

# FLOORING



## Vetotop EL499

Epoxy-based floor topping (Self-smoothing)  
From 2 - 4 mm in thickness

### Uses

- In industrial kitchens and food processing plants.
- In vehicle factories and car parks.
- In clean rooms and laboratories.
- For heavy-duty applications such as, turbine rooms, armories, and hangers.
- For any flooring where impact resistance is required.

### Product Description

Vetotop EL499 is a multi-component, high-performance, self smoothing, epoxy flooring system that flows in a honey-like manner to self smoothen to a perfect level. Once cured, the product has excellent abrasion and chemical resistance. Vetotop EL499 provides an attractive, hard-wearing, and easily cleanable floor finish. The product enhances the lighting in the environment due to its reflective properties.

### Advantages

- A single product applied at 2 - 4 mm without changing packaging size or filler.
- Fast, easy application.
- High abrasion and chemical resistance.
- Low maintenance costs.
- Hygienic, impervious, and easy to clean.
- Available in 8 standard colors (with the possibility of custom RAL colors).
- High bonding properties (stronger than the concrete cohesive strength).

### Standards Compliance

- ASTM C722

### Design Criteria

Vetotop EL499 is designed to be a hard-wearing, self smoothing, single-pour-application on cementitious or metal substrates at thicknesses between 2 - 4 mm. The applied product will be resistant to water as well as a wide range of chemicals.

### Technical Data

Vetotop EL499	Typical Values
Solid Content (by Volume %)	100
Recommended DFT / coat / micron	2 - 4
Pot Life @ 12°C/54°F (Minutes)	115
Pot Life @ 40°C/104°F (Minutes)	25
Thin Film Dry Time (Hours)	
@ 12°C	18
@ 40°C	8
Application Maximum Relative Humidity (%)	75
Compressive Strength ASTM C579 (N/mm <sup>2</sup> )	80
Flexural Strength - ASTM D790 (N/mm <sup>2</sup> )	32
Tensile Strength - ASTM D638 (N/mm <sup>2</sup> )	20
Bond Strength to Concrete - ASTM D4541 (N/mm <sup>2</sup> )	> 2
Taber Abrasion - ASTM D4060 CS17 Wheels (mg loss/1000 cycles) (N/mm <sup>2</sup> )	30
Water Absorption - ASTM C413 (maximum)	0.001
Porosity with No Sealer NACE Sand (TM-01-74)	0
Hardness Shore D	80
Impact Resistance - ASTM D2794 (Joules)	10
Skid Resistance	Pass

## 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 should be removed using mechanical methods such as grinding or blasting to provide a sound, well-profiled surface. Make all the 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

All surfaces receiving Vetotop EL499 should be primed with Vetoprime EP491 (which is designed for maximum absorption and adhesion to concrete substrates). Add the entire content of the hardener tin to the base tin and mix the two primer components thoroughly for at least 2 minutes (Do NOT mix partial quantities).

Once mixed, apply the primer immediately to the prepared substrate using a stiff brush and/or a roller. The primer should be 'scrubbed' well into the substrate to ensure full coverage, avoid over-application or 'ponding.'

Allow the primer to dry before proceeding to the next stage, do not proceed while the primer is 'tacky' as this will lead to unsightly marks in the finished surface. Porous substrates may require a second primer coat (this can occur when the first coat is directly absorbed into the substrate. Observe minimum overcoating times before using this product).

### Mixing

Vetotop EL499 is supplied in three pre-weighed packs (base, hardener, and aggregate), ready for immediate on-site use. Avoid mixing partial quantities of these components as it will affect both the performance and appearance of the finished floor.

Mixing should be done 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. The components should be mixed in a suitably sized mixing container.

Stir the base and hardener components individually, then empty them into the mixing container (make sure to scrape the edges), and mix for 2 minutes. Add the contents of the graded aggregate pack slowly and mix for another 3 minutes until a completely homogeneous material is obtained.

### Application

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

Once 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 the required thickness evenly and slowly, using a notched trowel or a gauged spreader. Do not overwork the resin.

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.

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 sets).

### Floor Joints

Follow all existing expansion or movement joints along the new floor surface.

### Cleaning

Remove Vetoprime EP491 and Vetotop EL499 from tools and equipment with Vetonit Solvent XX400 immediately after use. Remove hardened material mechanically.

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### Packaging & Coverage

Product	Pack Size	Theoretical Coverage
Vetotop EL499	15 liters Kit	5 m <sup>2</sup> /kit @ 3 mm thickness
Vetoprime EP491	4 liters Kit	7 - 10 m <sup>2</sup> / Liter

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 EL499 has a shelf life of 12 months, provided it is stored clear of ground in a dry and shaded place at a temperature below 35°C.

### Health & Safety

Vetotop EL499 is non-flammable. Refer to the product material safety data sheet for more information.

### 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.

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