

Flexible Waterproofing Membrane 540

(Formerly known as Flexible Waterproofing Membrane ST-FWM)

ST-FWM540

Two-component flexible waterproofing membrane with outstanding waterproofing, water resistance and efflorescence resistance properties suitable for using at interior and exterior waterproofing system.



PRODUCT DESCRIPTION

ST-FWM540 is a two-component membranous non-exposed type waterproofing product with one part of cement-based powder and one part of acrylic copolymer providing the required flexibility and waterproofing effect to the finished membrane. The product has an excellent workability for application and provides high resistant properties to water ingress. Its enhanced tensile strength and flexibility also helps sustain slight movement and tensile stress of other kinds induced at the substrate. The membrane is able to cover micro and minor cracks on substrate without degrading its hydrophobic ability and resistance to chemical attack. High alkalinity of ST-FWM540 can also help restore a high pH value in old hardened concrete thus reducing or delaying the risk of carbonation. ST-FWM540 can be applied by either paint brush or roller.

SUBSTRATE PREPARATION

Ensure the substrate is clean, structurally sound and free of loose particles, oil, grease and other intrusion materials or residues that would affect the adhesion of ST-FWM540.

FEATURES & BENEFITS

- ◆ Highly hydrophobic with ultra strong resistance to water and chemical ingress.
- ◆ Easy to apply with little wastage of material
- ◆ Applicable under high humidity environment
- ◆ Flexible in nature to sustain slight movement & tensile stress induced at substrate
- ◆ Cover minor cracks at substrate
- ◆ Reduce or delay carbonation
- ◆ Largely reduce maintenance cost
- ◆ Short curing time
- ◆ Anti-efflorescence

AREAS OF APPLICATION

- ◆ Sealing up and waterproofing of walls, floors and roofs of concrete and plaster/render substrate
- ◆ Waterproofing for wet areas at building units, e.g., washrooms, bathrooms, kitchens, balconies, wet areas, etc., with covering materials
- ◆ Waterproofing for water tanks, swimming pools, terraces, etc, with covering materials
- ◆ Protection of old concrete from carbonation

MIXING & INSTALLATION

1. Mix the liquid part and powder part of ST-FWM540 with an electric auger type mixer in a suitable container for ~3 - 5 minutes until a lump-free homogeneous mixture is obtained.
2. A maximum of 0.3L clean water can be added to the mixture for minor adjustment of consistency to cater for workmanship needs in certain circumstances, especially under hot climate condition. (Such adjustment will not affect the waterproofing effect of the finished waterproofing membrane but may induce certain reduction in its elasticity and prolong the dry out time.)
3. ST-FWM540 can be applied on damp surface but not over stagnant or running water. Application of ST-FWM540 at ambient temperature below 5°C is not recommended.
4. ST-FWM540 can be applied by rolling or brushing to achieve the required thickness. At least two layers of ST-FWM540 applied in crisscross direction is recommended for full coverage of the substrate surface.
5. For details, please consult Score Tech Staff or refer to method statement.

CURING

Under good ventilation condition, allow ST-FWM540 to cure naturally for 7 days is normally adequate before conducting watertightness test or application of subsequent layer of material.

PACKAGE

One set of ST-FWM540 is packed with a 20 kg bag of powder and a 7.7 kg pail of liquid.

SHELF LIFE

ST-FWM540 has a shelf life of 12 months when kept unopened under dry condition.

HEALTH & SAFETY

Wear NIOSH approved face mask or equivalent personal protective equipment when handling the material. ST-FWM540 contains cement which may cause an allergic effect or irritation to eyes and skin. When contact with eyes, flush immediately with large quantity of water.







REFERENCE STANDARDS

- ◆ American Standard: ASTM D412;
USEPA Method 24
- ◆ Hong Kong Standard: HKHA MTS Spec. Part D
- ◆ Chinese Standard: JC/T 1024
- ◆ German Standard: DIN 1048

PRODUCT INFORMATION

 Colour	Grey
 Surface Drying Time	< 4 hours
 Pot Life	~ 1 – 2 hours
 Coverage	~ 12 – 17 m ² / 2 coats / set (subject to substrate texture and condition)

PRODUCT PERFORMANCE

 Tensile Strength	ASTM D412	≥ 1 MPa
 Elongation at Break	ASTM D412	≥ 80%
 Bond Strength	HKHA MTS Spec. Part D Cl.2.1.14	≥ 0.5 MPa
 Water Penetration Test	DIN 1048	0 mm
 Resistance to Efflorescence	JC/T 1024	No efflorescence after 21 cycles
 VOC Content	USEPA Method 24	< 10 g/L

* Note: The test standards for the product performance stated above refer to laboratory test only.

DISCLAIMER

Note: As the application condition may vary from site to site and may not be identical to the same condition under which the parameters in the brochure are drawn, the information provided on this Technical Data Sheet is for general guidance only. Warranty will not be given to the ultimate performance and application results of this material when the material is not kept, mixed, applied or cured strictly in accordance with the requirements and/or instructions listed out in this brochure or in other supplementary document.

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