



FLOORING

Installation & Maintenance Guide

Read this guide before starting installation

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

Conducting a calcium chloride moisture test on all concrete floors is essential. The test should be conducted around the perimeter of the room, at columns, and **at** 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 for an appropriate period for the product to acclimate. Remove material from the packaging, spread out if possible, and allow it to condition in the room where the installation is to take place at a constant temperature of 55°F to 100°F (12.78°C to 38°C) 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 the thickness, and location of the slab.

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 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.

The product warranty will not cover any damage to the floor caused by the radiant heating system. Any problems associated with aftermarket radiant heating systems are not the responsibility of LW Flooring.

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 tolerance in the plane of 3/16" in 10 feet or 1/8" per 6'. 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 Subfloor

- Concrete substrates should be finished using a flat trowel, and the surface should be sound, true and level to tolerance in the plane of 3/16" in 10 feet or 1/8" per 6'. for floor installation.
- Must be fully cured (at least 60 days old). 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 Subfloor

- Particleboard, strand board, and flakeboard 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 the ASTM F499-84 standard.
- All wood underlayment should be new and acclimated for at least 24 hours to the job site conditions before installation. Any failure of the underlayment or flooring associated with the underlayment cannot be considered the responsibility of the manufacturer/supplier.
- 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 additives are recommended for use. Other types of levelers, such as calcium sulfate/plaster/gypsum-based compounds, are not recommended.
- Basements and crawl spaces must be dry. The use of an 8 mil black polyethylene is required to cover 100% of the crawl space on earth. 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). Crawl space clearance from ground to underside of the joist is to be no less than 18," and perimeter vent spacing should equal 1.5% of the total square footage of the crawl space area to provide cross ventilation. Where necessary, local regulations prevail.

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 subfloor 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 have been completely removed.

Installation

- Use pressure-sensitive adhesive when applying the vinyl flooring over porous or non-porous subfloors and existing vinyl floors or in wet-use areas, such as concrete or wood. *Trowel sizes are a guideline and may vary depending on the substrate, adhesive manufacturer, and site conditions.
 - 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 ensure enough adhesive coverage and to achieve a 95% transfer to the backing of the floor covering.
 - 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
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 properly in the adhesive without sliding and press firmly down, paying special attention to the tile edges and corners and ensuring the planks' ends are staggered for the best visual appearance. Periodically check the adhesive by lifting a tile to ensure 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 of 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 the adhesive is still fresh and mineral spirits when the adhesive is dried. Ensure that all tiles 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 the adhesive to cure. Allow 72 hours before using a mopping the floor.
- 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 the room temperature is kept at a minimum of 65°F and the relative humidity is no more than 65% for a period of 72 hours after the completion of work.

General Maintenance

Installation and maintenance guides may be revised periodically to apply to new products or reflect changes in industry standards. Please visit our website at www.lwflooring.com to review our most up-to-date documents.

- NEVER use wax or oil-based cleaning products. All-purpose cleaners are not recommended; they can dull your floor's finish or leave a hazy residue.
- LW Flooring recommends Bona brand cleaning products, which are widely regarded as the best cleaning solution for urethane finish flooring.
- Sweep, vacuum (no beater bar), or dust mop regularly.
- Do not use steam mops.
- Wipe up spills immediately. Never let water stand on the wood floor for any length of time.
- Use walk-off mats at entrance doors and in front of kitchen sinks.
- Install proper felt protectors under the chair and furniture legs to prevent scratching.
- Roller or castor chairs should not be used directly on the floor surface as grit will build up under the wheels over time and become abrasive. Protective mats must be placed on the floor to protect the surface coating and to keep your floor looking good.
- Do not drag or push heavy items across the surface of the floor.

For Routine Cleaning: Thoroughly sweep or vacuum the 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 the best results. Continue to rinse the mop or sponge throughout the cleaning process. Never steam clean or use a steam mop on the floor.

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 the 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.