# Aquaproof 2K

# 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 application.
- » 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 any contamination. Remove any traces of curing compound, laitance, 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.

## **PRIMING**

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

# **TECHNICAL PROPERTIES:**

Colour: Grey

Density:  $1.90 \pm 0.10 \text{ g/cm}^3$ 

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:**

Adhesion to concrete: 1.46 N/mm<sup>2</sup>

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/mm<sup>2</sup>

Capillary absorption and

permeability to water:

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

Permeability to water vapour - equivalent

vapour - equivalent thickness of air S<sub>n</sub>:

Class 1: SD < 5 m (Vapour Permeability)

Permeability to Carbon

Dioxide (CO<sub>2</sub>):

> 50 m

Chloride ions content:

0.05%

## **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.



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When the material begins to drag, do not add any water, but dampen the surface again. Leave the first coat to cure for 4 hours before applying the second coat. 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

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 4 hours after the application of the second layer.

#### **CLEANING**

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

## **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.

#### **PACKAGING**

Aquaproof 2K is available as 20 kg packs (5.1 kg polymer & 14.9 kg powder).

# **COVERAGE**

Approximately 11 m<sup>2</sup>/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 Aguaproof 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.

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# Aquaproof 2K

# **TECHNICAL PROPERTIES EN 14891:**

Initial tensile adhesion strength after aging under ≥ 0.5 N/mm<sup>2</sup> standard conditions: Adhesion strength after ≥ 0.5 N/mm<sup>2</sup> immersion in water: Tensile adhesion strength ≥ 0.5 N/mm<sup>2</sup> after freeze-thaw cycles: Tensile adhesion strength ≥ 0.5 N/mm<sup>2</sup> after heat ageing @ 70°C: Tensile adhesion strength after contact with lime ≥ 0.5 N/mm<sup>2</sup> water. Tensile adhesion strength after contact with chlorinated > 0.5 N/mm<sup>2</sup> water:

Permeablity @ 150 kPa: Nil

Crack briging ability under standard conditions at 20°C

> 0.75 mmand 50% RH:

Crack bridging ability at low temperature @ - 5°C:

> 0.75 mm

For further information refer to the Material Safety Data Sheet.

## FIRE

Aquaproof 2K is nonflammable.

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