ShaliFix® SC 40

High Strength Quick Setting Repair Mortar



Description

ShaliFix® SC 40 is a single component portland cement based ready to use material to restore and repair concrete & masonry surface. It requires only addition of clean water to produce non- shrink, rapid-setting high strength repair mortar.

Product Information

Appearance	Grey powder in single pack system.
Handling & Storage	Store under cover out of direct sunlight, moisture and protect from extremes of temperature. In tropical climates the product must be stored in an air-conditioned environment. Failure to comply with the recommended storage conditions may result in premature deterioration of the product or packaging.
Packaging	Available in 30 kg moisture resistant bags.
Shelf Life	6 months from the date of manufacture when maintain in protected storage in original unopened sealed condition at 5 - 38°C.

Technical Characteristics @ 27°C, 55% RH

Appearance	Grey Powder
Water to Powder Ratio*	0.14 - 0.15
Yield, m ³ / 30 kg bag	0.0136
Setting Time, minutes	40 - 50
Workable time*, minutes	10 - 12
Compressive strength, MPa, minimum, ASTM C 109	
• 2 hrs.	13 - 18
• 24 hrs.	25 - 30
7 days	40 - 50
• 28 days	58 - 65
Tensile Strength, MPa @ 28 days	> 2.5
Flexural Strength MPa @ 28 days	> 7
Permeability @ 28 days, DIN 1048 - 5	< 15

^{*} Water to powder ratio may vary depending consistency required for end use and climatic condition.

Note: The above test results were achieved under laboratory conditions. Tested at fluid consistency of 1.4 L of water per 10 kg powder material.

Field of Application

- Structural repair for roadways, parking lot, ware house, bridges, dam, machinery, turbine floors
- Repair of damaged concrete in balconies, terraces, walls, beams
- · Repair of spalling
- Repair of industrial shop floor
- Road repair: Horizontal repairs, manholes placement (bedding and bonding) road / joint nosing
- Paving: Grouting pavement stone, joint filling
- · Street Furniture: Fixing of road signage

Advantages

- Rapid hardening and return to service & thus reducing downtime.
- Application comfort in dangerous areas of use.
- Rapid re-opening to traffic, even at low temperature.
- Long service life of the repair.
- Does not contain any chlorides or additive which may contribute to corrosion of base structure.
- · Low Permeability and higher durability.

Application Methodology

Surface Preparation

- Surface to be plugged must be clean & free from dust, oils, grease curing compounds, residual mould oils or other contaminants that could impair adhesion.
- Preferably, cracks or holes should be cut to a minimum width and depth of 20 mm, cutting the side as square as practicable. Several hours prior to placing, the entire concrete substrate should be saturated with clean water. Remove any standing water.

> Priming

• Prime the surface with **ShaliSBR Latex** modified cement slurry @ 1:2 with addition of water to get a brushable consistency.

Material Preparation

• In a mortar mixing machine initially add **ShaliFix SC 40** followed by the addition of water in the W/P ratio 0.14 - 0.15. Mix thoroughly until a homogenous mixture is obtained.

Application of Material

- After achieving consistency in the mixture, pour immediately in the repair joints & trowel or press into the joint.
- Use the entire prepared material within 5 minutes.
- Normal mortar curing process should be followed.

Value base of product data

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control and different test methods.

Health & Safety Information

- Avoid contact with skin / eyes and avoid swallowing.
- Ensure adequate ventilation and avoid inhalation of vapour.
- Wear suitable protective clothing, gloves and eye protection.
- In case of skin contact, rinse with plenty of clean water, then cleanse with soap and water. Do not use solvent to clean the contacted area.
- In case of eye contact, wash with plenty of clean water and seek medical advice.
- If swallowed, seek medical attention immediately. Do not induce vomiting.

Cleaning

Tools and mixer may be cleaned with water before mortar paste has hardened, otherwise mechanical cleaning will be required.

