





# Vetotop EC397

Slightly Elastic Solvent free Industrial-Grade high performance, high build epoxy flooring system

#### Uses

- Floor coating for a variety of industrial applications such as: production assembly areas, workshops, dairies, bottling plants, breweries, pharma plants, kitchens, showrooms, etc.
- Aircraft hangers, anti-slip floors, ramps & high traffic.
- Wet working areas subject to chemical spillage.
- Vehicle production factories and parks.

## **Product Description**

Vetotop EC397 is a two component high performance solvent free epoxy coating system that is especially designed for industrial flooring. Once cured, the product has excellent abrasion and chemical resistance. Vetotop EC397 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**

- High abrasion and impact resistance.
- Ease of application.
- High abrasion and chemical resistance.
- Low maintenance costs.
- Hygienic, impervious and easily cleanable.
- Slip-resistant finish can be obtained.
- Available in 8 standard colors with possibility of custom RAL colors.
- High bond, stronger than concrete cohesive strength.
- Slightly flexible to handle vibration
- Economic installation.

## **Standards Compliance**

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

# **Design Criteria**

Vetotop EC397 is designed to be a hard wearing two coat application on cementitious. The applied product will be resistant to water as well as a wide range of chemicals. The applied product should be top coated with UC371 to withstand heavy industrial traffic.

#### **Technical Data**

Vetotop EC397	Typical Values
Solid Content (%Volume)	100
Recommended DFT / coat	500-800 μm
Pot Life @ 12°C/54°F (min)	50
Pot Life @ 40°C/104°F (min)	15
Thin Film Dry Time (hours) @ 12°C	24
Thin Film Dry Time (hours) @ 40°C	12
Mixed Density @ 20°C (kg/L)	1.6
Max Recoat/Topcoat Time @ 12°C (hours)	60
Max Recoat/Topcoat Time @ 40°C (hours)	24
Application Maximum Relative Humidity (%)	75
Elongation	10%
Tensile Strength ASTM C307	36 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)	25
Water Absorption ASTM D413 (maximum)	0.004
Porosity with no sealer NACE Sand TM-01-74	0
Hardness Shore D	65
Impact Resistance ASTM D2794	10 Joules





#### **Chemical Resistance**

Chemical	Concentration	Resistance
Lactic Acid	10%	Excellent
Citric Acid	10%	Excellent
Hydrochloric Acid	30%	Excellent
Sodium Hydroxide	50%	Excellent
Acetic Acid	10%	Excellent
Butanol	-	Excellent
Crude Oil	-	Excellent
Nitric Acid	25%	Discoloration
Sulphuric Acid	50%	Excellent
Phosphoric Acid	50%	Discoloration
Mineral Oil	10%	Excellent
Ammonia	10%	Excellent
Sea Water	-	Excellent
Jet Fuel	-	Excellent
Skydrol	-	Discoloration

Vetotop EC397 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**

Priming is not normally required provided the substrate is sound, prepared and good quality non porous concrete. However, if concrete surface is porous, or w/c ratio is >0.5 it is recommended to use Vetoprime EP390.

Vetoprime EP390 should be mixed in the proportions supplied. Add the entire contents of the hardener can to the base can. When thoroughly mixed, preferably using a slow speed mixer, the primer should be applied in a thin, continuous film using rollers or stiff brushes. Work the primer well into the surface of the concrete taking care to avoid ponding or over application. The primer should be left to achieve a tack-free condition before applying the top coat.

### Mixing Vetotop EC397

In a separate mixing vessel, use a slow speed mixer to mix the base, hardener for 3 minutes. Mix these components in the quantities supplied taking care to ensure all containers are scraped clean. Do not add solvent thinners at any time.

#### **Application**

The first coat of Vetotop EC397 should be laid using a short haired lamb wool roller, or gauged squeegee to achieve a continuous coating. Ensure that loose hairs on the roller are removed before use. A minimum film thickness of 500 microns per coat should be applied for flooring system (this can be increased where specifications demand).

Vetotop EC397 should be topcoated with Vetotop UC371. The top coat can be applied in the same manner within 8 to 24 hours of the application of the top coat.

#### **Antislip Aggregates**

If the option of using antislip aggregates has been chosen, the base coat should be dressed with the chosen antislip aggregates as soon as possible after laying of the base coat. The recommended procedure is to completely blind the base coat i.e. apply excess dressing aggregate to completely obliterate the base coating.

Alternatively, the antislip silica particles can be broadcast in a light random dressing to provide a less dense finish, or the product can be used to obtain a smooth finish by omitting the antislip aggregates.

When the base coat has reached initial cure (after 12 hours at 20°C or 6 hours at 40°C), the excess aggregate should be vacuum cleaned from the surface.

The top coat can now be applied by a short haired roller or airless spray equipment. Care should be taken to ensure that a continuous film is achieved and the rough surface caused by the aggregate is completely sealed. This topcoat must be applied within 36 hours at 20°C (24 hours at 40°C) of the application of the resin base coat.

#### **Expansion Joints**

Expansion joints in the existing substrate must be retained and continued through the Vetotop EC397 topping. Saveto have a range of joint sealants specifically designed for flooring (see Vetoflex PS781, Vetoflex PS782 and Vetoflex PS786 product data sheets).

#### Cleaning

Tools and equipment should be cleaned with Vetonit Solvent XX400 immediately after use.





## Packaging & Coverage

Product	Pack Size
Vetotop EC397	4 Liter Kits
Vetoprime EP390	4 Liter Kits
Vetotop UC371	4 & 15 Liter Kits
Antislip Aggregates	25 Kg Bags

Product	Coverage	
Vetotop EC397	2 m <sup>2</sup> / Liter @ 500 microns	
Vetoprime EP390	8 m <sup>2</sup> / Liter	
Vetotop UC371	10 m <sup>2</sup> / Liter	

In case of use of antislip aggregates; the consumption values for the top coat will be reduced by 15 to 20%. Antislip aggregate consumption:

Product	Coverage
Antislip Aggregate Fine	1.5 - 3.5 m <sup>2</sup> / Kg
Antislip Aggregate Medium	1.2 - 3.0 m <sup>2</sup> / Kg
Antislip Aggregate Coarse	1.0 - 3.0 m <sup>2</sup> / Kg

# <u>Total System Thickness with antislip aggregate use:</u>

Vetotop EC397 with Antislip Aggregates Texture	Thickness
Fine	0.75 - 1.5 mm
Medium	1.5 - 2.0 mm
Coarse	2.0 - 2.5 mm

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 EC397 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 EC397, Vetotop UC371, Vetoprime EP390 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 medial advice. If swallowed, seek medical attention immediately - Do not induce vomiting.

Vetoprime EP390 and Vetonit Solvent XX400 are flammable. Keep away from sources of ignition. No Smoking. In the event of fire extinguish with CO2 or foam.





#### **Additional Information**

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

- Concrete Repair, Grouts and Enhancement.
- Wall & Facade Systems.
- Flooring and Coating Systems.
- Sealants and Joints.
- Plasters & Renders.
- Puties & Finishes
- Tiling Systems
- Waterproofing.
- 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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