



# PACTORep HB-2C

Two Component, Polymer Modified, Fiber Reinforced  
Cementitious Repair Mortar

## DESCRIPTION

**PACTORep HB-2C** is a high strength two component polymer-modified cement based mortar. It contains high strength hydraulic binders, graded aggregates, fibers, polymers and additives which improve the compressive, flexural & bond strengths. When mixed together the components produce a high abrasion resistant mortar easy to apply on vertical and horizontal surfaces in thickness from 10 mm to 50 mm in one layer by hand and by trowel application.

**PACTORep HB-2C** mortar is shrinkage compensated. It has low permeability, excellent bonding properties and is extremely durable.

## TYPICAL USES

- All types of structural repair which can be applied by trowel.
- Restoration and repair of concrete and masonry surfaces.
- Protection of concrete subject to attack from water containing chlorides and sulphates.
- Repairs in industrial areas, especially those containing mineral oils & lubricants.
- Repairs in marine environments.
- Joint edges, pavement, docks, curbs & walk ways.
- Repairs of waste water & sewage structures and reservoirs,

## ADVANTAGES

- Simple to use, two parts system.
- High early compressive and flexural strength.
- High abrasion resistance
- Good resistance to freeze/thaw cycles and de-icing salts.
- Non sag consistency makes it easy to place on vertical & horizontal surfaces.
- Excellent durability under freeze/thaw cycling.
- Excellent bond due to its high concentration of liquid polymer.
- Thermal expansion coefficient compatible with that of concrete.

## PACKAGING

25 Kg unit consisting of:

Part A : 4 kg liquid polymer

Part B : 21 kg powder

## PROPERTIES

The physical properties shown below were obtained under laboratory conditions at a liquid polymer : powder ratio of 0.19, and may vary in practice depending various factors.

### Compressive Strength

(ASTM C 579) 28 days : 65 N/mm<sup>2</sup>

### Flexural Strength

(ASTM C 580) 28 days : 13 N/mm<sup>2</sup>

### Bond Strength

(ASTM C 307) 28 days : 2.5 to 3 N/mm<sup>2</sup>

## APPLICATION INSTRUCTION

### Preparation of substrate:

It is essential that the substrate to be repaired is sound, clean and free of all contamination.

The damaged areas of concrete to be removed should be clearly identified. The perimeter of the area should be saw cut to a depth of 10mm and the edges cut as neatly as possible keeping the sides square. Feather-edging is not permitted and a minimum thickness of 10mm must be maintained over the whole repair area.

The substrate should be prepared to provide a rough surface having at least 5mm amplitude at 20mm frequency.

If reinforcement is corroded ensure that the back of the steel has been exposed. Reinforcement should have all rust removed by the use of power tools, abrasive blasting (wet or dry) or wire brushing. Reinforcing steel should be exposed and cleaned around its whole circumference. Steel should be



prepared to Swedish Standard SIS 05-900:1967-SA 2½ or BS 4232 Ref. 24 second quality.

Priming is recommended but not always necessary, as **PACTORep HB-2C** contains high concentration of liquid and powder polymers. Based on site conditions and the condition of the substrate, a slurry coat using a mixture of Part A and B at a ratio of 1:2 by volume as a primer. Keep primer coat tacky and moist before applying the repair layer.

### MIXING

**PACTORep HB-2C** must be mixed mechanically. The following mixing equipment is suitable, heavy duty slow speed drill with spiral mixing paddle, forced action mixer, such as Creteangle, Mixal, Pan Mixers etc.

Add 4.0 kg of liquid polymer into the mixer. Start the mixer and add the powder slowly and continuously. Mix for 3 minutes after all the powder has been added until mortar is homogeneous and lump free.

**PACTORep HB-2C** can be used when the ambient temperature between 5 and 50°C. If ambient temperature is >30°C, use chilled water and condition the bagged product in an air-conditioned store prior to use. Maximum mixed temperature should be not more than 35°C.

### APPLICATION

After mixing, **PACTORep HB-2C** can be trowel applied. When applying by hand **PACTORep HB-2C** must be forced tightly into the substrate to ensure intimate contact with the pre-wetted substrate. Levelling and initial finishing should be carried using a wooden or plastic float.

Final finishing should be carried out using a steel float.



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When the material has stiffened to the point where finger pressure lightly marks the surface, a final firm trowelling should be given using the steel float.

### CURING

**PACTORep HB-2C** must be cured immediately after application using wet hessian cloth wrapped with polythene sheet and taped at all edges, alternatively, a high efficiency curing compound such as PACTOCURE may be applied after thorough wetting of the surface.

### YIELD

One bag of 21 kg powder with 4 liters of liquid polymer will yield approximately 13 liters. Actual coverage of **PACTORep HB-2C** will be dependent upon the general substrate condition. It is recommended, therefore, that site trials over a typical area are carried out to determine actual usage.

### STORAGE

Part A, free from frost

Part B, Protect from moisture

Shelf life is 12 months when unopened. When stored off the ground free of moisture and humidity.

### PRECAUTIONS

As with other products containing Portland cement, the cementitious material in **PACTORep HB-2C** may cause irritation. In case of contact with eyes, immediately flush with plenty of water for at least 15 minutes. Call a physician. In case of contact with skin, wash skin thoroughly.



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