KREVO Repair EP-Mortar

High-strength thixotropic epoxy repair and structural bonding mortar | Two-component system | Up to 30 mm

PRODUCT DESCRIPTION

KREVO Repair EP-Mortar is specified as a two-component, low-VOC, filled epoxy bonding and repair mortar. Its thixotropic, non-sag consistency is intended for durable bonding of prepared construction materials, structural concrete patch repairs, reprofiling, filling of small holes and sealing of static cracks. The material may be used on sound dry or matt-damp concrete, without standing water.

ADVANTAGES

- High initial and ultimate mechanical strength for structural repairs.
- Strong adhesion to sound concrete, masonry, stone and prepared steel.
- Thixotropic and non-sag for vertical and overhead application.
- Suitable for localized repairs and filling; no primer normally required.
- Low-shrinkage, moisture-tolerant formulation with abrasion resistance.

TYPICAL USES

Structural and non-structural concrete repair • Honeycombs and damaged edges • Beam, column and wall patching • Bonding concrete, masonry, stone and metal • Bonded reinforcement and mortar • Filling holes, voids and non-moving cracks.

PRODUCT INFORMATION

PARAMETER	SPECIFICATION
Material type	Two-component, thixotropic epoxy adhesive and repair mortar
Composition	Epoxy resin and selected mineral fillers
Mixing ratio	Part A : Part B = 2 : 1 by weight or volume
Component appearance	Part A: white / Part B: dark grey / mixed: concrete grey
Mixed density	Approximately 2.0 ± 0.1 kg/L at +23 °C
Single-layer thickness	Maximum 30 mm; non-sag up to 20 mm on vertical work
Packaging	6 kg A+B packs
Shelf life / storage	24 months in sealed packs, dry at +5 °C to +30 °C

MECHANICAL PERFORMANCE SPECIFICATION | 7 d at +23 °C

PROPERTY / TEST METHOD	SPECIFIED VALUE
Compressive strength | EN 12190	75 MPa
Tensile strength | EN ISO 527-2	20 MPa
Tensile modulus | EN ISO 527-2	9 GPa
Shear strength | EN 12615	16 MPa
Adhesion to dry concrete | EN 1542	> 5 MPa; concrete failure
Adhesion to matt-damp concrete | EN 1542	> 5 MPa; concrete failure
Adhesion to prepared steel | EN 12188	> 20 MPa
Shrinkage | EN 12617-1	0.01%
Glass transition temperature | EN 12614	Approximately 50 °C

Application & System Data

KREVO Repair EP-Mortar | Working life, mix ratio, substrates, coating thickness and bonding controls

APPLICATION PROPERTIES

PARAMETER	SPECIFICATION	PARAMETER	SPECIFICATION
Temperature range	+10 °C to +30 °C	Mix ratio A : B	2 : 1
Pot life at +23 °C	~60 min	Pot life at +30 °C	~45 min
Open time at +23 °C	~75 min	Open time at +30 °C	~45 min
Consumption	2.0 kg/m² per mm	Maximum layer depth	30 mm
Concrete condition	Dry or matt damp	Dew point margin on steel	At least +3 °C

Working time varies with material temperature and mixed quantity. Prepare only the amount that can be placed within the pot life. Bonding surfaces must remain sound and free from standing water, dust and contaminants.

TYPICAL REPAIR & BONDING SEQUENCE

STAGE	MATERIAL / METHOD
1 | Assessment	Identify repair geometry, structural requirements and bond surfaces.
2 | Preparation	Mechanically prepare sound substrate and remove laitance, rust and dust.
3 | Mixing	Blend matched A+B components at 2:1 until homogeneous.
4 | Installation	Apply with trowel / spatula; compact, bond and finish within pot life.
5 | Protection	Support bonded members; protect from movement until cured.

CONCRETE & MASONRY PREPARATION

Concrete and mortar must be sound, clean and suitably cured. Remove loose particles, coatings, laitance, grease and contamination. Mechanically abrade, grind or lightly scabble to create an open-textured, gripping surface. Vacuum the prepared area thoroughly. Dry or matt-damp concrete is acceptable, but standing water is not.

STEEL & OTHER SUBSTRATES

Clean steel to a bright metal finish by appropriate abrasive methods and establish a profile suitable for adhesion. Remove rust, scale, oils and loose debris. Prepare wood by sanding or planing; remove glaze or contamination from other compatible construction materials. Avoid condensation on steel before and during application.

INSTALLATION CONDITION	SPECIFIED CONTROL
Concrete and masonry	Open-textured, structurally sound and free from standing water.
Steel and metal	Bright metal, clean and profiled; keep >3 °C above dew point.
Heavy or overhead bonding	Provide temporary mechanical support until full cure.

On steel, keep the surface temperature at least 3 °C above the dew point. Where bonding heavy vertical or overhead elements, provide temporary supports until the epoxy has hardened. Test adhesion and compatibility on representative areas when necessary.

APPLICATION CONDITIONS & WORKING TIME

Use KREVO Repair EP-Mortar between +10 °C and +30 °C. Pot life is approximately 60 minutes at +23 °C and 45 minutes at +30 °C; open time is approximately 75 and 45 minutes respectively. Do not apply beyond its workable life.

Installation & Product Support

KREVO Repair EP-Mortar | Mixing, bonding, patching, limitations and international contacts

MIXING PROCEDURE

- Use complete, correctly proportioned components: Part A (resin) : Part B (hardener) = 2 : 1 by weight or volume.
- Stir Part A briefly with a slow-speed mixer (maximum 300 rpm), then add Part B fully to Part A.
- Mix for at least 3 minutes until smooth and uniformly coloured; transfer to a clean container and remix for about 1 minute.
- Avoid entrapping air. Mix full pre-batched packs and use each batch within its specified pot life.

APPLICATION & FINISHING

- Apply with a suitable spatula or trowel to the prepared surface; press firmly to secure contact and remove entrapped air.
- For structural bonding, coat both joining faces where practical. Support heavy or overhead elements until fully hardened.
- Apply in single layers up to 30 mm; the recommended non-sag vertical thickness is up to approximately 20 mm.
- Fill holes and static cracks with well-compacted mortar. Clean equipment immediately; hardened material requires mechanical removal.

LIMITATIONS & SERVICE NOTES

- Application and substrate temperature: +10 °C to +30 °C; avoid condensation and standing water.
- Substrates must be structurally sound; remove all dust and contamination immediately before placement.
- Long-term structural design must account for epoxy creep; seek engineer approval for sustained loads.
- For layers above 30 mm, use approved staged application with suitable surface key and curing between layers.
- Keep unopened packs dry at +5 °C to +30 °C. Protect fresh work from damage until sufficiently cured.

HEALTH, SAFETY & ENVIRONMENT

For professional use by trained applicators. Read the current KREVO Safety Data Sheet before handling both components. Use chemical-resistant gloves, eye protection, protective clothing and ventilation. Avoid skin or eye exposure and control spills. Dispose of uncured epoxy and containers according to applicable regulations.

QUALITY & PRODUCT INFORMATION

Performance depends on correct component ratio, mixing, surface preparation, moisture, temperature and curing. Declared strengths, adhesion figures and any EN 1504 claims are design specifications that must be demonstrated with KREVO production and qualification test records before certification.

KREVO | GLOBAL CONTACTS

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