



Vetotop EL492

Self smoothing epoxy based floor topping from 0.8 to 2 mm thickness

Uses

- Industrial kitchens and food processing plants.
- Vehicle factories and car parks.
- Clean rooms and laboratories.
- Plant rooms & path ways.
- Any flooring where impact resistance is required.

Product Description

Vetotop EL492 is two 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 EL492 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

- Two components; none dusting at site
- Fast easy application ; only 2 components to mix.
- 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 EL492 is designed to be a hard wearing self smoothing single pour application on cementitious or metal substrates at thicknesses between 0.8 to 2 mm. The applied product will be resistant to water as well as a wide range of chemicals.

Technical Data

Vetotop EL492	Typical Values
Solid Content (%Volume)	100
Recommended DFT / coat	0.8 - 2.0 mm
Pot Life @ 12°C/54°F (min)	115
Pot Life @ 40°C/104°F (min)	25
Thin Film Dry Time (hours) @ 12°C	24
Thin Film Dry Time (hours) @ 40°C	10
Application Maximum Relative Humidity (%)	75
Compressive Strength ASTM C579	70 N/mm ²
Bending Strength	40 N/mm ²
Tensile Strength ASTM C307	24 N/mm ²
Bond Strength to Concrete ASTM D4541	>2 N/mm ²
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

Chemical Resistance

Chemical	Concentration	Resistance
Lactic Acid	10%	Excellent
Citric Acid	20%	Excellent
Hydrochloric Acid	20%	Excellent
Sodium Hydroxide	50%	Excellent
Acetic Acid	10%	Excellent
Butanol	-	Excellent
Crude Oil	-	Excellent
Sulphuric Acid	25%	Discoloration
Mineral Oil	10%	Excellent
Ammonia	10%	Excellent
Sea Water	-	Excellent
Jet Fuel	-	Excellent

Vetotop EL492 is resistant to acids and alkali of medium concentrations, mineral oil products and solvents.

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 EL492 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 3 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 over-coating times must still be observed.

Mixing

Vetotop EL492 is supplied in two pre-weighed packs (base and hardener) 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 3-4 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. Joint sealant & joint geometry should be compatible with the floor type used, intended exposure conditions and likely movement characteristics of the substrate - consult the local Saveto office for more details.

Cleaning

Vetoprime EP491 and Vetotop EL492 should be removed from tools and equipment with Vetonit Solvent XX400 immediately after use. Hardened material can only be removed mechanically.

Maintenance

The service life of a floor can be considerably extended by good housekeeping. Regular cleaning may be carried out using a rotary scrubbing machine with a water miscible cleaning agent at temperatures up to 35°C.

Limitations

- Vetotop EL492 should not be applied on to surfaces known to, or likely to suffer from, rising dampness, potential osmosis problems or have a relative humidity greater than 75%.
- In areas where significant thermal shock is likely to occur, for e.g. cold rooms etc., Please consult the local Saveto office.
- Vetotop EL492 should not be applied to asphalt, weak concrete below 25 N/mm² compressive strength, unmodified sand/cement screeds, PVC tiles or sheet or substrates known to move substantially e.g. steel walkways.
- Vetotop EL492 should not be installed at temperatures below 12°C or above 40°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 regarded as being detrimental to performance.

Packaging & Coverage

Product	Pack Size	Theoretical Yield
Vetotop EL492	15 Liter Kit	15 m ² /kit @ 1mm thickness
Vetoprime EP491	4 Liter Kits	7-10 m ² / 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 EL492 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 EL492, Vetoprime EP491 and Vetonit Solvent XX400 should not come into contact with 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, suitable respiratory protective equipment must be used.

The use of barrier creams provide additional skin protection. In case of contact with skin, rinse with plenty of clean water, then cleanse with soap and water. Do not use solvent. In case of contact with eyes, rinse immediately with plenty of clean water and seek medical advice. If swallowed, seek medical attention immediately - Do not induce vomiting.

Vetonit Solvent XX400 is flammable. Keep away from sources of ignition. No Smoking. In the event of fire extinguish with CO₂ or foam.

Vetotop EL492 and Vetoprime EP491 are non-flammable.

Disposal

Spillages of component products should be absorbed on to earth, sand or other inert material and transferred to a suitable vessel. Disposal of such spillages or empty packaging should be in accordance with local waste disposal regulations.

For further information, refer to the Product Material Safety Data Sheet.

Additional Information

Saveto manufactures a wide range of construction chemicals and specialty products for various applications divided into the following product groups:

- Waterproofing.
- Concrete Repairs, Grouts and Enhancements.
- Flooring and Coating Systems.
- Wall & Facade Systems.
- Sealants and Joints.
- Renders & Finishes.
- Plasters & Masonry.
- Tiling Systems.
- Primers & Ancillary Products.
- Specialty Products.

Saveto also provides various technical information such as CAD details, detailed method statements, specification clauses, application manuals, product selectors and technical support both in contractors and consultants offices as well as construction sites.

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

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