

# VINYL STAIRWELL INSTALLATION INSTRUCTIONS

Stair Treads, Stair Nosings, Risers, & Stringers

#### INTRODUCTION

These instructions are written as a guide to be used by professional installers when installing Tarkett products. These instructions, combined with our adhesives and flooring products, create a system. Utilizing this system will ease the installation process and provide the customer with a completed product that will perform to its intended purpose. Always visit <a href="www.tarkettna.com">www.tarkettna.com</a> for the most current installation and main tenance instructions. Technical videos and tip sheets are also available. Contact Tarkett Technical Services at (800) -899-8916 with any questions.

#### HANDLING AND STORAGE

Tarkett cannot accept responsibility for any loss or damage that may result due to processing or working conditions and/or workmanship outside our control. Users are advised to confirm the suitability of this product by their own tests.

STORING ALL PRODUCTS & ADHESIVES	PRE-INSTALLTION			
Stack cartons squarely on top of one another, do not over stack cartons and protect corners from damage by tow-motors and other traffic.  NOTE: Do not flex, bend, or stand cartons on end. Never double stack pallets.	Room temperature must be maintained between 65°F (18.3°C) and 85°F (29.4°C) with ambient relative humidity between 40% and 60% for 48 hoursprior to, during the entire installation, and 48 hours after installation.  NOTE: Permanent, operational HVAC systems are highly recommended. If alternate system is utilized, it must provide proper control of both temperature and humidity for the above stated time durations.			
Store on a dry, flat, level surface.	Site-condition flooring and adhesives 48 hours prior to installation.			
Maintain temperature between 65°F (18.3°C) and 85°F (29.4°C).	In areas exposed to intense or direct sunlight, protect the product by covering the light source during site-conditioning, installation, and adhesive curing periods			
Maintain relative humidity between 40%-70%.				
Tarkett products are warrantied for installation in Indoor, Climate-Controlled spaces only.  NOTE: Exposure to excessive UV light can result in fading, degradation, and/or color variation.	Inspect all flooring material to verify accuracy of order as well as for any dan visual defects, and satisfactory color match. Notify an authorized Ta Distributor or Representative prior to installation if any defects are found. Natarkett will not pay labor costs claimed on installed materials with videfects.			

# **GENERAL SUBFLOOR PREPERATION**

An adhesive bond test must be performed using the actual flooring materials and adhesive to be installed. The test areas must be a minimum of 36" x 36" and remain in place for at least 72 hours and then evaluated for bond strength to the subfloor.

A porosity test must be performed on the substrate to determine which installation method (porous or non-porous) will be required. Refer to ASTM F3191 Standard Practice for Field Determination of Substrate Water Absorption (Porosity) for Substrates to Receive Resilient Flooring

Caution: Do not install stair treads and nosings in areas that are exposed to grease, oil or animal fats.

SUBFLOOR CONSTRUCTION	REQUIREMENTS					
All Staircases	Perman ently dry, clean, smooth, and structurally sound					
	Free of all dust, loose particles, solvents, paint, grease, oil, wax, alkali, sealing/curing compounds, old adhesive any other foreign material, which could affect the installation and adhesive bond to the substrate. All substrate contaminates must be mechanically removed prior to the installation of the flooring					
	DO NOT use liquid solvents or adhesive removers,					
	DO NOT use oil-based sweeping compounds					
	NOTE: Permanent and non-permanent markers, pens, crayons, paint, or similar marking tools used to mark the substrate or back of the resilient flooring material will cause migratory staining that is not covered by the warranty.					
	Minimum substrate temperature must be 60°F (15.6°C) and must be within 5°F (2.8°C) of ambient temperature					
	Substrate temperature must be a minimum of 10°F (5.6°C) higher than the dew point temperature NOTE: Dew point calculators are available online. If your substrate is not 10°F (5.6°C) above the dew point, contact Technical services at (800) 899-8916					
	Fill all depressions, cracks, and other surface irregularities with a good quality, Portland cement-based underlayment patching compound appropriate for this purpose					

Existing Flooring	Remove all existing, resilient flooring materials and adhesives mechanically prior to installation of Tarkett flooring NOTE: Refer to the Resilient Floor Covering Institute's (RFCI's) Recommended Work Practices for Removal of Existing Resilient Flooring for best work practices  CAUTION: Some resilient flooring products and adhesives contain "asbestos fibers" and special handling of this material is required.					
	Constructed as recommended by the American Concrete Institute's (ACI) 302.2 Guide for Concrete Slabs that Receive Moisture-Sensitive Flooring Materials					
	Prepared in accordance with ASTM F710 Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring					
	DO NOT install Tarkett flooring over expansion joints or other moving joints in the substrate. These joints must be respected and should not be filled with products that are not intended for that purpose. Contact an expansion joint cover manufacturer to meet specific flooring conditions.					
	Test for moisture in accordance with:					
	ASTM F2170 Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using in situ Probes					
	-OR-					
Concrete	ASTM F1869 Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride.					
	Acceptable moisture limits can be found in the adhesive section at the end of this document, on the adhesive label, and in the adhesive specifications found online at <a href="https://www.tarkettna.com">www.tarkettna.com</a> .					
	NOTE: Following ASTM F2659 Preliminary Evaluation of Comparative Moisture Condition of Concrete, Gypsum Cement and Other Floor Slabs and Screeds Using a Non-destructive Electronic Moisture Meter can provide qualitative information prior to performing ASTM F2170 or ASTM F1869.					
	Test results must not exceed the limits of the adhesive; If the tests results exceed the limitations, the installation must not proceed until the problem has been corrected. Tarkett does not recommend or warrant any product or procedure for the remediation of high moisture in concrete substrates. There are several companies that manufacture products suitable for moisture remediation. Tarkett recommends products that meet ASTM F3010 Standard Practice for Two Component Resin Based Membrane-Forming Moisture Mitigation Systems for Use Under Resilient Flooring Systems must be capped with a cementitious underlayment applied prior to installing Tarkett flooring. Contact the mitigation system manufacturer for recommendations on capping prior to the installation of resilient flooring.					
	Test for pH in accordance with ASTM F710-19 (section 5.2.1.) Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring					
	Acceptable pH limits can be found in the adhesive section at the end of this document, on the adhesive label, and in the adhesive specifications found online at <a href="https://www.tarkettna.com">www.tarkettna.com</a> . Test results must not exceed the limits of the adhesive; if they do, the installation must not proceed until the problem has been corrected.					
Wood	Must be firmly nailed and sanded flat.					
	Countersink nail heads and fill depressions, joints, cracks, gouges, and chipped edges with a good quality Portland cement based patching compound designed for this purpose.					
	Do not install over OSB (Oriented Strand Board), particle board, chipboard, lauan or composite type underlayments.					
Terrazzo & Ceramic	Thoroughly sand to remove all glaze and wax					
	Remove or replace all loose tiles and clean the grout lines					
	Use a good quality, Portland cement-based leveling compound to fill all grout lines and other depressions					
Steel	Mechanically abrade to assist with adhesive bond					
NOTE: Follow all non- porous installation	Fully clean to remove all dirt, rust, and other contaminates					
instructions	Prime with a rust inhibitor					

#### **GENERAL INSTALLATION**

- 1. Tarkett recommends that the installation of new stairwell materials not be performed until all the other trades have completed their work. Proper precautions must be taken during and after the installation process to avoid damage to the newly installed stairwell materials.
- 2. Tarkett Stair Treads, Nosings, Risers, and Stringers are available in convenient lengths and sizes, but normally, trimming will be required to obtain proper fit on each stair.
- 3. If the shape of the step does not conform to the shape of the stair nosing, and cannot be altered to conform, then we do not recommend the installation of our products.
- 4. Wide staircases, which require butting multiple lengths of product, will require additional planning and dry fitting prior to adhesive installation to ensure proper pattern alignment.

#### STRINGER INSTALLATION

1. Adhesive Application: See adhesive chart below and follow adhesive label in structions for proper use.

#### 2. Stringer Installation:

- a. Stringers are applied to the vertical surface adjacent to the staircase and installed prior to stair treads, nosings, and risers.
- b. Use scribing felt or other appropriate material to make a template of the step stringer. Rough cut the template and use releasable masking tape to affix the template to the step stringer.
- c. Using a carpenters square, dividers or other appropriate tool, transfer the step profile onto the template.
- d. Lay the template over the stringer material and transfer the pattern onto the material. Cut the stringer material and check the fit to the staircase prior to applying the adhesive.
- e. If the wall surface is porous, install stringer utilizing Tarkett 960 Wall Base Adhesive. Follow the directions on the container for proper trowel size and application.
- f. If the wall surface is nonporous, apply Tarkett 946 Premium Contact Adhesive to both the wall surface and the back of the stringer material. Allow the adhesive to thoroughly "dry-to-touch". Carefully position the stringer material on the wall surface. Caution: Allow the 946 adhesive to dry to the touch with no transfer to the finger. Once the adhesive reaches the "dry-to-touch" state, the stringer must be installed within 45 minutes and immediately rolled.

NOTE: Once contact is made to the wall surface, the stringer material cannot be repositioned.

- g. The stringer must be rolled with a small hand roller to ensure adhesive transfer.
- h. Inspect the stringer surface, remove any excess adhesive.

# STAIR TREAD, NOSING, AND RISER INSTALLATION

1. Adhesive Application: See adhesive chart below and follow adhesive label instructions for proper use.

#### 2. Fitting the Stair Tread / Nosing:

- a. Tarkett Stair Treads, No sings, and Risers must be trimmed to proper size and dry laid prior to the application of adhesive.
- b. Since each step on a staircase can vary slightly in width, depth, and squareness, Tarkett recommends scribing each tread/nosing and riser to ensure properfit on the step.
- c. Measure the width of the step and place a pencil mark on the step's riser indicating the center of the step. Next, measure the length of the stair tread and mark the center point at the back of the tread where the tread meets the riser. When installing a nosing, extend the centerline mark approximately 4 to 5 inches back from the step nose.

NOTE: When installing patterned treads the same point of the pattern should always fall at the center point of each tread for visual alignment.

- d. To fit the stair tread to the depth of the step, place a 2 x 4 under the nose of the tread and position on step. If the tread is still deeper than the step, use the 4" side of the 2 x 4 or increase the size of the spacer, until the back of the stair tread is away from the riser.
- e. Set the dividers 1/16" wider than the width of the spacer (i.e.: 2 x 4), scribe, and cut the back of the stair tread.
- f. To cut the width, position the stair tread/nosing on the step with the right hand side net to the stringer.
- g. Utilizing a set of dividers, span the needles across the two centerline marks. Increase the measurement by approximately a 1/16" to allow for expansion.
- h. Move to the right hand side of the step. Place one needle on the stringer and the other on the tread or nosing. Start at the back of the tread and pull the dividers forward. Keep the needle firmly in contact with the stringer while exerting adequate downward force to scribe the tread and nose of the material.
- i. Following the scribe line, cut the material with a utility knife.
- j. Reposition the tread/nosing on the left hand side of the step and repeat the same procedure to fit the left side of the tread or nosing.
- k. After fitting the stair tread as described above, if the tread has carborundum strips, cut strips back 1/16" on each side of tread to allow for expansion. After installation of the tread, roll the carborundum strips to ensure adhesion.
- I. Position the stair tread/nosing on the step. There must be approximately 1/16" uniform clearance around the perimeter of the tread for expansion.

# Fitting the Riser:

- a. Following the previous directions for scribing the width of the stair tread/nosing, utilize the same centerline mark on the step, position the riser, scribe both sides, and cut.
- b. Set the trimmed stair tread and riser in place. Position the nose of the stair tread over the riser material. Using the edge of the stair tread nose as a guide, scribe a line on the riser material using a pin vice or divider needle. When utilizing an under-scribe tool, do not overlap the riser material with the tread nose prior to scribing. Follow the scribe line and cut the riser material with a utility knife to abut the bottom of the stair tread nose when installed.

# 4. Adhesive Application:

#### Standard Stair Tread / Nosing

- a. Prior to applying adhesive, wipe the back of the tread and nosing with denatured alcohol to remove any contaminants which may interfere with the adhesive bond. (Follow manufacturer's precautions when using denatured alcohol.)
- b. To adhere the nose of the stair tread directly to the step riser, apply a uniform coat of Tarkett 946 Premium Contact Adhesive to the nosing area of the stair tread and step riser and allow the adhesive to dry to the touch. The tread nose must be adhered to the step riser. Do not install tread nose over the resilient riser material.
- c. Important: Step surface porosity must be checked to determine if the substrate is porous or non-porous prior to applying 965 adhesive.
- d. For Porous Step Surfaces: Trowel the 965 adhesive onto the tread portion of the step surface using a 1/16" square-notched trowel. Keep adhesive back 1/2" from the step edge to provide a bonding area for the 930 Epoxy Caulking Compound or 931 Rapid Reaction Epoxy Caulking.

Allow the 965 adhesive proper open time. Open and working times are dependent on the ambient temperature, humidity, substrate porosity and temperature, and air movement. It is the installer's responsibility to modify the open and working timefor jobsite conditions.

- e. For Non-Porous Step Surfaces: Trowel the 965 ad hesive onto the tread portion of the step surface using a 1/16" V-notch trowel. Keep adhesive back 1/2" from the step edge to provide a bonding area for the 930 Epoxy Caulking Compound or 931 Rapid Reaction Epoxy Caulking. Allow enough open time for the adhesive to partially set and develop body. The stair tread or nosing MUST be placed into semi-wet adhesive to obtain a complete transfer of adhesive to the back of the tread which is vital for a successful installation.
- f. Gun an adequate amount of Tarkett 930 Epoxy Caulking Compound or 931 Rapid Reaction Epoxy Caulking into the nose of the stair tread/nosing to completely fill the void between the internal angle of the stair tread and external edge of the stair step. Caution: Improper application of the caulking compound can interfere with the adhesion of the 965 and 946 adhesives.
- g. Set the stair tread nose into its proper position on the step while lifting the back of the tread slightly to avoid adhesive contact. With the nose is in position lay the tread into place until the nose is tight to the step edge.
- h. Make certain that the nosing portion of the stair tread is fit tight against the step nosing. After installation is complete, firmly roll with a small hand roller.
- i. Important: If adhesive is allowed to remain uncovered, after the initial drying period, for periods longer than 45 minutes, a loss of adhesion strength will occur. Care should be taken by the installer not to spread more adhesive than can be worked within the 45 minute time frame.

#### Riser Material

- a. For riser installations on **porous surfaces**, apply Tarkett 960 Wall Base Adhesive to the ribbed surface (back) of the riser material with a 1/8" square-notched trowel. **The adhesive must cover 80% of the back of the riser material.** Leave a 1/4" (6.35mm) uncovered space at the top of the riser to prevent the adhesive from oozing to the surface of the riser.
- **b.** For riser installations on **non-porous surfaces** (i.e.: metal, epoxy paint, ceramics, etc.) apply Tarkett 946 Premium Contact Adhesive to both the step riser surface and the back of the riser material. Follow the adhesive label instructions for proper use.
- c. Position riser and roll with a small hand roller. NOTE: Once contact is made to the riser surface, the riser material cannot be repositioned.

#### Clean up:

- a. Inspect the tread and riser surfaces, remove any excess adhesive.
- b. Caution: 930 Epoxy Caulking Compound or 931 Rapid Reaction Epoxy Caulking cannot be removed when dried without resulting in damage to the stair tread/nosing material.
- c. Foot traffic must be restricted for 12 to 24 hours after installation depending on temperature and humidity.
- d. Flooring must be swept or vacuumed to remove loose dirt and grit (Lightly damp mop if necessary).
- e. All heavy traffic, rolling loads, furniture dollies, etc. must be restricted for a minimum of 72 hours after installation.

# ADHESIVE CLEAN UP

Excess adhesive should be removed during the installation process.

# 946™ Premium Contact Adhesive, 965™ Flooring & Tread Adhesive, 960™ Wall Base Adhesive

- Use a clean white cloth dampened with water to remove wet adhesive from floor covering and tools.
- Dried adhesive may require the use of denatured alcohol applied to a clean white cloth. (Follow manufacturer's precautions when using denatured alcohol.)

# 930™ Epoxy Caulking Compound, 931™ Rapid Reaction Epoxy Caulking

- Before the adhesive sets, remove excess adhesive from flooring and clean tools with denatured alcohol applied to a clean white cloth. (Follow manufacturer's precautions when using denatured alcohol.)
- . Do not allow adhesive to dry on the flooring surface.
- Removing dried adhesive may cause irreparable damage to the flooring surface.

# **MAINTENANCE**

- 1. Wait 72 hours after installation before performing initial cleaning.
- 2. A regular maintenance program must be started after the initial cleaning.
- 3. Refer to Tarkett's Maintenance Instructions for complete details.

# ADHESIVE SELECTION CHART

		Application and Coverage		Moisture / pH Limits		imits	Notes
Products	Adhesive	Porous	Non-Porous	RH%	CaCl <sub>2</sub>	pН	Notes
Stair Tread	965 Flooring and Tread Adhesive	1/16 x 1/16 x 1/16 SQ 125 – 150 sq. ft. per gallon	1/16 x 1/16 x 1/16 V 150 – 175 sq. ft. per gallon	N/A	N/A	N/A	The 965 adhesive is sensitive to substrate porosity. Determine substrate porosity and follow the adhesive label instructions regarding porous and non-porous substrate drying times prior to the installation.
Riser Stringer	960 Wall Base Adhesive	1/8 x 1/8 x 1/8 SQ 4" = 200-250 lf. 6" = 100-150 lf. 2.5" = 300-350 lf.	USE 946 PREMIUM CONTACT ADHESIVE	N/A	N/A	N/A	Porous surfaces ONLY
Stair Nosings	946 Premium Contact Adhesive	Applied with Brush or Roller 1 qt. unit 24 – 36 sq. ft. 1 gal. unit 144 – 215 sq. ft.	Applied with Brush or Roller 1 qt. unit 24 – 36 sq. ft. 1 gal. unit 144 – 215 sq. ft.	N/A	N/A	N/A	The 946 adhesive MUST be used to adhere the nose to the stair riser surface (DO NOT adhere to the resilient riser material)  Coverage based on both sides
Stair Nosings & Vinyl Stair Treads	930 Epoxy Caulking Compoundor	30 ounce Cartridge 1/4" = 50 lf.	30 ounce Cartridge 1/4" = 50 lf.	N/A	N/A	N/A	
Stair Nosings & Vinyl Stair Treads	931 Rapid Reaction Epoxy Caulking	30 ounce Cartridge 1/4" = 50 lf.	30 ounce Cartridge 1/4" = 50 lf.	N/A	N/A	N/A	

# **Tarkett North America**

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