

Domoreflex PU 122 Fiber

Fiber polyurethane based waterproofing coating without solvents

DOMOREFLECT PU 122 FIBER is a fiber, elastomer waterproofing, based on special **aliphatic polyurethane resins**. After its application, it forms an **enhanced layer thickness membrane** which is moisture and stagnant water resistant. The dry film has **excellent resistance to deformation** and to temperature fluctuations absorbing thus the structural movements of the substrate. Its innovative composition prevents dust and dirt to adhere on the applied surface maintaining thus its whiteness over time.

Field of application

DOMOREFLECT PU 122 FIBER is suitable for application on:

- Flat or inclined roofs
- Guardrails
- Gutters, metal sheets, plasterboards, etc.

Advantages

- Easy application (one component)
- Fast drying
- Enhanced layer thickness of dry film -> **0,7mm**
- Excellent adhesion
- Bridges hairline cracks
- Retains its mechanical properties even in extreme temperature fluctuations (-30°C to +90°C)
- Water vapor permeable, allows the transpiration of the substrate
- Ideal for walkable roofs
- User-friendly
- Environment friendly

Method of use

Substrate condition:

Clean the substrate from any loose pieces, as well as peeled off paints and oils. The substrate must be free of moisture and standing water.

Prime with acrylic water-based DOMOREFLECT PRIMER or with DOMOREFLECT PU 122 FIBER diluted 10-15% w/w with water depending on the nature of the substrate.

In case of particularly loose substrates, prime the surface with DOMORESIN diluted with water at a ratio of 1 to 3.

Application:

2-3 layers: DOMOREFLECT PU 122FIBER undiluted.

Apply with a roll, brush or airless.

Each layer is applied crosswise after the previous has been fully dried (after 2,5 hours depending on the ambient temperature).

In places with cracks apply polyester cloth tape as reinforcement. In this case, apply the primer and when fully dry spread one layer of DOMOREFLECT PU 122 FIBER. Then apply the reinforcement tape along the cracks while the material is still wet and then another two successive layers of DOMOREFLECT PU 122 FIBER.

On surfaces with many and dense cracks, it is recommended to fully reinforce the surface using polyester cloth in a width of 1 m and weight 60 gr/m².

Additional information:

- All tools and application equipment must be cleaned thoroughly and immediately after their use with plenty of water.
- The polymerization of the applied membrane is accelerated by high temperatures and slowed down by low temperatures.
- The application temperature is +5°C to 35°C. Do not apply when rain or frost is expected in the following two days.

Consumption

200-300 g/m² as primer.

1,3-1,5 kg/m² for 2 layers on primed surfaces depending on the nature of the substrate.

Storage

Can be stored for at least 12 months from production date in the original pail, in a cool environment protected from frost and direct sunlight.

Packaging

Pails of 1 kg, 5 kg & 15 kg.

Colors

White. Other colors available on request.

Volatile Organic Compounds

EU REGULATION 2004/42: According to Directive 2004/42/EU (Annex II, Table A), the maximum allowed content of VOC (Product Category i / Type WB) is 140 g/L (limits of 2010) for the final product. The final DOMOREFLECT PU 122 FIBER contains max <140 g/L.

Specifications

| | |
|--|--|
| Form | Thick liquid |
| Shading | White |
| Specific weight | 1.48 ± 0.01 kg/L (23°C) |
| Application temperature | +5°C to +35°C |
| Dry to touch (23°C) (1 mm wet film thickness on glass) (ASTM D1640-03) | 1 hour 45 min |
| Drying times on Terraces | |
| <u>Environmental Temperature</u> | <u>25°C</u> <u>30°C</u> |
| <u>Environmental Humidity</u> | <u>40%</u> <u>30%</u> |
| 1 st product layer (diluted by 10%w/w) | 15 min 10 min |
| 2 nd product layer | 30 min 20 min |
| Total time before the last layer | 45 min 30 min |
| 3 rd product layer | 35 min 25 min |
| Final dry film thickness for 1 mm of liquid film and a consumption of 1,45 kg/m² (EN ISO 2808) | 0,7 mm |
| Maximum tensile stress (EN ISO 527-3) | 2,92 MPa |
| Elongation at break (EN ISO 527-3) | 202% |
| Elastic modulus (EN ISO 527-3) | 9,8 MPa |
| Permeability to CO ₂ , s _d (EN 1062-6) | >50 m |
| Water vapor permeability, s _d | <5 m (Class I) |
| Capillary water absorption (EN 1062-3) | <0.1 kg/m ² h ^{0.5} |
| Adhesive strength (EN 1542) | 2,0 N/mm ² |
| EN 1504-2 categories | Ingress Protection - Moisture Control - Increasing Resistivity |

All the technical data stated in the present Technical Data Sheet are based on laboratory tests and the knowledge and experience of the company. Different conditions may apply at field applications that are beyond the control of the company. Therefore, the end user is ultimately responsible to make sure that the product is suitable for the application in question and to know the real conditions of the project.

**Artificial aging of Domorelect PU122 Fiber according to EN 1297
(exposure to UV radiation and humidity)**

| Tests | Units | EN | Results |
|--|-------|---------------------------|----------------------|
| Impact Resistance Test (UV aging and humidity) - at normal conditions - after 1000 hrs of UV aging - after 2000 hrs of UV aging | N.m | BDS EN ISO 6272-1:2011 | 10 10 10 |
| Abrasion Resistance – Taber method (1000 cycles) (UV aging and humidity) - at normal conditions - after 1000 hrs of UV aging - after 2000 hrs of UV aging | mg | BDS EN ISO 5470-1:2017 | 0,28 0,36 0,45 |
| Shore A Hardness (UV aging and humidity) - at normal conditions - after 1000 hrs of UV aging - after 2000 hrs of UV aging | Sh A | BDS EN ISO 868:2006 | 65 73 83 |