Flexible acrylic cement modified waterproof coating



DESCRIPTION

Aquaproof 2K is a two component polymer modified cementitious, flexible waterproof coating for internal and external applications available in many attractive colours.

APPLICATIONS

- » For waterproofing of water retaining structures and reservoirs.
- To provide protection for concrete substrates and masonry against carbon dioxide, chloride ions, water and de-icing salts.

ADVANTAGES

- >> Waterproof, suitable for water retaining structure and basements.
- » Breathable, water vapour preamble.
- Durable, excellent resistance to UV attack.
- » Excellent protection against carbon dioxide, chloride ions and water.
- » Non-toxic, suitable for drinking water.
- » Cost effective, quick and easy brush or spray
- » Suitable for internal and external applications.

STANDARDS

Aquaproof 2K complies with:

- » EN 14891 CMO1P.
- » EN 1502-2 Principle 1(PI); 2(MC); 8(IR).

METHOD OF USE

SUBSTRATE PREPARATION

The surfaces to be coated should be clean, sound, and free from contamination. Remove any traces of curing compound, laitance, mold release agents, organic growth, or any other loose materials. This is best obtained by using high pressure water or light grit blasting.

Honey combing, damaged or deteriorated concrete exists, the substrate should be repaired using suitable low permeability repair mortar from DCP repair systems before commencing the coating.

Note: Solvent based primers and coatings like Repcoat primer and Setseal A should be removed mechanically before applying Aquaproof 2K.

TECHNICAL PROPERTIES:

Colour: Grey

1.90 ± 0.10 g/cm³ Density:

Water permeability at positive pressure: DIN 1048-5

Impermeable @ 3 bars,

3 days

Water permeability at negative pressure: DIN 1048-5

Impermeable @ 1.5

bars, 3 days

TECHNICAL PROPERTIES EN 1504-2:

1.46 N/mm² Adhesion to concrete:

Static crack-bridging at

-10°C:

Class A2 > 0.25 mm

Static crack-bridging at

-20°C:

Class A1 > 0.1 mm

Resistance to thermal shock

@ 70°C:

≥ 1.5 N/mm²

Capillary absorption and

permeability to water:

 $< 0.1 \text{ kg/m}^2.\text{h}^{0.5}$

Permeability to water vapour - equivalent

Class 1: SD < 5 m (Vapour Permeability)

> 50 m

thickness of air S_D: Permeability to Carbon

Dioxide (CO₂): Chloride ions content:

0.05%





PRIMING

No primer is required, but substrates should be pre-soaked with clean water prior to application of Aquaproof 2K.

MIXING

To ensure proper mixing, a mechanically powered mixer or drill fitted with suitable paddle should be used. The 5 kg of Aquaproof 2K liquid should be added to a clean container.

The 15 kg powder is then added slowly to the liquid while mixing continuously with low speed mixer/drill (400 - 600 rpm). Mixing time should be continued for 3 minutes until a uniform consistency is obtained.

APPLICATION

Aquaproof 2K can be applied by brush or spray. The mixed material should be brushed well into the surface. Strike off with the brush in one direction.

Care must be taken not to spread the material too thin. When the material begins to drag, do not add any water, but dampen the surface again.

Leave the first coat to cure for a minimum 4 hours before applying the second coat, depending on ambient temperature, relative humidity and ventilation conditions. If the first coat is left for more than one day or if it is very dry, pre-soaking with clean water is needed before applying the second coat.

The second coat shall be applied by brush in a similar way to the first layer but preferably perpendicular to the previous layer to ensure good bond and coverage. Tiling over the waterproofing could start after a minimum of 4 hours after the application of the second layer, depending on ambient temperature, relative humidity and ventilation conditions.

CLEANING

All tools should be cleaned immediately after finishing by clean water. Hardened materials should be cleaned mechanically.

TECHNICAL PROPERTIES EN 14891:

Initial tensile adhesion strength after aging under standard conditions:	≥ 0.5 N/mm²
Adhesion strength after immersion in water:	≥ 0.5 N/mm²
Tensile adhesion strength after freeze–thaw cycles:	≥ 0.5 N/mm²
Tensile adhesion strength after heat ageing @ 70°C:	≥ 0.5 N/mm²
Tensile adhesion strength after contact with lime water:	≥ 0.5 N/mm²
Tensile adhesion strength after contact with chlorinated water:	> 0.5 N/mm²
Permeablity @ 150 kPa:	Nil
Crack briging ability under standard conditions at 20°C and 50% RH:	> 0.75 mm
Crack bridging ability at low temperature @ - 5°C:	> 0.75 mm

REMARKS

- Aquaproof 2K should not be applied to frozen substrate or if ambient temperature is below 5°C or expected to fall below 5°C
- Fair faced concrete should be roughened mechanically to ensure good adhesion, if this is not possible contact DCP technical department for advice.
- Ensure proper ventilation during waterproofing system application and curing for optimal results.

PACKAGING

Aquaproof 2K is available as 20 kg packs (5 kg polymer & 15 kg powder).

COVERAGE

Approximately 11 m²/20 kg for one coat @ 1 mm thickness.

STORAGE

Aquaproof 2K has a shelf life of 12 months from date of manufacture if stored at temperatures between 5°C and 50°C.

If these conditions are exceeded, DCP Technical Department should be contacted for advise.

CAUTIONS

HEALTH AND SAFETY

As Aquaproof 2K contains Portland cement and sand, Aquaproof 2K may cause irritation to skin or eyes. In case of accidental contact with eyes, immediately flush with plenty of water for at least 10 minutes and seek medical advise.

For further information refer to the Material Safety Data Sheet.

FIRE

Aquaproof 2K is nonflammable.



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