Mats Inc. Installation Instructions for Ovation

These instructions supersede any verbal or written instructions from Mats Inc. representatives, and must be followed in order for the warranty to be in effect.

General and Delivery

- The Product is intended for installations in interior locations only.
- The Product must be installed by an installer with a minimum of five years of proven experience in performing work similar to that required for the Product. Acceptable certifications include The International Standards and Training Alliance (INSTALL), The International Certified Floorcovering Installers Association (CFI), and Flooring American University. Without specific prior experience with this specialized product, a Mats Inc. expert may be needed on site to consult on the installation. Please inquire for more information.
- Order materials in compliance with product supplier's ordering and lead time requirements, in order to take delivery at least 48 hours in advance of installation (to allow materials to acclimate to job site conditions).
- Accept delivery of materials only if they are in unopened, undamaged packaging that bears the name and brand of the manufacturer or supplier, project identification, and shipping and handling instructions.

Storage

- Tiles should be removed from pallets and any loading/shipping constraint pressures removed in order to acclimatize to room conditions.
- Avoid exposure to direct sunlight as UV rays can alter the appearance of colored rubber.
- Store material –floor covering, adhesive, and maintenance products if ordered in original packaging in areas that are enclosed and weather tight with the permanent HVAC system set at a temperature between 60 °F and 75 °F for a minimum of 48 hours prior to commencement of installation. The relative humidity in the storage area cannot exceed 65%.
- Rubber tiles are susceptible to dimensional changes due to temperature and climate conditions. It is vital that the site conditions remain constant within the acceptable working range.
- If material is flattened or distorted during storage or transporting, do not attempt to install it.

Materials and Accessories Required

Consult the appropriate Material Safety Data Sheets (MSDS) for proper handling of accessories.

- Flooring: Ovation Square or Interlocking Tile
- **Tools:** sharp utility knife and extra blades, double-sided tape, carpenter's square and straight edge for custom cuts, measuring tape, chalk line for layout, markers to indicate cut

measurements, rubber gloves, safety glasses, 1/16" square notched trowel* for base adhesive, 75 lbs. (min.) sections roller, 2" masking tape to secure seams, concrete blocks to weigh down the seams, Kraft paper to protect flooring from concrete blocks

- Adhesive: Mapei G21 2 part Epoxy
 - 2 gallon pail coverage: 200 250 sq.ft.*

Substrate Preparation

All substrates

- The substrate must be sound, clean, permanently dry, perfectly smooth, and free of cracks and contaminants, including paint, old adhesive, curing compounds, oil, grease, wax, asphalt, or other contaminants that could negatively affect the performance of the adhesive.
- Floor laying work shall not begin until the installer has assessed and approved the substrate and subfloor conditions.

Concrete substrates and subfloors

- Concrete floors must cure for a minimum of 6 weeks before installation.
- Ensure that the general contractor has tested the concrete subfloor using the Calcium Chloride test (ASTM F1869) and Relative Humidity test (ASTM F2170). No other test methods are acceptable. The General Contractor and installer shall both keep records of all tests on file.
- Test procedures shall be followed exactly in order for test results to be valid. (Building shall be at in service temperature and humidity, concrete shall be properly cleaned, etc.)
 See ASTM F2170 for details. It is recommended that a qualified, independent third party conduct the tests.
- Test result requirements :
 - o ASTM F1869: maximum MVER of 5 lbs/1000 sq ft/24 hrs
 - o ASTM F2170: relative internal humidity of 75% or less
 - o pH test: pH between 7.0 and 9.0
 - Reading below 7.0 and above 9.0 can adversely affect resilient flooring or adhesive or both.
- If concrete moisture conditions are outside the above limits, do not commence installation. Please inquire about the use of Mats Inc.'s Underfloor Vapor Barrier.

Wood subfloors

- For wood subfloor systems, ensure the subfloor conforms to the guidelines of ASTM F1482 Guide to Wood Underlayment Products Available for Use Under Resilient Flooring. Requirements include
 - Double layer construction of a wood subfloor/underlayment assembly, with a minimum total thickness of 1". The base layer shall be plywood over joist on center. The second layer shall be plywood underlayment.

^{*}The final determination of trowel size and coverage will be determined by the substrate porosity and is the responsibility of the flooring installer.

- A minimum of 18" of cross-ventilated air space beneath all wood subfloors. Use a moisture barrier to insulate and protect the crawl space.
- New wood subfloors should be CDX exterior plywood installed smooth side up.
- All nails, staples or screw fasteners must be caulked and surface sealed with epoxy sealant.
- Plywood should be acclimatized for a 48 hour period prior to installation of flooring tiles.
- All wood subfloors must be clean, dry and free of all dust, dirt and previous floor finishes.
- Patch cracks, holes and rough or uneven areas with an appropriate cement based leveling compound.
- Do not install Ovation over:
 - Existing resilient flooring including sheet or tile products (as telegraphing of the existing flooring through the surface of new resilient sheet vinyl is possible over time) Note: If removal of existing resilient flooring is required, strictly follow the Resilient Floor Covering Institute's paper on "Recommended Work Practices for Removal of Resilient Floor Coverings" available on www.rfci.com. Also, be aware that existing floors and/or adhesives may contain asbestos. Various federal, state, and local government agencies regulate the removal of asbestos-containing material. Review and comply with all applicable regulations.
 - o Surfaces containing any type of residual adhesive
 - Non-compatible substrates, such as asphalt, any bituminous or asphalt-saturated material, or floor coverings
 - o On-grade or below-grade concrete that is subject to excessive moisture
 - o Gypsum-based underlayments
 - o Radiant-heated floors with surface temperatures over 75°F

Site Conditions

- The flooring shall be installed only after all other trades have finished, and a permanent HVAC system is operational. Temporary heat is not acceptable.
- During installation maintain the room temperature between 60°F and 75°F. Relative humidity must not exceed 75%. Excessively high or low interior air relative humidity will influence curing of floor patching materials and adhesive open times. These conditions must be maintained 24 hours per day for the duration of the installation and for a minimum of 72 hours after the installation is complete.
- Maximize fresh air ventilation by using exhaust fans, at point of use, and by opening windows and doors as necessary. Face fans out of the area where flooring is being installed, not into the area.
- Because some materials used during installation may be flammable, make sure no sources of ignition or open flame exist near the use of those materials.

Layout

- The flooring dealer or contractor shall provide a layout drawing for the intended installation that contains the following information
 - Date and scale of drawing
 - Location, swing, and clearance of all doors
 - Existing substrate/subfloor conditions

- Notation identifying who is responsible for:
 - removal of existing floor coverings and/or underlayments
 - preparation of existing substrate
 - removal of debris from new floor covering installation
 - protection of finished floor covering after installation
 - Initial maintenance procedures
- o Name of manufacturer, product style, and pattern to be installed
- Product quantities required
- Location and type of all edge moldings and base required
- The end user shall be provided a copy of the layout drawing for approval prior to installation.

Installation - Interlocking Tiles (loose lay)

Interlocking tiles shall be loose laid. Loose laid tiles shall be installed over hard surface subfloors only. Gaps between tiles may develop as tiles can shift with use. Shifting of tiles can be minimized with the use of double-sided tape strips applied under the tiles around the perimeter of the installation and under several tiles within the installation.

- 1. 24 hours prior to installation, lay out the tiles on the subfloor under normal, occupied lighting conditions in the configuration required for installation. This step will ensure the tiles acclimate to the climate properly. This step will also assist the installer in identifying any shade variations within the tiles and allow the installer to move them to a less visible area. Shade variations are natural for a virgin rubber tile and in no way compromise the quality of the tile.
- 2. It is the installer's responsibility to inspect the dry laid installation and notify the appropriate authority of any imperfections or irregularities prior to final adhesive installation.
- 3. The floor should be squared by locating the midpoint of the room and chalking a start line down the center of the room.
- 4. Chalk another similar start line 90 degrees and square to the first chalk line.
- 5. Begin tile installation from the point where the two chalk lines intersect.
 - Lay flooring in a running bond (staggered) pattern installation with color accent marbling oriented in the same direction. Lay out the tiles to produce the minimum number of seams.
- 6. Adjoin factory edge to factory edge.
- 7. Border widths shall be a minimum of 1/3 the width of a full tile. Install the border pieces aligning the cut edge against the wall or other vertical surfaces.
 - Cut tiles using a sharp utility knife. Make repeated passes when cutting to ensure straight cuts.

Installation - Square Tiles (glue down)

1. 24 hours prior to installation, lay out the tiles on the subfloor under normal, occupied lighting conditions in the configuration required for installation. This step will ensure the tiles acclimate to the climate properly. This step will also assist the installer in identifying any shade variations within the tiles and allow the installer to move them to a less visible area. Shade variations are natural for a virgin rubber tile and in no way compromise the quality of the tile.

- 2. It is the installer's responsibility to inspect the dry laid installation and notify the appropriate authority of any imperfections or irregularities prior to final adhesive installation.
- 3. The floor should be squared by locating the midpoint of the room and chalking a start line down the center of the room.
- 4. Chalk another similar start line 90 degrees and square to the first chalk line.
- 5. Begin spreading the adhesive from the point where the two chalk lines intersect.
- 6. Continue spreading the adhesive in a line in one direction. Spread only enough adhesive to install one starting row of tiles.
- 7. Apply the adhesive uniformly using the recommended trowel and application rate.
- 8. Ensure tiles are flat and not arched when laid into the adhesive.
- 9. Do not spread more adhesive than can be covered by flooring before initial set takes place (check adhesive for set times).
- 10. Ensure joints are tight. All joints should be secured to prevent gaps by applying masking tape across the joints onto adjoining tiles until the adhesive has cured. Apply tape in 16 inch long strips horizontally across all joints. Apply tape in 12 in long strips vertically across all joints.

Never use duct tape. Duct tape adhesive chemically reacts with the flooring surface and leaves a permanent residue.

- 11. Continue to spread the adhesive and install the tiles in each direction.
- 12. Lay tiles into fresh adhesive in small sections and roll with a 75 lbs. (min) sectional roller within 15 minutes of laying to ensure proper adhesive transfer.
- 13. Suitable weight must be applied over every seam. Lack of weight on the seams can result in peaking.
 - Gray concrete utility bricks 2x4x8 are the only suitable weights. To protect the floor, Kraft paper must be placed under the concrete blocks wherever they come into contact with the flooring. **The concrete blocks must completely cover the seams for 24 hours.** Failing to follow these precautions will void the warranty.
 - Gray concrete utility blocks (2" x 4" x 8") are the only suitable weight. Never use wood, boxes, sand bags, cinder blocks or any other substitute materials.
- 14. Flooring installed around any irregular or sloped surfaces (i.e. around drains) should be weighed with bricks to ensure proper bonding of flooring to adhesive (See step 11 in Installation Square Tiles section). Perimeter and edges must be installed in a brick pattern.
- 15. Promptly clean adhesive from top surface of tiles using a soft cloth soaked in denatured alcohol.

To ensure the long life and beautiful appearance of your Ovation flooring:

- Do not use or drag furniture with sharp edges (for example, desks, shelving units, and cubicle assemblies). Furniture should be fitted with stainless steel or Teflon pads.
- Do not use soft chair caster wheels, including polyurethane wheels, on office chairs. Wheels must be hard polyamide or similar (wheel type H per EN 12529) so that they will roll easily, preventing unnecessary wear and tear on the flooring.

- Do not drag furniture across the floor. During a move-in day, floor protection should be used to prevent damage from movers, dropped furniture, or soiling from dirty moving equipment.
- Do not use certain materials (for example: rubber feet, rubber mat, shopping carts) if they
 will be in contact with the floor for a long time, as they can cause discoloration that cannot
 be removed.

Clean Up and Final Finish

- Dust mop or commercial vacuum to clear the area of debris and grit.
- Upon completion of the job, the end user shall sign a Job Completion Ticket.
- Keep all traffic off flooring for a minimum of 48 hours after installation.
- See maintenance instructions to learn how to maintain the product after installation.