
ST-FWM540

Flexible Waterproofing Membrane

Short curing time

Highly hydrophobic with strong resistance to water ingress

Easy to apply with little wastage of material

High flexibility and tensile strength

Cover minor cracks at substrate

Mitigating or eliminating risk of concrete carbonation

Applicable under high humidity environment

Anti-efflorescence

ST-FWM540

Flexible Waterproofing Membrane

PRODUCT DESCRIPTION

ST-FWM540 is a two-component non-exposed type flexible cementitious waterproofing membrane material. After application, finishing materials can be applied directly over its surface. It is suitable for use as a waterproofing material in new works and existing building renovations, repairs, and precast components. ST-FWM540 can be applied on various substrate including concrete, pre-cast surface, gypsum blocks, etc.

AREAS OF APPLICATION

- Walls and floors in washrooms, bathrooms, kitchens, etc.
- Wet areas such as balconies, canopies, water tanks, swimming pools, etc., with suitable covering materials
- Protective coating against concrete carbonation
- Consult Ardex Scoretech staff for other applications

SUBSTRATE PREPARATION

The substrate must be sound, even, well-aligned, clean and free from loose particles, oil, grease and other intrusion materials or residues that would affect the adhesion of ST-FWM540.

INSTALLATION

1. Mix the liquid part and powder part of ST-FWM540 with a suitable mixer (e.g., electric hand drill mixer) in a suitable container until a lump-free homogeneous mixture is obtained.
2. 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.
3. Apply ST-FWM540 in two layers by roller or brush. Successive layer can be applied when the previous layer touch dry, which is about 2 – 4 hours apart under normal weather and well-ventilated conditions. Two layers of ST-FWM540 shall be applied in crisscross direction to ensure full coverage of the substrate surface.
4. For detailed application method, please refer to the manufacturer's method statement.

CURING

Under good ventilation condition, allowing ST-FWM540 to cure naturally for 3 days is normally adequate before conducting watertightness test. Application of subsequent layer of material can be proceeded after 7 days natural curing.

PACKAGE

Standard packing:

Part A: 8L liquid/bucket

Part B: 20kg powder/bag

Small packing (in one pail):

Part A: 2.4L liquid/bottle x 2

Part B: 6kg powder/bag x 2

SHELF LIFE

Unopened ST-FWM540 has a shelf life of 12 months if well-kept in dry condition on lifted floor.

HEALTH & SAFETY

A qualified mask or equivalent personal protective equipment must be worn when handling this product. This product is non-toxic and does not contain harmful substances but may cause allergies or irritation to eyes and skin. If it accidentally comes into contact with eyes, rinse immediately with plenty of water and seek for medication.

REFERENCE STANDARDS

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

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PRODUCT INFORMATION

Colour	Grey
Surface Drying Time	< 4 hours
Pot Life	~ 1 – 2 hours
Coverage	• Standard packing: ~ 12 – 17 m² / 2 coats / set • Small packing: ~ 7 – 13 m² / 2 coats / set (subject to substrate texture, absorption rate and condition)

PRODUCT PERFORMANCE

Performance	Test Standard	Result
Tensile strength	ASTM D-412	≥ 1 MPa
Elongation at break	ASTM D-412	≥ 50 %
Pull-off Strength	HKHA MTS Spec. Part D Cl.2.1.15	≥ 0.5 N/mm ²
Water Penetration Test	DIN 1048	0 mm
Resistance to Efflorescence	JC/T 1024	No efflorescence
VOC Content	USEPA Method 24	< 10 g/L

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

DISCLAIMER

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 in 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 any other supplementary document.