

Technical data sheet

GRAY SINGLE-COMPONENT FIBER-REINFORCED STRUCTURAL REPAIR AND STRENGTHENING MORTAR / INTERIOR - EXTERIOR

Stuccos and mortars / 25 kg



ESTUCOS Y MORTEROS

**MORTERO DE REPARACION Y
REFUERZO ESTRUCTURAL
MONOCOMPONENTE REFORZADO
CON FIBRAS GRIS**

Color: Gris

25 KG

CONTENIDO NETO

MOR-REP-GRI-025

LOTE: _____ FECHA: _____



FT / FDS

MASCRO

mascro.com.mx

ARTE PRELIMINAR · SACO

PRELIMINARY DOCUMENTATION

Preliminary information. This is not a final data sheet or an authorized application instruction.

Commercial identity is adapted to MASCRO. Technical data and pending observations from the source document are retained.

Digital information and draft control

GRAY SINGLE-COMPONENT FIBER-REINFORCED STRUCTURAL REPAIR AND STRENGTHENING MORTAR / INTERIOR - EXTERIOR

Agreed pack size: 25 kg · Color: Gray

SKU: MOR-REP-GRI-025

Digital information and downloads

Scan to open the product page and view its PDFs and flipbooks.

<https://mascro.com.mx/productos/mortero-de-reparacion-y-refuerzo-estructural-monocomponente-reforzado-con-fibras-gris/>

Scope of this review

The content was checked against the artboards in the original first- and second-part files. Data carried over from other products were corrected and the commercial pack size was updated. The company name, address, telephone numbers, final formulation and performance validation remain subject to confirmation. The standards cited in the originals are retained for this review.



Characteristics and applications

TECHNICAL CHARACTERISTICS

Fiber-Reinforced Structural Mortar is a single-component, high-strength, rapid-setting, shrinkage-compensated cementitious mortar for vertical and overhead structural concrete repairs. Its formulation includes synthetic fibers, a corrosion inhibitor and polymer additives that improve adhesion, durability and mechanical strength. It allows application up to 10 cm on walls or columns and 5 cm overhead without detachment or cracking. It produces a finish compatible with the original concrete and can be applied manually or by mechanical spraying. It meets ASTM C928 (Type R2) for rapid-setting structural repair mortars, offering excellent workability and controlled open time.

APPLICATIONS

Recommended for repairing structural concrete elements such as columns, beams, slabs, walls and joints deteriorated or damaged by corrosion, impact or fatigue. Suitable indoors and outdoors in dry or damp areas. Suitable for vertical and overhead work requiring high adhesion and early strength. Compatible with reinforcing steel and existing concrete. It can also fill joints, edges and honeycombing in precast elements. Do not apply to surfaces containing oil, paint or bituminous coatings. For thicknesses above the recommendations, apply successive layers or use metal anchors according to the structural design.

Procedure and identification

Substrate preparation: mechanically remove damaged concrete (sandblasting or brushing) to expose sound aggregate and remove corrosion from reinforcing steel. Thoroughly remove dust, grease, paint, efflorescence and release agents. Steel must be free of loose rust; apply a corrosion inhibitor if required. Dampen the substrate to saturated surface-dry (SSD) condition.

Mix preparation: in a clean container, add 16% to 17% of clean water per 25 kg bag. Gradually add the powder while mixing with a drill and paddle at 400 rpm until uniform and lump-free.

Application: apply a contact coat by brush or trowel to the prepared surface. While fresh, place the mortar directly, pressing it into the substrate. Apply from 1.5 mm up to 10 cm vertically and 5 cm overhead. Compact firmly to remove air pockets and obtain full adhesion. Level with a metal trowel or shape to match the original concrete. Avoid strong wind and direct sunlight. Ideal temperature: 13 °C to 29 °C. Do not use on frozen surfaces or below +5 °C.

Curing: protect from drafts, sunlight and rapid evaporation. Cover with damp burlap for at least 6 hours or apply a water-based curing compound complying with ASTM C309. Do not expose to water until after 24 h.

Yield: one 25 kg bag yields approximately 0.013 m³ of mortar. Estimated consumption: 19 kg/m² per cm of thickness. Cleaning: wash tools and equipment with water before setting.

Property	Characteristic value
Consistency	Thixotropic fiber-reinforced premixed powder
Color	Cement gray
Bulk density	1.800 kg/m ³
Solids content	100%
ISO classification	R4 (reinforced structural repair mortar)
VOC emissions	0.0 g/L
Product shelf life	12 months in unopened packaging
Pack size	25 kg bags
Storage	Dry, cool location protected from direct sunlight

Technical data

Condition / Property	Value
Mixing ratio	100 parts powder with 16% to 17% water
Mix density	1.700 kg/m ³
Mix pH	12
Consistency	Fiber-reinforced thixotropic paste
Application temperature	+5 °C to +35 °C
Application thickness	5–50 mm per layer
Working time	10 – 15 minutes
Initial set	≈ 30 – 40 minutes
Initial curing	2 – 3 hours
Compressive strength (1 day)	≥ 25 N/mm ²
Compressive strength (7 days)	≥ 50 N/mm ²
Compressive strength (28 days)	≥ 60 N/mm ²
Flexural strength (28 days)	≥ 8 N/mm ²
Adhesion to concrete (28 days)	≥ 2.5 N/mm ²
Modulus of elasticity	≥ 25 GPa
Linear shrinkage (28 days)	< 0.05 %
Controlled expansion (24 h)	0.1 – 0.3 %
Service temperature range	–20 °C to +90 °C
Alkali and sulfate resistance	High
Compatibility with reinforcing steel	Excellent, non-corrosive
Internal reinforcement	High-strength synthetic microfibers