PRB CHAPECEM HPR

READY TO USE QUICK SETTING AND DRYING SCREED MORTAR

The + PRB CHAPECEM HPR

- Shower: screed + sealing in 4 h
- Management of difficult to access sites
- Quick recommissioning
- Compensated shrinkage

PACKAGING
– 25 kg-paper bag
– 1.225 t-pallet, i.e. 49 25 kg-bags

STORAGE: 12 months.

CONSUMPTION
As Slurry per m2:
PRB MANUCEM HPR slurry + sand; 1.5 to 3 kg i.e.:
– Binder **PRB MANUCEM HPR**: 0.5 to 1 kg
– Resin **PRB LATEX**: 0.120 to 0.250 l

PRB MANUCEM HPR slurry; 2 to 3 kg i.e.:
– Mortar **PRB CHAPECEM HPR**: 3 kg
– Resin **PRB LATEX**: 0.240 to 0.300 l

In Mortar per m², PRB CHAPECEM HPR: 22 kg/m²/cm thickness

P4/P4S premises

QUALITÉ POUR LE BÂTIMENT
AT CSTB 13/15-1293

EMISSION IN INTERIOR AIR* A+ (A+ A B C)

AREA OF USE

USE

- Interior floors of all moderate or heavy traffic classified buildings:
  P2 to P4S classified such as: Houses, Garages, Offices, Shops, Superstores.
- **New build and refurbishment work:**
  please contact us for any special circumstances.
- CSTB n° 13/15-1293 technical notice
- DTU, CPT and applicable regulations.

- **Screed solutions (see table):**
  The floor clearance and preliminary work must be carried out according to the DTU 26.2 and 52.2 rules.
- Other uses: underfloor form see DTU

To maintain **PRB CHAPECEM HPR** performances, do not add cement or additives (plasticizers, superplasticizers, retarders and antifreeze) and respect the following water dosage.

AUTHORISED SUBSTRATES

- Strong, cohesive and stable substrates suitable for the building's usage:
  - Solid concrete slab.
  - Solid concrete floor or with concrete topping.
  - Cement mortar screed that adheres to concrete.
- Other substrates: please contact us.
- As a loose screed:
  - Existing tiling,
  - Plastic tiles (P2-P3 premises)

LIMITS TO USE

Do not apply as adherence screed to:

- friable or unstable substrates,
- anhydrite screeds, timber floors, lightweight mortars or concretes,
- old plaster-based levelling products,
- old synthetic tiles,
- submerged floors,
- substrates with active cracks.

TYPE OF STRUCTURES	Possible thickness's		
	Adhesive screeds on fresh slurry	**Floating screeds on insulation** (except for underfloor heating coatings)	**Loose screeds** on polyethylene film
Private or community buildings up to P3	• from 15 to 100 mm * locally 10 mm Min. thickness over the floor drain: 5 mm	• 35 to 100 mm	• 35 to 100 mm
Buildings with heavy traffic P4 / P4S	• 30 to 100 mm Min. thickness over the floor drain: 15 mm	Prohibited	• 50 to 100 mm

APPLICATION CONDITIONS

- Between 5°C and 35°C.
- Do not apply on frozen, freezing or thawing, hot or soaked substrates.
- Avoid drafts when applying.
- Follow the existing expansion joints and partitioning joints.

TECHNICAL CHARACTERISTICS

COMPOSITION

- High performance hydraulic binders and specific additives.
- Silica sands 0/3 mm.

POWDER

- Colour: grey
- Density: 1.6 ± 0.1 t/m³

EXAMPLE OF PRB CHAPECEM HPR PERFORMANCES

- Mixture density: 2 to 2.2
- 4 h compressive strength: ≥ 18 MPa
- 24 h compressive strength: ≥ 25 MPa
- 24 h residual moisture (5 cm): ≤ 2 %

- Class as per EN 13813: CT - C40 - F6
- Fire behaviour: $A1_{fl}$ (M0)
- Shrinkage: ≤ 0.6 mm/m

DOSES

Adherence or rework slurry			
PRB MANUCEM HPR	4 parts	PRB CHAPECEM HPR	25 kg
0/2 or 0/4 mm sand			4 parts
Water	1 part	Water	2.25 l
PRB LATEX resin	1 part	PRB LATEX resin	2.25 l
Mortar screed			
PRB CHAPECEM HPR		25 kg	
Water *		2.25 to 2.75 l	

PREPARATION

- Mixture usage time: 15 to 30 min
- Floating possibility: 20min
- Light pedestrian traffic: 2 to 4 h
- **Waiting time for applying coatings:**
  - Laying tiles: 4 h
  - Levelling flexible floors: 6 h.

N.B.: These values are standard laboratory testing values. The preparation conditions may modify them significantly.

PREPARATION

Refer to PRB Process Sheets

SUBSTRATE PREPARATION

- Substrates must be compliant with the reference DTUs (26.2, etc.) and suitable for the use of the premises.
  For refurbishment,refer to the prior flooring study (CPT 3529 v4 and 3530 v4).
- **Inspection and Cleaning**
  Substrates must be strong, cohesive and stable, dry, free of cracks and rising damp.

CASE OF ADHERENCE SCREED:

- Traces of plaster, varnish, waxes, surface laitance, etc. must be eliminated by scraping or rubbing down.
- Clean by shot blasting or mechanically rub down products restricting adherence: wax products, surface hardeners, floor treatments (wax, water-repellent, oil-repellent, etc.), oils and greases, etc. until the cement substrate is clean and healthy.
- Then, remove dust by brushing and vacuuming.

- Pipes must be incorporated into a **PRB MANUCEM HPR** or **PRB CHAPECEM HPR** underfloor form – see DTU 26.2 and 52.10.

Slurry for adherence screed:

- Prepare Slurry according to the following proportions:
  - 4 parts **PRB MANUCEM HPR**
  - 4 parts 0/2 mm sand
  - 1 part **PRB LATEX resin**
  + 1 part water

Slurry variant: PRB CHAPECEM HPR mortar mixed to a "slurry" consistency with a 50/50 mixture of water + **PRB LATEX** resin

- Apply the slurry as and when so that the screed is applied on still fresh slurry. (Pot life: ± 30 min; remix from time to time).

CASE OF LOOSE SCREED:
The preliminary work and separation sheets must comply with UTD 26.2/52.10.

PRB CHAPECEM HPR MIXING

- The mortar is mixed using the concrete mixer, mixer or shovel.
- The water dosage is approximately 2.5 L per 25 kg-bag.
- Mix **PRB CHAPECEM HPR** carefully and quickly using water for maximum 3 to 4 minutes. Respect the water dosage throughout the work.
- The pot life is 20 to 30 minutes
- **Apply immediately.**
- Given the speed of setting, clean the tools (concrete mixer, etc.) before the mortar hardens.

APPLICATION

- Quickly identify levels and slopes, then spread the screed, tamp it then adjust it. Finish by floating within 15 minutes and respecting the pot life.
- If work is halted for more than one hour, leave your uncoated reinforcement mesh visible or while waiting place a metal reinforcement 50 x 50 mm mesh band in the fresh mortar (50 cm coating, 50 cm visible).
- Resume work by applying adhesion slurry to the section of screed.

Treatment of technical joints

- Respect the 3 to 10 mm wide edge joint required for the structure; apply a polystyrene or foam tape (e.g.: ISOL 100 PRB).
- Reproduce existing expansion joints using suitable sections on the market.
- Division of surfaces: to be adapted according to the structure (see DTU).

PRECAUTIONS FOR USE

- Contains cement.
- Read the regulatory labelling on the package and read the safety data sheet before using.

Technical sheet - January 2017