

HVT and LVT

Installation Guide



FasolPlus® / Terraline® / Kareina Asento®

Linotesta® AdVantage / Strataline® AdVantage / Dynamic Stone AdVantage

Please refer to the TOLI-North America website www.toli-na.com for the most current guidance about product application charts, material handling, subfloor preparation/testing, product installation and maintenance recommendations. Failure to follow these instructions may result in installation related problems.

- Do not install unless you have the correct product, color and quantity of materials. Check for visible damage before installation. Immediately notify TOLI of any discrepancies BEFORE installation. Installation of materials implies acceptance. No credit will be provided for installing the incorrect materials or materials with visible issues.
- Handle materials with care to prevent damage. DO NOT DOUBLE STACK PALLETS.
- Store all flooring products and accessories in a dry interior area maintained between 50°F-85°F (10°C-29°C). Avoid temperature extremes.
- Store cartons of tile or plank flooring flat and squarely on top of one another. Do not lie on edge.
- Acclimate flooring, adhesive and substrate in the area to be installed to a stable condition between 65°F-85°F (18°C-29°C) and 20%-65% RH for a minimum of 48 hours before, during and after installation. Afterwards, maintain a minimum temperature of 50°F (10°C) for the life of the floor.
- Refer to Material Handling & Subfloor Preparation Guide for additional product handling and subfloor preparation guidance.

Dye Lots

- The installation needs to be planned to control dye lots. The installation of multiple dye lots together implies acceptance of material.
- Dye lots (or “lots”) are printed on each product label. The first 4 digits of the production code represent the dye lot.
- Check the dye lots on each unit as there may be more than one dye lot on a pallet.
- When possible, isolate individual dye lots in each room/area.
- If more than one dye lot is used in the same room, shuffle individual planks from different dye lots to randomize.
- When using multiple dye lots, dry lay BEFORE installing for acceptance.
- Slight color and gloss variations may be present within a dye lot or between dye lots and are not considered manufacturing defects.

Adhesive Selection

- Make sure that you have the recommended adhesive and trowel size for installation conditions. Use only recommended adhesives as others may not provide satisfactory performance. For most installations, TOLI recommends using TOLI 5001 acrylic adhesive. However, the ultimate adhesive selection is the responsibility of the installer based on the specific environment and use. See our Adhesive Reference Chart at the end of this document or call TOLI-NA Technical Support for assistance at (910) 999-TOLI (8654).

Installing with TOLI 5001 Adhesive

- **TOLI 5001** High Performance Flooring adhesive can be used on most applications.
- **CAUTION:** For areas subject to heavy topical moisture or temperature extremes, use TOLI 951 Epoxy.
- Using proper trowel based on product and properly prepared subfloor, spread adhesive evenly. Do not allow any puddles or lumps of adhesive.
- When using TOLI 5001, be sure that trowel notches are as recommended and kept clean. TOLI does not recommend re-notching a trowel by hand. Replace the blade or entire trowel as necessary to insure proper coverage.
- For porous or rough substrates, the sheet goods may be placed into adhesive after 10-20 minutes of open time (wet set).
- For smooth and non-porous substrates, install tile into adhesive as it becomes dry to the touch, normally 30-45 minutes based on humidity and surface porosity.
- Work off the flooring to prevent adhesive from oozing, shifting of material, or indentation from adhesive displacement. If you must work on top of the material, use large kneeling boards or 1/2" blue foam insulation.
- Roll the flooring with a 100 lb. 3-section roller after setting flooring into adhesive.
- Allow immediate foot traffic for installations over adhesive that is dry to the touch on non-porous substrate.
- Wait a minimum of 3 hours for foot traffic for installations over adhesive that is wet to the touch on porous substrates.
- For all applications, wait 48 hours for rolling traffic or point loads.

Instructions for the use of TOLI 295 2-Part Polyurethane Adhesive

TOLI 295 solvent-free, two-component polyurethane flooring adhesive designed for use with recommended Toli sheet and tile flooring products. Adhesive has been formulated to produce a superior, flexible bond required for use in high traffic applications.

Direction for Use

Requirements for job site conditions, substrate preparation and concrete testing are contained in the Installation Guide for each TOLI North America product. Installation Guides can be downloaded at www.toli-na.com.

1. Pour the entire contents of the Part B container into the Part A container. Using a low-speed mixer, thoroughly mix the contents until a smooth, even colored consistency is achieved. Mixing by hand is not recommended.
2. Immediately pour the entire contents onto the substrate. Do not allow mixed adhesive to set in container. Mixed adhesive will cure faster when allowed to remain in mixing container. Adhesive shall be mixed and applied at normal room temperature. Excessive heat will cause adhesive to cure faster.
3. Spread adhesive evenly using a 1/32" x 1/16" x 1/32" U-Notch trowel. Hold trowel at a 60° angle. Replace trowels with worn notches. Do not re-notching a trowel by hand. Replace the blade or entire trowel as necessary to insure proper coverage.
4. Adhesive Set up and Working Time: Set up time is 10 minutes after mixing. Place the flooring into the wet adhesive after 10 minutes. Ensure 100% adhesive transfer to the flooring material. Working/open time is 40-60 minutes. (higher room temperatures will result in shorter working times). Do not exceed recommended set up / working time.
5. To ensure transfer of adhesive to back of flooring, flooring material must be positioned while adhesive is wet. Allowing a 10-minute open time before positioning flooring will help reduce tile or sheet shifting and adhesive bleed through at tile joints. Kneeling boards are required working on tile. When installing sheet flooring, the use of a push board will help remove excess air under the flooring.
6. Immediately roll flooring in both directions with a 100 lb. three-section floor roller in both directions. Hand roll areas along edges and others where 100lb roller cannot reach.

Post Installation

1. Remove wet adhesive immediately with a clean cloth dampened with rubbing alcohol. Do not apply solvents directly to flooring. Cured adhesive is very difficult to remove.
2. Prevent all traffic for a minimum of 8 hours, 24 hours on stairs. Restrict heavy traffic and rolling loads for 48 hours after installation. Do not wash or begin maintenance procedures on the floor for a minimum of 5 days after installation to allow the adhesive to properly cure.

Installing with CBC 951 2-Part Adhesive

- **TOLI 951** epoxy adhesive is recommended for all areas where consistent topical moisture may be encountered. TOLI 951 may also provide stronger adhesion in areas exposed to concentrated and pivoting rolling loads.
- Do not spread more adhesive than can be covered within 40 minutes.
- Note: The subfloor temperature directly affects setting time. The warmer the surface temperature, the faster the adhesive will set. The cooler the temperature, the slower the adhesive will set.
- Use the 2-part adhesive following the label instructions. Pay careful attention when mixing to ensure the adhesive is fully mixed with no streaks remaining. Caution: Mixing adhesives on the substrate will cause mixing failure, excessive adhesive application, and trapped air bubbles. Do not attempt to mix portions of the adhesive. Mix all of part A and all of part B as directed.
- Immediately apply the 2-part adhesive to the substrate and spread using a 1/32" x 1/16" x 1/32" U-notched trowel or as recommended by the adhesive manufacturer with properly notched trowel.
- Adhesive Set up and Working Time:
 - Set up Time: No waiting time required – place the flooring immediately into the wet adhesive bed to ensure 100% adhesive transfer to the flooring material.
 - Working/open time: 40-60 minutes, depending on slab temperature. High temperatures will decrease the working time.
- Work off the flooring to prevent adhesive oozing, shifting material, or indentation from adhesive displacement. If you must work on top of the material, use large kneeling boards. Styrofoam insulation boards 1 inch or thicker can be used for kneeling or walking boards.
- Indentations made in wet adhesive are permanent and cannot be rolled out!
- Roll the sheet flooring three times with a 3-section, 100 lb. roller. The first roll should occur immediately after the material has been laid into the adhesive. Roll first across the width of the room.
- Then roll lengthwise. Roll the material two (2) more times in both directions every 30 minutes.
- Hand roll areas that cannot be rolled with the larger roller.
- Note: Do not exceed the adhesive's working time. Adhesive will 'skim over' and not transfer when working time is exceeded. **Do not install flooring or re-apply new adhesive over hardened adhesive. Mechanically remove the hardened adhesive from the substrate and start again.**

Installing HVT Tile Products

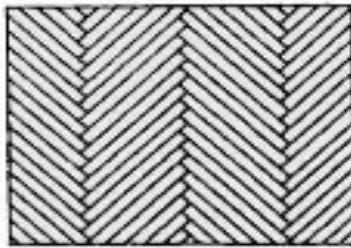
- Laying out the job is done the same way as standard 12" x 12" tiles.
- Where border areas are plainly visible, care should be taken to center the pattern so border tiles are the same size on each side. In all cases, avoid cutting border tiles less than 6 inches.
- Proper planning is important, so 'dry lay' (without adhesive) some tiles to be sure of the layout.
- Tiles can either be laid all in one direction, or quarter turned.
- To assist the installer, most tiles have arrows on the back. The arrows show machine direction during manufacturing.
- The End User or Specifier should determine tile direction and layout.
- Tile products can be cut using a tile cutter, a linoleum knife, or a utility knife.
- Keep knife blades sharp for easy, accurate, safe cuts.
- Fit tiles using the same methods as other floor tiles (overlap, pattern scribe, wall scribe, freehand).
- Avoid heating tiles when cutting. If it is necessary to heat tiles, heat very slightly from the back.

Installing Plank Products

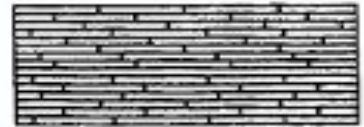
- TOLI plank flooring can be installed in a random staggered pattern, diagonally, parquet, herringbone, or others (see diagram below).



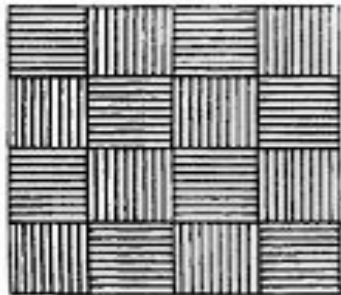
STAGGERED



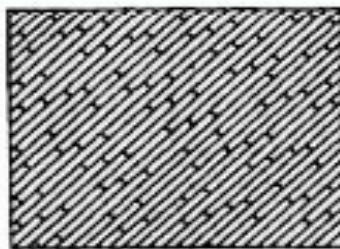
HERRINGBONE



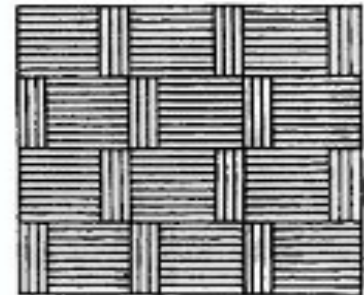
RANDOM STAGGERED



CHECKER BOARD



DIAGONAL



MOSAIC

- For straight lay planks, start at the longest straightest wall. Measure across room and make sure last plank will be at least 1/2 plank wide or trim first plank.
- If installing planks in a pattern, planks should be installed from the center of the room. Find the center and establish working lines, as you would for any tile installation. When starting installation along the longest wall, move working line 2-3 feet away from the wall.
- Lay a section of plank without adhesive to establish the pattern (see pattern reference). Care should be taken to avoid cutting planks less than 9 inches long, or less than half the width of the plank. Move your working lines to achieve this. Dry laying a section of flooring assists this process.
- Spread the adhesive and allow the proper set up time. Lay the first plank from the starting point, following the working line. Lay the first 2 rows across the room. Place the planks aligned to the reference line butted together tightly. Careful placement of the first row of planks is very important, since the rest of the planks follow the first row. Set all full planks first, and then fit the border planks in that row.
- To fit border planks, place a full plank on top of the last full plank installed. This is the plank to be cut. Then place another plank flush with the wall, overlapping the plank to be cut. Mark a line on the plank to be cut, cut the plank following this line, and install the plank net to the wall. Be careful not to cut planks too tight to the wall. This will cause the plank to buckle. Crosscuts on LVT Planks can be done using a tile cutter, or a utility knife with a small carpenter's square or straightedge. Lengthwise cuts work best with a straight edge. Keep a sharp blade in your knife for easy, accurate, safe cuts.
- Always butt factory edge to factory edge. Be sure not to place cut edges against factory or cut edges.

Custom Designs

- HVT tiles can be specified in patterns including those with custom patterns or logos.
- HVT can be cut into custom designs two ways: by fabricators using water jet and ultrasonic knife cutting or by the installer at the job site.
- Custom cutting done by the installer on the job site should be cut from the top of the tile using a very sharp knife.

When the installation is complete, follow the flooring product's appropriate Maintenance Guide.