

INSTALLATION INSTRUCTIONS LUXURY VINYL TILE AND PLANK

Even Plane

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 www.tarkett.com for the most current installation and maintenance 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 of our control. Users are advised to confirm the suitability of this product by their own tests.

STORING ALL PRODUCTS & ADHESIVES	PRE-INSTALLATION			
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 hours prior to, during the entire installation, and 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. The location selected for site-conditioning must be either the room where the flooring will be installed or have similar ambient temperature and relative humidity as the room where the flooring will be installed.			
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. If exposure to intense or direct sunlight will continue after the installation and adhesive curing period, refer to the adhesive selection table below.			
Maintain relative humidity between 40 – 60%.				
Tarkett products are recommended for installation in Indoor, Climate-Controlled spaces only. NOTE: Exposure to excessive UV light can result in fading, degradation, and/or color variation.	Distributor or Representative prior to installation if any defects are found. Nature Tarkett will not pay labor costs claimed on installed materials with v			

GENERAL SUBFLOOR PREPARATION

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 substrate.

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

Substrate Construction	Requirements					
	Permanently dry, clean, smooth, and structurally sound					
	The finished substrate must be flat to tolerance as specified. If not otherwise specified, refer to ASTM F710 Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring, which requires the substrate to be flat to within the equivalent of 3/16" in 10' (4.75mm in 3.05m)					
All Substrates	Free of all dust, loose particles, solvents, paint, grease, oil, wax, alkali, sealing/curing and parting compounds, old adhesive, and 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					

(All Substrates Cont.)	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					
	AT THE TIME OF INSTALLATION: Testing the substrate with a Tramex moisture encounter meter (refer to ASTM F2659) is recommended due to possible issues related to topical moisture from dew point conditions. Substrate surface readings must not exceed 4.0%, if above 4.0%, contact Tarkett Technical Services prior to beginning installation. If these conditions are not properly addressed, the open and working times, bond strength, and setting of the adhesive may be affected.					
	Fill all depressions, dormant cracks, dormant saw cuts (control joints), and other surface irregularities with a good quality, 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 NOTE: Refer to ACI 302.2 for recommended drying times for newly poured concrete.					
	Prepared in accordance with ASTM F710 Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring					
	DO NOT install Tarkett flooring over expansion joints. 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 substrate conditions.					
	DO NOT install Tarkett flooring directly over moving cracks or joints in the substrate. Contact a cementitious patch manufacturer to meet specific substrate conditions.					
	Test for moisture in accordance with:					
	ASTM F2170 Standard Test Method for Determining Relative					
	Humidity in Concrete Floor Slabs Using in situ Probes					
	<u>-OR-</u>					
	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 www.tarkett.com.					
Concrete	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 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 www.tarkett.com . Test results must not exceed the limits of the adhesive; if they do, the installation must not proceed until the problem has been corrected.					
	MOISTURE MITIGATION					
	If the moisture and pH test results exceed the limits of the adhesive, 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:					
	Contact Moisture Remediation product manufacturer and supply testing results.					
	 Follow the remediation recommendation provided using products that meet ASTM F3010 Standard Practice for Two Component Resin Based Membrane-Forming Moisture Mitigation Systems for Use Under Resilient Flooring Systems. 					
	Cap the moisture remediation system with a cementitious-based product per the moisture remediation system manufacturer's recommendations for primer, thickness, drying time, etc.					

Install Tarkett flooring over the cementitious-based capping product following our standard installation instructions.

	Underlayment grade plywood that is smooth, free of knots or voids, and a fully sanded face. DO NOT use preservative treated, fire-retardant plywood as these may be manufactured with resins or adhesives that can discolor the flooring					
	NOTE: Do not install over OSB (Oriented Strand Board), particle board, chipboard, lauan, cementitious tile backer boards, or composite type underlayments. DO NOT install over wood floors in direct contact with concrete substrates or installed over sleeper systems.					
	Minimum 1" (25.4mm) overall thickness, Double Floor wood construction in compliance with ASTM F1482 Standard Practice for Installation and Preparation of Panel Type Underlayments to Receive Resilient Flooring					
Wood	NOTE: Single Floor Wood Construction substrates and existing Tongue and Groove strip wood must be covered with an APA approved underlayment plywood. For single floor wood construction and strip wood floors with a face width of 3" (76mm) or less, use minimum ½" (6.4 mm) thick underlayment panels. For strip wood floors with a face width wider than 3" (76mm) face width, use minimum ½" (13mm) thick underlayment panels.					
	Minimum 18" (47cm) of cross-ventilated space between the bottom of joists and ground, and exposed earth spaces must be sealed with a polyethylene moisture barrier					
	Meet local and national building codes. Refer to ASTM F1482 Standard Practice for Installation and Preparation of Panel Type Underlayments to receive Resilient Flooring for additional information.					
	Countersink nail heads and fill depressions, joints, cracks, gouges, and chipped edges with a good quality, cement based patching compound designed for this purpose					
	Thoroughly sand to remove all glaze and wax					
Terrazzo & Ceramic	Remove or replace all loose tiles and clean the grout lines					
	Use a good quality, cement-based leveling compound to fill all grout lines and other depressions					
	NOTE: Follow all <u>non-porous</u> installation instructions					
Otest	Mechanically abrade to assist with adhesive bond					
Steel	Fully clean to remove all dirt, rust, and other contaminates					
	Prime with a rust inhibitor					
	Panels must be firm, level, smooth, clean, dry, and free from defects. There should be no flexing or movement of the panels system. If panels have a concave distortion, a good quality cementitious patch must be applied to ensure the panels are level before installation.					
	NOTE: Although all preparations may be taken to meet our recommendations, telegraphing of the panel joints may still be visible through the finish flooring.					
Raised Access	Height difference between panels cannot exceed 1/32" (0.75mm)					
Panels	All fasteners must be flush with the top of the panels.					
	Gaps between panels cannot exceed 3/64" (1mm)					
	Offset all tile and plank seams from the panel seams					
	Follow all adhesive application instructions as outlined in the Adhesive Selection table at the end of this document					
Radiant Heat	Must be embedded in concrete a minimum of 2" below the surface of the substrate					
	Check the manufacturer of the radiant heat system to ensure it is safe for use with resilient flooring					
	Concrete surface must never exceed 85°F (29.4°C)					
	24 hours prior to install, lower the thermostat to a minimum of 65°F (18.3°C). Maintain this temperature throughout installation and for 48 hours after completion					
	48 hours after installation, gradually increase the thermostat in increments of 5° every twenty-four hours, never exceeding $85^{\circ}F$ (29.4°C)					

INSTALLATION

- 1. Adhesive Application: See adhesive chart below and follow adhesive label instructions for proper use.
- 2. Tile & Plank Installation Procedure:

NOTE: When installing using Tarkett 959HM Adhesive, follow Adhesive Back Rolling instructions found on www.tarkett.com

- a. Batch numbers should not be mixed during the installation.
- **b.** Square the area and establish reference points on the substrate based on recommended layout. Please refer to the current product guide found on the website for recommended layouts.
- c. Apply the adhesive to the substrate and allow 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 time for jobsite conditions.

- d. Use established reference points and install the flooring.
- e. Install planks in the same direction, in a random pattern, and offset plank end joints by a minimum of 9" (22.9 cm). To achieve a more aesthetic, natural appearance, avoid stair-step and H-patterned layouts by using random sizing 9" (22.9 cm) and larger to start each row.
- f. Install tiles with the directional arrows (found on the back on each tile) pointing in the same direction. Tiles may be 'quarter-turned' to create a pattern.
- g. Planks and tiles should be lightly butted together when placing the flooring into the adhesive.
- h. Do not force planks and tiles together creating a ledge condition at the seams and corners. Sliding tiles will force the adhesive out between the seams
- i. When using 975 Two-Part Urethane or 996 Two-Part Epoxy Adhesive the installer MUST work off the flooring.
- j. Periodically, lift the corner of an installed tile to ensure proper transfer of adhesive.
- k. Roll floor in both directions with a 100 pound three-section roller. Use a small hand roller in areas that cannot be reached with a large roller.
- I. Inspect the floor surface, especially seams, and remove any adhesive on the surface.

3. Transition Directly to ethos® Modular with Omnicoat Technology™ Carpet:

NOTE: Only ethos Modular carpet is approved for installation abutting Even Plane without a transition piece. If the total carpet thickness exceeds the height of the Even Plane by 2.5mm (3/32") or greater, the use of Tarkett Subfloor Levelers is recommended by following the below steps.

- a. Even Plane may require being built up so that the surface of the carpet pile and the surface of the Even Plane are level within 2.5mm (3/32"). This will require use of the Tarkett Subfloor Leveler Strips.
- b. Begin by installing the ethos Modular carpet per standard installation instructions.
- c. Dry fit the appropriate subfloor leveler against the finished edge of the ethos Modular Carpet and trim to fit.
- d. Apply the adhesive for the subfloor leveler to the substrate and allow 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 time for jobsite conditions.
- e. Install the Tarkett Leveler Strips into the adhesive.
- f. Roll the leveler strips in both directions with a 100 pound three-section roller. Use a small hand roller in areas that cannot be reached with a large roller.
- g. To minimize the possibility of premature cracking of finish flooring material or telegraphing of the level change through the finish flooring material, the leveler strip must be feather edged to the substrate with a good quality, cement-based patching compound.
- h. Once all patching compound has dried, finish flooring materials can be installed immediately after the proper installation of the Tarkett Leveler strip.
- i. Following Non-Porous installation instructions, apply adhesive to the leveler strip for the ethos Modular. 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 time for jobsite conditions.
- j. The ethos Modular must be protected from resilient maintenance products. Apply a bead of #C-XL Water Based Seam Sealer to the joint line of the ethos Modular and install the first row of Even Plane into the seam weld by sliding the tile up to the bead of seam weld. NOTE: Avoid pressing the Even Plane down into the seam weld as this will push the weld away from the seam and not seal the joint. Remove any weld that gets on the face of the carpet. C-XL can be easily cleaned while wet with water and a clean white towel.
- k. Install the remaining ethos Modular per standard installation instructions.

4. Post Installation Floor Protection:

We recommend that the installation of new flooring material 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 flooring.

a. Immediately after installation:

- · All traffic must be restricted for a minimum of 24 hours after installation.
- All heavy traffic, rolling loads, pallet jacks, and furniture or appliance placement must be restricted for a minimum of 72 hours after installation.
- Flooring must be swept or vacuumed to remove loose dirt and grit prior to the application of proper floor protection. (Do not trap dirt and grit
 under floor protection.)
- Apply floor protection suitable for construction foot traffic such as: undyed heavy Kraft paper, Ram Board, 1/8" Masonite panels, or similar product designed for resilient floor protection.

b. 72 hours after installation:

- Areas that will receive heavy traffic, rolling loads, pallet jacks, and furniture or appliance placement must be protected with ¼" thick Masonite
 or similar wood panels.
- The floor must be swept or vacuumed prior to the placement of the floor protection panels. (Lightly damp mop if necessary)

NOTE: Do not use plastic or other non-porous materials to protect the newly installed flooring that could prevent the adhesive from drying properly.

ADHESIVE CLEAN UP

Excess adhesive should be removed during the installation process.

959HM™ High Moisture Substrate 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 or methyl hydrate applied to a clean white cloth. (Follow manufacturer's precautions when using these chemicals.)

975™ Two-Part Urethane Adhesive, 996™ Two-Part Epoxy Adhesive

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

MAINTENANCE

- 1. Once the installation is completed, the service temperature of the space must never fall below 55°F (12.8°C).
- 2. Wait 72 hours after installation before performing initial cleaning.
- 3. A regular maintenance program must be started after the initial cleaning.
- 4. Refer to Tarkett's Maintenance Instructions for complete details.

ADHESIVE SELECTION CHART

Only Tarkett adhesives are recommended for use with Tarkett products. When used as recommended, Tarkett adhesives are guaranteed by the limited warranty of the flooring product.

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A pH test must be performed in accordance with ASTM F710-19 (section 5.2.1.) Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring

		Application and Coverage			Moisture / pH Limits			Notes	
Products	Adhesive	Porous	Non-Porous		RH%	CaCl ₂	рН	notes	
Even Plane	959HM High Moisture Substrate Adhesive	1/16 x 1/16 x 1/16 SQ 125-150 sq. ft. per gallon	1/32 x 1/16 x 1/32 U 250 – 300 sq. ft. per gallon	New Concrete	99%	10 lbs.	7-12	substrate porosity and follow the adhesive label instructions regarding porous and non-porous substrate drying times prior to the	
				2+ Year Old Concrete	95%	8 lbs.	7-10		
Even Plane	975 Two-Part Urethane Adhesive	1/32 x 1/16 x 1/32 U 225 – 250 sq. ft. per gallon	1/32 x 1/16 x 1/32 U 225 – 250 sq. ft. per gallon		90%	8 lbs.	9	For application in areas subject to heavy point loads, rolling loads, topical moisture, or temperature extremes.	
Even Plane	996 Two-Part Epoxy Adhesive	1/32 x 1/16 x 1/32 U 225 – 250 sq. ft. per gallon	1/32 x 1/16 x 1/32 U 225 – 250 sq. ft. per gallon		90%	8 lbs.	9	For application in areas subject to heavy point loads, rolling loads, topical moisture, or temperature extremes. Do not use on wood or metal substrates.	

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