

# INSTALLATION INSTRUCTIONS ELECTROSTATIC SHEET FLOORING

iQ Granit™ SD

## 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="https://www.tarkett.com">www.tarkett.com</a> 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.

Click here to watch instructional video:
Installation of Granit SD Sheet & Tile
(https://youtu.be/Jhg1znWVNec)

## 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.

NOTE: Tarkett recommends 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.

STORING ALL PRODUCTS & ADHESIVES	PRE-INSTALLATION			
Immediately upon delivery, rolls must be stored vertically, tightly rolled	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 48 hours after installation.			
face-out on an appropriate sturdy cardboard tube.	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, accessories, 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 readings 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 adhesive chart below.			
Maintain relative humidity between 40 – 60%.	Inspect all flooring material to verify accuracy of order as well as for any dama			
Tarkett products are recommended for installation in Indoor, Climate-Controlled spaces only.	visual defects, and satisfactory color match. Notify an authorized Tarkett Distributor or Representative prior to installation if any defects are found. NOTE: Tarkett will not pay labor or material costs claimed on installed materials			
NOTE: Exposure to excessive UV light can result in fading, degradation, and/or color variation.	with visual defects.			

# **GENERAL SUBFLOOR PREPARATION**

An adhesive bond test must be performed per ASTM F3311 Standard Practice for Mat Bond Evaluation of Performance and Compatibility for Resilient Flooring System Components Prior to Installation and 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				
All Substrates	Permanently dry, clean, smooth, and structurally sound				
	The finished substrate must be flat to tolerance as specified. If not otherwise specified, refer to <b>ASTM F710</b> 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)				
	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 contaminants 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 the substrate is not 10°F (5.6°C) above the dew point, contact Technical Services at (800) 899-8916					
(All Substrates Cont.)	AT THE TIME OF INSTALLATION: Testing the substrate with a Tramex moisture encounter meter 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					
	NOTE: The use of a high moisture and alkali resistant cementitious underlayment may be required. Contact a cementitious underlayment manufacturer for best recommendations.					
	<b>DO NOT install Tarkett flooring over expansion joints.</b> 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.					
Company	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.tarkett.com">www.tarkett.com</a> .					
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 F3441 Standard Guide for Measurement of pH Below 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.tarkett.com">www.tarkett.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.					
	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 group distinguished with a product that manufacturer and supply testing results.					
	<ul> <li>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 or ASTM F3513 Standard Practice for Single Component, Fluid-Applied Membrane-Forming Moisture Mitigation Systems for Use Under Resilient Floor Coverings.</li> </ul>					
	<ul> <li>Cap the moisture remediation system with a cementitious-based product per the moisture remediation system manufacturer's recommendations for primer, thickness, drying time, etc.</li> </ul>					
	Install Tarkett flooring over the cementitious-based capping product following our standard installation instructions.					

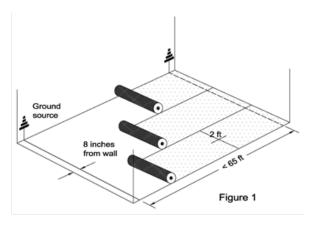
Underlayment grade plywood that is smooth, free of knots or voids, and a fully sanded face. <b>DO NOT</b> use preservative treated, fire-retardant plywood as these may be manufactured with resins or adhesives that can discolor the flooring					
NOTE: Do not install over OSB (Oriented Strand Board), particle 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 <b>ASTM F1482</b> Standard Practice for Installation and Preparation of Panel Type Underlayments to Receive Resilient Flooring					
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 underlaymer 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 <b>ASTM F1482</b> 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					
Refer to ASTM F2419 Standard Practice for Installation of Thick Poured Gypsum Concrete Underlayments and Preparation of the Surface to Receive Resilient Flooring for guidelines when pouring gypsum underlayments or preparing for use as an underlayment under Tarkett flooring. Follow the gypsum underlayment manufacturer's recommendations for proper application and preparation. Refer to the product manufacturers recommendations for sealing and/or priming the finished surface.					
When installing a product with adhesive, the gypsum surface should be capped with a cementitious underlayment. Follow the underlayment manufacturers recommendations for proper application.					
AT THE TIME OF INSTALLATION: Testing the substrate with a Tramex moisture encounter meter (refer to ASTM F2659) i recommended due to possible issues related to topical moisture from dew point conditions. Substrate surface readings must not exceed 0.5% when measured on the Gypsum settings, if above 0.5%, 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.					
Thoroughly sand to remove all glaze and wax					
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					
Mechanically abrade to assist with adhesive bond					
Fully clean to remove all dirt, rust, and other contaminates					
Prime with a rust inhibitor					
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°F (29.4°C)					
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## **ELECTROSTATIC SHEET INSTALLATION**

NOTE: 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. If substrate readings are above 4.5%, 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.

#### 1. Sheet Installation Procedure:

- a. Install rolls in sequential order following roll numbers on the labels.
- b. Reverse sheets.
- c. Cut pieces to length allowing approximately 3" (76 mm) excess for trimming.
- d. Cut the first piece to fit by freehand knife, direct scribing or pattern scribing method
- e. Trim 1/2" (13 mm) off selvage edge on the seam side of the sheet using an edge trimmer or straight edge and knife. Cut must be perpendicular, do not angle the knife blade.



- f. Establish all relevant reference marks on the sheet and the subfloor to ensure sheets are aligned at seams and have not shifted.
- g. Position dead weight like a 100 lbs. floor roller or adhesive pails onto half of the sheet to prevent unintentional movement. Fold back the first half of the sheet.
- h. Using a straight edge and pencil or a white chalk line, mark a parallel glue line onto the substrate at the fold in the sheet. This line will serve as the guideline for straight adhesive application.
- i. Fold back the sheets and install copper grounding strips as seen in Fig. 1. A copper grounding strip is placed across the width of the sheets approximately 8 inches from the wall. The copper grounding strips should extend up the wall to a known ground.
- j. All end/head seams must have a 2-foot section of copper grounding strip as seen in Fig. 1.
- k. In rooms less than 65 ft. in length a copper grounding strip must be installed at both short ends of the room. In rooms that exceed 65ft. in length a copper grounding strip must be installed at both short ends of the room and at equal intervals in between. The distance between each strip must never exceed 65 ft.
- I. Apply a 3" (76 mm) band of 906 Conductive Adhesive over ALL copper grounding strips.
- Adhesive Application: See adhesive chart below and follow adhesive label instructions for proper use. NOTE: When using Tarkett 975 Two Part
  Urethane Adhesive or Tarkett 996 Two Part Epoxy Adhesive, the installer <u>MUST</u> work off the flooring or use kneeling boards.
  - a. Apply the adhesive to the substrate starting at the guideline established in 1.h. and working away from the guideline. Allow proper open time. NOTE: 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.
  - b. Ensure proper techniques are used to eliminate telegraphing of adhesive at the fold of the sheet.
  - c. Install the first half of the sheet into the adhesive and roll the flooring in both directions using a 100 pound three-section roller. Avoid allowing the weight of the roller to contact the sheet flooring closer than 6" (152 mm) from the previously established adhesive guideline (1.g.) and stay 3" (76 mm) away from the seams where the flooring sheets will overlap.
  - d. Remove the dead weight from the unglued half of the sheet and fold this half back from the substrate.
  - e. Apply adhesive carefully at the adhesive guideline to avoid overlapping previously applied adhesive and/or voids in coverage and in the remainder of the open area of the substrate. Allow proper open time. NOTE: 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.
  - f. Install the second half of the sheet and roll in both directions, repeating steps 2.c. above for rolling the flooring and staying 3" (76 mm) away from seams. The adhesive guideline area may be rolled at this time.

## 3. Seams:

- a. Inspect the floor surface, especially seams, and remove any adhesive on the surface.
- b. Position all remaining sheets so that the top sheet overlaps the previous sheet by ½" to ¾" (13 mm to 19 mm). Trim ½" (13 mm) off opposite seam edge using an edge trimmer or straight edge and knife. Cut must be perpendicular, do not angle the knife blade.
- c. Recess-scribe the seam to achieve a proper fit.
- d. Vinyl sheet flooring must be welded using the Heat Weld or Cold Weld methods listed below.

## 4.a. Heat Weld Seam:

#### NOTE: It is recommended to heat weld seams to provide a sterile and watertight seam.

- a. Recess scribe the seam with a slight gap not to exceed 1/64" (0.4mm) to help guide the router.
- b. Insert a scrap piece of material under the scribe mark to protect the seam edge of the first piece.
- c. Use a sharp knife to cut the seam following the scribe mark. Cut must be perpendicular, do not angle the knife blade.
- d. Remove the scrap material and seam trimmings before rolling the seam with a small hand roller.
- e. Roll the seam area with a 100 pound three-section roller.
- f. Wait a minimum 24 hours after installation before heat welding the seams.
- g. Rout approximately 2/3 of the thickness of the material.
- h. Use Tarkett vinyl weld rod.

#### 4.b. Cold Weld Seam:

- a. Recess scribe the seam to provide a net fit.
- b. Insert a scrap piece of material under the scribe mark to protect the seam edge of the first piece.
- c. Use a sharp knife to cut the seam following the scribe mark. Cut must be perpendicular, do not angle the knife blade.
- d. Remove the scrap material and seam trimmings before rolling the seam with a small hand roller.
- e. Roll the seam area with a 100 pound three-section roller.
- f. Wait at least 2 to 3 hours after the flooring material has been installed before applying the Tarkett Cold Weld Liquid.
- g. Refer to the Cold Weld instructions for complete Cold Weld Liquid application details.

## 5. Flash Coving:

- a. Use Tarkett CFS -00-A Cove Filler Strip.
- b. Apply 925 Resilient Flooring Adhesive to wall area using a trowel or paint brush.
- c. Net fit the flooring material into the cove cap.
- d. 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 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.

## 906™ Conductive 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 (methyl hydrate) or 70% isopropyl alcohol applied to a clean white cloth. (Follow manufacturer's precautions when using these chemicals.)

## **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**

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.

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.

A pH test must be performed in accordance with ASTM F3441 Standard Guide for Measurement of pH Below Resilient Flooring

		Application and Coverage		Moisture / pH Limits		imits	Notes
Products	Adhesive	Porous	Non-Porous	RH%	CaCl <sub>2</sub>	рН	Notes
iQ Granit SD (FIELD ONLY, MUST BE USED WITH 906)	925 Resilient Flooring Adhesive	1/32 x 1/16 x 1/32 U 250 – 300 sq. ft. per gallon	1/32 x 1/16 x 1/32 U 250 – 300 sq. ft. per gallon	85%	7 lbs.	9	The 925 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.
iQ Granit SD (FIELD ONLY, MUST BE USED WITH 906)	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.
iQ Granit SD (FIELD ONLY, MUST BE USED WITH 906)	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.
iQ Granit SD (USE WITH ALL COPPER STRIPS)	906 Conductive Adhesive	1/32 x 1/16 x 1/32 U 250 – 300 sq. ft. per gallon	POROUS ONLY	80%	5 lbs.	9	Apply as instructed on copper grounding strips when installing sheet.
iQ Granit SD	Cold Weld Liquid	4.5-ounce tube 175 – 200 lin. ft. per tube	4.5-ounce tube 175 – 200 lin. ft. per tube	N/A	N/A	N/A	

## **Tarkett North America**

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