

Technical Data Sheet

GEOKRETE - VR is a proprietary blend of powders based on Geopolymer technology used for vertical and overhead structural repair and requires only addition of water at site. GEOKRETE - VR has 15 minutes of working time plus additional 10 minutes to shape the repair to match the existing contours of the host concrete. It can be applied in temperature ranges from 20°C to 40°C.

UNIQUE FEATURES & BENEFITS

- Quick setting and High early compressive strength
- No priming & No curing required
- Rapid return to service (Less than 2 Hrs after application)
- Forms tenacious bond with host material
- Non Shrink, 100% Water Proof and Fire Resistant
- Not affected by Sulfates or Chlorides
- Eco-friendly (Do not contain any cement or resin or VOC)

PHYSICAL PROPERTIES SET TIME (at 30°C)

Initial Setting time : 15-Minutes

Final Setting time : 30- Minutes

*Set time will be shortened at higher temperature site conditions and will be delayed at lower temperature site conditions

COMPRESSIVE STRENGTH

3Hrs : 8 Mpa

24Hrs : 20 Mpa

7 Days : 25 Mpa

28 Days : 35 Mpa

*Strengths will be marginally higher at higher temperature site conditions and marginally lower at lower temperature site conditions than the above specified value of 30°C

BOND STRENGTH TO CONCRETE	: 5 Mpa
WATER PERMEABILITY	: Depth of Penetration: 4 mm (As per DIN 1048)
SHRINKAGE	: None
OPEN POROSITY	: Less than 1 %
UNIT WEIGHT	: 2200 kg/m ³
COVERAGE	: 50 Kgs/m ² at 20 mm thickness



SURFACE PREPARATION

Surfaces to receive GEOKRETE -VR should be clean and free from unsound materials, oil, grease and other contaminants. It is recommended to clean the substrate by water jet to remove dust and remove particles. Cracks present must be treated first with crack filler like TECHNIFILL. Sprinkle water to the cleaned surface to enhance the bonding before application of GEOKRETE - VR.

MIXING GUIDELINES (at 30°C)

Use 150 to 175 ml of water per kg of the powder. After 2 minutes of mixing it will form smooth slurry. At these points you may choose to hand apply or use any kind of suitable application equipments. Remember to wash off all the equipments immediately. To ensure the performance of the product, DO NOT break up individual units into smaller portions. Mix entire contents at one time.

Above mixing times are based on using 30°C temperature mixing water. During usage of higher temperature water for mixing, the mixing time to be shortened appropriately. The above mixing times are indicative only. Where mixing time is critical a trial mix is recommended.

WORKING TIME

GEOKRETE - VR has an approximate working time of 15 minutes at 30°C

PACKING

25Kg Bag (Contains 25 Nos. x 1KG Sachets)

SAFETY

The use of dust mask, safety goggles and gloves is recommended.

STORAGE LIFE

GEOKRETE-VR has a shelf life of 12 months from the date of manufacturing if stored in unopened original packing, under shade in dry and frost free conditions.

USES

Used for vertical and overhead structural repairs
Areas where high chemical resistance required
Areas where high heat and fire resistance required
Areas where high water resistance and corrosion protection required
Rapid construction needs

DISCLAIMER: The use of this product is beyond the manufacturer's control and liability is restricted to the replacement of material proven faulty" The manufacturer is not responsible for any loss or damage arising from incorrect usage" Specifications are subjected to change without notice"

 **Ecomaterials India LLP**

www.ecomaterials.in

8/5, Sreyas Apartments, Race View Colony, 1st Street, Guindy, Chennai, Tamil Nadu - 600032

Tel: +91 44 22441395, Email: mkt@ecomaterials.in, Web: www.ecomaterials.in