

# LW Flooring Glue-Down Luxury Vinyl Plank Installation and Maintenance Guide

## **Product Suitability**

LW glue-down luxury vinyl plank flooring is appropriate for all interior floor surfaces (above, on, or below grade) and over concrete or wood substrates. This type of flooring is ideally suited for residential and light-duty commercial environments, such as retail, leisure, health and education.

## **Testing and Acclimatizing**

It is essential to conduct a calcium chloride moisture test on all concrete floors. The test should be conducted around the perimeter of the room, at columns, and locations where moisture may be evident. The moisture emissions from the concrete should not exceed 3lbs/1000 sq.ft. in 24 hrs.

During this preliminary moisture-testing period, the vinyl flooring should be present at the job site to allow an appropriate period for the product to acclimatize. Remove material from the packaging, spread out if possible, and allow the material to condition in the room where the installation is to take place at a constant temperature of 18<sup>0</sup>-26<sup>0</sup> for a period of 48 hours prior to installation. This temperature should be maintained during installation and for a 24 hour period after installation.

If the concrete exceeds moisture limitations, the installation should not proceed until the problem is corrected. A moisture problem can be corrected by sealing the concrete with any one of the many brands of concrete sealers available. After the sealer has been applied, re-test to ensure that the problem has been corrected. It is important to note that a moisture test only indicates conditions at the time of testing. The flooring contractor cannot be held responsible if moisture appears in the future, causing adhesive failure.

Please note that new concrete subfloors contain a high percentage of moisture and must be allowed to dry out. The drying time will depend on several conditions, such as the type of concrete used, average air temperature, and thickness and location of the slab.

## **Floor Preparation**

The vinyl flooring can be installed using pressure-sensitive adhesive. It is suitable for installation over non-porous surfaces and existing vinyl floors. Please consult your LW Flooring Representative for your particular application.

- All supporting surfaces should be structurally sound, solid, stable, level, plumb and true to a tolerance in plane of 1/4" in 10 feet (6 mm in 3 m). They should be dry, clean, and free of dust, oil, grease, paint, tar, wax, curing agent, primer, sealer, old adhesive or any deleterious substance and debris which may prevent or reduce adhesion.
- Mechanically sand, bead, blast or scarify the substrate to completely remove all paint, loosely bonded topping, loose particles, construction debris, old adhesive, and any contaminant that may prevent or reduce adhesion.
- Remove any trace of strong acid or alkali from the substrate prior to applying the surface product and/or adhesive.
- For wood underlayment, the moisture content should meet the requirements of the wood manufacturer and/or flooring manufacturer, generally 8-10% using a wood moisture tester.

## **Concrete**

- Concrete substrates should be finished using a flat trowel, and the surface should be sound, true and level to a tolerance in plane of 1/4" in 10 feet (6 mm in 3 m) for floor installation.
- The installer is responsible for completing a humidity test and providing the general contractor and/or the architect with the written results prior to the execution. A humidity test has to be done at least 96 hours (4 days) prior to commencing work and the results shall not exceed 3lbs/1000 sq.ft. in 24 hrs with the anhydrous calcium chloride test.
- All new concrete surfaces should be steel trowel-finished. A moisture barrier with a permeance of less than 0.2 metric perms, as measured according to the ASMT-96 standard, must be present under concrete slabs that are on or below grade. This barrier must be resistant to deterioration as well as to puncture during construction and must remain intact and continuous.
- Any repair to the concrete substrate should be made using the proper surface preparation product. Where self-smoothing surface preparation material is required, the concrete shall be bead-blasted or scarified. Where a fast-setting screed mortar or polymer-modified premixed mortar is used, the concrete shall be scarified.
- Neutralize any traces of strong acid or alkali prior to applying the surface preparation product or adhesive.

## **Wood underlayment**

- Particleboard, strand board and flake board are not RFCI-recommended underlayments, and therefore are not recommended for use as a substrate.
- Plywood substrate and underlayment should be group 1, exterior-grade plywood, CC-plugged or better, should conform to APA classification and U.S Product Standard PS 1-95, and should classify as SEL TF or COFI.

- The installation of wood underlayment should comply with ASTM F499-84 standard.
- All wood underlayment should be new and acclimated for at least 24 hours to the job site condition prior to installation.
- When required, the wood underlayment should be filled and patched to correct seams, cracks, indentations and other subfloor irregularities using the proper products. Fast-setting, cement-based, polymer-modified patching compound and Acrylic latex additive is recommended for use. Other types of levelers, such as calcium sulfate/plaster/gypsum-based compounds, are not recommended.

### **Old substrates**

- Existing cement terrazzo, ceramic tile, and single layer non-cushioned mineral fibrous felt-back sheet vinyl should be sound, solid, well-adhered, flawless, stripped or sanded clean and free of dust, wax, grease, soap residue or any deleterious substance that may reduce or prevent adhesion.
- When installed with a Luxury Vinyl Tile (LVT) adhesive, the floor may be installed over a single layer of non-cushioned resilient flooring, provided the existing flooring is fully-adhered and well-bonded. The sub floor or underlayment that is under the existing resilient floor must meet these requirements.
- Any cuts, gouges, dents or other irregularities in the existing floor and any existing embossing or texture must be leveled to prevent telegraphing. Embossed vinyl flooring should be properly leveled with the fast setting cement-based polymer-modified patching compound and Acrylic latex additive system and the entire floor skim should be coated to ensure adhesion.
- Any waxes or finishes must be completely removed and rinsed with clean water. If the existing floor has been installed over concrete on a below grade, a calcium chloride moisture test must be performed for every 1000 square feet. The results of the test must meet the requirements as previously noted (in the section “Testing and Acclimatizing”). Moisture tests should be conducted over an area where the existing floor and adhesive has been completely removed.

### **Installation**

- Use pressure-sensitive adhesive when applying the vinyl flooring over porous sub floors, such as concrete or wood. Recommended Trowel Size is 1/16”x1/16”x1/16”.
- Use pressure-sensitive adhesive when applying the vinyl flooring over non-porous surfaces and existing vinyl floors or in wet-use areas. Recommended Trowel Size is 1/32”x1/32”x1/16”.
- Do not install over concrete floors that are excessively cold or radiant-heated with floor temperatures that exceed 85°F. Radiant heating should be turned off 12 hours before installation.
- Spread the adhesive with the recommended notched trowel to assure enough adhesive coverage and to achieve a 95% transfer to the backing of the floor covering.

\*Trowel sizes are a guideline and may vary depending on substrate, adhesive manufacturer, and site conditions.

1. Work in a small enough area to ensure that the vinyl flooring is laid into the adhesive, according to the adhesive manufacturer’s installation methods. The adhesive working time is approximately 15-45 minutes under normal conditions. Position the plank at a proper position in the adhesive without sliding and press firmly down, paying special attention to the tile edges and corners and making sure the ends of the planks are staggered for best visual appearance. Periodically check the adhesive by lifting a tile to make sure that at least 95% of the adhesive pattern has been transferred to the back of the plank or tile. If the adhesive starts to set up or skins over, scrape it up and reapply fresh adhesive.
2. Roll each section in both directions immediately upon completion with a minimum 100-150 lb. roller. Re-roll the entire area after one or two hours. Promptly remove adhesive smudges with a clean cloth dampened with water while adhesive is still fresh and mineral spirits when adhesive is dried. Ensure that all tile and planks are free from general traffic for 24 hours after installation.
3. Do not wash or polish the floor for a minimum of 48 hours after installation. The manufacturer or supplier will not be liable for any loss, damage, or complaint of any kind if the specific laying procedure described in this guide is not followed.

### **Protection**

- Protect the floor covering installation against dirt and other trades.
- Do not allow traffic over the installation 24 hours after work completion.
- Do not thoroughly wash the floor covering with water for 30 days. Wipe with a damp mop during the first month to allow adhesive to cure.
- Temperature and humidity during and after the floor covering installation will have a direct effect on the drying time of the adhesive. Therefore, ensure that room temperature is kept at a minimum of 65°F and relative humidity is no more than 65% for a period of 72 hours after the completion of work.

## **Cleaning and Maintenance**

### **For Routine Cleaning:**

Thoroughly sweep or vacuum floor before washing. Add 1 ounce (4 mL/L) of a Neutral Floor Cleaner to one gallon of warm water. Damp mop the floor using a clean sponge or mop for best results. Continue to rinse the mop or sponge throughout the cleaning process.

### **For Extra Dirty Floors:**

Add 2 ounces (8 mL/L) of a Neutral Floor Cleaner to one gallon of warm water. Damp mop the floor using a clean sponge or mop for best results. Continue to rinse the mop or sponge throughout the cleaning process.

### **For Heavily Soiled Areas:**

Add 8 ounces (50 mL/L) of a Neutral Floor Cleaner to one gallon of warm water and allow it to saturate for 3-4 minutes. Use a white scrub brush or nylon pad to loosen dirt. For best results, continue to rinse the brush or pad throughout the cleaning process.

**Warranty** – 10 years for residential and 5 years of light commercial

## **Product**

LW warrants its LVT product to be free from manufacturing defects at a specified length of time from the date of purchase as set forth above.

## **Installation**

This warranty covers material and reasonable labor costs if professional installation was paid for when the floor was originally installed, provided that such floor is installed to the LW installation guide. This guide may be updated periodically. Please check our website ([www.lwflooring.com](http://www.lwflooring.com)) for the most current guide.

## **Replacement/Repairs**

LW Flooring reserves the right to repair any floors and/or use its own source to obtain an installer for replacement flooring. You are responsible for clearing any items placed over the affected areas subsequent to the original installation. In the event that LW Flooring repairs a floor, this warranty shall remain effective on this floor.

## **Exclusions**

The following are *not* covered by the warranty:

Improper installation; difference in color between products and samples or photographs; indentation from improper loading, including high heels, spiked shoes, rolling loads, chairs or other furniture not using floor protectors; discoloration; inappropriate end user activities or abuse; fire and flood; scratches and dirt build-up that requires maintenance.