

# **TectorSpex** Concrete Repair Mortar 703

## Description

**TectorSpex Concrete Repair Mortar** is a specially formulated, non-shrink, fiber-reinforced high strength cementitious mortar composed of high quality cement, properly selected & graded aggregates, fibers & additives. TectorSpex Concrete Repair Mortar is suitable for a wide range of concrete and masonry repair work especially in vertical and overhead applications because it is shrinkage compensating, high strength reinforced mortar with excellent bonding properties.

## **Areas of Application**

- Repair of damaged, deboned or weak concrete.
- Repair of vertical and overhead surfaces.
- Heavy concrete structural repair works.

## **Features & Benefits**

- Speciality Formulated for Middle East hot climatic conditions.
- Strength special reinforced strength due to the presence of Fibre.
- Thickness high thickness built-up is possible.
- Shrinkage shrinkage compensating hence reduces cracking.
- Permeability Low permeability and weatherproof increases durability.

- Replacement of spalled, chipped or cracked concrete.
- The mortar is suitable where superior chloride and carbon dioxide resistance is required.
  - Bonding excellent bonding strength to old concrete.
  - Resistant excellent resistance to chloride and carbon dioxide permeability.
  - User Friendly pre-packed, easy to use, simple addition of water at the site.
  - Thixotropic and can be used in over-head applications

# **Method of Application**

The heavy load bearing capacity and high mechanical strength of TectorSpex 703 makes it ideal for structural repair.

### Surface Preparation

The surface to be prepared must be sound & clean. It should be free of dust, loose mortars, oil, grease & coatings.

#### Application

#### Bedding

- The voids diameter should be at least 30mm bigger than the rod; the depth of the voids should be 10 to 15 times the diameter of the rod to be bedded. A few hours before bedding, fill the voids with water. Make sure that there is no residual water in the voids.
- Apply TectorSpex Concrete Repair Mortar as in the form of sound mortar by adding water.

#### Blocking

- Make a solid formwork and ensure that the formwork is leak proof to avoid bleeding and leakage.
- Thoroughly wet the area and make sure that no residual water remains.
- Pour the TectorSpex Concrete Repair Mortar by a suitable method such as hand or pump.
- Care should be given to avoid air pockets while filling.
- For mortar and slurry the ratio is 3.5 litres per 25 kg bag.

## Repairs on Fresh Concrete Areas

- The repair areas must be clean and primed with suitable bonding agent and allow 20 minutes for subsequent application of TectorSpex Concrete RM.
- Tector RM can be applied at thickness in excess of 50 mm at a time on vertical surfaces and upto 40 mm thickness when applied in overhead work.

#### **Priming of Reinforcing Steel**

- Immediately after the completion of cleaning, apply the suitable primer as a protective coat for steel. The priming system to be used on the concrete substrate, will depend on the cause of the damage.
- Allow minimum 1 hour standing time between the application of suitable primer and the subsequent application of TectorSpex Concrete RM.



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#### **Repairs on Old Concrete Areas**

• The decayed or damaged area of the concrete should be saw cut or cut neatly keeping the side of the area as square as possible. Feather edging must be avoided. test the surface for soundness; remove all loose debris, dust and water.

## **Precautions & Limitations**

- Temperature range: 5°C to 35°C. Outside this range, it is recommended to use hot mixing water (below 5°C) or cold water (above 50°C) depending on the circumstances, as well as increased care in protecting the surface (covering with insulating materials).
- Solid and resistance supports to be used. Support is to be saturated with water a few hours prior to installation. All residual water to be removed prior installation.
- Do not mix with other hydraulic binders. Under no circumstances should any additives be used.

Technical Properties:							
Properties		Specification			Results		
Appearance					Granular grey powder		
Bulk density, Kg/ltr					1.62		
Grain size, mm					Upto 1.6		TectorSpex
Special ingredients					Fibers & binders		Concrete Repair Mortar
Compressive strength, 28 days, N/mm <sup>2</sup>		ASTM C 579		70		703	
Flexural strength, 28 days, N/mm²		ASTM C 580			12		Statuter Charley Statemant
Tensile strength, 28 days, N/mm <sup>2</sup>		ASTM C 307		5		anteres.	
Water absorption, %				< 1.7			
Туре	Repair Mortar (kg)		Gravel	Water (litres)		Volume in place	
Mortar	25		0	4.50		15.81	
Pure slurry	25		0	4.50		16.51	28.
Micro-concrete	25		5	3.21		20.10	

# Packaging: 25 kg

Shelf Life & Storage: Shelf life is 12 months from the date of manufacturing in unopened condition. Store in a cool & dry place.

## **Health & Safety:**

- As with all chemical products, caution should always be exercised. Protective clothing, such as gloves and goggles, should be worn.
- Treat any contact to the skin or eyes with fresh water immediately. Should any of the products be accidentally swallowed, do not induce vomiting but seek for medical assistance immediately.
- Ensure the pack is available for the medical attendant to examine any relevant instructions and contents details.
- Reseal all containers after use and ensure product is stored as instructed.

The above technical data are based on controlled laboratory conditions. However, there may be some variation in yield and coverage depending on the ambient weather and site conditions.



Wear gloves



Wear goggles and respirator mask



Do not swallow,

do not inhale



GHS05





GHS07

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