

# LOOSE LAY INSTALLATION INSTRUCTIONS

This product is ideal for use in both new construction, renovation projects or any other project where speed of installation is required. The combination of a fiberglass reinforced middle layer with multiple “hot-pressed” layers, makes this product unprecedented in strength, performance and overall quality.

This product is intended for interior use only and is suitable for above-grade, on-grade and below-grade in applications. However, it should not be installed in locations where the space beneath the building structure is exposed to the elements.

Direct sunlight may cause this product to fade or the joints to separate. Protect it from direct sunlight using window treatments or UV tinting on windows. This product is not recommended for areas without permanent HVAC.

## PRE-INSTALLATION

### Evaluate the Job Site

#### Exterior

Damage caused by water and high humidity should be addressed prior to installing this product. Examine the driveway and landscaping surrounding the building. Be sure that they slope and direct water away from the foundation. Inspect gutters, down spouts and drains for blockage. Remove clogs caused by leaves, dirt and debris, allowing runoff to flow freely away from the foundation. Check crawl spaces for cross-ventilation air vents equaling at least 1.5% per 100 square feet of floor space. Crawl spaces should measure a minimum of 18 inches high and should be insulated according to the latest building code requirements. The ground should be covered with a minimum 6-mil vapor barrier.

#### Interior

Moisture issues should be addressed and corrected at the job site prior to installation. Examine the installation site for leaky plumbing, including leaks from water heaters, dishwashers, washing machines, or any other water-bearing fixtures or pipes. Inspect substrates for level. They must be sturdy, sound, and flat within  $\frac{3}{16}$ " in a 10 foot radius without any abrupt height differences. The substrate should not slope more than 1 inch per 6 feet in any direction.

All concrete substrates must be tested for relative humidity, moisture and pH before installation begins. Test results should not exceed 85% relative humidity (RH). The Calcium Chloride Test for moisture should be no more than 8lbs per one-thousand square feet in 24 hours MVER, (Moisture Vapor Emission Rating) and pH tests for alkalinity levels should register between 7 and 9. All wood floors must be checked for moisture. Obvious signs of moisture issues include warping, peaking, degradation of the integrity of the substrate, rusted fasteners, and rusted floor registers. Even if obvious signs are not present, the material should be tested using a wood moisture meter; moisture levels should not exceed 14%.

**ATTENTION:** Mold and mildew grow only in the presence of moisture. Moisture issues should be addressed and corrected at the job site prior to installation. Please visit [www.epa.gov/mold](http://www.epa.gov/mold) for information about safely preventing and removing mold, mildew and other biological pollutants.

## Identify Your Substrate

### *Approved Substrates*

#### **Concrete**

This product is waterproof, but moisture issues should be corrected at the jobsite before installation begins to prevent serious damage to the subfloor and surrounding structure, and to discourage the growth of mold and mildew. Concrete substrates should be prepared in accordance to the most current version of ASTM F710 (Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring). Concrete substrates must be sturdy, sound, and flat within  $\frac{3}{16}$ " in a 10 foot radius without any abrupt height differences. The substrate should not slope more than 1 inch per 6 feet in any direction. Moisture and alkalinity tests should be performed on all concrete substrates regardless of grade level or age of slab. Perform either ASTM F2170 In-Situ Relative Humidity (RH) test or ASTM F1869 Calcium Chloride Moisture Test (MVER: Moisture Vapor Emission Rating). Perform pH test per ASTM F710 to determine alkalinity of the slab. RH Test results should not exceed 85% relative humidity. The Calcium Chloride Test for moisture should measure no more than 8lbs per one-thousand square feet in 24 hours MVER, and pH tests for alkalinity levels should register between 7 and 9. Electronic meter testing is not considered a replacement for a Calcium Chloride Test or Relative Humidity Test. All moisture tests should be conducted prior to installation to ensure that moisture is at recommended levels. Follow current ASTM F710 guidelines. It is highly recommended that substrate moisture and pH testing be conducted by an ICRI (International Concrete Repair Institute) tier 2 certified technician.

#### **Radiant Heat**

Radiant heating systems must be cast  $\frac{1}{2}$ -inch below the surface of the concrete slab, and should be operating at least 2 weeks before installation. Set the temperature of the radiant heating system to 68°F 48 hours before, during, and 72 hours after installation. The temperature of the radiant heat floor may be increased gradually 72 hours after installation, but the surface temperature of the subfloor should never exceed 81°F (27° FC). Contact the manufacturer of your radiant heating system for further recommendations.

#### **Plywood, OSB, Particleboard & Chipboard**

Wood substrates must be A.P.A. approved with a minimum grade of "BB" or "CC". They must be sturdy, sound, clean, dry, and flat within  $\frac{3}{16}$ " in a 10 foot radius without any abrupt height differences. The substrate should not slope more than 1 inch per 6 feet in any direction. It is recommended to perform moisture tests prior to installation to prevent serious damage to the subfloor and surrounding structure, and to discourage the growth of mold and mildew. Moisture readings should never exceed 14% for plywood, OSB, particleboard and chipboard substrates. If moisture readings exceed 14%, it is advisable to correct moisture issues at the jobsite before installation.

#### **Tile, Terrazzo, Asbestos Tile, Resilient Tile, Non-Cushion Sheet Vinyl, and Metal**

Existing floors must be firmly attached to the structural floor. They must be sturdy, sound, clean, dry and flat within  $\frac{3}{16}$ " in a 10 foot radius without any abrupt height differences. The substrate should not slope more than 1 inch per 6 feet in any direction. When installing in commercial settings, fill in grout lines on ceramic tiles, terrazzo, quarry tiles and similar floors with cementitious leveling and patching compound.

#### **Raised Access Panels**

Inspect the subfloor thoroughly. The access panels should be structurally sound, smooth, level, clean, dry and free of any foreign, loose matter or defects. The raised panels should meet the following standards:

- The entire raised access floor should be must be clean, smooth, dry, structurally sound, and flat within  $\frac{3}{16}$  of an inch within a 10-foot radius with no abrupt height differences.
- Gaps between panels should not exceed .04" (1mm).
- Lipping of panels and the height differences between adjacent panels should not exceed .03" (.075mm).

## **NON-APPROVED SUBSTRATES**

Remove the floors noted below and remove old adhesive before installation. Encapsulate adhesive and cutback residue.

Carpeting/Carpet Pad  
Cushion Back Sheet Vinyl  
Engineered Hardwood Over Concrete  
Floating Floors  
Hardwood Over Concrete  
Parquet Over Concrete  
Cement Tile Backer Boards  
Ferrous Substrates  
Sleeper Substrates

NOTE: Various Federal, State and Local government agencies have established regulations governing the removal of in-place asbestos-containing material. If you contemplate the removal of a resilient floor covering structure that contains (or is presumed to contain) asbestos, you must review and comply with all applicable regulations. Do not sand, dry sweep, dry scrape, drill, saw, bead blast, or mechanically chip or pulverize existing resilient flooring, backing, lining felt, asphalt "cut-back" 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 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. The RFCI's Recommended Work Practices for Removal of Resilient Floor Covering are a defined set of instructions addressed to the task of removing all resilient floor covering structures. For further information, contact the Resilient Floor Covering Institute website at [www.rfci.com](http://www.rfci.com).

## **Material receiving, handling, and storage**

- 1) Upon receipt, immediately remove any shrink-wrap and check material for damage, and that the material is of the correct style, color quantity, and run number.
- 2) Immediately report any discrepancies.
- 3) General Storage: Store all materials flat and off of the floor in an acclimatized, weather-tight space between 65°-81°F (18°-27°C). Do not double-stack pallets.

## **Prepare the Job Site**

Careful preparation is the key to outstanding results. All trades must finish before installation.

- Install Permanent Exterior Doors and Windows
- Turn on HVAC at Least One Week Prior to Installation Room temperature should be maintained between 50°F – 100°F at least 48 hours prior to installation. Acclimate materials in the acclimatized jobsite between 65°-81°F (18°-27°C) and 35%-85% RH for a minimum of 48 hours prior, all times during, and maintain temperature continuously after installation. Spread unopened cartons no more than 6 cartons high and at least 6" apart. Keep away from heating and cooling ducts and direct sunlight.
- Allow all other Trades to Finish
- Perform Recommended Moisture and pH Tests See the "Identify Your Substrate" section of this manual (pages 3-4) for further information about suggested tests.
- Level Uneven Surfaces Fill large cracks and voids with cementitious leveling and patching compound.

Substrates must be sturdy, sound, and flat within  $\frac{3}{16}$ " in a 10 foot radius without any abrupt height differences. The substrate should not slope more than 1 inch per 6 feet in any direction.

- Remove Floor Moldings Quarter round and wall base should be carefully removed before installation begins. It will be used to conceal the expansion space once the job is finished.
- Fill Grout Lines on ceramic tiles, terrazzo, quarry tiles and similar floors with a proper floor patching compound.
- Remove Non-approved Substrates
- Remove or Encapsulate Old Adhesive Old adhesives must be scraped up and left so that no ridges or puddles are evident and all that remains is a thin, smooth film. Then, encapsulate residue.
- Undercut Wood Door Casings Wood door casings should be undercut so that the product will fit neatly beneath them, concealing the expansion space. Position the plank on the substrate against the door casing. Lay the handsaw flat against the scrap plank and carefully cut the door casing to the height of the plank.
- Cut Around Metal Door Casings Do not cut metal door casings. Cut the product around them, leaving the appropriate expansion space. - After installation, fill the space with a coordinating premium waterproof 100% silicone sealant.
- Clean Up the Job Site Remove all debris, sweep and vacuum the subfloor. Smooth, non-porous floors should be damp-mopped after vacuuming and allowed to dry thoroughly before installation. All dust must be removed prior to installation.

## Check Run Numbers and Manufacture Date

Locate the run number on the short end of each carton and verify that all of the material for your job is from the same run. Minor shade variations within the same run number contribute to the natural look of the product. To avoid noticeable shade variations, do not install material from different runs across large expanses.

To determine manufacture date, locate the run number on the short end of the carton. It is the eight-digit number separated by decimal points beginning with the two-digit day, then the two-digit month, and finally the four-digit year.

## INSTALLATION CONSIDERATIONS

<b>Subfloor Flatness Tolerances</b>	$\frac{3}{16}$ " in a 10 foot radius without any abrupt height differences. Slope no more than 1" in 6'
<b>Is Underlayment (Pad) Required</b>	No
<b>Acclimation Requirements</b>	Minimum of 48 hours
<b>Transition Requirements (T-Mold) for Large Spaces</b>	Not Required
<b>Transition Requirements (T-Mold) Doorways/Thresholds</b>	Not Required
<b>Installation Over Existing Ceramic Tile Floor</b>	Filling grout lines required. Follow subfloor flatness tolerances.
<b>Subfloor RH/MVER Recommendations</b>	85% RH, 8 lbs MVER
<b>Radiant Heat</b>	Approved – Substrate surface temperature not to exceed 81° F (27° FC)
<b>Required Interior Environmental Conditions</b>	Interior environmental conditions must be maintained at 65°-81°F (18°-27°C) and 35%-85% RH a minimum of 48 hours before testing, and at all times during testing (ASTM F710).

<b>Definition of “Waterproof”</b>	Structural integrity of flooring will not degrade due to contact with moisture/water but is not a moisture barrier
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## INSTALLATION PROCEDURES

- This is designed to be installed without adhesive in areas up to a maximum of 215 sq. ft. (20m<sup>2</sup>), except for areas that are subject to substantial temperature fluctuations or very high traffic (including heavy rolling-loads). In this case a permanent full bond installation method is required.
- For loose lay installations measure and cut fill pieces perfectly net as to not leave an expansion space or force fit into position.
- For raised access systems over 215 sq. ft. (20m<sup>2</sup>) Contact Customer Service.
- In all areas, bigger than 215 sq. ft. (20m<sup>2</sup>), and areas subject to substantial temperature fluctuations or very high traffic, this product must be installed using the permanent full bond installation method.
- For applications using the permanent full bond installation method contact Customer Service for proper adhesive and application requirements.
- When this has been bonded with adhesive, upon completion of the installation, roll the floor in two directions at right angles to each other with a 100 pound roller with overlapping passes. This ensures good contact between tiles, adhesive and substrate.
- One key factor to ensuring an excellent, finished appearance of this product is careful substrate preparation. The suitability and application of substrate preparation materials must be in strict accordance with the manufacturer’s instructions. All warranties and guarantees pertaining to the suitability and performance of any preparation or ancillary product rests with that material manufacturer or the flooring contractor and NOT with the flooring manufacturer. The condition of the substrate and bond issues resulting from the use of non-recommended, improper, or incorrectly prepared adhesive, sealers, embossing, levelers, patches, concrete, gypsum-based products and other such items, are the sole responsibility of the flooring contractor, general contractor, and/or manufacturer of the particular product.
- When having problems during installation please stop the installation and contact Customer Service for a solution or input.

<b>Loose Lay</b>	<b>Raised Access Floor Systems</b>	<b>Permanant Full Bond</b>
Up to 215 sq. ft. (20m <sup>2</sup> ) with no rolling loads, temperature swings, direct sunlight or in-floor heating.	Contact Customer Service for details.	For areas larger than 215 sq. ft. (20m <sup>2</sup> ), rolling loads, temperature swings, direct sunlight or in-floor heating.

## IMPORTANT CONSIDERATIONS

- Intense direct sunlight may cause this product to lift, shift, discolor, or fade. Protect it from direct sunlight using window treatments or UV tinting on windows.
- Use a matting system to remove all dirt from the bottom of shoes to prevent excessive dirt and moisture being drawn onto the floor from entrances. Carpet or mats with rubber backings should not be placed on vinyl tile because of chemical reactions (migration) that could cause yellowing.

## **ROUTINE CARE & MAINTENANCE**

- Sweep, dust mop or vacuum daily. Do not use vacuums with any type of beater bar assembly.
- Lightly damp mop with a pH neutral cleaner. Remove excess soil by carefully scrubbing with a soft nylon brush or magic eraser sponge and a pH neutral cleaner.
- Remove scuffs using a pH neutral cleaner and a soft nylon brush or magic eraser sponge.
- Heavily soiled floors may require an occasional deep cleaning using a pH neutral cleaner and a low-speed buffer not exceeding 175 RPM. Fit the buffer with a red or white scrubbing pad and work the solution over the floor. Remove the dirty residue by damp mopping with clear water.
- Remove standing water, pet urine and other liquids promptly.

## **PREVENTIVE CARE**

- Use non-staining walk-off mats at all outside entrances.
- Use flat glides at least 2" in diameter under furniture legs to prevent indentations and scratches.
- Use broad surface non-staining casters at least 2" in diameter on rolling furniture.
- Do not use vinegar, polishes, waxes, oil soaps, abrasive cleaners, harsh detergents, "mop and shine" products or solvents.
- Do not expose to direct sunlight for prolonged periods.
- Do not use steam cleaners.
- Do not flood floor or subject to standing liquids, including pet urine.