

mart-AQUA FLEX

2 PART ELASTOMERIC, CEMENT BASED WATERPROOF COATING

DESCRIPTION

mart-AQUA FLEX is a 2-part elastomeric, cement based waterproof coating for concrete and masonry. Part A is a blend of Portland cements, silica, PET microfibres and performance additives. When mixed to a slurry consistency with Part B, a styrene acrylic polymer emulsion, it can be easily applied to surfaces. It cures to give an elastomeric, flexible membrane.

CHARACTERISTICS/ADVANTAGES

mart-AQUA FLEX forms a waterproof membrane that is seamless and hardwearing. It also stops the ingress of waterborne salts and atmospheric gases.

- Retains flexibility when submerged
- Freeze-thaw resistant
- Highly flexible, crack bridging up to 0.75mm
- UV stable
- Protects concrete surfaces from Chloride attack and carbonation
- Self-curing
- Non-toxic
- Suitable for potable water system

TYPICAL USES

- For waterproofing water-retaining structures which may be subject to movement like water tanks, pools, reservoirs etc.
- To protect concrete from water, carbonation and de-icing salts.
- Suitable for internal and external use, against positive and negative water pressure.

PRODUCT DATA

- **Appearance:** Milky white liquid & Grey powder
- **Toxicity:** Non Toxic
- **Elongation:** > 5%
- **Chloride ion diffusivity:** Not measurable after 190 days testing
- **Shelf Life:** 12 months in original unopened bags, when stored in the correct storage conditions

Wet Density:	Approximately 1750 kg/m ³
Pot Life:	30 minutes
Drying Time:	180 minutes
Mixing Liquid:	5L Part B liquid to 10kg Part A Powder
Resistance to Water Pressure:	Attained after 7 days cure
Positive pressure:	10 bar
Negative pressure:	4 bar
Nominal Coverage Rate:	8-10m ² /15kg for 1mm wet film thickness



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APPLICATION PROCEDURE

Surface Preparation:

- Any loose material must be removed first. Ensure there are no oils or other materials that can hinder the bond on the surface. Contaminants could negatively affect the adhesion of **mart-AQUA FLEX**.
- The better the surface preparation the better the adhesion and surface finish will be.
- All laitance should be removed with high pressure washing. For small areas wire brushing can be used.

Mixing:

mart-AQUA FLEX is supplied in the correct mix ratios. Using a clean mixing bucket add the entire contents of the liquid part B into the bucket then using a slow speed drill or mixer fitted with a suitable mixing blade or paddle add the Part A powder and mix thoroughly. Do not add additional water.

NOTE: **mart-AQUA FLEX** should be power mixed only. Do not use a bricklayer's mortar mixer. For colour uniformity, always mix the same amount of liquid.

Application:

- Do not apply **mart-AQUA FLEX** to frozen substrates or if the ambient temperature is below 5°C or expected to fall below 5°C in the next 24 hours.
- Avoid application in direct sunlight.
- Always apply the product to a pre-dampened surface. High suction substrates require more dampening than dense substrates. However, there must be no standing water on the surface before product application. Mixed material must be used within 30 minutes or less depending on ambient weather conditions.

First Coat:

- Brush the product onto a pre-dampened surface and suitably prepared surface, brushing well into the surface.
- Strike off with a trowel in one direction for a neat appearance. Care must be taken not to spread the product too thinly.
- Typical product coverage should be approximately 500ml/m² per coat.
- If the material begins to 'ball' or drag, do not add more liquid to the mixture, just dampen the surface again.

NOTE: Do not apply product at thicknesses greater than 1mm. If product is applied at a thickness greater than 1mm, it may lead to prolonged drying and curing time periods.

Reinforcing Mesh/ Membrane:

It is recommended that all horizontal and vertical interfaces like showers and walls, water retaining structures and in corners between two walls be reinforced with **mart-AQUA FELT** to accommodate any variable movement between the interfaces. Apply 1st coat, soak **mart-AQUA FELT** in **mart-AQUA FLEX**, stick to surface, allow to dry then paint 2nd coat allow to dry. The membrane is recommended to be not less than 200mm wide so the overlap on each side for the respective surfaces should be approximately 100mm.

Second Coat:

- Allow the first coat applied to cure at least 6 hours at a temperature of 20°C before the application of any subsequent coats. Low temperatures and high humidity will delay product setting and curing.
- Brush the product onto the previous coat at 500ml/m² at right angles to the direction of brush strokes on the previous layer.

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CURING

- Under hot or excessive drying conditions, adequate shielding must be provided.
- In cold or humid areas, it may be necessary to leave the application for a longer curing time period. **mart-AQUA FLEX** must dry under air-dry circumstances.
- Additional heating and/or ventilation may assist in proper curing. Never use dehumidifiers during curing periods.

OVERCOATING

Do not overcoat or overpaint **mart-AQUA FLEX** in basements or other structures where the membrane would be subject to negative water pressure. Never use solvent-based paints.

CLEANING

Wet product can be cleaned off equipment with water and soap.

PACKAGING

mart-AQUA FLEX comes in a 15kg double pack: 5kg Part A Liquid and 10kg Part B Powder.

HEALTH AND SAFETY

Refer to **mart-AQUA FLEX** MSDS sheet.



Disclaimer: The information contained in this document is given to the best of Mart Solutions' knowledge and is the result of extensive testing. However, this document will not under any circumstances be considered as a warranty involving Mart Solutions' liability in case of misuse. Tests should be carried out before any use of the product to ensure that the methods and conditions of use of the product are satisfactory. Mart Solutions specialists are at the disposal of the users in order to help them with any problems encountered.