# Slip Resistant Flooring Exterior & Poolside Installation Guide



Nattice® and Pathways (w/ coordinating treads)

Please refer to the CBC® Flooring website <a href="www.cbcflooring.com">www.cbcflooring.com</a> 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 CBC Flooring 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 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.
- ◆ 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.
- ◆ Refer to the Exterior & Poolside 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.
- ♦ 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 BEFORE installing for acceptance.
- ♦ 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. The ultimate adhesive selection is the responsibility of the installer based on the specific environment and use. See our <u>Adhesive Reference Chart</u> at the end of this document or call CBC Technical Support for assistance at (919) 230-8700.

## Installing with CBC<sup>®</sup> 951 Epoxy 2-Part Adhesive

- ♦ If this is your first project or if it has been several months since installing Takiron sheet flooring using the CBC 951 Epoxy 2-Part Adhesive call CBC Flooring Technical Support at (919) 230-8700 to review installations 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 Subfloor Preparation Guide.
- ◆ Perform moisture (RH and or CaCl) and pH testing before interior poolside installations in accordance with current ASTM methods. CBC 951 limits:
  - ♦ ASTM F 1869 Anhydrous Calcium Chloride Moisture limit 5 lbs MVER
  - ◆ ASTM F 2170 in-situ Relative Humidity limit 90% RH
  - ◆ ASTM F 710 Preparing Concrete Surface Alkalinity 7-10 pH
- ♦ 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.
- ♦ For coved installations, it is recommended to terminate the field floor away from the wall an equal distance to the height of the coving to allow for a border skirting installation. Most coves are 4 or 6 inches (100 to 150 mm) high. Carefully read through and plan the installation following all of the coving instructions.
- ◆ 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.

- ◆ Leave a 1/4 inch (5 mm) gap around the perimeter of the installation for applying the required edge sealant.
- ♦ 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.
- ♦ 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.

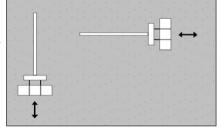
Caution: Mixing adhesives on the substrate will cause mixing failure, excessive adhesive application and trapped air bubbles.

1/16  $\rightarrow \leftarrow \rightarrow \leftarrow 1$ 

- ♦ 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 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" 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.

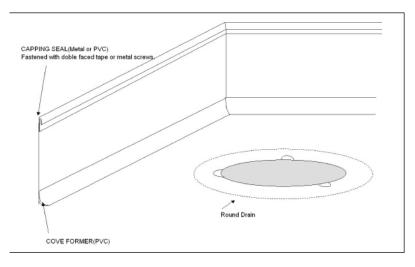


✦ Hand roll seams immediately after placing the sheet into the adhesive.

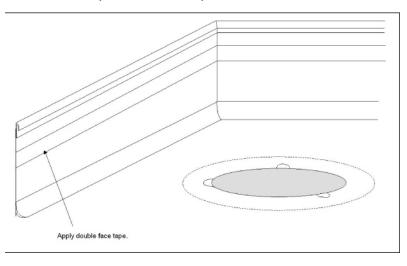
Note: Do not exceed the adhesive's working time. Adhesive will 'skim over' and not transfer when working time is exceeded. DO NOT INSTALL FLOORING OR RE-APPLY NEW ADHESIVE OVER HARDENED ADHE-SIVE. Remove the hardened adhesive from the substrate and start again.

#### Flash Cove Installation

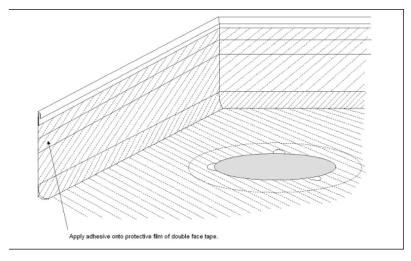
◆ For flash cove Installations, install metal or vinyl Cove Cap & Cove Stick. Adhere with double face tape or screws.



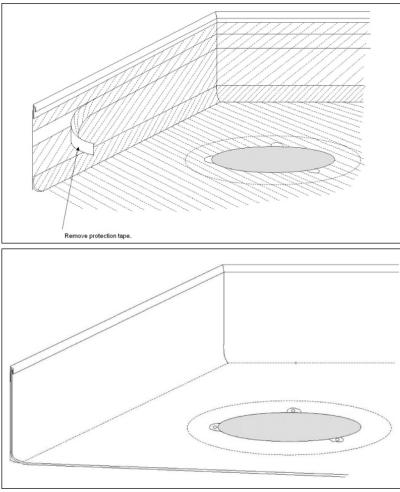
♦ When installing with 2-part reactive adhesive, apply 1-inch wide Opti-Tape or Power Tape (double face tape) on the vertical surface parallel to and between the Cove Cap and the Cove Stick. Do not remove the tape's protection film. Trim the flooring around the perimeter to run up the wall 1 inch past 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 cover cap, over the tape (with release paper intact) and cove stick.

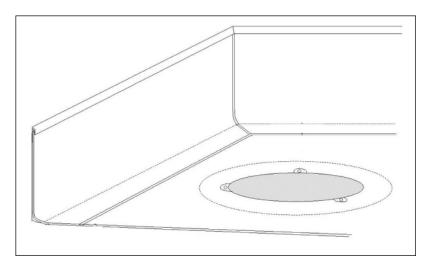


♦ After applying adhesive, remove the protection film and place the trimmed sheet into the adhesive within the adhesive's Working-time. Use caution not to get any adhesive on the edge of the sheet flooring.



After flooring is applied

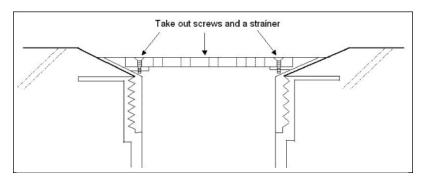
When an easier flash cove installation is preferred, to install a contrasting border color, end the sheet flooring installation a distance from the wall equal to the height of the cove or as specified. Most coved installations are 4 or 6 inches high, so you would stop the field installation 4 or 6 inches 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.

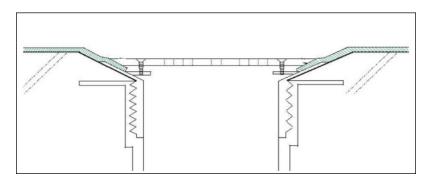


- ♦ Once the field area is installed the appropriate distance from the walls, complete the installation by trimming and fitting the coved section of flooring.
  - ◆ Trim the cove flooring piece so that it is aligned and pattern matched along the edge of the installed field flooring and the top edge is 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 Opti-Tape 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 2-part 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 the all of the coving is installed.
  - ♦ Once the adhesive has set up for a minimum of 24 hours, trim the seams and heat weld.

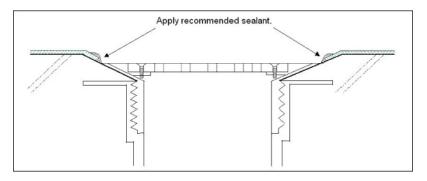
# **Installing Around Drains**

♦ 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.





◆ As an alternative sealing method, applying Henkel Teroson MS 939NA Edge Sealer or equivalent around the perimeter of flooring trimmed to edge of the drain.

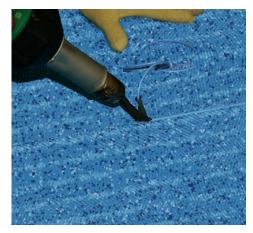


#### **Seaming Preparation for Resilient Sheet Flooring Products**

- ◆ Although Nattice<sup>®</sup> 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, make short seams rather than long seams 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 in front of storage areas, under 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 CBC Flooring 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 the 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.

#### **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 CBC sheet flooring are very similar to that of other products.







**Typical Heat Welding Tools** 

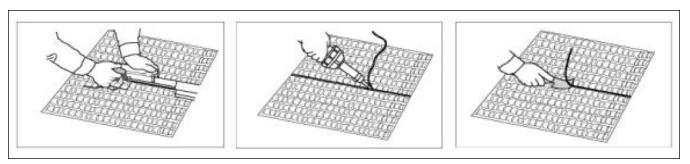
Note: Takiron Nattice<sup>®</sup> and Pathways require a **3.5 mm** welding thread. Do not use a heat-welding tip larger than **4.0 mm**.

WARNING: Practice on scrap material before beginning. This will help the installer to become familiar with heat welding CBC 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 when installing with CBC 951 Epoxy Adhesive.
- ♦ Groove or rout the seam to 2/3 the depth of the flooring material using a mechanical or hand groover. Mechanical groovers produce the most consistent groove and are recommended for all long stretches. Use a 3.0 mm wide blade for Takiron Nattice and 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:
  - ◆ Trim the welding thread when "cool to touch" using a trim knife with trim plate attached.
  - ♦ Wait at least 30 minutes for the weld to cool, then trim the remaining welding thread using the trim knife without the trim plate.

NOTE: The use of seam trim planes are recommended to produce consistent trimming.

Wait 48 hours before wet cleaning.



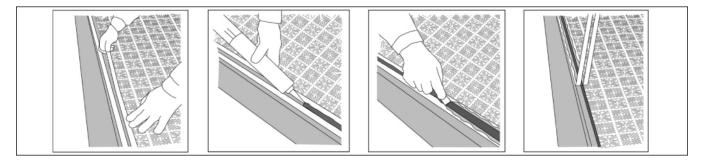
1. Groove the Seam

2. Weld the Seam

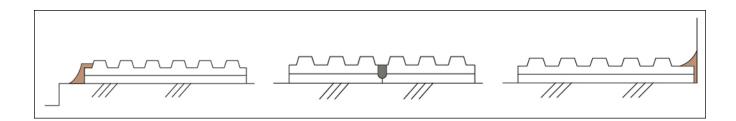
3. Trim the Weld

### 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.
- In order to provide a consistent and uniform appearance, it is recommended to use masking tape to outline 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.
- 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 2-Part 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.
- Use caution walking barefoot on the flooring if it is exposed to direct sunlight. The surface temperature may become uncomfortably high for bare feet.
- 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.

Product, Nominal Size	Metric	Inches	Sq.Yd Roll
Nattice <sup>®</sup> & Pathways 6' x 66'	1820 mm x 20 m	5' 11 3/4" x 65' 8"	44

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

CBC® Flooring

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# **Adhesive Reference**

	Product	RH Limit ASTM 2170	Vapor Emission ASTM F1899	pH Limit	Weight (lbs) per Unit	Trowel Size and Usage Notes	Unit Size	Coverage per Unit	Wet or Flood Wa	Extreme Heat or	Heavy Static Loa	Custom Designs	Mature® AdVant	Lightwood®/Kar	Homogeneous Vi	Nattice <sup>®</sup> & Pathv	Nattice & Pathwa	Tread & Risers (In	Tread & Risers (E
Si	CBC® 5001 Acrylic	85%	6 lbs / 24 hours / 1,000 SF	10 pH		1/16 x 1/16 x 1/16 V-notch	4 Gallon	670-750 SF				•				Р		Р	
					40.0	1/16 x 1/16 x 1/16 V-notch	4 Gallon	720-800 SF								N			
i.					40.0	1/32 x 1/16 x 1/32 U-notch	4 Gallon	880-1,040 SF		•		•	Р	P	Р				
Adhesives						1/32 x 1/16 x 1/32 U-notch	4 Gallon	1,200-1,400 SF					N	N	N	N			
PΑ	CBC 951 Epoxy	90%	8 lbs / 24 hours / 1,000 SF		29.0	1/32 x 1/16 x 1/32 U-notch	1 Gallon	175-225 SF	•	•	•	•	•	•	•	•	•	•	•
Tread Accessories	<b>Opti-Tape</b> 9.5" Width				7.3		1 roll/ctn	165 LF per roll										•	
	CBC 800 Nose Caulk				1.7	Double Caulking Gun	13.5 oz. Tube	40 LF per tube		•								•	•

P = Porous surface

N = Non-porous surface

Recommended

TOLI®

eina Asento®

C.I. TAKIRON

ways (Interior)\*

ys (Exterior)

◆ = Porus & non-porous surface

\* = Interior wet areas follow exterior instructions

CBC® Flooring

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