

### Technical Data Sheet

Advanced Geopolymer Based – Contains No Portland Cement

**GEOKRETE - PR** is a proprietary blend of powders based on advanced Geopolymer technology extremely versatile, cementitious, rapid setting, curing free, semi leveling structural mortar for quick construction and repair needs. It's a single component powder activated by adding just water at site.

If required, GEOKRETE - PR can be extended with aggregates of different sizes (6mm or 12 mm or 20 mm) at a ratio of 1 : 0.5 by weight depending upon the application needs.



#### UNIQUE FEATURES & BENEFITS

- No priming & curing required
- Quick setting and High early compressive strength
- Rapid return to service (Less than 2 Hrs after application)
- Forms tenacious bond with host material / old Concrete
- Self bonding (bonds itself and No cold Joints)
- Highly dense micro structure and impervious to water
- Not affected by Sulfates and Chlorides
- Can set in Sub Zero temperature
- Freeze thaw resistant
- Fire resistant - Tolerates temperature > 1200°C - Zero flame spread
- Resistant to deicing chemicals
- Eco friendly (Do not contain any cement or resin or VOC)

#### GENERAL PROPERTIES

**WATER PERMEABILITY**- Depth of Penetration : 1.6 mm  
(As per DIN 1048)

- SHRINKAGE** - None
- OPEN POROSITY** - Less than 1 %
- UNIT WEIGHT** - 2250 kg/m<sup>3</sup>
- COVERAGE** - 22 Kg/m<sup>2</sup> @10 mm thickness

#### PHYSICAL PROPERTIES ( at 30°C )

##### SET TIME

- 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

SPLITTING TENSILE STRENGTH : 28 days - 3.4 Mpa

BOND STRENGTH TO CONCRETE : 24 hrs - 8.1 MPa

**Quicker ...**

**Stronger ...**

**Greener ...**

## COMPRESSIVE STRENGTH

Duration	Strength	Strength when extended with gravel at a ratio of 1: 0.5 by weight
2 hrs	15 Mpa	18 Mpa
24 hrs	30 Mpa	35 Mpa
7 days	45 MPa	50 MPa
28 days	50 MPa	55 MPa

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

## SURFACE PREPARATION

Surface must be sound, clean and free from loose particles or contamination to ensure proper bonding. Dry clean and stable substrate is required.

## MIXING GUIDELINES (at 30°C)

Use about 550 ml of water for 5kg of material. Mix the slurry approx 2 minutes until a homogenous mix of smooth, creamy and trowel able consistency is obtained. If required, extend the mix at this point with aggregates at a ratio of 1:0.5 by weight. Mix the slurry for another 1 minute and apply the mix in the repair area. Remember to wash off all the equipment immediately. Upon initial set, a broom finish can be applied and upon final set the material can be saw cut, drilled, sanded and / or polished. Increasing the water content more than specified will affect the final properties of the product.

### PACKING

25Kg Bag (Contains 5 Nos. x 5KG Sachets or 25 Nos. X 1KG Sachets)

### SAFETY

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

### STORAGE LIFE

GEOKRETE-PR 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

### GEOKRETE-PR is ideal for

- Rapid repair of Bridge Decks / Highways / Airport Runways / Industrial Floors / Parking Structures / Concrete Pavement / Freezer Floors
- Instant concreting needs where time is crucial like in the area of equipment installation / Precast panel installation / emergency construction needs
- Cold weather Concreting - Replacement/Repair of concrete pavements in sub zero temperatures with a very minimal down time.
- Construction where water impermeability is of primordial importance

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"



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