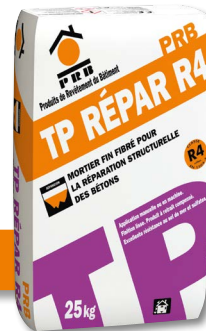


# PRB TP RÉPAR R4

THIN FIBRED MORTAR FOR STRUCTURAL CONCRETE REPAIRS.



## The PRB TP RÉPAR R4 +

- + Can be applied in thick layers up to 70 mm in places
- + Smooth finish
- + Compensated shrinkage product
- + Excellent resistance to seawater and sulphates

### PACKAGING

- 25 kg paper bag.
- 1.2 t pallet, i.e. 48 25 kg bags.

**STORAGE:** 12 months.

### CONSUMPTION

As an indication: 2 kg/m<sup>2</sup>/mm of thickness.

**COLOUR:** Light grey.



Class R4 as per EN 1504-3



## AREA OF USE

### USE

- Concrete repairs
- Vertical, horizontal or underside application, interior or exterior use
- Repair and filling of chips, step nosing, balconies, holes, chasing, etc.
- Restructuring of damaged structures: posts, slabs, vaults, beams, etc.
- Treatment of passive cracks.

### AUTHORISED SUBSTRATES

- Concrete.

### PROHIBITED SUBSTRATES

Do not use on substrates that are:

- Plaster.
- Covered with organic products (to be completely eliminated)
- Crumbling or weak
- On industrial floors or floors with heavy traffic that are not covered with suitable coverings

### APPLICATION CONDITIONS

- Between 5°C and 30°C.
- Do not apply on substrates that are frozen or thawing, hot or exposed to full sunlight, soaked or exposed to driving rain and strong winds. Do not apply if there is a risk of freezing temperatures in the following 24 hours.

## TECHNICAL CHARACTERISTICS

### COMPOSITION

- Hydraulic binders, sands, fibres, additives.
- Grading: 0-0.7 mm.

### PRODUCT

#### POWDER

- Apparent density of the powder: 1.4 t/m<sup>3</sup>.

#### PASTE

- Pot life: 1 h approx. at 20°C, 30 min at 30°C

- Setting time

Temperature	Setting start	Setting end
at 20°C	3 h	3 h 30
at 30°C	1 h 05	1 h 20

- Floating time: 1 h
- Release time: 4 to 5 h

### Performances when hard

- Compliant with the EN1504-3 standard class R4
- Mechanical strengths in MPa as per EN12190

Strength	at 24 h	7 days	28 days
Bending	6	8	10
Compression	30	45	50

- Adherence on concrete: ≥ 2MPa.
- Thermal compatibility (Parts 1, 2, 4): ≥ 2MPa.
- Carbonation resistance: OK
- Chloride ion content: ≤ 0.05 %
- Modulus of elasticity: 25 GPa
- Fire behaviour: A1

- Capillary absorption: ≤ 0.5Kg.m<sup>-2</sup>.h<sup>-0.5</sup>
- Abrams ½ cone slump test: 4 cm
- Time before covering:
  - Bonded tiling: 48 h.
  - Mortar render: ≥ 7 days.
  - Paint, TPC: 48 to 72 h depending on ambient conditions and the thicknesses applied.

These values are laboratory testing values determined using applicable technical guides. Application conditions may significantly alter them. The times indicated at 20°C are extended at lower temperatures and shortened at higher temperatures.

## PREPARATION

### SUBSTRATE PREPARATION

- The substrate must be hard, cohesive, rough, clean and dust-free.
- Sound the areas to be repaired using a hammer and eliminate the defective parts with a pick to reveal the healthy concrete.
- Leave sharp edges on edges of the repair
- Chases: open each chase to obtain a minimum 1 cm square or triangular section of a depth ≥ the width.

### TREATING STEELS CONSIDERED TO BE HEALTHY

- Completely bare the rebars, including the back, for a depth of 1 to 2 cm so that the mortar properly coats them.
- Deoxidise the rebars on all sides by brushing or sand-blasting until "white metal" is obtained, then protect it immediately.

- **Option 1:** Treat the rebars using PRB PASSIVANT ACIER and leave to dry.
- **Option 2:** Treat the rebars by applying a slurry composed of 50 % PRB TP RÉPAR R4 mixed with 50 % pure PRB LATEX resin using a brush.
- Remove all the dust from the areas to be repaired.

### WETTING

- Start by wetting the areas to be repaired and leave to dry (the substrate must be damp but not dripping wet).

### INCREASED ADHERENCE\*

On the areas to be repaired, if necessary, prepare a slurry using PRB TP RÉPAR R4 mixed with a PRB LATEX resin solution + water of 1/3 resin and 2/3 water, i.e.:

- 0.4 l PRB LATEX + 0.8 l of water for 5 kg
- 2 l PRB LATEX + 4 l of water for 25 kg

Spread the slurry over the concrete in a layer of about 2 mm using a wide brush.

### PRODUCT PREPARATION

Mix the PRB TP RÉPAR R4 with potable water in a clean container:

- 4.75 to 5.4 l approx. per 25 kg bag
- 0.95 to 1.08 l for 5 kg,

### SPRAYING EQUIPMENT SETTINGS

#### Mortar pump

- Water pressure setting: 10 to 12 bars
- Paste operating pressure: 14 to 18 bars
- Spray nozzles (min. Ø): 12 mm

### APPLICATION

- The first application of PRB TP RÉPAR R4 must occur:
  - As soon as the PRB PASSIVANT ACIER (Option 1) or the slurry (Option 2) stiffens.
  - In cases where an ADHERENCE STRENGTHENING has been used, as soon as it stiffens and before it has hardened.

- PRB TP RÉPAR R4 is applied in successive applications of 5 to 70 mm.
- Fill cavities and strongly compact the mortar so that it adheres.
- Wait for the 1st application to stiffen before applying the next.
- Profiling: cut the excess using a trowel edge or a level.
- Smooth using a smoother or finish by floating using a plastic or polystyrene float.

### PRECAUTIONS FOR USE

- Contains cement and/or lime.
- Refer to the regulatory labels on the packaging and to the safety data sheet before use.
- Comply with applicable regulations.