Vetotop EL383

Epoxy-based floor topping (Self-smoothening, anti-static, and conductive) 1 - 2 mm in layer thickness

Uses

- In flammable gas-handling locations.
- In aerospace and defense facilities.
- In hospitals and operating theaters.
- In pharmaceuticals and solvent-handling areas.
- In automobile assembly areas.
- In IT server and data storage rooms.
- In telecommunication control rooms.

Product Description

Vetotop EL383 is a two-component, solvent-free, conductive, epoxy flooring system that consists of an insulating primer, self-adhesive conductive tape, conductive primer, and a conductive top layer with excellent abrasion and chemical resistance. It's ideal to create anti-static floors when controlling static electricity is needed. For example, in hospital operating rooms, cleaning rooms, and in hazardous and chemical environments.

Advantages

- Self-smoothening consistency.
- Protects sensitive electronic parts from the effects of static charges.
- Prevent explosions due to sparks of accumulated static charges.
- Excellent adhesion to concrete and cement screed substrates.
- Conductive and anti-static floor overlay system.
- High mechanical and anti-static properties.
- Extremely resistant to various chemicals such as alkalis, diluted acids, brine, mineral oil, lubricants, and fuels.
- Available in a wide range of attractive colors.

Standards Compliance

- ASTM C722
- BS 2050

Technical Data

Vetotop EL383	Typical Values @ 25°C
Mixed Density (kg/liter)	1.45
Pot Life (Minutes)	60
Thin Film Thickness (mm)	1.5 - 2
Compressive Strength - ASTM C579 (MPa) @ 7 days	55
Flexural Strength - ASTM D790 (MPa) @ 7 days	20
Tensile Strength - ASTM D638 (MPa) @ 7 days	12
Surface Resistance - ASTM F150 DIN-EN 1081 - BS 2050 (Ohms)	2.5×10^4 ~ 1×10^6
Abrasion Resistance H22 Wheel - ASTM D4060 (mg loss/1000 cycles)	220
CS17 Wheel (mg)	< 80
Hardness Shore D - ASTM D2240	> 80
Substrate Temperature (°C)	10 to 35
Full Cure Time (Days)	7

Usage Instructions

Surface Preparation

The surface should be sound, clean, free from loose material, grease, laitance, dirt-curing compounds, etc. Laitance and weak surface layers must be removed using mechanical methods such as grinding or blasting to provide a sound, well-profiled surface.

Materials should be preconditioned at 25°C to reduce the possibility of flash and slow setting. Make all necessary repairs before applying by using an epoxy mortar from the Vetorep ER range.

New concrete floors should be at least 28 days old with a moisture content of less than 5% (for earlier applications, test the moisture conditions of the substrate).

Priming

Prime the substrate with Vetoprime EP381 before the application of Vetotop EL383.

Install a grid formation - at most 5m x 5m mesh - of notable self-adhesive copper bands (conductors) on the floor. Connect it to the ground through a perimetrical cable. Once mixed, immediately apply Vetoprime EP381 in a continuous thin film using a brush or roller. Avoid over application and puddles. Allow Vetoprime EP381 to become

tack-free before applying conductive coating (unless otherwise specified), but well within the open time specified for the given temperature.

The hotter the substrate, the more quickly the primer will become dry. Apply Vetoprime EP381 at a rate of 5 - 6 m^2/ liter in a single coat.

Apply Vetotop EL383 within the following 24 hours.

Earthing

Consult Saveto technical representative for proper installation procedure as per the established norms and guidelines for optimum connectivity and results.

Mixing

Vetotop EL383 is supplied in two pre-weighed packs (base and hardener), ready for immediate on-site use. Do not mix partial quantities as it will affect both the finished floor's performance and appearance.

Carry out the mixing using either a forced action mixer or a heavy-duty mobile mixer fitted with a jiffy-type mixing paddle. All such equipment should be of a type and capacity approved by Saveto. Mix the components in a suitably sized mixing container.

Stir the base and hardener components individually, then empty the components into the mixing container (we recommend scrapping the edges) and mix for 2 minutes. Slowly Add the filler pack content and mix for another 3 minutes until the mixture is completely homogeneous.

Application

Ensure sufficient labor and materials to make the mixing and the subsequent application process a continuous one for any given, independent floor area.

Once the components are mixed, use the material within its specified pot life. Pour the material onto the prepared and primed substrate as soon as mixing is complete. Spread it to a thickness of 1.5 - 2 mm using a notched trowel or a gauged spreader. Do not overwork the resin and spread it evenly and slowly.

After laying, roll the material immediately, using a spiked nylon roller to remove slight trowel marks and assist air release. Use a 'back and forth' technique along the same path for rolling. An overlap of 50% with adjacent paths is recommended. Further light rolling may be required to remove surface imperfections or for subsequent release of trapped air (This should be done before the product begins to set).

Cleaning

Remove Vetoprime EP381, and Vetotop EL383 from tools and equipment with Vetonit Solvent XX400 immediately after use. Remove hardened material mechanically.

Packaging & Coverage

Product	Pack Size	Coverage
Vetoprime EP381	6.5 liters kit	6 m^2/liter/coat @100 microns thickness
Vetotop EL383	7 liters kit	4.7 m^2/ kit @ 1.5 mm thickness

Stated consumption data are for general guidance. Actual consumption depends on the nature of substrate, method of application, and wastage.

Shelf Life & Storage

The original sealed kit of Vetotop EL383 has a shelf life of 12 months, provided it is stored clear of ground in a dry and shaded place at a temperature below 25°C.

Limitations

- Vetotop EL383 should not be applied on surfaces known to, or likely to suffer from, rising dampness, potential osmosis problems, or have a relative humidity greater than 75%.
- Consult Saveto's local office for applications in areas where the significant thermal shock is likely to occur, for example, cold rooms.
- Vetotop EL383 should not be applied to asphalt, weak concrete below 25 N/mm^2 compressive strength, unmodified sand/cement screeds, PVC tiles, or sheet or substrates known to move substantially, for example ,steel walkways.
- Vetotop EL383 should not be installed at temperatures below 15°C or above 35°C. If in doubt or for application outside these temperature limits, please consult your nearest Saveto office.
- In common with all epoxy materials, some light shade changes may be experienced over the long term when placed in adverse exposure conditions. Any such change in shade is not detrimental to performance.

Health & Safety

Vetotop EL383, Vetoprime EP381, and Vetonit Solvent XX400 should not contact skin and eyes or be swallowed. Ensure adequate ventilation and avoid inhalation of vapors. Some people are sensitive to resins, hardeners, and solvents. Wear suitable protective clothing, gloves, and eye protection. If working in confined areas, use suitable respiratory protective equipment.

Additional Information

Saveto manufactures a wide range of construction chemicals and specialty products for various applications.

For further information on these products and systems kindly check our website or contact your local Saveto representative.

Legal Disclaimer

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