## **Technical Data Sheet 17D**





# W Reflex

W REFLEX High reflectance microfiber finishing coating applicable to roller, brush and airless with reflection index (SRI) 109. For UV and heat protection of waterproofing systems and building surfaces in general.

## **Description**

W REFLEX is a liquid finishing coating in aqueous emulsion, composed of synthetic resins and special additives that make it highly reflective. W REFLEX guarantees a reflection of the sun's rays, thus lowering the temperature of the surface on which it is used. Easily applicable on any support, W REFLEX has high elasticity, is inspectable and resistant to sunlight and marine environments.

## **Employment**

W REFLEX is used as a finishing for waterproofing systems in synthetic resins, traditional bituminous membranes and (healthy) slates already in use on roofs, balconies, terraces and roofs in general. Also suitable for concrete surfaces. It is particularly suitable for increasing the efficiency of photovoltaic panels.

## How to use

### **Preparing the Stand**

The substrates on which W REFLEX is applied must be perfectly dry and clean. Any trace of oils, greases, rust, mold and anything else that could compromise its adhesion must be eliminated.

#### · Bituminous sheath support

The bituminous membranes must be perfectly oxidized (about 6 months, this period may vary depending on the type and quality of the same) in order to prevent the oily substances contained from compromising the aesthetic appearance of W REFLEX over time. Clean the surface thoroughly, it must be perfectly dry, any detachments between vertical sheets must be checked, swellings must be eliminated.

#### Concrete support

It must be aged (over 28 days) dry, free of rising moisture, and well cohesive.

#### Iron support

Mechanically remove any existing rust and apply a suitable NAIRUST rust converter (see relevant data sheet). Once dry, apply NAI 80 (see relevant data sheet).

## Wooden support

Make sure that it is perfectly clean and dry, to improve the adhesion of W REFLEX, all existing treatments must be eliminated.

#### **Product Preparation**

The ready-to-use product. Mix by hand.

#### **Material Application**

The product can be applied by roller, brush or airless. Apply a first coat diluted with 10% water. After 2-3 hours (in any case after drying) proceed with the application of the next coats, crossing so that a correct distribution of the fibers takes place. The product should be applied in two-three coats, preferably no more than 48 hours apart. The next application must be carried out when the previous one has completely dried. The consumption per application should not exceed 200 g/m². The final consumption should not be less than 600 g/m². At the end, visually check that the coat is even. The indicated consumption is to be considered on a smooth surface and net of any dilutions.

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## Parameters of spray application by airless pump

The device, according to our experience, can have the following parameters:

Pressure: 150 - 180 bar
Nozzle: Ø 0.53 mm - 0.63 mm

Note: In consideration of the various brands and construction qualities of the machinery, these parameters are in any case indicative and must always be identified during construction, based on the type of same.

## **Technical Data**

PARAMETER	VALUE
Product Type	Single-component
Aspect	Thick liquid
Color	White
Specific gravity (g/cm³)	1.26 ± 0.05
Dry residue	62%
Viscosity (without fibers)	3500 ± 500 mPas (rpm=20,R5, 25°C)
Thickness yield	0.49 mm/kg/m <sup>2</sup>
Dried film thickness (600gr. /sqm)	300 μm
Cold flexibility < -20° C	retaining flexibility
Operating Temperature	- 25°C to +50°C
Application Temperature	+ 5°C to + 35°C
Minimum T° of filming	5° C
Waiting time between applications (at 25°C – R.H. 50%)	6 to 10 hours no more than 48
Inspection	10 hours at 25°C
Average final consumption	Minimum 600 g/m² on smooth surface
Consumption for coat	Max 200 g /m <sup>2</sup>
Storage	1 year at a temperature between +5 and +35 °C away from moisture.
Cleaning tools	Water
VOC	DIR 2004/42/EC: One-component high-performance (B/A) paint. Limit value for this product (CAT. A/i) 140 g/l. W Reflex contains 18 g/l VOC

Final reflectance performance	
Solar absorption factor "c"	13,6%
Thermal Emissivity* (ASMT C 1371)	90%
Solar Reflectance* (ASMT E 903)	86,4%
SRI (Solar Reflection Index) * (ASMT E 1980)	109
* Value certified by ISTITUTO GIORDANO S.p.A	

## **Packaging**

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## **Warnings**

Reflectance tends to decrease over time due to dirt depositing on the surface, so periodic cleaning of the coating is recommended. It can also be applied at temperatures above 5 °C, but it is always advisable to operate at temperatures above 10 °C to avoid application on frozen surfaces. The support to be treated must be healthy. Store the product at a temperature between +5 and +35 °C for a maximum of 12 months, away from moisture and protected from frost. Do not apply directly on surfaces with PH > 11 (in this case please contact our technical department). During installation, consider that a high level of humidity slows down the drying of the product and that rain, dew or other precipitation can wash the product if not perfectly dry. Do not apply W REFLEX on surfaces subject to permanent stagnation of water (ensure complete outflow).

## **Specifications**

Application on waterproofing systems (of flat roofs, balconies, terraces, solar panels and roofs in general) with a one-component white microfiber finish called W REFLEX (Naici), based on polymers in aqueous emulsion and special additives with high reflectance and thermal emissivity. Able to reduce surface temperature and promote heat dissipation. W REFLEX, applied by roller, brush or airless, has a Solar Reflectance (ASMT E 903) > 86%, Thermal Emissivity (ASMT C 1371) 90% and a Solar Reflectance Index SRI≥109%.