
ST-PMM40

Polymer Modified Mortar

Easy for use by just mixing with water

High adhesion strength to substrate concrete

Good compatibility with old concrete

Chloride ion content below standard specification

Shrinkage compensated thus reducing risk of shrinkage cracks

Can be applied by trowel, gloved hand or spray machine

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PRODUCT DESCRIPTION

ST-PMM40 is a grade 40 cementitious pre-bagged high quality polymer modified mortar with enhanced adhesive strength and compressive strength for spalling repair and patching up work of concrete.

ST-PMM40 can be applied either by hand or by spray to repair concrete on vertical surfaces and is also suited to repair soffits and other overhead repair work. ST-PMM40 can be applied in a single layer with thickness up to 60 mm in vertical locations and up to 40 mm in one layer at overhead locations.

AREAS OF APPLICATION

- Spalling repair
- Patch repair for concrete
- Make good honeycombs
- Reinstatement of large concrete areas

SUBSTRATE PREPARATION

The substrate must be clean, structural sound, free of loose particles, contaminations, grease and any other unwanted contaminants. All existing reinforcement shall be cleaned, and all rust should be removed.

Excessively corroded steel reinforcement must be replaced. Exposed sections of retained reinforcement must be thoroughly cleaned, with all rust removed, and treated with anti-corrosion protection (e.g., applying a primer mixture of ST-BCL and cement).

The perimeter of the concrete repair area must be saw-cut to a depth of 10mm below the concrete surface. If the concrete substrate to be repaired is too smooth, surface treatment (roughening) must be performed to create an ideal bonding surface for the repair mortar application.

All honeycombed concrete must be chiselled out and completely cleaned until solid concrete is exposed before repair work begins.

INSTALLATION

1. Mix ST-PMM40 with the recommended amount of water until a uniform consistency is achieved.
2. Apply the mixed ST-PMM40 using a trowel onto the prepared (pre-wetted) concrete substrate that requires repair.
3. Smooth and finish the surface with a trowel as needed.
4. For detailed application method, please refer to the manufacturer's method statement.

CURING

Natural air curing is normally adequate for ST-PMM40. Under exterior environment or unfavourable conditions, water curing is recommended to ensure ST-PMM40 achieves the best performance.

PACKAGE

25 kg bag

SHELF LIFE

ST-PMM40 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

- British Standard
BS 6319
- Hong Kong Standard
HKHA MTS Spec. Part D
Product Certification
PCCS-RM Class 40
- Chinese Standard
JC/T 2381

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PRODUCT INFORMATION

Colour	Grey
Maximum Grain Size	2.0 mm
Application Thickness	10 – 60mm / layer
Yield	~ 1.5kg/m ² /mm
Water Demand	~ 4.5 – 5L/ 25 kg bag
Pot Life	~ 1 hour

PRODUCT PERFORMANCE

Performance	Test Standard	Result
Compressive Strength at 28 days	PCCS-RM TM 1 (HKHA MTS Spec. Part D Cl. 2.1.1 & BS 6319-2)	30 - 60 MPa
Tensile Strength at 7 days	PCCS-RM TM 2 (HKHA MTS Spec. Part D Cl. 2.1.3 & BS 6319-7)	≥ 2.0 MPa
Modulus of Elasticity at 28 days	PCCS-RM TM 3 (HKHA MTS Spec. Part D Cl. 2.1.4 & BS 6319-6)	15 - 25 GPa
Bond Strength at 7 days	PCCS-RM TM 4 (HKHA MTS Spec. Part D Cl. 2.1.14 & BS 6319-7)	≥ 2.0 MPa
Cracking in Coutinho Ring Test at 28 days	PCCS-RM TM 5 (HKHA MTS Spec. Part D Cl. 2.1.6 & BS 6319-6)	No Crack
Figg Air Permeability	PCCS-RM TM 6 (HKHA MTS Spec. Part D Cl. 2.1.7)	≥ 200 seconds

* 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.