



Two Part Reactive Conductive Epoxy Adhesive Application Instructions



Figure 1. 81522 – Two Part, Conductive Epoxy Adhesive

Description:

81522 is a low VOC emitting two-part reactive epoxy conductive adhesive for the installation of 8400 Series ESD Vinyl Tile over clean, smooth substrates.

Technical Data

Laboratory Tests	Results
Polymer type	Epoxy
Percent solids	90-100%
VOC's (Rule #1168 of California's SCAQMD)	10 g/L (1.3 oz/US gallon)
Pot life	45 minutes once mixed
Type of Installation	Immediately after mixing
Working Time*	30 minutes
Trowelability	Light, easy
Color	Black
Volume Resistance (Per ANSI/ESD STM11.12)	< 1 x 10 ⁶ ohms (10V)
Shelf life	1 year when stored in original packaging
Storage conditions	65°F to 85°F (18°C to 29°C)
Certification (Indoor Environmental Quality)	CRI Green Label Plus # GLP05980
LEED projects eligibility	See LEED v4 Matrix
Protect from traffic	12-24 hours for light traffic, +24 hours for heavy traffic

*The working time can vary depending on ambient temperature and humidity as well as subfloor porosity, humidity and temperature. Mat bond test is required as per ASTM F3311. Always ensure an adequate transfer of adhesive to the flooring backing.

Limitations:

1. Keep from freezing in transit and storage. If frozen, allow to return to room temperature without stirring.
2. Do not use when the substrate temperature is below 10°C (50°F) or above 29°C (85°F).
3. For interior installations only
4. Do not use for the installation over impervious surfaces.

Directions:

1. Part A and B are packaged to exact quantity ratios for maximum performance.
2. Pour all material out of the Part B container into Part A. Place the cap back on the Part B container and turn the container upside down to ensure all remaining material drains into the cap. Pour the remaining material into Part A.
3. Always mix complete units. Do not add other materials to this mixture.
4. Use a low-speed mixer to ensure that the material is mixed thoroughly to the consistency of a smooth, homogenous paste (generally achieved within 3 minutes). Inadequate mixing will cause bond failure. Avoid prolonged mixing. Do not allow the mixed product to sit in the container as the heat generated by the chemical mixture will reduce pot life.
5. Immediately after mixing, apply the adhesive to the substrate.

Application:

Adhesive Properties & Limitations	
pH (ASTM F710)	7-11
Relative Humidity (RH) (ASTM F2170)	Maximum 90%
Moisture Vapor Emission Rate (MVER) (ASTM F1869)	<3.63 kg/93 sq.m/24 hours (<8.0 lbs/1,000 sq.ft/24 hours)
Electrical grounding	Prior to applying adhesive, install the copper tape (See page 2)
LEED projects eligibility	See LEED v4 Matrix

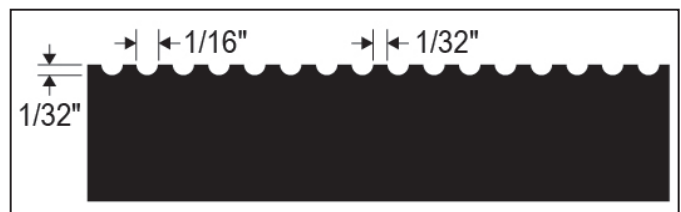


Figure 2. U-notched Trowel

- Using a 1/32" x 1/16" x 1/32" U-notched trowel, apply the adhesive evenly to the floor.
- Start laying the 8400 Series ESD Vinyl Tile after 10 minutes allowing the moisture to flash off. Laying of the tiles must start no later than 15 minutes. After the moisture has been allowed to flash off, lay the tile into the adhesive (do not force the tiles together tightly, rather place them so that the seams are just touching). Take care to use kneeling boards or work off of the tile whenever possible. The adhesive

is still workable if it is wet and transfers to the fingers when touched. Ensure that the adhesive has transferred to the back of the tile by lifting the corners.

- Avoid trapping air bubbles by cross rolling the floor with a 100 pound sectional.

Clean Up:

- Clean excess adhesive off the tile and tools using soap and water, rubbing alcohol, denatured alcohol or methyl hydrate. Dry adhesive is more difficult to remove.
- **For Containment:** Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.
- **Methods for Cleaning Up:** Clean up spills immediately and dispose of waste safely. Spills should be contained with mechanical barriers. Transfer spilled material to a suitable container for disposal. Contact competent authorities after a spill.

Coverage:

- Two part [81522](#) conductive adhesive covers up to 200 sq. ft. per U.S. gallon.

Note: Coverage quantities shown are approximate and given for estimating purposes only. Actual job site coverage may vary according to substrate conditions.

Grounding:

Statguard 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.

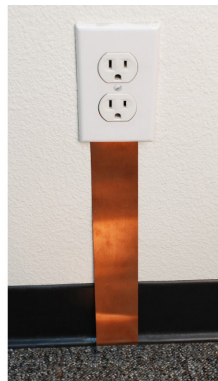


Figure 3. [81524](#) Copper Grounding Strip in use

Installation:

- Wear all appropriate safety equipment to avoid skin contact during mixing, application and cleaning. The curing of two-part reactive adhesives is sensitive to temperature; heat will speed up the curing process while colder temperatures will slow it down.
- Use the correct notch trowel for the selected flooring and follow the installation instructions. Replace all worn trowels to ensure proper spread rate; do not re-notch.
- Do not spread more adhesive than can be covered with floor covering within 30 minutes. After spreading the adhesive, immediately install

the flooring material into the adhesive while it is still fresh. Periodically lift the material to confirm proper adhesive transfer to the backing.

- Roll the flooring surface across the width and length with the manufacturer's recommended roller to break down adhesive ridges and to ensure complete removal of trapped air. Multiple rolling may be required to maintain proper flooring placement during cure.

Remarks:

- Refer to safety data sheet for further instructions.
- Wear suitable individual protection equipment while using product.
- Keep out of reach of children.
- Protect against freezing during transportation and storage.

Specific Instructions After Installation

Roll the flooring in both directions with a 45 kg (100 lb) sectional roller.

Adhesive clean up: soapy water, rubbing alcohol, denatured alcohol or methyl hydrate.

Protection:

- 0 to 12 hours after installation: No traffic;
- 12 to 24 hours: Light traffic;
- +24 hours: Heavy traffic, Rolling loads, Initial maintenance

Adhesive Properties

Polymer	Epoxy
Color	Black
Size	Part A: 3.1 Liters (0.82 US Gallon) Part B: 0.68 Liters (0.18 US Gallon) Mix: 3.79 Liters (1 US Gallon)
Solid content	90-100%
Storage conditions	Between 18 °C and 29 °C (65 °F and 85 °F)
Shelf life	1 year when stored in original packaging
VOC (SCAQMD rule #1168)	10 g/liter (1.3 oz/US gallon)
Certification (Indoor Environmental Quality)	CRI Green Label Plus #GLP05980
LEED projects eligibility	See LEED v4 Matrix