KREVO Proof Cem-Flex

Two-component polymer-modified cementitious waterproofing slurry | Brush or trowel applied

PRODUCT DESCRIPTION

KREVO Proof Cem-Flex is a two-component, polymer-modified cementitious waterproofing slurry supplied as a pre-measured liquid-polymer and cementitious-powder set. Mixed to a homogeneous grey slurry, the material is designed to waterproof and damp-proof sound concrete, mortar and masonry surfaces in below-grade and exposed construction applications.

ADVANTAGES

- Pre-proportioned components for convenient mixing and application.
- Good adhesion to prepared substrates with resistance to water penetration.
- Suitable for brush-applied slurry or thicker trowel application.
- Slightly flexible coating with resistance to abrasion and erosion.
- Non-flammable, non-corrosive cementitious waterproofing system.

TYPICAL USES

Basements and retaining walls • Water tanks and swimming pools • Flat roofs, balconies and terraces • Bridges and sea walls • Tunnels • Waterproofing of concrete, mortar, brickwork and suitably prepared steel.

PRODUCT INFORMATION

PARAMETER	SPECIFICATION
Material type	Two-component, polymer-modified cementitious waterproofing slurry
Chemical base	Cement, selected graded aggregates and polymer dispersion
Component appearance	Part A: white liquid; Part B: grey powder; mixed: grey slurry
Mixing ratio (A:B) by weight	Brush 1:4; trowel 1:4.5 (use approx. 90% of the Part A liquid)
Packaging	30 kg set: 10 kg Part A liquid + 30 kg Part B powder
Fresh mortar density	Approximately 2.1-2.2 kg/L
Storage / shelf life	At least 6 months unopened when stored dry, shaded at +5 °C to +35 °C
Theoretical yield	Approximately 20 L of mixed mortar per 40 kg set

TECHNICAL PERFORMANCE SPECIFICATION

PROPERTY / TEST METHOD	TYPICAL VALUE
Shore A hardness | ASTM D2240	Approximately 90
Compressive strength | ASTM C109	40 MPa at 28 days
Flexural tensile strength | ASTM C348	9 MPa at 28 days
Tensile adhesion | ASTM D4541	1 MPa
Elongation	66% after 14 days
Crack-bridging ability	Up to 1.2 mm
Water-tightness / negative pressure	No penetration reported; 5 bar for 72 h

Application & System Data

KREVO Proof Cem-Flex | Mixing ratios, film build, overcoating and substrate requirements

APPLICATION PROPERTIES

PARAMETER	SPECIFICATION	PARAMETER	SPECIFICATION
Air / substrate	+5 °C to +35 °C	Pot life at +25 °C	Approximately 50 minutes
Thickness per coat	0.75-1.5 mm	Consumption	About 1 kg/m² per coat
No. of coats	Minimum 2	Severe exposure	3 coats may be required
Recoating +10 °C	Approximately 12 h	Recoating +20 °C	Approximately 6 h
Recoating +30 °C	Approximately 3 h	Maximum intercoat	Follow approved site instructions

Two coats are recommended for waterproofing and damp-proofing; a third coat may be required where water exposure is severe. Consumption and film build depend on surface roughness and application method.

TYPICAL WATERPROOFING SYSTEM

STAGE	MATERIAL / METHOD
1 | Surface preparation	Clean and repair sound concrete, mortar or masonry; treat steel separately as required
2 | Pre-wetting	Dampen absorbent surfaces before the first coating; avoid standing water
3 | Mix components	Combine Part A liquid and Part B powder to a uniform slurry without adding water
4 | First coat	Apply by brush or trowel to the damp substrate at specified consumption
5 | Second / third coat	Apply after sufficient set; maintain specified intercoat intervals and cure properly

SUBSTRATE PREPARATION

Concrete, mortar and brickwork must be structurally sound, clean and free of oils, grease, dust, laitance and loose material. Repair unsound or uneven areas before coating. Thoroughly pre-wet absorbent substrates and maintain a damp surface for the first coat. Steel and iron must be cleaned of corrosion, grease and loose contaminants.

MIXING RATIO & RECOATING INTERVAL

Use the stated liquid-to-powder proportion by weight. Do not add extra water or other materials. Waiting times vary with temperature and environmental conditions.

METHOD / TEMPERATURE	DESIGN GUIDANCE
Brush application	1 part Part A : 3 parts Part B by weight
Trowel application	1 part Part A : 4.5 parts Part B by weight
Typical overcoat interval	+10 °C: 12 h | +20 °C: 6 h | +30 °C: 3 h

If the waiting interval exceeds 24 hours, lightly roughen or blast-clean the coating surface before continuing. Observe approved application guidance where recoating occurs near the maximum interval.

APPLICATION METHOD

Apply the first coat to the clean, damp substrate using a stiff synthetic brush or suitable trowel. Allow it to set sufficiently to support the next layer, then apply the second coat across the first coat direction. Use a minimum of two coats; consider a third coat for severe water exposure. Protect each coat from rapid drying and premature rainfall.

Installation & Product Support

KREVO Proof Cem-Flex | Mixing, curing, service limitations and international contacts

MIXING PROCEDURE

- Pour approximately half of the polymer liquid (Part A) into a clean mixing vessel.
- Gradually add the full cementitious powder (Part B) and mix to a smooth, uniform slurry.
- Add the remaining Part A liquid and mix with a slow-speed mixer for 2-3 minutes.
- For trowel consistency use approximately 90% of Part A; do not introduce extra water.

APPLICATION, FINISHING & CURING

- Brush application: use a suitable synthetic-bristle brush on vertical work; a rubber squeegee or push broom may be used on horizontal surfaces.
- Trowel application: use a 3 mm notched trowel for the first layer and a flat trowel for the second; finish with a dry sponge as the coat begins to set.
- Protect freshly applied material from wind, direct sun and rain. Cure using damp hessian or plastic sheeting as required.
- Clean tools promptly with water before hardening; cured residue generally requires mechanical removal.

LIMITATIONS & SERVICE NOTES

- Do not apply below +5 °C or above +35 °C ambient and substrate temperature.
- Apply a minimum of two coats for waterproofing; use additional coats for severe water penetration as specified.
- On directly UV-exposed roofs, protect the system with an appropriate cementitious screed, typically 20-30 mm where designed.
- Avoid applying over unlevelled surfaces, and do not exceed the specified coating consumption or thickness per layer.
- Do not permit rain, splashing or premature immersion before sufficient hardening. Respect movement joints and use compatible detailing.

HEALTH, SAFETY & ENVIRONMENT

For professional use by trained applicators. Obtain and review the current Safety Data Sheet before handling. Cementitious powder and polymer liquid may cause skin or eye irritation. Use suitable gloves, protective eyewear, workwear and dust protection when handling powder. Prevent fresh material entering drains and dispose of residues responsibly.

QUALITY & PRODUCT INFORMATION

System durability depends on correct substrate preparation, mixing proportion, application thickness and curing. Mechanical, adhesion, crack-bridging and water-tightness characteristics must be supported by product-specific quality testing before certified performance is claimed. Suitability for potable-water contact or special exposures requires separate approval.

KREVO | GLOBAL CONTACTS

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