JOHNSONITE TACTILE WARNING SURFACE

Installation and Maintenance Instructions

Tarkett | THE ULTIMATE FLOORING EXPERIENCE

Safe-T-First®

UL 1994-Compliant Photoluminescent Egress Path Marking Systems, listed by Underwriters Laboratories, Inc.

1. Activation: Minimum 1 foot candle (10.8 Lux) of ambient fluorescent lighting per 2012 IBC Section 1024.5 Illumination.
2. Install Safe-T-First photoluminescent egress path marking systems only in locations where an external illumination source is present, is deemed reliable and whose controls are accessible only to authorized personnel. This reliable illumination source is to be energized at all times during building occupancy.
3. Do not use the system where ambient illumination level is less than 1 foot candle (10.8 Lux).
4. Check with your applicable local or national installation codes such as, IBC-International Building Code, to perform periodic visibility test.

Handling and Storage

1. All Tarkett products must be stored indoors and be protected from the elements. 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° and 85°F (18° and 29°C) with HVAC system operating. A minimum temperature of 55°F (13°C) must be maintained afterwards. The ambient relative humidity should be between 40% and 60%.
2. 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.
3. The highest quality of materials and workmanship is employed in the manufacture of Tarkett flooring. However, 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.
4. Tarkett cannot accept responsibility for any loss or damage that may result from the use of this information, 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.

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 installation. **Caution: Do not use oil based sweeping compounds.** Fill all depressions, cracks, and other surface irregularities with a good quality Portland cement based product.

   NOTE: Contamination on the substrate can cause damage to the resilient flooring material. Permanent and non-permanent markers, pens, crayons, paint, etc., must not be used to write on the back of the flooring material or used to mark the substrate as they could bleed through and stain the flooring material. If these contaminants are present on the substrate they must be mechanically removed prior to the installation of the flooring material.

   Caution: Do not use liquid solvents or adhesive removers.

   Tarkett does not recommend installing over existing resilient floors. All existing flooring and adhesives must be removed prior to installing the new flooring material. Remove existing adhesive mechanically – do not use chemical adhesive removers or solvents.

   Caution: Do not install Tactile Warning Surface in areas that are exposed to grease, oil or animal fats.

   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 to receive resilient flooring according to ASTM F 710 "Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring".

   Do not install Tarkett flooring over expansion joints.

   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.

   - Results must not exceed 80% when testing to ASTM F 2170 or exceed 5 lbs. per 1,000 sq. ft. in 24 hours when testing to ASTM F 1869.
   - If the tests results exceed the limitations, the installation must not proceed until the problem has been corrected.

   A pH test for alkalinity must be conducted. Results should range between 7 and 9. If the test results are not within the acceptable range of 7 to 9, 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 should be sealed with a polyethylene moisture barrier.

   Subfloors should meet local and national building codes. Trade associations, such as the APA -"The Engineered Wood Association", offer structural guidelines for meeting various code requirements.

   Single Wood and Tongue and Groove subfloors should 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 product.

   Do not install over OSB (Oriented Strand Board), particle board, chipboard, lauan or composite type underlayments.

4. **Terrazzo and Ceramic floor** surfaces must be free of all sealers and waxes. Remove or replace all loose tiles and clean the grout lines. Use a good quality Portland cement based product to fill all grout lines and other depressions.
5. **Steel floor** surfaces must be mechanically abraded to assist with the adhesive bond. The floor must be cleaned to remove all dirt, rust and other contaminants. When applying adhesive the non-porous installation instructions must be followed.
6. **Concrete floors equipped with a radiant heating system:** Turn the heat down to 65°F (18°C) for at least 48 hours before installation. Heat may be gradually returned to operating temperature 48 hours after installation. Surface of slab must not exceed 85°F (29°C) under any condition of use.
7. **An adhesive bond test** should be performed using the actual flooring materials and adhesive to be installed. The test areas should 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.

Safe-T-First Tactile Warning Surface Installation

1. **Recommended Adhesives:**
   - **a.** For standard application use:

     Johnsonite 965 Flooring and Tread Adhesive

     Trowel: porous substrate –

     1/16" x 1/16" x 1/16" SQ-notch

     Trowel: non-porous substrate: -

     1/16" x 1/16" x 1/16" V-notch

     Caution: 965 Flooring and Tread Adhesive is substrate porosity sensitive. Determine subfloor porosity and follow the adhesive label instructions regarding porous and non-porous substrate drying times prior to the installation of the rubber floor tiles.
   - **b.** For application in areas subject to heavy point loads, rolling loads, topical moisture, or temperature extremes use:

     Johnsonite 975 Two-Part Urethane Adhesive

     Trowel: porous and non-porous substrates –

     1/32" x 1/16" x 1/32" U-notch

     Johnsonite 996 Two-Part Epoxy Adhesive **(Do not use on wood or metal substrates)**

     Trowel: porous and non-porous substrates –

     1/32" x 1/16" x 1/32" U-notch

     Caution: When using 975 Two-Part Urethane or 996 Two-Part Epoxy Adhesive the installer must work off of the flooring material or use kneeling boards to prevent adhesive displacement during the installation and rolling process.
2. **Adhesive Application:** Follow adhesive label instructions for proper use.
3. **Installation Procedure:**
   - **a.** Johnsonite Tactile Warning Surface material must be uncoiled and allowed to condition for 24 hours prior to installation.
   - **b.** The product should be trimmed to fit, dry laid, and inspected prior to adhesive application.
   - **c.** If the installation requires compliance to ANSI A117.1, position the first section of tactile warning surface material with the striping running parallel to the leading edge and extending across the entire width of the hazardous location.
   - **d.** Position two additional strips of material adjacent to the first piece to create a total depth of 3 feet (.91 m) of tactile warning surface material.
   - **e.** After visual inspection of the dry laid installation, lay the three sections of pre-trimmed tactile warning surface material aside and apply adhesive to the substrate.
   - **f.** Apply the adhesive to the substrate and allow proper open time.
   - **g.** Do not force strips together creating a ledge condition at the seams and corners.
   - **h.** When using 975 Two-Part Urethane or 996 Two-Part Epoxy Adhesive the installer **MUST** work off the flooring. Sliding tactile warning strips will result in forcing the adhesive out between the seams.
   - **i.** Periodically, lift the corner of an installed strip to ensure proper transfer of adhesive.
   - **j.** Roll floor in both directions with a 100 pound three-section roller. Use a hand roller in areas that cannot be reached with a large roller.
   - **k.** Inspect the floor surface, especially seams, and remove any adhesive on the surface.
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)

   <u>Note:</u> 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.

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 for 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.

996 Two-Part Epoxy 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 for 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. Thoroughly sweep or vacuum the flooring to remove all loose dirt and grit.
4. Prepare a cleaning solution using a pH neutral cleaner.
5. The dilution ratio depends on light to heavy soil conditions. Follow manufactures label instructions.
6. Apply the cleaning solution with a nylon or rayon mop.
7. Let the cleaning solution dwell for 5 to 15 minutes (dwell time is based on soil conditions of the floor). **IMPORTANT** – Do not allow the solution to dry.
8. Agitate solution with mop, then wet vacuum or mop up cleaning solution.
9. Rinse the floor thoroughly with clean water, remove all water by vacuum or mop.
10. Allow the flooring to dry completely.
11. If desired, one or two coats of a liquid, acrylic floor finish may be applied to improve gloss level and ease cleaning. Apply the floor finish to the floor according to the manufacturer's label instructions.

Visit www.tarkettna.com for most current installation and maintenance instructions.
Contact Tarkett at (800)-899-8916 ext 9297with any questions.

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