STATGUARD FLOORING = TECHNICAL BULLETIN TB-9059=

ESDvantage Conductive Adhesive Application Instructions





Figure 1. Statguard Flooring ESDvantage Conductive Adhesive

Description

Statguard Flooring ESDvantage is a solvent-free, acrylic conductive adhesive formulated to install conductive and static dissipative carpet tile, resilient tile and sheet flooring, rubber tile and sheet flooring. To insure product stability and reduce joint openings, Statguard Flooring ESDvantage has been formulated to produce a firm bond line less susceptible to indentation and telegraphing. May be used over properly prepared porous and non-porous surfaces such as concrete, underlayment grade plywood, raised access floor panels, cementitious based patching compounds and levelers.

Benefits

- Non-Flammable
- Solvent-free
- Excellent moisture and alkakli resistance
- Excellent plasticizer resistance
- In bucket anti-microbial protection
- When dry, does not promote growth of mold or mildew
- Low odor
- Easy to trowel
- Can be used for a tough permanent bond or releaseable/pressure-sensitive installation
- Easy clean up

Testing Methods

- Freeze-thaw stability (ASTM D7149)
- Shelf Life (ASTM D1337)
- Adhesive Shear Strength (ASTM D6004)
- 90° Peel Resistance (ASTM D6862)
- Plasticizer Resistance (ASTM D7888)
- Caster Chair (ISO 4918)
- Heat Aged Expansion/Contraction

Technical Data

Electrical Resistance	≤ 1.0 x 10 ⁶ ohms	
Weight/Gal	8.5 lbs	
Color	Off-white with gray fibers	
VOC	<1 gram/liter per SCAQMD Rule 1168	
Shelf Life	1 year in unopened container	
Freeze-thaw	4 cycles @ 0° F. If adhesive has frozen, thaw under normal room temperature.	

Packaging

Statguard Flooring ESDvantage is available in 1-gallon and 4-gallon pails.

Storage and Shelf Life

Adhesive shall be stored in a dry, climate-controlled area. Shelf life is one year from date of manufacture in unopened, properly stored containers

Coverage

Flooring Type	Installation Type	Spacing	Coverage
Non-Access	Trowel	1/16" x 1/16" x	Approximately
		1/16" Square	200-225
		Notch	square feet
			per gallon
Access	1/4" Foam		Approximately
	Roller		400-450
			square feet
			per gallon

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Acclimation

The area to receive flooring shall be fully enclosed, weather tight, with an installed operating HVAC system. The installation area, flooring materials and adhesive must be acclimated at a temperature between 65°-85°F for 48 hours prior to, during and permanently after installation. The relative humidity of the installation area shall be maintained between 35-55% per ASTM F710 (Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring).

Statguard Flooring ESDvantage can be used on porous and non-porous surfaces free of moisture. Surface to be covered must be dry, clean and smooth. Any foreign materials present such as paint, grease, oil, pen markings, adhesive residues, etc. that may prevent a proper bond or migrate to the surface causing a stain must be removed. Adhesive can be used on all grades of concrete on, above or below grade in the absence of moisture. Installation of a 10 mil (0.010") or greater effective moisture retarder is recommended directly under all on and below grade concrete floors with its integrity insured. Concrete shall be prepared according to the recommendations outlined in ASTM F710 (Standard Practice for Preparing Concrete Floors to Receive Resilient Flooring). Concrete floors shall be free from crazing, dusting, spalling and any curing or sealing compounds. Concrete floors shall be tested for moisture according to the latest revision of ASTM F2170 Standard Test Method for Determining Relative Humidity in Concrete Floor Slabs Using in situ Probes with levels not to exceed 85% RH and ASTM F1869 Standard Test Method for Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride with moisture levels not to exceed 5 pounds per 24 hours per 1,000 square feet. Substrate PH reading should be between 7.0 and 10.0. Wood floors must be double construction with a 1" minimum thickness, structurally sound, securely fastened and free from deflection/spring. Top layer of wood shall be underlayment grade plywood. Cracks and uneven surfaces must be filled with an approved cement-based patching compound.

Grounding

Install ground strips or grounding hardware prior to beginning floor covering installation. See specific flooring product's installation instructions for details.



Figure 2. 81448 Grounding Strip In Use

Application

Apply adhesive evenly with a 1/16" x 1/16" x 1/16" square notch trowel. Hold trowel at a 60° angle. Replace trowels with worn notches. Do not re-notch worn notches.

Note: When troweling adhesive, avoid excess build-up of fibers on trowel blade, as this can affect the static dissipative or conductive properties of the flooring installation. If excess fibers build up on the trowel discard the adhesive on the trowel. Do not return the adhesive to the bucket.

Access floor installations: The adhesive should be poured onto the access floor panels in small amounts and spread to achieve complete coverage. Care should be taken to ensure moderately even distribution of fibers. Do not force adhesive into panel gaps.

Porous Substrates: For permanent applications, flooring material shall be positioned while adhesive is wet. The adhesive shall be allowed to remain open or flash-off for approximately 5-10 minutes before positioning flooring. The working time of the adhesive will be dependent upon substrate porosity, room temperature and humidity.

For releasable applications, the adhesive must be allowed to dry to the touch. Dry time will be dependent upon substrate porosity, room temperature and humidity. From the time the adhesive dries to the touch, to the time it must be covered with flooring is approximately one-hour. If the adhesive remains uncovered longer than the recommended one-hour a loss in adhesion strength may result. The installer should not spread more adhesive than can be covered with flooring within the one-hour time frame.

Non-Porous Substrates: The adhesive must be allowed to dry to the touch. Dry time will be dependent upon substrate porosity, room temperature and humidity. From the time the adhesive dries to the touch, to the time it must be covered with flooring is approximately one hour. If the adhesive remains uncovered longer than the recommended one hour a loss in adhesion strength may result. The installer should not spread more adhesive than can be covered with flooring within the one-hour time frame.

For carpet tile, roll the entire installation with a 75 lb. or greater roller after installation. For all resilient flooring, immediately roll flooring in both directions with a 100 lb. three-section roller. Roll the entire floor again after 1 hour if edges are lifting.

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Clean-Up

Remove wet adhesive from flooring and tools with soapy water and a clean cloth. Use mineral spirits to remove dried adhesive. Do not apply solvents directly to flooring. Use caution when handling flammable solvents.

Post Installation

Remove wet adhesive from flooring and tools with soapy water and a clean cloth. Use mineral spirits to remove dried adhesive. Do not apply solvents directly to flooring. Use caution when handling flammable solvents.

RoHS, REACH, and Conflict Minerals Statement

See the Desco Industries RoHS, REACH, and Conflict Minerals Statement:

http://www.descoindustries.com/ROHS.aspx

Desco Industries Limited Warranty

See the Statguard Flooring Limited Warranty:

Statguard.descoindustries.com/Limited-Warranty.aspx

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