# Takiron Slip Resistant Flooring

## Installation Guide

## Nattice® and Pathways (w/ coordinating treads)

Please refer to the TOLI-NA® Flooring 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 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 50ºF-85ºF (10ºC-29ºC). Avoid temperature extremes.
- Immediately upon receipt, store resilient sheet flooring rolls standing up, with capped end down. This prevents distortion and compression.
- 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. Afterwards, maintain a minimum temperature of 50°F (10°C) for the life of the floor.

  Interior: For the life of the floor

  Exterior: For at least 48 hours after installation
- Refer to the Material Handling & Subfloor Preparation Guide for additional product handling and subfloor preparation guidance.

Note: Although Nattice and Pathways do not have a pattern match, the sheets should be installed in the same direction whenever possible. To assist the installer, there are small arrows on the back of the product which show machine direction during manufacturing.

### Dye Lots

- The installation needs to be planned to control dye lots. The installation of multiple dye lots together implies acceptance of material.
- Dye lots (or Lots) are printed on each product label.The first 4 digits of the production code represent the dye lot.
- Check the dye lots on each unit as there may be more than one dye lot on a pallet.
- When possible, isolate individual dye lots in each room/area.
- If more than one dye lot is used in the same room, compare flooring materials to see if a color, texture or gloss variation is present.
- Slight color and gloss variations may be present within a dye lot or between dye lots and are not considered manufacturing defects.

### Adhesive Selection

- Make sure that you have the recommended adhesive and trowel size for installation conditions. Use only recommended adhesives as others may not provide satisfactory performance.
- For interior dry area installations, TOLI-NA recommends using TOLI 5001 acrylic adhesive.
- For interior wet or exterior area installations, TOLI-NA recommends using TOLI 951 Epoxy adhesive along with Henkel Teroson MS 939NA Edge Sealer or equivalent for all non-clamped or covered edges. See our Adhesive Reference Chart or call TOLI-NA Technical Support for assistance at (910) 999-TOLI (8654).

## Instructions for the use of TOLI® 5001

**TOLI 5001** High Performance Flooring adhesive can be used on **DRY INTERIOR** applications when all sheet edges are clamped down or covered over with moldings.

- Spread adhesive evenly. Fold the sheets back and comb the adhesive perpendicular to the seam line. This prevents adhesive from contaminating the seam area. Do not allow any puddles or lumps of adhesive.
- When using TOLI 5001 be sure that trowel notches are as recommended and kept clean. TOLI-NA does not recommend re-notching a trowel by hand. Replace the blade or entire trowel as necessary to ensure proper coverage.
- For porous or rough substrates the sheet goods may be placed into adhesive after 10-20 minutes of open time.
- For smooth and non-porous substrates install sheet goods into adhesive as it becomes dry to the touch, normally 30-45 minutes based on humidity and surface porosity. Do not let adhesive completely dry.
- Work off the flooring to prevent adhesive from oozing, shifting of material, or indentation from adhesive displacement. If you must work on top of the material, use large kneeling boards or dense 1” Styrofoam.
- Roll the flooring with a 100 lb. 3-section roller after setting flooring into adhesive, flattening trowel marks.
- Wait a minimum of 3 hours for foot traffic on installations over adhesive that is wet to touch on porous substrate.
- For all applications, wait 48 hours for rolling traffic or point loads.

## Instructions for the use of TOLI 295 2-Part Polyurethane Adhesive

**TOLI 295** solvent-free, two-component polyurethane flooring adhesive designed for use with recommended Toli sheet and tile flooring products. Adhesive has been formulated to produce a superior, flexible bond required for use in high traffic applications.

**Direction for Use**

Requirements for job site conditions, substrate preparation and concrete testing are contained in the **Installation Guide for each TOLI North America** product. Installation Guides can be downloaded at www.toli-na.com.

1. Pour the entire contents of the Part B container into the Part A container. Using a low-speed mixer, thoroughly mix the contents until a smooth, even colored consistency is achieved. Mixing by hand is not recommended.
2. Immediately pour the entire contents onto the substrate. Do not allow mixed adhesive to set in container. Mixed adhesive will cure faster when allowed to remain in mixing container. Adhesive shall be mixed and applied at normal room temperature. Excessive heat will cause adhesive to cure faster.
3. Spread adhesive evenly using a 1/32” x 1/16” x 1/32” U-Notch trowel. Hold trowel at a 60° angle. Replace trowels with worn notches. Do not re-notching a trowel by hand. Replace the blade or entire trowel as necessary to insure proper coverage.
4. Adhesive Set up and Working Time: Set up time is 10 minutes after mixing. Place the flooring into the wet adhesive after 10 minutes. Ensure 100% adhesive transfer to the flooring material. Working/open time is 40-60 minutes. (higher room temperatures will result in shorter working times). Do not exceed recommended set up / working time.
5. To ensure transfer of adhesive to back of flooring, flooring material must be positioned while adhesive is wet. Allowing a 10-minute open time before positioning flooring will help reduce tile or sheet shifting and adhesive bleed through at tile joints. Kneeling boards are required working on tile. When installing sheet flooring, the use of a push board will help remove excess air under the flooring.
6. Immediately roll flooring in both directions with a 100 lb. three-section floor roller in both directions. Hand roll areas along edges and others where 100lb roller cannot reach.

**Post Installation**

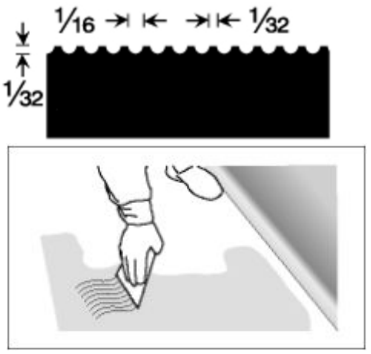
1. Remove wet adhesive immediately with a clean cloth dampened with rubbing alcohol. Do not apply solvents directly to flooring. Cured adhesive is very difficult to remove.
2. Prevent all traffic for a minimum of 8 hours, 24 hours on stairs. Restrict heavy traffic and rolling loads for 48 hours after installation. Do not wash or begin maintenance procedures on the floor for a minimum of 5 days after installation to allow the adhesive to properly cure.

## Installing with TOLI 951 2-Part Adhesive

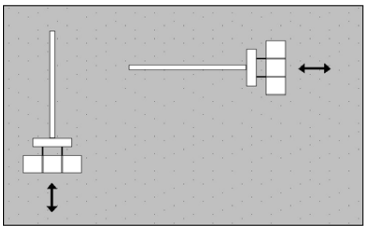
Reactive epoxy adhesive is recommended for all areas where consistent topical moisture may be encountered, spaces that do not maintain proper temperature and exterior spaces. In these areas any sheet edges should be edge sealed with Henkel Teroson MS 939NA or equivalent edge sealer. Consult this product's application sheet if this process is required.

- Refer to the current label instructions
- Establish your starting line. Dry lay the sheet flooring without distortions following the line. Curled or distorted Nattice® or Pathways will cause bubbles. Do not dry fit and cut more material than can be adhered during the same day.
- Cut seams net. Dry cut all seams using the 'double cut' method or other method that will produce a net fit without gap or overlap. Trim a minimum of ¼ inch (5 mm) from each edge. Before cutting seams, align pattern of material to maintain visual. All sheet flooring must be cut/trimmed and fit prior to mixing the 2-part adhesive. Do not spread more adhesive than can be covered within 40 minutes.

  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. If working exterior, use tents to avoid direct sunlight.
- Unless flash coving, leave a ¼-inch (5 mm) gap around the perimeter of the installation for applying the required edge sealant when installation is completed.
- Once materials are dry fitted and seams are trimmed, fold back ½ of first sheet and apply adhesive. If cuts are manageable, it is possible to fold back and spread adhesive for more than one sheet at a time. Be careful to maintain proper sheet placement and alignment to the starting line.
- 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 or as recommended by the adhesive manufacturer.
- Comb the adhesive across the width of the sheet 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 sheet flooring 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. High temperatures will decrease the working time.
- Work off the 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. 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 sheet flooring three times with a 3-section, 100 lb. 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 notches. This will help to remove trapped air beneath the floor. Then roll lengthwise. Roll the material two (2) more times in both directions every 30 minutes.
- 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 FLOORING OR RE-APPLY NEW ADHESIVE OVER HARDENED ADHESIVE.

  Remove the hardened adhesive from the substrate and start again.

## Seaming Preparation for Resilient Sheet Flooring Products

- Although Nattice® and Pathways do not have a pattern match, the sheets should be installed in the same direction whenever possible. To assist the installer, there are small arrows on the back of the product which show machine direction during manufacturing.
- Use as few seams as possible and place seams in low traffic areas.
- Keep all sheets running the same direction. Avoid seaming floors in areas subjected to heavy rolling traffic, such as under hospital beds, chairs or other areas subjected to rolling loads.
- Pathways patterns are strip designs, seams in the length blend well. ‘Cross seams’ are more noticeable. We recommend that estimators avoid cross seams. Reduced labor cost and a cleaner looking installation will usually offset any additional material costs necessary to avoid cross seams.
- Unroll and cut all sheets at least three inches longer than needed. Dry lay all sheets running the same direction edge to edge and check for any shade, color, texture or height difference. Contact TOLI-NA immediately if discrepancies are found before continuing installation. To help reduce curling after being tightly rolled up, allow the sheet flooring to relax. It may be helpful to re-roll the material face-in or dry lay the sheets flat on the floor overnight. Do not leave materials dry laid or rolled face in for more than 24 hours.
- All factory edges must be trimmed a minimum of 1/4”. Cut seams net. Do not leave a gap at the seam, and do not cut seam so tight that material peaks. The best way to achieve this is the ‘double cut’ method. Overlap the two sheets about one inch and cut down the center of the overlap with a sharp utility knife. Hold the knife at a right angle to the floor.
- Fold the sheets back and comb the adhesive perpendicular to the seam line. This prevents adhesive from contaminating the seam area. When placing sheets into adhesive, keep adhesive from penetrating the seam.
- Adhesive contamination of the seam area will cause seam discoloration and/or failure of the welding.
- After the sheets are adhered, hand roll the seam area. Roll the entire floor with a 100 lb. 3-section roller.
- Complete the installation by sealing the seams using the Heat Weld method.

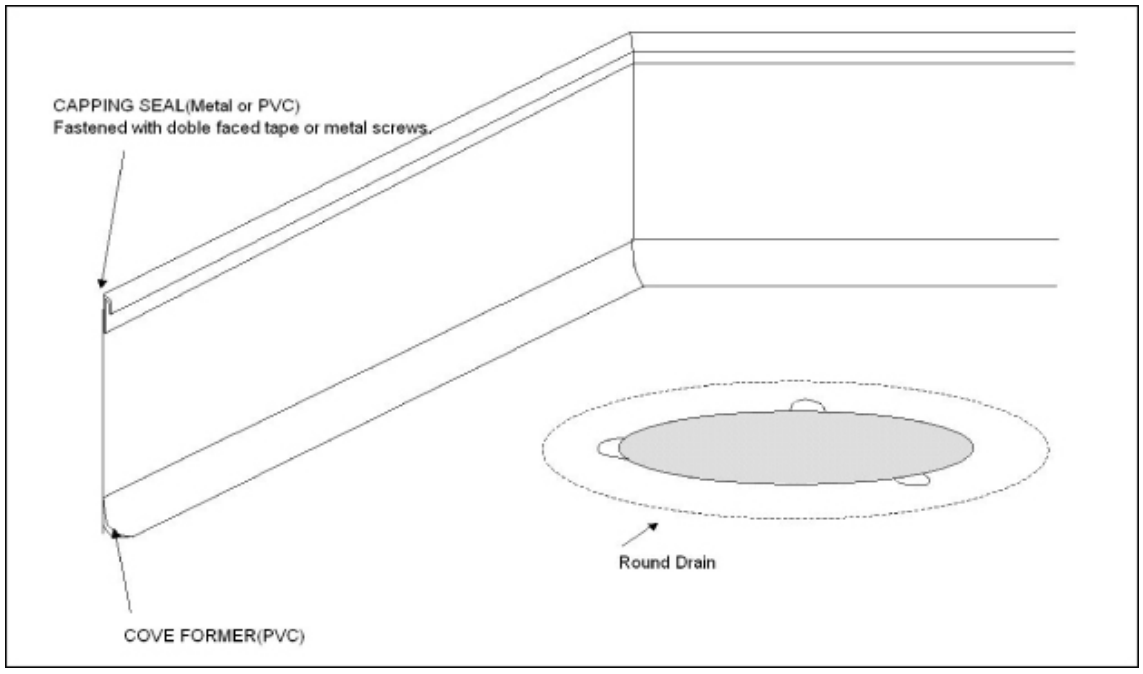
# Flash Cove Installation

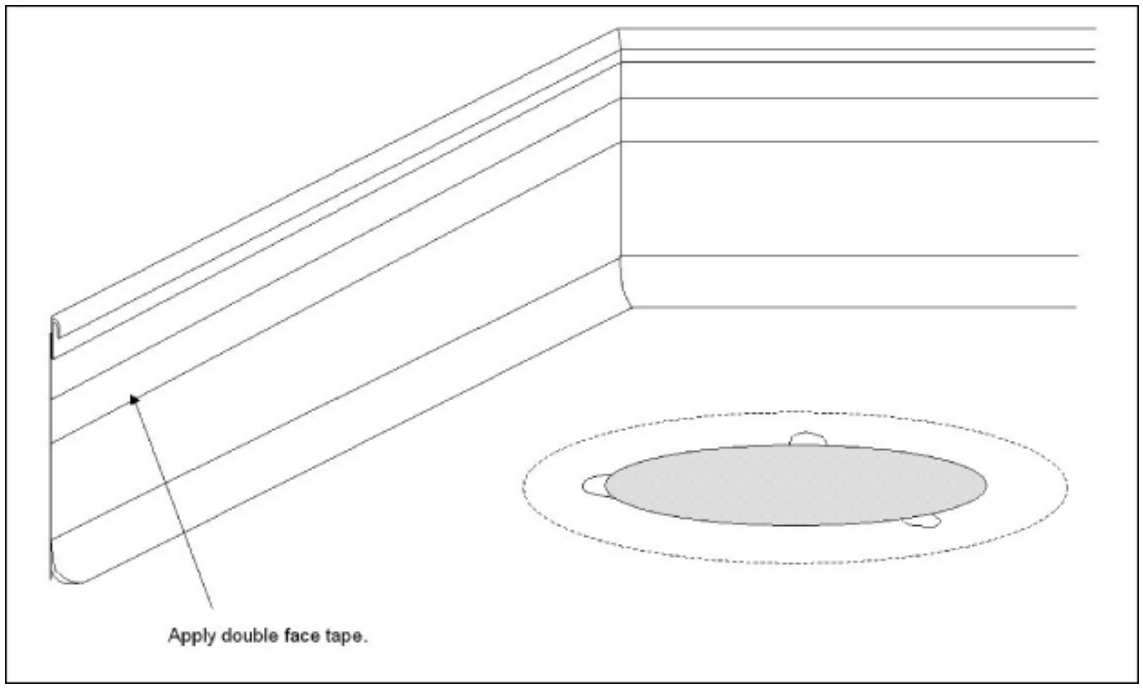
- For flash cove Installations, install metal or vinyl Cove Cap & Cove Stick. Adhere with double face tape or screws. For wet areas, ensure a watertight transition from the flash cove to the wall by:

  A) Installing the wall panel over the flash cove (no cove cap) and apply recommended caulking

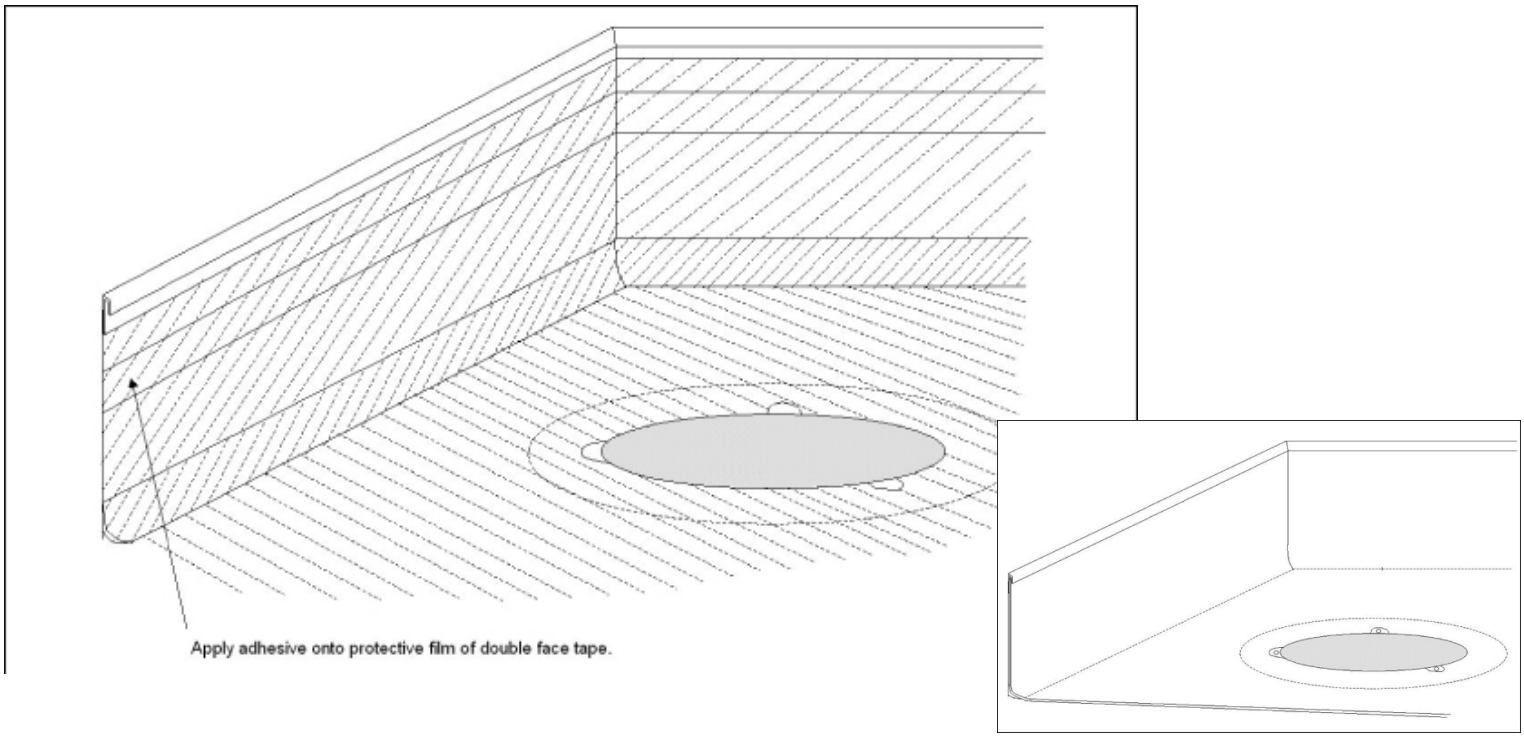
  B) Use recommended caulking behind cove cap before mechanically fastening it to the wall. Apply an even bead of recommended caulk along the top edge of the cove cap as well.

- When installing with 2-part reactive adhesive, apply 1-inch wide Opti-Tape or Power Tape (double face tape) on the vertical surface parallel to and between the Cove Cap and the Cove Stick. Do not remove the tape's protection film. Trim the flooring around the perimeter to run up the wall 1 inch past the height of the cove cap. This will get trimmed off flush with the top of the cove cap once the cove is installed.

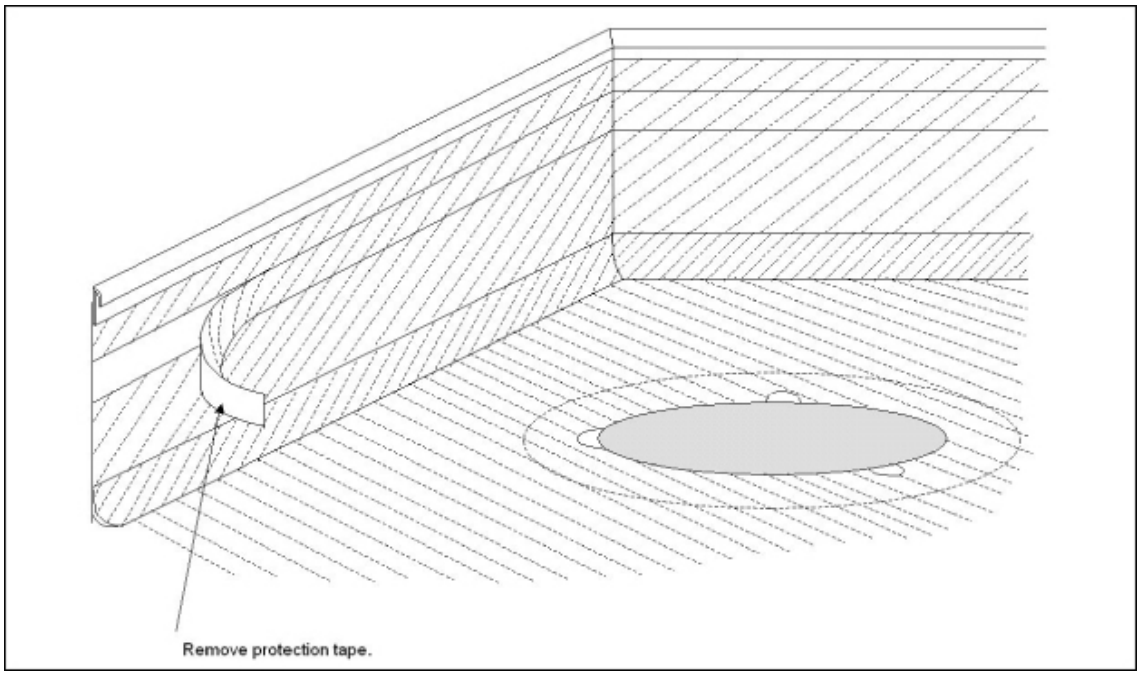


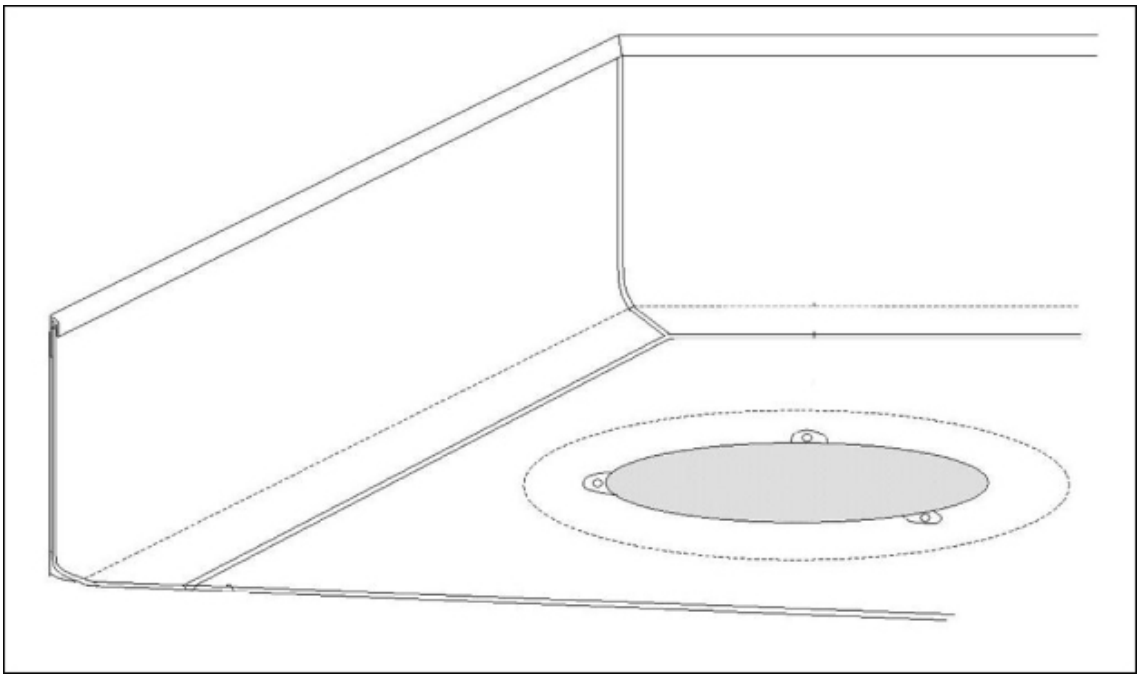
- Apply the 2-part adhesive over the location for the first sheet of flooring including the entire vertical area from the lower edge of the cove cap, over the tape (with release paper intact) and cove stick.




- After applying adhesive, remove the protection film and place the trimmed sheet into the adhesive within the adhesive's working time. Use caution not to get any adhesive on the edge of the sheet flooring.



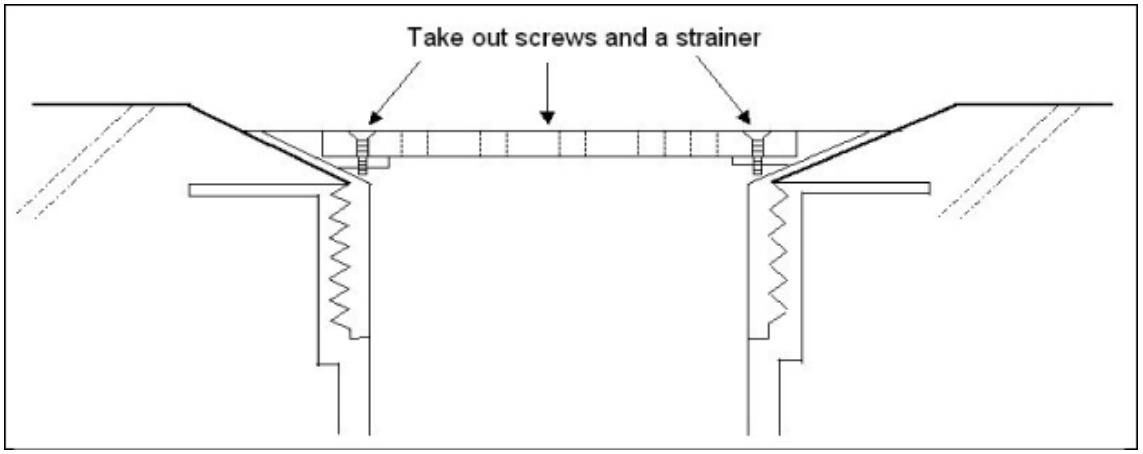
- When an easier flash cove installation is preferred or to install a contrasting border color, end the sheet flooring installation a distance from the wall equal to the height of the cove or as specified. Most coved installations are 4 or 6 inches high, so you would stop the field installation 4 or 6 inches from the wall to allow for a border skirting installation. This will create a seam line that will be welded after the completion of the cove installation.



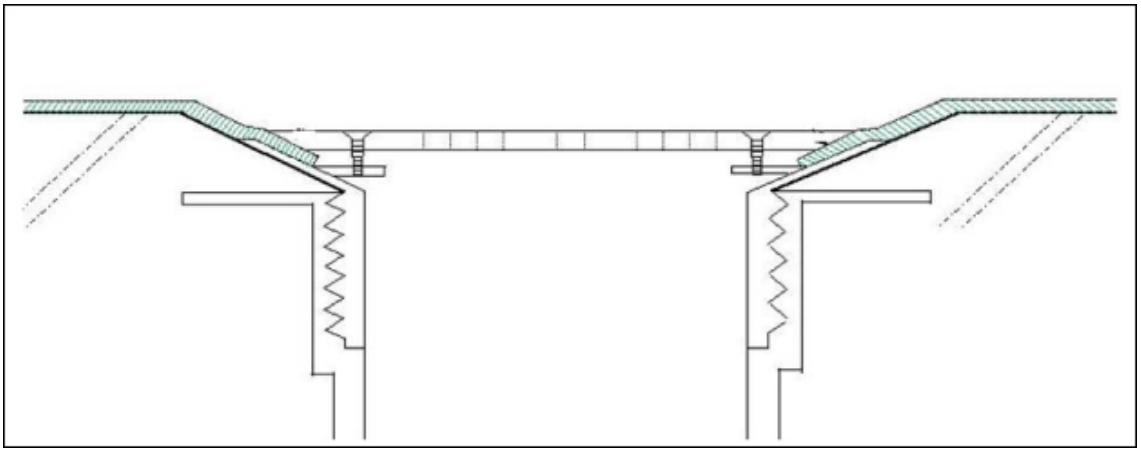
- Once the field area is installed the appropriate distance from the walls, complete the installation by trimming and fitting the coved section of flooring.
  - Trim the cove flooring piece so that it is aligned and pattern matched along the edge of the installed field flooring and the top edge is flush with the top of the cove cap. Carefully trim the cove flooring by firmly holding the flooring material in position and cutting to fit using a sharp utility knife or by creating a template and trimming the flooring to the template.
    - With 2-part adhesive, once the flooring is properly trimmed to maintain pattern, apply the 1-inch wide OptiTape parallel between the cove cap and cove stick. The tape will hold the cove flooring in place while the adhesive sets. With the Opti-Tape installed with the release paper still attached, properly mix and apply the 2part adhesive from the edge of the installed flooring up to the base of the cove cap. Use the specified trowel size. Be careful not to leave any areas void of adhesive or with excess adhesive and to keep the adhesive from contaminating the edges that will be seamed. Once the adhesive is spread, remove the release paper from the Opti-Tape. Begin by carefully placing the cove flooring into position maintaining alignment and pattern along the seam. Once the cove flooring is in position along the seam, continue to place the flooring into the adhesive to the cove stick and then up the wall to the cove cap without wrinkle or distortion.
  - Once you get to the cove cap, either flex the lip of the cove cap upwards until you can place the flooring underneath the edge or carefully push the flooring up into the cove cap using a putty knife or other flat slim tool. Use caution not to cut or tear the flooring.
  - Roll the flooring using a 3-section hand roller to ensure complete contact between the flooring and the adhesive. The Opti-Tape and cove cap will hold the flooring to the vertical surface until the epoxy has set up.
  - Continue with each piece of flooring until all the coving is installed.
  - Once the adhesive has set up for a minimum of 24 hours, trim the seams and heat weld.

# Installing Around Drains

- Remove strainers from drainage system. Place sheet flooring over drain hole and trim around the edge of the drain. Make sure to trim around the screw brackets to fasten the strainers.




- Once trimmed, secure the strainer over the edge of the sheet flooring to lock into place.



# Heat Weld Instructions

The heat weld method is the strongest of all seam-sealing methods. Only installers who are trained and experienced with this method should attempt heat-welded seams. The installation methods for heat welding Takiron® sheet flooring are very similar to that of other products.

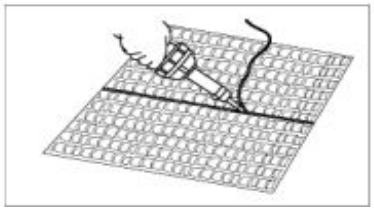
Note: Nattice® & Pathways require a 3.5 mm welding thread.

Groovers must be 3.0mm U shaped groovers. Larger or V-groovers will result in seam failure. Welding tip can be 3.5-4.0mm, but no larger.

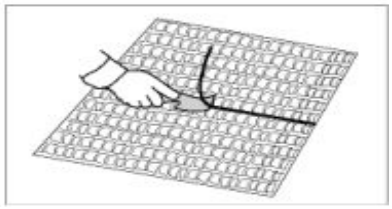
WARNING: Practice on scrap material before beginning. This will help the installer to become familiar with heat welding Takiron sheet flooring. This step is critical for successful heat welding.

- Install the flooring and fit the seams using the 'double cut' method. Do not leave a gap at the seam. Fit seam net, but not so tight that the material peaks.
- Wait at least 24 hours before grooving and heat welding seams.
- Groove or rout the seam to 2/3 the depth of the flooring material using a mechanical or hand groover. Use a 3.0 mm wide blade for Nattice & Pathways. Be sure to center the groove on the seam so that both sides are equally grooved. Do not groove or rout completely through the flooring material.
- Weld the seam using a hot-air heat-welding gun designed for heat welding resilient flooring. Take care not to stretch the welding thread when applying.
- Follow the two-part finishing process:
  1. Trim the welding thread when "cool to touch" using a trim knife with trim plate attached.
  2. Wait at least 30 minutes for the weld to cool, then trim the remaining welding thread using the trim knife without the trim plate.
- Wait 48 hours before wet cleaning.

1. Groove the Seam

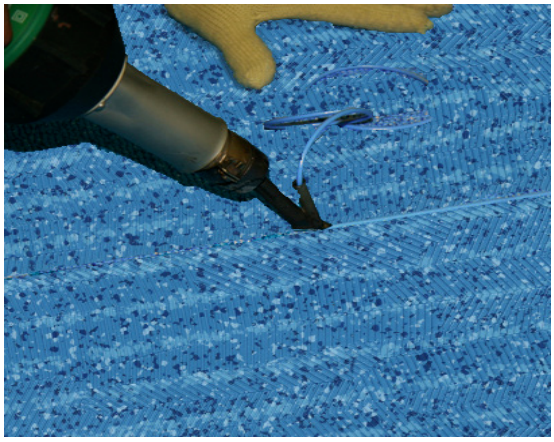


2. Weld the Seam



3. Trim the Weld

When the installation is complete, follow the flooring products appropriate Maintenance Guide.

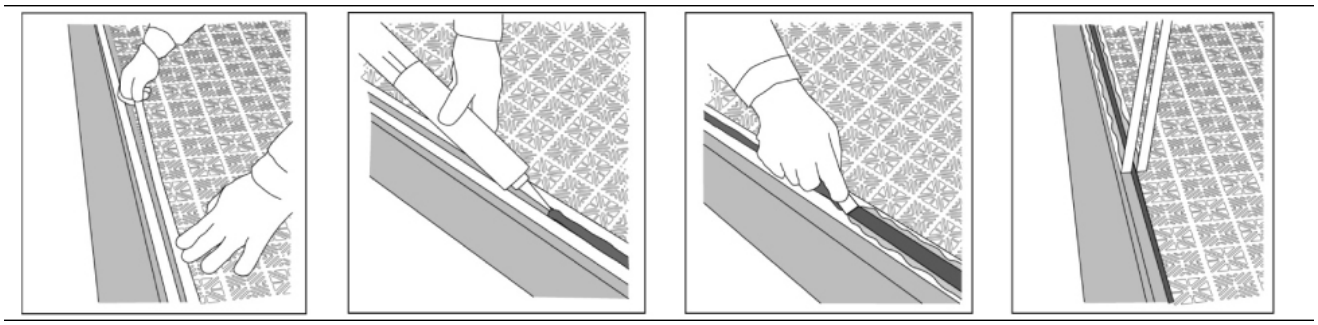


Heat Welding

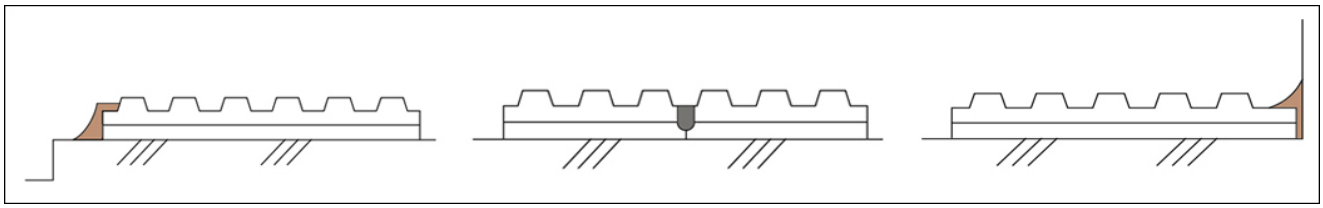
Typical Heat Welding Tools

# Sealing the Exposed Edges of the Sheet Flooring

- All exposed edges of the installation must be properly sealed or the installation may fail!
- Seal the exposed perimeter and all penetrations (floor drains, etc.) using Henkel Teroson MS 939NA Edge Sealer or equivalent. It is recommended to use a spatula or putty knife to ensure 100% coverage between the sealant, the substrate and the edge of the flooring. The sealant should overlap the top of the floor 1/8 inch or more to ensure a good seal.
- To provide a consistent and uniform appearance, it is recommended to use masking tape to outline both sides of the sealant application. Place two parallel lines of masking tape around the entire edge of the sheet. The inside tape line should be on the sheet floor parallel to and 1/8 inch (1-2 mm) in from the edge of the sheet. The second tape line should be on the substrate parallel to and ¼ inch (5 mm) from the edge of the sheet, or on the wall.
- Use a standard caulk gun and apply a continuous uniform bead along the exposed edge of the floor between the parallel tape lines.
- Smooth the sealant bead with a spatula, putty knife or similar tool ensuring 100% coverage.
- Immediately remove the masking tape after smoothing the sealant. Wrap the used tape around the empty sealant tube. Wear latex gloves during tape removal. Dispose of the tape in accordance with federal, state and local ordinances.



1. Tape parallel to edge
2. Apply bead of sealant
3. Smooth with spatula
4. Cleanly remove tape



## Floor Protection After Installation

- Keep foot traffic off sealant and flooring installed with 2-part adhesive for 24 hours.
- Keep all heavy point loads and rolling traffic off the sealant and sheet flooring for 48 to 72 hours until the 2Part adhesive and the sealant have cured.
- The set-up and curing period will vary with temperature. The higher the temperature, the quicker the 2-part adhesive will set up and cure.
- Cover the flooring with heavy kraft paper and plywood or other rigid panel if other trades will be working on the floor after installation. Tape all seams of the kraft paper and tape to the edge of the installation. Tape all protective panels together and to the kraft paper to prevent dirt and debris from getting under the panels and damaging the floor.
- Use rigid protective boards whenever moving heavy objects across the floor.

## Points of Caution During Use

- Avoid continual exposure of the floor surface to sand and abrasive materials. Such contaminants can damage the floor over time.
- Use Calcium Chloride before possible snow or ice storms and liberally apply afterward to melt snow and ice. DO NOT USE ROCK SALT.
- Immediately remove snow and or ice from the surface to eliminate slip-and-fall hazards. For additional traction, lightly broadcast sand over the snow or ice. Promptly remove the sand once the ice and snow have melted.
- 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 and other adhesive residues left on the floor may cause soiling/staining issues and damage the flooring over time. Remove tape residue with mineral spirits.
- Avoid high heels, spike shoes, ice skates and other usage that will damage the floor
- Avoid pallet jacks, forklifts and other machinery that will damage the floor.
- Refer to the Takiron Nattice & Pathways Maintenance Guide for floor care instructions.

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