

## Mats Inc. Installation Instructions for Decathlon

*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

- Upon receiving floor covering, remove from pallet.
- Store floor covering rolls horizontally with the weight supported across the entire width and rolled tightly on a suitable cardboard core. The material may be stacked horizontally in a pyramid up to four rolls high.
- Avoid exposure to direct sunlight as UV rays can alter the appearance of colored rubber.
- Store material – underlayment panels, patching or leveling compounds, floor covering, adhesive, maintenance products, and game line paint if ordered – in the original packaging (as delivered) in areas that are enclosed and weather tight with the permanent HVAC system set at a temperature between 65°F and 80°F for a minimum of 48 hours prior to commencement of installation and for 48 hours after completion of installation. The relative humidity in the storage area cannot exceed 50°F.
- **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:** Decathlon
- **Adhesive:** We recommend Mats Inc. Urethane-Bond adhesive. Trowel and coverage guidelines are below:

	<b>Urethane-Bond</b>
Trowel type*	1/16" x 1/16" x 1/16" V-notch
Coverage per gallon*	60 - 75 sq.ft.

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

- **Game line paint (optional):** Always use aliphatic polyurethane paint for game line painting. We recommend Endura game line paint (Contact U.S. distributor Can-Am Coatings at 619.937.0430 or visit [www.endurapaint.com](http://www.endurapaint.com)). Follow manufacturer's instructions for use, which are also printed at the end of these instructions starting on page 9.
- **Other:** sharp utility knife and extra blades, carpenter's square and straight edge, measuring tape, chalk line for layout, 2" masking tape, markers to indicate cut measurements, safety glasses, 1/16" V-notch trowel, 100 lbs. roller

## Substrate Preparation and Pre-installation Testing

### **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. Any irregularities in the substrate will telegraph (show through) to the finished floor.
- Floor laying work shall not begin until the installer has assessed and approved the substrate and subfloor conditions.

### **Concrete substrates and subfloors**

- Concrete shall have a minimum compressive strength of 3,000 psi.

- New concrete slabs should cure for a minimum of 28 days, be fully cured and permanently dried before installation.
- Ensure that the general contractor has followed ASTM F710 Standard Practice for Preparing Concrete floors to receive Resilient Flooring. ASTM F710 includes requirements for moisture and pH testing, smoothness, flatness, concrete strength, and the presence of a vapor retarder under the slab. ASTM F710 requires that all concrete slabs be tested, regardless of age or grade level, 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 related to ASTM F710 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.
- Specific test result requirements for Decathlon, using Mats Inc. Urethane-Bond, are:
  - ASTM F1869: maximum MVER of 3 lbs/1000 sq ft/24 hrs
  - ASTM F2170: relative internal humidity of 75% or less
  - pH test: pH 9.0 or less  
Readings above 9.0 can adversely affect resilient flooring or adhesives, or both.Urethane-Bond can be used in applications with a maximum MVER of 5 lbs/1000 sq ft/24 hrs depending on the porosity of the substrate and the porosity of the material.
- **If concrete moisture conditions are outside the above limits, do not commence installation.** Contact your Mats Inc. salesperson or Product Specialist at 1.800.MATS.INC to discuss the best options for your installation.

### ***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.
  - A minimum of 18" of cross-ventilated air space beneath all wood subfloors. Use a moisture barrier to insulate and protect the crawl space.
- To cover unsuitable substrates in a wood subfloor system, use underlayment grade plywood with a minimum thickness of 1/4" with a fully

sanded face (i.e. arctic birch panels, APA Group 1 exterior-grade A/C plywood). Do not install Decathlon over existing resilient flooring, lauan panels, plywood with knots, OSB, treated wood (i.e. CCA, fire-rated plywood, or other coated wood-), particle board, chipboard, flakeboard, fiberboard Masonite™, pressboard, or other hardboard underlayment, hardwood flooring, or other uneven or unstable substrates.

- For a copy of the ASTM F1482 guidelines, contact Mats Inc.

### **Other subfloors**

- Do not install Decathlon 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](http://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.*
  - Surfaces containing any type of residual adhesive
  - Non-compatible substrates, such as asphalt, any bituminous or asphalt-saturated material, or floor coverings made of (or containing) rubber
  - On-grade or below-grade concrete that is subject to excessive moisture
  - Gypsum-based underlayments
  - Radiant-heated floors with surface temperatures over 85°F (as constant exposure to these temperatures may discolor the vinyl)

### **Site Conditions**

- The flooring shall be installed only after other trades have finished, and a permanent HVAC system is operational. Temporary heat is not acceptable.
- During installation
  - Maintain the room temperature between 65°F and 80°F. Relative humidity of 35% - 65% is preferable. Excessively high or low interior air relative humidity will influence curing of floor patching materials and adhesive open times.
  - 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 architect or end user should be shown the proposed installation layout including any intended seam locations, with the goal of keeping seam visibility to a minimum. Position seams so that:
  - Main traffic runs parallel to – rather than across – the seam
  - Light does not strike directly across the seam.
  - The seams are away from areas subject to pivoting or rolling traffic.
  - In doorway openings connecting adjoining rooms, parallel seams are required.
- 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
    - moisture and pH testing
    - removal of debris from new floor covering installation
    - protection of finished floor covering after installation
    - Initial maintenance procedures
  - Name of manufacturer, product style, and pattern to be installed
  - Product quantities required
  - Seam layout including pattern match requirements (if 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

1. 24 hours prior to installation, unroll the material on the subfloor under normal, occupied lighting conditions in the configuration required for installation. This step will ensure the material acclimates to the climate properly. This step will also assist the installer in identifying any shade variations and allow the installer to move them to a less visible area. Shade variations are natural for rubber flooring and in no way compromise the quality of the flooring.
2. All Decathlon rolls must be unrolled and installed in the same direction. Laying the rolls in the opposite direction will cause color variations between rolls.

3. Decathlon is stretched slightly during the manufacturing process. The installer must allow all cuts to relax for a minimum of 2 hours before installation, 24 hours is preferred. Shaking the material once it is unrolled can help it relax.
4. 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.
5. Begin the installation on the side opposite the room entrance. Assume that the walls you are butting against are not straight or square. Using a chalk line, make a starting point the edge of the flooring to follow.
6. Place the edge of the first roll along the chalk line.
7. Position the second roll with no more than a 1/16" overlap over the first roll at the seam. Work the material back to eliminate the overlap. This procedure will leave tight seams and eliminate any gaps.
8. Repeat step 7 for each consecutive roll necessary to complete the area.
9. After the material is rolled out, cut and allowed to relax, begin the application of the adhesive.
10. Fold over one half of the width of the first roll of material starting with the edge running along the wall.
11. Apply the adhesive to the substrate with a 1/16" V-notch trowel. Do not spread more adhesive than can be covered with flooring within 30 minutes. The open time of the adhesive is 30 - 40 minutes at 75 °F and 50% relative humidity.
  - Temperatures above 75 °F and/or relative humidity above 50% will cause the adhesive to set up more quickly.
  - Temperatures below 75 °F and/or relative humidity below 50% will cause the adhesive to set up more slowly.
12. Never leave adhesive ridges or puddles. They will telegraph through the material.
13. Lay the flooring into the wet adhesive. Do not allow the material to "flop" into place; this may cause air entrapment and bubbles beneath the flooring.
14. Immediately roll the floor with a 100 lbs. roller to ensure proper adhesive transfer. Overlap each pass of the roller by 50% of the previous pass to ensure the floor is properly rolled. Roll the width first and then the length.
15. Fold over the second half of the first roll and half of the second roll. **Spread the adhesive at a right angle to the seam to prevent the adhesive from leaking through the seam.**

16. Lay the flooring into the wet adhesive. Do not allow the material to "flop" into place; this may cause air entrapment and bubbles beneath the flooring.
17. All seams should be secured to prevent gaps by applying masking tape across the seam onto the next roll of material. **Do not use duct tape. Duct tape adhesive chemically reacts with the flooring surface and leaves a permanent residue.**
18. Immediately roll the floor with a 100 lbs. roller to ensure proper adhesive transfer. Overlap each pass of the roller by 50% of the previous pass to ensure the floor is properly rolled. Roll the width first and then the length.
19. Follow steps 10 - 18 for the remainder of the area. Work at a pace so that the material is always installed into wet adhesive.
20. Once finished, smooth the entire floor again with the roller.

### Clean Up and Final Finish

- Maintain the room temperature between 65 °F and 80 °F for 48 hours after installation.
- Check appearance of entire installation. Use a white cloth moistened with water to remove any adhesive on the surface of flooring or walls. **Mineral spirits and solvents are not recommended. Using mineral spirits or solvents to remove adhesive will alter the surface appearance of the flooring. Any damage to the flooring as a result of adhesive removal is solely the responsibility of the installer.**
- Sweep or vacuum the floor to remove all dirt and grit.
- Keep all traffic off flooring for 24 hours to prevent indentation while the adhesive sets.
- Wait 72 hours before doing initial cleaning or allowing rolling traffic or furniture on the floor (Initial cleaning shall follow the latest version of the Maintenance Instructions for Decathlon available from [www.matsinc.com](http://www.matsinc.com)).