



## RIGID ENGINEERED LUXURY VINYL FLOORING TRIUMPH INSTALLATION INSTRUCTIONS

### GENERAL INFORMATION

All instructions and recommendations are based on the most recent information available. Please refer to [www.efhardsurfaces.com](http://www.efhardsurfaces.com) for our installation instructions/video and instructions on replacing a damaged plank.

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 or incorrect product.

Always store the unopened 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) during and after the installation period. Keep in mind a concrete floor can be up to 10° colder than actual room temperature.

Engineered Floors LVF is intended for indoor use only and is warranted as a floor covering only.

Engineered Floors recommend that all installations that are subject to heavy rolling loads must be glued to the substrate. The use of our approved adhesives is required. Please contact Engineered Floors Technical Services at [hstechservice@engineeredfloors.com](mailto:hstechservice@engineeredfloors.com) or 1-866-706-9745 Ext. 7105 with any additional questions.

**Three Season Rooms and Cottages:** Engineered Floors Luxury Vinyl Flooring can be installed in 3 season environments. It is important to understand; all Luxury Vinyl Flooring approved for areas such as Solariums, Sun Rooms, three season rooms and seasonal cottages can withstand temperature variations ranging from a low -20°F (-29°C) to a high temperature of 176°F (80°C) when not occupied. While occupied, the temperature range requires being maintained between 55°F (13°C) to 100°F (38°C). Special considerations need to be given to proper acclimation and temperature ranges prior to installing in 3 season environments. Verify the temperature fluctuations prior to installation to determine if the area is suitable for LVP flooring.

### PRIOR TO INSTALLATION

- Cartons should be stored horizontally at all times with the corners protected from damage.
- Install cabinets or a kitchen island prior to installing your LVF. Do not install on top of your floating floors.
- 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.
- 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.
- Avoid exposure to direct sunlight for prolonged periods; such exposure may result in discoloration, and excessive temperature can cause the flooring to expand and lift off of the subfloor. During peak sunlight hours, the use of the drapes or blinds is recommended. Remove all existing moldings and undercut doorway moldings to the thickness of the flooring.
- This product is intended to be a floating floor and should never be nailed to the substrate

**RECOMMENDED TOOLS AND MATERIALS:** Measuring tape, Framing/Speed Square, Utility knife, Straight edge, Spacers, Chalk line, Embossing leveler/floor patch (if necessary), Rubber mallet, Tile cutter (optional), Table Saw, Jigsaw.

### JOB SITE CONDITIONS/SUBSTRATE PREPARATION

- 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 removed down to a thin residue.
- Any looseness of the substrate should be secured.

- High spots should be levelled and low spots should be filled with a cement-based patching compound 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.
- Check with patching and leveling compound manufacturers for curing times. Check moisture levels before starting installation to ensure moisture levels are within guidelines as outlined in the "Concrete Substrates" paragraph. Engineered Floors does not warrant nor is responsible for damage to floor covering due to moisture related issues.
- The contractor or owner is responsible for cure time, moisture content testing, and the structural integrity of any leveling or patching compound used.

#### **SUITABLE SUBSTRATES**

Engineered Floors LVF can be installed on, above, or below grade. However, excessive moisture in the subfloor could promote mold, mildew growth and other moisture related issues like the trapping of moisture emissions under the flooring, which may contribute to an unhealthy indoor environment. All carpeting and padding need to be removed. Make sure that the subfloor surface is clean, dry, structurally sound and flat within 3/16" per 10 foot radius. Supporting floors must be rigid as too much deflection can result in a failed installation. Maximum deflection should not exceed 3/64". Engineered Floors LVF should not be installed over 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 8 lbs. /1000 sq. ft. per ASTM F1869 and the internal Relative Humidity should not exceed 90 % when using the ASTM F2170 test method. The pH level should be between 5 and 9.

#### **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. If the wooden subfloor is not an APA approved flooring grade underlayment, a minimum of 1/4" (6.35 mm) approved wood underlayment must be adhered to the existing substrate. 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 to the substrate. Engineered Floors LVF can be installed over one layer of non-cushioned sheet good flooring.

#### **GYPSON FLOORS**

Engineered Floors LVF can be installed as floating floor over flooring grade gypsum subfloors when properly installed over a subfloor that is structurally sound and flat within 3/16" per 10 foot radius (4.7 mm per 3 m).

#### **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 larger than 1/4" to prevent telegraphing through the new flooring.

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

#### **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 weeks prior to installation of the flooring to reduce any residual moisture in the subfloor. For 48 hours prior to and during installation, the system should be kept at 65 °F (18.3° C). Once the installation is completed, the heat should be gradually increased in 5° (2.8°) increments per day until the desired setting is reached. Engineered Floors does not recommend the wire induction mat system. 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).

## **INSTALLATION**

1. Determine in which direction the planks/tiles will be installed. It is recommended that the flooring be installed running parallel to the longest wall.
2. Carefully measure the room to determine the width of the last row of planks/tiles. If the width is less than 2" (50 mm), excluding the tongue, the width of the first row of planks/tiles will have to be cut accordingly.
3. A minimum of 1/4" (6.35 mm) expansion space is required around the perimeter of the room and all vertical objects.
4. Begin laying planks/tiles from the left side of the starting wall and work to the right side. The tongue of the plank should face the starting wall.
5. Inspect the groove area and remove any debris that may prevent proper assembly of planks/tiles.
6. Place 1/4" (6.35 mm) spacers between the short and long side of the planks/tiles and the wall. Always position one spacer between the wall and where the planks/tiles join.
7. The end joints of the planks in the first row are assembled by overlapping the tongue side over the groove side of the previous plank ensuring that the planks are perfectly aligned, with firm pressure; push the end joint downward till the end of the plank snaps in place. Install remaining full planks in the first row.
8. The last plank/tile in the first row will need to be cut. Measure the distance between the wall and the surface of the last full plank/tile. Subtract 1/4" (6.35 mm) from this measurement to allow for the spacer. If this measurement is less than 8" (20 cm), the first plank/tile in the row should be cut. The first and last plank/tile in each row should be at least 8" (20 cm) in length. Planks/tiles are cut using a sharp utility knife and a square. Score the surface of the plank/tile with the knife and snap the plank/tile at the score line or use a tile cutter.
9. The remaining piece cut off from the last plank/tile in the first row may serve as the first plank/tile in the second row provided it is at least 8" (20 cm) long. Always stagger end joints from row to row a minimum of 8" (20 cm) apart.
10. Install the long side of the first plank/tile of the second row. Place a 1/4" (6.35 mm) spacer between the wall and the short side of the plank/tile. Insert the tongue side into the groove side of the plank/tile from the previous row at a low angle and lower flat to the substrate.
11. Install the second plank/tile of the second row. Position the long side of the plank/tile with the tongue side, fully engage into the receiver of the first row of product. Lower the plank/tile with firm pressure to the floor, ensuring that the end joint is overlapping and perfectly aligned; push the end joint downward till the end of the plank/tile snaps in place. This may require the use of a rubber mallet for it to completely lock in place. Continue installing planks/tiles in the second row. It is important to make sure that the first two rows are straight and square as they can affect the entire installation.
12. Continue working from left to right, row by row. Be sure to maintain a 1/4" (6.35 mm) space around all walls and vertical objects. To maintain a random appearance, remember to offset end joints a minimum of 8" (20 cm).

## **FINISHING THE INSTALLATION**

- After all planks/tiles have been installed, remove spacers from perimeter of room.
- Install quarter-round or baseboard molding. Molding should be of sufficient size to cover the 1/4" (6.35 mm) space and should be fastened to the wall, not to the flooring. Do not fasten any moldings through the flooring.
- Use plywood to cover the top of the flooring when moving heavy furniture or appliances into position.
- Use floor protectors under the legs of furniture and chairs.
- Heavy furnishing loads placed on the Engineered Floors LVF can pin the product down to the substrate which may prevent the product from expanding and contracting evenly, causing side or end separation, peaking or gapping.

## **HOMEOWNER OBLIGATIONS**

- To maintain warranty coverage and ensure fast and easy warranty service, the homeowner is responsible for the following:
- Keep five planks/tiles of the Engineered Floors LVF after installation for testing purposes.
- Keep and be able to provide the original sales receipt or documentation illustrating proof of purchase and installation date of the product.
- Make sure the flooring is installed according to Engineered Floors installation instructions.
- Keep a list of cleaners used to maintain the flooring.

For additional assistance with the most up to date Installation, Warranty, and Maintenance information please contact Engineered Floors Technical Services at [hstechservice@engineeredfloors.com](mailto:hstechservice@engineeredfloors.com) or 1-866-706-9745. Ext 7105

## Installation Illustrations

### How to engage:

1. Start by engaging the plank on the long side.



2. Slide the plank until it reaches the short side of the next plank and drop gently.



3. Press with your thumb on both ends of the short side.



4. Continue pressing until you hear the "click" of the plank falling into place.



5. Hit both sides gently with a rubber mallet on the end joints.



6. Planks are now fully locked.



### How to Disengage:

1. Always disengage the long side.



2. Grab the planks with both hands and gently lift at the same time until the planks disengage.



3. Place the planks gently on the floor.



4. To disengage the end joints, slide the planks in opposite directions.



5. Press the planks gently while sliding.



6. Continue sliding until the planks are fully separated.

