

Dani FLEX - PU 1200

One-Component, polyurethane, liquid waterproofing membrane

◆ Description

Dani FLEX - PU 1200 is a one-component, polyurethane, liquid waterproofing membrane for flat roofs offering:

- Excellent mechanical, chemical, thermal, UV & weather resistance properties, as it is based on pure, elastomeric, hydrophobic polyurethane resins.
- A continuous elastic, waterproof & vapor-permeable membrane, without seams or joints.
- Excellent adhesion to various substrates like concrete, cement mortars, wood & most waterproofing layers.
- Applicability even to irregular substrates.
- Suitability for green roofs, flower beds, etc.

◆ Fields of Application

Dani FLEX - PU 1200 is ideal for waterproofing:

- Flat roofs & balconies as an exposed waterproofing membrane.
- Under tile layers in kitchens, bathrooms, balconies & flat roofs.
- Under thermal insulation boards on flat roofs.
- In construction works, such as highways, bridge decks, tunnels etc.
- In open parking deck systems.
- Foundations.
- Gypsum & cement boards.
- Old layers of bituminous membranes.
- Polyurethane foam.
- Metal Surfaces.

◆ Technical Data

1. Properties of the product in liquid form:

Form: Polyurethane Prepolymer.

Colors: White, Grey & Blue.

Density: 1.39 KG/ltr.

Viscosity: 4000 ± 500 mPa.s (at +23°C).

2. Properties of the Cured Membrane:

Elongation at Break: >500%
(ASTM D 412/EN 527-3)

Tensile Strength: >8.0 N/mm²
(ASTM D 412/EN 527-3)

SHORE a Hardness: 75 ± 3

Water impermeability: 5 atm.
(DIN 1048)

Solar Reflectance (SR): 86%
(ASTM E903-96)

Infrared Emittance: 0.88
(ASTM C1371-04a)

Solar Reflectance Index (SRI): 108
(ASTM E1980-01)

Service Temperature: -40°C to +90°C

Crack-Bridging According to:
EN 1062-7

(Method A): ≥3 mm
(Class A5 > 205mm)

Artificial Weathering:
(EN 1062-11, after 2000 h)
Pass (no blistering, cracking or flaking)

◆ Packaging

Dani FLEX - PU 1200 is supplied in metal containers of 20 KG.

◆ Direction for Uses

1. Substrate Preparation:

In General, the substrate must be dry (moisture content < 4%), clean, free of grease, loose particles, dust, etc.

1.1 Concrete Substrates

Any existing cavities in concrete should be filled with the appropriate repair materials in advance. Severe cracks in the substrate must be primed locally and after 2-3 hours (depending on the weather conditions) must be sealed with the polyurethane sealants.

Concrete & other porous surfaces with moisture content < 4% should be treated with the primer, with a consumption of approx. 200 g/m².

1.2 Smooth & Non-Absorbent Substrates

Smooth & non-absorbent substrates, as well as bituminous membrane or old waterproofing layers, must be primed water based epoxy primer, thinned with water upto 30% by weight. The product is applied by brush or roller in one coat.

Consumption: 150-200 g/m².

Depending on the weather conditions, Dani FLEX - PU 1200 is applied within 24-48 hours from priming, as soon as the moisture content falls below 4%.

1.3 Metal Surfaces

Metal Surfaces should be:

- Dry & Clean.
- Free of grease, loose particles, dust, rust, corrosion, etc, that might impair adhesion.

Having been prepared by brushing, rubbing, sandblasting, etc, and then thoroughly cleaned from dust. Metal surfaces are primed with the anti-corrosion epoxy coating in one or two layers. Epoxy Coating is applied by roller, brush or spray. The second layer follows after the first has dried but within 24 hours.

Consumption: 150-200 g/m²/layer.

Application of Dani FLEX - PU 1200 should follow within the next 24-48 hours.

2. Application - Consumption

Before application, it is recommended to slightly stir Dani FLEX - PU 1200 until fully homogeneous. Excessive stirring should be avoided to prevent air entrapment.

Full-Surface Waterproofing

Dani FLEX - PU 1200 is applied by brush or roller in two layers. The first layer is applied 2-3 hours after priming & while primer is still tacky. The second layer should be applied crosswise after 8-24 hours, depending on the weather conditions. Consumption: 1.0-1.5 KG/m², depending on substrate type.

In case of dense, multiple cracks all over the surface, it is strongly recommended to fully reinforce Dani FLEX - PU 1200 membrane with 100cm wide strips of polyester fleece (60 g/m² or 120 g/m²), which must overlap by 5-10 cm. 2-3 hours after priming, the first layer of Dani FLEX - PU 1200 is applied to a width of 100cm & while still fresh a strip of polyester fleece is embedded. The same application process is followed on the remaining surface. Then two extra layers of Dani FLEX - PU 1200 are applied, completely covering the reinforcement.

Consumption: > 2.50 KG/m², depending on substrate type.

Tools should be cleaned with solvent while Dani FLEX - PU 1200 is still fresh.

◆ Shelf Life - Storage

12 months from production date if stored in original, unopened packaging at temperature +5°C & +35°C. Protect from direct sunlight & frost.

Whilst the information and/or specifications given are, to the best of our knowledge, true and accurate, no warranty is given or implied in any connection with any recommendations or suggestions made by us, our representatives, agents, or distributors as the conditions of use and labor involved are beyond our control. Deviations are possible when delivery takes place. Given that recommendations may differ from those shown in this leaflet written confirmation should be sought. It is the responsibility of the purchaser to ensure they have the latest leaflet issue and that its contents are current. Our customer service staff will be glad to provide assistance at any time. We appreciate the interest you have shown in our products. This technical data sheet supersedes previously issued information.
