



GENERAL INSTALLATION INSTRUCTIONS LOOSE LAY FLOORING

All instructions and recommendations are based on the most recent information available. Please refer to www.efhardsurfaces.com to ensure you have the most up to date version of our installation instructions. These instructions should be followed for an ideal installation.

WARNING

Failure to follow these guidelines may result in an installation failure. Prior to installation, please ensure that the product received is the correct style and color as well as to the customer's satisfaction. If there are any doubts, do not install the flooring and contact the retailer. Engineered Floors® will not be held responsible for any costs relating to the installation of unsatisfactory, incorrect product, or job failure due to not properly acclimating the product.

ACCLIMATION

Acclimation is a required procedure prior to the installation of Luxury Vinyl Flooring (LVF). Store the UNOPENED BOXES in the room where the flooring is to be installed for at least 48 hours prior to installation. Always store the boxes on a flat and level surface; never store the boxes on their sides. Heating and air conditioning should be operational and set between 65 °F - 85 °F (18.3 °C - 29.4 °C) for the acclimation and installation period. Keep in mind a concrete floor can be up to 10° colder than the actual room temperature.

REQUIRED ADHESIVE (for perimeter and full spread installations)

Engineered Floors requires the use of one of our approved adhesives for LVT. Please contact Engineered Floors Tech Services at hstechservice@engineeredfloors.com or 1-866-706-9745 Ext. 7105 to obtain a list.

Note: All commercial installations subject to rolling loads require full spread glue-down method.

FOLLOW ADHESIVE MANUFACTURER'S INSTALLATION INSTRUCTIONS REGARDING APPLICATION AND WORKING TIME.

RECOMMENDED TOOLS AND MATERIALS

Safety glasses, Measuring tape, Square, Floor roller, Utility knife, Straight edge, Chalk line, Marking pen, Trowel (as per adhesive manufacturer's recommendations), Primer (if necessary), Vinyl plank/tile cutter (optional), Acetone (if necessary), Embossing leveler /floor patch (if necessary)

Note: Depending on the required floor preparation, other materials required may include: cement-based floor patching compound and trowel, embossing leveler, scraper, sander or grinder.

SUITABLE SUBSTRATES

Engineered Floors LVF can be installed over many floors. All carpeting and padding need to be removed. Make sure that the surface is clean, dry, structurally sound and flat within 3/16" per 10 foot radius (4.7 mm per 3 m). Supporting floors must be rigid as too much deflection can result in a failed installation. Maximum deflection should not exceed 3/64" (1.1 mm). Engineered Floors LVF should not be installed over plank floors, cushioned-backed vinyl flooring, asphalt-based floors, carpet, self-adhering plank or tile, laminate or other floating flooring or structurally-damaged concrete; concrete should be free from dust, solvents, paint, wax, grease, oil, sealing compounds or curing agents.

CONCRETE SUBSTRATES

Concrete subfloors must be inspected prior to installation and if they do not meet the following requirements, do not install flooring. Concrete shall have a minimum compressive strength of 3500 psi. Concrete subfloors must be cured for 60 days prior to installation of the flooring, and should be tested for excessive moisture. Moisture vapor emission rate should not exceed 90% when using the ASTM F2170 test method, and the pH level should be between 7 and 9.

GYPSUM FLOORS

Engineered Floors LVF can be installed over flooring grade gypsum subfloors when properly installed following the adhesive manufacturer's installation instructions. It should be noted that gypsum subfloors are very porous and are required to be primed or sealed following the adhesive manufacturer's installation instructions. The subfloor should be structurally sound and flat within 3/16" per 10 foot radius (4.7 mm per 3 m).

WOODEN SUBSTRATES

Wood floors should be a minimum of 3/4" (19 mm) thick, APA approved grade tongue and groove plywood or 23/32" (18.25 mm) OSB, with a smooth finish, free from spring and deflection. Make sure that the surface is clean, dry, structurally sound and flat within 3/16" per 10 foot radius (4.7 mm per 3 m). All fastener indentations and joints should be level and smooth using appropriate patching compounds. Deflection should not exceed 3/64" (1.1 mm).

EXISTING RESILIENT FLOORS

When installing Engineered Floors LVF over existing resilient flooring, ensure that the existing sheet good or tile product is in good condition, that it was installed in the full spread glue method and is properly secured. Engineered Floors LVF can be installed over one layer of non-cushioned sheet good flooring. Existing tile or sheet resilient floorings should be stripped using a product that is an appropriate stripper for vinyl to remove wax or other contamination, rinsed with clear water and allowed to dry. Very smooth or high-gloss floors need to be lightly abraded to rough up the surface to allow proper adhesive bonding.

MARBLE, QUARRY TILE, TERRAZZO, CERAMIC TILE

Properly cleanse substrate using a commercial degreasing/dewaxing solution. Grind or abrade any highly polished or irregular surfaces. Fill any low areas, chips and grout joints that may telegraph through the new flooring. Test for porosity and use the appropriate adhesive application method. Bond tests are required.

RADIANT-HEATED FLOORS

Engineered Floors LVF can be installed over embedded radiant-heated floors provided the operating temperature never exceeds 85 °F (29.4 °C). The radiant system should be in operation for three (3) weeks prior to installation of the flooring. For 48 hours prior to and during installation, the system should be kept at 65 °F (18.3 °C). It should be noted that when using adhesive, flash off time may be decreased due to operation of the radiant heat flooring system. Once the installation is completed, the heat should be gradually increased by a maximum of 5 °F (2.8 °C) per day until the desired setting is reached. Do not use radiant heat systems that expose the flooring to wide variations in temperature, such as a wire induction mat system. The installation area of the flooring shall not contain heated and non-heated areas, unless expansion joints separate them. Keep in mind that loose rugs or carpets may accidentally function as heat insulators and raise the temperature to more than the tolerated maximum surface temperature of 85 °F (29.4 °C).

JOB SITE CONDITIONS/SUBSTRATE PREPARATION

- Room temperature must be maintained between 65 °F (18.3 °C) and 85 °F (29.4 °C) at all times.
- Substrate should be free of dust, debris from paint, varnish, wax, oils, curing sealers, solvents and other foreign matter. Any adhesive residue from prior installations should be completely removed.
- Any looseness of the substrate should be secured.
- High spots should be levelled and low spots should be filled with a proper material to ensure substrate is flat within 3/16" per 10 foot radius (4.7 mm per 3 m).
- All construction seams, expansion joints, and holes should be filled level with the surrounding surface to eliminate telegraphing of such irregularities.
- Engineered Floors recommends the use of floor primers on all porous substrates.

Caution: If you plan to remove old resilient flooring material or any type of old adhesive, please be aware that it may contain asbestos fibers or crystalline silica; therefore, avoid creating dust. Inhalation of such dust is a cancer and respiratory tract hazard and local regulations may require professional removal. Instructions for the removal of old flooring materials and adhesives may be



found in the RFCI Recommended Work Practices for Removal of Resilient Floor Coverings. You may contact the Resilient Floor Covering Institute at 706-882-3833 or www.rfci.com.

PATCHING AND LEVELING

Use only cement-based patching and leveling compounds. Check with patching and leveling compound manufacturer for curing times. Check moisture levels before starting installation to ensure moisture levels are within guidelines as outlined in the "Concrete Substrates" paragraph. The contractor or owner is responsible for cure time, moisture content testing, and the structural integrity of any leveling or patching compound used.

Note: Priming the substrate or adding latex to levelers will normally make the floors NON-POROUS. Test for porosity and use the non-porous adhesive instructions if necessary.

EMBOSSING LEVELER

When installing over an existing resilient flooring material, an embossing leveler may be required to prevent the existing material pattern from telegraphing through the new material.

PRIOR TO INSTALLATION

- Cartons should be stored horizontally and the corners protected from damage at all times.
- Inspect all planks/tiles for visible defects and damage before and during installation. Do not install damaged planks/tiles. Engineered Floors will not accept responsibility for claims on flooring installed with visible defects. During installation, inspect the groove area and remove any debris that may prevent proper assembly of planks/tiles.
- Engineered Floors LVF is production-run sensitive. Ensure that all planks/tiles you are installing come from the same production run. Engineered Floors cannot guarantee that any future replacement or additional installation will match the originally-installed product.
- Residential installation in rooms larger than 20' in either direction require an application of adhesive around the perimeter and middle of the room in both directions.
- Ensure that all boxes are of the correct product and when installing, open several boxes at a time and mix planks/tiles from different boxes for best results and overall look.
- Room temperature should be no less than 65 °F (18.3 °C) for 48 hours before, during and after installation.
- Engineered Floors LVF is intended for indoor use only.
- Determine in which direction the planks/tiles will be installed. It is recommended that the flooring be installed running parallel to the longest wall.

COMMERCIAL INSTALLATION

Please refer to the following procedures for residential installations. **All commercial installations subject to rolling loads require the full spread glue-down method.**

RESIDENTIAL INSTALLATION

For residential installations, loose lay products should be installed using the perimeter, grid glue method.

1. Remove the existing flooring if necessary. If the existing floor surface is solid and smooth, you may choose to skip this step. If you remove carpet or old vinyl, you may need to use a power scraper to remove old adhesive without omitting corners and crevices.
2. Planks/tiles should be glued to the substrate around the perimeter of the room with a 10-12" (25-30 cm) band of pressure-sensitive adhesive. The planks/tiles are to be fitted tightly to the walls. In areas where there may be heavy traffic such as a hallway, areas exposed to direct sunlight and areas where there may be wheeled traffic, a full spread glue method is required. **Flooring that cannot be protected from direct sunlight is required to be installed with adhesive.** If a room is greater than 20' in any direction, a grid pattern of adhesive is required. A strip of 10-12" (25-30 cm) should be applied in both directions in the middle of the room. In even greater areas, a grid pattern of adhesive should be applied every 10' x 10' (3 m x 3 m).

3. Additional adhesive should be used at areas of potential movement such as near appliances, at stair landings, doorways, and pivot points. The floating planks/tiles and the glued down planks/tiles can be installed in tandem wherever the need for adhesive is required. Make sure to apply the adhesive only when you are ready to install the planks/tiles over it, abiding to the adhesive's working time. Any adhered portion of the installation, including the perimeter, will require the use of a floor roller to remove any trapped air and to ensure that the flooring is well bonded to the substrate.
4. Starting from one corner of the room, lay down the first row of planks/tiles moving towards the other wall. Since these planks/tiles do not have any particular direction, they can be installed either from left to right or from right to left.
5. When placing the second row and every subsequent row, stagger the end joints a minimum of 8" (20 cm) apart from the previous row. Staggering the planks/tiles creates a more authentic appearance. In order to accomplish this, you may need to cut a plank/tile to start a row. Ends that have been cut should be placed against the wall. Use a vinyl floor plank/tile cutter (recommended) or a utility knife and square to cut the plank/tile at a 90-degree angle to its length. Make sure there are no gaps between the planks/tiles; they should be fitted tight to each other on all four (4) edges. Once the planks/tiles have been installed, use a floor roller to ensure all the planks/tiles are firmly bonded to the floor. Rolling should take place during the working time of the adhesive (see adhesive label).
6. When cutting around door jambs or other irregular objects, it is helpful to make a pattern using heavy paper or cardboard. Trace the pattern on to the flooring and cut with a utility knife.
7. Protect all exposed edges of the flooring by installing wall molding and/or transition strips. Make sure that no plank will be secured in any way to the sub floor.
8. To remove any adhesive residue on the surface of the floor, use a clean white cloth dampened with water if adhesive is wet and acetone, denatured alcohol or mineral spirits if adhesive is dry.

IMPORTANT

- Engineered Floors LVF is intended for indoor use and is warranted as a floorcovering only.
- Post-installation temperature should be maintained between 65 °F - 85 °F (18.3 °C - 29.4 °C). Relative humidity should be maintained between 40% and 70%.
- **Luxury vinyl flooring must be protected from direct sunlight exposure. Engineered Floors recommends using UV protective film, blinds or curtains in all windows that provide direct sunlight to ensure that the products are not overheated.** Luxury vinyl floor coverings exposed to excessive heat are subject to thermal expansion which may lead to buckling or peaking. Engineered Floors shall be released from any claims, damages, or liabilities whatsoever arising out of or related to the failure to install the flooring with approved adhesive when the flooring is exposed to direct sunlight. Failure to install loose lay LVF with Engineered Floors approved adhesive when such flooring will be exposed to direct sunlight voids all warranties, express or implied; the end user shall assume full responsibility for any failure of the flooring.

HOMEOWNER OBLIGATIONS

To maintain warranty coverage and ensure fast and easy warranty service, the homeowner is responsible for the following:

9. Keep five (5) planks/tiles of the LVF product after installation for testing purposes.
10. Keep and be able to provide the original sales receipt or documentation illustrating proof of purchase and installation date of the product.
11. Make sure the flooring is installed according to Engineered Floors Installation Instructions.
12. Keep a list of cleaners used to maintain the flooring.