

Two-Component Aliphatic Polyurethane Liquid Waterproofing Membrane – UV Stable

DESCRIPTION

CasTech Proof PU-2K is a high-performance, aliphatic polyurethane coating designed for waterproofing and protective applications. Composed of Polyol (Part A) and Isocyanate (Part B), it forms a seamless, UV-resistant membrane with exceptional chemical and abrasion resistance.

TYPICAL USES

- Roofing systems (combo roofs, terraces)
- Balconies, parking decks and pedestrian walkways
- Industrial floors (chemical resistant)

ADVANTAGES

Key advantages:

- UV resistance – retains colour and gloss under sunlight
- Chemical resistance – withstands oils, acids and alkalis
- Fast curing
- Abrasion resistance
- Hydrolysis resistance – suitable for humid climates
- Easy application by brush, roller or spray

SURFACE PREPARATION

Long-term durability is determined by the bond achieved between the coating and the substrate, so substrates must be correctly prepared.

New concrete: at least 28 days old with a moisture content below 5%, sound and free from oil, grease, mortar and paint splashes or curing compound residues. Remove laitance by light mechanical scabbling, grinding or grit/captive blasting, followed by vacuum cleaning.

Old concrete: remove laitance as above. Remove oil and grease with a proprietary degreaser or hot compressed air. Repair damaged areas or irregularities with suitable CasTech products.

Priming: not normally required on sound, untreated, good-quality non-porous concrete. If in doubt, or if porous, prime with CasTech PU Primer.

MIXING

Stir Component A with a jiffy mixing blade on a low-speed drill (200 – 300 rpm) to disperse any settlement. Pour all of Component B into Component A, scraping the container, and mix thoroughly to a streak-free, uniform colour. Use immediately after mixing; working time decreases as

temperature increases.

APPLICATION

Apply immediately to the dry surface as a continuous coating of uniform thickness using a stiff nylon brush or short-nap roller, or airless spray for faster rates. Use a brush for touch-up and edging. Apply sufficient material to achieve the specified dry film thickness.

Coverage: 5 – 6 m²/L at 70 – 80 microns wet film thickness. Two coats at right angles are recommended.

TECHNICAL DATA AND PROPERTIES

Nature	Two components
Colour	Desired shade
Mix Density	1.05 ± 0.02 g/cm ³
Mixing Ratio (R : H), pbw	80 : 20
Solids	55 ± 2%
Complete Curing Time	7 days
Hard Dry Time	Overnight
Tack-Free Time	3 – 4 hours
Surface Dry Time	1 – 2 hours
Pot Life @ 25°C	45 – 60 minutes
Gloss (ASTM D523)	40 (60° Gardner), semi-gloss
Adhesion (ASTM D4541)	2.5 MPa on primed surface
Shore D Hardness (ASTM D2240)	75 ± 5
Abrasion Resistance (ASTM D4060)	45 mg loss after 1000 cycles, CS-17 wheel
Chemical Resistance (ASTM D543)	Good overall
UV Resistance (ASTM G53)	1000 h – no loss of gloss, no colour change
Solar Reflectance Index (EN 410)	85%

CLEANING

Clean tools and equipment immediately after use with suitable cleaners.

PACKAGING AND STORAGE

- Packaging: 20 L kits
- Shelf life: 12 months in unopened containers at 25°C
- Storage: cool, dry place, away from direct sunlight

HEALTH AND SAFETY

PPE: Wear gloves and goggles; long-sleeve overalls, safety shoes and a face mask are recommended.

Precautions: Avoid inhaling the product, as it may irritate the respiratory system. Treat splashes to skin or eyes with fresh water immediately. If swallowed, do not induce vomiting; call

Product Data Sheet
CasTech Proof PU-2K

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for medical assistance and keep the container available for the medical attendant. Reseal containers after use.

Additional information: Refer to MSDS (available on request).

TECHNICAL SUPPORT

CasTech provides on-site assistance and consulting services on projects when requested. Technical data sheets on other CasTech products and guidance on their use are available on request.

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