

PRB FINIDUR

MICRO MORTAR SURFACE HARDENER



The **+** s of PRB FINIDUR

- +** Ready-to-use coloured hardener
- +** Produces a hard-wearing layer for fresh concrete floors and floor screeds
- +** High mechanical strength: suitable for high-traffic areas



PACKAGING

– Paper bag containing 25kg.

STORAGE LIFE: 12 months.

CONSUMPTION/USE

It depends on the nature and intensity of the traffic in the area and the desired colour:

- 3 to 6 kg/m² as a broadcast.
- at least 12 kg/m² for a fresh-on-fresh micro-screed or added screed.

COLOURS: grey, cream*, green*, red*, yellow*, grey-blue* and grey-black*.

* Please contact us for colours other than grey (minimum order quantities).



APPLICATIONS

USES

- PRB FINIDUR can be used on interior and exterior floors.
- PRB FINIDUR is a ready-to-use surface hardener, composed of hydraulic binders, plasticisers, water reducers, specific additives and hard, mineral-based aggregates with well-defined shapes and grain sizes in order to obtain excellent physical-mechanical characteristics (hardness, strength, etc.).
- French DTU 13.3.

SUITABLE SUBSTRATES

- Freshly floated concrete or screed (broadcasting).
- fresh concrete (as a fresh-on-fresh micro-screed),
- hardened concrete (added to the screed).

N.B. CONCRETE COMPOSITION:

- the concrete must have a cement content of approximately 350 kg/m³ in dry sand,
- it must be well-compacted (tensile strength: ≥ 3.7 Mpa),
- it should not contain any additives other than plasticisers (monitor bleeding),

- the grain size must be the same throughout the mix,
- when applying to fibre-reinforced concrete, the fibres must be metallic.

UNSUITABLE SUBSTRATES

The application is specific to the above-mentioned substrates: please pay close attention to the composition of the concrete (for example, the use of fibres can result in a defect in appearance due to heating when using a power float).

APPLICATION CONDITIONS

- Between 5°C and 30°C on well mixed

concrete with a plastic consistency.

- Safe to handle.
- PRB FINIDUR is not suitable for areas exposed to acids, their salts or other substances that may rapidly degrade cement.
- Light colours are not recommended due to the greyish mildew of the concrete which can affect the appearance of PRB FINIDUR.

N.B. Please consult the PRB technical department for any questions relating to each individual case.

TECHNICAL CHARACTERISTICS

INGREDIENTS

- Binders: cements and hydraulic lime.
- Siliceous sands.

- Moisture-binding agent.
- Air-entraining agent.
- Redispersible resin.

- Colours: grey (+ 7 other colours: contact us).
- Hard, mineral-based aggregates
- bulk density: 1.4 ± 0.1 t/m³.

- Finished product appearance: uniform in colour when carefully trowelled/floated.
- MOHS aggregate hardness: 7.

UTILISATION

BROADCASTING ON FRESHLY FLOATED CONCRETE/SCREEDS

PRINCIPLE:

- When the surface of the substrate (concrete or other rendered material that has finished bleeding) can be walked on by an individual leaving only a small footprint, a manual concrete float or power float can be used.

APPLICATION:

- Once the surface is suitable for applying PRB FINIDUR, broadcast evenly over the fresh concrete or screed by hand or with a shovel.
- To obtain a uniform colour and sufficient hardness, depending on the nature of the substrate, we recommend applying the powder in several layers.
- A smoothing machine (power float) must be used after applying each layer.
- For small surfaces, a manual concrete float may be used instead of a power float.
- Before applying to fresh concrete, place the required number of bags next to the work area to ensure that the correct amount is applied per m². Alternatively, a container can be set up for the amount per m² to be broadcast for each layer.
- No other additives or mixtures are required or permitted.
- In hot weather (outdoors), you **must** spray a curing compound after applying PRB FINIDUR to prevent the surface from drying out. This can be done when the surface can be walked on without leaving any marks.
- Regulatory shrinkage, expansion and floor joints should be made the day after application. Once hardened, these joints should be filled with a flexible sealant.

- The floor can be used, depending on the temperature and weather conditions:
 - after 24 hrs for pedestrian traffic,
 - after 7 days for light equipment,
 - after 28 days for normal traffic.

ADDED AS A FRESH-ON-FRESH MICROSCREED

PRINCIPLE:

- Mechanically reinforce the floor by incorporating a microscreeed of PRB FINIDUR, a product specially designed, both in terms of dosage and grain size, to obtain a homogeneous mass with high mechanical resistance after mixing, to fresh concrete (fresh-on-fresh).
- This hard-wearing layer is applied at a minimum rate of 12 kg/m².
- This can be increased for areas subject to higher mechanical stresses. Please contact our technical department.
- Before applying the PRB FINIDUR hard-wearing microscreeed, check that the thickness of the concrete is suitable for the nature of the soil and the loads to which it will be subjected (please refer to the trade rules for concrete flooring).
- It must also be in line with industry practices and standards in terms of its design and construction. The microscreeed should be mixed with 2.8 to 3 L of water per 25 kg bag.

APPLICATION:

- it must be applied to fresh concrete a few hours after laying in order to remove any bleeding water, but within 24 hours to ensure that the PRB FINIDUR microscreeed adheres perfectly to the concrete.
- Once the construction joints have been prepared (connection between 2 concrete strips), pour the desired amount of the PRB FINIDUR microscreeed onto a smooth and even concrete surface that is still wet (the surface

- should be slightly marked when walked on).
- This layer should be levelled using a straight edge.
- To obtain a smooth surface, trowel and smooth the surface in a criss-cross pattern.
- Once smoothed, in warm weather, spray a curing compound to prevent the screed from drying too quickly, thus eliminating the risk of cracking and poor surface finish.
- Shrinkage or expansion joints should be made by cutting the concrete with a circular saw to a depth equal to 1/4 of the thickness of the concrete, defining the surface areas in accordance with the trade rules in force. To make the floor independent of the structure, we recommend using separation joints.

ADDED TO THE SCREED

PRINCIPLE:

- Mechanically reinforce the floor by laying a 4 to 6 cm thick cement mortar screed, with a damp consistency on hardened concrete, at least 21 days old, incorporating a fresh-on-fresh layer of PRB FINIDUR at a minimum of 12 kg/m² (approximately 6 mm thick) or more for areas of high mechanical stress.
- Before applying the screed and PRB FINIDUR, check that the thickness of the concrete is suitable for the nature of the soil and the loads to which it will be subjected (please refer to the trade rules for concrete flooring).
- It must also be in line with industry practices and standards in terms of its design and construction. It should be laid in strips of 4 to 5 metres wide. Its surface will be rough, so it should be scratched before it sets.

PREPARATION:

It is important to prepare the surface before application:

- The concrete surface must be clean and free of debris; it is essential to remove all traces of oil, grease, dirt, curing compounds or other substances mechanically (using a concrete planer or bush hammer) or with a suitable chemical cleaning agent.
- Wet the concrete thoroughly 24 hours before applying.

APPLICATION:

- On the day of application, as the work progresses, spread a bonding slip with a broom.
- On this slip, which should still be fresh (sticky), lay a 4 to 6 cm thick mortar screed consisting of 400 kg of CEM1 52.5 cement per m² of dry sand (0/8 or 0/10 sand).
- This screed should be carefully levelled and compacted.
- While the screed is still fresh, apply the PRB FINIDUR screed in a soft paste-like consistency, pulling with a straight edge with wedges of the correct thickness for the surface, levelling and floating as it progresses, and then smoothing using criss-cross strokes once it has begun to set, in order to obtain a smooth and solid finish.
- Once smoothed, in warm weather, spray a curing compound to prevent the screed from drying too quickly, thus eliminating the risk of cracking and poor surface finish.
- Shrinkage joints must be neat and, above all, must be **precisely aligned** with those of the supporting concrete.
- To make the floor independent of the structure, we recommend using separation joints.

PRECAUTIONS FOR USE

- Contains cement and/or lime.
- Refer to the packaging safety label and technical data sheet before use.