

# Premium Luxury Vinyl

PMIMLVLLGD23.1

## INSTALLATION & MAINTENANCE INSTRUCTIONS | LOOSELAY & GLUE DOWN



PLEASE READ ALL INSTRUCTIONS CAREFULLY, BEFORE YOU BEGIN INSTALLATION.  
IMPROPER INSTALLATION WILL VOID WARRANTY. FOR ALL INSTALLATION CONDITIONS AND INFORMATION NOT COVERED SPECIFICALLY UNDER THESE INSTRUCTIONS, OR DEFECTIVE MATERIAL, CONTACT MANUFACTURER.

Always check the manufacturer website for the latest installation, maintenance, and warranty information. Read and follow all manufacturer instructions.

### Special attention needs to be given to (but not limited to):

- Building environments contract and expand with temperature and climate changes.
- Avoid excessive heat, such as sun rooms and area with extended direct sunlight. Excessive heat can cause uneven expansion and contraction and result in floors buckling. Window coverings can be installed to reduce excessive heat.
- Flooring should be one of the last products installed in new construction. The building must be climate controlled with all windows and doors installed, and other trades work completed.
- All subfloors must be smooth and flat, void of waxes or other contaminants that might allow the flooring to stick to the subfloor surface, restricting movement.
- Porosity must be determined to select the proper adhesive, trowel notch, and installation method.
- Always allow proper expansion space. An expansion gap must be provided, continuously, at all vertical surfaces, allowing material to expand and contract with no restriction.

### General Guidelines

Always follow the most current installation instructions. For the most current instructions go to the manufacturer website.

Always read the complete installation instructions prior to installation.

Always follow all Local and Federal Building Codes.

Always follow all OSHA regulations for safety.

Although a product may be waterproof, it is not a moisture barrier.

### Installation Tools Required

Spacers/Shims	Utility Knife	String Line
Rubber Mallet	Tape Measure	Square
Hand Saw, Circular Saw, Jig Saw	Pencil	Pull/Pry Bar

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### 1) Pre-Installation Checklist

**NORMAL ROOM CONDITIONS (NRC):** Normal room conditions are defined as; ambient air temperature between 60-85 degrees Fahrenheit; surface temperature between 60-85 degrees Fahrenheit; ambient RH (Relative Humidity) between 35%-55%. Flooring should be the last material installed on a project. Make sure all painting and drywall is done, doors and windows are installed, and HVAC system is installed and operating.

**ACCLIMATION:** Flooring products are designed to perform in normal room conditions (NRC) ambient temperature and surface temperature must be between 60-85 degrees Fahrenheit, ambient relative humidity (RH) must be between 35-55%. Flooring products must achieve and maintain NRC prior to, during, and after installation. Temperature readings must be taken and documented, including ambient room temperature and surface temperature. Acclimate cartons laying flat, not on end or on side, stacked no more than 5 cartons high. Avoid storing flooring direct sunlight. Do not store on radiant in-floor heated areas.

**SUBFLOOR MOISTURE CONCRETE SUBSTRATES:** Moisture levels in concrete substrates must be no higher than 80% Relative Humidity (ASTM F2170) and MVER of  $\leq 3$  lbs./1000 sf in 24 hours (Calcium Chloride Test ASTM F1869). For levels higher than approved levels, additional dry time and/or moisture mitigate with a product designed to reduce moisture level to acceptable level. Subfloor pH must be between 5-9 on a pH scale. It is difficult to measure gypsum substrates for moisture. Although Relative Humidity Probes (ASTM F2170) are the recommended method of testing, they are not practical due to the number of tests required and often the thickness of the gypsum. A professional electronic moisture indicator (Protimeter Aquant recommended) can be used to indicate if the substrate is dry enough to receive floor covering. **\*Note: Concrete substrates must be properly cured and meet moisture requirements.**

**SUBFLOOR MOISTURE WOOD SUBSTRATES:** Moisture levels in wood underlayment should coincide with required temperature and humidity of installation site and generally shall not exceed 10% moisture determined by a professional electronic pin meter (example: Protimeter Surveymaster). Subfloor pH must be between 5-9 on a pH scale.

**SUBFLOOR CONSTRUCTION:** Subfloors must be clean, dry, and free of any materials that might interfere with unrestricted movement. Subfloors must be soundly constructed to eliminate vertical movement. Subfloors must be flat, no more than 3/16" undulation in 10 linear feet or 1/8" in 6'. Subfloors must meet all Federal and local building codes. Patch subfloor depressions using a portland based patch, grind down high spots following acceptable installation standards.

**\*Note:** For wood substrates ensure that there is a minimum of 18" between the subfloor and the ground, the crawl space is ventilated, and there is a minimum 6mil poly sheeting installed over the entire ground surface overlapped and taped.

**APPROVED SUBSTRATES:** Approved substrates include: properly prepared concrete and cement leveling compounds (minimum 3000 PSI), properly prepared gypsum (minimum 3000 PSI), and underlayment grade plywood/OSB/OFB board.

**SUBSTRATE POROSITY:** Porosity must be determined to select the proper adhesive, trowel notch, and installation method.

**ADHESIVE:** Always use a premium grade adhesive designed for installing vinyl plank or vinyl tile flooring and designed for substrate porosity of the installation conditions.

**RADIANT HEATED FLOORING:** Flooring is only approved over hydronic (water) radiant heat systems. Radiant heated floors should never exceed 85 degrees Fahrenheit.

**ADHESIVE RESIDUE:** Never install over adhesive residue. All residue must be completely removed or properly encapsulated.

**INTERIOR ONLY:** This product is designed for interior climate controlled areas only.

**VISUAL INSPECTION:** All flooring must be inspected, in proper lighting, prior to installation. Installed material with visible defects is not covered under the flooring warranty.

**PRODUCT DIRECTION:** For best visual results install flooring in the same direction of direct sunlight. Use of suitable window coverings during the times of most direct sunlight is strongly recommended. Always work out of 3-5 cartons mixing products from several boxes. Always dry lay prior to final installation to ensure best visual results.

**CHAIR PADS AND LEG PROTECTORS:** Chair pads are required under roller castors and leg protectors, a minimum of 1.5" diameter, are required under chair legs.

**FLOOR PROTECTION:** After installation floors must be protected from trade and other damage by a floor protection designed for this purpose.

## 2) Installer Responsibilities

It is the floor covering installers responsibility to:

- Make sure the latest installation instructions are followed. For the most current instructions go to the manufacturer website.
- Make sure the product is suitable for its intended use.
- Visually inspect all material and remove any visibly defective material. Visibly defective material installed will not be covered under warranty.
- Stop any project that does not meet installation guidelines and contact the flooring retailer it was purchased from.
- Work out of several boxes mixing product for visual appearance. Dry fit prior to installation is the recommended method.

## 3) Suitability of Product

This product is approved for climate controlled indoor applications only.

### Loose Lay Method Approved for use in:

- Residential applications
- Multi-Family applications (residential units only)

### Glue Down Method Approved for use in:

- Residential applications
  - Multi-Family applications (entry foyers, common areas, residential units)
  - Light Commercial applications (light traffic areas of business offices and boutique shops)
  - Commercial applications (moderate traffic areas of business offices, boutique shops, stores, entry foyers, areas with moderate rolling loads)
- NOTE: Commercial only applies to products constructed with a wear layer of  $\geq$ 12mil Ceramic Bead or any 20mil.

### Loose Lay Method Not Approved for use in:

- Areas of heavy rolling loads (such as: hospital beds, electric wheelchairs)
- Heavier traffic areas, entry foyers, or any area where food is prepared, objects are rolled or dragged around, and areas with high temperature variation (more than 20 degrees per day)
- Industrial applications

### Glue Down Method Not Approved for use in:

- Commercial applications (Areas of heavy traffic or heavy rolling loads)
- Industrial applications

**IMPORTANT:** Please read warranty for a more complete definition of acceptable use.

## 4) Site Condition Requirements (NRC)

### Normal Room Conditions:

Normal Room Conditions (NRC) must be maintained prior to, during, and after installation.

The NRC are defined as:

- Ambient air temperature between 60-85 degrees Fahrenheit
- Surface temperature between 60-85 degrees Fahrenheit
- Ambient RH (Relative Humidity) between 35%-55%
- Substrate must be dry: concrete-less than 80% RH (Relative Humidity), wood - equal to moisture content of install location (average 8%) while not exceeding 10% moisture, and pH levels between 5-9

All flooring products are required to achieve NRC prior to installation.

## 5) Acclimation Requirements

### All products must acclimate to the room conditions in which they are being installed.

Flooring products (including adhesive & trim) are designed to perform in normal room conditions (NRC). Flooring products must achieve and maintain NRC 24 hours prior to, during and after installation. Temperature and Relative Humidity readings must be taken and documented, including ambient room temperature and surface temperature.

Acclimate cartons laying flat, not on end or on side, stacked no more than 5 cartons high. Allow air movement between boxes. Avoid storing flooring in direct sunlight. Do not store on operational radiant in-floor heated areas. It is critical to take a surface temperature reading of the vinyl plank prior to installation, it must also be at NRC (Normal Room Conditions).

NRC (Normal Room Conditions) must be consistently maintained at:

- Room temperature between 60-85 degrees Fahrenheit
- Surface temperature between 60-85 degrees Fahrenheit
- Ambient RH (Relative Humidity) between 35%-55%, Moisture Content 6-10% dependent on region
- Flooring material must be maintained between 60-85 degrees Fahrenheit

## 6) Sub-floor Flatness Requirements

### Subfloor Flatness:

- Subfloor must be flat, with no undulation exceeding 3/16" in a 10' radius (or 1/8" in 6'). Grind high spots down and/or fill low spots with a quality cement patching compound. Allow patch to completely dry prior to installation. Follow patch manufacturers installation guidelines.
- Follow all local build regulations and OSHA procedures when grinding. Some substrates might contain harmful contaminants; such as silica sand or asbestos. It is critical that you determine prior to grinding if there are any harmful contaminants in the subfloor.

**WARNING:** Follow the Resilient Floor Covering Institute (RFCI) ([rfci.com](http://rfci.com)) recommended practices whenever grinding a substrate, existing flooring, or adhesive residue. These surfaces may contain Asbestos or other harmful contaminants.

## 7) Sub-floor Construction Requirements

### Subfloor Construction must meet all Local and Federal Building Codes:

Subfloors must be soundly constructed to eliminate vertical movement. Subfloors must be flat, not to exceed undulations exceeding 3/16" in 10' or 1/8" in 6 feet. It is the floor covering installers responsibility to ensure that subfloor conditions are suitable.

### Approved Subfloors:

- Concrete, properly prepared concrete, cement patch and leveling compounds (minimum 3000 PSI). Must not exceed 80% RH (ASTM F2170) and must not exceed  $\leq 3$  lbs./1000 sf in 24 hours (ASTM F1869), and pH levels must be between 5-9.
- Gypsum, properly prepared gypsum (minimum 3000 PSI). Must be dry based on gypsum and adhesive manufacturer standards, maximum 80% RH (ASTM F2170).
- Wood, properly prepared wood (underlayment grade plywood, OSB & OFB). Joist spacing recommendation is glued & fastened at 16" on center (O.C.). Joists  $\geq 16$ " O.C. are required to be glued and fastened at joist (ASTM D3498). Subfloor must have a minimum 18" clearance between the bottom of the joist and the ground. Ground must be covered 100% with 6-mil poly film.
- Gypcrete, properly prepared gypcrete, must be sealed with Ardex P 51 primer coating to stabilize the surface for adhesive bond. *NOTE: All issues with gypcrete cracking, crumbling, powdering and/or resulting in the release of adhesive bond are NOT warranted.*
- Existing floor covering that is firmly bonded to the substrate; dense not cushioned, and only one layer thick.

### Non-Approved Subfloors:

- Sleeper/Screed type floor systems.
- Plywood installed directly over a concrete slab.
- Soft plywood, Luan, pressure treated, or plywood not approved as "Underlayment Grade" certified by the Plywood Association.
- Masonite or hardboard.
- Contaminated surfaces: abatement chemicals, paint, oil, mold, mildew, grease or any containments.
- Strip plank wood flooring.
- Uneven (3/16" in 10') or unstable substrates.

**IMPORTANT:** For any substrates not mentioned above check with the manufacturer before proceeding with the installation.

## 8) Subfloor Porosity

### Determining Porosity:

Porosity must be determined to select the proper adhesive, proper trowel notch, and installation method.

To determine porosity:

- Place a dime sized drop of water on the substrate surface.
- If the water dissipates completely into the substrate within 2 minutes the substrate is highly porous.
- If the water dissipates partially into the substrate within 2 minutes it is considered moderately porous.
- If the water remains beaded up on the surface for 2 minutes it is considered non-porous.

## 9) Adhesives

- Always use a premium grade adhesive designed for installing vinyl plank or vinyl tile flooring, such as Henry Gription adhesive.
- Always use an adhesive designed for substrate porosity of the installation conditions.
- Always provide proper ventilation.
- For areas of high temperature fluctuations and high moisture Apex Pro (wet lay) adhesive can be used.
- Clean any adhesive residue on the surface of vinyl plank or tile immediately per adhesive manufacturer instructions.

**IMPORTANT:** For all adhesives it is necessary to follow the adhesive manufacturer recommended method of application and installation instructions. Failure to do so may result in voiding the vinyl flooring warranty.

## 10) Radiant Heated Substrates

### Radiant Heated Substrates:

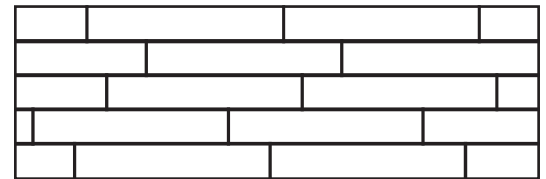
Installation over hydronic (water) radiant heat systems is acceptable, providing the substrate never exceeds 85 degrees Fahrenheit. Prior to installing over newly constructed radiant heat systems, operate the system at maximum capacity to force any residual moisture from the cementitious topping of the radiant heat system.

A substrate temperature between 60-85 degrees Fahrenheit must be achieved prior to, maintained during, and for 48 hours after the installation. It is recommended that the radiant heat be applied in a gradual manner after installing the Luxury Vinyl flooring. Refer to the radiant heat system manufacturer's recommendations for additional guidance.

**IMPORTANT:** Due to the speed of sudden temperature changes, which has potential to negatively affect vinyl flooring construction, it is not recommended to install over electrical radiant heating systems. This will not be covered by the manufacturer's warranty. Only radiant heating systems using water are acceptable.

## 11) Layout

- It is best to lay flooring parallel to light source (such as a window).
- Determine the center of the room by marking the center of each end wall. Snap a chalk line between these two points.
- Dry lay rows to wall, if the plank to the long wall will be less than 2" adjust the center line to make the long wall plank over 2". The goal is to have planks next to the wall to be a minimum of 2". Balance the cuts in the room.
- Stagger end joints by a minimum of 8" on a random basis.



Staggered Joint Design

## 12) Expansion Space

### Expansion Space:

Flooring expands and contracts with normal climate changes. This product must be allowed to accommodate minimal expansion and contraction.

- At all vertical surfaces within the installation area, a 1/4" expansion space (loose lay or glue down method) is required.
- Undercut door jambs and other vertical surfaces to allow flooring to freely fit underneath.
- At vertical surfaces that will not be receiving wall base or other expansion trim (such as sliding glass doors); allow a minimum 1/4" expansion space (loose lay or glue down method) and caulk gap with a flexible caulking (Silicone).
- Do not fit flooring full or under compression.

## 13) Installation Instructions

### Room Requirements:

- Open transition areas with no wall to lay against should be fixed with adhesive.
- In rooms with dimensions greater than 20' in any direction, or in high residential traffic areas, an additional band of adhesive is required every 10' from perimeter inward.
- In areas of extreme high traffic or areas with rolling loads, it is required to use full spread adhesive (glue down install).

## Installation continued

### Loose Lay Installation:

Loose lay option is for single unit residential application only. High traffic, heavy rolling loads, or areas with high temperature variation (more than 20 degrees per day) require full spread adhesive installation (glue down install).

- Begin the installation in a corner, ensuring first that the layout requirements have been planned for.
- When loose laying never fit full, a expansion gap of 1/4" is required at vertical surfaces. In areas where the flooring will not be covered by trim and/or base, a bead of flexible caulking (Silicone) is required.
- Apply a 6" band of firm setting adhesive, designed for use with vinyl flooring (recommended: Henry Gription), around the entire perimeter of the installation area. Follow the adhesive manufacturers installation instructions. A 6" spread of adhesive is required where plank transitions to a different type of flooring.
- Make sure each plank is fit tightly to the next piece. Very light tapping to get a tight fit is acceptable, but take care not to compress the plank you are tapping into. Overly tight fit will lead to compression and later peaking joints when the compressed planks expand to normal length or width.
- In areas larger than 20' in width or length, a 4" band of adhesive is required every 10'. Apply on a cross direction.

### Glue Down Installation:

- Buildings and flooring expands and contracts with normal climate changes, always leave a 1/4" expansion gap at all vertical surfaces.
- Vinyl plank can be cut using a shear cutter designed for cutting vinyl plank, a utility knife and utility blade using a "score & snap" cutting method, a table saw, or jig saw.
- Always read and follow the adhesive manufacturer's complete installation guidelines.
- Always follow adhesive manufacturer's instructions on open time requirements. This is the amount of time the adhesive must remain open to allow the moisture to "flash off".
- For wet lay (permanent) applications always ensure a minimum 90% coverage of the adhesive to the back of the vinyl plank or tile. Test adhesive often to make sure it has not skinned over. If working on the flooring use a kneeler board to avoid dispersing the wet adhesive.
- For dry lay (pressure sensitive) applications allow adhesive to dry to the touch, still tacky with no transfer to your finger when touched.
- Always check substrate conditions prior to applying adhesive. It is the installers responsibility to ensure conditions are suitable.
- Determine substrate porosity prior to choosing adhesive and trowel. See Subfloor Porosity for how to test porosity.
- Apply adhesive with the recommended trowel notch. Trowel notches can become worn during installation. Use a trowel notch tool, file, or replace trowels when they become worn.
- Apply adhesive and allow proper open (flash time) based on the adhesive manufacturer's installation instructions.
- Place planks or tiles into adhesive making sure all joints, end and side, are lightly butted together. Avoid gaps and tight compression fits.
- Roll entire installation with a 100lb roller immediately after installation. Roll again 1-2 hours after installation.
- Visually inspect installation to ensure all side and end joints are rolled flat. A small hand roller is best to roll down lifted areas.
- Clean any adhesive residue that is on the plank or tile surface immediately per adhesive manufacturer's instructions for removal.
- Cover all cut edges with appropriate floor trim.
- For cut edges that will not be covered with trim (example: sliding glass door frames or door thresholds) fill expansion gap with a flexible caulking.
- Do not wash or treat the floor for a minimum of 48 hours to allow the adhesive to cure.

## 14) Post Installation

### Floor Protection:

- Allow adhesive to set up before allowing traffic onto the installation area, light traffic 24 hours, heavy traffic 72 hours.
- If other trades are working in the installation area, protect flooring with an approved breathable floor protection material such as a builder board or reinforced 60lb Kraft paper.
- Allow a minimum of 24 hours post installation before applying floor protection.
- Allow a minimum of 48 hours post installation for light cleaning or treatment and minimum 7 days for a complete cleaning.
- Always use chair pads under rolling caster chairs and chair leg protectors, minimum of 1.5" diameter, under furniture legs.

## 15) Maintenance

### Initial Maintenance

- Always use a neutral pH cleaner, such as Once 'n Done Cleaner.
- Allow flooring to dry completely prior to foot traffic.

### Daily & Weekly Maintenance

- Sweep, dust mop, or vacuum the floor as needed to remove loose dirt and grit. Do not use a vacuum with bristles or a beater bar.
- Recommend cleaning liquid spills immediately.
- Damp mop (do not flood floor) as needed.

### **Preventative Maintenance**

- Chair pads are required under roller castor chairs.
- Furniture leg protectors, minimum 1.5" diameter, are required under all furniture legs.
- Use protective boards when sliding heavy furniture across flooring.
- Never apply rubber mats directly on top of vinyl flooring.
- Place walk off mats outside entry doors to prevent dirt and sand from entering into the installation.
- Protect flooring from direct sunlight with window and glass door coverings to prevent fading.
- Any additional floor finishes are not required and not approved. The application of any additional floor finishes will void all warranties.

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