



## Installation Guide LVP Glue Down

### Materials Required for Installation:

- Tape Measure
- Square ruler
- Chalk line
- Utility knife
- Hand/Seam roller
- 75 lb roller

### Acceptable Subfloors:

#### • Wood subfloor

Wood subfloor must be American Plywood Association (APA) rated subfloor grade as specified and warranted by the manufacturer. All wood subfloors require a double layer construction. Porous wood subfloors must be primed. **(HF225 Primer)**

Any failure of the subfloor or flooring due to the subfloor is not the responsibility of Happy Feet International. Happy Feet International does not recommend installing resilient flooring over wood flooring or subfloors applied directly over concrete or sleeper-construction floors.

- **Concrete** — See Grade Levels below. All concrete subfloors require moisture testing.

### Grade Levels:

**Suspended:** An acceptable suspended floor is a concrete or wood substrate with a minimum of 18" (460mm) of well-ventilated air space beneath it. Happy Feet International recommends that a moisture vapor barrier be placed on the ground below the air space.

**On-Grade:** An acceptable on-grade floor is a concrete substrate in direct surface contact with the ground at the surrounding ground level. The concrete slab should be protected from moisture penetration and incorporate a permanent, effective moisture vapor retarder with a minimum thickness of 0.010 and a permeance of 0.1 per ASTM F710.

**Below-Grade:** An acceptable below-grade floor is a concrete substrate partially or completely in contact with the ground below the average surrounding ground level. The concrete slab should be protected from moisture penetration and incorporate a proven moisture vapor barrier. The concrete slab should be protected from moisture penetration and incorporate a permanent, effective moisture vapor retarder with a minimum thickness of 0.010 and a permeance of 0.1 per ASTM F710.

**Approved Substrates:**

- Concrete
- Portland Based Underlayment's
- Terrazzo
- APA Approved Plywood
- Fiber Cement Underlayment
- Radiant Heated Subfloors (not exceeding 85°F (29°C))
- Properly Prepared VCT
- Properly Prepared Sheet Vinyl (single layer, fully adhered)

**Unacceptable Surfaces:**

- Cushion-back vinyl
- Laminate
- Any floating floor system
- Carpet

Happy Feet International will not warrant or accept responsibility of any kind for flooring failures related to the use of unacceptable substrates and surfaces.

**Floor Preparation:**

The smoothness and cleanliness of concrete subfloors must meet or exceed the requirements of ASTM F710. Fill all holes and cracks with a latex fortified Portland cement based patching compound. Happy Feet International only recommends the use of latex fortified Portland cement based products as a satisfactory patching or leveling compound. The floor should be flat 3/16" in a 10 foot span.

Happy Feet International recommends priming extremely porous floors with a Premium Acrylic Latex Primer to prevent over absorption of adhesives, dust containment, and to insure a better bond of the adhesive to the subfloor/underlayment.

**Moisture Testing:**

All concrete slabs, both old and new, must be tested for moisture transmission using the Calcium Chloride Moisture Test according to ASTM F1869. Moisture vapor transmission should not exceed the recommended levels of 3 lbs. per 1,000 sq. ft. in 24 hours. This test should be performed and documented prior to installation. Also test for relative humidity in concrete floor slabs using in-situ probes, which should be no more than 80% RH per ASTM F2170 before, during and after installation.

These acceptable moisture readings are only applicable when using HF9100 Transitional Adhesive.

**Storage and Handling:**

Acclimate the flooring a minimum of 48 hours before installation in the area it is to be installed. Conditions between 65°F and 85°F (18°C and 29°C) are required before, during and after installation. Cartons should be evenly stacked no more than two high on a flat surface and away from any heating/cooling ducts or direct sunlight.

Floor must be clean, smooth, flat and dry. Remove all foreign substances such as wax, grease, dirt, construction marks and contaminants, and any substance or chemical that would interfere with a good bond. Avoid using sweeping compounds. Do not install over substrates that have been chemically cleaned. The flatness of wood subfloors or underlayment must not exceed on variation of 3/16" in 10 feet.

**PH Levels:**

pH on concrete substrates must be between 7 and 9.

**Inspection of flooring material prior to installation is required.** Any defects should be immediately reported to the retail store from which the flooring was purchased before installation. **(Within 24hrs of install)** Happy Feet International will not be responsible for labor costs to repair or replace material with defects that were apparent before or noticed at the end of an installation. The job site and all flooring material and adhesive must be kept for 48 hours before, during and after installation between 65°F and 85°F (18°and 29°C).

**Please Note:**

If removal of existing resilient floor covering is required, follow all recommended Resilient Floor Covering Institute (RFCI) work practices at [www.rfci.com](http://www.rfci.com) Happy Feet International only recommends the use of Portland cement based products as a satisfactory patching or leveling compound for the installation of all Happy Feet International flooring products.

**Common Uses:**

- Leveling Substrates
- Filling holes
- Filling cracks
- Embossing existing resilient floor, ceramic tile or VCT
- Leveling non water-soluble adhesives

Trowel Specifications

Type of Installation	Trowel Size & Notch	Spread Rate
Over porous substrates (Vinyl Tile & Plank, Rubber Tile, Vinyl & Rubber Stair Treads)	1/16" x 1/16" x 1/16" Sq. 1.6mm x 1.6mm x 1.6mm Sq	250 sq. ft. per gal
Over porous substrates (Solid Vinyl Sheet Goods, Rubber Sheet Goods)	1/16" x 1/32" x 1/32" U 1.6mm x 0.8mm x 0.8mm U	350 sq. ft. per gal
Over non-porous substrates (Vinyl Tile & Plank, Rubber Tile, Vinyl & Rubber Stair Treads)	1/16" x 1/32" x 1/32" U 1.6mm x 0.8mm x 0.8mm U	350 sq. ft. per gal
Over non-porous substrates (Solid Vinyl Sheet Goods, Rubber Sheet Goods)	1/16" x 1/32" x 5/64" U 1.6mm x 0.8mm x 2mm U	400 sq. ft. per gal

- Filling saw cuts and/or construction joints

\*Trowel dimensions are width x depth x spacing. Coverage is approximate and may vary depending on porosity of substrate and the angle at which the trowel is held. **IT IS THE INSTALLER'S RESPONSIBILITY TO APPLY THE PROPER AMOUNT OF ADHESIVE FOR THE JOB CONDITION.**

Do not fill actual expansion joints or other moving joints with elastomeric fillers that are designed to absorb movement in concrete slabs. Cementitious underlayment, patches and resilient flooring installed across true expansion joints will often buckle or crack when the slabs move. Usually architects will specify expansion joint covers for the use with various floor coverings.

**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 at [www.rfci.com](http://www.rfci.com)

**Cutting:**

Tiles and planks may be cut with a small tile cutter or scored and snapped.

**Precautions:**

Planks/tiles may be walked on immediately; however, the floor should be protected with plywood when moving heavy furniture and appliances back into the room.

**Start of Installation:**

The adhesive, floor covering, and area to receive flooring must be maintained at a temperature of 65° to 85° F and at a relative humidity of 30% to 60% for 72 hours before, during, and after installation. Follow the flooring manufacturer's guidelines regarding site conditions and installation.

**Porous Surfaces:** May be used either wet or as a pressure sensitive adhesive over porous surfaces. To use wet, apply adhesive with the recommended trowel and allow to flash off for 5-10 minutes before installing flooring. Lay tile, plank or sheet goods into wet adhesive according to flooring manufacturer's instructions. Adhesive must transfer to floor product to ensure proper bond. To use as a pressure sensitive adhesive, dry to a tacky state and then install flooring according to flooring manufacturer's instructions within 3 hours.

**Non-Porous Surfaces**—Tile & Plank: Apply with the recommended trowel, allow to dry completely from yellow to tan, and lay in the tile or plank according to the flooring manufacturers instructions within 3 hours. The highly aggressive pressure sensitive grip prevents slippage and minimizes seam gaps. Drying time is 45-90 minutes and will vary depending on temperature and humidity. Installation over areas of incomplete drying can result in job failure.

**Please note: If our HF225 Primer or HF9100 Transitional Adhesive is not used, then the warranty is voided.**

**DO NOT** use a damp cloth or damp mop on the new flooring for at least 14 days after the installation. This will allow planks/tiles to become "seated" in the adhesive and prevent excess moisture from interfering with the adhesive bond.

**NOTE:** Flooring installed in front of direct sunlight will not be covered, (windows or doors must be tinted).