

# INSTALLATION INSTRUCTIONS

For Luxury Vinyl Tile (LVT) Flooring - Dryback Groutable Tiles

### **GENERAL INFORMATION**

Below are guidelines for installing Vinyl tile Flooring- Dry back. Please follow these instructions carefully to assure a successful installation of this product.

## **Installer Responsibility:**

- Thoroughly inspect all flooring products, in proper lighting, to ensure they are the
  correct color, pattern, size and texture, as ordered. Installed flooring found to have
  visible defects or damage will not be covered by warranty nor labor costs associated
  with removal & reinstallation.
- Inspect related installation materials and tools to ensure that they are correct, in proper working order and that the correct quantity of materials is on hand.
- When adhesives are used, check the expiration date; do not use adhesive if expired.
- Review warranty of products to ensure that the proper flooring and sundries are being used for intended application, i.e. residential or commercial use, including static and dynamic load expectancy.
- Ensure that the jobsite is ready for the installation of floor covering: Look for signs of
  moisture or alkalinity and other conditions that may prevent the successful installation
  and longer term performance.

NOTE: STONE TRENDS Tiles replicate the look of natural products, which show natural variation in color, texture, and gloss. For optimal visual effect, mix planks or tiles by working from several cartons. Blend tiles into the installation, avoiding the placement of similar tile decors next to one another.

Because of STONE TRENDS rigid core, tiles can be installed over existing fixed floors such as concrete, vinyl, linoleum, and even ceramic. See detailed instructions below. STONE TRENDS is ideal for basements, laundry rooms, foyers and bathrooms. No underlayment is necessary. STONE TRENDS tiles are quiet and warm under foot. STONE TRENDS tiles are waterproof, and guaranteed to not to delaminate.

### **Storage and Handling:**

- Carry and transport STONE TRENDS luxury vinyl flat at all times. Do not carry cartons without use of a
  carry board. Store on a flat and level surface. Stack squarely, no more than 15 cartons high. Do not store
  or turn on edges.
- Store in a dry, temperature controlled environment out of direct sunlight. Maintain temperatures between 68°F (20°C) and 77° F (25°C) at all times. LVT expands and contracts with changes in temperature. Ensure the flooring temperature is not above 25°C or below 20°C at the time of installation. Stone Trends should be acclimated to the conditioned temperature noted above and must be kept at a minimum of 68°F (20°C) and maximum of 77°F (25°C) before, during and after the installation for at least 48 hours.
- IMPORTANT: Remove flooring and sundries from your vehicle immediately after transporting.



#### **Jobsite Conditions:**

- Intended for interior applications only. STONE TRENDS should not be installed in garages, commercial kitchens, food processing areas, heavy industrial areas or where spiked shoes are worn.
- Do not begin installation or floor preparation before other trades have completed their work.
- All areas should be fully enclosed, weather-tight with the permanent HVAC in operation.
- UV Glass and/or Window coverings should be used to prevent excessive heat buildup.
- Substrates must be clean, dry, sound, smooth and flat, +/- 4mm in 3m radius. (3/16" in 10').

All moisture tests must be performed and recorded prior to installation with results not to exceed the adhesive manufacturer's specifications. A significant number of installation failures in the market today are due to moisture related issues.

This product should be stored at the jobsite free from all the elements. This product should be acclimated to the conditioned temperature inside and must be kept at a minimum of 68°F (20°C) and maximum of 77°F (25°C) before, during and after the installation for at least 48 hours. The jobsite must be cleaned and prepared prior to starting the installation. All patch work and preparation to the subfloor must be done and allowed to dry prior to starting the installation.

Check cartons and confirm that the product is correct and has the same batch and lot number. If a different batch or lot number, to minimize shade variation mix product from several boxes. If the product looks incorrect stop the installation immediately and call your local retailer.

DO NOT: Install product with visible defect. This product is manufactured to high quality inspection standards but boxes can have occasional defective product contained inside. If you notice excessive defect stop the installation immediately and call your local retailer. The manufacturer is not responsible for visually defective material that has already been installed.

# PRE-INSTALLATION SUBFLOOR REQUIREMENTS

Proper subfloor preparation and suitable underlayment installation are essential for a trouble-free job. Uneven or rough subfloor surfaces will show through (or telegraph) to the surface of this product resulting in an unsightly surface and can make high spots more susceptible to excessive wear. Correct the subfloor imperfections before you begin installing this product.

**WOOD SUBFLOORS** - Wood subfloors must be rigid and suspended at least 18" (46cm) above the ground with adequate cross ventilation. Crawl space ground must be covered with suitable vapor barrier. Do not install this product over a wood subfloor which is directly on top of a concrete substrate or sleeper system. Wood subfloors must be covered with a minimum 1/4" (6 mm) or heavier underlayment rated panel to assure a successful installation.

If an existing wood subfloor is damaged or not of underlayment grade one must be put in place prior to beginning the installation of this product. The approved underlayment should provide a smooth and even surface for this product. Do not install this product over particle board, chipboard, construction grade plywood, luaun plywood, hardboard, or flakeboard.



## Wood underlayment panels should:

- be dimensionally stable.
- be smooth and fully sanded so the graining or texturing will not show through.
- be resistant to both static and impact indentation.
- be free from 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.
- be installed with the face grain running across the joists.
- be lightly butted against each other, not forced tightly.
- have their end joints offset at least 16" (41cm).

Start the installation in one corner and work diagonally across the floor. Use only non-staining fasteners. Do not use common steel, cement coated or nails that are resin/rosin coated. It is not recommended to glue and screw down underlayment panels, as some solvent based adhesives are known to stain vinyl floor coverings. Fasteners should be staggered and no more than 4" (10cm) apart around the perimeter and no more than 2/5" (1cm) from the edges (6" apart across the middle of the panel). Fasteners must set flush or slightly below the surface of the underlayment. Any unevenness must be sanded level. Gaps, hammer indentations, and all other surface irregularities must be patched with a non-shrinking, water resistant Portland cementitious based patching underlayment compounds.

**CONCRETE SUBFLOORS** – Concrete subfloors must be dry, smooth and free from dust, dirt, solvent, paint, wax, grease, oil, asphalt sealing compounds and other extraneous materials. The surface must be hard and dense and free from powder or flaking. New concrete slabs must be allowed to dry completely prior to beginning the installation of this product, which takes at least 6 weeks. Curing agents, surface hardeners and other additives may cause adhesive bond failure. All concrete subfloors must be checked for moisture and alkalinity before installing this product. Do not install over any subfloor with moisture emissions higher than 5 lbs. (2.5kg) per 1,000 sq. ft. (100m²) per 24 hours per a calcium chloride test. As in wood subfloor systems, all holes, grooves, expansion joints, and other depressions must be filled with a latex underlayment compound and toweled smooth and feathered even with the surrounding surface.

Concrete floors with a radiant heating system are satisfactory, provided the temperature of the floor does not exceed 81°F (27°C) at any point. The heating system should be turned on to eliminate residual moisture. See detailed Radiant Heat Guidelines below.

**EXISTING RESILIENT FLOOR COVERING** – This product is not approved for installation over existing resilient floor covering. WARNING: Do not sand, dry scrape, bead blast or mechanically pulverize existing resilient flooring, backing or lining felt. These products may contain asbestos fibers that are not readily identifiable. Using the above non-recommended procedures on asbestos containing material can create asbestos dust. The inhalation of asbestos dust may cause cancer or other serious bodily harm.

The final responsibility lies with the installer for approving the condition of the subfloor and its impact on the final look of this product.



#### SUBFLOORS WITH RADIANT HEAT

IMPORTANT: These instructions are for approved installation of vinyl tiles over radiant heating systems using water. Note that it is not advisable to install this product over any electrical radiant heating systems due to the speed of temperature changes which can negatively affect the flooring. Installation over electrical radiant heating systems will not be covered under the manufacturer's warranty.

Ensure the radiant heat surface temperature never exceeds 81°F (27°C). Before installing over newly constructed radiant heat systems, operate the system at maximum capacity to force any residual moisture from cementitious topping of the radiant heat system. Then set the thermostat to a comfortable room temperature for the installation. It is recommended that the radiant heat be applied in a gradual manner after installing the flooring. Refer to the radiant heat system's manufacturer recommendations for additional guidelines.

## **GLUE-DOWN INSTALLATION (Not Grouted)**

Select a proper Luxury Vinyl Tile Pressure-Sensitive adhesive according to specific types of subfloor. With the approved/proper adhesive apply a 1/16" wide (1.5mm), 1/16"(1.5mm) deep, 1/16"(1.5mm) apart square notched trowel. Snap a chalk line to divide the room into sections. Begin applying adhesive at an intersection and spread the appropriate amount.

Spread the adhesive in a thin even coat. Allow adhesive to dry until it changes color and will not transfer to finger when touched. Dry adhesive is extremely tacky. Lay tile into dry adhesive positioning carefully because it will be difficult to slide the tile. Roll each section immediately upon completing with a 100 lbs. (45kg) three section roller. Re-roll the entire floor after one or two hours then again after the installation in both directions. Remove any excess adhesive immediately with soapy water. Dried adhesive is difficult to remove. Cover all exposed edges. Install wood or vinyl shoe/cove moldings along the walls, cabinet toe kicks, etc. Install transitions moldings and caulk along tubs, toilets, etc. Dried adhesive should be removed with an approved non-flammable cleaner or solvent. Do not wash or treat the floor for a minimum of 48 hours after installation. After 48 hours, use a damp mop to remove residual surface dirt.

#### **GROUTED TILE INSTALLATION**

Select a proper Luxury Vinyl Tile Pressure-Sensitive adhesive according to specific types of subfloor. With the approved/proper adhesive apply a 1/16" wide (1.5mm), 1/16" (1.5mm) deep, 1/16" (1.5mm) apart square notched trowel. Snap a chalk line to divide the room into sections. Begin applying adhesive at an intersection and spread the appropriate amount.

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## **Positioning Tiles for Grout Line**

The desired grout line width should be determined prior to starting the flooring installation. It is important to understand that the finished grout line will be 1/16" (1.5mm) to 3/32" (2.4mm) wider than the space between the tiles, since the grout will extend onto part of the radius along the top edge of the tile.

Spacer Size	1/8" (3 mm)	3/16" (4.75 mm)	1/4" (6 mm)
Actual Grout	3/16" (4.75 mm) to	1/4" (6 mm) to	5/16" (6 mm) to
Line Width	7/32" (5.5 mm)	9/32" (7 mm)	11/32" (8.7 mm)

• Use spacers to maintain the joint width (Fig 1.). If standard tile spacers are used, it will be necessary to remove one leg of the spacer otherwise it will interfere with positioning the tile. Stand spacers on end. Do not place tile spacers flat at the intersection of tiles; they can become bonded, making it difficult to remove them without damaging the edge of the tile.



Fig. 1 - Use spacers to maintain the joint width

• Position two spacers along the edge of adjacent tiles, then lay the next tile gently against the spacers without forcing it into place. Continue to set the tiles in straight rows to complete each section. Follow the chalk lines to keep the joints straight and make minor adjustments if necessary. Remove the spacers immediately after setting each tile.

# **Grout Application**

Tiles can be grouted immediately or within 24 hours after setting the tiles. Tiles must be grouted using an approved Luxury Vinyl Tile acrylic premixed grout. This acrylic grout is designed for high flexural strength and adhesion to the edge of the tile. This feature provides durability to resist cracking from thermal dimensional changes and normal subfloor deflection. Traditional cement grouts are not recommended and will not perform properly.

# **Tools and Equipment**

- Hard, green, rubber epoxy float
- Firm, square-edge sponge
- 3M white nylon scrubbing pad
- Spray bottle of water

- Water buckets
- Rubber gloves
- Safety glasses

Soft grout floats and soft sponges are not recommended because they tend to pull the grout out of the joint, leaving it shallow.



## **Surface Preparation**

• Re-roll the floor just before grouting and check to make sure all edges are tightly seated in the setting adhesive. The joints must be clean and dry. Remove any adhesive smears from the surface and edges of the tile with mineral spirits before grouting.

## **Application**

- Always wear rubber gloves when working with grout.
- Start grouting floors at the far end of the room and work toward the entrance.
- Apply grout in small sections, up to 20 sq. ft. (2m²) and cleanup immediately or before grout films over (approximately 5 minutes).
- Use the tip of a hard rubber float and fully pack the grout into the joints (Fig. 2). Hold the float in a low angle and press firmly with short strokes at a right angle to the joint.

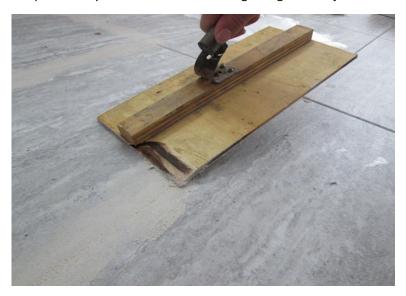


Fig. 2 - Pack the grout into the joints

- Extend the grout a few inches in to the next row of tile so water does not run into the unfinished joints during cleanup.
- Remove excess grout from the surface of the tile by holding the float at a 45° angle to the floor surface and moving diagonally across the joints.

# **Initial Cleanup**

Initial cleanup should be done immediately after finishing each section. The faster the grout is removed from the tile, the easier it is to clean up.

- Apply a light mist of water with the spray bottle over the grouted tiles and allow it to remain on the surface for at least 30 seconds.
- Use a slightly wet 3M white nylon pad to loosen the grout residue. Apply light pressure while moving the pad in a circular motion (Fig. 3).





Fig. 3 - Apply light pressure while moving the pad in a circular motion

- Use a firm square edge sponge to remove the excess water solution. Use light pressure and wipe diagonally across the joints. Do not allow the water to flow into the ungrouted joints or accumulate in finished areas.
- Then rinse the sponge in clean water and wipe diagonally again to shape joints evenly and remove any remaining grout residue. Change rinse water frequently. Clean tools with water while grout is wet. If allowed to dry, remove with an ammonia-based window cleaner.

### **Final Cleanup**

- Allow grout to dry for 24 hours.
- Remove any remaining grout haze with an ammonia-based window cleaner or a dilute solution of 1/4 cup household ammonia to one gallon of warm water. Apply a small amount of the solution over a small section and allow it to remain for about 30 seconds. Use a clean sponge mop or a 3M nylon white pad to loosen the grout haze. Rinse with fresh water and buff with a soft, dry terry cloth towel. Do not use grout haze removers or solvents.

Keep all traffic off newly tiled floors for 24 hours. Resume normal traffic after 48 hours.

In all cases, please refer to the manufacturer's specifications and instructions on the grout packaging. Any grout issue will be the responsibility of the grout manufacturer.



### **CARE AND MAINTENANCE**

Preventative Maintenance calls for clean protective mats in front of any doors leading to the outside. This helps limit the amount of sand and grit from getting onto your tiles. Gritty sand is any floor covering's worst enemy. Also, if you have installed the tiles in your kitchen, you should place a throw rug in front of the sink area to catch spills and splashes. If the rug gets soaked it should be removed and allowed to dry. Do not use mats or rugs with petroleum-based backing (e.g. rubber backing). Install proper floor protectors of furniture legs used on vinyl flooring. Protectors will allow chairs to move easily over the floor without scuffing or scratching. Clean the protectors on a regular basis to remove any grit that may have become embedded. To keep your floor looking its best, dust mop or vacuum your floor frequently. Do not use household dust treatment chemical of any kind as this may cause the floor to become slick or dull the finish. Simply sweep the floor as needed. Do not pour pails of water on your floor to clean or use excessive water. This can damage your subfloor. Do not allow pets with unclipped nails to walk on the floor. It could cause severe scratching to the surface.

Regular Maintenance calls for food spills to be cleaned up as quickly as possible. Avoid acidic or abrasive all-purpose cleaners, powdered cleaners, oil soaps, dish washing detergents, and dusting products. Shoe marks and scuffs can be removed by spot cleaning with a non-abrasive all purpose cleaner and a non-abrasive scrubbing pad. Regular household dirt can be cleaned by damp cleaning with warm soapy water. Always sweep and vacuum your vinyl floor before cleaning.

If accidental deep scratches occur then it might be necessary to replace individual tiles. Always retain some extra product for this instance. To replace, score the tile diagonally with a utility knife and make sure not to damage adjacent tiles. Point a hair dryer about 4" (10cm) from the center of the tile for about 45 seconds or until it is hot to the touch. Pry up the tile starting from the middle. More heat may be necessary to work the piece. Smoothen the subfloor surface (can use floor patching or leveling compound sparingly) and reapply adhesive.

Avoid moving heavy furniture on to a newly installed floor for at least 24 hours.

Avoid excessive heat and light exposure which will cause degradation of the product.