

PC Mortar WPR



Cementitious waterproofing repair mortar

Product Overview

PC Mortar WPR is a cementitious, ready to apply waterproofing and repair mortar.

Areas of applications

1. All concrete, masonry and stonework substrates.
2. Active or passive waterproofing and protection against water and moisture
3. For all horizontal and vertical substrates for levelling, reprofiling and waterproofing.
4. Filling up spaces between walls and floors
5. All water retaining structures
6. Foundations, slabs, retaining walls, etc.

Properties

1. PC Mortar WPR is applied in layers of 5 - 10 mm thickness in one working cycle.
2. Due to a unique composition of cement, quartz sand and chemical additives, it is extremely resistant to abrasion, mechanical wear and chemical wear.
3. It is waterproof but vapour permeable. It can be used in structures retaining potable water.

Guidelines for Usage

1. Surface preparation : The substrate to be treated must be sound and even, openpored, roughened and its surface should be made free from voids, large cracks or ridges. Any adhesion reducing substances like bitumen, oil, grease,

remains of paint or laitance must be removed by suitable means. Water leaks must be stopped e.g. with PC Plug. Thoroughly moisten the substrate, it must be damp but not wet at the time of application. Any surface water on horizontal surfaces must be removed.

Any remaining plaster, render or other substances that could inhibit bonding must be removed back to the substrate. Gypsum, remains of wood or other foreign material must be removed by appropriate means. Loose pointing must be routed out and the substrate cleaned thoroughly.

2. Mixing: Mix 20 kg of PC Mortar WPR with 2.4 - 3.4 ltr of tap water in a clean container for at least 5 minutes to a uniform, lump-free and homogeneous consistency. Use a mechanical mixer.

3. Application: PC Mortar WPR should be applied with trowel or suitable spray equipment. Apply a minimum of 5 mm (approx. 10 kg/m²) and a maximum of 10 mm (approx. 20 kg/m²) in one working cycle. For small areas such as coves, fillets, local repairs and shutter tie holes PC Mortar WPR may be applied in layer thicknesses exceeding the above value. After initial hardening it can be trowelled or provided with a broom finish to increase the non-skid quality. Apply PC Mortar WPR to vertical surfaces like normal render. If several coats are required, then it is recommended to apply the second coat whilst the first coat is still damp at the surface. The waiting time before applying the following coat depends on local climatic conditions such as humidity, temperature, etc. The previous coat must be textured by suitable

means whilst still plastic to form a key. To maintain workability of the material do not add water, simply re-stir the mixture.

Trowel application : Initially a scratch coat is recommended to enhance maximum adhesion to the substrate, working from the bottom to top. Ensure that all cavities in the substrate are filled in order to evict any trapped air.

Spray application : PC Mortar WPR can be applied with a suitable mortar spraying device. For maximum spray pattern it should be possible to adjust volume of product as well as air pressure and volume. The nozzle diameter should be approx. 10 mm. The first layer of PC Mortar WPR should be applied in a circular motion with the spray nozzle held perpendicular to the substrate. The material is then flattened and keyed. The final layer can be left as a spray finish or treated to a required finish.

4. Curing: Keep the freshly treated surface damp for at least 5 days and appropriate measures must be taken to protect against extreme weather conditions (e.g. sun, wind, frost) while setting. They should be protected from rain for a minimum period of 24 h to prevent washing off.

5. Plastering and coating : Surfaces treated with PC Mortar WPR which are to be coated or painted should be left to cure for at least 28 days. When a plaster or final finish is required on top of a PC Mortar WPR treatment it is essential to spray a rough cast of sand and cement on the final PC Mortar WPR while it is still moist. On hardened PC Mortar WPR surfaces, apply an appropriate bonding agent before rendering. Coatings on top of a PC Mortar WPR treatment have to be chemical resistant. It is recommended that decorative coatings applied on the passive water pressure side should be water vapour permeable.

Coverage area

Type of water impact	Recommended overall application rate	Approximate layer thickness
Normal condition	10-14 kg/m ²	5 - 7 mm
Hydrostatic pressure condition	14-20 kg/m ² depending on water pressure	7 - 10 mm

NOTE : Coverage area may vary depending upon the substrate type and workmanship.

Packages available

PC Mortar WPR is available in 20 kg packs.

Storage and Shelf life

PC Mortar WPR should be stored away from direct sunlight. It has 12 months shelf life when stored in original, dry and unopened packs.

Safety Measures

Proper safety precautions and tools must be taken into consideration, i.e. wearing safety gloves, safety goggles, safety apron and nose masks, etc. For further related to application and safety precautions, please contact Mcrete technical representative.

Technical data

Aspect	Grey powder
Mixed Density	2.0 - 2.2 g/cc
Pot life	> 45 mins
Compressive strength (28 days)	50 MPa
Setting time	5 - 6 hrs
Overcoating time	After 24 hours of curing period

For further clarifications Please contact on below address

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