidity. Responsibility for determining if the concrete is dry enough for installation of the flooring lies with the owner and installer.
- 4. Surface alkalinity of concrete substrate should be tested for the presence of alkali salt build up. Excessive alkali can cause adhesive and vinyl failure. A simple pH paper can determine the presence of excessive alkali salt. Pour a small amount of distilled water on the slab and allow it to stand for a minimum of one minute. Place the pH paper strip into the distilled water. The acceptable range should be 5 to 9. Corrective measures must be taken if the pH exceeds these guidelines.

Wood Subfloors

NOTE: As with many other interior finish products, modification of existing structural components may be required for a successful installation.

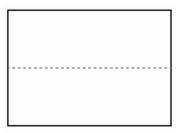
- 1. Nail or screw any areas that are loose or squeak. Wood panels should exhibit an adequate fastening pattern, glued, screwed or nailed as the system requires, typically 6" along bearing edges and 12" along intermediate supports. Flatten edge swell as necessary. Replace any water-damaged, swollen or delaminated subflooring or underlayment.
- 2. Wood subfloor panels should be a minimum of 1" or thicker and free of vertical deflection. All fasteners must be flush with the subfloor panels.
- 3. Basements and crawl spaces must be dry. Use of a 6 mil black polyethylene membrane is required to cover 100% of the crawl space earth. Crawl space clearance from ground to underside of joist should be no less than 18", and perimeter vent spacing should be equal to 1.5% of the total square footage of the crawl space area to provide cross ventilation.





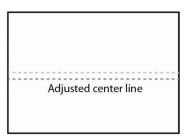
Floor Layout

First determine the direction to install the planks. As a general rule, planks are normally installed running in the long direction of the main room. Place a mark in the center of the floor at each end of the room. Snap a chalk line between the marks.



Original center line

To avoid small narrow planks along the walls, divide the distance from the center line to the wall by the plank width (6"). If the remainder is less than 3", adjust the center line by half the width of a plank in either direction. This will provide a balanced layout with larger cut pieces at the wall.



Center line after adjustment

Finished Flooring Installation

Apply the adhesive using the recommended notched trowel, spread the adhesive over half of the floor up to the center line. For porous surfaces, install the planks into adhesive with the semi-wet method, where the adhesive is tacky to the touch. In normal situations, this will require 15-20 minutes. For non-porous surfaces, install the planks as it becomes dry to the touch with little or no transfer to finger when touched. In normal situations, this will require 30-60 minutes. Refer to the Installation Instructions provided with the adhesive for more detailed instructions.

Start installing the planks along the center line. Complete each row, including cut pieces at the wall, before proceeding to the next row. Offset end joints by at least 6" and position planks in a random fashion for the best appearance. Position each plank, lightly against the previous one, by pressing it firmly into place without sliding it. Remember to avoid small cuts of less than 6" at the ends of each row and place cut ends toward the wall.

If it is necessary to adjust or remove a plank, use a heat gun to warm the plank first. Complete the opposite side of the room in the same fashion as the previous side.



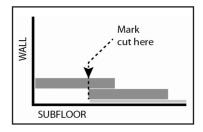
Cutting Planks to Fit

The last row of planks will need to be cut to fit to walls and other vertical surfaces.

Straight cuts: Place a loose plank directly over the top of the last full installed plank, making sure to line up all edges. Using a plank to measure the distance from the wall to the last installed plank, position the edge against the wall and mark the loose plank with a pencil where it meets the installed plank at the opposite edge from the wall.

Next, place the marked plank on a cutting board. Using a carpenter square as a guide, score the pencil line carefully with a sharp knife, then snap or cut the plank along the score mark.

CAUTION: Keep fingers away from the knife blade to avoid injury. Install plank with the cut edge toward the wall.



Irregular cuts: Scribe plank to fit irregular shapes such as door trims, pipes, etc, and cut with a utility knife.

Immediately After Installation

Roll the entire floor with a 100 lb 3 section roller. Restrict to light traffic for the first 24 hours. Replace the base moldings and return appliances and furniture to the room by rolling or sliding them over strips of hardboard. Seal all areas that may be exposed to surface spills (i.e. tubs, toilets, and showers) with silicone caulking.

Plank Repairs

- 1. Warm the plank with a heat gun.
- 2. Using a sharp utility knife, cut through a corner of the damaged plank, taking care not to cut into the subfloor below.
- 3. Lift the end of the plank and continue heating.
- 4. As sufficient heat is provided, the plank will release from the adhesive.
- 5. Lift out the entire plank and warm the exposed adhesive.
- 6. Install the new plank.
- 7. Set the new plank firmly into place with a hand roller.



Tips and Warnings

- 1. Sweep regularly with a soft bristle broom.
- 2. Use felt protectors under heavy pieces of furniture and chairs.
- 3. Use protective mats at all exterior entrances. Do not use mats or area rug cushions constructed of rubber or PVC. Instead use urethane backed products.
- 4. Shoes in need of repair or spiked heels can severely damage floor.
- 5. Replace hard plastic or metal casters or wheels on furniture with soft rubber casters or use a protective mat under the casters.
- 6. UV rays from the sun can alter flooring color.
- 7. Keep animal nails trimmed.
- 8. Protect flooring by using a dolly for moving furniture or appliances. Never slide or roll heavy furniture or appliances across the floor.

Exterior walk-off mats should be routinely maintained to avoid becoming a soil source.