**AERO DAMP PROOF SMART**

**Description**

AERO DAMP PROOF SMART is a high performance fiber reinforced elastomeric, single pack, liquid applied waterproofing and vapour proofing membrane.

The product is supplied ready to use straight from the bucket. The consistency is similar to that of thick emulsion paint, the standard product being supplied as a white membrane coating. The membrane is flexible, elastic and is resistant to light abrasion and UV light.

AERO DAMP PROOF SMART Paint is water based and safe to apply onto damp substrates by brush, roller or spray. Membranes are typically touch dry in one hour.

**Benefits**

* Basements: as part of a waterproofing system.
* Floors: above and below screeds to provide a damp proof membrane.
* Walls: can be used under a render as a waterproof layer.
* Walls: can be used to cover up damp stains on painted areas.
* Crack bridging : Unmatched crack bridging ability due to elastomeric properties.
* Adhesion : Strong adhesion to masonry substrates
* Bunds, silage and sewage tanks: protects concrete from silage attack.
* Anti carbonation : Reduces carbon dioxide and chloride ion diffusion thus protecting re-bars against corrosion.
* Typical Membrane Properties
* Specific Gravity @ 25°C: 1.1
* Viscosity: 2800-4300mPas
* Resistance to Pressurised Water Penetration
* 0.6mm thick dry film of the membrane will resist a water pressure of 0.2N/mm2 (equivalent to 20 metres head of water)
* Water Vapour Permeability
* 0.6mm thick dry film of the membrane conditioned at room temperature for 7 days prior to test gave a water vapour permeability <4g/m²/24hours at 25°C/75%RH (BS 3177)
* Carbon Dioxide Permeability
* On the basis that the carbon dioxide permeability of a coating is ten times less than its water vapour permeability, 0.6mm thick dry film of the membrane will have a carbon dioxide resistance of 100 metres of still air. (Recommendation for anti CO2 coatings at least 50m)

**Surface Preparation**

All contact surfaces must be sound, clean smooth with a trowelled or brushed finish. Any masonry should be flush pointed and defects in existing surfaces made good. Remove any laitance, dust, loose material and surface water.

**Priming**

No priming is necessary. To assist the membrane in fully wetting out the substrate the background may be dampened. There should not be any standing water or water droplets on the surface.

**Application**

Stir well before use. The membrane may be applied by brush, roller or airless spray. If necessary the liquid compound may be diluted with a little water (max 10 % by vol.) to reduce the viscosity. Care should be taken to ensure that the correct dry coat application thickness is achieved and that the drying time is not unacceptably extended.

A minimum dry film thickness of 0.6mm is required to provide a water/ vapour barrier. Typical coverage value, depending on substrate, is 1 litre /m². This should be applied in a minimum of two coats, each of 0.5 litres /m².

 For the dry film thickness to be 0.6mm, the wet film thickness needs to be 1.1mm. This will be achieved at a coverage rate of 1 litre/m² applied in two coats each of 0.5 litres /m². For the application of a dry film thickness of greater than 0.3mm in a single coat it is recommended that the membrane is applied by airless spray. Using airless spray, a single application dry coat thickness up to 1mm may be achieved.

When applying two or more coats it is recommended that subsequent coats are applied at right angles to the previous coat. Before applying a second coat it is necessary to allow the first coat to become touch dry, typically one hour. The second coat should be applied within 24 hours of applying the first coat.

If applying a subsequent screed to AERO DAMP PROOF SMART, the second coat may be used as a primer for the screed. If subsequent renders are to be applied a third coat of AERO DAMP PROOF SMAR of Paint should be applied to the substrate once tacky the render should be applied.

Curing

No special curing is required. Application of the membrane should not be undertaken if rain or water ingress is expected before the coating can fully dry. Do not apply in temperatures below 5°C or falling. After all coats have been applied the membrane should be left for at least 4 days before attempting any ponding tests. Under unfavourable conditions this period may need to be extended.

Health and Safety

AERO DAMP PROOF SMART should not come into contact with skin, eyes or be swallowed. Protective glasses should be worn during application. Should AERO DAMP PROOF SMART come into contact with skin, remove before drying by washing with soap and water. Should accidental eye contact occur wash with plenty of water and seek medical advice. If swallowed seek medical advice immediately. Do not induce vomiting. Full health and safety data are given in the Product Safety Data Sheet.

Yield

For the membrane to give maximum water/vapour protection the thickness of the dried material should be 0.6mm. To achieve this apply two coats each at a coverage rate of 0.5 litres /m². The required quantity of material may vary depending on the substrate texture and absorption.

Storage and Shelf Life

AERO DAMP PROOF SMART has a shelf life of 12 months when kept in original container with the lid on at a temperature of 7°C to 35°C. Storage at higher temperatures may reduce the shelf life. Permaseal Damp Proof Paint must be protected from frost.

Packaging

5 kg and 20 kg Plastic Buckets.