Get To Know Metroflor® LVT Loose Lay

- Metroflor LVT Loose Lay 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 Metroflor LVT Loose Lay unprecedented in strength, performance and overall quality.

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

- Direct sunlight may cause Metroflor LVT Loose Lay to fade, buckle or the joints to separate. Protect the flooring from direct sunlight using window treatments or UV tinting on windows. Metroflor LVT Loose Lay is not recommended for areas without permanent HVAC.
It is important to avoid problems from the outset. If you are unsure of any information provided in this document, or are having a problem with your installation, please stop your work and contact Metroflor Customer Service at (888) 235-6672, Monday through Friday, 8:00am to 5:00pm EST.

EVALUATE THE JOB SITE

Exterior
Damage caused by water and high humidity should be addressed prior to installing Metroflor LVT Loose Lay.

• 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 clean, smooth, dry, structurally sound, and flat within $\frac{3}{16}$ of an inch within a 10-foot radius with no 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 moisture and pH before installing Metroflor LVT Loose Lay. 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. 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. Metroflor Corp. highly recommends that substrate moisture and pH testing be conducted by an ICRI (International Concrete Repair Institute) tier 2 certified technician.

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 for information about safely preventing and removing mold, mildew and other biological pollutants.

Metroflor LVT Loose Lay should only be installed by flooring professionals that have demonstrated successful installation of jobs in similar size and scope. For the most secure warranty protection, Metroflor LVT Loose Lay flooring should be installed in strict accordance with the information and procedures outlined in this and corresponding documents. It is highly recommended that you review this document in its entirety before starting a Metroflor LVT Loose Lay flooring installation.

IDENTIFY YOUR SUBSTRATE

Approved Substrates
Metroflor LVT Loose Lay is suitable for use over a wide variety of substrates:

Concrete
Metroflor LVT Loose Lay is waterproof, but moisture issues should be corrected at the jobsite before installation begins to prevent serious damage to the substrate 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 clean, smooth, dry, structurally sound, and flat within $\frac{3}{16}$ of an inch within a 10-foot radius with no 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. Metroflor Corp. highly recommends 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 ½-inch below the surface of the concrete slab, and should be operating at least 2 weeks before installing Metroflor LVT Loose Lay. 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 should never exceed 81°F (27°C). 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 clean, smooth, dry, structurally sound, and flat within 3/16 of an inch within a 10-foot radius with no abrupt height differences. The substrate should not slope more than 1 inch per 6 feet in any direction. Metroflor Corp. recommends performing moisture tests prior to installation to prevent serious damage to the substrate 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 installing Metroflor LVT Loose Lay.

Tile, Terrazzo, Asbestos Tile, Resilient Tile, and Non-Cushion Sheet Vinyl

Existing floors must be firmly attached to the structural floor. They must be clean, smooth, dry, structurally sound, and flat within 3/16 of an inch within a 10-foot radius with no abrupt height differences. The substrate should not slope more than 1 inch per 6 feet in any direction. Fill all grout joints on ceramic tiles, terrazzo, quarry tiles and similar floors with a 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 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” (.75mm).

NON-APPROVED SUBSTRATES

• 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

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

PREPARE THE JOB SITE

Careful preparation is the key to outstanding results. All Trades Must Finish Before Installing Metroflor LVT Loose Lay.

- Install Permanent Exterior Doors and Windows
- Turn on HVAC at Least One Week 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 for further information about suggested tests.
- Level Uneven Surfaces
  Fill large cracks and voids with a proper floor patching compound. Substrates must be clean, smooth, dry, structurally sound, and flat within ⅛ of an inch within a 10-foot radius with no 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 Metroflor LVT Loose Lay will fit neatly beneath them. 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 Metroflor LVT Loose Lay around them.
- Clean Up the Job Site
  Remove all debris, sweep and vacuum the substrate. Smooth, non-porous floors should be damp-mopped after vacuuming and allowed to dry thoroughly before installing Metroflor LVT Loose Lay. 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 Metroflor LVT Loose Lay. 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.

Run Number/Manufacture Date 29.10.2013
DAY.MONTH.YEAR

KEY INSTALLATION CONSIDERATIONS

<table>
<thead>
<tr>
<th>Substrate Flatness Tolerances</th>
<th>⅛&quot; in 10' with no abrupt height differences. Slope no more than 1&quot; in 6'</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is Underlayment (Pad) Required</td>
<td>N/A</td>
</tr>
<tr>
<td>Acclimation Requirements</td>
<td>Minimum of 48 hours</td>
</tr>
<tr>
<td>Transition Requirements (T-Mold) for Large Spaces</td>
<td>Not Required</td>
</tr>
<tr>
<td>Transition Requirements (T-Mold) Doorways/ Thresholds</td>
<td>Not Required</td>
</tr>
<tr>
<td>Installation Over Existing Ceramic Tile Floor</td>
<td>Filling grout joints required. Follow subfloor flatness tolerances.</td>
</tr>
<tr>
<td>Subfloor RH/MVER Recommendations</td>
<td>85% RH, 8lbs. MVER</td>
</tr>
<tr>
<td>Radiant Heat</td>
<td>Approved – Substrate surface temperature not to exceed 81°F (27°C)</td>
</tr>
<tr>
<td>Required Interior Environmental Conditions</td>
<td>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).</td>
</tr>
<tr>
<td>Definition of “Waterproof”</td>
<td>Structural integrity of flooring will not degrade due to contact with moisture/water</td>
</tr>
</tbody>
</table>
IMPORTANT PRIOR TO INSTALLATION

• Prior to beginning the installation a balanced layout should be established to ensure that all perimeter cuts are a minimum of 12” in length and 4” in width.

• Using a divider or scribing tool mark the first row of the material to match the contour of the starting wall and cut. Then, you can place the first row against the wall.

• Measure and mark the last plank or tile of a row to the correct length either by scribing with a divider or using another plank (overlapping method).

• To install the second row, place a piece of at least 12” in length and continue with full planks or tiles. Make sure that the end joints are offset by at least 12” in the individual rows in order to achieve the best installation result.

• To install the final row, measure and mark the plank or tile to the correct width either by scribing with a divider or scribing with another plank using the overlap method.

INSTALLATION METHODS

• Metroflor LVT Loose Lay is designed to be installed without adhesive in areas up to a maximum of 215 sq. ft. (20m²), 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. (20m²) Contact Metroflor Customer Service.

• In all areas, bigger than 215 sq. ft. (20m²), and areas subject to substantial temperature fluctuations or very high traffic, Metroflor LVT Loose Lay must be installed using the permanent full bond installation method.

• For applications using the permanent full bond installation method contact Metroflor Customer Service for proper adhesive and application requirements.

• When Metroflor LVT Loose Lay 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 Metroflor LVT Loose Lay 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 Metroflor. 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.

• Please visit metroflorusa.com for the most current installation information. When having problems during installation please stop the installation and contact Metroflor Customer Service for a solution or input.

• Metroflor Corporation will not accept liability for bond failures with the use of other non-Prevail adhesives.

<table>
<thead>
<tr>
<th>Loose Lay</th>
<th>Raised Access Floor Systems</th>
<th>Permanant Full Bond</th>
</tr>
</thead>
<tbody>
<tr>
<td>Up to 215 sq. ft. (20m²) with no rolling loads, temperature swings, direct sunlight or in-floor heating.</td>
<td>Contact Metroflor Customer Service for details.</td>
<td>For areas larger than 215 sq. ft. (20m²), rolling loads, temperature swings, direct sunlight or in-floor heating.</td>
</tr>
</tbody>
</table>

IMPORTANT CONSIDERATIONS

• Intense direct sunlight may cause Metroflor LVT Loose Lay to lift, shift, discolor, or fade. Protect Metroflor LVT Loose Lay 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 Prevail Neutral Cleaner. Remove excess soil by carefully scrubbing with a soft nylon brush or magic eraser sponge and Prevail Neutral Cleaner.
• Remove scuffs using Prevail Neutral Cleaner and a soft nylon brush or magic eraser sponge.
• Heavily soiled floors may require an occasional deep cleaning using Prevail 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. Follow with Prevail 1-Step Neutral Cleaner or Prevail Ready to Use Neutral Cleaner.

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.

Notes: Stain Removal – To remove stubborn spots and stains from Aspecta floors, always begin with mild cleaners, such as Prevail 1-Step Neutral Cleaner. If such cleaners fail to remove the spots and stains, and “if permitted,” use mineral spirits. Do not use harsh solvents, such as lacquer thinner or straight acetone, as these can permanently soften and damage the vinyl surface.

For stubborn spots and stains (such as paints, permanent markers, and dyes), and “if permitted,” try applying fingernail polish remover containing acetone (do not use straight acetone) to a soft cloth and rubbing across the affected areas. Subsequent to this cleaning procedure for stubborn spots and stains, please clean the affected area with clear water to remove any residue. Any damage resulting from the use of pure solvents IS NOT covered by the Aspecta Warranty. Always test stronger cleaning agents on sample pieces or in unnoticeable areas, first.

Never use a brush or pad more aggressive than a 3M red equivalent. Blue, Green, Brown and Black pads will damage the surface of the floor.

WARRANTY REGISTRATION

To register and activate your product warranty, please visit metroflorusa.com. The registration information you provide will be used only to register your purchase and for no other purpose.

For further information, please call Metroflor Customer Service at (888) 235-6672, or visit our website at metroflorusa.com.