duradecor

# polishedpro | 2.0mm Glue Down LVT

## Product Guide

## Limitations

Acceptable concrete substrates must have an effective vapor retarder that is compliant with ASTM E1745 installed directly beneath the slab and, depending on the adhesive in use, must be tested following the protocol of ASTM F2170 Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using in situ Probes or ASTM F1869 Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride. The optimal operating temperature for use is between 40°F to 90°F (4°C to 32°C). Avoid prolonged exposure to direct sunlight or other heat sources where temperatures will exceed 90°F (32°C), as discoloration, deformation or damage may occur.

Do not install in areas that may be subjected to sharp, pointed objects, such as stiletto heels, cleats or spikes. Do not allow product to be directly exposed to extreme heat sources, such as self-cleaning ovens or other high-heat equipment. Do not install outdoors or in areas that may be exposed to repeated and sustained UV/IR rays, as product may fade, discolor or experience excessive movement. Refer to the Material Usage Guide and, if applicable, the Wet Areas technical bulletin for a full list of acceptable areas and information about approved areas of use. Do not use rubber tires, casters or rubber-backed walk-off mats directly on the flooring surface, as permanent staining may occur.

## Receiving Material & Storage

Remove all plastic and strapping from product after delivery. Confirm that the flooring product color, style, quantity and lot numbers are all correct. Carefully check all materials for shipping damage and note all damage on the bill of lading before accepting the delivery. Material accepted with visible shipping damage that is not reported on the bill of lading is not covered under warranty. Ensure that the adhesive intended for installation is approved for use with the flooring product. The floor covering, adhesive and accessories must be stored in dry indoors conditions between 40°F to 90°F (4°C to 32°C). Do not store outside (even in containers) and do not stack pallets. Deliver all materials to the installation location in its original packaging with labels intact.

## Warning

All local, state, and federal regulations must be followed; this includes the removal of in-place asbestos flooring and adhesive, as well as any lead-containing materials. The Occupational Safety and Health Administration (OSHA) has exposure limits for people exposed to respirable crystalline silica; this requirement must be followed. Do not use solvent or citrus-based adhesive removers. When appropriate, follow the Resilient Floor Covering Institute's (RFCI) Recommended Work Practice for Removal of Existing Floor Covering and Adhesive. Always wear safety glasses and use respiratory protection or other safeguards to avoid inhaling any dust. The label, installation, and maintenance instructions along with the technical data sheet, limited warranty and any appropriate Safety Data Sheet (SDS) of all products must be read, understood, and followed prior to installation. Do not leave spills unattended - wipe up promptly, and allow the floor covering to dry before trafficking.

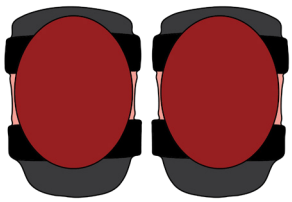
## Documentation

Record and/or photograph the site conditions, test results, and any corrective measures taken. All relevant pre-installation documentation, as well original product invoices and associated shop drawings or project information, should be stored for the entire warranty period.

## Site Conditions & Acclimation

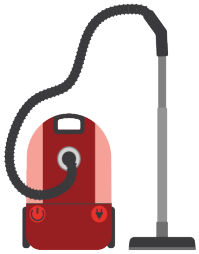
The area must be fully enclosed and weathertight. During the installation, any direct sunlight should be blocked using window treatments or other protection. Use permanent or temporary HVAC system to control the site conditions. The temperature for the installation must match the temperature when the product will be in use (in-service temperature) and be constant (± 5°F). In addition, ambient temperatures must be between 60°F (16°C) and 80°F (27°C) for ≥ 48-hours before, during and after the installation. The ambient relative humidity must be between 35% and 65% and ≥ 10°F above dew point (dew point calculators are available on the internet), or adhesive working and/or curing times will be severely affected. For any project that does not meet these requirements, please contact the technical department before installation.

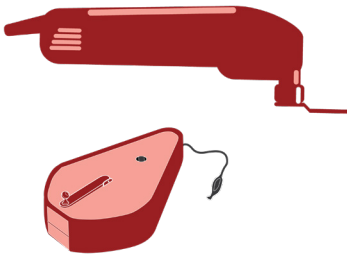
Flooring acclimation is not required when the Receiving Material & Storage requirements and the Site Conditions & Acclimation requirements are both met. If these conditions cannot be met, installation cannot proceed until the ambient temperature and humidity conditions are within the acceptable range and the flooring material is within the acceptable ambient temperature range (± 2°F) when measured with an infrared (IR) thermometer.



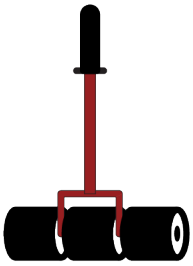


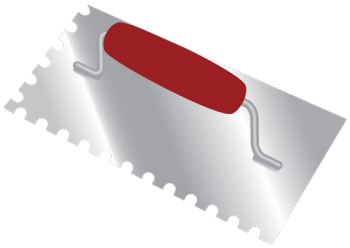
- Knee Pads
- Safety Glasses
- Cut-Resistant Safety Gloves
- Dust Mask





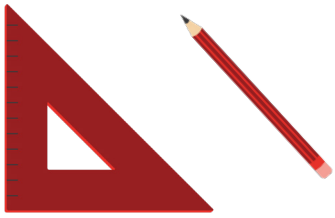
- HEPA-Filtered Vacuum
- Oscillating Multi-Tool or Hand Saw (for door jambs)
- Chalk Line





- Three-Section 100 lb. Floor Roller
- Appropriate Notch Trowel









- Tape Measure
- Utility Knife with Blades
- Pencil
- Speed Square
- 6-foot and 1-foot Straight Edge or Level

## 1. Substrate Preparation

### General Substrate Guidelines

Ensure the substrate is clean, dry, flat, sound and suitably prepared according to these instructions prior to installation, as manufacturer is not responsible for problems related to substrates that have not been properly prepared. All substrates must be free of visible water or moisture, dust, residual adhesives and adhesive removers, solvents, wax, oil, grease, asphalt, visible alkaline salts or excessive efflorescence, mold, mildew and all other extraneous coating, film, material or foreign matter. Substrate and/or subfloor deflection, movement, or instability may cause issues with the flooring installation – these are not covered under warranty.

### Flatness Guidelines

Check all substrates for flatness prior to installation. All substrates must have a floor flatness of FF32 and/or have a maximum deviation of < 1/8-in. gap (2 x US quarters should not slide underneath) within 6-ft. and ≤ 1/16-in. gap (1 x US quarter should not slide underneath) within 1-ft.. Substrates that do not meet this requirement must be corrected appropriately before installation begins.

### Concrete Substrates

All concrete must be at least 28-days old, free of contaminates and structurally sound. If required, flatten and/or smooth the surface using a suitable, moisture-resistant, commercial-grade leveling or patching compound, following the product instructions. Do not install if water or hydrostatic pressure is visible, present or suspected. If a chemical adhesive remover has been used, contact the technical department.

All expansion joints must have a suitable expansion joint covering system installed to allow for expansion and contraction of the concrete. All dormant construction joints and surface cracks > 1/4-in. must be cleared of all dust, dirt and debris and filled with a rigid crack treatment designed for use in construction joints or cracks. Follow the products instructions and ensure surface is troweled flush with surface of concrete.

### Concrete Moisture Requirements

All on and below-grade concrete must have a confirmed and effective vapor retarder that is compliant with ASTM E1745 installed directly beneath the slab. All concrete substrates must be tested for moisture in accordance with the adhesive in use and must be below all published limits.

If a vapor retarder is not present, confirmed or adequate and/or if the results of concrete moisture testing exceed the published limits, a suitable concrete moisture mitigation product must be installed, following the product instructions.

### Concrete Moisture Mitigation

When appropriate, use a dimensionally stable, surface-applied moisture mitigation system that, when tested in accordance with ASTM E96 / E96M Standard Test Methods for Water Vapor Transmission of Materials (Method B), has a permeability value of ≤ 0.1 grains/sq. ft./hr. Confirm compliance with the manufacturer before use.

### Gypsum / Lightweight Concrete Substrates

Lightweight or gypsum substrates must be dry (according to the product manufacturer's requirements) and have a minimum compressive strength of 2000 PSI when installed over a wood substrate or 3000 PSI when installed over a concrete substrate. Lightweight or gypsum substrates must be installed and prepared in accordance with ASTM F2419 or ASTM F2471, respectively. Gypsum and lightweight substrates must be firmly bonded to a structurally sound subfloor. All cracked or fractured areas must be removed and repaired with a compatible repair product. New or existing gypsum or lightweight substrates may require a sealant or primer be installed prior to resilient flooring installation - follow the product manufacturer's recommendations regarding preparation for resilient flooring.

### Wood Substrates

All wood substrates must be structurally sound, dry and within the moisture content percent (MC%) for your region. Wood substrates and subfloors must be compliant with and, if necessary, prepared in accordance with ASTM F1482. Wood substrates should be of double layer construction with a recommended total thickness of 1-in. or more, depending on federal, state and local building codes. Sleepers and sleeper systems must not make direct contact with concrete.

### Resinous Coating Substrates

When installing directly over a resinous coating, such as an epoxy coating or a moisture mitigation system, ensure the coating is clean and free of contaminates, structurally sound, smooth, dry and has cured for the prescribed length of time.

### Metal Substrates

Metal substrates must be clean, dry, structurally sound smooth and free of oil, rust and/or oxidation. When installing in areas that may be subject to topical water, moisture and/or high humidity, an anti-corrosive coating should be applied to protect the metal substrate. Contact a local paint or coating supplier for coating recommendations.

### Other Substrates

Installing over existing resilient vinyl flooring is not recommended. However, it may be possible over some materials, such as VCT, quartz tile, solid vinyl tile, sheet

vinyl or linoleum, as well as existing hard surface flooring substrates, such as terrazzo, porcelain or ceramic tile. Ensure existing flooring is a single layer and is clean, dry, sound, solid and well adhered. All loose material must be removed and repaired or replaced. All grout lines and wide seams greater than 1/4-in. in width and/or depth, as well as any significant substrate imperfections, must be filled and troweled flush with a suitable cementitious patch. Electing to install over any existing floor covering releases the manufacturer from any responsibility regarding the suitability and continued performance of that product, including any resulting effect on the new floor covering.

### Radiant Heating Requirements

When installing flooring over a substrate that contains a radiant heating system, ensure that none of the heating elements make direct contact with the flooring material. Ensure radiant heat is no higher than 70° F (21° C) 8-hours prior to and during the entire installation. After installation, the radiant heat may be gradually increased over the course of 24 hours, until normal operating temperature is reached. Ensure the temperature of the radiant heating system does not exceed 85° F (29.5° C) and avoid making abrupt changes in radiant heating temperature.

### Unsuitable Substrates

These include, but are not limited to: any floating or loose floor coverings, VAT, hardwood, carpet, cushioned vinyl, rubber, cork, foam, asphalt tile, additional acoustical underlayments and any substrate with visible mold, mildew, or fungi and any substrate in wet areas, such as inside showers and saunas. Do not install directly over any adhesive or adhesive residue of any kind. Do not install in recreation vehicles, campers or boats.

Note: Existing hardwood floor coverings will swell when exposed to moisture - vinyl floor covering may restrict the movement of moisture in hardwood, which may result in flooring failure, especially when installed on or below grade. Some hardwood floor coverings may also discolor vinyl floor covering. Issues related to unsuitable substrate are not covered under warranty.

### Adhesive Mat Bond Evaluation

If the suitability of an otherwise suitable substrate is in question, perform an adhesive bond test per ASTM F3311 Standard Practice for Evaluation of Performance and Compatibility for Resilient Flooring System Components Prior to Installation. Store all records related to this test with other relevant documentation. Flooring Expansion

## 2. Flooring Installation

### Grouting

If the product has a micro-beveled edge, the flooring may be grouted. During installation, leave a consistent gap around all four sides of the tile or plank – the gap should be created using appropriate tile spacers and should be 1/16-in., 1/8-in. or 3/16-in. wide. Remove the spacers just before rolling and grout the joints using a flexible grout specifically made for vinyl floor covering. Follow the product instructions regarding application and cleaning.

Note: Any grout residue left on the surface will affect product maintenance and is not covered under the warranty.

### Installation Preparation

It is recommended that all wooden door jambs be undercut with an Oscillating Multi-Tool - the height must be the thickness of the floor covering. Allow all trades to complete work prior to installation. Clean the entire area to be installed using a HEPA-filtered vacuum.

Inspect all material prior to and during installation to verify that there are no visible defects, damages and excessive flatness, shading, sheen or texture variations. Blend materials from several cartons within the same lot to ensure a consistent appearance. Some flooring products, colors and textures have latent and acceptable color and shade variations. If there are concerns regarding product defects, flatness, shade, sheen or texture variation, do not install material and consult a sales representative or manufacturer's technical staff. Labor costs associated with materials installed with obvious visual defects will not be covered under warranty.

Although mixing different lots within the same area will not affect the performance of the product, it is not recommended, as shade, sheen and texture variations may be visible. Prior to installing, compare different lots side-by-side from all directions and lighting conditions to confirm acceptability for the owner or end-user. Material installed with obvious visual differences related to production lots will not be covered under warranty.

### Layout

Prior to installation, confirm the installation pattern and direction per the design specifications or work order. Planks should be installed in a random pattern - plank end joints should be randomly spaced by ≥ 8-in. Avoid "H" joints and do not install in a "Stair-Stepped" installation pattern, while ensuring no obvious pattern repeats emerge.

### Starting Line

Measure the width of each end of the area, then calculate and mark your starting line, at the center of the room. Calculate the width of the last row – if it is less than half the width of the floor covering, adjust your starting line by half the width of the flooring.

### Cutting

To cut the floor covering, carefully score along the cut line at least twice with a sharp utility knife. When cutting across the width of a piece, use a speed square as a guide. Snap the piece downwards. Alternately and as necessary, a jigsaw with a carbide blade may be used for complicated cuts, following the tool's safety instructions.

### Adhesive Application

Only apply as much adhesive as can be covered within the working-time, typically to only one side of the starting line at a time. Apply the adhesive slowly and evenly to the substrate at the appropriate angle using the specified trowel notch. Avoid skips, puddles or sharp trowel turns. Allow the specified open time for the adhesive, depending on the porosity of the substrate and the site conditions. The adhesive may need to be dry to the touch prior to installation - refer to the product instructions for specific requirements.

### Flooring Installation

After the appropriate adhesive open time has been reached, install the floor covering, including perimeter cuts. Make sure that all arrows on the back are pointed in the same direction. Follow the starting line, keeping all joints snug without over-compressing the material. Make sure the starting row is straight - the acceptable straightness tolerance is within 1/16-in. for lengths over 20-ft. or 1/32 -in. for lengths under 20-ft.. After each area of flooring is completed (< 1-hour), roll it slowly, first width then length, using a 100 lb. three-section roller. Failure to roll correctly may result in bond failure.

Repeat this process for the remainder of the installation. If adhesive gets on the surface of the material or has dried on the surface, immediately remove it in accordance with the adhesive manufacturer's cleaning instructions.

### Post-Installation

Visually inspect the installation to ensure that the appearance is uniform and straight, that all seams are tight and correctly staggered/spaced. When spot cleaning, do not apply abrasive or solvent-based cleaners directly to the surface of the floor covering. When required, protect newly installed flooring with construction grade paper or protective boards, such as Masonite, Ram Board or plywood, to prevent damage from other trades. Take photographs and have any required documentation signed and filed following completion. Save three or more extra pieces of material in the original packaging as attic stock for the lifetime of the floor. **In the unlikely event of a product issue, attic stock can play a crucial role in product identification, color matching, product claim verification and possible repairs.**

## 3. Flooring Protection

Do not slide or drag heavy objects across the floor. When moving appliances, heavy furniture or equipment, protect the flooring with appropriate, hard surface furniture sliders or 1/2-in. plywood.

All furniture casters or glides must be intended for resilient flooring and made of a soft material, such as a felt, silicone or a poly-based material. Casters and glides must have a flat contact point that is at least 1 -sq. in. or 1.125-in. in diameter to limit indentation and flooring or finish damage.

All rolling seating in desk areas must have chairs that use soft, W-Type polyurethane wheels or have a resilient flooring chair pad installed over the finished floor to protect it. Do not use nylon/hard plastic wheels, glides or casters.

All fixed furniture legs or corners must have permanent floor protectors installed on all contact points to reduce indentation, wear, scratching and other flooring or finish damage. Floor protectors must be intended for resilient flooring and made of a soft material (such as a felt, silicone or a poly-based material). Floor protectors must have a flat contact point of at least 1 -sq. in. or 1.125-in. diameter and must cover the entire bottom surface of the furniture leg. Do not use nylon/hard plastic floor protectors or furniture feet.

Ensure all furniture castors and chair legs are clean and free of all dirt and debris. Routinely clean chair castors and furniture legs to ensure that dirt or debris has not built up or become embedded in castors or floor protectors. Replace chair castors and floor protectors at regular intervals, especially if they become damaged or heavily soiled. Felt floor protection devices may need to be replaced 3 or more times a year to prevent accumulation. Use an effective walk-off mat or system at all outdoor entrances/ exits and prevent water from accumulating. Ensure mats are manufactured with non-staining backs to prevent discoloration.