

COSTAR RM 10

High Quality Concrete Patch Repair Mortar



PRODUCT DESCRIPTION

Costar RM 10 is a single-component cementitious repair mortar. The high strength patching material is suitable for both interior and exterior concrete surfaces, and for general repair of cracks and holes. It can be applied to rigid surfaces – sand/cement/screed or concrete bases, asphalt, granolithic, terrazzo, ceramic and quarry tiles, epoxy and polyurethane coatings.

BENEFITS

- Easy to Use
- Improves impermeability and chemical resistance.
- No pollution to environment.
- Improves compressive strength and durability
- Tenacious adhesiveness and low shrinkage.

USES

- Patching and repair of masonry blocks, curbs, steps, sidewalks, and more, both for external and internal purposes
- Used as plaster on walls and panel system.
- Widely used on highway, fly-over, concrete constructions on the sea, new and old buildings
- Ideal for restoration of honeycombed, spalled or otherwise damaged concrete
- It may be used for flatwork, in-situ or precast beams, columns and walls.
- It may be applied for mass or thin-set repairs.

APPLICATION

Surface preparation

Ensure that the concrete surface to be repaired is sound and free from dirt, oil, laitance and any other deleterious substances, which reduces adhesion of material to the substrate. Weak, damaged and deteriorated concrete should be

recessed to a depth of 5mm to prevent feather edging. To ensure satisfactory bonding, the prepared surface should be dampened down to minimize suction. Ensure that the surface is in a saturated surface dry condition prior to application of Costar RM 10.

Priming

All exposed reinforcement bars must be cleaned and treated with Costar anti-corrosion rebar primer. Absorbent surfaces should be dampened with clean water. Very absorbent surfaces must be primed with dilute Primer-Aqualatex C10.

Non-absorbent

surfaces must be primed as well.

The primer should be used in accordance with the instructions printed on the Product Datasheet and must be allowed to dry before applying the repair mortar.

Mixing

- Costar RM 10 should be mixed in the proportions of 20kg of powder to 4.4 – 4.6 liters of water or 3:1 to 4:1 by volume.
- Add Costar RM 10 powder to the required amount of water in a clean container and mix for at least 3-4 minutes until a homogenous, smooth, and even trowel-able plastic consistency is obtained.
- Mixing is best achieved using a drill fitted with a power whisk.
- Only mix enough mortar that can be applied before the product begins to set (approx. 10 – 15 minutes). Costar RM 10 can be applied up to a thickness of 5- 50mm.
- The working time will be extended at low temperatures and reduced at higher temperatures.

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TECHNICAL PROPERTIES

Packaging	20kg				
Appearance	Gray				
Shelf life	12 months from date of production				
Storage condition	Product must be stored in original, unopened, and undamaged sealed packaging in dry condition and temperature between +5 °C and +35 °C.				
Water ratio	4.5litres of water per 20kg bag of product				
Setting time	Initial: Approx. 20 minutes		Final: 20 to 40 minutes		ASTM C191
Compressive strength	3 hours (11.7 MPa)	24 hours (20.5 MPa)	7 days (29.4 MPa)	28 days (35.3 MPa)	ASTM C109 modified
Slant shear, modified	24 hours: (4.9 MPa)	7 days: (8.3 MPa)	28 days: (10.7 MPa)	ASTM C882	
Length change	28 days, air : $\geq -0.05\%$	28 days, water: $\leq 0.05\%$	ASTM C157		
Application temp	A minimum 10° C Maximum 30° C				
Density	2.0kg/l				
Open time	Approximately 100 minute@20°C and 45minute@35°C				
Coverage	Approximately 1.2 – 1.5 kg per m ² per 1 mm thickness. (Note: The figure above does not take in to account surface profile, porosity or material waste, thus variation in actual site results can be expected)				

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STORAGE AND SELF LIFE

Protect from freezing, if frozen or crystallized, thaw gradually and stir to homogenous mixture. Shelf life in unopened original containers is 12 months when stored at 70°F (21°C).

LIMITATIONS

Superbond 20 should not be used when the temperature is below 50C and falling. Do not exceed the maximum recommended water content and only use clean potable water. If any doubts arise concerning temperature or substrate conditions, consult your local Costar Building Product office.

HEALTH & SAFETY

- Please ensure that hand gloves and goggles are worn during installation
- Apply in ventilated areas, away from flames
- It is only important that during application and after application, standard safety procedures are done.
- Please consult current MSDS for product.
- *For Professional Use only.*

STANDARD COMPLIANCE

- ASTM C109 Standard Test Method for Compressive Strength of Hydraulic Cement Mortars
- ASTM C157 Standard Test Method for Length Change of Hardened Hydraulic-Cement, Mortar, and Concrete
- ASTM C191 Standard Test Methods for Time of Setting of Hydraulic Cement by Vicat Needle

ADDITIONAL INFORMATION

Costarchem manufactures a complete range of construction chemical products which include:

- Concrete admixtures
- Waterproofing system
- Flooring system
- Cementitious and epoxy precision grouts
- Damp-proofing products
- Sealants and adhesives
- Repair and refurbishment systems

For more information on any of our products, please contact Costarchem global or regional office.

LEGAL NOTE

The information and recommendations relating to the application of Costarchem products, are given in good faith based on current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with the stated recommendations in the product datasheets. Whilst Costarchem endeavors to ensure that any advice, recommendation, specification of information it may give is accurate and correct, it cannot, because it has no direct or continuous control over where or how its products are applied, accept any liability either directly or indirectly arising from the use of its products, whether or not in accordance with any advice, specification, recommendation of information given by it. The user of the product must test the product's suitability for the intended application and purpose. Costarchem reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.