Installation Recommendations for Commercial Glue Down LVT

GENERAL INFORMATION

The following installation recommendations are intended for professional installers.

1. Commercial glue down LVT should be stored and installed in climate-controlled indoor locations between 65°F - 85°F.
2. The rooms into which the flooring will be installed must be maintained between 65°F - 85°F (18.3°C– 29.4°C) with a relative humidity between 40% to 60% for at least 48 hours prior to installation, as well as during and any time after the installation. The flooring must also be acclimated to these same conditions for a minimum 48 hours prior to installation, ideally in the area which the flooring is to be installed.
3. Install the product only after the jobsite has been cleaned and cleared of other trade apparatus that may damage a finished tile installation.
4. Always check the cartons to assure the pattern number is correct. To minimize variation, mix and install tiles and planks from several different cartons.
5. The recommended installation adhesive is Next1200™. Regardless of the adhesive used, semi-wet set application is recommended. Open time and working time will vary depending upon temperature and humidity. Spread rate (i.e. trowel size) must be appropriate to the porosity of the subfloor. If adhesive other than Next1200™ is used, adhesive-related floor performance issues (including by not limited to peaking, gapping, adhesion, bubbling, discoloration, etc.) are excluded from our warranty coverage.
6. The flooring should be protected from prolonged direct exposure to sunlight. Exposure to direct sunlight creates excessive heat directly on the finished flooring and subfloor which may result in movement. During peak sunlight exposure, the use of drapes or other window treatments is strongly recommended.
7. Do not use foam padding or any free-floating underlayment under the LVT.
8. It is the duty of the person installing the floor to inspect all flooring before installation. If during inspection the installer or buyer feels the floor is the wrong color, improperly manufactured, is off-grade, or is the wrong gloss level, he/she should NOT install the flooring. Please immediately contact the retailer from which the flooring was purchased. No claims will be accepted for flooring which is visibly wrong if such flooring is installed. Installed flooring is deemed to be visibly acceptable.
9. Commercial glue down LVT is not recommended for: outdoor installations, showers, counter tops, areas without climate control.

SUBFLOOR GENERAL

Subfloors must be clean, smooth, flat, solid (no movement), structurally sound, dry, and free from all existing adhesive residues and/or any other foreign material that might prevent adhesive bond. Residual adhesives should be mechanically removed*. Do not use chemical adhesive removers or solvents. Do not install planks over floors that are sloped for drainage, or over expansion joints or other moving joints in the substrate. Any uneven areas greater than 3/16” (4.76mm) in a 10-foot (3.05m) radius [1/8” (3.17mm) in a 6-foot (1.83m) radius] must be leveled with a non-shrinking, water-resistant Portland cement patching compound. An uneven subfloor can contribute to multiple problems, including assembly of planks and post installation gapping of planks, and roughness or unevenness of the subfloor will telegraph through the new floor covering resulting in an unsightly surface and excessive wear on high spots. Proper subfloor preparation and suitable underlayment installation are essential for a trouble-free job.

UNDERFLOOR HEATING

Underfloor heating is possible with warm water heating systems. The temperature of the floor surface must not exceed 85°F (29.4°C) at any point in time. For newly installed systems the underfloor heating system should be turned on at its maximum temperature for several days to eliminate residual moisture. When installing over radiant heated subfloors, turn the radiant heat off for 24 hours before and during installation, and for at least 48 hours after completion of the installation, Failure to turn the heat off may result in shortened working time of the adhesive. When turning radiant heat back on, gradually increase the temperature in increments of 5°F (2.8°C) every 24 hours, but do not exceed 85°F (29.4°C).

WOOD SUBFLOORS

1. GENERAL

All wood floors must be suspended at least 18" above the ground. Adequate cross-ventilation must be provided, and the ground surface of a crawl space must be covered with a suitable vapor barrier. Wood subfloors directly on concrete or installed over sleeper construction are not satisfactory. Wood subfloors must be covered with a minimum 1/4" or heavier underlayment rated panel to assure successful finished flooring installation.

2. UNDERLAYMENT

Many times, wood panel subfloors are damaged during the construction process or are not of underlayment grade. These panels must be covered with an approved underlayment. Underlayment panels are intended to provide a smooth surface on which to adhere the finished floor covering. It must be understood that underlayment panels cannot correct structural deficiencies. Particleboard, chipboard, construction-grade plywood, any hardboard and flakeboard are not recommended as underlayment. All have inadequate uniformity, poor dimensional stability and variable surface porosity. The manufacturer will not accept responsibility for adhered installation over these subfloors. In all cases, the underlayment manufacturer or underlayment installer is responsible for all underlayment warranties.

3. UNDERLAYMENT REQUIREMENTS

Panels intended to be used as underlayment should be specifically designed for this purpose. These panels should have a minimum thickness of 1/4". Any panels selected as an underlayment must meet the following criteria:

- Be dimensionally stable
- Have a smooth, fully sanded face so the graining or texturing will not show through
- Be resistant to both static and impact indentation
- Be free of any surface components that may cause staining such as plastic fillers, marking inks, sealers, etc.
- Be of uniform density, porosity, and thickness
- Have a written warranty for suitability and performance from the panel manufacturer or have a history of proven performance

CAUTION:

Some types of nails, such as common steel nails, cement coated or some resin- or rosin-coated nails, may cause a discoloration of the vinyl floor covering. Use only non-staining fasteners with underlayment panels. The procedure of gluing and screwing underlayment panels is not recommended. Solvent based construction adhesives are known to stain vinyl floor coverings. All responsibility for discoloration problems caused by fastener staining or the use of construction adhesive rests with the underlayment installer.

CONCRETE SUBFLOORS

- Concrete subfloors must be dry, smooth, and free from dust, solvent, paint, wax, grease, oil, asphalt sealing compounds and any other foreign material that might prevent adhesive bond. The surface must be hard and dense, and free from powder or flaking.
- 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.
- All concrete slabs must be checked for moisture before installing material. The final responsibility for determining if the concrete is dry enough for installation of the flooring lies with the floor covering installer. Commercial glue down LVT must never be installed where excessive moisture emissions may exist. Moisture emission from subfloor cannot exceed 3 lbs. per 1,000 sq. ft. per 24 hours as measured with the calcium chloride test. Alternatively, relative humidity of the slab can be tested according to ASTM F2170. A result of up to 85% is acceptable per ASTM F2170. The manufacturer will not assume responsibility for floorcovering failure due to hydrostatic pressure or moisture vapor emission.
- Holes, grooves, expansion joints and other depressions must be filled and troweled smooth and feathered even with the surrounding surface.

***Recommended Work Practices for Removal of Resilient Floor Coverings.**

***WARNING:** Do not sand, dry scrape, beadblast or mechanically chip or pulverize existing resilient flooring, backing, lining felt, asphaltic "cutback" adhesive or other adhesive. These products may contain asbestos fibers and/or crystalline silica. Avoid creating dust. Inhalation of such 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 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. RFCI's Recommended Work Practices for Removal of Resilient Floor Coverings are a defined set of instructions addressed to the task of removing all resilient floor covering structures.

INSTALLATION

A. Tile Layout

As with all tile formats, Commercial glue down LVT flooring should be "balanced" in the work area. Tiles may be laid squarely or laid out diagonally in the work area. In either case, the room must be accurately measured to square off the area and to determine the center point. Accurately measure the room to determine the center line, adjust this established line to accommodate a balanced layout and then transpose this line to the determined layout width away from the starting wall (approximately 2' to 3'). Apply the adhesive in this area and begin installing planks. Careful and precise measurements must be taken during tile layout. Look at the arrows on the back of the tile and randomize the direction of installation. Work from at least two cartons at a time and randomize the location of similar tiles.

B. Adhesive Application

Follow adhesive manufacturer's instructions.

C. Tile Installation

After allowing sufficient open time, begin laying the tile at the intersection of the working lines. Be certain this tile is installed squarely on the lines. After the first tile is in place, begin laying tiles outward along both guidelines. Press tiles firmly against adjoining tiles and press into the adhesive. Begin stair-stepping the tiles into the field area. Maintain the squareness of the installation by keeping tiles along guidelines. Ensure that the tiles are firmly bonded to the subfloor by rolling the entire installation with a minimum of 100-pound three-section floor roller.

D. Finishing the Job

Commercial glue down LVT must be rolled with a minimum 100-pound, three-section floor roller immediately after installation. Roll the flooring in both directions to firmly seat the tile into the adhesive. Cover all exposed edges. Use wood molding or vinyl cove base along all walls, cabinet toe kicks, etc. Use transition strips in doorways or where new flooring joins another floor covering. Caulk along tubs, toilet bowls, etc. Do not wash the floor for 48 hours after installation. After 48 hours, damp mop to remove residual surface dirt.

V. REPAIRING COMMERCIAL GLUE DOWN LVT

Although the wear surface of commercial glue down LVT is durable, it is not bulletproof. Should an accident occur that damages the surface of the product, a simple repair procedure exists. The key to this process is having ample material available to replace the damaged area(s). This should be considered when placing the original order. Extra tiles and planks should be wrapped in their packaging and stored in an interior, climate-controlled location.

To remove a tile or plank, gently heat with a hot air blower to allow the material to become more flexible. Insert a thin 2" wide putty knife in the seam and gently lift up. Be careful not to damage the surrounding flooring. Remove the damaged tile or plank from the floor. When removing a tile, pay attention to the orientation of the embossed arrow on the back of the damaged piece so that the new tile can be installed in the same direction. Inspect the subfloor for lumps of residual adhesive, remove and smooth out as necessary. Using a 1/32" notched trowel, apply a thick coating of adhesive to the back of the replacement piece. You must consider the thickness of the residual adhesive layer when determining the appropriate adhesive application to the replacement piece. Too much adhesive will cause the replacement flooring to be higher than the surrounding tile or plank. Provide sufficient open time and then position the tile or plank into the repair area. Roll evenly with a hand roller and, if necessary, weight the tile or plank for several hours until the adhesive sets. If the tile was grouted, the grout must be removed and replaced during tile replacement.

CAUTIONS AND MISCELLANEOUS

A. Furniture should be moved onto the newly installed floor using an appliance hand truck over hardboard runways.

B. Do not place heavy items on newly installed floor covering for at least 24 hours after completion of the installation. Heavy furniture should be equipped with suitable non-staining, wide-bearing caster. Non-staining felt protectors are recommended for table and chair legs to help prevent scratching.

C. Floor covering subjected to excessive heat and light is subject to thermal degradation. Use appropriate precautions to minimize potential effects on the floor covering.

D. Oil or petroleum-based products can result in surface staining. Do not track asphalt-driveway sealer or automobile-oil drips onto the vinyl floor covering.

E. Use non-staining mats. Rubber may discolor the product.