



LUXURY VINYL FLOORING GLUE DOWN INSTALLATION AND MAINTENANCE

All instructions and recommendations are based on the most recent information available. If you receive a printed copy of these instructions, please refer to www.Forthsurfaces.com to ensure you have the most up to date version of our installation instructions.

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. If you need additional assistance or have questions concerning compatibility contact Forth Surfaces Tech Services at 888-933-4746.

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

The product is a glue down product rated for indoor use only, in a controlled environment (while occupied), within the required temperature range of 55°F to 100°F (12.78°C - 38°C). It is not recommended for three season environments. **Do not install outdoors.**

Forth Surfaces recommends that installations in areas of potential rapid temperature change (solariums, sun-rooms, saunas, etc.) are avoided as the rapid temperature changes may damage the product and void the warranty. Verify the temperature fluctuations prior to installation to determine if the area is suitable for glue down Luxury Vinyl Flooring. Please note that extreme variances in temperature may increase expansion and contraction not only in the flooring itself but the structure as well.

It is the sole responsibility of the installer/owner, prior to installation, to assure that the planned installation area is suitable for the Forth Surfaces Luxury Vinyl Plank. Confirm that all subflooring meets or exceeds all industry standards as well as the recommendations listed herein. The manufacturer accepts no responsibility for product failure extending from or related to failure to meet job environment and subflooring requirements.

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

Forth Surfaces recommends using a Premium LVP adhesive and that adhesive manufacturer's guidelines are strictly followed concerning moisture limitations and application of the adhesive. A "Firm Set" LVP Adhesive is recommended for areas with "rolling loads" (wheelchairs, hospital beds, carts, racks, tables, etc.)

TOOLS REQUIRED:



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

SUBFLOOR & SUBSTRATE REQUIREMENTS:

Do not install Forth Surfaces Luxury Vinyl Flooring over soft, rough, or uneven surfaces.

All sub-floors and substrates must be structurally stable, dry, smooth, clean, and free from all foreign materials (dust, wax, solvents, paint, oils, and old adhesive residue etc.) that might affect the installation. Any high or low areas exceeding 3/16" per 10' (7.5 cm in 3 meter) or 1/8" per 6' (2.5 cm in 1.8 meter) must be corrected.

Wood subfloors: Wood subfloors require a double layer construction requiring a clean underlayment grade underlayment as specified and warranted by the manufacturer of the underlayment. Fasten underlayment panels per the manufacturer's installation guidelines. Any failure of the underlayment, or flooring associated with the underlayment cannot be considered the responsibility of Forth Surfaces. Forth Surfaces does not recommend installing our resilient flooring over wood surfaces applied directly over concrete (AKA "Sleeper-construction floors").

Forth Surfaces recommends all crawl spaces be a minimum of at least 18" tall (46cm) from the ground to the underside of the joist. A black ground cover minimum 8mm thick Polyethylene overlapped a minimum of 6" (115 cm) and taped using a moisture resistant tape to avoid moisture migration from the ground up through the flooring. Cross ventilation (vents located around the perimeter) equal to 1.5% of the square footage of the area should be highly considered (if not already a local code).

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). Low areas should be filled with a latex fortified Portland cement based self-leveling compound. The moisture content and PH levels of the concrete substrate should not exceed the recommendation of the adhesive manufacturer. If surface is painted or otherwise sealed, verify with the adhesive manufacturer if compatible and if not, what steps must be taken to ensure proper adhesion to the surface of the subfloor (Do not use solvents or chemical adhesive removers to remove paint or adhesives).

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). It is the responsibility of purchaser to confirm the suitability of the radiant heating system for use with this product. Any damage to the floor caused by the radiant heating system will not be covered by the product warranty.

Should the radiant heating system be an aftermarket system, Forth Surfaces requires confirming with the manufacturer of that system that Luxury Modular Flooring (considered resilient) can be installed over their



system. Any problems associated with aftermarket radiant heating systems are not the responsibility of Forth Surfaces.

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 in using a Portland based patching compound. The floor must be clean and contaminate free. Forth

Surfaces 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.

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. All topical waxes, polishes, air born contaminants, etc. must be removed. Any irregularities must be repaired or replaced. Embossing leveler is recommended to prevent telegraphing. Do not install over rubber-based substrates.

Old Adhesive Residue: Forth 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. 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.

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. Please follow all recommended Resilient Floor Covering Institute (RFCI) work practices as www.rfci.com

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 glosslevels.

- It is recommended to undercut doorjamb, 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). Forth Surfaces 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 their Technical Services Team 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

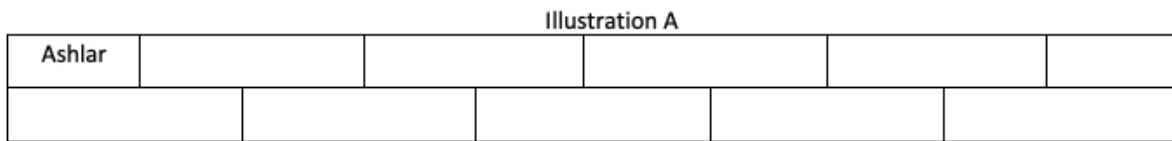
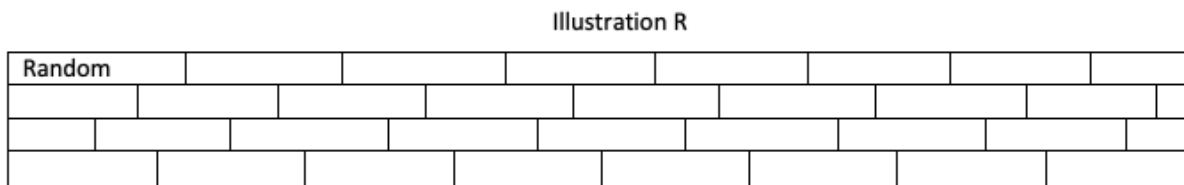


Illustration R Random



- 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. Forth Surfaces 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.

PROTECTION AND MAINTENANCE:

- It is recommended that you sweep & vacuum the area immediately after installation to remove potential damaging soil and debris. Allow 72 hours before wet mopping the floor. This will provide ample time for the adhesive to cure.

- Forth Surfaces recommends using a pH neutral vinyl floor cleaner as required. Examples of pH neutral floor cleaners are Bona Stone, Tile, and Laminate Cleaner, ZEP, Diversey Stride, Hilway Direct HD pH Neutral Cleaner, Armstrong's Once-n-Done, etc. **NOTE:** The listed cleaning agents are a

representation of flooring cleaners that Forth Surfaces recognizes as acceptable for our products. Other neutral pH cleaner may provide satisfactory results as well. Forth Surfaces does not warrant any of the cleaning agents or conditions associated with them as the application of them is beyond our control.

- For commercial installations, we approve the use of a low speed (175 rpm) floor cleaning machine with 3M red or white pad. Forth Surfaces will not be responsible for damages associated with any floor cleaning products or machinery.

- Always rinse the floor thoroughly with clean water and allow to dry as the floor may be slippery when wet. Air movers or fans will speed up drying time.

- Never saturate your flooring.

- Do not buff, wax or use cleaning products that contain surfactants. Dish lotions, laundry detergents, Murphy Oil Soap cleaners should not be used to maintain your flooring.

- Never steam clean or use a steam mop on the floor.

- Furniture & appliances: When moving heavy furniture or appliances place a hard surface between the item and the floor and roll or slide the item on it. **DO NOT** roll or slide them across the floor without this protection. When possible lift the object being careful to avoid injury. Using furniture glides to slide your furniture over the flooring may cause damage to your flooring.

- Felt pads on chair and furniture legs should be installed and replaced periodically, as they wear and accumulate abrasive materials with use that can damage the floor.

- Hard surface mats are required under office chairs. Rolling traffic may damage your flooring and is not warranted.

- We recommend the use of non-staining walk off mats at all entryways. **Note:** Always use non-staining area rugs and mats as they can reduce the risk of permanently staining your flooring caused by latex and rubber backed rugs. Woven rugs may have dye's that can permanently stain your flooring. Using a non-staining padding / mat under it will help reduce that risk.

- High heels and spiked shoes, may mark, abrade, or otherwise damage the surface and finish of your floor. This is not a warranted condition.

For information regarding our products, and warranties please visit our web-site: www.forthsurfaces.com