



# Installation & Maintenance Guide

# Read this guide before starting installation

Grand Nature 3D Printed RCV Flooring is a waterproof floor. Even though this floor is waterproof, this floor should not be used to seal an existing floor. It cannot inhibit mold growth or prevent structural problems associated with or caused by flooding, excessive moisture, alkalis in the subfloor, or conditions arising from hydrostatic pressure. Regardless of location, always remove standing water and other liquids promptly. Moisture issues should be addressed and corrected at the job site before installation.

#### **PRE-LAY CHECK**

It is the installer's responsibility to verify the product is the correct product, color, pattern, and quantity. Check each board for visual defects before installation. Claims for flooring cut to size and/or installed will not be accepted. LW Flooring cannot accept responsibility for flooring installed with visible defects. Color variations are to be expected. For the best visual effect, shuffle planks from several cartons before - and during - installation.

## SITE CONDITIONS

The floor covering should be stored and installed in a climate-controlled location with a temperature between  $60^{\circ}$  -  $80^{\circ}$ F (-  $15^{\circ}$  -  $27^{\circ}$ C) or an average temperature of  $70^{\circ}$ F ( $21.1^{\circ}$  C). The post-installation temperature of 41-  $86^{\circ}$ F ( $5^{\circ}$  -  $33^{\circ}$ C) and relative humidity in the 35- $65^{\circ}$ K range are optimal and recommended.

Installing a moisture barrier may prevent the floor from getting wet. LW Flooring is not responsible for site-related moisture issues. For additional protection, consider applying a moisture barrier compound system.

Acclimate for 48 hours. For acclimation, unopened cartons of flooring need to be lying horizontally in the room when acclimating. They do not need to be opened or the plastic to be removed. They need to lay (can be stacked) horizontally for 48 hours in a controlled environment. Humidity is maintained at or near normal living conditions, generally between 60° to 80° Fahrenheit and at the average yearly relative humidity for the area.

## **SUBFLOOR PREPARATION**

Before installing any flooring, the installer must ensure that the job site and subfloor meet the requirements of this installation guide. As a floating floor, the floor can be installed over existing hard surface floor coverings, provided that the existing floor surface is clean, flat, dry, and structurally sound. There should be no loose grout, tiles, or planks, and grout depth must be no more than 5/64 " (2 mm) below the tile surface. Do NOT install over existing hardwood floors that lay directly on concrete. Moisture issues should be addressed and corrected at the job site before installation. Do NOT install over existing timber strip floors directly adhered to concrete or installed directly over timber bearers & joists. Installation is NOT allowed over any type of carpet.

The subfloor should be flat within 1/5" in a 20-foot radius. The substrate should not slope more than 1" per 6 feet in any direction.

#### **UNDERLAYMENT**

The product has an attached pad, and using an additional underlayment that is more than 2mm thick will void the warranty. It is not approved. If you choose to use an additional underlayment, we recommend 1-2mm thick. Make sure to use an underlayment that is approved for use with floating LVP flooring and has a manufacturer's warranty regarding floating LVP usage.

**CAUTION:** Grand Nature 3D Printed RCV Flooring is considered a vinyl floor covering. As a vinyl floor covering, some types of nails - such as common steel nails - may cause discoloration to the flooring. Solvent-based construction adhesives are known to stain vinyl floor coverings and be avoided around this product. LW Flooring will not be responsible for discoloration problems caused by the use of the products mentioned above.

# **Wood Subfloors**

Do not install material over wood subfloors that lay directly on concrete or over-dimensional lumber or plywood used over concrete. Do NOT install over existing hardwood floors that lay directly on concrete. LW Flooring recommends checking wood substrates for moisture. Obvious signs of moisture may include warping, peaking, degradation of substrate integrity, rusted fasteners, and rusted floor registers. Even if apparent signs are not present, the material should be tested using an invasive moisture meter, and moisture levels should not exceed 14%.

- 1. Do not apply sheet plastic over wood subfloors.
- 2. Basements and crawl spaces must be dry. The use of 6 mil black polyethylene is required to cover 100% of the crawl space earth. Crawl space clearance from ground to underside of the joist is to be no less than 18," and perimeter vent spacing should be equal to 1.5% of the total square footage of the crawl space area to provide cross ventilation. Where necessary, local regulations prevail.

# **Concrete Subfloors**

LW Flooring recommends testing concrete substrates for relative humidity, moisture, and pH before installing LW Flooring RCV. Test results should not exceed 85% relative humidity (RH). The Calcium Chloride Test for the moisture should be no more than 8 lbs per 1000 SF in 24 hours MVER (Moisture Vapor Emission Rating), and pH tests for alkalinity levels should register between 6 and 9. **LW Flooring requires a 6 mil poly film when installing over concrete subfloors.** 

# **Radiant Heat**

Grand Nature 3D Printed RCV Flooring is suitable for underfloor heating systems using hot water - but radiant or electrical underfloor heating is prohibited.

Note: Follow and comply with various Federal, State, and Local government agencies' regulations governing the removal of in-place asbestos-containing material. If you contemplate removing a resilient floor covering structure containing (or is presumed to contain) asbestos, you must review and comply with all applicable regulations. Unless positively certain that the product is a non-asbestos-containing material, you must presume it contains asbestos.

## **INSTALLATION PROCEDURES**

LW Grand Nature 3D Printed RCV Flooring is designed to be installed utilizing the floating method on Plywood, OSB, Particleboard (PB), and Masonite. This flooring can be installed on, above, and below grade. Never secure the planks to the subfloor when using the floating installation method. DO NOT adhere any tape to the face of the floor, as it will damage the finish. LW Flooring will process no claims for tape damage. Do NOT install over existing hardwood floors that lay directly on concrete. The flooring is not suitable for areas with dynamic horizontal forces, such as those found at gyms, sports, and dance floors. Do not install cabinets or fixed objects on top of the flooring. A proper expansion space of (7/16") 10mm is required. Undercut all doorjambs. Do not fasten wall moldings and or transition strips to the planks. Installation exceeding 32 feet in each direction with direct sunlight and installation exceeding 49 feet in each direction with no sunlight exposure require expansion trim.

Grand Nature 3D Printed RCV Flooring uses a 5G with a drop lock system and should be installed utilizing the

# following procedure.

- 1. Plan the direction of the area to be installed to maximize the visual appearance once installed. The direction of the plank grain should be confirmed, and the installation should be balanced from the center of the area.
- 2. Start from the top left corner of the room by putting the first plank in place to expose both the head and side grooves. Planks should be installed from left to right. Lay the first row straight.
- 3. Install the second piece in the first row by laying the short-end tongue onto the previously installed piece's short-end groove. Lock the pieces together by firmly pressing down with your thumb along the seam to lock the planks together. This will engage the 5G locking tab into the piece you just placed. You will hear and feel the pieces lock together as the locking tab engages in the joint. Use a soft rubber mallet to engage the joint vertically, if necessary.
- 4. Continue this manner for the rest of the first row. Make sure there is a 7/16" space between the first row and the walls.
- 5. Cut the following piece at least 10" shorter, so the short end is enough apart from the end of the first row. Install the first piece in the second row by inserting the long side tongue into the groove of the piece in the first row at a low angle into the installed piece. Then, firmly lower the plank while maintaining a slight pressure towards the installed piece. The pieces should fit snugly together and lay flat. Finish the remainder of the second row.
- 6. It is critical to keep the first two rows straight and square since they are the foundation for the rest of the installation. Check often for straightness while installing the floor as failure to do so can result in gapping.
- 7. Continue installing. Make sure to maintain a random pattern repeat. Maintain a 7/16" expansion gap at all fixed vertical surfaces.
- 8. Check to be certain all planks are fully locked. If slight gapping is noticed, or pieces will not lie flat, simply disengage the long side joint and carefully slide the short end joint apart. **Do not pull up on this joint as it will damage the locking mechanism!** Reinstall the piece.
- 9. Install wall and door moldings last. Be sure that all moldings are fastened directly to the wall or subfloor. Do not place any fasteners through the floating vinyl flooring.

Note: The 5G drop lock joints cannot be "lifted" or angled apart when removing or repositioning a plank. To remove a plank, first, disengage the long joint by lifting at a slight angle while pulling the complete rows away from each other. Then, simply "slide" the drop joint apart along the floor. Failure to slide this joint will damage the drop lock mechanism and prevent proper re-installation of the affected plank.

# **GENERAL MAINTENANCE**

**NEVER** use wax or oil-based cleaning agents. 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 with a beater bar up, or dust mop regularly.
- Do not use steam cleaners or a wet mop to clean floors. "wet mop" is defined as "well submersed with fluid."
- 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 keep your floor looking good.
- Use walk-off mats at entrance doors and in front of kitchen sinks.
- Do not use mats with a rubber or latex back, as they may permanently stain your floor.
- Do not drag or push heavy items across the surface of the floor.
- Sun exposure can cause discoloration and thermal expansion on the flooring. LW Flooring recommends keeping curtains or blinds closed to limit direct sun exposure.