



www.msisurfaces.com

- **Read enclosed detailed installation instructions before beginning install.**
- **A flat subfloor is a must!**
- **Proper moisture testing is a must!**
- **Molding, trim, transition, and finish pieces must not prevent the floor from floating.**
- **Failure to follow installation instructions will void the warranty.**

**Please Carefully Read All Instructions Before You Begin Your Installation.
Improper Installation Will Void The Warranty.**

**For full warranty information and care and maintenance instructions visit
<https://www.msisurfaces.com/luxury-vinyl-flooring/downloads/>**

Tools and materials

- MSI's MS001, MS007, or MS009 adhesive (only)
- MSI recommended trowel (*1/16" x 1/32" x 1/32" for MS001, MS007, MS009*)
- 100 pound, 3 section roller
- Chalk Line
- Carpenter square
- Utility Knife
- Cutting board
- Tape measure
- In Situ probes (ASTM F2170) and a Moisture Meter

Preparing the Area

- Remove all furniture, appliances, and fixtures from the room.
- Remove all binding strips or other restrictive molding from doorways, walls, etc.
- Undercut wood door casings where possible so that flooring can be slid under it.
- Areas to receive flooring should be adequately lit during all phases of the installation process.

Important Notes:

- Each installation setting is unique; therefore, it is recommended to consult a licensed installer/contractor to verify that the conditions are appropriate for this product.
- Inspect the floor for defects and verify that it is the correct product prior to and during installation in good lighting.
- Do not install any flooring that appears to be defective.
- Always check flooring planks for defects such as chips and color variations under good light conditions.
- Use planks from multiple boxes during installation to ensure random pattern variation. Installation of planks implies acceptance of its appearance and quality regardless of whether there are visual defects or not.

Acclimation

Flooring material and adhesive must be acclimated in the area that the product will be installed for a minimum of 48 hours prior to installing. The product should not be acclimated or installed until the area is within the recommended temperature and relative humidity requirements listed below.

- The area where the flooring is to be installed should be clean, fully enclosed, and have a permanent operational HVAC (which should be operating at least 72 hours prior to installation) to maintain a uniform temperature range of 65° F to 85° F. These conditions should be maintained during acclimation and after installation for the life of the product. Never allow the area to drop below 55° F.



www.msisurfaces.com

- Humidity in the room should remain below 65%.
- Flooring material should be removed from packaging during acclimation and laid flat.
- Direct sunlight exposure to the material should be avoided during acclimation and installation by way of window coverings.

Subfloor Preparation

Asbestos Warning

WARNING! DO NOT MECHANICALLY CHIP OR PULVERIZE EXISTING RESILIENT FLOORING, BACKING, LINING FELT, ASPHALTIC “CUTBACK” ADHESIVES OR OTHER ADHESIVES. Installed resilient floor covering products and the asphaltic or cutback adhesives used to adhere them may contain either asbestos fibers and/or crystalline silica. The products in this carton **DO NOT** contain asbestos or crystalline silica. Avoid creating dust or inhalation of asbestos/crystalline dust as they can cause 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 previously installed 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 and may govern the removal and disposal of material. See current edition of the Resilient Floor Covering Institute (WWW.RFCI.com) publication “Recommended Work Practices for Removal of Resilient Floor Coverings” for detailed information and instructions on removing all resilient covering structures.

- All subfloor surfaces must be flat, clean, dry, smooth, and free of movement.
- **Flat** within 3/16” in a 10’ radius and within the equivalent of 1/32” in 12”.
- Sand high areas or joints and fill low areas with a high compressive strength Portland base compound.
- Completely remove all residual adhesive with an approved method on previously covered subfloors or cover them with **MSI’s MS005 Adhesive Encapsulator**, if needed. Never use solvent-based adhesive removers.
- **Dry** – Test and record moisture content results. **DO NOT INSTALL FLOORING IF MOISTURE TEST RESULTS EXCEED RECOMMENDED LIMITS.** (WWW.RFCI.com)

Concrete Subfloors

1. Concrete subfloors must be dry, smooth, and free from dust, solvent, paint, wax and grease, asphalt sealing compounds, and oil or other materials. The surface must be hard and dense, and free from powder or flaking. If the surface is dusty but meets all other requirements, use **MSI’s MS003 Floor Primer** to prepare the surface for adhesive application.

Note: New concrete slabs must be thoroughly dry (at least sixty days) and completely cured. Curing agents, surface hardeners and other additives may cause adhesive bonding failure. These should be removed by sanding or grinding.

2. Moisture in concrete subfloors can create high moisture vapor emission levels, hydrostatic pressure, and high alkalinity levels. This combination is highly corrosive and damaging to flooring, over time. To avoid this, ensure that concrete subfloors are constructed according to the American Concrete Institution’s guidelines (ACI’s 302.2 Guide).

To check current conditions, an RH test using in situ Probes (ASTM F2170) is necessary. If the level of hydrostatic pressure is over 90% RH, you must use MSI’s MS007 or MS009 Adhesive (up to 95-99% RH) for the installation. There also is calcium chloride testing (ASTM F1869) but the in-situ Probe (ASTM F2170) is the preferred test. Lightweight concrete (minimum density of 90 lbs. per cubic foot) is acceptable if installed according to the manufacturer’s instructions and primed with **MSI’s MS003 Floor Primer**.

3. If there is an old adhesive present from a previous install, you must remove all surface residue. Once you remove all surface residue, use **MSI’s MS005 Adhesive Encapsulator** to prepare the subfloor for the new adhesive and a proper bond.

Wood Subfloors

NOTE: As with many other interior finish products, modification of existing structural components may be required for a successful installation.

1. Nail or screw any areas that are loose or squeak. Wood panels should exhibit an adequate fastening pattern. They should be glued, screwed, or nailed as the manufacturer requires, using an acceptable pattern, typically, 6" along bearing edges and 12" along intermediate supports. Flatten edge swell as necessary and replace any water- damaged, swollen, or delaminated subflooring or underlayment.
2. Double-layered APA rated plywood subfloors should be a minimum of 1" or thicker and free of vertical deflection. All fasteners must be flush with the subfloor panels.
3. Basements and crawl spaces must be dry. Use of a 6-mil black polyethylene membrane is required to cover 100% of the crawl space earth. The crawl space clearance from ground to underside of joist should 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.

Important Notes:

- Wood subfloors directly fastened to concrete, or sleeper construction, are not recommended.
- This flooring is not recommended to be installed over fire-retardant treated plywood or preservative treated plywood. The substances used to treat the wood may cause issues with the bond between the adhesive and the subfloor.
- For strip plank wood flooring, it is recommended to install ¼" or thicker APA rated underlayment panels.

Radiant Heat

- Radiant heated substrates are not to exceed 85° F surface temperature.
- It is recommended to operate newly constructed systems in concrete at maximum temperature several days prior to installing the flooring to reduce residual moisture in the new concrete.
- Three days prior to installation of the flooring, lower the temperature to 65° F. Then, 24 hours after installation gradually increase the temperature in increments of 5° F only. Ensure that the surface of the floor is not exceeding 85° F at any point.

Installation procedure

- Product can be loose laid and net fit in areas under 20'. Areas larger than 20' in any direction would require either perimeter glue or full spread and require a 1/8" expansion gap.
- Use an MSI adhesive (MS001, MS007, or MS009) and follow the instructions on the adhesive.
- Results of the moisture tests will help determine which adhesive to use. For example, if the subfloor RH is 96%, then the MS009 would be appropriate as it can handle up to 99% RH conditions.

Before beginning, plan the layout such that plank/tile joints fall at least 6 inches (15 cm.) away from subfloor and underlayment joints. Find the center point in the room. Divide the room into equal quadrants by marking two perpendicular lines on the subfloor intersecting at the center point. Depending on your layout, you may also start your row along a wall. To account for walls that may not be straight, snap a chalk line.

Do not install over expansion joints.

Step 1: Apply adhesive with the recommended trowel (if applicable). Follow directions on adhesive label for open and working time. Do not exceed working time of adhesive. To ensure adhesive doesn't sit longer than working time, only spread areas with adhesive that product can be installed within the working time of the adhesive.

Step 2: Install all planks/tiles making sure each piece fits tightly to the next.

Step 3: Repeat Step 1 and Step 2 until the area is completed.

Step 4: If adhesive is used, roll once ASAP with a 100-pound, 3-section roller and roll again after 45 - 60 minutes in the opposite direction to ensure the entire installation is rolled.



www.msisurfaces.com

After Installation,

- Immediately remove any excess adhesive from the surface of the flooring using a clean white cloth dampened with water. You may also use rubbing alcohol or denatured alcohol to remove tacky or dried adhesive. Dried adhesive may be removed with a clean white cloth dampened with mineral spirits.
- Restrict to light traffic/foot traffic for a minimum of at least a FULL 24 hours. Additional time may be necessary if the installation is over a non-porous substrate.
- Install the base moldings. Use silicone caulking to seal all areas that may be exposed to surface spills (i.e. tubs, toilets, and showers).
- Restrict heavy traffic, rolling loads, or furniture placement for 72 hours after installation.
- Return appliances and furniture to the room by rolling or sliding them over strips of hardboard.
- Allow at least five days following the installation before performing wet maintenance.