

PRB CHAPECEM N

READY TO USE SEMI QUICK SETTING SCREED MORTAR



The + of PRB CHAPECEM N

- + Lay tiling or sealing after 24 h
- + Use with a screed pump
- + Compensated shrinkage
- + Ideal for balconies and paths

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 N slurry + sand; 1.5 to 3 kg i.e.:

- Binder PRB MANUCEM N: 0.5 to 1 kg
- Resin PRB LATEX: 0.120 to 0.250 l

PRB CHAPECEM N slurry: 2 to 3 kg i.e.:

- Mortar PRB CHAPECEM N: 3 kg
- Resin PRB LATEX: 0.240 to 0.300 l

In Mortar per m², PRB CHAPECEM N: 20 to 22 kg/m²/cm thickness

P4/P4S premises

AT CSTB 13/13-1218



FIELD OF USE

USE

- Interior floors of all moderate or heavy traffic classified buildings: P2 to P4S classified such as: Houses, Garages, Offices, Shops, Superstores.
- Loggia, balcony, pathway floors.
- **New build & Refurbishment work and outdoor flooring:** consult us for all special cases.
- CSTB n° 13/13-1218 technical notice
- DTU, CPT and applicable regulations.
- **Screed solutions (see table):**
 - The floor clearance and preparatory work must be carried out according to the DTU 26.2 and 52.10 rules.
 - Other uses: underfloor form see DTU.
- To maintain PRB CHAPECEM N 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.
 - Drainage mat.
- Other substrates: please contact us.

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.

APPLICATION CONDITIONS

- Between 5°C and 35°C.

TYPE OF STRUCTURES	Possible thicknesses		
	Adhesive screeds on fresh slurry	Floating screeds on insulation (except for underfloor heating coverings)	Loose screeds on polyethylene film
Private or community buildings up to P3	• 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
Exterior floors	Adhesive screeds on fresh slurry		Loose screeds on a drainage mat (DTU 52.1)
	• 10 to 100 mm Min. thickness over the floor drain: 5 mm		• 50 to 100 mm with reinforcing mesh*

- Do not apply on frozen or thawing substrates, or substrates that are wet or subject to rising damp,

in high winds, exposed to strong heat.

TECHNICAL SPECIFICATIONS

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 N PERFORMANCES

- Mixture density: 2 to 2.2
- 48 h compressive strength: ≥ 20 MPa
- 28 day compressive strength: ≥ 25 MPa
- 48 h residual moisture: ≤ 2 %

- Class as per EN 13813: CT - C30 - F6
- Fire behaviour: A1_{fl} (MO)

- Shrinkage: ≤ 0.6 mm/m

DOSES

Adhesive or rework slurry			
PRB MANUCEM N	4 parts	PRB CHAPECEM N	25 kg
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 N		25 kg	
Water *		2 to 2.5 l	

PREPARATION

- Mixture usage time: 60 ± 30 min.
- Floating possibility: 20 to 30 min.
- Light pedestrian traffic: the next day
- **Waiting time for applying coatings:**
 - Laying of tiles and textiles: 24 h
 - Levelling flexible floors: 24 h
 - Laying PVC: 72 h
 - Laying wood flooring: 7 days
 - Floor paints: 21 days.

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 N or PRB CHAPECEM N underfloor form – see DTU 26.2 and 52.10.

Slurry for adherence screed:

- Prepare slurry according to the following proportions:
 - 4 parts PRB MANUCEM N
 - 4 parts 0/2 mm sand

- 1 part PRB LATEX resin
- + 1 part water

Slurry variant: PRB CHAPECEM N 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 preparatory work and separation sheets must comply with DTU 26.2/52.10.

MIXING PRB CHAPECEM N

The mortar is mixed using a concrete mixer, mixer or shovel.

- The water dosage is approximately 2 to 2.5 l per 25 kg bag.
- Mix PRB CHAPECEM N carefully and quickly using water for maximum 3 to 4 min. Respect the water dosage throughout the work.
- The pot life is 60 ± 30 min.
- **Apply immediately.**
- Clean the tools (concrete mixer, 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 min. 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 reinforcing mesh band of 1 metre in the fresh mortar (50 cm coating, 50 cm visible).

- Resume work by applying adhesive slurry to the section of screed.
- A screed pump can be used to transport it.

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.
- Refer to the regulatory labels on the packaging and to the safety data sheet before use.

Technical sheet - September 2017

The only purpose of the technical sheet provided is to inform our clients about product specificities. The information it contains is based on current knowledge.

We recommend the user to check that this sheet has not been replaced by a more recent version before using the product.



PRB CHAPECEM N
SCREDS: SCREED MORTARS

MORTAR
& FLOORS