

Crown Rain Protek (Fibre Reinforced Acrylic Waterproof Coating)

PRODUCT DESCRIPTION

Type: Crown Rain Protek is a high-performance, fibre reinforced elastomeric liquid applied acrylic waterproof coating for exposed roofs and walls. After curing, it forms a breathable, UV resistant, antifungal, elastomeric, tough and extensible abrasion resistant durable membrane with up to 2 mm crack tolerance. This can withstand normal expansion and contraction stresses caused by temperature variations.

Recommended use: Crown Rain Protek is recommended for waterproofing applications like building roofs, terraces, parapet, sunshades, podiums, roof slabs, old concrete and on exterior vertical walls. Also, can be applied on mosaic tiles, wooden roofs, dome etc. The product can be applied to damp backgrounds, but not those that are covered in surface water.

Substrates: All types of exterior masonry surfaces, concrete, cement sand renderings, block work, concrete, brick, stonework, concrete screed, etc. All new cement-sand renderings /concrete surfaces should be allowed to age 6 to 8 weeks before surface coating.

Advantages: Excellent water-resistant barrier on roof/terrace & exterior wall. Resistance to UV degradation. Crack bridge ability up to 2 mm. Easy to apply, Superior adhesion, Resistant to silage acids, Excellent flexibility and elongation, Tough and abrasion resistant, Suitable for light foot traffic, Good mechanical and tensile strength, Excellent antifungal property, Eco friendly- Non-Toxic water-based system, Provides long time protection to the structure that are endangered due to thermal degradation. Free from heavy metals and low VOC.

Conditions during application: The temperature of the substrate should be minimum 10°C and at least 3°C above the dew point of the air, measured near the substrate. Before starting application, uniformly mix the product in the can and not recommended to apply with high humidity. Good ventilation is required in confined areas to ensure proper drying. The coating should not be exposed to oil, chemicals or mechanical stress until fully cured.

PRODUCT DATA:

Colour Range: White and selected natural attractive colours.

Sp. Gr. : 1.29 (For White)

Solid: 61 – 62 (% by wt.)

SVR: 53.0 – 55.0

Application Tool: Roller/Long haired brush/Spray

Drying Times: Surface dry: 1-3 hours. Dry to Re-coat: 6 -8 hours @ 25°C. Attains maximum toughness after 5 – 6 days.

Thinner & equipment cleaner: Water

Dilution Ratio: Refer to application method.

Elongation: Minimum 100% (ASTM D 412 : 2002)

Tensile Strength N/mm²: 1.5 (ASTM D 412: 2002)

TECHNICAL DATA SHEET

Adhesion Strength N/mm²: 1.5 (ASTM D 4541: 2002)

Crack Bridging @ 450 - 500 micron: up to 2 mm (ASTM C 836: 1995)

Hydrostatic Pressure: 5 Bar Passes (DIN 1048)

Water Absorption (%) @ 24 hrs.: Passes (ASTM D471)

Theoretical coverage:

Self-Priming – Coverage 8.5 to 9.5 sq. meter per lit./coat. (dilution 50% by volume).

2 coats for Roof - Coverage 2 to 2.2 sq. meters per lit./coat (no dilution).

Single coat Exterior Surface – Coverage 3.8 to 4.0 sq. meter per lit./coat (dilution 5% by volume).

Two coat Exterior Surface – Coverage 3.6 to 3.8 sq. meter per lit./2 coats (dilution 10% by volume).
(Coverage can vary depending on the porosity of the surface).

Shelf Life: Shelf life is 24 months from the date of manufacturing if stored in original and unopened packaging in a cool dry place away from direct sunlight.

APPLICATION DATA:

Before application, the surface should be sound, clean and free from oil, grease, loose particles, dust, etc. The surface cracks/pin holes to be filled with suitable exterior filler/polymer modified mortar.

Application can be done by the recommended methods.

APPLICATION PROCEDURE:

Horizontal surface-Roof/Terrace (New & Repair): Apply one coat of Crown Damp Protek with max of 10% dilution by weight and allow to dry overnight or apply Rain Protek as a self-primer, after uniformly diluted with water in 2:1 ratio by volume (2 part of Rain Protek and 1 part of water) at spreading rate of 8.5 – 9.5 Sq. meter/lit. Allow to dry for 2 - 3 hours.

Then apply the first coat of Rain Protek, without dilution at a spreading rate of 2.0 to 2.2 Sq. meter/lit/coat. Apply the second coat and the rate of application being the same. This would ensure correct consumption of material that will deliver a total dft of 550 – 500 microns. Allow the system to air dry for 5 – 6 days. Provide 6 to 8-hour recoating period between the coats.

Roofs more than area of 200 sq. meter, for additional protection, use reinforcing fibre glass mesh roll (40 gsm) between the 1st and 2nd coat of Rain Protek (fix the fibre glass mesh roll on the first coat wet surface of Rain Protek). After dry, apply the second coat over the fibre glass rolls in a criss-cross direction to the previous coat. If necessary, apply for the 3rd coat of Rain Protek.
Provide 6 to 8-hour recoating period between the coats.

Vertical surface (New Construction): Apply one coat of Damp Protek with max of 10% dilution by weight and allow to dry overnight or apply Rain Protek as a self-primer, after uniformly diluted with water in 2:1 ratio by volume (2 part of Rain Protek and 1 part of water) at spreading rate of 8.5 – 9.5 sq. meter/lit. Allow to dry for 2-3 hours.

Apply one coat of Rain Protek (diluted with water up to 5% by volume) and apply at the rate of 3.8 to 4.0 sq. meter/lit./coat. (dft:135–128 microns). Post application of single coat of Rain Protek, apply suitable exterior paint as per desired colour.

If external surface is required in white colour, apply 2 coats of Rain Protek (diluted with water up to 10% by volume) at the rate of 3.6 to 3.8 sq. meter per lit/2 coats. (total dft:135–128 microns). Provide 6 to 8-hour recoating period between the coats.

Exterior Surface (Repair/Repainting): Apply 1 coat of Rain Protek (diluted up to 5% by volume), at the rate of 3.8 to 4 sq. meter/lit./coat. (dft:135–128 microns).

(The spreading rate depends on film thickness applied, surface porosity, imperfections, and wastage during painting).

TECHNICAL DATA SHEET



Precautions

1. Dilute as per recommendation.
2. Diluted material to be consumed on the same day.
3. Do not apply during rain.
4. All corners, gaps, joints, protrusions & outlets shall be coated with extra coat.
5. For horizontal application cover up to 2-inch from the floor joints to skirting area.
6. All wall to floor joints must be provided with proper angle fillets prepared with polymer modified mortar
7. The product is designed only for foot traffic and not meant for vehicular traffic. Not suitable for any machinery or equipment movement.
8. Remove masking tape, immediately after application.
9. Keep out of reach of children.

Availability: From Crown Depots in Nairobi, Kisumu, Mombasa, Meru, Nyeri, Eldoret, Arusha, Mwanza, Dar es Salaam, Kigali and through Crown Stockists.

Storage Conditions: Store under cool dry conditions away from direct sunlight, heat and extreme cold.

Safety, Health and Environmental Information

- When applying paint, it is advisable to wear eye protection and suitable gloves.
- In case of contact with eye, rinse with plenty of water immediately and seek medical advice.
- Remove splashes of paint from skin by using soap and water
- Keep containers tightly closed and away from food, drinks, animal feed.
- Paint must always be stored in an upright position and cool place.
- Dispose of any paint waste in accordance with the appropriate Environmental Quality Regulations.

For additional health & safety information, please refer to our Material Safety Data Sheet (MSDS)

Disclaimer: We warranty only the quality of our product, and this data sheet is based on results obtained from experience and tests. The recommendations contained herein are given in good faith and meant to guide the user in accordance with good painting practices. They are gained from our tests and experiences and are believed to be accurate and reliable. No warranty/guarantee is implied by the recommendations contained herein since the conditions of use; application method, substrate and cleanliness of the substrate are beyond Crown Paints Kenya PLC control.

Technology may change with time, necessitating changes to this Technical Data Sheet (TDS). Crown Paints Kenya PLC reserves the right to amend the TDS without any further notice.

It is the responsibility of the user to ensure that the latest TDS is being used for reference.

