

PRB MONOCOUCHE SEMI ALLÉGÉ R&D

SEMI-LIGHTWEIGHT, FINE-GRAINED, ECO-DESIGNED SINGLE-LAYER PLASTER



PRB MONOCOUCHE SEMI ALLÉGÉ R&D
COLOURED/SINGLE LAYER FACADE COATINGS: LIGHTWEIGHT AND SEMI-LIGHTWEIGHT SINGLE-LAYER PLASTERS

The **+**s of PRB MONOCOUCHE SEMI ALLÉGÉ R&D

- +** Carbon footprint reduced by 48%*
- +** Guaranteed cement-free**
- +** Waterproofing and decorating Rt1, Rt2 & Rt3 exterior walls (see conditions) and interior walls
- +** All types of finishes (fine scrape, float-finish & roughcast)
- +** Can be used underground (see conditions)



PACKAGING

– Paper bag containing 25 kg.

STORAGE LIFE: 18 Months.

CONSUMPTION/USE

The consumption varies depending on the surface (type, flatness, roughness, etc.).
NB: The thickness at all protruding points of the façades must be at least 10 mm, in order to ensure proper waterproofing.

– **Minimum thickness of 10 mm:** 16 kg/m²

Concrete surface and undercoat:

For decorative plastering, the thickness must be 5 mm at all points.

– **Minimum finished thickness of 5 mm:** 7.5 kg/m²

– **Maximum finished thickness of 15 mm:** 22 kg/m²

COLOUR: 25 PRB colours



* Calculated against a product of the same category, functional unit and useful life (see the FDES document on the INIES website - FR).

** Please note : curing time extended (see section implementation /or/ application)

APPLICATIONS

USES

- Waterproof coating for exterior or interior walls, on all types of buildings, for residential, tertiary or industrial use.
- Joints (min. 8 mm) for bricks, stone and ceramic façades.

REFERENCE DOCUMENTS

- French DTU Standard 20.1, French DTU Standard 23.1, French DTU Standard 26.1, French DTU Standard 59.1, French DTU Standard 42.1, French DTU Standard 52.2,

SUITABLE SUBSTRATES

(see selection guide)

- Concretes (French DTU 23.1).
- Masonry with breezeblocks and common or light aggregates or bricks with traditional or thin joints (French DTU 20.1).
- Cement undercoats and mixes (French DTU 26.1).
- Please contact us if you wish to use this product on old masonry and other surfaces (French DTU 26.1).
- Cellular concrete masonry - density >500 kg/m³ according to NF EN 772-13.
- For underground walls of category III private homes, as defined in the French DTU Standard 20-1, the PRB

MONOCOUCHE SEMI ALLÉGÉ R&D should be applied to the outside of the buried wall to a maximum depth of 0.6 m. It must be compacted and finished with a smooth or trowel finish and have a minimum thickness of 15 mm. A 40 to 60 cm wide reinforcing strip of alkali-resistant fibreglass should be inserted into the first coat or layer, at the capillary break, to reduce the risk of cracking.

- Make a horizontal capillary cut in the plaster, 15 cm from the finished floor, using the cutting edge of a trowel, then fill in with a cord of SNJF-certified 1st category sealant. The underground part concerns category 3 walls only, according to the French DTU Standard 20.1.

UNSUITABLE SUBSTRATES

- All gypsum-based surfaces (plaster).
- Paint & thick paint coatings.
- Wood.
- Horizontal or inclined surfaces (except for archways or undersides of mouldings)

APPLICATION CONDITIONS

- Between 5°C and 35°C.
- Do not apply to frozen, thawing, hot or damp surfaces. Do not apply to surfaces in full sunlight or during heavy rain and strong winds.

TECHNICAL CHARACTERISTICS

INGREDIENTS

- Binders (natural hydraulic lime and calcium lime), fillers, sands and aggregates.
- Water-retention agents & setting agents.
- Water-repellent agents.

PRODUCTS

POWDER:

- Max. grain size: 2 mm

PASTE:

- Water retention: 91%
- pH (alkaline): 12.5 ± 0.5

PERFORMANCE OF THE MORTAR WHEN HARDENED:

- Density: 1.3 to 1.7 t/m³
- Modulus of elasticity: <5000 MPa
- Flexural strength: 1 to 2.5 MPa

PERFORMANCE ACCORDING TO EN 998-1 - SINGLE-LAYER MORTAR:

- Compressive strength: CS II (1.5 to 5 N/mm²)
- Water permeability after freezing: ≤1 cm³/cm²
- Water vapour permeability: μ <35
- Heat conductivity (λ 10, dry): 0.53 W/(m.K) (established value)

- Durability/adhesion after freezing/Rupture: ≥0.2 N/mm² A, B or C.
- Water absorption (Wc2): C <0.20 kg/m².min^{0.5}
- Reaction to fire (non-combustible): A1 (M0).

APPLICATION

⚠ The cement-free formulation extends timelines between layers and delays scraping. Do not use Accelerator with cement-free material.

- Quantity of water needed: 20 to 22%
- Mixing time: 3 to 7 mins
- Mixture handling time: 60 mins max.

- Setting time - before contact with water: 8 to 24 hrs
- Setting time - before scraping: 8 to 24 hrs
- Setting time - between layers: 24 to 72 hrs
- Maximum thickness per layer: 20 mm
- Maximum working thickness: 30 mm (Localised)
- Min. thickness (waterproofing): 10 mm.

NB: These values are estimates based on laboratory or on-site testing. The conditions of use, the type of material used and its level of wear and tear can significantly alter these values.

APPLICATION

PREPARING THE SURFACES

- Surfaces must be clean, dust-free, stable, and any large chips, cracks or dents must be filled in beforehand.
- Spray the surfaces with water 1/2 hour before application and allow to dry (matt appearance) before applying the plaster.
- Refer to "Preparing the surface", as well as to "Applying single-layer plaster according to the condition of the surface".

PREPARING THE MORTAR

- Mortar spraying pumps.
- Concrete mixers (batch mixers).
- Add PRB MONOCOUCHE SEMI-LÉGER R&D to 5 to 5.5 liters of clean water per 25 kg bag and mix for 5 minutes.

- The water ratio and mixing time should be kept as consistent as possible to ensure a uniform application, an even shade/colour and a smooth, optimum finish.
- Also, when using different batches, you should mix them proportionally in order to avoid any differences in colour.

SETTING UP THE PROJECTION EQUIPMENT

- **Grouting pump**
- Set the water pressure to: 12 to 14 bars
- Paste operating pressure: 18 to 24 bars
- Sprayer flow rate: 14 to 18 L/min
- Spray nozzles (min. Ø): 12mm.
- **Hand-held plastering machine**
- Air pressure: 6 to 8 bars.

Manual application

- The plaster can be applied in small strokes with a plastic mortar trowel, overlapping slightly.
- Level the 1st layer by smoothing the plaster with a large ruler.

APPLICATION AND TYPE OF FINISH

- Applying the plaster in 2 layers:
 - 1st layer: 8 to 10 mm,
 - 2nd layer: 5 to 10 mm, depending on the finish.
- Finish: Fine scrape, Rough scrape, Rustic, Rustic roughcast, Float-finish, Circular Float-finish.
- Apply in accordance with the "Types of Finishes" section.

- See the "Selection Guide" for possible types of finishes.

For façades:

- Laying terracotta tiles glued on small surfaces (plinths, lintels and window surrounds, the bottom of loggias, balcony structures, etc.).

PRECAUTIONS FOR USE

- Contains lime.
- Refer to the packaging safety label and safety data sheet before use.

Technical Data Sheet - 29 August 2022