



DESCRIPTION

PACTORep HB is a polymer and fibre modified mortar which has been designed to provide high strength repair mortar, shrink control and flexural strength. It possess excellent bond characteristics to steel reinforcement and to concrete.

PACTORep HB mortar is shrinkage compensated. It has low permeability and is extremely durable. **PACTOREP HB** contains no metallic aggregate and is chloride free.

PACTORep HB is formulated for sprayed or trowelled applications; in thickness up to 50 mm in one layer by hand application. Greater thicknesses can be achieved when spray applied.

TYPICAL USES

- All types of structural repair which can be applied by trowel or wet spray.
- Repair of structural members subjected to repetitive loading.
- Repairs of exterior and interior concrete or masonry surfaces.
- Protection of concrete subject to attack from water containing chlorides and sulphates etc.
- Repairs in industrial areas, especially those containing mineral oils, lubricants.
- Repairs in marine environments.
- Filling tie rod holes.

ADVANTAGES

- Approved by (WRAS, # 1511537) for use with drinking water.
- Good resistance to chemicals
- One component only needs addition of cold clean water.
- Shrinkage compensation – reduces the risk of cracking due to shrinkage and ensures full contact with host concrete and load transfer in structural repair situations.
- Can be spray applied – rapid application of large quantities.
- Low rebound – When spray applied rebound is minimal, with subsequent saving in material cost.

- Extremely low permeability – gives excellent resistance to attack by aggressive elements.

PACKAGING

25 kg. bags

PROPERTIES

The physical properties shown below were obtained under laboratory conditions at a water: powder ratio of 0.12, and may vary in practice.

| Characteristics | Standards | Value |
|----------------------|--------------|---|
| Fresh wet density | ASTM C1329 | ~ 2300 kg/m ³ |
| Compressive Strength | ASTM C109 | 7 days >38 N/mm ² 28 days >58 N/mm ² |
| Pull off Strength | BS 1881-1992 | >1.4 N/mm ² |
| Flexural Strength | (ASTM C 580) | 10 N/mm ² |
| Tensile Strength | (ASTM C 307) | 4.0 N/mm ² |
| VOC | USEPA 24 | <1 g/L |

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.



MIXING

PACTOREP HB 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 3.0 – 4.0 litres of water into the mixer. Start the mixer and add the **PACTOREP HB** powder rapidly and continuously. Mix for 3 minutes after all the powder has been added until mortar is homogeneous and lump free.

Add water, if necessary, within the limits given, until the required consistency is achieved. Mix for a further 1-2 minutes. The amount of water required will be affected by ambient temperature and relative humidity.

PACTOREP HB 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 no more than 35°C.

APPLICATION

After mixing, **PACTOREP HB** can be sprayed or trowel applied. When applying by hand **PACTOREP HB** 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.

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 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.

COVERAGE

One 25kg bag of **PACTOREP HB** with 4 litres of added water will yield approximately 12.6 litres of mortar which will cover 1m² at 12.6mm average thickness.

STORAGE

Store out of direct sunlight, clear of the ground on pallets, protect from rainfall. Avoid excessive compaction. Shelf life is 12 months when stored as above.

PRECAUTIONS

As with other products containing Portland cement, the cementitious material in **PACTOREP HB** 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.



P.O. Box no 282 676 Dubai-UAE
Tel: +971 4 7706646
Fax: +971 4 7706647
Visit us: www.pactechnologies.ae

Important Note: Whilst any information contained herein is true, accurate and represents our best knowledge and experience, no warranty is given or implied with any recommendations made by us, as the conditions of any labor involved in the application is beyond our control. PAC Technologies shall not be liable for any injury, loss or damage, direct or consequential, arising out of the use of this product. It is the responsibility of the user to ensure that the product meets his particular requirements and to use it in a suitable way. Field service, where provided, does not constitute supervisory responsibility. For additional information contact your local PAC Technologies representative.

JUNE 2019

Page 2 of 2