

Stair Treads

Installation Guide



Interior / Exterior Commercial Tread/Riser

Please refer to the TOLI-NA website www.toli-na.com for the most current guidance about product application charts, material handling, subfloor preparation and testing, product installation and maintenance recommendations. Failure to follow these instructions may result in installation related problems.

- Do not install unless you have the correct product, color and quantity of materials. Check for visible damage before installation. Immediately notify TOLI-NA of any discrepancies BEFORE installation. Installation or cutting of materials implies acceptance. No credit for labor will be provided for installing the incorrect materials or materials with visible issues.
- Handle materials with care to prevent damage. DO NOT DOUBLE STACK PALLETS.
- Store all flooring products and accessories in a dry interior area maintained between 50°F-85°F (10°C-29°C). Avoid temperature extremes.
- Store resilient sheet flooring rolls standing up, with capped end down. This prevents distortion and compression.
- Store treads in factory cartons on a firm flat substrate. Do not stack more than 8 cartons high.
- Acclimate flooring, adhesive and substrate in the area to be installed to a stable condition between 65°F-85°F (18°C-29°C) and 20%-65% RH for a minimum of 48 hours before, during and after installation. For interior installations, maintain a minimum temperature of 50°F (10°C) for the life of the floor.
- Refer to Exterior & Poolside Substrate Preparation Guide for additional product handling and subfloor preparation guidance.

Adhesive Selection

- Make sure that you have the recommended adhesive(s) and trowel size(s) for installation conditions. Use only recommended adhesives and accessories as others may not provide satisfactory performance. For most interior, dry applicaitons, TOLI recommends using TOLI 5001 adhesive. For interior wet or exterior applications, TOLI recommends using TOLI 951 adhesive. However, the ultimate decision is the resopnsibility of the installer based on the specific environment and use. See our Adhesive Reference Chart or call TOLI Technical Support for assistance at (910) 999-TOLI (8654).

Fitting Takiron One-Piece Stair Treads & Risers

- For one-piece tread risers, the use of a cove stick is recommended of 1" to 1 1/4" radius.
- Tread/riser can be installed without a cove stick, but radius cannot exceed 3/8".
- Begin by fitting the bottom riser
- Measure the width of the riser and cut riser portion of tread (or landing material) to fit width.
- Do NOT cut height at this time.
- Apply TOLI OPTI Tape System (interior only)
 - Apply 9.5" tape to the back of the tread and riser. Two strips of tape are required to cover full tread and riser. Apply tape to within 1/8" of the tread edges without overlap. Note: Do not remove film from tape at this time.
- -or-
- Apply TOLI 5001 Acrylic Adhesive using a 1/16" x 1/16" x 1/16" V-notched trowel (interior only)
- -or-
- Apply TOLI 951 using a 1/32" x 1/16" x 1/32" U-notched trowel (interior, exterior, or wet applications)
- Adhere bottom riser material to bottom riser.
- Trim top of riser material such that material is flush with first step, ensuring no protrusions. See Fig. 1.

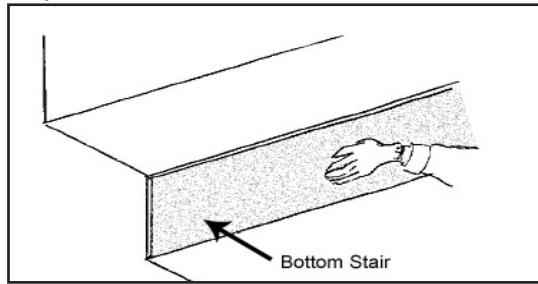


Fig. 1

- Now begin to prepare the treads for installation:
- Apply adhesive or tape as noted above.
- Caulk the inside nose of all Takiron Stair Treads. Use a twin-caulking gun to apply the caulk. Attach the mixing nozzle to the front of the caulking gun. Do not remove nosing tape at this time (tape is removed later in the process).
- Apply a 6-7mm thick bead (the thickness of a pencil) of TOLI 800 Nose Caulking to the inside nose fold. See Fig. 2.

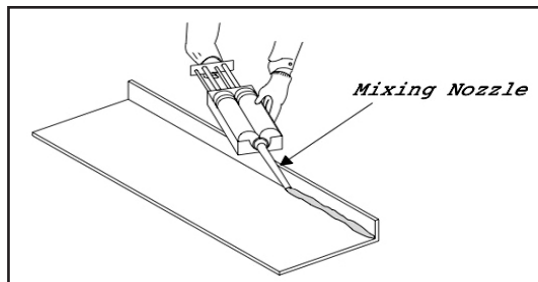


Fig. 2

Note: Discard the first several inches of nose caulking from the mixing nozzle. It will not be completely mixed.

Note: Insufficient TOLI 800 Nose Caulking will result in stair nose cracking. See Fig. 3.

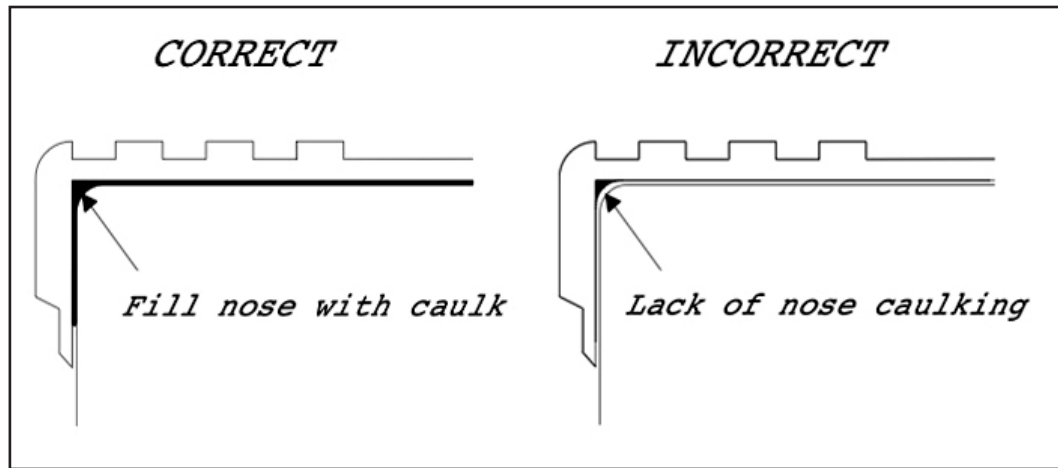


Fig. 3

Placing Takiron Stair Treads

- Place-and-press the precut riser only material to adhere to the riser of the bottom stair. Make sure the top edge of the sheet does not protrude above the edge. See Fig. 1.
- Place the nose fold of the Takiron Stair Treads onto the right angle of the step. Carefully press into place so that there is no gap between the substrate and the nose fold. See Fig. 4.

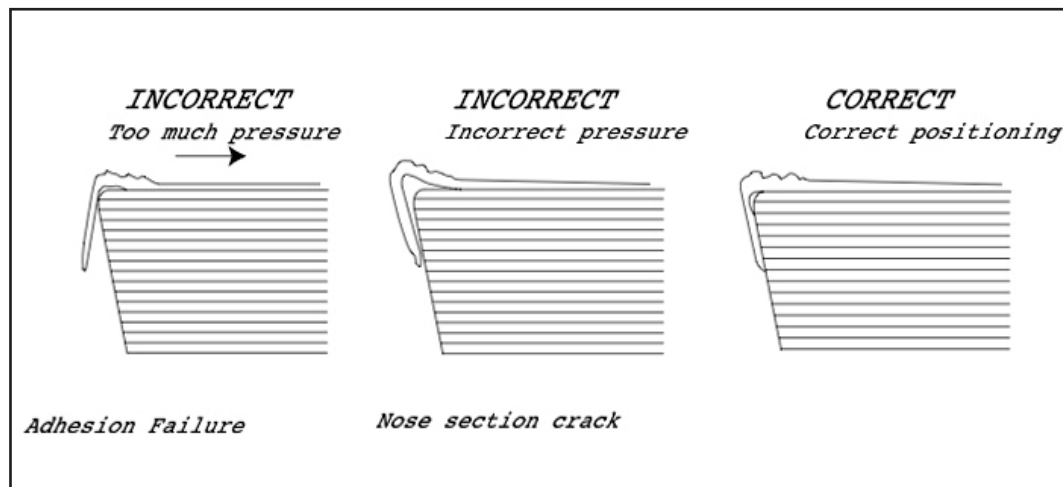


Fig. 4

- To ensure complete adhesive contact, immediately roll the material using a hand roller.
- After rolling, trim any part of the riser protruding beyond the top edge of the stair. See Fig. 5

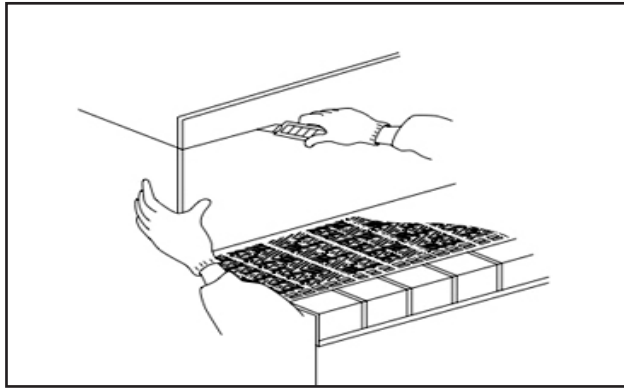


Fig. 5

Note: Any protruding riser left untrimmed will not allow the stair nosing to lay flat.

- Any discrepancy between the side edges of the Takiron Riser Sheet and the tread should be trimmed to form a straight-line side
- Immediately hand roll the stair tread, riser, nosing and the corner between riser and tread. Roll the nose area carefully. See Fig's. 6 & 7.

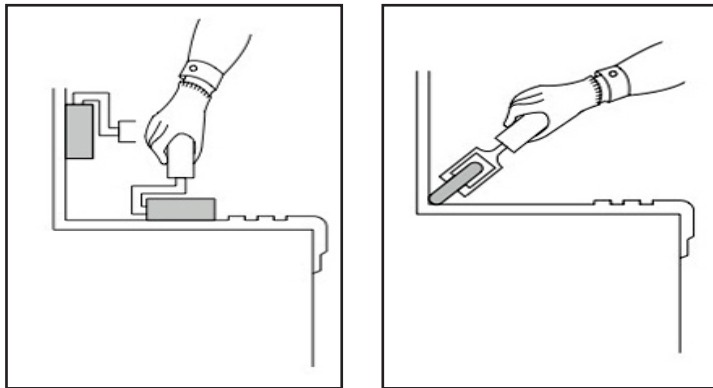


Fig. 6

- Cove stick is optional at the tread-riser junction. Tread/riser can be installed without a cove stick, but radius cannot exceed 3/8".

Use caution when rolling the corner between riser and stair tread.

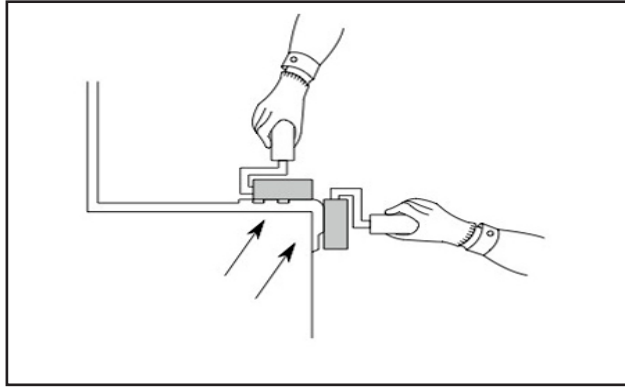


Fig. 7

Carefully roll the nose area to avoid displacing the nose caulking.

Carefully remove film from self adhesive tape, and adhere nose to subsequent riser, and roll again.

Seam Sealing Method to Nattice® or Pathways Landing Sheet (Heat-Welding)

- Groove or rout the seam line between the Takiron Stair Treads and Nattice or Pathways Landing Sheet.
- Grooving and seaming must be done in a flat area between the treads embossed design.
- Groove only to a width to accept a 3.5mm welding thread. Depth should be two-thirds (2/3) of the product thickness. Only use a U-shaped 3.0mm groover.
- When installed with adhesive, allow it to completely set (minimum of 12 hours) before beginning the welding procedure. When using TOLI OPTI Tape, welding can be done the same day. Weld the seam using a hot-air heat-welding gun designed for heat welding resilient flooring. After the seam has cooled to room temperature, the seam weld thread should be trimmed using a trim knife or similar tool, being careful not to damage the textured surface of the Takiron Stair Treads. See Fig. 8 & 9.

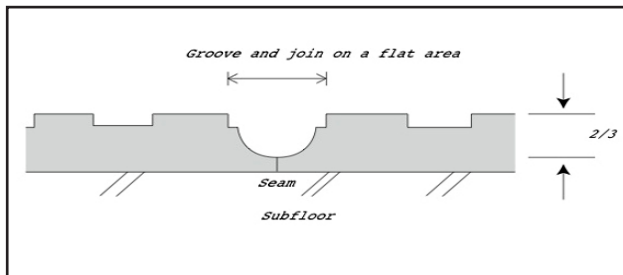


Fig. 8



Fig. 9

Seam Sealing Method (Heat-Welding)

- Groove or rout the seam line between the Takiron Stair Treads and Nattice® or Pathways Landing Sheet, and/or between two Takiron Stair Tread portions to be seamed.
- Grooving and seaming must be done in a flat area between the embossed designs.
- Groove only wide enough to accept a maximum 3.5mm welding thread. Groove depth should be two-thirds ($\frac{2}{3}$) of the product thickness. See Fig. 10.

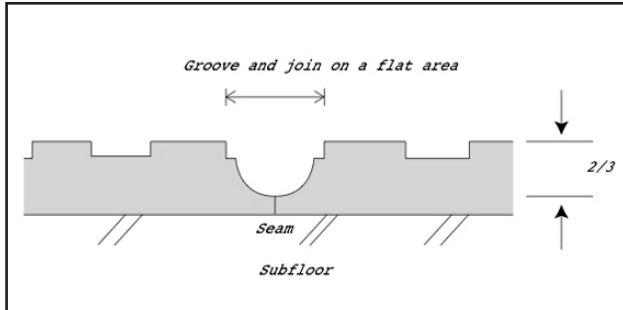


Fig. 10

- Allow the adhesive to completely set (minimum 12 hours) before beginning the heat welding procedure. Weld the seam using a hot-air heat-welding gun designed for heat welding resilient flooring. After the seam has cooled to the room temperature, trim the seam weld using a trim knife or similar tool, being careful not to damage the surface of the Takiron Stair Treads. See Fig. 8 & 9.
- The 3mm wide flat area in the embossing may also be sealed using Henkel Teroson MS939NA or equivalent edge sealer. Please two parallel lines of masking tape on each side of seam area. Smooth the edge sealer with a spatula or similar tool. See Fig. 11, 12 & 13.

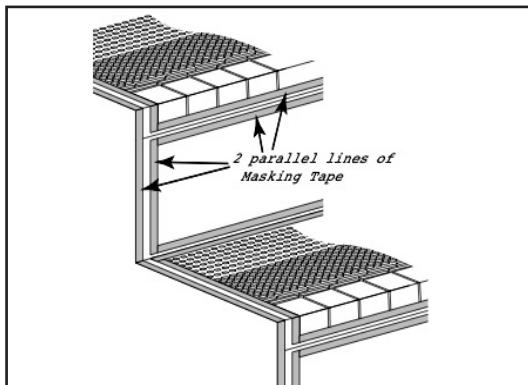


Fig. 11

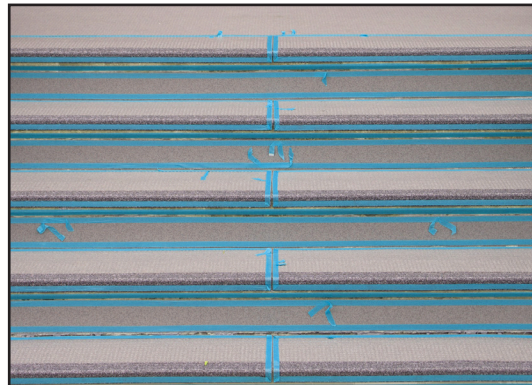


Fig. 12

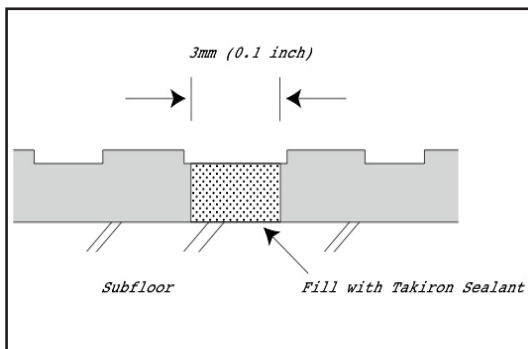


Fig. 13

- Immediately remove the masking tape after applying the Henkel Teroson MS 939NA or equivalent edge sealer. Wrap the used tape around the empty edge sealer tube.
- Dispose of the tape in accordance with federal, state, and local ordinances. Allow the edge sealer to completely set before allowing traffic on the flooring material, as the outdoor curing time varies with temperature and humidity.

Note: Keep all foot traffic off the Takiron Stair Treads for a minimum of 72 hours to allow the Henkel Teroson MS 939NA or equivalent edge sealer to cure.

Tape Installation

Indoor installations of Takiron Stair Treads may be installed using double-faced tape. Use only Opti-Tape (9.5-inch rolls) for Takiron Stair Treads.

Tape Installation (One-piece tread & riser type)

- Measure the width and height of the bottom step's riser. Cut the riser portion of Takiron One-piece tread to the measured size for the riser of the bottom step. Trace the cut tread and riser outline on the concrete with a pencil. Measure width and depth and height of the riser. Cut flooring material to the measured size.
- Apply TOLI Opti-Tape 9.5 inch Double Face Tape to the back of the Takiron Stair Treads. Completely cover the tread backing with tape. When installing one piece tread riser combination product, two strips of tape will be required. Leave the protective film on the top side. See Fig. 14.
- Remove the protective film paper one-by-one beginning at the Stair Tread nose. Leave the final protective film in place. Remove it during final placement of the Stair Tread. See Fig. 15.



Fig. 14

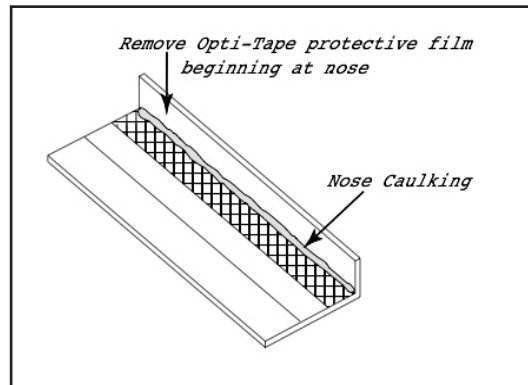


Fig. 15

Note: Do not remove all the protective films at one time. If all the protective film papers are removed, adjusting the final position of the Takiron Stair Tread will be very difficult.

- Remove the protective film from the back of the Takiron Stair Tread nose. See Fig. 15.
- Apply TOLI 800 Nose Caulking to fill nose section.
 - Follow the procedures as outlined on page 2. See Fig. 2.
- Place-and-press the sheet cut out in accordance with page 3 to adhere to the riser of the bottom stair. Make sure the top edge of the riser does not protrude above the edge.
- Place the fold of the Takiron Stair Treads into the right angle ridge of the step, and carefully press into place so that there is no gap between the substrate and the back of the fold of Takiron Stair Treads. (Cove stick optional).
- Remove the strips of protective film starting at the stair nose one-by-one. Leave on the last film for final tread placement.
- Roll the flooring material with a hand roller to ensure complete adhesive transfer.
- Once in place and rolled, trim any protruding part. See Fig. 5.

Note: The Stair Tread will not lay flat if any protruding parts are left untrimmed.

- Use the flooring material remaining after the cutting process described on page 3 for the staircase landing. Cut in the flat area of Takiron Stair Treads between the embossing and match the patterns of Takiron Landing Sheet.
- Trim the side edges of the Stair Treads in a straight line to remove any discrepancies.
- Immediately hand roll the stair tread, riser, nosing and the corner between riser and tread. Press the corner area carefully. See Fig. 6 & 7.
- Level the material by running the roller both vertically and horizontally. Use caution when rolling the nose area where the TOLI 800 Nose Caulking is applied.

Note: Too aggressive rolling on the nose may cause the TOLI 800 Nose Caulking to flex, resulting in gaps between flooring material and substrate.

Note: Use caution when rolling the corner between riser and stair tread.

Installing with TOLI 951 2-Part Adhesive

- If this is your first project or if it has been several months since installing Takiron flooring using the TOLI 951 Epoxy 2-Part Adhesive, call TOLI technical support at (910) 999-TOLI (8654) to review installation recommendations and obtain guidance for your specific application.
- Acclimate materials to jobsite conditions.
- Prepare the surface following the guidelines within the Takiron Nattice® & Pathways Exterior and Poolside Substrate Preparation Guide.
- Perform moisture (RH and/or CaCl) and pH testing before interior poolside installations in accordance with current ASTM methods. TOLI 951 limits:
 - ASTM F1869 Anhydrous Calcium Chloride Moisture limit - 5 lbs MVER
 - ASTM F2170 in-situ Relative humidity limit - 85% RH
 - ASTM F710 Preparing Concrete - Surface Alkalinity 7-10 pH
- For one piece stair tread and risers, the use of a cove stick is recommended.

Note: The subfloor temperature directly affects setting time. The warmer the surface temperature, the faster the adhesive will set. The cooler the temperature, the slower the adhesive will set.

- Use the 2-part adhesive following the label instructions. Pay careful attention when mixing to ensure the adhesive is fully mixed with no streaks remaining.

Caution: Mixing adhesives on the substrate will cause mixing failure, excessive adhesive application, and trapped air bubbles.

- Immediately apply the 2-part adhesive to the substrate and spread using a 1/32" x 1/16" x 1/32" U-notched trowel.
- Comb the adhesive across the width of the tread so that all the adhesive ridges are straight and running across the width of the material. This helps trapped air to escape during rolling.
- Adhesive Set Up and Working Time:
 - Spread Rate: Approximately 175 to 225 sq. ft. per gallon using the 1/32" x 1/16" x 1/32" U-notch trowel.
 - Set up Time: No waiting time required - Place the treads immediately into the wet adhesive bed to ensure 100% adhesive transfer to the flooring material.
 - Working/open time: 40-60 minutes, depending on slab temperature. Higher temperatures will decrease the working time.
- Work off the tread to prevent adhesive oozing, shifting material, or indentation from adhesive displacement. If you must work on top of the material, use large kneeling boards. Styrofoam insulation boards 1 inch or thicker can be used for kneeling or walking boards. Indentations made in wet adhesive are permanent and cannot be rolled out!
- Roll the tread fully three times with a hand or light weight carpet roller with downward pressure to ensure complete adhesive transfer.
- Hand roll seams immediately after placing the sheet into the adhesive.

Note: Do not exceed the adhesive's working time. Adhesive will 'skim over' and not transfer when working time is exceeded. **DO NOT INSTALL TREADS OR RE-APPLY NEW ADHESIVE OVER HARDENED ADHESIVE.** Remove the hardened adhesive from the substrate and start again.

- Pour Part B into Part A. Thoroughly mix using a drill and suitable mixing paddle. Mix until a uniform consistency is achieved with no streaks. Do not mix by hand. Do not mix adhesive on the substrate.
- Do not leave mixed epoxy adhesive in the container for more than 3-5 minutes. Mixed containers of epoxy generate heat that accelerates the cure and reduces the working time and coverage.
- Immediately pour the mixed contents onto the substrate.
- Set up Time: none - Place the material immediately in the adhesive bed to ensure adhesive transfer to the flooring material.

- Working time: 40-60 minutes, depending on temperature. Higher temperatures will decrease the working time.
- If the temperature of the outdoor concrete substrate drops to 60°F, it will take 5 hours for the adhesive to set up (cure). If the concrete temperature drops to 50°F, it will take 8 hours for the adhesive to set up. At 40°F, the set up time is 12 hours. Bond strength is not compromised by curing at lower than ambient (72-76°F) temperatures.
- When using TOLI 951 for Takiron Stair Tread installations, all tread, riser and Nattice® or Pathways landing sheet material must be completely cut/fit prior to mixing the TOLI 951. Working time is very limited with this adhesive!
- Hand roll the Stair Treads, risers, and landing area immediately after placement of material into adhesive.
- When using TOLI 951 under Takiron Stair Treads, 'comb' the adhesive across the width of the Stair Tread and riser.
- When using TOLI 951 under Takiron Nattice or Pathways Sheet flooring, 'comb' the adhesive across the width of the sheet material so that all the trowel notches are straight and running across the width of the material.
- Roll the Nattice or Pathways Landing Sheet material three times with a 3-section, 100lb roller. The first roll should occur immediately after the material has been laid into the adhesive. Roll first across the width of the sheet parallel to the adhesive trowel marks and then roll lengthwise. Roll the material two (2) more times every 30 minutes.
- Work off the Landing Sheet flooring to prevent adhesive oozing, shifting material, or indentation from adhesive displacement. If you must work on top of the material, use large kneeling boards. Indentations in wet adhesive cannot be rolled out.

Note: Do not exceed the working time. Adhesive will 'skim over' and not transfer when open time is exceeded.

Note: **DO NOT INSTALL FLOORING OR RE-APPLY NEW ADHESIVE OVER HARDENED ADHESIVE.** Remove the hardened adhesive from the substrate and start again.

Edge Sealing

- All exposed edges of the installation must be sealed for exterior and wet area installations.
- Place two parallel lines of masking tape around the entire edge of the Takiron Stair Treads, Riser and Landing Sheet. The inside tape line should be on the tread paralleling the tread edge. The second tape line should be on the substrate paralleling the tread edge. The gap between the two masking tape lines should be 5mm wide (approximately 3/16"). Apply a bead of Henkel Teroson MS 939NA or equivalent edge sealer and smooth with a spatula or similar tool so that edge sealer is 5mm wide (approximately 3/16"). See Fig. 11, 12 & 13 on Page 6.
- Remove the masking tape immediately after applying the Henkel Teroson MS 939NA or equivalent edge sealer. Wrap the used tape around the empty edge sealer tube. Dispose of the tape in accordance with federal, state, and local ordinances.

Note: Takiron Stair Treads installed on steel substrates and sealed with Henkel Teroson MS 939NA or equivalent edge sealer (sealant for edge portion) should not be sealed to the stringer.

Following Installation

- Wait at least 48 hours before moving furniture or heavy loads across the Takiron Stair Treads and Nattice® or Pathways Landing Sheet. The installation must be completed, the adhesive must be fully cured, and the material be cleaned before use.

Points of Caution During Use

- Use proper matting systems to capture shoe-born contaminants that could be tracked onto the floor surface. Such contaminants can lead to slip-and-fall hazards and permanent staining.
- Packing tape or other tapes left on the floor as debris may cause changes in color and quality of the product. The adhesive material used on the back of the tape may cause such damage.
- Avoid walking in spiked shoes, ice skates and similar shoes since this may damage flooring.
- Avoid using jacks and forklifts for pallets, since this may damage or destroy the flooring.
- Use of cleansing or maintenance methods other than those recommended may cause damage to the floor sheet. Such damage is not the responsibility of C.I. Takiron Corporation.

Product Size	Tread Thickness	Nose Height	Nose Thickness	Inches	Metric	Pcs/Ctn
6' Length	0.10" (2.5mm)	1.57" (40mm)	.165" (4.2mm)	72 x 19.69	1828mm x 500mm	5
4' Length	0.10" (2.5mm)	1.57" (40mm)	.165" (4.2mm)	48 x 19.69	1220mm x 500mm	7

When the installation is complete, follow the flooring product's appropriate Maintenance Guide.