

## CONCRETE REPAIR



# Vetorep ER359

Epoxy putty, high strength specially formulated thick lining mortar for vertical application

### Uses

- Lining and benching manholes, sewage tanks, and all similar structures which require impervious mortar or lining to achieve maximum chemical resistance.
- Repair of concrete surface pores and blemishes at a thickness from feather edge.
- Sealing of surface cracks in aggressive environments and injection repairs.
- Leveling of surface imperfections and irregularities before the application of Vetonit's resinous coatings and toppings range.

### Product Description

Vetorep ER359 is a two-component, epoxy-based, thixotropic, solvent-free compound. Once the kit components are mixed, the product becomes a smooth paste used to repair surface imperfections and irregularities, fill blowholes and pores, and is completely impermeable with excellent adhesive and bonding properties. The product's thixotropic nature allows it to function in vertical and overhead situations without sagging while maintaining an excellent bond.

### Advantages

- Paste consistency that is non-slump.
- Chemically resistant compound.
- Superior bond to a wide range of substrates.
- Compatible with most coating and topping types.
- Can be feather-edged and built up to a thickness of 30 mm in a single layer.
- Can build up to a thickness of 30 to 40 mm for vertical applications, 5 to 10 mm for overhead applications, and 30 to 75 mm for flooring (trafficable) in a single layer.

### Design Criteria

Vetorep ER359 should be applied in a checkerboard fashion at a minimum thickness of 5 mm. The use of Vetorep ER359 in a single layer shall conform to the following:

- Vertical application up to 40 mm.
- Horizontal concrete repair up to 75 mm.

### Technical Data

| Vetorep ER359                                   | Typical Values @ 25 °C & 55%RH |
|---|--------------------------------|
| Mix Density (kg/liter)                          | 1.86                           |
| Pot Life (Minutes)                              | 50                             |
| Solid Content (By weight%)                      | 100                            |
| Compressive Strength (MPa) ASTM C579, 7 days    | 75                             |
| Tensile Strength (MPa) - ASTM C579, 7 days      | 10                             |
| Flexural Strength (MPa), BS 6319, Pt3 @ 28 days | 20                             |
| Bond Strength (MPa)                             | > 2 (Concrete Failure)         |
| Initial Hardness (Hours)                        | 24                             |
| Application Temperature (°C)                    | 5 to 45                        |
| Water Penetration DIN1048                       | Nil                            |
| VOC Content (gm/liter), ASTM D2369              | < 10                           |
| Full Cure Time (Days)                           | 7                              |

## Chemical Resistance

| Chemicals        | Concentration % | Resistance    |
|------------------|-----------------|---------------|
| Bleach           | -               | Resistant     |
| Petrol           | -               | Resistant     |
| Sodium Hydroxide | 15              | Discoloration |
| Sodium Chloride  | 20              | Resistant     |
| Sulphuric Acid   | 15              | Discoloration |

## Usage Instructions

### Surface Preparation

Surfaces should be clean and structurally sound. Remove any loose or unsound brick or concrete. Surfaces must be entirely free of oil, grease, paint, detergents, rust, or other contaminants. The surface should preferably be abraded by light sandblasting, followed by thorough rinsing to remove dust.

Where a rough surface is difficult to obtain, Vetoprime EP491 should be used to prime the surface. Vetorep ER359 should be applied while the primer is still tacky.

### Mixing

Stir the hardener and base components thoroughly to disperse any settlement before mixing them together. Empty the entire contents of both components into a clean container and mix thoroughly for 2 minutes using a heavy-duty, slow-speed drill fitted with a spiral mixing paddle. Once achieving a uniform color and consistency, slowly add the aggregate and continue mixing until all the components are thoroughly blended.

### Application

Apply Vetoprime EP491 in a thin film using a stiff brush or a roller and then apply Vetorep ER359 mixture to the prepared surface using a trowel while the primer is still tacky. To repair holes, apply Vetorep ER359 to the surface and finish it until it is level. To avoid sagging on vertical surfaces, do not apply mortar thicker than 30 mm. Protect the assembled parts from movement until the resin has set. Vetorep ER359 has an working time of about 90 minutes at a temperature of 25°C. Do not leave the mixed material standing for a long time before applying, as this will significantly reduce its working time.

### Cleaning

Clean tools with Vetonit Solvent XX400 promptly before material harden. Cured material must be mechanically removed.

### Legal Disclaimer

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Hard copies of TDSs are printed once or twice a year. Our technical data sheets are continuously updated as per R&D improvements and new 3rd party testing; kindly refer to our website for the latest updated TDSs.

## Packaging & Coverage

| Product         | Pack Size     | Coverage   |
|-----------------|---------------|--|
| Vetorep ER359   | 20 kg kit     | 0.4 m <sup>2</sup> /kit/coat @ 30 mm thickness       |
| Vetoprime EP491 | 4 & 15 LT kit | 10 m <sup>2</sup> /liter/coat @100 microns 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 Vetorep ER359 has a shelf life of 12 months, provided it is stored off the ground in a dry, shaded place at temperatures between 5°C and 35°C.

### Limitations

- Vetorep ER359 should not be used when the temperature is below 5°C.
- Do not thin the components with solvent, as this will prevent proper curing.
- Do not expose the product to moving water during curing.

For more information, contact our technical team.

### Health & Safety

Vetorep ER359 contains resins that may cause sensitization by skin contact. Avoid contact with skin and eyes and inhalation of vapor. Wear suitable protective clothing, gloves, and eye/face protection. Barrier creams provide additional skin protection. Should accidental skin contact occur, remove immediately with a resin-removing cream, followed by 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.

Vetorep ER359 & Vetoprime EP491 are non-flammable.

Vetonit Solvent XX400 is flammable. Do not expose to direct flame and keep away from heat sources.

Refer to the product Material Safety Data Sheet for further information.

### Additional Information

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

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