

TAMCRETE® CRM100 TX

Cement Based Thixotropic Structural Repair Mortar

About the Product

TAMCRETE® CRM100 TX is a high strength structural repair mortar containing cement, mineral fillers, polymers and special fiber additives, with thixotropic properties.

Complies with EN 1504-3 standard as Class R4.

R4: Structural repair mortar

Areas of Application

- Horizontal and vertical surfaces
- Repair of reinforced concrete structures
- Repair of precast concrete elements
- Protection of concrete exposed to sulfate and chloride attack
- Marine structures and structures exposed to aggressive environmental conditions
- Repair of underground sections of historical structures
- Repair and restoration of uneven concrete surfaces
- Surfaces exposed to light and medium traffic loads
- Filling of formwork connection element voids

Advantages

- Easy to mix with water and apply
- Thixotropic consistency, does not sag
- Provides high adhesion to concrete and reinforcement
- High compressive strength
- Resistant to sulfate and chloride attack
- Resistant to oils
- Waterproof and non-shrink
- Resistant to freeze-thaw cycles

Technical Specifications

General Information	
Material composition	Cement, mineral fillers, silica fume and special chemical additives
Appearance	Grey powder
Density	~2.20 kg/lt
Max. particle size	≤ 3 mm
Performance Data (EN 1504-3)	
Compressive strength (EN 12190)	≥ 60 MPa (7 days), ≥ 70 MPa (28 days)
Flexural strength (EN 196-1)	≥ 9 N/mm ²
Modulus of elasticity (EN 13412)	≥ 20 GPa

Bond strength to concrete (EN 1542)	$\geq 2.0 \text{ N/mm}^2$
Capillary water absorption (EN 13057)	$\leq 0.5 \text{ kg/m}^2 \cdot \text{h}^{0.5}$
Chloride ion content (EN 1015-17)	$\leq 0.05\%$
Carbonation resistance (EN 13295)	Not inferior to control concrete
Application Data	
Application temperature	+5°C / +35°C
Mixing ratio	3.50–4.00 lt water / 25 kg
Pot life	~45 min
Application thickness	10–40 mm
Ready for service	~24 hours
Consumption	~18–20 kg/m ² (10 mm thickness)
Safety Information	
Reaction to fire class (EN 13501-1)	A1
Hazardous substances	Refer to SDS

The stated technical values are obtained at +23°C ambient temperature and 50% relative humidity conditions. High temperatures shorten the time, low temperatures extend it.

Application Instructions

Surface Preparation

The application surface must be sound, dry, clean, dust-free and load-bearing. The surface must be free from oil, grease, paint, rust, paraffin and similar contaminants that may adversely affect adhesion. Smooth surfaces should be roughened mechanically. The edges of repair areas should be prepared at right angles and reinforcing steel must be cleaned of rust. Highly absorbent surfaces should be saturated with water before application, but no standing water should remain on the surface. Application should not be carried out under conditions where there is a risk of frost, under direct sunlight, in strong winds or during rainy weather.

Mixing

The amount of water specified in the technical table is poured into a clean container. TAMCRETE® CRM100 TX powder is then gradually added while mixing with a mixer at 400–600 rpm until a homogeneous consistency is obtained. After resting for 3–5 minutes, it is mixed again for 1 minute and made ready for use. Water must not be added to the mixture that has started to set.

Application

Apply the prepared mortar onto the surface and spread with a trowel. It should be applied in a single layer with a thickness of 10–40 mm. Where necessary, an appropriate waiting period should be observed between layers. After application, the surface should be moistened periodically for 24 hours.

Cleaning of Tools

All equipment used during application must be cleaned with water before it dries. Once hardened, the material can only be removed mechanically.

Storage Conditions and Shelf Life

Store in the original, unopened packaging in a cool, dry place. Under proper storage conditions, the product has a shelf life of 12 months from the date of manufacture.

Safety Precautions

During application, suitable work clothing, protective gloves, goggles, and a mask should be worn in accordance with occupational health and safety requirements. Due to the irritant effects of the uncured material, the components must not come into contact with skin or eyes; in case of contact, rinse immediately with plenty of water and soap, and seek medical attention immediately in case of ingestion. Food products must not be kept in the areas where the material is applied. Store out of reach of children. Refer to the Safety Data Sheet for further information.

Liability

Our company is responsible only for the quality of the product. Any use of the product beyond the scope of written technical recommendations, including incorrect application or use under unsuitable conditions, is the sole responsibility of the user. For more detailed technical information, please refer to the product catalogue or contact our authorized representatives.

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