

HARMONIUM xf²™ LINOLEUM SHEET FLOORING

Veneto, Etrusco, Lenza, Tonali and Veneto Acoustiflor®

Installation Instructions

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.tarkettna.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 ext. 9297 with any questions.

HANDLING AND STORAGE

1. All Tarkett products must be stored in an indoor, climate controlled space and be protected from the elements. Temperature must be maintained between 65°F (18.3°C) and 85°F (29.4°C) with a relative humidity between 40% and 60%.
2. Rolls must be stored and secured vertically, tightly rolled face-out on an appropriate sturdy cardboard tube.
3. Tarkett flooring and adhesives must be site conditioned at room temperature for 48 hours prior to, during, and after installation. Room temperature must be maintained between 65°F (18.3°C) and 85°F (29.4°C) and the ambient relative humidity must be between 40% and 60%. We strongly recommend the permanent HVAC system be fully operating. **NOTE:** If a system other than the permanent HVAC source is utilized, it must provide proper control of both temperature and humidity to recommended or specific levels for the appropriate time duration as stated above.
4. Once the installation is completed, the service temperature of the space must never fall below 55°F (12.8°C).
5. In areas that are exposed to intense or direct sunlight, the product must be protected during the conditioning, installation, and adhesive curing periods, by covering the light source.
6. Tarkett products are not recommended for exterior use. Exposure to excessive UV rays can result in fading, degradation, and/or color variation.
7. The highest quality of materials and workmanship is employed in the manufacture of Tarkett Flooring and careful inspection is made before shipment. A quality installation is the responsibility of the installer. It is the installer's responsibility to verify the accuracy of the order and to ensure the materials are checked for damage, defects, and satisfactory color match. An authorized Tarkett distributor or Tarkett representative must be notified of any defects before installation proceeds. **Tarkett will not pay for labor or material costs claimed on installed materials with visual defects.**
8. Tarkett cannot accept responsibility for any loss or damage that may result due to processing or working conditions and/or workmanship outside our control.
9. Users are advised to confirm the suitability of this product by their own tests.

GENERAL SUBFLOOR PREPARATION

1. **All subfloors** must be permanently dry, clean, smooth, and structurally sound. The surface must be free of all dust, loose particles, solvents, paint, grease, oil, wax, alkali, sealing/curing compounds, old adhesive, and any other foreign material, which could affect the installation and adhesive bond to the substrate. Permanent and non-permanent markers, pens, crayons, paint, or similar marking tools used to mark the substrate or the back of the resilient flooring material will cause migratory staining. Subfloor contamination or markings that bleed through the flooring material causing discoloration or staining are excluded from the Tarkett Limited Warranty. All substrate contaminants must be mechanically removed prior to the installation of the flooring material. **NOTE: Do not use liquid solvents or adhesive removers.**

Caution: Do not use oil based sweeping compounds.

Fill all depressions, cracks, and other surface irregularities with a good quality Portland cement based underlayment patching compound appropriate for this purpose.

Tarkett does not recommend installing over existing resilient floors. All existing flooring and adhesives must be mechanically removed prior to installing the new flooring material – **Do not use chemical adhesive removers or solvents.** Refer to the Resilient Floor Covering Institute (RFCI), *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.

2. **Concrete subfloors** must be constructed as recommended by the American Concrete Institute's ACI 302.2 Guide for Concrete Slabs that Receive Moisture-Sensitive Flooring Materials and prepared in accordance with ASTM F 710 Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring.

Do not install Tarkett flooring over expansion joints, control 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.

All concrete subfloors must be tested for moisture and pH (alkalinity):

Moisture testing must be conducted in accordance with ASTM F 2170 Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using *in situ* Probes or ASTM F 1869 Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride. Following ASTM F 2659 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 F 2170 or ASTM F 1869.

Acceptable moisture limits can be found in the adhesive section below, on the adhesive label, and in the adhesive specifications online. 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 particular product or procedure for the remediation of high moisture in concrete substrates. There are several companies that manufacture products suitable for moisture remediation. We suggest you refer to the current ASTM F 710 Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring and ASTM F 3010 Standard Practice for Two Component Resin Based Membrane-Forming Moisture Mitigation Systems for Use under Resilient Flooring Systems.



THE ULTIMATE
FLOORING EXPERIENCE

A pH test for alkalinity must be conducted. Acceptable pH range of the adhesive can be found in the adhesive section below, on the adhesive label, and in the adhesive specifications online. Results must not exceed the limits of the adhesive. If the test results are not within the acceptable range, the installation must not proceed until the problem has been corrected.

- 3. Wood subfloors** must have a minimum 18" (47 cm) of cross-ventilated space between the bottom of the joist and ground. Exposed earth crawl spaces must be sealed with a polyethylene moisture barrier.

Subfloors must meet local and national building codes. Trade associations, such as the APA -The Engineered Wood Association, offer structural guidelines for meeting various code requirements. Refer to ASTM F 1482 Standard Practice for Installation and Preparation of Panel Type Underlayments to receive Resilient Flooring, for additional information.

Single Floor Wood Construction and Tongue and Groove subfloors must be covered with 1/4" (6.4 mm) or 1/2" (13 mm) APA approved underlayment plywood. Use 1/4" (6.4 mm) thick underlayment panels for boards with a face width of 3" (76 mm) or less. For boards wider than 3" (76 mm) face width use 1/2" (13 mm) underlayment panels.

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.

- 4. Terrazzo and Ceramic floor** surface must be thoroughly sanded to remove all glaze and waxes. 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.
- 5. Steel floor** surface must be mechanically abraded to assist with the adhesive bond. The floor must be cleaned to remove all dirt, rust and other contaminants that could affect the adhesive or the bond of the flooring material to the substrate. Surface must be primed with a rust inhibitor. It is important to follow the non-porous installation instructions when installing over metal.
- 6. Concrete floors equipped with a radiant heating system:** Turn the heat down to 65°F (18.3°C) for at least 48 hours before installation. Heat may be gradually returned to operating temperature 48 hours after installation. Surface temperature must not exceed 85°F (29.4°).
- 7. 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 concrete.

INSTALLATION

- 1. Adhesive Application:** See adhesive chart below and follow adhesive label instructions for proper use of the 950 or 965 adhesive.

2. Sheet Installation for Heat Welding:

- Install rolls in sequential order following roll numbers on the labels.
- Do not reverse sheets.
- Cut pieces to length allowing approximately 3" (76 mm) excess for trimming.
- Cut the first piece to fit by using the direct scribing or pattern scribing method.
- Remove 1/2" (13 mm) off the factory seam edge using an edge trimmer or straight edge and knife.
- Position all remaining sheets so that the top sheet overlaps the previous sheet by 1/2" (13 mm). Trim 1/2" (13 mm) off opposite seam edge using an edge trimmer or straight edge and knife.
- Fold back the sheets and apply the adhesive to the substrate and allow proper open time. Proper adhesive transfer must be achieved by laying into wet adhesive. **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.**
- When using 975 Two-Part Urethane Adhesive the installer **MUST** work off the flooring or use kneeling boards.
- Periodically, lift a corner of the sheet to ensure proper transfer of adhesive.
- Roll the flooring in both directions using a 100 pound three-section roller. Use a small hand roller in areas that cannot be reached with a large roller.
- Inspect the floor surface, especially seams, and remove any adhesive on the surface.

3. Heat Weld Seam:

- Recess scribe the seam with a slight gap not to exceed 1/64" (0.4mm) to help guide the router.
- Insert a scrap piece of material under the scribe mark to protect the seam edge of the first piece.
- Use a sharp knife to cut the seam following the scribe mark. Cut must be perpendicular, do not angle the knife blade.
- Remove the scrap material and seam trimmings before rolling the seam with a small hand roller.
- Roll the seam area with a 100 pound three-section roller.
- Wait a minimum 24 hours after installation before heat welding the seams.

- Route the material down to the jute taking care not to cut through the jute fibers. On 3.2 mm or 4 mm gauge linoleum route 2/3 the thickness of the material. Route down to the jute but not into the foam layer of the Veneto Acoustiflor.

- Use Tarkett linoleum weld rod.

4. Sheet Installation for Net Fit Seam: NOT FOR VENETO ACOUSTIFLOR

Adhesive Selection: See adhesive chart below for proper use of the 965 adhesive.

- Install rolls in sequential order following roll numbers on the labels.
- Do not reverse sheets.
- Cut pieces to length allowing approximately 3" (76 mm) excess for trimming.
- Cut the first piece to fit by using the direct scribing or pattern scribing method.
- Remove 1/2" (13 mm) off the factory seam edge using an edge trimmer or straight edge and knife.
- Position all remaining sheets so that the top sheet overlaps the previous sheet by 1/2" (13 mm). Trim 1/2" (13 mm) off opposite seam edge using an edge trimmer or straight edge and knife.
- Fold back the sheets and apply the 965 adhesive to the substrate and allow proper open time. Proper adhesive transfer must be achieved by laying into wet adhesive. **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.**
- Immediately recess scribe the seam to provide a **net** fit. Do not compress fit the seam or leave any gaps.
- Insert a scrap piece of material under the scribe mark to protect the seam edge of the first piece.
- Use a sharp knife to score the seam following the scribe mark. Cut the score mark with a hook blade keeping the cut perpendicular.
- Remove the scrap material and seam trimmings before rolling the seam with a steel hand roller.
- Periodically, lift a corner of the sheet to ensure proper transfer of adhesive.
- Roll the flooring in both directions using a 100 pound three-section roller. Use a small hand roller in areas that cannot be reached with a large roller. Inspect the floor surface, especially seams, and remove any adhesive on the surface.
- When using 975 Two-Part Urethane Adhesive the installer **MUST** work off the flooring or use kneeling boards.

5. Flash Coving:

- Use Johnsonite CFS -00-A Cove Filler Strip.
- Apply 950 or 965 to wall area using a trowel or paint brush.
- Net fit the flooring material into the cove cap.
- Roll the coved material with a small hand roller.

6. 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 1/4" 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.

950 Linoleum Sheet 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.)

965 Flooring and Tread 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.)

975 Two-Part Urethane Adhesive

- 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

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

ADHESIVE SELECTION CHART

Products	Adhesive	Application and Coverage		Moisture / pH Limits			Notes
		Porous	Non-Porous	RH%	CaCl ₂	pH	
Veneto Etrusco Lenza Tonali Veneto Acoustiflor	950 Linoleum Sheet Adhesive	3/32 x 3/32 x 3/32 V 100 - 125 sq. ft. per gallon	1/16 x 1/16 x 1/16 SQ 125 - 150 sq. ft. per gallon	80%	5 lbs.	9	Complete transfer of wet adhesive to the material back must be achieved.
Veneto Etrusco Lenza Tonali	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 SQ 125 - 150 sq. ft. per gallon	85%	7 lbs.	9	Complete transfer of wet adhesive to the material back must be achieved.
Veneto Etrusco Lenza Tonali Veneto Acoustiflor	975 Two-Part Urethane Adhesive	1/16 x 1/16 x 1/16 V 150 - 175 sq. ft. per gallon	1/16 x 1/16 x 1/16 V 150 - 175 sq. ft. per gallon	85%	7 lbs.	9	For application in areas subject to heavy point loads, rolling loads, topical moisture, or temperature extremes.



THE ULTIMATE
FLOORING EXPERIENCE

Technical Services Department
30000 Aurora Road, Solon, Ohio 44139
(800) 899-8916 ext 9297
Fax (440) 632-5643
email: info@johnsonite.com
www.tarkettna.com