Product	
Supplier	Flooring2
Product Type	Luxury Vinyl
Number	LT
Name	Lakeshore Tile

Luxury Vinyl Installation Guide (Loose-Lay / Glue-Down)

> **Document Version:** 1.0
> **Last Updated:** January 2026

Applies to: Loose-lay luxury vinyl tiles and planks that can also be installed using glue-down methods.

Legal Disclaimers

> **IMPORTANT: READ BEFORE INSTALLATION**

Limitation of Liability
This guide provides general installation information only. We are not responsible for installation errors, product damage, personal injury, or property damage resulting from the use of this guide. Actual results depend on site conditions, installer skill, and adherence to all applicable codes and standards.

General Information Notice
This guide covers both loose-lay and glue-down installation methods for specialty luxury vinyl products designed for loose-lay use. Product specifications may vary between product lines.

Professional Consultation Recommended
We recommend consulting a licensed flooring professional before installation for commercial applications or complex layouts.

Assumption of Risk
By proceeding with installation, you assume all risks associated with flooring installation, including but not limited to physical injury, property damage, and voiding of product warranties due to improper installation.

Safety Warnings

Regulatory Compliance

Before beginning any flooring installation, ensure compliance with:

- **OSHA Standards** - Follow workplace safety requirements (29 CFR 1926 for construction)
- **EPA Regulations** - Proper handling and disposal of materials
- **Building Codes** - Comply with International Building Code (IBC) and International Residential Code (IRC)
- **Lead Safety** - For structures built before 1978, follow EPA RRP Rule requirements
- **Asbestos Requirements** - For structures built before 1981, have existing flooring tested before removal

Personal Protective Equipment (PPE)

Equipment	When Required
Respiratory Protection	N95 mask when cutting or working with adhesives
Eye Protection	Safety glasses during cutting
Hand Protection	Work gloves when handling materials and adhesives
Knee Protection	Knee pads for floor-level work

Health Hazards

> **Chemical Exposure (Adhesives - Glue-Down Method):**
>
> - Work in well-ventilated areas when using adhesives
> - Review Safety Data Sheets (SDS) for all chemical products
> - Wash hands thoroughly after handling adhesives
>
> **Dust Exposure:**
>
> - Use dust collection when cutting
> - Keep work area clean
>
> **Physical Strain:**
>
> - Use proper lifting techniques
> - Use knee pads for floor-level work
> - Take regular breaks

Emergency Procedures

Situation	Action
Adhesive Contact (Skin)	Wash immediately with soap and water for 15 minutes
Adhesive Contact (Eyes)	Flush with clean water for 15 minutes, seek medical attention
Cuts from Knife	Apply pressure, clean wound, seek medical attention for deep cuts

Emergency Contacts:

- Poison Control: 1-800-222-1222
- Local emergency services: 911

Understanding Loose-Lay Vinyl

What is Loose-Lay Vinyl?

Loose-lay vinyl is a specialty luxury vinyl product designed to be installed without adhesive over most of the floor area. These products feature:

- **Heavy weight** - Thicker, denser construction stays in place
- **Fiberglass backing** - Provides dimensional stability
- **Friction backing** - Textured underside grips the subfloor
- **Minimal expansion/contraction** - Stable across temperature changes

When to Choose Loose-Lay

Advantages:

- Fastest installation method
- Easy replacement of damaged tiles/planks
- No adhesive fumes or curing time
- Good for temporary installations
- Ideal for raised access floors
- Easy removal if needed

Best Applications:

- Commercial installations with easy-replacement needs
- Rental properties
- Temporary showrooms or event spaces
- Over existing flooring
- When minimal disruption is needed

When to Add Glue-Down

Although designed for loose-lay, adding adhesive may be beneficial for:

- High-traffic commercial areas
- Areas with heavy rolling traffic
- Perimeter adhesion for added security
- Installations over irregular subfloors
- Maximum long-term stability

Pre-Installation Preparation

Tools and Materials Needed

Installation Tools:

- □ Tape measure (minimum 25 ft / 7.6 m)
- □ Chalk line or laser level
- □ Utility knife with extra blades
- □ Straight edge (48" / 122 cm minimum)
- □ Vinyl tile cutter or saw
- □ 75-100 lb floor roller
- □ Hand roller for edges
- □ Notched trowel (for glue-down method only)

Materials - Loose-Lay:

- □ Loose-lay vinyl tiles/planks (add 5-10% for waste)
- □ Double-sided tape (for perimeter and transitions)
- □ Transition strips

Materials - Glue-Down (if applicable):

- □ **Adhesive: Hold Fast HF99, MAPEI ECO 399 or MAPEI ECO 373 only**
- □ **Primer: Appropriate MAPEI primer for subfloor type**

Safety Equipment:

- □ Safety glasses
- □ Work gloves
- □ Knee pads
- □ Dust mask

Room Preparation

1. **Remove all furniture** - Clear the entire installation area
2. **Remove existing flooring** - If applicable, or install over if conditions permit
3. **Clean the subfloor** - Remove all debris, dust, and contaminants
4. **Verify subfloor flatness** - Critical for loose-lay success
5. **Ensure room is temperature controlled** - HVAC must be operational

Subfloor Requirements

IMPORTANT: CRITICAL RESTRICTION (Glue-Down): NOT approved for installation over particle board subfloors when using adhesive.

Flatness Specification:

- Maximum variance: 1/8" over 10 feet (3 mm over 3 m)
- Loose-lay products require excellent flatness
- Sand down high spots
- Fill low spots with leveling compound

Acceptable Subfloor Types:

Subfloor	Loose-Lay	Glue-Down
Concrete (cured 60+ days)	Yes	Yes
Plywood (1/4" min)	Yes	Yes
OSB (1/4" min)	Yes	Yes

Subfloor	Loose-Lay	Glue-Down
Existing vinyl (well-bonded, smooth)	Yes	Yes
Existing ceramic tile (level)	Yes	Yes
Particle board	Yes (loose-lay only)	No
Gypsum*	Yes	Yes

* Gypsum (gypcrete, Gyp-Crete, or gypsum-based self-leveling underlayments) with a minimum PSI rating of 3000. When fully dry and cured. Approved primers and adhesives required.

NOT Acceptable:

- Carpet or carpet pad
- Cushion-backed vinyl
- **Particle board (for glue-down method)**
- Uneven or damaged subfloors

Moisture Testing Requirements:

Subfloor Type	Test Method	Maximum Reading
Concrete	Calcium Chloride (CaCl)	5 lbs per 1,000 sq ft / 24 hrs
Concrete	Relative Humidity (RH)	85% RH
Wood	Pin-type moisture meter	12% moisture content

Climate Requirements

Required Conditions:

- Temperature: 65F - 85F (18C - 29C)
- Relative Humidity: 35% - 55% RH
- Maintain conditions 48 hours before, during, and after installation

Acclimation:

- Store flooring in installation area for 24-48 hours
- Keep boxes closed until ready to install
- Allow material to reach room temperature

Adhesive Requirements (Glue-Down Method Only)

REQUIRED PRODUCTS - NO SUBSTITUTIONS

If choosing to install with adhesive (full-spread or perimeter only):

Required Products

Product	Specification
Adhesive	Hold Fast HF99, MAPEI ECO 399 or MAPEI ECO 373
Primer	Appropriate MAPEI primer for subfloor type
Application	Troweled only (rolling NOT permitted)

Application Method

1. **Apply primer first** - Allow to dry completely per MAPEI specifications
2. **Trowel adhesive** - Use recommended notch trowel size
3. **Do NOT roll adhesive** - Troweling is required
4. **Follow open time guidelines** - Per Hold Fast/MAPEI technical data sheets
5. **Spread manageable sections** - Only what you can cover within working time

WARNING: Using non-approved adhesives or improper application methods will void the product warranty.

Installation Methods

Method 1: Full Loose-Lay Installation

Best For: Most applications, fastest installation, easy replacement

Requirements:

- Subfloor must be flat (1/8" over 10 ft maximum)
- Product must be rated for loose-lay
- Clean, dry, smooth subfloor

Step-by-Step Instructions

Step 1: Plan Your Layout

- Measure room and find center point
- Snap perpendicular chalk lines
- Dry-lay tiles/planks from center to walls
- Adjust starting point if border pieces would be less than half-width
- For planks: plan stagger pattern (minimum 6" / 15 cm offset)

Step 2: Begin Installation from Center

- Start at intersection of chalk lines
- Place first tile/plank firmly on subfloor
- Butt subsequent pieces tightly together
- Work outward in all directions

Step 3: Continue Installation

- Press each piece firmly into place
- Butt edges tight - no gaps
- For planks: maintain stagger pattern
- Mix pieces from multiple boxes for color variation
- Use hand pressure to ensure contact with subfloor

Step 4: Cut Border Pieces

- Measure each border piece individually
- Leave 1/8" - 1/4" (3-6 mm) gap at walls
- Cut using utility knife and straight edge
- Install cut pieces at perimeter

Step 5: Secure Perimeter and Transitions

- Apply double-sided tape under perimeter tiles/planks
- Apply tape at all doorway transitions
- Press firmly to secure

Step 6: Roll the Floor

- Roll entire floor with 75-100 lb roller
- Roll in both directions
- Pay attention to seams and edges
- This ensures full contact with subfloor

Method 2: Perimeter-Bond Installation

Best For: Added security, high-traffic areas, extra stability

Requirements:

- Clean, flat subfloor
- Hold Fast HF99, MAPEI ECO 399 or ECO 373 (if using adhesive)
- OR double-sided carpet tape

Step-by-Step Instructions

Step 1-4: Same as Loose-Lay Method

- Plan layout
- Begin from center
- Continue installation
- Cut border pieces

Step 5: Apply Perimeter Adhesive

- Fold back perimeter tiles/planks (8-12" / 20-30 cm)
- Apply thin adhesive bead OR double-sided tape
- Press pieces firmly into adhesive/tape
- Apply at all doorways and transitions

Step 6: Roll and Complete

- Roll entire floor with 75-100 lb roller
- Allow adhesive to set before heavy traffic

Method 3: Full-Spread Glue-Down Installation

Best For: Maximum stability, heavy rolling traffic, permanent installations

Requirements:

- Clean, properly prepared subfloor (no particle board)
- Hold Fast HF99, MAPEI ECO 399 or ECO 373 adhesive
- Appropriate MAPEI primer

Step-by-Step Instructions

Step 1: Plan Layout

- Same as loose-lay method
- Snap chalk lines
- Verify layout with dry-lay

Step 2: Prepare Subfloor

- Apply MAPEI primer
- Allow to dry completely

Step 3: Apply Adhesive

- Work in sections (approximately 50-100 sq ft)
- Trowel adhesive with recommended notched trowel
- Allow to tack per Hold Fast/MAPEI guidelines

Step 4: Install Flooring

- Place tiles/planks firmly into adhesive
- Do not slide - set in place and press
- Butt edges tightly together
- Roll each section with floor roller

Step 5: Complete Installation

- Cut and install border pieces
- Roll entire floor
- Clean any adhesive residue from surface immediately

Finishing Touches

Expansion and Movement

Loose-lay vinyl has minimal expansion, but still requires:

- 1/8" - 1/4" (3-6 mm) gap at walls and fixed objects
- Gap covered by baseboards or quarter round

Transitions and Moldings

Transition Type	Use Case
T-Molding	Between rooms of equal height flooring
Reducer	Transition to lower flooring
End Cap	At doorways, sliding doors
Metal edge	Exposed edges
Quarter Round	Along walls if gap is visible

Final Steps

1. **Roll the floor** - 75-100 lb roller in both directions
2. **Clean floor** - Remove any residue or debris
3. **Inspect seams** - Check all edges are tight
4. **Install transitions** - Secure to subfloor at doorways
5. **Install baseboards** - Cover perimeter gaps
6. **Replace furniture** - Use felt pads under furniture

Traffic Restrictions

Method	Light Traffic	Normal Use	Heavy Furniture
Loose-Lay	Immediately	Immediately	24 hours
Perimeter-Bond	12 hours	24 hours	48 hours
Full Glue-Down	24 hours	48 hours	72 hours

Room-Specific Considerations

Commercial Spaces

- Loose-lay is ideal for easy replacement
- Consider perimeter-bond for added security
- Full glue-down for heavy rolling chair traffic
- Keep spare tiles for replacement

Offices

- Loose-lay works well for typical office environments
- Use chair mats in heavy rolling chair areas
- Easy to replace worn or damaged tiles

Retail

- High traffic may benefit from perimeter-bond or glue-down
- Easy replacement for damaged areas
- Consider traffic patterns when planning layout

Raised Access Floors

- Loose-lay is ideal - matches access panel size
- No adhesive needed
- Easy access to utilities below

Basements

- Conduct moisture testing
- Loose-lay can tolerate minor moisture better than glue-down
- Full glue-down requires moisture mitigation

Kitchens and Bathrooms

- Loose-lay vinyl is generally water-resistant
- Perimeter-bond recommended for wet areas
- Ensure product is rated for these applications

Radiant Heat Systems

Pre-Installation Requirements:

- Verify product is rated for radiant heat
- Maximum surface temperature: 85F (29C)
- System operating 2 weeks before installation

Post-Installation:

- Gradually increase temperature (5F / 2.8C per day max)

Quality Control Checklist

Pre-Installation

- □ Subfloor flatness verified (1/8" over 10 ft maximum)
- □ Subfloor is NOT particle board (glue-down method)
- □ Moisture testing completed
- □ Materials acclimated for 24-48 hours
- □ Environmental conditions verified (65-85F, 35-55% RH)
- □ Layout planned and verified
- □ All materials and tools on site

During Installation

- □ Tiles/planks set firmly (not slid)
- □ All edges butted tight
- □ Stagger pattern maintained (planks)
- □ Perimeter tape/adhesive applied (if using)
- □ Floor rolled after installation
- □ Border pieces properly cut and fitted

Final Inspection

- □ No visible gaps between pieces
- □ All tiles/planks lying flat
- □ Perimeter secured
- □ Transitions installed
- □ Floor clean and free of debris
- □ Spare tiles set aside for future replacement

Troubleshooting

Tiles/Planks Shifting or Moving

Cause: Inadequate subfloor prep, missing perimeter adhesion, or unsuitable product

Solution:

- Apply perimeter adhesive/tape
- Consider full glue-down for problem areas
- Verify product is rated for loose-lay

Prevention:

- Ensure subfloor is clean and flat
- Always secure perimeter and transitions
- Use 75-100 lb roller

Edges Curling or Lifting

Cause: Temperature fluctuations, direct sunlight, or subfloor issues

Solution:

- Apply adhesive to affected edges
- Address heat/sunlight source
- May need to replace affected tiles

Prevention:

- Maintain consistent temperature
- Use window treatments to reduce direct sunlight
- Secure perimeter properly

Visible Gaps Between Pieces

Cause: Pieces not butted tightly, shrinkage, or installation technique

Solution:

- Lift and reposition affected pieces
- Butt edges firmly together

Prevention:

- Press pieces firmly together during installation
- Roll floor thoroughly

Telegraphing Subfloor Imperfections

Cause: Subfloor not flat enough

Solution:

- May require lifting floor and addressing subfloor
- Fill low spots, sand high spots

Prevention:

- Verify subfloor flatness before installation
- Loose-lay requires excellent subfloor prep

Professional vs DIY

DIY Suitable For

- Loose-lay installations
- Small to medium rooms
- Simple rectangular layouts
- Most residential applications
- Installers with basic DIY experience

Professional Installation Required For

- Large commercial areas
- Full glue-down installations
- Complex room layouts
- When subfloor preparation is needed
- When warranty requires professional installation

Care and Maintenance

Daily Care

- Sweep or dust mop to remove loose dirt
- Wipe up spills promptly
- Use walk-off mats at entrances

Regular Cleaning

- Damp mop with neutral pH cleaner
- Use neutral pH cleaners
- Avoid excess water

Products to Avoid

- Steam cleaners
- Abrasive cleaners
- Wax or polish products
- Oil-based soaps
- Ammonia-based cleaners
- Bleach or harsh chemicals

Ongoing Maintenance

- Use felt pads under furniture
- Use chair mats under rolling chairs
- Lift furniture to move, do not drag
- Replace damaged tiles/planks as needed (major advantage of loose-lay)
- Keep spare tiles from same dye lot

Replacing Damaged Tiles/Planks

One major advantage of loose-lay installation:

1. Lift damaged tile/plank (may need to lift adjacent pieces for planks)
2. Clean subfloor
3. Install replacement from same dye lot
4. Press firmly into place
5. For perimeter pieces: reapply tape if needed

Additional Resources

Industry Associations

- Resilient Floor Covering Institute (RFCI)
- World Floor Covering Association (WFCA)
- Floor Covering Installation Contractors Association (FCICA)

Certification Programs

- CFI Certified Flooring Installers
- INSTALL Flooring Certification

Warranty Information

See separate warranty brochure for complete warranty terms and conditions.

This installation guide is provided for general reference. Always consult local building codes before installation.