

2-Part Dielectric Insulation High Voltage Resistant Self Smoothing Epoxy Floor Screed

PRODUCT DESCRIPTION:

Not all coating with "high dielectric strength" are created equal.

ELECTROSCREED is a high performance solvent free three component Electric Insulation epoxy floor screed. It provides a hard wearing floor finish where high level of Dielectric Voltage Breakdown is desired.

BENEFITS:

- High dielectric strength and insulation resistant,
- High bond strength with concrete floors,
- Less than 0.1% porosity
- Seamless and hygienic surface,
- Abrasion resistance,
- Easy to apply being composite pack.

USES:

APPLICATION

- Concrete floors and slabs, metal plates in Electrical, Electronics and Communication industries
- Concrete, metal and non-metal surfaces for dielectric insulation such as control panel rooms, AC rooms, transformer rooms, LT/HT laboratories
- Concrete flooring at warehouses, chemical and petrochemical plants, workshops, clean rooms, food processing areas which are subjected to electric hazards and chemical spillages,
- Pulp and paper mills,
- Metal-treatment plants,
- Battery storage areas,
- Production areas,
- Food-processing plants,
 - Waste areas.

LOCATION

Interior

SUBSTRATE

Horizontal & vertical surfaces





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TECHNICAL DATA:

Properties	Values
Breakdown Voltage, KV	>22
Coverage, Kg/m ² /mm	1.3
Thickness Required, Micron	1000
Touch Dry Time	2-5 Hours
Shore D Hardness	70-75
Compressive Strength	>45 N/mm ²
Flexural Strength	>20 N/mm ²
Bond Strength	>4.0 MPa (Concrete Breaks)
Pot Life	30 Minutes
Min. Working Temperature	25 °C
Colour Available	Light Grey, Light Blue, Green, Signal Yellow, Dark
	Red,

SYSTEM REQUIREMENT:

- 1. FLOORPRIME® EP-5105: Epoxy based primer for concrete
- 2. ELECTROSCREED: Dielectric Insulation Coating applied in 1mm and 2mm thickness

Following products can be used independently or in combination with Electroscreed:

Electrogard® ELI 500

Electrogard® ELI 1100

Electrogard® ELI 2200

Electrogard® ELI 3300

Electrogard® ELI 5300

Electrogard® ELI 8000

Refer separate TDS for each product.

APPLICATION DATA:

PREPARATION:

All Surfaces

Remove all dirt, grease, oil, salt and chemical contaminants by washing the surface with Pure Strength Cleaner/Degreaser MultiKleen®, commercial detergent or other suitable cleaner. Mold and mildew areas must be cleaned with a chlorinated cleaner or bleach solution. Rinse thoroughly with fresh water and allow to fully dry. All surfaces must be dry at time of application. Moisture content should be less than



Electroscreed/2021/R0-2021

DATASHEET

ELECTROSCREED

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3%. If moisture is more than system requirement, use Aquablock® Primer, before applying FloorPrime® EP5105.

Concrete

- 1. Ensure that floors are structurally sound and fully cured a minimum of 28 days.
- 2. Repair concrete and install joint sealants and fillers as necessary. Use patching materials such as FloorTop® EP as appropriate.
- 3. Mechanical surface profiling is the preferred floor preparation method for both new and existing floors. It is the only acceptable preparation method where warranties are issued. Acid etching is not recommended. Mechanically profile the floor to medium-grit sandpaper texture, to get concrete profile to MCSP4 or more. Remove curing and parting compounds and other surface hardeners and floor coatings in accordance with the manufacturer's instructions.
- 4. Measure the moisture vapor transmission rate (MVT) after shotblasting by conducting a calcium chloride test in accordance with ASTM F 1869.
- 5. If the test shows that a rate of 1.5 Kg /1000 ft² in 24 hours is exceeded, then VapourGard® Concrete Floor Primer is needed prior to the use of Floorkrete® flooring installation products.
- 6. One coat of VapourGard® Concrete Floor Primer will reduce MVT by half. Multiple coats of VapourGard® Concrete Floor Primer may be required. Once the MVT is under 1.5 Kg, the flooring installation products can be applied.

Metal

PREVIOUSLY COATED: Previously coated surfaces must be sound and in good condition. Smooth, hard, or glossy finishes should be scarified by sanding to create a surface profile. The Electrogard® is compatible with most coatings, but a test patch is suggested. WARNING! If you scrape, sand or remove old paint, you may release lead dust.

FRESH METAL SURFACE: Use following material depending on Breakdown voltage requirement.

Electrogard ELI500: upto 5 KV Electrogard ELI1100: upto 11 KV Electrogard ELI2200: upto 22 KV Electrogard ELI3300: upto 33 KV Electrogard ELI5300: upto 53 KV

Electrogard ELI8000: for more than 53 KV

MIXING:







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- 1. Electroscreed has a limited pot life; complete all preparations before starting the mixing sequence.
- 2. It is very important to properly mix the components of this product together in the exact manner and sequence specified in the following instructions in order to form a stable slurry and ensure proper film formation before combining Parts.
- 3. A and B, premix each separately. When mixing, wear protective gloves and goggles to avoid injury from splashes. Part C should be added above mixed material.
- 4. To mix Electroscreed Concrete Floor coating, pour the entire contents of Part B (Hardener) from the pail and insert into Part A in the bottom of the pail. Scrape out remaining material in the liner, being careful not to spill any. The Part A (Resin) container is oversized to allow for easy mixing. Part C should be added above mixed material.
- 5. DO NOT MIX BY HAND. Mix with a Jiffy mixer blade and an electric drill at very low speed for 3 4 minutes. Scrape sides of the container several times to ensure complete mixing. Keep the mixer blades immersed in the material to avoid introducing air bubbles.
- 6. Use Electroscreed within its pot life.

PLACING:

- 1. Floor and atmospheric temperature must be between $16-27^{\circ}\text{C}$ during the application of Electroscreed Concrete Floor coating.
- 2. Apply suitable primer, such as Electrogard EPI 5105.
- 3. Apply the mixed material Electroscreed through notch trowel at desired thickness. Use spike roller to remove entrapped air.
- 4. Install as evenly as possible, and avoid leaving excessive build-up in rougher areas. Complete coverage is required to ensure there are no pinholes or voids in the finish.

PACKING:

Pack Size: 20.8 kg composite pack

CLEANING:

All tools should be cleaned with suitable solvent or hot water immediately after use.

STORAGE:

Store in dry, frost-free conditions at moderate temperatures not greater than 25 °C.







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- 1. Floors should be sloped to drain to prevent standing water or chemicals. As with any surface, all spills should be removed as soon as possible to prevent a slipping hazard.
- 2. Do not thin with solvents unless advised to do so by Multichem.
- 3. Prepare substrate according to "Surface Preparation" portion of this document.
- 4. Do not apply to slabs on grade unless a heavy unruptured vapor barrier has been installed under the slab.
- 5. Always use protective clothing, gloves and goggles during use. Avoid eye and skin contact. Do not ingest or inhale. Refer to Material Safety Data Sheet for detailed safety precautions.
- 6. For industrial/commercial use. Products should be installed by trained personnel only.

SAFETY DATA:

- IRRITATING TO EYES, RESPIRATORY SYSTEMS AND SKIN.
- RISK OF SERIOUS DAMAGE TO EYES
- KEEP OUT OF REACH OF CHILDREN.
-) IN CASE OF CONTACT WITH EYES, RINSE IMMEDIATELY WITH PLENTY OF CLEAN WATER AND SEEK MEDICAL ADVICE.
- AFTER CONTACT WITH SKIN, WASH IMMEDIATELY WITH PLENTY OF CLEAN WATER.
- WEAR SUITABLE PROTECTIVE CLOTHING, GLOVES AND EYE /FACE PROTECTION.

WARRANTY

Multichem warrants Electroscreed to be free from manufacturing defects as defined in this warranty. Manufacturing defects are considered to be those defects that occur due to the quality of the ingredients or from the manufacturing process itself. This warranty does not include labor costs and other costs or expenses associated with the removal or installation of Electroscreed.

Because the Multichem does not perform the actual installation, it cannot be held responsible for the results of the application. Multichem specifically disclaims problems that occur due to weather conditions, structural movement, structural design flaws and application techniques.

This warranty is in lieu of all other warranties expressed or implied including the warranty of merchantability and fitness of purpose and of all other obligations or liabilities on Multichem part. Multichem neither assumes nor authorizes any person to assume for Multichem any liability in connection with the sale and installation of Electroscreed.

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