

**GENERAL PREPARATION AND CONDITIONING**

- Read the literature concerning the product description, limitations, installation, maintenance and warranty prior to installation of tile
- Allow all trades to complete work prior to installation of Gratia LVT Flooring
- Deliver all materials to the installation location in its original packaging with labels intact
- Remove any plastic stretch wrap and strapping from product after delivery to jobsite
- Do not stack pallets of material to avoid any damage
- Maintain the installation area and tile between 65° F (19° C) and 85° F (30° C) for at least 48 hours before installation, during installation, and after the installation
- Remove material from cartons and stack evenly on a smooth dry surface no more than 18" high
- Inspect all material for proper type, color and matching lot numbers if appropriate
- Conduct the proper moisture emission and pH testing on the substrate
- Proceed with the installation only when the conditions are proper and correct
- Turn off radiant-heated flooring systems prior to installation and gradually increase the temperature after 48 hours from installation.

**SUBSTRATE PREPARATION AND INSPECTION**

- All substrates must be clean, smooth, permanently dry, flat, and structurally sound
- The substrate must be free of moisture, dust, sealers, paint, curing compounds, parting agents, residual adhesives, solvent based chemical adhesive removers, hardeners, resinous compounds, solvents, wax, oil, grease, asphalt, gypsum compounds, alkaline salts, excessive carbonation or laitance, mold, mildew, any other extraneous coatings, films, materials and all other foreign matter
- In renovation or remodel work, it is best to remove all existing adhesive residue so that 100% of the overall area of the original subfloor/substrate is exposed
- Follow The Resilient Floor Covering Institute's (RFCI) "Recommended Work Practice for Removal of Existing Floor Covering and Adhesive", and all applicable industry, local, state, and federal standards

**Concrete Substrates**

- Concrete substrates on **all** Grade Levels must be tested in accordance with ASTM F 2170 Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs using *in situ* Probes to quantitatively determine the amount of moisture vapor emission prior to installation.
- Procedo recommends a result equal to or lower than 90% RH prior to installation.

**There are products on the market that make specific statements regarding moisture testing not being required when these products are used as an ad-mixture or topical treatment. Failure to preform moisture testing voids the performance warranties of the Procedo product. Product defects not related to moisture issues will be covered under the warranty after cause of defect is determined by Procedo to not be moisture related.**

- Do not install material over chemically contaminated concrete. Contaminants include chemical adhesive removers, asbestos abatement chemicals, oil spills, fuel spills, glycol spills and/or other similar chemicals

**Procedo recommends using the MAPEI subfloor treatment system Planiprep SA and Planiprep ET to enclose these chemicals in the slab and protect the flooring installation. This two part system includes cleaning and profiling the surface with Planiprep SA, then applying the epoxy topping Planiprep ET. The substrate may then be leveled and the flooring installed. Please contact Procedo prior to using any other systems that provide a warranty for this application.**

- Caution: ASTM F 2170 tests cannot predict long-term moisture conditions of concrete slabs. Moisture testing only indicates moisture conditions at the time the tests are performed
- The concrete's temperature range must also be identical to that of the installation area
- DO NOT install flooring if there is hydrostatic pressure

- Every concrete floor slab on-grade or below grade to receive resilient flooring shall have a permanent, effective moisture vapor retarder installed below the slab

#### **Wood Subfloors**

- Wood subfloors should be of double layer construction with a minimum thickness of 1" APA Underlayment Grade plywood, with each layer a minimum of 3/8" thick, with a fully sanded face.
- Use APA approved exterior grade plywood if finished floors are subjected to moisture.
- OSB, lauan, maranti, solid-core mahogany, waferboard, particleboard, chipboard, flakeboard, tempered hardboard, glass mesh mortar units or cementitious tile backer boards, sheathing-grade plywood, preservative-treated plywood and/or fire-retardant treated plywood are not recommended as some manufacturers may use resins or other adhesives in the manufacturing of the product that may cause discoloration or staining of the flooring.
- Wood subfloor movement, flexing or instability will cause the flooring installed to buckle or become distorted.
- Do not proceed with the installation until corrective measures have been made.
- The warranties, performance, installation and uses are the responsibility of the wood subfloor manufacturer and/or contractor.
- DO NOT use plastic or resin filler to patch cracks.
- DO NOT use cement or rosin coated nails/staples, or solvent-based construction adhesive to adhere the plywood.
- Installation on a sleeper, a wood subfloor system constructed over the top of concrete, is not recommended.
- All wood subfloors, single construction plywood floors, single and/or double tongue-and-groove strip floors, and wood plank floors must be prepared to receive resilient flooring in accordance with industry standards.
- Follow the recommendations ASTM F 1482, Standard Guide to Wood Underlayment Products Available for Use under Resilient Flooring, for the installation and proper construction of the panels to receive resilient flooring.
- It is the contractor's responsibility to determine if the subfloor is acceptable to receive the flooring.

#### **Terrazzo and Ceramic Floors**

- Terrazzo and ceramic floors to be used as subfloors/substrates are to follow the procedures recommended for concrete in 2.2.
- Ceramic tile must be solidly adhered and all loose tiles must be removed and repaired or replaced.
- Ensure all glazed, sealed, smooth and/or shiny surfaces are properly sanded and cleaned.
- Fill all grout lines and other irregularities with a Portland cement-based underlayment with a minimum compressive strength of 3500 PSI.
- The subfloor must be structurally sound. Inspect and ensure there is an adequate bond of the old flooring to the original substrate.
- Procedo will not warrant the product if there is a bond failure caused by problems relating to the old flooring.

#### **Metal Floors**

- Metal floors to be used as subfloors/substrates must be thoroughly cleaned of any residue, oil, rust and/or oxidation and properly sanded/grinded to provide a smooth, level, clean substrate to receive the resilient flooring.
- The flooring must be installed within 12 hours after sanding/grinding to prevent the metal flooring from re-oxidizing.
- The metal subfloor shall be structurally sound.
- Deflection of the metal floor can cause a hollow space between the flooring and the metal substrate.
- The installation of flooring materials will not prevent deterioration of metal substrates from occurring.

#### **Existing Products**

Procedo does not recommend the installation of Summa Design Flooring over existing flooring products. If this is considered, please contact the Technical Department for installation guidelines.

#### **PRODUCT INSTALLATION**

- When laying out the area ensure all end seams are a minimum of six inches apart.
- Whenever possible avoid any seams directly on seams in the substrate and borders less than half of the width of the material.
- In large areas, blend material from several boxes to ensure a consistent appearance.

- Install products with directional arrows on the back with the arrows pointing in the same direction unless utilizing custom layouts or quarter-turn designs.
- Do not install over expansion joints.
- Apply adhesive according to the label directions.
- When laying the flooring, use a kneeling board, or for best results work off of the flooring whenever possible.
- If the adhesive is bleeding or oozing at the seams, there is too much adhesive or the adhesive is too "wet".
- Immediately remove excessive wet adhesive with a soft, clean cloth dampened with warm soapy water.
- Periodically, lift the tiles to check for proper adhesive transfer. There should be at least 90% coverage of adhesive on the back on the tile.
- Observe the adhesive to assure that the adhesive has not surpassed the open time and has not begun to cure.
- Cut wall borders leaving a minimum of 1/8" to allow for minimal expansion and contraction. Cut specialty cut tiles such as door frames and other visible finished areas to fit snugly but not forced into position. Forcing incorrectly sized tiles into smaller areas will cause buckling of the tile.
- Do not wait until all the installation of main areas of flooring to begin laying the borders.
- Lay the border tiles within the adhesive open time.
- Roll and cross roll each section of tile laid with a 100pound 3section roller within 15 minutes after installation of the tile section.
- Adjust rolling time to climatic conditions. Use a hand roller in areas that cannot be reached with the larger roller.
- Conduct a visual inspection during the rolling process to assure there has been no shifting of the tiles and that there is no adhesive on the surface of the tile.
- Do not wait until completing the entire installation before rolling as the adhesive may have surpassed the open time and cured.
- Roll and cross roll a second time approximately 30 minutes after the initial rolling.

**RESTRICTIONS AFTER INSTALLATION**

**PRO610 Spray Adhesive**

Immediate foot traffic, no restrictions  
 Immediate rolling loads, no restrictions  
 Maintenance, after 48 hours

**PRO620 Acrylic Adhesive**

Foot traffic after 24 hours  
 Light rolling loads after 48 hours  
 Heavy rolling loads after 72 hours

Always protect installed flooring after installation from any traffic prior to release for normal use. Failure to do so will result in damage to the flooring. It is also best to protect the flooring while moving any furniture or fixtures into the room as well.

**FLOOR PROTECTION DEVICES**

- When moving in appliances or heavy furniture, it is always wise to protect the floor from scuffing and tears by using something to protect the floor
- Use floor protectors under heavy furniture or fixtures to reduce indentation; as a rule of thumb, the heavier the item the wider the floor protection device needed
- Use floor protectors under feet of chairs and tables that will be moved across the surface of the flooring. Procedo recommends a soft protector such as felt pads for these applications. Other products such as Teflon and/or Stainless Steel can be used as long as the surface remains smooth and not damaged. Keep in mind that debris can damage these surfaces and cause them to create damage to the flooring.
- Place walk-off mats at outside entrances manufactured with non-staining backs to prevent discoloration