Conductive Epoxy Adhesive Application Instructions

Made in the United States of America

Figure 1. 8403 Conductive Epoxy Adhesive

Description

Statguard Flooring's 8403 adhesive is a conductive, high-solids, 2-part epoxy adhesive that is recommended for installation of 8400 Series Static Control Vinyl Floor Tile, both conductive and static-dissipative tiles. It provides an efficient electrical groundplane underneath the entire floor to drain electrostatic charges to ground. The black adhesive is supplied in "gallon units", each consisting of two gallon-sized cans, Part A and Part B, that are pre-measured to provide the proper mix ratio when the contents of the two cans are combined. The coverage rate for each gallon unit is typically 135 square feet.

Technical Data

	Part A	Part B	Mixed
Material	Epoxy	Curative	--
Color	Translucent	Black	Black
Weight/ Gallon	9.2 lb/gal	8.3 lb/gal	8.9 lb/gal
Specific Gravity	1.1	0.99	1.05
Flash Point	93°F	54°F	93°F
Weight/ Gallon	93%	86%	89%
VOC	79 g/l	150 g/l	115 g/l
Electrical Resistance After Curing	--	--	< 3.0×10^6
Shelf Life	1 year	1 year	--

Subfloor Condition and Preparation

The adhesive is designed for tile installations above-, on- or below-grade, and where moisture is not a factor. The subfloor must be level, clean, dry, and free of contaminants like powdery residue, concrete curing compound, or old adhesive. For optimum adhesion, the surface of the subfloor should be abraded to a texture similar to that of 80- to 100-grit sandpaper. Protrusions should be removed; cracks and depressions should be filled with good grade cementatious underlayment, and uneven areas should be leveled.

Temperature and Preconditioning

Both the floor tile and the conductive adhesive should be preconditioned to the job site environment for 48 hours prior to installation. Recommended storage, conditioning, and installation temperature range is 65°F to 85°F.

Mixing

The mixing ratio, Part A to Part B, is unequal parts by volume. All of the conductive pigment is contained in Part B. Each part should be thoroughly mixed individually in its own can before the two parts are combined. (Two wooden mixing paddles are provided in each carton; use a separate paddle to stir each part.) Pour the entire premixed contents of the Part A into the can holding the premixed Part B and mix the two parts together for 3 to 5 minutes. *NOTE: Thorough mixing is extremely important to attain the specified electrical properties and complete chemical cure.* A variable-speed electric drill (3/8") with a mixing paddle should be used to mix Parts A and B together in the Part B can. Mixing speed should not exceed 200 rpm; higher speeds will create excessive heat, speeding up the curing action of the epoxy in the can, making it thicker and more difficult to spread.

Spreading

Immediately after mixing, pour the entire contents of the can onto the floor. If the mixed compound is left in the can, it will generate excessive heat and start to cure prematurely, making it unusable. Spread the adhesive as soon as possible using a 1/16" square-notched trowel (2 mm x 2 mm) with 1/16" (2 mm) flats, held at a 45° angle to the floor surface.

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Spread Rate

Typical spread rate for 8403 conductive adhesive, using the recommended trowel, is approximately 135 square feet per unit. Actual spread rate varies with subfloor porosity and applicator technique, and the installer should adjust according to conditions. Snapping chalk lines on the floor to outline sections 135 square feet in area will make the spread rate control easier.

Tile Installation

After the adhesive has been spread, allow it to “flash off” for a short time (typically 15 to 20 minutes) before starting to install tile. The working life of the spread adhesive is about one hour. These times will vary with temperature, and the installer should adjust according to conditions. “Drop” each tile into place and press firmly into the adhesive; do not “slide” the tile into position. *NOTE: Throughout the installation, the installer should periodically lift a tile to ensure that there is adequate adhesive transfer. The back of each tile should be at least 90% covered with adhesive.* Work from the “dry” side to avoid contact with the freshly laid tiles; if working on top of the tiles is necessary, use a kneeling board to avoid accidentally shifting any tiles. Shortly after each section has been laid, it must be rolled twice with a 150-lb (70 kilogram) sectioned roller, first in one direction and then in a perpendicular direction. Roll the entire floor once again at completion. Use a hand roller in areas that cannot be reached with a large roller.

Clean Up

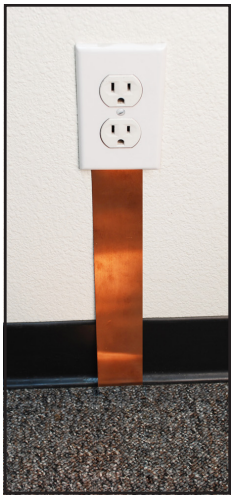
Clean excess adhesive on the tile and tools promptly using a soapy solution or denatured ethyl alcohol or isopropyl alcohol (friction alcohol).

Cure Time

Typically, newly installed tile can withstand foot traffic 24 hours after installation. Allow a full 48 hours for curing before moving any equipment onto the new floor.

Grounding

Statguard Flooring recommends installing one copper grounding strip per 1,000 square feet throughout the installation. A thin coating of adhesive should be applied on top of grounding strip to ensure good contact with tile backing.



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:
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