

AQUASEAL 100

Single Component, Cementitious Waterproofing Osmotic Mortar

Description

AQUASEAL 100 is a ready to use, cementitious, polymer modified, waterproofing membrane consisting of sulphate resistant Portland cement, graded quartz and chemical additives.

AQUASEAL 100 is suitable for application to both vertical and horizontal surfaces on concrete block work, cement plaster...etc. It is durable, resistant to frost and heat after setting and remains permeable to water vapor.

Features & Benefits

- > Pre-mixed, ready to use.
- > Shrinkage compensated, cracks-free.
- > Excellent substrate bonding.
- > Sulphate resistant.
- > Good bonding with finishing tiles.
- Can be used in contact with water for human consumption.
- > One component, no additional latex is required.
- > Formulated for hot weather climate

Uses

AQUASEAL 100 is excellent for solving the problem of water seepage through concrete and masonry in both new and old structures. It is ideal in applications where high-pressure face is not easily accessible.

It is also ideal for waterproofing the inside face of vertical and horizontal surfaces such as: sewerage processing tanks, concrete block walls and any masonry surface where crystal growth waterproofing will not be effective due to a lack of alkalinity in the substrate.

Other applications include; bathrooms, showers, kitchens, basement walls, lift pits, water storage, drainage tanks, sewer aqueducts... etc.

Technical Properties

Appearance	Cementitious fine powder
Color	Grey / White
Mix Density	1,650 Kg/m ³ approx.
Mix Pot Life	40 min
Compressive strength	20 N/mm ²
Adhesion to concrete	≥1.5 N/mm ² @ 28 days
Shore D hardness	45
Flexural Strength	6 N/mm ²
VOC	<1.0 g/L
Water vapor resistance	3 MN Sg -1
Initial setting time	2 hours @ 25 °C
Curing time before tiling	48 hours
Drying time before	7 days
waterproofing testing	
Service temperature	-5 to 80 °C

All values are subject to 5-10% tolerance

Standards Compliance:

- BS 6920 Pt 1 (potable water compliance)
- BS 1881 Pt 5
- DIN 1048

Application Procedures

Surface preparation:

The support must be clean, solid and free from non-adherent parts, loose cement, traces of form stripping oils, old varnishes.

Create a 45 ° fillet at junction between wall and floor with SUPERREP T40 or T60. Saturate the foundation with water to eliminate possible water absorption at the moment of application.

Priming is not normally required on good quality concrete substrates, however all surfaces must be splashed with clean water before applying AQUASEAL 100.

All expansion and movement joints should be sealed with a suitable joint sealant before the application of AQUASEAL 100. Consult the Technical Department in SBI office for advice.



All shrinkage and non-moving structural cracks having a width equal to or less than 0.3 mm will be waterproofed by applying AQUASEAL 100 directly bridging over the crack. Static cracks wider than 0.3 mm must be routed out to form a 'V' shaped groove with a hand or pneumatic chisel. The cracks then must be repaired by priming the chiseled out crack with ULTRABOND AR (diluted 1:1 with water), followed by the application of SUPERREP T40 or T60 to fill the rebate flush with the concrete surface.

Mixing Instructions:

Mix one bag of AQUASEAL 100 (20kg) with approx. 6.0 to 6.5 liters water. Mix until a uniform, lump-free and slurry grade mortar is obtained. The mixture should not contain any residue of dry powder. For best results an electric drill with attached stirrer or compulsory mixer should be used. Let the mixture rest for about 5 minutes, and remix again shortly before application.

Application Instructions:

Apply the first layer using steel trowel in a thickness of 2 mm. in case of vertical surface, start from the base of the wall and work towards the top. After 16-24 hours apply the second layer in a thickness of 2mm. Do not apply first layer more than can be overcoated with a second layer during the 48 hours. It is strongly recommended to apply a fiber mesh between the two coats in the area that needs more support such as corners and expansion joints ...etc., imbed the mesh in the first layer when it is still wet by using smooth trowel.

Coverage

1.6-1.7 kg per m² per 1mm thickness.

Packaging

AQUASEAL 100 is available in 20kg bag.

Storage

Keep the product in dry and sheltered place at temperature between +5°C to +35°C. In these conditions and in closed original containers, the product will have a shelf life of at least 12 months.

Health and Safety

Wear gloves, goggles to avoid any contact with eyes and skin. In case of splashes in the eyes wash abundantly with warm water and consult a doctor.

For further information or particular use, contact SBI Technical Department.

Quality & Care

All products produced in SBI facilities are manufactured under a management system certified to conform to the requirements of the quality and environmental health & safety standards ISO 9001 & ISO 14001.

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