# Repair Mortar 40 MPa

ST-RM40

Grade 40 polymer modified cementitious mortar for spalling repair and patching up work of concrete in exterior and interior conditions.





## PRODUCT DESCRIPTION

ST-RM40 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-RM40 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-RM40 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.

# SUBSTRATE PREPARATION

The substrate must be clean, structural sound, free of loose particles, contaminations, grease and any unwanted other contaminants. existing reinforcement shall be cleaned and all rust should be removed. Over deteriorated reinforcement shall be replaced while retained reinforcement should be primed with anti-rust paint. Edges of the repair area should be saw cut to a minimun depth of 10 mm from the finished concrete surface. Smooth surfaces should be treated to form rough surfaces as proper mechanical keys to receive repair mortar. All honeycomb should be hacked off until sound concrete is exposed.

## **FEATURES & BENEFITS**

- Premixed in factory
- Easy for use by just mixing with water
- ♦ High adhesion strength to substrate concrete
- ♦ Good compatibility with old concrete
- ♦ Chloride free
- Shrinkage compensated thus reducing risk of shrinkage cracks
- Can be applied by trowel, gloved hand or spray machine

# **AREAS OF APPLICATION**

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

#### **MIXING & INSTALLATION**

- Prepare the bond coat slurry by mixing Score Tech Bond Coat Latex: ST-BCL with Ordinary Portland Cement (OPC).
- Prime the exposed reinforcement bars, if any, by brushing the bond coat slurry. Wait until the bond coat slurry on the reinforcement becomes dry on the reinforcement before applying bond coat slurry onto the concrete substrate.
- Apply the bond coat slurry with brush onto the concrete substrate when its surface is still damp but without apparent surface water.
- 4. Apply repair mortar on the concrete substrate after the bond coat slurry lose its shiny colour.
- Level up the surface of the repair mortar with trowel and/or spatula and to align with the adjacent surface. Finish the surface of the repair mortar to the required texture by trowel or other suitable tools.

# **CURING**

Under normal circumstances, natural curing for ST-RM40 is proven to be adequate. When the weather is extremely hot or dry, curing the applied ST-RM40 with water mist will be beneficial to achieve its best performance.

#### **PACKAGE**

25 kg bag

#### SHELF LIFE

ST-RM40 has a shelf life of 12 months if well kept in dry condition on lifted floor.

#### **HEALTH & SAFETY**

Wear NIOSH approved face mask or equivalent personal protective equipment when handling the material. ST-RM40 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**

British Standard: BS 6319; BS 1881

Hong Kong Standard: ArchSD General Specification,
HKHA MTS Spec. Part D,

# TECHNICAL DATA

₽ Compressive Strength at 28 days (TM1)	34	≥ 40 MPa	
Tensile Strength at 7 days (TM2)		≥ 2.0 MPa	
₽ Modulus of Elasticity at 28 days (TM3)	3	15 - 25 GPa	
Bond Strength at 7 days (TM4)		≥ 2.0 MPa	
₽ Cracking in Coutinho Ring Test at 28 days (TM5)	3	No Crack	
Figg Air Permeability (TM6)		≥ 200 seconds	
	34	< 1.5%	

#### **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.



Tel: 852-2165 0900 Fax: 852-2590 0511

Email: enquiry@scoretech.com.hk Website: www.scoretech.com.hk

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