

## Installation Instructions and Maintenance

### FOUNDATION ENDURE COLLECTION

NOTE TO INSTALLER: BEFORE INSTALLATION, PLEASE READ ALL INSTRUCTIONS THOROUGHLY. FAILING TO FOLLOW ANY OF THE FOLLOWING CONDITIONS MAY VOID WARRANTY

Prior to installation, the floor MUST be inspected for:

- QUALITY — Check quality and verify the material is as requested.
- QUANTITY — Verify that the quantity is correct prior to doing any installation.
- COLOR/FINISH — Verify that the material is the color, finish and sheen level requested.

Make sure to maintain your house's temperature at 65-80 °F(18-27°C) all year round. Your warranty may be void failing this instruction.

Prior to installation, the owner/installer is responsible for final inspection. Product thought to have any possible defect by the persons doing the installation should be returned for inspection and possible replacement. All questions of product quality, grading or color/sheen level must be addressed prior to installation.

The installer must use either Twelve Oaks TOAD adhesive or Uzin KE 2000S adhesive for flooring installation. If the installer opts for an equivalent adhesive, it must first be approved by the Twelve Oaks technical department before installation. Failure to adhere to this condition will result in voiding the warranty.

- Prior to installation of our lvp/lvt flooring, the owner/installer must determine that the job-site environment and the sub-surfaces involved meet or exceed all applicable standards and all requirements which are stipulated in the installation instructions section of the pamphlet inside the carton. Recommendations of the construction and materials industries, as well as local codes must be followed. These instructions recommend that the construction and subfloor be clean, dry, stiff, structurally sound and flat. Variations in subfloor or concrete are not to exceed 3/16" in 10' (5mm in 3 m) run in any direction. Floor "must" be level prior to installation. Any residue or debris has to be removed before the installation.
- The final responsibility for determining if the subfloor is dry enough for installation of the lvp/lvt flooring lies with the floor covering installer. Although our lvp/lvt product is not susceptible to damage from moisture, excessive subfloor moisture is an ideal breeding ground for mold, mildew and fungus. The limited warranties do not cover discoloration from mold or from flooding, leaking plumbing or appliances, water entering through sliding glass doors or similar conditions.
- Make sure the panels are mixed sufficiently when you are installing them, so that you do not end up with too many identical, light or dark panels next to each other.
- After installation, it is the installer's responsibility to advise the homeowner of the following: 4-the care and maintenance Instructions listed in the pamphlet inside the carton must be followed in order to maximize the life of the floor.

#### General

**Acclimation:** This is a necessary step to make sure the LVP/LVT product will function as it is designed and make the installation easier. Store UNOPENED BOXES and lay them flat in the rooms it will be installed for at least 48 hours. Make sure the temperature in the rooms is between 65-80F(18-27C)

**Subfloors:** The LVP/LVT product can be installed over concrete, some wooden subfloors, as well as some existing floor coverings. Proper preparation of the subfloor is a major part of a successful installation. Roughness or unevenness of the subfloor may telegraph through the new floor covering, resulting in an unsightly surface and excessive wear on high spots. This unevenness may also compromise the integrity of the locking system which may void the warranty.

No matter what kind of subfloor the LVP/LVT is installed over, the subfloor MUST be dry, clean, smooth, flat and leveled, free from all existing adhesive residue, and must be structurally sound with no spring or abnormal deflection.

**Wooden Substrate:** All wood floors must be suspended at least 18" above the ground. Adequate cross-ventilation must be provided, and the ground surface of a crawl space must be covered with a suitable vapor barrier. Wood floor must be at least 5/8"(15.5mm), exterior grade T&G plywood, or 23/32" (18mm) OSB, with no spring or abnormal deflection.

Particleboard, chipboard, construction grade plywood, any hardboard and flakeboard are not recommended as underlayment for fully adhered installations. All have inadequate uniformity, poor dimensional stability, and variable surface porosity. Twelve Oaks will not accept responsibility for adhered installation over these subfloors.

**Concrete Surfaces:** The LVP/LVT product can be successfully installed over concrete substrate on grade, above grade or below grade.

- a) Concrete subfloors must be dry, smooth and free from dust, solvent, paint, wax, grease, oil, asphalt sealing compounds and other extraneous materials.

The concrete should be constructed in accordance to local construction standards, and shall have a minimum compressive strength of 3500 psi. Installation of a moisture vapor barrier is recommended prior to pouring of, on, or below grade slabs. Moisture vapor transmission shall not exceed 3lb/1000 sq.ft per 24 hours, per ASTM F-1869.

- b) New concrete slabs must be thoroughly dry (at least six weeks) and completely cured. Moisture should be tested according to ASTM F2170, when tested according to this method; the internal relative humidity shall not exceed 75%.
- c) Holes, grooves, expansion joints and other depressions must be filled with latex leveling underlayment, and troweled smooth and feathered even with the surrounding surface.
- d) Concrete floors with a radiant heating system are satisfactory, provided the temperature of the floor does not exceed 85°F (29°C) at any point. Before installing the flooring, the heating system must be turned on to eliminate residual moisture.

**Existing Floor Covering:**

Our dry back LVT/LVP can also be installed over some existing smooth, hard-surface floor coverings. Check flooring for any curled area around the perimeter or at seams and repair if necessary. Ceramic tile should be made smooth by applying a cement overlay such as patching or leveling compound.

**Do not install our dry back LVP/LVT over:**

- Single layer wood floors
- Existing plank floors that are on or below grade concrete
- Existing cushioned-backed vinyl flooring
- Asphalt plank or tile
- Carpet
- Self-adhering plank or tile
- Laminate or other floating flooring
- Adhesive residue
- When installing over an existing resilient flooring material, an embossing leveller may be required to prevent the existing material pattern from telegraphing through the new material.

**Twelve Oaks is not responsible for damages or performance issues as a result of the resilient substrate.**

**Radiant Heated Systems:**

LVP and LVT can be installed over in-floor radiant heating systems provided the subfloor surface does not exceed 85F or (29C) at any point. The initial floor temperature should not exceed 70F (21C) for 24 hours prior to and 48 hours after installation. Thereafter the temperature should be gradually increased by no more than 5F (2.8C) per day to the desired setting up to 85F or (29C). Radiant heating systems that are installed on top of the subfloor surface are not recommended under any circumstances. Caution! Please follow RCFI's Recommended Work Practices for Removal of Resilient Floor Coverings.

**WARNING:** Do not sand, dry scrape, beadblast or mechanically chip or pulverize existing resilient flooring, backing, lining felt, asphaltic "cutback" adhesive or other adhesive. These products may contain asbestos fibers and/or crystalline silica. Avoid creating dust. Inhalation of such dust is a cancer and respiratory tract hazard. Smoking by individuals exposed to asbestos fibers greatly increases the risk of serious bodily harm. Unless positively certain that the product is a non-asbestos-containing material, you must presume it contains asbestos. Regulations may require that the material be tested to determine asbestos content. RCFI's Recommended Work Practices for Removal of Resilient Floor Coverings are a defined set of instructions addressed to the task of removing all resilient floor covering structures.

**Preparation**

- a) Subfloor must be level with 3/16" within 10 ft. (5mm in 3m). Fill and level all plywood seams and concrete cracks, construction joint, control joints, depressions, grooves or other irregularities using appropriate materials. Sweep and Vacuum subfloor to remove all dust and debris.
- b) Room temperature should be between 65-80F(18-27C) for more than 48 hours before the installation and should be maintained within this range during and after installation.
- c) Remove all existing mouldings and undercut the door jamb to the thickness of the flooring.
- d) Determine in which direction the flooring will be installed. For better appearance, it is preferable to install the LVP/LVT parallel to the longest room dimensions.

**Tools & Accessories Needed**

Depending on the required floor preparation, other materials required may include floor patching compound and trowel, embossing leveller, scraper, sander or grinder.

### **Installation Procedures** (diagram below)

1. Remove thresholds and baseboards before you measure the room to see how much flooring to purchase. Your surface to cover will be the length times the width of the room plus the area of any nooks and closets. To this total surface, you will need to add 10 percent for trimming.
2. Strip the existing flooring if necessary. If the existing floor surface is solid and fairly smooth you may choose to skip this step. If you remove carpet or old vinyl, you may need to use a power scraper and citrus-based solvent to remove old adhesive without omitting corners and crevices.
3. Use a patching compound to fill in any cracks and holes in your subfloor. Work the compound into the hole with a putty knife and level it off. Once you have a smooth, even surface, sweep and mop it thoroughly. The smoother the subfloor, the better the vinyl planks will bond to it. Finally, a coat of primer is recommended to seal extremely porous subfloors or difficult to bond to surfaces.
4. Planks are to be installed parallel to the wall that is the main line of sight in the room (usually this is the wall opposite to the room's main entrance). Measure to determine the centre of the room and adjust the center point so that planks are evenly distributed on each side. Mark this straight centre line on the floor using a chalk line or fine felt pen. Planks of first and last rows may need to be cut to ensure even layout throughout the room.
5. Spread the adhesive with the recommended notched trowel. Use only Twelve Oaks recommended adhesives and closely follow instructions for their use. Wait the appropriate time according to the manufacturer's directions before commencing to lay flooring.
6. Starting on your centre line, be very careful to line up the first plank perfectly straight since all the remaining planks will key off the first.
7. Cut a vinyl plank in half to begin your second row. Use a vinyl plank cutter (recommended) or a utility knife and square to cut the plank at a 90-degree angle to its length. Staggering the vinyl planks creates a more authentic appearance; commence subsequent rows using the cut-offs from previous rows, alternating them randomly. Pieces should be minimum 20 cm (8") in length, as should the stagger from one row to the next.
8. Use a floor roller to ensure all the planks are firmly bonded to the floor and install mouldings. Locate any gaps between planks; if any, use a putty knife to fill gaps with wood putty and wipe away any excess.
9. Should there be adhesive residues on the surface of the floor, use a clean white cloth dampened with water if adhesive is wet and acetone or mineral spirits if it is dry to wipe it away.

### **Finishing the installation**

1. Install transition mouldings
2. Pre-drill and install quarter round or baseboard moulding
3. Use plywood to cover the top of the flooring when moving heavy objects into position. Use proper floor protectors under the legs of furniture.
4. After installation, the temperature in the areas or rooms that our LVP/LVT is installed must be maintained between 65-80F(18-27C). Relative humidity must be maintained between 35% and 55% with all floor coverings and care must be taken to protect the finished flooring from exposure to direct sunlight.
5. Close your curtains or blinds where extreme sunlight hits the floor. A combination of heat and sunlight can cause most home furnishings to fade, discoloration or thermal expansion. The same applies to your floor.

### **REPAIRS**

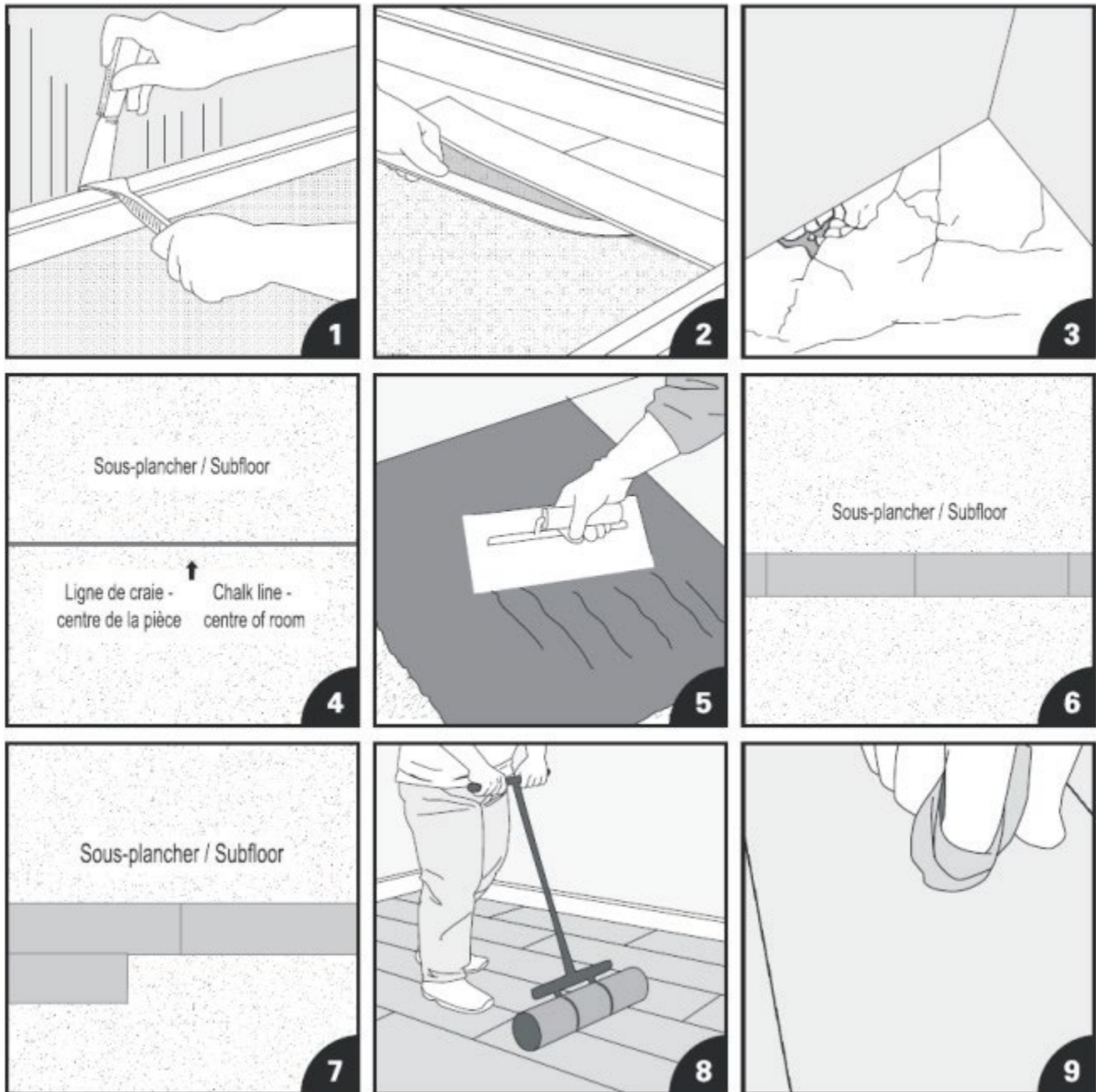
Our LVP/LVT is tough and durable; however, if a plank or tile becomes damaged, it can be replaced.

The following procedure should be used:

- Using a straight edge and a sharp utility knife, cut out and remove the center of the damaged item, leaving approximately a 1" strip attached to the surrounding items on all sides.
- Carefully cut back from the corners of the plank or tile to the inside edge.
- Remove the edges by pulling out the board that needs to be replaced. Scrape off the residue of the adhesive on the opened space if needed.
- Spread the Twelve Oaks recommended adhesive with the recommended notched trowel on the opened space. Wait the appropriate time according to the manufacturer's directions before commencing to lay flooring.
- Position the replacement flooring in the opened space and use a hand roller to ensure all the planks are firmly bonded to the floor, and to assist in aligning the edges into position.
- Weigh down the replaced flooring until it is fully bonded to the subfloor.

### **Daily / Regular Maintenance**

1. Sweep, dust mop or vacuum the floor daily to remove dust, dirt, grit and debris that can damage the LVT/LVP and become ground into the surface.
2. Spot mop as needed. Any spills should be cleaned up immediately.
3. Damp mopping of the LVT/LVP should be performed on a regular or daily basis depending upon traffic and soil levels in the area. Use a properly diluted, neutral, cleaning-detergent solution.



## FOUNDATION ENDURE INSTALLATION

### IMPORTANT

- Foundation Endure planks can be scored and cut to shape to fit around irregular spaces. It is recommended to make a cardboard template of the space and transfer the pattern onto the plank. Measure twice, cut once.
- Withhold foot traffic and keep liquid away from the surface of newly installed Foundation Endure flooring for 24 hours. Thereafter, clean and maintain per Care and Maintenance instructions below.
- Use only the Twelve Oaks approved adhesive, trowel size, and spread rate specified by the manufacturer. Temperature and humidity can affect the flash and working time of the adhesive. Follow the adhesive manufacturer's instruction carefully, and spread out a small amount on subfloor to test for adhesion bonding. Warranty will be voided when there is improper use of adhesive or trowel.