



RM770

REPAIR MORTAR (SPRAYABLE)

PRODUCT DESCRIPTION

OPTIMIX RM770 REPAIR MORTAR (SPRAYABLE) is a high quality polymer modified and shrinkage-compensated mortar. Formulated for applications by wet or dry spraying. Low water demand with high early strength for reinstatement of concrete.

TYPICAL USAGE

- Reinstatement of large areas of spalled concrete caused by reinforcement corrosion, fire damage, or other renovation purposes.
- Areas where spray application provides a cost effective reinstatement method.
- Overlayment for the sacrificial anode units of the impressed current cathodic protection system.
- Suitable for both vertical and overhead spray applications.
- Generally can be applied up to 100mm for overhead application per layer depending on the substrate conditions and the density of the exposed reinforcement.

FEATURES AND BENEFITS

- Easy to use
- Good bonding to substrates
- Consistent quality
- Extremely low VOCs
- High early and ultimate strength
- Low shrinkage
- High build
- Chloride and carbonation resistance
- Cost effective



TECHNICAL DATA

Product Characteristics	OPTIMIX RM770	
	Sprayable	Trowellable
Compressive Strength at 28 Days	55 MPa	60 MPa
Flexural Strength at 28 Days	9 MPa	10 MPa
Bond to Concrete at 28 Days	1.5 MPa	
Linear Shrinkage	0.10 %	
Chloride Content	< 0.01%	
Electrical Resistivity	5000 – 50000 Ohm	
Typical Mixing Water *	4.5 – 5.0 L	3.8 – 4.2 L
Wet Density	2000 kg/m ³	2100 kg/m ³
Yield	14.8 L	13.8 L
Packaging	25 kg per bag	
Shelf Life	12 months	

Note: The above are typical laboratory test results and can vary slightly depending on the ambient and substrate conditions during application.

** Actual value will depend on spray machine being used.*

TESTING METHODS

Compressive Strength	HKHA MTS (00/02), Part D 2.1.1
Pull-off Test	HKHA MTS (00/02), Part D 2.1.15
Linear Shrinkage	ASTM C 596 - 82
Chloride Content	HK Construction Standard CS1

Note: The tests were performed according to the national standard or in-house modifications of the corresponding testing procedure.

SURFACE PREPARATION

Break out the repair area to a depth of at least 10mm. If reinforcement is exposed, all loose rust shall be removed from the corroded reinforcement. For corrosion protection, apply **OPTIMIX PE Polymer Emulsion** cement slurry primer (**PE** : Cement = 1 : 1.5) to the cleaned reinforcement and allow to dry in forming protective film. Concrete substrate should be soaked with potable water to saturated surface dry conditions, and excess water should be removed. The repair mortar should then be applied to build up the required thickness.

MIXING AND APPLICATION

OPTIMIX RM770 can be applied by most of the commonly available spray equipment. It is strongly recommended that trial applications should be conducted prior to work commencing to confirm the suitability of the spray equipment. For applications by hand troweling, **OPTIMIX RM770** should be mixed with a forced action mixer or a drill fitted with a suitable paddle. The powder should be slowly added to the required amount of water and mixed for about 5 minutes or until a lump-free homogeneous is achieved. The mortar should be sprayed by a suitable experienced operative. The repaired surface can be finished with the use of a wood float. If the applied layer is too thick leading to sagging, the affected area should be removed and re-applied in a slightly thinner layer. Where thick section is needed, it should be applied and built up using multiple layers.

CURING

With the excellent water retention properties of **OPTIMIX RM770**, self-curing of the applied mortar is considered adequate. Water curing is only required under extremely hot conditions or when excessive rapid drying occurs.

HEALTH AND SAFETY

OPTIMIX RM770 is alkaline in nature and can cause irritations to persons with sensitive skin. Avoid inhalation of dust and contact with skin and eyes. Wear suitable protective gloves and masks while handling the product. If contact with eyes, rinse immediately with plenty of clean water and seek medical advice. This product is non-toxic and is not flammable.



STORAGE

Store in the original unopened bags on pallets with plastic wrapping under dry conditions. Store out of direct sunlight, clear of ground on pallets protected from rainfall. Avoid excessive stacking of pallets. Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging.

Important Note: The information contained herein is, the best of our knowledge, true and reliable and is supported by the present state of our knowledge. No warranty is given or implied in connection with any recommendations or suggestions made by us or our representatives as the conditions of use and any labour involved are beyond our control.



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