



**2006**

***INSTALLATION GUIDE***

***for***

***TOLI FLOORING PRODUCTS***

This replaces all TOLI Installation Guides published prior to 2006. As changes occur in our installation systems, TOLI International publishes a new edition each year. To ensure the most up-to-date information, please visit our website at

[www.toli.com](http://www.toli.com)

*Should you encounter a situation that is not covered in this  
manual, we encourage you to call*

Toli Technical Support  
Toll-Free

**1-888 TRY TOLI**  
**(1-888-879-8654)**

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## 1. BEFORE STARTING THE JOB

### 1.1. Material Handling and Storage

- Store cartons of tile or plank products flat and squarely on top of one another. Do not lie on edge.
- Store resilient sheet flooring rolls standing up, with capped end down. This prevents distortion and compression.
- Store all flooring products, adhesives, seam sealer and maintenance products in a dry, temperature-controlled interior area at 65 – 80°F. Temperature extremes should be avoided.
- Acclimate all materials to job site conditions. Deliver the material to the job site 48 hours prior to installation. See the 48-hour Rule below in section 1.2.6.

### 1.2. Job Site Conditions

- 1.2.1.** Visit the jobsite to confirm conditions & floor measurements. Always check the flooring material to ensure that they are the correct TOLI product, color, and quantity.
- 1.2.2.** Allow other finishing trades, especially the overhead trades, to complete their work before beginning the installation. During spackling and/or painting, cover the substrate to prevent contamination or staining. Such stains can cause adhesion failures or product discoloration.
- 1.2.3.** A well-lighted interior is needed so the installer can properly prepare the substrate and install the floor.
- 1.2.4.** Close working spaces to traffic for 12 hours before installation and at least 12 hours after installation. This will minimize the chance of damaging the new floor.
- 1.2.5.** *The building's heating and air conditioning system needs to be in full operation for at least one week prior to the floor installation.* Portable heaters are not acceptable. Kerosene heaters should never be used where floor-covering products will be installed. They heat the air, not the substrate.
- 1.2.6.** *48-hour Rule* - For the 48-hour period before installation, during installation, and for a 48-hour period after installation, the temperature of the flooring material, the adhesive, the space to receive flooring and the sub floor must be between 65 and 80°F. Thereafter, the minimum temperature needs to be 55°F. Be sure the adhesive and the flooring acclimate to the job site conditions by delivering all materials to the job at least two days prior to installation.
- 1.2.7.** *All substrates to receive resilient flooring shall be permanently dry, clean, smooth, and structurally sound. They shall be free of dust, solvent, paint, wax, oil, grease, residual adhesive, adhesive removers, curing, sealing, hardening, or parting compounds, alkaline salts, excessive carbonation or latience, mold, mildew, and other foreign materials that might prevent adhesive bond<sup>d</sup>*

## 2. SUBSTRATE PREPARATION

**2.1. Wood substrates** - Wood floors should be double layer construction, *minimum one-inch total thickness*, with at least 18 inches of well-ventilated air space beneath. Insulate all crawl spaces and protect with a vapor retarder. Do not install over 'sleeper' floors or plywood floors that have been installed directly over a concrete slab. The top layer of a wood substrate must be completely free of knots or other voids in its surface. Unacceptable surfaces include, but are not limited to, *Luan, plywood with knots, underlayments made of pine or other soft woods, particle board, Masonite™ or other hardboard underlayment, hardwood flooring, textured or cushioned flooring, or other uneven or unstable substrates.* Cover unacceptable surfaces using a 1/4-inch or thicker panel underlayment such as MULTI-PLY™ or TECHPLY™ that is designed for the use intended. Follow the panel underlayment manufacturer's written instructions for spacing, nailing, and seam treatment for underlayment panels.

**2.2. Concrete Substrates** - *Concrete Slab Construction: New and existing concrete substrates must meet the requirements of the latest edition of ASTM F 710 'Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring'.*

The appendix of F 710 contains guidelines regarding concrete slab construction, and specific information regarding lightweight concrete, water-cement ratio, curing procedures, alkalinity, moisture retarders, flatness and levelness, and additional reference documents.

**Note:** Regardless of the type of concrete or cement-like material that is used as a substrate, in the event of any underlayment failure, the responsibility for warranty guarantees rests with the concrete or cement-like manufacturer and not with the manufacturer of the resilient flooring.

**2.2.1.** To ensure a successful TOLI installation, concrete substrates must be structurally sound to receive resilient flooring material and must meet these minimum requirements:

- A minimum compressive strength of 3500 psi
- A concrete mix *water/cement RATIO* OF less than 0.5
- A minimum density of 115 lb. /cubic foot
- A maximum slump of 4 inches

**2.2.2.** *Concrete floors to receive resilient flooring shall be free of sealers, coatings, finishes, dirt, curing compounds and other substances which may affect the rate of moisture dissipation from the concrete or the adhesion of resilient flooring to the concrete. Non-chemical methods for removal, such as abrasive cleaning or bead blasting may be used on existing slabs and shall take place 48 hours before testing<sup>1</sup>*

**2.2.3.** *Lightweight concrete* (less than 115 lb/ cubic foot) may not be a suitable substrate for TOLI floors. Lightweight concrete suffers from fundamental problems that include, but are not limited to:

- Low compressive strength
- Surface porosity and breakdown
- High moisture content
- Excessively long drying times
- Surface indentation due to its low compressive strength

ASTM F 710 clearly states: *Lightweight concrete, less than 115 lb./cubic foot, may have such low strength that it is unsuitable for covering with resilient flooring unless 1 inch of standard weight concrete (generally 140 lb./cubic foot) is used as a topping. In addition, floors containing lightweight aggregate or excess water, and those that are allowed to dry from only one side, such as concrete on metal deck construction, may need a much longer drying time.<sup>1</sup>*

**2.2.4.** *WARNING: Exceptionally porous, soft, or dusty concrete surfaces may have such low strength that they are not suitable for installation of resilient floor coverings. It may be necessary to mechanically remove the top layer of concrete in such cases. Such surfaces may need to be primed and covered with a latex patching or underlayment compound. Consult with a manufacturer of patching or underlayment compounds or someone with expertise in concrete problems.*

**2.2.5.** Expansion joints: *Joints such as expansion joints, isolation joints, or other moving joints in concrete shall not be filled with patching compound or covered with resilient flooring.<sup>1</sup>* Use an expansion joint covering system.

**2.2.6.** To improve the adhesive bond to a concrete substrate, sand the concrete with a 16 or 20-grit sandpaper before spreading the adhesive.

**2.2.7.** Radiant heated floors: TOLI floors may be installed over a radiant heated floor as long as the slab temperature does not exceed 85°F under any condition of use. Set the heating system to highest possible temperature three or four days before installation. This will help to “dry out” any moisture remaining in the slab. Turn the heat off twenty-four (24) hours before installation. Leave the heat off during installation and 24 hours after installation. Then, gradually raise the heat back up to room temperature. While the heating system is turned off, maintain room and slab temperature at a minimum of 65°F and a maximum of 80°F. In cold climates, it is best to install over radiant heated floors in moderate weather months such as spring or autumn.

## 2.3. Concrete Testing

### TOLI CONCRETE MOISTURE & pH REQUIREMENTS

Moisture testing on concrete substrates should be performed using ASTM test methods F 1869 Calcium Chloride Test and/or ASTM F 2170 *in situ* Relative Humidity Test. When measured in accordance with F 1869, the moisture emission rate should not exceed 5 pounds per 24 hours per 1000 square feet. The acceptable test result when using test method F 2170 should not exceed seventy five per cent (75%) AND pH readings should not exceed 9.0.

**2.3.1.** Test all concrete slabs for moisture and alkali regardless of age or grade level. *New concrete slabs shall be properly cured and dried before installation of resilient flooring. Drying time before slabs are ready for moisture testing will vary depending on atmospheric conditions and mix design.<sup>1</sup>* Conduct tests according to ASTM test method F 1869 (Calcium Chloride test). To ensure accurate test results, follow the these procedures closely:

- *Use three test locations for areas up to 1000 square feet and one additional test for each 1000 square feet or fraction thereof.<sup>2</sup>*
- *The test site should be at the same temperature and humidity expected during normal use. If this is not possible then the temperature should be 65-85°F and 45%-55% relative humidity.<sup>2</sup>* Concrete testing should be done after the building is enclosed and the HVAC system is fully operational for at least one week.
- *The actual test area shall be clean and free of all foreign substances. All residual adhesives, curing compounds, sealers, paints, floor coverings, etc shall be removed.<sup>2</sup>*
- *New or existing concrete must be cleaned 24 hours prior to testing. Expose a minimum area of 20 in. x 20 in. to [these] conditions for a minimum period of 24 hours prior to starting each test.<sup>2</sup>*

**Note:** Do no test lightweight concrete using the F1869 Calcium Chloride Test. It was designed for standard weight concrete. The results will not be accurate.

**2.3.2.** ASTM F 2170 Relative Humidity Test Method in Concrete Floor Slabs using in situ Probes - ASTM F 2170 allows the flooring contractor to monitor the rate of drying that the concrete is experiencing at a depth of 20% or 40% of the slab thickness. Once installed, the capped sites can be used continuously, even allowing remote monitoring of the slab's drying. Conduct the Test according to F 2170, paying close attention to these procedures:

- *Perform three tests for the first 1000 ft<sup>2</sup> (100 m<sup>2</sup>) and at least one additional test for each additional 1000 ft<sup>2</sup> (100 m<sup>2</sup>).*
- *Select test locations to provide information about moisture distribution across the entire concrete floor slab especially areas of potential high moisture. For slabs on-grade and below-grade, include a test location within 1 m (3 ft) of each exterior wall.*
- *Determine the appropriate depth for probe holes:*

<i>Drying Conditions</i>	<i>Drill-to Depth from Top of Slab</i>
<i>Slab drying from top only</i>	<i>40%</i>
<i>Slab drying from top and bottom</i>	<i>20%</i>
- *Use a rotary hammerdrill with a carbide-tipped drill bit to drill holes to required depth. Drill bit diameter shall not exceed 0.04 in. (1 mm) larger than the external diameter of the hole liner. Hole shall be drilled dry. Do not use water for cooling or lubrication; do not wet-core test hole.*
- *Remove dust from the hole using a vacuum cleaner.*
- *Insert hole liner to bottom of hole. Place rubber stopper into upper end of liner and seal around liner to concrete at concrete surface with joint sealant, caulk, or gasketed cover.*
- *Allow 72 hours to achieve moisture equilibrium within the hole before making relative humidity measurements.*
- *Remove the rubber stopper at the top of the liner and insert probe.<sup>4</sup>* Follow the remaining steps listed in F 2170, being careful to record all readings taken.

**2.3.3.** *pH Testing – Concrete floors shall be tested for alkalinity prior to the installation of resilient flooring. To test for pH at the surface of a concrete slab, use wide range pH paper, its associated pH chart, and distilled or deionized water. Readings in excess of 9.0 have been known to affect resilient flooring or adhesives, or both<sup>1</sup>.*

**2.3.4.** Test results need to be documented by the person conducting the testing and submitted to the general contractor/architect/building owner at the time of testing. This is important, as moisture and/or excess pH conditions that occur after the floor covering installation are not the responsibility of the installer or TOLI International.

## **2.4. Wall Installations**

The beauty of TOLI flooring makes it desirable for installations on vertical surfaces. We offer the following advice regarding vertical installations.

**2.4.1.** Fire Codes: TOLI is a floor covering product, so check local building codes regarding fire testing for wall coverings, and compare it to the test data for TOLI products.

**2.4.2.** Substrates: TOLI products have been successfully installed on primed drywall and can also be applied to a plywood surface. For all other types of surfaces, we advise testing an area to determine bond strength.

**2.4.3.** Adhesives: For wall installations use TOLI 5050 adhesive or a good quality Contact Cement. Contact Cement may be easier to apply because it can be applied with a brush or roller. Apply the chosen adhesive with a 'double' application by first applying a very fine coat to the back of the material, and then a thin coat to the wall surface. Allow both adhesive coats to become completely 'tacky'. Set the material in place once both adhesive coats have 'tacked up'.

## **2.5. Other Substrates**

Epoxy terrazzo, rubber, cork, and asphalt tiles are *not* acceptable substrates. To successfully install TOLI, remove the flooring or cover with an approved underlayment.

Cement terrazzo or metal may be suitable for TOLI floors. Check with the patching/leveling compound manufacturer for guidelines on preparing these substrates. For metal substrates, see section 3.2 TOLI #900 Epoxy adhesive.

## **2.6. Selection of Patching or Underlayment Compounds.**

For all substrates, *surface cracks, grooves, depressions, control joints or other non-moving joints, and other irregularities shall be filled or smoothed with latex patching or underlayment compound [which] shall be moisture-, mildew-, and alkali-resistant, and shall provide a minimum of 3500 PSI compressive strength<sup>1</sup>.* The resilient floor covering industry has found that these requirements are most consistently met by using cement-based compounds.

Obtain patching or underlayment compound manufacturer's written warranty and recommendations to be sure that the compound is recommended for the intended application (some products are not recommended for commercial use). *Follow the instructions for proper mixing, especially the correct ratio of powder to liquid and the proper drying time.* Unless the instructions state otherwise, let dry completely, not just 'to the touch'. Do not force dry with heat guns or fans. After compound is dry, sand and/or scrape all uneven spots or any trowel ridges smooth. Sweep or vacuum the surface to pick up all of the dust from sanding or scraping. Once the underlayment is thoroughly dry and the smoothness of the floor is acceptable, proceed with the installation of the TOLI flooring.

## **2.7. Installing over Existing Resilient Floor Coverings**

**2.7.1.** To assure that your customer will receive a smooth, flat, indentation-resistant TOLI floor, TOLI flooring should be installed directly over a clean, properly prepared concrete substrate. *However, in some cases it may be preferable to leave the existing resilient floor covering in place and go directly over the top (single flooring layer only) with the new floor<sup>3</sup>.* The performance of the finished floor is directly dependent on the condition and continued bond of the existing resilient flooring. Any irregularities in the existing flooring (such as bumps, depressions or tile joints) will show through, or telegraph, to the new floor. This is especially true for resilient sheet flooring installations. *It may be preferable to remove existing floors that are not sufficiently smooth.*

### 2.7.2. Guidelines for installation over existing resilient flooring:

- TOLI products can be successfully installed over most clean, dry, securely bonded, properly prepared, non-cushioned *single-layer* resilient flooring. *Do not install over more than one layer. Do not install over an existing resilient floor where the TOLI finished floor (especially a resilient sheet floor) will be subjected to heavy rolling loads or static loads such as hospital beds, heavy furniture or fixtures.*
- TOLI floors need to be installed over as smooth a substrate as possible. Smooth the existing floor using a latex patching or underlayment compound (also known as "embossing leveler") to fill in any depressions or other imperfections in the existing floor.
- *Make sure the product is recommended as an embossing leveler.* Follow the manufacturer's instructions, particularly *the proper ratio of powder to liquid and the proper drying time.*
- TOLI #5050 adhesive takes longer to set up when spread over an existing floor.

## 2.8. Removal of Existing Resilient Floor Coverings

**2.8.1.** If you decide to remove an existing floor, please be aware that many existing floors and/or adhesives may contain asbestos fibers that cannot be easily identified except by laboratory testing. Improper removal of asbestos containing materials (including, but not limited to, vinyl asbestos tile, asphalt tile, felt backed sheet goods, asphalt 'cutback' adhesives and other flooring materials) can create asbestos dust, a known health hazard.

**2.8.2. *WARNING!*** *Do not sand, dry sweep, dry scrape, drill, saw, bead blast, 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. 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.*

***NOTICE:*** *Various federal, state and local government agencies have regulations governing the removal of in-place asbestos-containing material. If you contemplate the removal of a resilient floor covering structure that contains, or is presumed to contain asbestos, you must review and comply with all applicable regulations<sup>3</sup>*

## 2.9. Installing Over Adhesive Residue

**2.9.1.** Do not install resilient flooring directly over residual adhesive or paint. Do not 'skim coat' directly over old adhesive. Where existing asphalt (black) adhesive is present, scrape the excessive adhesive residue from the floor so that a thin transparent layer (less than 5%) is all that remains. Cover with an approved patching or underlayment compound that will seal in the existing adhesive. SEE THE WARNING ABOVE (Section 2.8.2). Obtain the patching compound manufacturer's written recommendations to be sure that the compound being used is specifically recommended for use over asphaltic adhesives. Follow the manufacturer's guidelines for the proper preparation of the substrate and application of the compound. *The use of asbestos encapsulants or bridging materials over asphaltic adhesive is not recommended, as those products may affect the bonding properties of the new adhesive.<sup>3</sup>*

**2.9.2.** Existing water-based (other than black) adhesive or any type of paint must be thoroughly removed prior to applying a patching or underlayment compound. This includes old carpet or VCT adhesive.

**2.9.3. *Adhesive Removers*** -- *There are commercial adhesive removal products containing solvents that are effective in removing cutback or emulsion adhesives and comply with OSHA requirements. These products may be used for adhesive removals, however they may leave a solvent residue within the subfloor that can adversely affect the new adhesive or floor covering. Thus, the warranties provided by the manufacturers of new floor covering materials will not cover instances where subfloor conditions damage their products or affect the installation.<sup>1</sup>*

***Note:*** Should chemical adhesive removers be used, any damage including, but not limited to adhesive failure, indentation, bubbling, delaminating, etc. is the responsibility of the company using the adhesive remover, and is not covered by the TOLI warranty.



### 3. ADHESIVES

TOLI has invested much time and research to develop the best adhesives for use under TOLI floors. If TOLI adhesives are not used to install TOLI floors, any problems related to the adhesion of the finished floor will not be covered by the TOLI warranty. Such problems are the responsibility of the manufacturer of the adhesive used to install the TOLI Flooring. Potential problems include, but are not limited to: indentation, shrinkage, shifting, bubbling, seams peaking, adhesive oozing, moisture related failures, etc.

#### 3.1. Adhesive Selection

**3.1.1.** TOLI #900 2-part epoxy is the strongest adhesive available and is recommended for the following applications:

- Floors that are frequently wet or flood washed.
- Floors installed in extremely hot, cold, or wet spaces, such as near outside entrances or freezer cases.
- Floors subjected to heavy loads such as hospital beds, heavy carts, pallet jacks, rolling chairs, etc.
- Custom designs, logos, and other floors with small pieces (resilient sheet flooring only).

**3.1.2.** TOLI #5050 universal acrylic adhesive can be used on most other applications.

## **The TOLI Trowel**

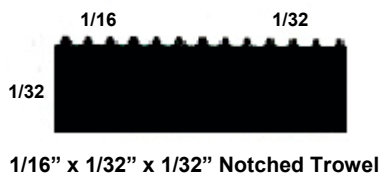
### **Too much adhesive is the cause of many installation failures**

The TOLI Trowel is the correct trowel for both TOLI adhesives, #900 Epoxy and #5050 Acrylic adhesive. The trowel acts as a critical measuring and application device that applies the correct amount of adhesive.

A fine notch (1/16"x 1/32"x 1/32") professional trowel, using the TOLI Trowel helps to ensure a successful installation.

**If you do not have the correct trowel, do not spread adhesive.**

- Periodically check your trowel for wear.
- TOLI does not recommend re-notching trowels by hand.
- Replace worn non-TOLI trowels every 1,000 s/f. Because of its high quality steel blade, the TOLI Trowel will last 2,000 s/f.



## INSTALLATIONS UNDER HOSPITAL BEDS

The new generation of convex, urethane casters used on most hospital beds exert a tremendous amount of pressure on resilient floors, causing indentation and/or buckling problems especially when the bed is moved with the wheels in a locked position. TOLI #900 Epoxy adhesive can provide added endurance and resistance to indentation. *Use #900 for installations under all hospital beds and under all other heavy furniture with glides less than 1-inch in diameter.*

**Apply #900 Epoxy in a minimum 4' x 7' rectangular area under the bed.** TOLI's extensive testing has shown that it is not necessary to install the entire room with #900 epoxy. TOLI #5050 applied with the TOLI trowel is the recommended adhesive for areas other than beneath hospital beds. Resilient sheet flooring installations using epoxy adhesives require extra time and care to assure a successful installation. To review all the techniques for installing TOLI resilient sheet flooring using TOLI #900 epoxy adhesive, please contact

**TOLI Technical Support @ 1-888-TRY TOLI**

### 3.2. TOLI # 900 Solvent Free Epoxy

TOLI # 900 is a highly water resistant, hard setting reactive adhesive that can be used for the interior installations of TOLI tile, plank, and resilient sheet flooring over most substrates.

One unit = Two Cans (Part A + Part B). Shelf life: One (1) year if not opened.

Coverage: Large Unit 160-200 square feet/ unit; Small Unit 40-60 square feet/unit.

Apply using the TOLI Trowel (1/16" x 1/32" x 1/32"). Open Time: 30-60 minutes.

#### 3.2.1. Instructions for the use of TOLI #900

- Using the wooden paddles provided, mix Part A and Part B in their separate containers. Pour Part A into Part B and mix approximately 6-8 minutes producing a uniform mix. You may also use an electric drill (max. speed 450 RPM) and a metal mixing paddle to mix the product in one can. Mix with an electric drill for a minimum of 3 minutes and a maximum of 5 minutes, producing a uniform mix.
- Pour the epoxy on the floor and spread immediately using the TOLI Trowel (1/16" x 1/32" x 1/32" notch). Do not leave epoxy in the container. Mixed epoxy left in the container for more than 3-5 minutes will begin to generate heat, accelerating the cure of the adhesive in the can and reducing coverage.
- Allow adhesive 'set up time' of not more than 10-15 minutes after spreading the epoxy. *Epoxy adhesive does not 'flash off' or 'tack up.'* Flooring has to be laid into the wet adhesive not more than one hour after mixing. The epoxy will harden if allowed too much open time. Once hardened, epoxy must be removed from the substrate and re-applied.
- Work off the flooring to prevent adhesive oozing, shifting flooring, or indentation from adhesive displacement. If you must work on top of the new floor, use kneeling boards. Walking prematurely on #900 adhesive will cause *permanent indentations that rolling will not remove*. The epoxy will begin to cure in approximately 45 minutes to one hour depending on substrate and room temperature.
- Roll the floor covering with a 100 lb., three-section roller. Always roll and cross roll. The first rolling should occur immediately after the floor covering has been installed into the adhesive. Subsequent rolling should occur 3 times every 30-45 minutes until the epoxy has begun to harden. Initial set will occur in 1-4 hours under normal conditions.
- Periodically pull up the flooring to visually confirm proper transfer of the adhesive from the substrate to the floor covering. *After the first rolling* carefully identify slight bubbles, curled edges, or seams and correct with sandbags (minimum 5 lb.) or a combination of sandbags on plywood to distribute the weight evenly and uniformly.

- Factors that can negatively affect #900 Epoxy cure time and bond strength include: *too much adhesive (too large a trowel notch), uneven mixing, cool substrates (below 60°F), insufficient rolling, contaminated substrates, excessive moisture vapor emissions, dew point condensation, or a high pH (over 9.0).*
- *Keep all traffic, including foot traffic, off the newly installed floor for 12 hours.*
- *Keep all rolling traffic and furniture off the newly installed floor for at least 48 hours.*
- Wet epoxy must be removed from the flooring surface as soon as possible. Use mineral spirits to remove the epoxy while still wet. Cured epoxy cannot be removed without damaging the flooring. Remove uncured epoxy from tools using water or mineral spirits.

### **3.2.2. Tips for using TOLI #900 Epoxy for installations of TOLI Resilient Sheet Flooring**

- Mix Epoxy per TOLI instructions using complete units. Do not mix partial units.
- 'Comb' Epoxy across the width of the flooring in straight continuous lines of adhesive without swirls, voids or puddles using the TOLI trowel (1/16"x 1/32"x 1/32" notch).
- After spreading, cover the adhesive within 30 minutes. 10-15 minutes open time does not jeopardize the adhesive, but always avoid open time in excess of 30 minutes. Temperature and humidity will impact your window of time (Epoxy cures faster in warm temperatures and more slowly in cool temperatures (65-80°F is ideal).
- Place flooring into the Epoxy adhesive by slowly rolling the fold into the adhesive, being careful not to trap air. Do not walk on the flooring once it has been placed into the Epoxy. Place a sheet of building insulation Styrofoam approximately 2' x 8' x 1/2" on top of the floor. Walk only on the Styrofoam.
- Starting at the adhesive line, *roll across the width of the flooring first.* Then roll lengthwise with a three-section, 100 lb. roller.
- When rolling, set the roller down and roll all in one motion so that the adhesive will not be indented.
- When rolling, overlap half the width of the roller so that air is forced to the flooring's edges, assuring consistent contact and uniform transfer to the flooring's backing.
- If you notice bubbles during rolling, lift the goods away from the adhesive. This allows trapped air to escape. Carefully reposition the flooring and re-roll. Repeat rolling procedure steps every 30-45 minutes three times.
- Identify any bubbles under the flooring's surface by highlighting with a high wattage floor lamp or flashlight. Hold the light at floor level casting a beam of light across the floor's surface. DO NOT allow light to lie on floor unprotected.
- For any remaining bubbles, use a heat gun to apply heat to the bubbled areas. Carefully apply heat so as not to burn or distort the flooring. Immediately hand roll, and then cool the area with a damp rag. Repeat the procedure if necessary.
- If applying heat does not remedy the bubble, apply more heat and place a sand bag, a bag of patching compound or a small piece of wood underlayment with weight on top until the epoxy has cured (approximately 24-48 hours).
- TOLI Cold Weld seam sealer is not compatible with #900 Epoxy. Only Heat welding will be successful on resilient sheet flooring installed over #900.
- Finally, before leaving the project make a final check for any bubbles, pockets of air, hollow sounds, etc. *Once epoxy adhesive sets and cures there are no corrective actions!*

### 3.3. TOLI #5050 Universal Resilient Floor Covering Adhesive

TOLI #5050 is a solvent free, low odor, acrylic-based high tack adhesive for interior installations of TOLI tile, plank, and resilient sheet flooring.

1 gallon container - coverage 200 square feet (approx)

2½ gallon container - coverage 500 square feet. (approx)

Apply using the TOLI Trowel (1/16" x 1/32" x 1/32" notch)

Minimum set up time: 20-35 minutes – depending on temperature and humidity.

Maximum open time: 1½ to 2 hours

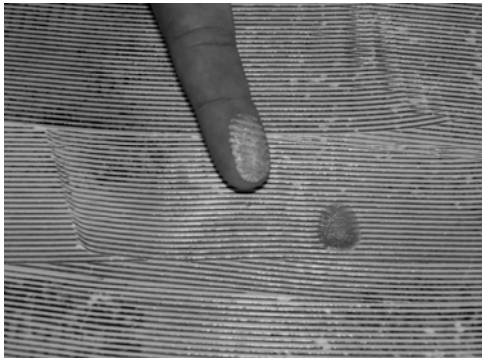
Shelf life: One (1) year if not opened.

#### 3.3.1. Instructions for the use of TOLI #5050

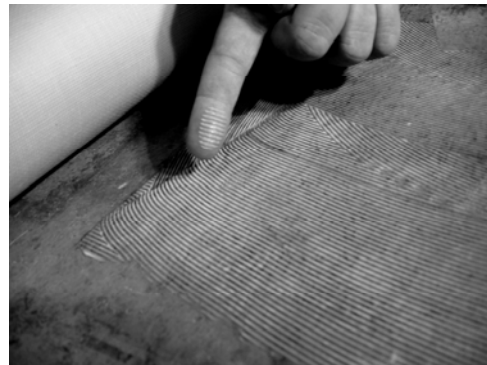
- Apply #5050 using the TOLI Trowel (1/16" x 1/32" x 1/32" notch).
- To improve the adhesive bond to concrete substrates, sand the floor using a 16 to 20-grit sandpaper.

***WARNING:*** Exceptionally porous concrete substrates may have such low strength that they are not suitable for installation of resilient floor coverings (see section 2.2.3).

- Spread adhesive evenly. Do not allow any puddles or lumps of adhesive.
- After spreading adhesive, allow the adhesive to 'flash' before laying material into adhesive. Time required for set up varies depending on temperature and humidity conditions, but should be about 20-35 minutes with the TOLI trowel. *TOLI #5050 adhesive is ready for flooring installation when a fingertip touched to the adhesive bed shows the ridges from the trowel notching, not a 'smudge' of adhesive.* It is not necessary to wait for the adhesive to become completely clear.



**#5050 Adhesive Not Ready**  
*Adhesive ridges are smudged*



**#5050 Adhesive Ready**  
*Adhesive ridges transfer to fingertip*

- *Installing over existing resilient flooring:* Allow longer set up time. The adhesive will be 'tacky' to the touch and will start to turn clear (Approx 35-45 minutes).
- Roll the flooring with a 100 lb., three-section roller after setting into adhesive.
- *Permit light foot traffic on a newly installed floor after 3-4 hours. Cover the new floor to protect from damage when floor is installed before construction is complete.*
- *Do not permit heavy traffic and rolling loads for 48 hours. For the first 2-3 days, protect the new floor from rolling traffic by covering with protective boards.*
- *Clean up: While the adhesive is still wet, use a white cloth dampened with water to remove adhesive from the flooring surface. Dry adhesive can be cleaned using a white cloth dampened with mineral spirits. Follow with a water rinse.*

## 4. TOLI RESILIENT SHEET FLOORING INSTALLATION

### 4.1. Material Handling and Storage

- Store resilient sheet rolls standing up, capped end down. Do not lay flat. Protect flooring products, adhesives, seam sealer and maintenance products from extremes of temperature. Do not expose to very hot or very cold temperatures. Deliver all materials to the job site at least 48 hours before installation to allow for acclimation to job site temperature and humidity, which should be 65-80°F.
- When making cuts from rolls, it is acceptable to roll the material face-in if the material will be installed within two days. It may be helpful to lay the sheets flat on the floor overnight. Cut the sheets a minimum of three inches longer than needed. These steps will help the material to lay flat on the floor.

### 4.2. Adhesive Selection

Be sure the correct adhesive has been selected. TOLI recommends the use of #900 Epoxy adhesive under TOLI floors subjected to heavy rolling and static loads such as hospital beds and heavy furniture, particularly furniture lacking 1-inch glides. For most other installations, use TOLI #5050 adhesive.

If you are not sure, please see Section 3.1 or call toll free 1- 888-TRY-TOLI. (1-888-879-8654)

### 4.3. TOLI Trowel

For all installations TOLI resilient sheet flooring should be installed using the TOLI Trowel, a fine notched (1/16" x 1/32" x 1/32") professional trowel. The trowel features a removable blade produced from premium quality full tempered bright polished spring steel for a long lasting edge.

### 4.4. Seaming TOLI Resilient sheet Flooring

- 4.4.1.** TOLI resilient sheet flooring products have no pattern match in width or length.
- 4.4.2.** Reverse sheets on TOLI Spectraflors and Ryel. Do not reverse sheets on TOLI Mature.
- 4.4.3.** Use as few seams as possible, make short seams rather than long seams, and place seams in low traffic areas. Avoid seaming floors in areas subjected to heavy rolling traffic, such as under hospital beds, chairs, or other areas subjected to rolling loads. Avoid cross seams whenever possible.
- 4.4.4.** Because Mature Wood patterns are plank designs, seams in the length blend well. 'Cross seams' are more noticeable. TOLI recommends that estimators avoid cross seams whenever possible on all resilient sheet flooring, especially TOLI Mature. Reduced labor cost and cleaner looking installation will offset the additional material cost needed to avoid cross seams.
- 4.4.5.** Cut seams net. Do not leave a gap at the seam, and do not cut seam so tight that material peaks. The best way to achieve this is the 'double cut' method. (The recess scribe method is also acceptable.) Overlap the two sheets about one inch and cut down the center of the overlap with a sharp utility knife. Hold the knife at a right angle to the floor. Fold the sheets back and comb the adhesive perpendicular to the seam line. This prevents adhesive from contaminating the seam area. When placing sheets into adhesive, keep the adhesive from penetrating the seam. Adhesive contamination of the seam area will cause seam discoloration and/or failure of the TOLI Cold Weld. After the sheets are adhered, hand roll the seam area. Roll the entire floor with a 100-lb. roller. Complete the installation by sealing the seams using either the Heat Weld or Cold weld method. See section 5.

## 5. SEAM SEALING METHODS

Seams - Seal all seams using either the HEAT WELD or the COLD WELD method.

*HEAT WELDING:* done the day after the resilient sheet flooring is installed.

*COLD WELDING:* done the same day the resilient sheet flooring is installed.

The heat weld method is the strongest of all seam-sealing methods. TOLI recommends heat-welded seams for health care installations, floors subjected to heavy rolling loads, and floors that are frequently washed or wet. Cold Weld may be used on all other installations. *When in doubt, heat weld the seams!*

## 5.1. TOLI Cold Weld Instructions

- 5.1.1. One 4.5-oz. tube of TOLI Cold Weld covers approximately 225 lineal feet of seam. Wait at least 2-3 hours after adhering the floor before applying TOLI Cold Weld. This will prevent wet adhesive from contaminating the seam during Cold Weld application. Contaminated seams can turn yellow or fail during the life of the floor. **Note:** Do not use Cold Weld on resilient sheet installed over #900 Epoxy adhesive.
- 5.1.2. It is recommended that two installers work together. One will warm the seam slightly with a hot air gun while the other completes the welding. This heating process will allow easier insertion of the applicator into the seam cut.
- 5.1.3. Shake the tube well. The volume of a new tube can be increased slightly by unscrewing the cap one turn and then pressing lightly at the sides above the folded end.
- 5.1.4. Hold the tube upright and away from the body and face. Remove the cap using the small cloth that is provided to catch any escaping fluid.
- 5.1.5. While holding the tube in one hand, place the index finger of the other hand on the nozzle collar. (Figure 1) The needle is offset in the collar. Be sure to hold the tube so that the needle is on the TOP.
- 5.1.6. Hold the tube at a 45-degree angle to the floor and insert the needle fully into the seam cut. Make certain it penetrates the entire thickness of the sheet flooring coating both sides of the seam (Figure 2).
- 5.1.7. *Practice:* Practice on scrap material to adjust the flow of sealer before beginning.
- 5.1.8. *Draw the needle evenly and slowly along the seam in one movement. Regulate the flow of sealer by exerting very light pressure on the tube. Apply a uniform bead of sealer, 1/8" wide, centered on the seam cut.*
- 5.1.9. *Leave the sealer bead on the surface. Do not attempt to wipe away the sealer.* This bead has a higher initial gloss level than the TOLI flooring, but will blend in once TOLI's recommended maintenance program begins. Any swellings in the seam will disappear as the sealer begins to harden.



Fig. 1

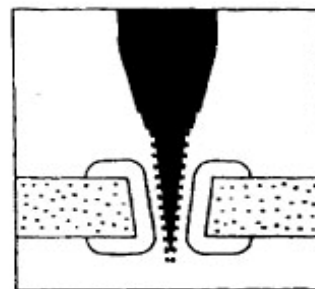


Fig. 2 The action of the needle shows how the seam edges are coated to weld them completely together.

- 5.1.10. *Do not use TOLI Cold Weld with #900 Epoxy Adhesive. They are not compatible.*
- 5.1.11. *The seam can be walked on in approximately 2 hours. Keep rolling traffic off for 24 hours.*

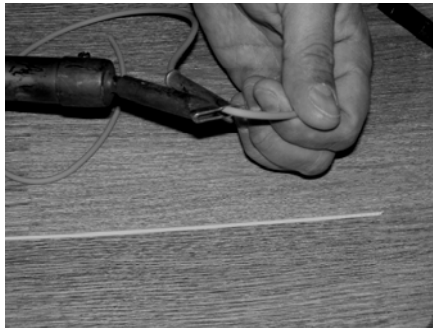
## 5.2. Heat Welding TOLI Resilient Sheet Flooring

The heat weld method is the strongest of all seam-sealing methods. Only installers who are trained and experienced with this method should attempt heat-welded seams. The installation methods for heat welding TOLI resilient sheet flooring are very similar to that of other products.

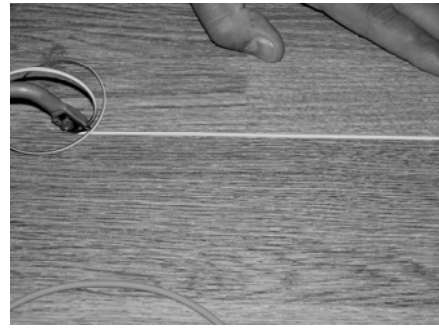
**Note:** TOLI uses a 3.5mm. welding thread. Do not use a heat-welding tip larger than 4.0 mm. Use of a 5.0 mm tip will result in seam failure and floor damage. (Figure 1)



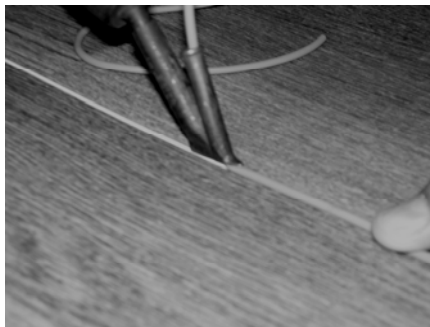
- 5.2.1.** *Apply TOLI welding thread using a hot air gun with a 4-mm tip. Practice on scrap material before beginning. This will help the installer to become more familiar with heat welding TOLI resilient sheet flooring.*
- 5.2.2.** *Install the flooring, and fit the seams using the 'double cut' method. Do not leave a gap at the seam. Fit seam net, but not so tight that the material peaks.*
- 5.2.3.** Be sure the adhesive has fully set before heat welding. Wait at least 24 hours before grooving and heat welding.
- Groove or rout the seam (using a mechanical or hand groover) to accept a **3.5 mm** welding thread. Be sure to center the groove on the seam so that both sides are equally grooved. *Do not groove or rout completely through the flooring material.* (Figure 2)
- Note:** Use an automatic router equipped with a 3.5 mm thick blade or a hand groover.
- Weld the seam using a hot-air heat-welding gun designed for heat welding resilient flooring. Take care not to stretch the welding thread when applying (Figure 3)
  - Allow welding thread to cool 'to the touch.' Three-part finishing process:
    - 1) Trim the welding thread using a trim knife with the trim plate attached
    - 2) Wait at least 30 minutes for the weld to cool, then trim the remaining welding thread using the trim knife without the trim plate.
    - 3) Apply a 'glaze' to the surface of the finished weld. Remove the tip from the welding gun. Hold the gun approximately 6 inches above the seam and apply hot air on the weld until the surface becomes slightly glossy. The glazed seam will be smoother, less porous, and less noticeable.
- 5.2.4.** Advise customer to begin maintenance program in 5-7 days. This will allow the adhesive to fully set.



**Figure 1**  
**3.5 mm TOLI welding thread in 4.0 mm tip**



**Figure 2**  
**Hand groover grooving seam without going completely through the product**



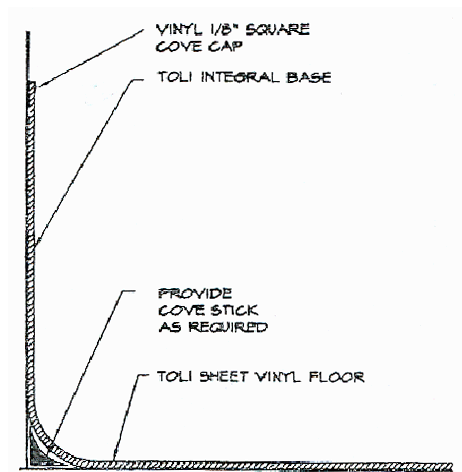
**Figure 3**  
**Take care not to stretch welding thread when applying**

## 6. FLASH COVE INSTALLATION

Flash coving is an extension of the resilient sheet flooring up the vertical wall surface to form an integral wall base. TOLI resilient sheet flooring may be flash coved up a wall to any desired height. 4 or 6-inch heights are customary. Adhere cove stick to the intersection of the floor and wall. Adhere cove cap molding to the wall where the flooring will end. Use TOLI #5050 adhesive. Apply a thin coat of adhesive on the wall using a notched trowel or a stiff brush, or both. Allow the adhesive to completely 'tack up' and turn clear before adhering. This should take about 20-40 minutes, depending on porosity of the wall.

**Note:** Do not adhere sheet flooring to vinyl wall covering or other materials not compatible with acrylic floor adhesives. Remove the vinyl wall covering.

After setting the flooring into the adhesive, use a hand roller to make sure the material is in contact with the adhesive. Seams on the inside and outside corners of flash coved installations should be sealed using the heat weld method. The cold weld method is not recommended. For more detailed information on flash coving, please contact TOLI Technical Support for assistance at 1-888-TRY-TOLI (1-888-879-8654).



## 7. TOLI TRANSITION STRIP

For installations where TOLI Tile and Sheet products will meet, TOLI Transition strip is an easy way to bridge the height difference between the two products. To install TOLI Transition strip, install either the tile or the resilient sheet flooring first. Leave a clean, straight edge where the transition will be installed. Lay the transition strip into the adhesive, fitting tightly to the flooring's edge. Roll with a hand roller. Allow the adhesive to set. The other flooring material can then be cut and adhered to fit tightly to the adhered transition strip.

### TOLI Transition Strip

36" Length available only in color # 3 - Medium Grey

.080" (2 mm)  
TOLI Sheet



1/8" ( 3 mm)  
TOLI Tile

.2" (5mm) wide



## 8. TOLI TILE AND PLANK PRODUCTS AND INSTALLATION

<i>Product, Nominal Size</i>	<i>Metric</i>	<i>Inches</i>	<i>Sq. Ft/ Piece</i>	<i>Pieces/ Box</i>	<i>Sq.Ft/ Box</i>	<i>Boxes/ Pallet</i>	<i>Sq. Ft/ Pallet</i>
Lightstone 18 x 18	450mm x 450mm	17.7 x 17.7	2.18	14	30.5	64	1952
Lightstone 12 x 18	300mm x 450mm	11.8 x 17.7	1.45	20	29.1	66	1920.6
Lightwood 3 x 36	75mm x 900mm	3 x 35.4	0.73	40	29.2	72	2102
Lightwood 4 x 36	100mm x 900mm	4 x 35.4	0.973	30	29.2	72	2102
Lightwood 6 x 36	150mm x 900mm	6 X 35.4	1.46	20	29.2	72	2102
Lightwood 7 x 49	180mm x 1260mm	7 X 49.6	2.43	12	29.2	80	2336
Lightwood Parquet	300mm x 300mm	11.8 x 11.8	0.97	33	32.0	72	2362
Lightwood Square	450mm x 450mm	17.7 x 17.7	2.18	14	30.5	64	1952
Linotesta 18 x 18	450mm x 450mm	17.7 x 17.7	2.18	14	30.5	64	1952
Viale 18 x 18	450mm x 450mm	17.7 x 17.7	2.18	14	30.5	64	1952

### 8.1. Sizes and packaging

### 8.2. Material Handling and Storage

- Store cartons of tile or plank products flat and squarely on top of one another. Do not lie on edge.
- Protect flooring products, adhesives, and maintenance products from extremes of temperature.
- Deliver all materials to the job site 48 hours in advance to acclimate flooring in conditioned air.

### 8.3. Dye Lots

When installing more than one carton, make sure that the cartons are all the same dye lot. If more than one dye lot is used in the same room, compare tiles to see if a color, texture, or gloss variation is present. When installing multiple dye lots, 'shuffle' the tiles to mix the dye lots, creating a random look, or use the different lots in different areas. Since TOLI floors imitate natural wood and stone materials, slight color variations from tile to tile may be present. These are desirable, since color variations are normal in natural wood and stone floors.

**Note:** TOLI tile and plank imitate natural materials and contain shading variations that are not considered manufacturing defects.

### 8.4. Tile Layout

Most TOLI tiles are 17.7" x 17.7". Laying out the job is done the same way as standard 12" x 12" tiles. In small rooms, 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.

### 8.5. Tile Direction

Many TOLI Tile products are directional and can either be laid all in one direction, or quarter turned. To assist the installer, most TOLI Tiles have arrows on the back. The arrows show machine direction during manufacturing. The customer or the specifier should make final decisions about tile direction. To be sure, 'dry lay' a section of tile to see if the desired look has been achieved.

### 8.6. Cutting TOLI Tile

TOLI tile products can be cut using an 18" 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.

### 8.7. Custom Designs

TOLI tiles are often specified in patterns including those with TOLI Divider Strips (see section 8.9), and custom patterns or logos. TOLI Tile 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. If you are interested in having your custom design precut, please contact your local TOLI representative regarding custom cutting. Custom cutting done by the installer on the job site should be cut from the top of the tile using a very sharp knife.

## 8.8. Installing TOLI Tile with TOLI Divider Strips

**8.8.1.** Divider Strips are 36 inches long and either 1/8" wide (3mm type D) or 3/16" wide (5 mm type F). The most popular design using TOLI divider strips is to install one strip around each tile, similar to the look of a grout joint or a metal divider strip. Other designs may be created using TOLI Tile or Plank products with TOLI Divider Strips. These instructions assume that divider strips will be installed around each tile. For this pattern, order one strip for each tile plus 10% waste. The installation of divider strips is a simple process using the following steps:

*Note:* Deliver all materials to the job site 48 hours in advance. TOLI Divider Strips must be acclimated prior to installation.

**8.8.2.** Find the center and establish working lines, as you would for any normal tile installation. Calculate the center based on the size of the pattern you are creating (tile size + divider strip = pattern size). "Dry lay" a small section of flooring to establish the starting points, which may require moving the working lines. This will also help the installer and the customer to visualize the pattern before starting the installation.

**8.8.3.** Precut a supply of divider strips to the same length as one tile (17.7").

**8.8.4.** (Figure 1) Spread the adhesive and allow the proper set up time. Begin laying the tile along the working line that was established in step 8.8.2. Insert one of the precut divider strips between each tile. Install the field tiles first, and the border tiles later. Use a hand roller as you lay each strip, to be sure the strip makes full contact with the adhesive.

**8.8.5.** (Figure 2) Before laying the next row of tiles, lay a row of full-size divider strips along the first row. Use a hand roller to be sure the strips make full contact with the adhesive.

**8.8.6.** (Figure 3) Lay the next row of tiles against the row of divider strips that was laid in step 8.8.5

**8.8.7.** Insert one of the precut divider strips between each tile, as was done in step 8.8.4.

**8.8.8.** (Figure 4) Before laying the next row of tiles, lay a row of full-sized divider strips against the second row, as was done in step 8.8.5.

**8.8.9.** Repeat the steps above until the field tiles have all been laid. Be sure to use a hand roller to be certain the divider strips make full contact with the adhesive. When finished, roll the entire floor with a 100-lb. roller.

**8.8.10.** Cut and adhere the border areas. Hand roll the strips and roll with a 100-lb roller.

**8.8.11.** Keep foot traffic off the floor for 12 hours. Do not allow rolling traffic, furniture or other heavy traffic on the floor for 24 – 48 hours.

**8.8.12.** Begin maintenance program after 3-5 days. This will allow the adhesive time to fully set.

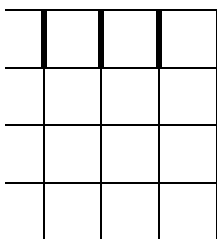


Fig. 1

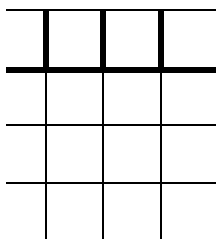


Fig. 2

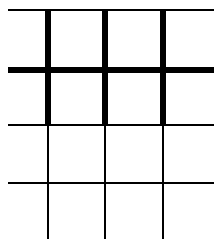


Fig. 3

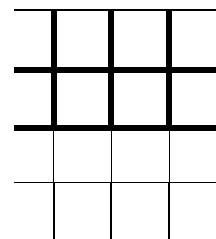


Fig. 4

## 8.9. Installing TOLI Lightwood Plank

### 8.9.1. Material Handling and Storage

- Store cartons of tile or plank products flat and squarely on top of one another. Do not lie on edge.
- Protect flooring products, adhesives, and maintenance products from extremes of temperature.
- Deliver all materials to the job site 48 hours in advance. TOLI Lightwood planks must be acclimated prior to installation.

**8.9.2.** When using more than one carton make sure that the cartons are all the same dye lot. If more than one dye lot shall be used in the same room, compare tiles to see if a color, texture, or gloss variation is present. When installing multiple dye lots, "shuffle" the tiles to mix the dye lots, creating a random look, or use the different lots in different areas. Since TOLI floors imitate natural wood and stone materials, slight color variations from tile to tile may be present. These are desirable, since color variations are normal in natural wood and stone floors.

**8.9.3.** Lightwood plank is manufactured to simulate real wood planks, and can be installed just like a wood plank floor in a random staggered pattern, diagonally, herringbone, or others (see diagram below).

**8.9.4.** Lightwood plank can be installed in the 'Checkerboard' design by using the TOLI divider strip around each block of the design.

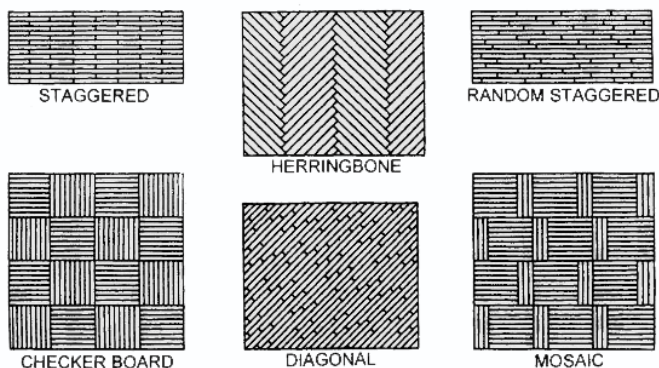
**8.9.5.** Lightwood Plank is installed using the same methods and the same adhesives as other TOLI Tile products.

**8.9.6.** Planks should be installed from the center of the room. Find the center and establish working lines, as you would for any other tile installation.

**8.9.7.** Lay a section of plank without adhesive to establish the pattern (see pattern reference below). 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. The most popular design is the Random Staggered pattern. Be careful to lay the planks in a truly random design, and not fall into a set pattern while laying the Random Staggered pattern.

**8.9.8.** Spread the adhesive and allow the proper set up time. Lay the first plank from the center point, following the working line. Lay the entire first row across the room before starting the second row. Careful placement of the first row of planks is very important, since the rest of the planks follow the first row. Set all of the full planks first, and then fit the border planks later.

**8.9.9.** To fit border planks, use the overlap method as you would for square tiles: 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 Lightwood 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 straightedge. Keep a sharp blade in your knife for easy, accurate, safe cuts. Since Lightwood Plank is a beveled product, always butt factory edge to factory edge. *Be sure not to place cut edges against beveled edges.*



Above patterns are based on the tile size of 4' x 35"

## 9. AFTER INSTALLATION

### 9.1. Clean up

Clean up all adhesive and protect the floor from foot traffic as per adhesive instructions.

### 9.2. Foot Traffic

Light foot traffic on a newly installed floor can be permitted after 3-4 hours if installed with TOLI #5050 adhesive and 12 hours if installed with TOLI #900 epoxy. (If the floor is installed before construction is complete, cover floor with protective boards to protect from construction traffic)

### 9.3. Keep heavy traffic and rolling loads off the newly installed TOLI floor for

- 24 hours if installed with TOLI #5050 adhesive
- 48 hours if installed with TOLI #900 epoxy.
- Protect the floor from rolling traffic by covering with protective boards.

### 9.4. Initial Maintenance

For Initial Maintenance, the new floor can be swept and damp mopped. Do not flood rinse for 7 days. It is also acceptable during construction to apply a light coat of #5 TOLI HIGH SOLIDS FINISH to protect the new floor.

### 9.5. See TOLI MAINTENANCE GUIDE for complete maintenance instructions.

## 10. TOLI SUNDRY PRODUCTS

TOLI's Technical Support Department has developed a complete line of sundry products so that the specifier, the flooring dealer, and the end user can be assured that their new TOLI floor will be installed and maintained correctly. We encourage specifiers to include TOLI sundry products in all their specifications.

### 10.1. TOLI Adhesive Systems

- TOLI Trowel: A professional quality trowel with the correct 1/32" fine notch size for all TOLI adhesives
- TOLI #5050 Universal Floor Covering Adhesive
  - Available 2½ Gallon Container - Coverage Approximately 500 Square Feet
  - 1 Gallon Container - Coverage Approximately 200 Square Feet
- TOLI #900 Solvent Free Epoxy Two-Part Units
  - Available In Large Unit Coverage Approximately 160-200 Square Feet
  - Small Unit Coverage Approximately 40-50 Square Feet

### 10.2. TOLI Seam Sealing Systems

For TOLI resilient sheet flooring, all seams must be sealed using either the heat weld or cold weld method.

The heat weld method is the strongest of all seam-sealing methods. Heat welded seams are recommended for health care installations and other high traffic areas, where floors are subjected to heavy rolling loads, or on floors that are frequently washed or wet. TOLI Cold Weld can be used on all other installations.

- TOLI COLD WELD: 4.5-oz. tube seals approximately 250 lineal feet of seam.
- TOLI HEAT WELD: Coils of 165 lineal feet, available in the same colors as TOLI resilient sheet flooring.

### 10.3. TOLI Transition Strip

For installations where Tile and Sheet products meet, the TOLI Transition strip is an easy way for the installer to bridge the height difference between the two products; 3/16" (5mm) wide x 36" long, color #3 med gray only.

#### **10.4. TOLI Maintenance Products**

TOLI has developed a line of maintenance products that are compatible with TOLI floors, easy to use, and available from all TOLI Sales Partners. We would be happy to help tailor a maintenance program specific to your needs. Please call TOLI Technical Support when you need help.

- TOLI #1 Stripper
- TOLI #2 Cleaner
- TOLI #3A Heavy Duty Cleaner
- TOLI #3B Neutralizer
- TOLI #4 Sealer
- TOLI #5M Matte Finish
- TOLI #5G Gloss Finish
- TOLI #6 Finish Restorer
- TOLI Maintenance Kits: TOLI now offers 4 kits for every maintenance need:
  - Kit A – New Floor Wax-Free Set Up
  - Kit B – New Floor Finish Set Up
  - Kit C – Existing Floor Finish Set Up
  - Kit D – Routine Maintenance

### ***Referenced Documents***

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1. Adapted, with permission, from ASTM F 710, Standard Practice for Preparing Concrete Floors To Receive Resilient Flooring, copyright American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428. Complete copies of these standards may be purchased from ASTM, phone (610) 832-9585, fax: 610-832-9555, e-mail [service@astm.org](mailto:service@astm.org), website [www.astm.org](http://www.astm.org)
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3. From *Recommended Work Practices for Removal of Resilient Floor Coverings* by the Resilient Floor Covering Institute (RFCI)  
401 East Jefferson Street, Suite 102, Rockville, MD 20850. phone: (301) 340-8580
4. Adapted, with permission, from ASTM F 2170, Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using *in situ* Probes, copyright American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428. Complete copies of these standards may be purchased from ASTM, phone (610) 832-9585, fax: 610-832-9555, e-mail [service@astm.org](mailto:service@astm.org), website [www.astm.org](http://www.astm.org).



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