





# Vetotop EL499

Self smoothening epoxy based floor topping from 2 to 4 mm thickness

#### Uses

- Industrial kitchens and food processing plants.
- Vehicle factories and car parks.
- Clean rooms and laboratories.
- Heavy duty applications, turbine rooms, armories and hangers.
- Any flooring were impact resistant

## **Product Description**

Vetotop EL499 is a multi component high performance self smoothening 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. Its use on floors will enhance lighting in the environment due to the product reflective properties.

## **Advantages**

- One product that can be applied at 2-4mm without changing packaging size or filler.
- Fast easy application.
- High abrasion and chemical resistance.
- Low maintenance costs.
- Hygienic, impervious and easily cleanable.
- Available in 8 standard colors with possibility of custom RAL colors.
- High bond, stronger than concrete cohesive strength.

## **Standards Compliance**

➤ BS EN476:2009 as class 1 in flame spread.

## Design Criteria

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

#### **Technical Data**

Vetotop EL499	Typical Values
Solid Content (%Volume)	100
Recommended DFT / coat	2.0 - 4.0 mm
Pot Life @ 12°C/54°F (min)	115
Pot Life @ 40°C/104°F (min)	25
Thin Film Dry Time (hours) @ 12°C	18
Thin Film Dry Time (hours) @ 40°C	8
Application Maximum Relative Humidity (%)	75
Compressive Strength ASTM C579	80 N/mm <sup>2</sup>
Bending Strength	32 N/mm <sup>2</sup>
Tensile Strength ASTM C307	20 N/mm <sup>2</sup>
Bond Strength to Concrete ASTM D4541	>2 N/mm <sup>2</sup>
Taber Abrasion ASTM D4060 CS17 Wheels (mg loss/1000cycles)	30
Water Absorption ASTM D413 (maximum)	0.001
Porosity with no sealer NACE Sand TM-01-74	0
Hardness Shore D	80
Impact Resistance ASTM D2794	10 Joules
Skid Resistance ASTM D2394	Pass





## **Usage Instructions**

#### **Surface Preparation**

The surface should be sound, clean, free from loose material, grease, laitence, dirt curing compound, etc.

Laitence and weak surface layer shall be removed using mechanical methods such as grinding or blasting in order to provide a sound well profiled surface. All necessary repairs should be made prior to application by using epoxy mortar from Vetorep ER range. New concrete floors shall be at least 28 days old with moisture content of less than 5% (shall earlier application be required testing of substrate for moisture conditions shall be made).

#### **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 contents of the hardener tin to the base tin and mix the two primer components thoroughly for at least 2 minutes - only mix full packs. Once mixed, the primer should be applied immediately to the prepared substrate using stiff brushes and/or rollers. The primer should be well 'scrubbed' into the substrate to ensure full coverage, but care should be taken to avoid over application or 'ponding'. Allow the primer to dry before proceeding to the next stage, do not proceed whilst the primer is 'tacky' as this will lead to unsightly marks in the finished surface. Porous substrates may require a second primer coat - when the first coat is directly absorbed into the substrate - but minimum overcoating times must still be observed.

#### **Mixing**

Vetotop EL499 is supplied in three pre-weighed packs (base, hardener and aggregate) which are ready for immediate on-site use. Part mixing of these components is not acceptable and will affect both performance and appearance of the finished floor. Mixing should be carried out 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 vessel. Stir the base and hardener components individually then empty them into the mixing vessel scrapping the edges and mix for 2 minutes. The contents of the graded aggregate pack should be slowly added and mixing carried out for a further 3 minutes until a completely homogeneous material is obtained.

#### **Application**

Ensure that there are sufficient labor and materials to make the mixing and subsequent application process a continuous one for any given, independent floor area. Once mixed, the material must be used within its specified pot life. The material should be poured onto the prepared and primed substrate as soon as mixing is complete. It should be spread to the required thickness using a notched trowel or a gauged spreader; with care taken not to overwork the resin, spreading evenly and slowly. Immediately after laying, the material should be rolled, using a spiked nylon roller, to remove slight trowel marks, and to assist air release. The rolling should be carried out using 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, but should be prior to the setting of the product.

#### **Floor Joints**

All existing expansion or movement joints should be followed through the new floor surface.

#### **Cleaning**

Vetoprime EP491 and Vetotop EL499 should be removed from tools and equipment with Vetonit Solvent XX400 immediately after use. Hardened material can only be removed mechanically.

## Packaging & Coverage

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

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

## Shelf Life & Storage

Original sealed bag of Vetotop EL499 has a shelf life of 12 months provided it is stored clear of ground in a dry and shaded place below 35°C.

## Health & Safety

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

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