



# HIND PATCH R

## PRODUCT DATA SHEET

### SINGLE COMPONENT READY TO USE FIBER REINFORCED STRUCTURAL REPAIR MORTAR

#### DESCRIPTION

Hind Patch R is a single component, polymer modified, fiber reinforced, cementitious based thixotropic structural repair mortar. It conforms to EN1504-3/R4.

# **USES**

It is used for repairing of reinforced concrete elements protecting it from sulphate and chloride attack. Can be used to repair underground and marine concrete structures. It is used for smoothening of concrete surface prior to application of waterproofing polymer coatings. High strength concrete elements can also be repaired with **Hind Patch R**. It is an ideal mortar for repairing of tie-rod holes used for fixing of shuttering.

# **ADVANTAGES**

- Easy to use only water to be added and applied.
- Excellent bonding to concrete & steel.
- Non-sagging/thixotropic properties make it an ideal compound for overhead applications.
- Non -Shrink.
- High strength and waterproof.
- It high resistant to oils, sulphate and chloride attacks and freeze-thaw cycle.

# APPLICATION

## **Substrate Preparation**

The concrete surface to be properly cleaned and it should be sound and dry. It should be free of frost, curing compound membrane, waterproofing treatments, oil, laitance, other containments and dust. The area to be repaired should be free from all loose particles and properly saw-cut perpendicular to the repair surface. Worn out corroded reinforcement to be replaced with new ones and cleaned properly. The surface to be pre-wetted before application of **Hind Patch R.** 

## Mixing

Adequate quantity of clean water is taken in a container and properly gauged. **Hind Patch R** is added into the water slowly and continuously mixed with a electrical mixer (400-600rpm) fitted with a paddler for **4-5 minutes**, so that an uniform homogenous mix is obtained. The mix is allowed to rest for 3 minutes so that entrained air escapes out and finally remixed for another **30-40 seconds**.

## Mixing Ratio:

Add 160 ml -165 ml of water slowly to 1Kg Hind Patch R to obtain the desired consistency required at site. Method of Application

**Hind Patch R** is now applied on the prepared surface with a steel trowel and that thickness of the mortar should be between 1-4 cm. If the application of the mortar is required to be thicker than further layer is applied by the same process after 24 hours. When the mortar sets initially water is sprinkled on it and is finished with a steel/wooden trowel. Open area applications are to be protected from rain and severe weathering conditions for the first 24-48 hours from the time when repairing gets finished with wet cloth or curing compounds.

# Coverage

19.15 to 19.25 Kg/m<sup>2</sup> to obtain a thickness layer of 1cm.

**Cleaning of Tools** - Clean all tools with water. Avoid hardening of the materials otherwise to be cleaned by mechanical abrasion.

#### **PROPERTIES**

Aspect	Grey Powder
Mixed Density (W/P Ratio :: 0.150/0.180 : 1)	2.25 - 2.50 Kg/Litre
Pot Life	45-60 minutes at 25 <u>+</u> 2° C
Compressive Strength	> 15 N/mm <sup>2</sup> after 3 days
	> 25 N/mm <sup>2</sup> after 7 days
	> 40 N/mm <sup>2</sup> after 28 days
Flexural Strength	6-7 N/mm <sup>2</sup> after 28 days
Bond Strength to Concrete	> 2 N/mm <sup>2</sup> after 28 days
Modulus of Elasticity	> 20,000 N/mm <sup>2</sup> after 28 days
Capillary Water Absorption	< 0.5 Kg.m-2.hour-0.5
Thickness of application	10mm (Min.) 40mm (Max.)
Application Temperature	$+5^{0}$ C to $+40^{0}$ C
Full Curing at 25 <sup>o</sup> C	28 days

#### Note:

- Higher temperature shortens the curing & working time , lower temperature extends the durations. Ideal Temperature is  $25^{\circ}$  C and  $50^{\circ}$  C Relative Humidity.
- Compressive Strength tested using 50mm X 50mm X50mm cube moulds.

#### **SHELF LIFE**

12 months from the date of manufacture in unpacked condition. Should be stored in a cool and dry place.

## **PACKING**

Available in 25 Kg. HDPE Bag

### HANDLING PRECAUTION

**Hind Patch R** is non-toxic and ingestion is to be avoided. If contact with eyes occurs, wash well immediately with water and seek medical advice.

## Note:

- Hindcon Chemicals maintains a team of technically trained professionals to provide full support to
  your problems in construction, and recommend the correct product to suite your specific requirements.
  Our authorized applicators can attend your site for application of the products.
- The content of the Technical datasheet are for general information and guideline. The result shown here
  are generated from our laboratory or from our site experiences.
- Quality of our products are maintained as per ISO9001:2008 recommendations and continuous researches. The behavior can change as per the prevailing conditions at the time of applications.
- Since HINDCON CHEMICALS LIMITED has no control over the use to which the users may put the material, it does not claim or warrant that in the user's particular circumstances, the result that the user will obtain from the product will be the same as those described in this communication or that the user will find the information or recommendations complete, accurate or useful. The client must test and ascertain the safety and fitness for the product for use.
- The right to change the properties of the products is reserved with us. The proprietary rights of third
  parties must be observed. All orders are accepted subject to the terms of sale and delivery. Users must
  always refer to the most recent issue of the latest Data Sheet for the product concerned, copies of which
  will be supplied on request.

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