

KERACRETE ADF100

Acrylic Cementitious Highly Flexible Waterproofing Membrane



DESCRIPTION

KERACRETE ADF100 is a two component product comprising of a powder and liquid component representing the next generation of cementitious polymer composites. The liquid component is a blend of highly durable and flexible polymers. The powder component is a blend of special cements, finely graded fillers and active chemicals.



USE

- Waterproofing of bathrooms and Wet areas
- Water Storage Tanks
- Swimming pools
- Flat Roofs
- Basement Walls
- Planter Boxes
- Tunnels
- Retaining Walls and Foundations
- Plaza Decks
- Balconies, terrace and roof floor



ADVANTAGES

- Resistant to water pressure up to 7 bar making it suitable for use in both water retaining and water excluding structures.
- Crack bridging of cracks up to 2mm ensures the membrane deflects dynamically with the structure maintaining waterproofing performance.
- The polymer composition of the membrane has very high bond



STORAGE

6 months from date of manufacture, when be stored correctly in original packaging, avoid sunshine, temperature from 20°C - 40°C



PACKAGING

KERACRETE ADF100 is supplied in 23 kg/ set

PRODUCT PROPERTIES

Minimum thickness	1mm
Surface drying time (ASTM D1640-14)	≤ 6 hours
Bond strength after water immersion (BS EN 14891:2017)	≥ 0.5 Mpa
Bond strength after heat aging (BS EN14891:2017)	≥ 0.5 Mpa
Ability to create cracks under normal conditions (BS EN14891:2017)	≥ 0.75 mm
Percent elongation at break (BS EN14891:2017)	≥ 30%
Impact Strength (ISO 6272-2:2011)	≥ 40 kG.cm
Tensile strength (ASTM D412-16)	≥ 1 Mpa
Bending strength (ASTM C348-18)	4.5 Mpa
Concentration of organic compounds evaporation (VOC) (ISO 11890-1:2007)	≤ 55%
Water durability, after 240 hours (JIS K5400:1990)	Good
Water impermeability of 150 kPa for 7 days (BS EN14891:2017)	Waterproofing

COVERAGE



Coverage depends on the nature, surface profile and porosity of the substrate, below are approx. values to act as a guide in calculating material consumption.

1mm :	1.5kg/ m ²
2mm :	3.0kg/ m ²

APPLICATION METHOD



Preparation

KERACRETE ADF100 should be applied to a clean substrate free of contamination from oils, grease, dust, etc. All surface contamination should be removed prior to application by using mechanical means or chemical degreasing agents. Surfaces should be sound and non dusting. Weak friable surfaces may need to be repaired with a suitable repair product or a suitable pretreatment prior to the membrane installation.

Cracks greater than 1mm should be clean and cut to form a V-cut, then filled by using mixed KERACRETE ADF100 and 50mm reinforcing scrim applied over the crack length.



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Priming

For very porous substrates it may be necessary to first seal the substrate this can be achieved by diluting KERACRETE ADF100 liquid with water in the ratio of 3 parts clean water to 1 part of KERACRETE liquid by volume. Apply by stiff brush or short hair roller and allow to dry at least 40 minutes before application of KERACRETE ADF100 membrane.

For external applications or normal mineral substrates pre-wetting with water is required before installation of the membrane. Pre-wet until the substrates will not accept any more water and a damp appearance is visible. Do not allow the water to pond, ponded water should be removed prior to membrane application.

Apply the membrane immediately after prewetting, if areas dry out than apply more water to return the surface to the prewetted state.



Mixing

KERACRETE ADF100 liquid waterproofing membrane is supplied in ready mixed quantities that require only on site mixing. In a large clean container add all the liquid component and slowly add the powder component while mixing. Continue mixing until all the powder is added and a lump-free, smooth free flowing slurry is achieved. On no account should additional water be added to the product as this will effect the performance of the applied membrane. Where possible mechanical mixing is recommended as this will yield the best results. This should be done by using a slow speed mixer 200-600 rpm ensuring not to mix in too much air and mix until an homogenous mix is achieved.



General Application Guidelines

Pour the mixed KERACRETE ADF100 liquid membrane on to the prepared substrate. The membrane may be spread out with a comb, serrated trowel or squeegee to the required rate. Finish the membrane by back rolling with a short haired roller. Normally a minimum of 2 coats should be applied perpendicular to each other.

If using reinforcing scrim this should be embedded in the first coat and pressed down with a split steel or nylon roller to allow wetting of the fibre in the liquid membrane.

When applying the membrane outside protection should be provided from strong sunlight or winds to limit the membrane from drying to quickly.



Following application the membrane should be allowed to cure at least 24 hour before applying further coats or allowing access to applied areas.

CURING



Allow to cure between coats and provide sufficient ventilation and a temperature above 20°C. A minimum of 24 hours should be allowed before opening to light foot traffic. Full cure is achieved after 28 days.

SUBSEQUENT FINISHER



KERACRETE ADF100 is compatible with a most finishing systems such as emulsion paints, concrete screeds or mortars, tile or other non solvated adhesives. It is not recommended to apply oil or solvent based finishes over KERACRETE ADF100 if in doubt over a particular finish then consult APT technical services.

CLEANING EQUIPMENT



Clean equipment and tools immediately after use using clean soapy water. If allowed to dry use APT Cleaning Solvent.

SAFETY PRECAUTIONS



Under normal working practices APT products are safe to handle and use, but as with all chemical products special precautions should be taken during their handling and use. Where possible, working areas should be well ventilated by providing addition ventilation if required. In poorly ventilated areas vapor protection masks may be necessary. The working area or materials should not be exposed to naked flames, or excessive heat, absolutely no smoking should be allowed in or around the working area. Avoid contact with the skin and eyes, wear suitable protective clothing and barrier creams on exposed parts. Splashes to the skin should be washed off immediately with soapy water do not use solvents. Splashes to the eyes should be rinsed immediately with plenty of water and seek medical advice. For complete information on the nature, handling and use please refer to the current material health and safety data sheet.

