saveto Construction Materials

vetonit Product Data Sheet

Vetorep *ER450*

Abrasion resistant flexible epoxy based transition mortar

Uses

- Transition mortar betwen bridge decks and mechanical expansion joints.
- Interface between asphalt and concrete slabs.
- Interface between steel and concrete elements
- Where a trafficable yet flexible mortar is needed.

Product Description

Vetorep ER450 is a three component system consisting of solvent free epoxy resins together with a special blend of fillers to provide a flexible trowel grade epoxy mortar. The mixed mortar is designed for use in bridge and highway transitioning joints and between concrete, asphalt and steel.

Advantages

- Solvent free.
- Hard wearing with high abrasions resistance.
- Excellent adhesion to concrete, asphalt and steel surfaces.
- Withstand dynamic movement.
- Fast cure.
- No priming is required.
- Flexible mortar.

Standards Compliance

➤ EN 1504:2013

Design Criteria

Vetorep ER450 shall be applied in at a thickness between 30 and 150 mm at a maximum of 15 m length in a single application.

Technical Data

Vetorep ER450	**Typical Values**@ 22°C
Volume of Solids	100%
Working life	45 minutes
Fresh Mixed Density	Approximately 1.8 kg/ltr
Compressive Strength ASTM C579, 7 days	> 40 MPa
Tensile Strength ASTM C579, 7 days	> 6 MPa
Flexural Strength BS 6319, Pt3	10 MPa @ 7 Days
Bond Strength	> 2 MPa (Concrete Failure)
Initial Hardness	24 Hours
Full Cure	7 Days
Water Penetration DIN1048	Nil
VOC Content ASTM D2369	<25 gm / Liter (LEED Compliant)

Usage Instructions

Surface Preparation

The surface must be structurally sound, free from oil, grease and other forms of contamination. Concrete should be surface dry and suitably prepared either by scabbling or grit blasting to remove any surface laitance.

Mixing

Vetorep ER450 comprises of three components, a resin base, hardener and filler which are pre-weighed to the correct proportions. Under no circumstances should part mixing be carried out.

Ensure that the bottom and sides of resin containers are thoroughly scraped; transfer the entire contents of the hardener container into the base container. Using a mixing paddle attached to a heavy duty slow speed electric drill, mix for approximately 2 minutes until a uniform consistency is obtained.

The resin mixture should then be transferred to a separate container or forced action pan mixer, and the FILLER gradually added and mixed for a further 2 minutes or until the filler has thoroughly wetted out and a uniform consistency is obtained.

Application

Vetorep ER450 should be applied by first tamping, followed by trowelling using steel float.

Cleaning

Vetorep ER450 should be removed from tools, equipment and mixers with Vetonit Solvent XX400 immediately after use.

Vetorep ER450 should be allowed to cure for 24 hours at 25°C before being subjected to foot traffic. At the same temperature, full mechanical and chemical properties are achieved after 7 days (please consult Saveto Technical Department for details of curing times at other temperatures).

Packaging & Coverage

Product	Pack Size	Theoretical Yield
Vetorep ER450	25 Kg kits	14 Liters / Kit

Stated coverage values are theoretical and may change depending on various factors such as nature of substrate and wastage factors.

Shelf Life & Storage

Original sealed kits of Vetorep ER450 has a shelf life of 12 months provided it is stored clear of ground in a dry and shaded temperature controlled place <25ºC.

Limitations

Vetorep ER450 should not be used when the temperature is below 5ºC and falling. Do not mix part packs under any circumstances. Do not thin components with solvent as this will prevent proper cure. The products should not be exposed to moving water during curing.

Health & Safety

Vetorep ER450 contains epoxy resin and coal tar which may cause skin sensitisation in certain individuals. Skin contact should be avoided and a suitable barrier cream applied or disposable rubber or plastic gloves worn. Also use eye/face protection. If contact with skin occurs, it must be removed before it hardens followed by washing with soap and water. In case of contact with eyes rinse immediately with plenty of water and seek medical treatment immediately.

Do not smoke during use. Do not use near a naked flame.

Flash point: >60ºC

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

LEGAL DISCLAIMER