LVT: LOOSE LAY INSTALLATION

By starting installation of this product, you are agreeing that you have read and understand all installer/owner's requirements and responsibilities and are aware that deviating from the instructions and recommendations in this installation guide may result in voiding the product warranty.

Handle cartons and flooring carefully to protect the edge. Always transport and store cartons in the original packaging, neatly stacked horizontally on a smooth, flat, solid surface. **Never** on their sides or ends.

Loose Lay LVT is intended to be a loose lay floor and should NEVER have objects fastened through it to the subfloor. Do not install fixed objects, such as cabinets, islands, wall units etc. on top of the flooring or fasten trim/molding/transition pieces directly to the floor.

The flooring should only be installed after all the other trades have finished and the jobsite has been cleared of any/all debris that could damage a finished installation.

It is the sole responsibility of the installer/owner, prior to installation, to assure that the planned installation area is suitable for the flooring and meets local building codes; as well as the recommendations listed herein.

The installer/owner assumes full responsibility forthe final inspection of this product. Inspection should be done prior to installation and should include: print/color/texture/factory finish /visible conditions. If the product is not acceptable, **DO NOT INSTALL IT**. Contact us immediately for assistance. Flooring that has been installed will be deemed to have been inspected and quality accepted. We will not accept any responsibility for any flooring installed with visible conditions.

TOOLS REQUIRED:

Safety glasses, utility knife, straight edge / square, chalk-line, tape measure, vinyl seam roller, saw or tile cutter and 100 Lb, roller.

GENERNAL GUIDELINES

All areas where product will be installed must have an operational HVAC system prior to installation and remain in operation during and after installation. Conditions should be at the same temperature and humidity level expected during occupancy. Temperature within the space should never drop below 55° F (12.8 °C) after installation while the building is occupied. Product should be acclimated in the climate-controlled location for 48 hours before starting installation.

SUBFLOOR PREPREATION

Proper preparation of the subfloor is a major part of a successful installation. Roughness or unevenness of the subfloor may telegraph through the new floor. All subfloors should be smooth, flat and dust free with the tolerance not exceeding more than 1/32" in 1' or 3/16" in 10' (3m) span.

CONCRETE:

Must be fully cured (at least 60 days old). The flatness of concrete subfloors must meet or exceed the requirements of ACI FF25. Most concrete subfloors are not flat/smooth and must be properly prepared before installation. In all cases, verify the substrate is flat (See above subfloor and substrate requirements). Fill all holes and cracks with a latex fortified Portland cement-based patching compound. Signature only recommends the use of latex fortified Portland cement-based products as a satisfactory patching or leveling compound. Grind down any high areas and fill any low areas with a Portland-based patching compound. (Do not use solvents or chemical adhesive removers to remove paint residue or adhesives).

While the product is a waterproof flooring it is not a moisture barrier. It is recommended that concrete slabs be tested for moisture vapor emissions with either a Calcium Chloride or an In Situ Relative Humidity test. Corrective measures must be taken if the level of moisture emission exceeds 8 lbs. Calcium Chloride or 85% Relative Humidity. Signature does not require the use of a vapor barrier under the Luxury Vinyl Tile. Moisture in the substrate will not damage the panels. Water traveling over or around the outer edges of the flooring can damage the subfloor.

Elevated moisture levels below your flooring can migrate through the joints as vapor emissions possibly causing a milky white appearance known as Blushing. Blushing is a site related condition and will dissipate once the moisture levels have decreased to the specified level. Water damage and or associated conditions are not warranted. In addition, other contaminates could migrate up as well. These are not manufacturing related conditions. All gypsum-based floors must be sealed with an approved gypsum sealer, as directed by the manufacturer of the sealing system, prior to the installation of Loose Lay planks/tiles.

Radiant Heated Systems:

The Hydronic or Embedded radiant heating system needs to be operational and working for one week prior to install date to reduce any residual moisture. Should the radiant heating system be in use at the time of installation it is necessary to lower the temperature to 65°F (18.3°C) for a minimum of three days prior to the installation date, during the entire installation, and for 24 hours following upon completion of the installation. The temperature can then be gradually increased in 5° increments. Temperature must never exceed 85°F (29°C). Mesh wire systems and heating mats (if applicable) must be imbedded with a self-leveling compound by at least ½" (refer to the RH manufacturer's guidelines for required depth). It is the responsibility of the purchaser to confirm the suitability of the radiant heating system with its manufacturer for use with this product. Any conditions associated with the radiant heating system will not be covered by the product warranty.

Existing Ceramic Tile, Quarry Tile, and Terrazzo Flooring:

All existing tile must be well-bonded to the subfloor or substrate. Terrazzo flooring should be sound and stable. Any weak area should be filled using a Portland based patching compound. The floor

must be clean and contaminate free. Signature recommends that you skim coat any existing grout lines exceeding the specifications with a latex fortified Portland cement-based patching compound. Grind any irregular surfaces.

WOOD SURFACES:

Any wood and wood composition panels should be APA rated and approved, and intended for subfloor use provided they are smooth, flat, structurally sound and free of deflection.

EXISTING RESILIENT FLOOR COVERING:

The existing resilient must be single layered, non-cushioned backed, well bonded, fully adhered, and smooth. The flooring should show no signs of moisture or alkalinity.

OLD ADHESIVE RESIDUE:

We does not recommend skim coating over existing adhesive. Because we cannot control how the adhesive was applied, the existing adhesive may break down possibly leading to a failure. Remove existing adhesives using a scraper such as a razor scraper designed for scraping flooring surfaces. The adhesive must be removed to the level of a film followed by skim coating the floor using a latex fortified Portland cement-based patching compound. Do not use solvents or chemical adhesive removers to remove old residue. These products can leave a residue in the concrete that may affect the performance of your new flooring.

METAL & PAINTED FLOORS:

Remove any loose paint or rust.

WARNING: For installation over, old resilient floor coverings or when considering removing existing resilient floors, please be advised that these products may possibly contain asbestos fibers or crystalline silica.

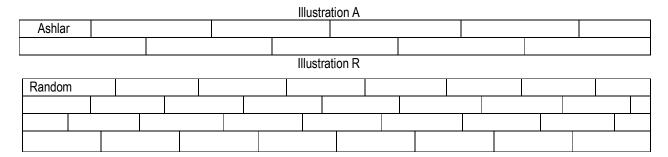
TOOLS NEEDED:

Utility Knife, Carpenters Square, Straight Edge and Tape Measure

INSTALLATION REQUIREMENTS

While it is possible to install glue down installations with four corners together, it can complicate the installation.

With tile installations, a half stagger (Ashlar/Brick) stagger is normal (see Illustration A). With plank installations a random stagger will provide a realistic appearance (see Illustration R).



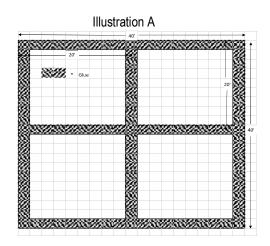
With plank installations a good rule of thumb is to never have a stagger less than the width of the plank and never place the stagger side by side or directly across every other row. Signature recommends a random 8" (20cm) stagger to achieve the most natural look with your installation and having no less than 8" (20cm) in length with any starter or finish panel.

Replace or install new coordinating baseboards and quarter rounds in all areas. Baseboards are to be nailed into the wall and quarter rounds into the baseboards. **DO NOT** nail either of these into the LVT flooring. Hint: When possible select a tile or plank from the cartons that will best coordinate with the molding to avoid moderate and above variances.

For areas 20' (6m) and under in length and width Signature Loose Lay Flooring must be installed tight to the wall. No expansion joint is required. For areas exceeding 20' (6m) in length and width please treat installation as a "Grid Stick" installation.

GRID STICK

In rooms with lengths and or widths longer than 20' (6m), the perimeter of the room requires a minimum 4" (10cm) strip of Pressure Sensitive Adhesive (PSA) or a premium "double stick" tape to be applied to perimeter of the subfloor and at 20'(6m) distances parallel to the perimeter, forming a "grid". The tiles/planks are then considered to be installed tight across the room. Illustration A has a 40'(12m) x 40'(12m) area with the glue grids applied.



CORRIDORS

Corridors do not need to be perimeter glued, however you will need to apply a minimum 8" (20cm) band of premium PSA adhesive across the width of the corridor every 20' (6m). All glued areas require rolling those panels with a 100 Lb. roller.

COMMERCIAL AREAS WITH HIGH FOOT TRAFFIC

For commercial applications, areas with high foot traffic (e.g. entrances, high frequent wheeled traffic) or high temperature variations (e.g. panoramic windows/doors), we recommend installing tiles/planks glue down method. Please refer to our Glue Down Installation Guidelines below.

In areas with higher levels of rolling loads or under office chairs, we recommend applying a premium Pressure Sensitive Adhesive, or double face/pressure sensitive tape under the planks to prevent the planks from gapping and lifting.

GLUE DOWN INSTALLATION GUIDELINES

PRE-INSTALLATION:

- When calculating flooring square footage requirements, allow a minimum of an additional 10% for cuts, waste and minor imperfections (this condition is called culling). If installing a diagonal or other special pattern, allow for 15-20 % additional in material.
- All installations require estimating additional material, due to trimming and culling of material (overages occur).
 This overage then becomes what is commonly referred to as "Attic Stock". It is recommended the end user keep attic stock in the event their installation require additional service.
- Verify material prior to installing, checking for debris or damage. Clean, trim or discard any affected sections.

ACCLIMATION:

- (Uncontrolled storage) Acclimate all materials in the area to be installed between the temperatures of 55°F to 100°F (12.78°C to 38°C) a minimum of 48 hours before, during, and after the installation. Protect flooring from excessive heat/cold during storage. If the product is stored in an environment different from the installation site and the temperature ranges are controlled within the 55°F to 100°F (12.78°C to 38°C) The offsite acclimation can be considered acceptable. Please note the material will need to be delivered directly to the installation site with no stops in between.
- It is recommended to mix panels from a minimum of 3 different boxes during installation to assure an even distribution of any minor color variations, slight variances in texture and gloss levels.
- It is recommended to undercut doorjambs, so the planks will slide easily under them. If the door casings are metal, the 1/8" (2.5cm) expansion space can be filled using a silicone or acrylic silicone caulk. Please note the expansion gap must be maintained under the doorjamb.

INSTALLATION INSTRUCTIONS:

• With glue down installation, it is best to plan your installation by measuring the length and width of your room and locating the center of your room in both directions. (Due to various layouts in rooms, you may end up with some panels larger or smaller). Signature suggest adjusting the starting row so the installation ends with a minimum of half the width of a plank. The length of the final planks will vary due to the stagger of the installation. Be sure to include the 1/8" (3mm) expansion space necessary allowing for expansion and contraction. Once you have determined your locations use a chalk line to mark your line for installation. Hint: Try dry racking (laying out) your panels prior to applying the adhesive to confirm this is an acceptable layout.

- To better assist you in your installation you can divide your installation into sections allowing you to start in the center of your area.
- Apply the adhesive (per the manufacturer's instructions). Always take into consideration their specifications and when in doubt contact our Technical Services department for adhesive related questions.
- While it is possible to install glue down installations with four corners together, it can complicate the installation.
- With tile installations a half stagger (Ashlar/Brick) stagger is normal (see Illustration A).
- With plank installations a random stagger will provide a realistic appearance (see Illustration R)

Illustration A															
Ashlar															
Illustration R															
Random															

- With plank installations, a good rule of thumb is to never have a stagger less than the width of the plank and never place the stagger side by side and directly across every other row. Signature recommends a "random" 8" (20cm) stagger to achieve the most natural look with your installation and having no less than 8"in length with any starter or finish panel.
- Replace or install new coordinating baseboards and quarter rounds in all areas. Baseboards are to be nailed into
 the wall and quarter rounds into the baseboards. DO NOT nail either of these into the LVF flooring.
 Hint: When possible select a tile or plank from the cartons that will best coordinate with the molding to avoid
 moderate and above variances.