KREVO Proof PU-Acryl

One-component polyurethane-acrylic liquid waterproofing membrane | UV-resistant roof coating

PRODUCT DESCRIPTION

KREVO Proof PU-Acryl is a ready-to-use, single-component polyurethane-modified acrylic dispersion for seamless liquid-applied roof waterproofing. It forms an elastic, water-based protective membrane with good UV and weathering resistance, crack-bridging capability and resistance to limited temporary ponding. Suitable for brush, roller or approved spray application, with optional fleece reinforcement for complex roof details.

ADVANTAGES

- One-component, ready-to-use water-based waterproofing coating.
- Highly elastic and crack-bridging, with a seamless membrane finish.
- Resistant to UV exposure, yellowing and normal roof weathering.
- Good adhesion to suitably prepared porous and non-porous substrates.
- Water-vapour permeable; suitable for limited temporary water ponding.

TYPICAL USES

New-build and refurbishment roofs • Roofs with difficult details and penetrations • Terrace and parapet waterproofing • Protective renovation of existing roof coatings • White reflective roofs to help reduce solar heat gain • Protective coating for concrete structures.

PRODUCT INFORMATION

PARAMETER	SPECIFICATION
Material type	Single-component polyurethane-modified acrylic dispersion
Supplied form	Ready-to-use, water-based liquid-applied roof membrane
Colours	Grey and white
Packaging	20 kg plastic pail
Density at +30 °C	Approximately 1.32 kg/L (EN ISO 2811-1)
Solids by weight	Approximately 70%
Shelf life	12 months in unopened and undamaged original packaging
Storage conditions	Dry and shaded at +5 °C to +30 °C; protect from heat and sunlight

TECHNICAL PERFORMANCE SPECIFICATION

PROPERTY / TEST METHOD	TYPICAL VALUE
Tensile strength | ASTM D412	1.7 MPa (free film, >7 days)
Elongation at break | ASTM D412	360% (free film)
Adhesion | ASTM D7234	1.5 MPa (free film, >7 days)
Artificial weathering | ASTM G154	Pass, 1,000 h UVA-340; no cracking, blistering or chalking
Solar reflectance | ASTM E903	80% (white colour)
Thermal emittance | ASTM C1371	0.91 (white colour)
Solar Reflectance Index | ASTM E1980	100.9 (white colour)

Application & System Data

KREVO Proof PU-Acryl | Coating build-up, consumption, drying and substrate preparation

APPLICATION PROPERTIES

PARAMETER	SPECIFICATION	PARAMETER	SPECIFICATION
Ambient / substrate temp.	+15 °C to +35 °C	Relative humidity	80% maximum
Surface moisture	Below 6%	Dew point margin	At least +3 °C
Primer	10% water dilution	Primer usage	Approximately 0.3 kg/m²
Touch dry +20 / +30 °C	2 h / 1 h	Rain resistance	10 h / 6 h
Full cure +20 / +30 °C	4 d / 2 d	Recommended roof fall	Approximately 1%

For a non-reinforced roof membrane, apply a diluted primer coat followed by two full coats at the stated consumptions. At joints, cracks and irregular details, use a compatible fleece-reinforced system. All coverage figures are theoretical and increase with substrate roughness, porosity and site losses.

TYPICAL WATERPROOFING SYSTEM

STAGE	MATERIAL / METHOD
1 | Primer	KREVO Proof PU-Acryl diluted with 10% clean water; approximately 0.3 kg/m²
2 | Unreinforced base coat	Apply an undiluted continuous first coat at approximately 0.5 kg/m²
3 | Unreinforced finish	Apply a second undiluted coat at approximately 0.5 kg/m²
4 | Reinforced detail	For reinforced works, apply an embedment coat (~0.3-0.5 kg/m²) and compatible fleece at 1 m²/m²
5 | Reinforced build-up	Saturate fleece with approximately 0.5 kg/m², then apply final coat at 0.3-0.5 kg/m²

SUBSTRATE PREPARATION

Concrete should be sound and fully cured (normally at least 28 days), with a pull-off strength of at least 1.5 MPa. Remove laitance, weak concrete, coatings, dust, grease and standing water; repair blowholes and cracks. Mechanically prepare cementitious surfaces to a clean, open texture. Existing membranes, tiles, metals and other substrates must be checked for adhesion and compatibility before coating.

OVERCOATING & CURING INTERVALS

The waiting periods below apply at 50% relative humidity. Lower temperature and higher humidity will slow film formation and curing. Apply successive coats only after the preceding coat is dry and clean.

METHOD / TEMPERATURE	DESIGN GUIDANCE
Primer before first undiluted coat	~2 h at +20 °C | ~1 h at +30 °C
Unreinforced coating between coats	~6 h at +20 °C | ~4 h at +30 °C
Reinforced membrane before following coat	~24 h at +20 °C | ~12 h at +30 °C

The coating may be recoated after longer intervals following thorough cleaning. Protect each fresh coat from rain, condensation, water ponding, dust and contamination until sufficiently cured.

APPLICATION METHOD

Stir the material for approximately 1 minute until homogeneous; avoid trapping air. Apply the primer evenly and allow it to become tack-free. Use a roller, brush or approved spray equipment to produce uniform coats without pinholes. In a reinforced system, embed compatible reinforcing fleece into wet coating, saturate thoroughly, and finish with subsequent coats after the specified drying intervals.

Installation & Product Support

KREVO Proof PU-Acryl | Reinforcement details, workmanship, limitations and global contacts

APPLICATION GUIDELINES

- Inspect the substrate for soundness, moisture, stable existing coatings, cracks, joints and roof drainage before starting.
- Mix briefly to a uniform consistency; avoid over-mixing, dilution beyond the specified primer ratio, and air entrainment.
- Apply the first full coat evenly; maintain a continuous film over changes in plane, penetrations and parapet junctions.
- Use suitable brushes for details and rollers or approved airless equipment for larger roof areas.

FLEECE-REINFORCED MEMBRANE

- On the primed surface, apply the wet embedment layer and place compatible reinforcing fleece into the liquid coating.
- Wet the fleece fully, remove trapped air and wrinkles, and overlap adjacent sheets by at least 50 mm.
- Saturate the reinforcement with the next coating layer while wet; avoid dry areas and exposed fibres.
- After drying, abrade any upright fibres if required and complete the finishing coat uniformly.

LIMITATIONS & SERVICE NOTES

- Apply only between +15 °C and +35 °C with relative humidity not exceeding 80%; substrate must be at least 3 °C above dew point.
- Substrate moisture must be below 6% and free of rising damp, condensation or standing water.
- A roof fall of approximately 1% is recommended; avoid permanent ponding, particularly where freeze-thaw exposure is possible.
- Do not apply directly to insulation boards or allow water to collect between coats. Use a designed separation layer where required.
- The membrane is intended as an exposed coating; do not cover with tiles or concrete unless a separate compatible system is engineered.

HEALTH, SAFETY & ENVIRONMENT

For professional use by trained applicators. Review the current KREVO Safety Data Sheet before handling. Wear eye protection, suitable gloves and protective clothing. Provide adequate ventilation during enclosed work. Prevent liquid coating and wash water from entering drains. Clean tools promptly with water; cured coating generally requires mechanical removal.

QUALITY & PRODUCT INFORMATION

Performance and durability depend on correct substrate preparation, compatible reinforcement, total film consumption, site weather and workmanship. Reflectance figures apply to the white coating only. The stated technical values are intended as specification targets and must be substantiated by KREVO production testing before being represented as certified test results.

KREVO | GLOBAL CONTACTS

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