

Polysint Sun Reflect

Water-based waterproofing fibre-reinforced liquid membrane in white offering high solar reflectivity and thermal emissivity ratings

SOLAR REFLECTANCE INDEX (SRI) 105



POLYSINT SUN REFLECT is a water-based fibre-reinforced acrylic liquid membrane in white, offering high solar reflectivity and thermal emissivity ratings (83% and 91% respectively), with a solar reflectance index (SRI) of 105, for protecting bitumen waterproofing membranes and concrete surfaces.

With its high solar reflectance index, **POLYSINT SUN REFLECT** helps earn the "Sustainable sites: Heat Island Reduction" credit under the LEED scheme.



PRODUCT COMPLIANT
WITH EUROPEAN STANDARD



t2i CERTIFICATE
N° N 1232 R01/18
ACCREDIA-CERTIFIED COMPANY



SOLAR
REFLECTANCE
INDEX

INTENDED USES

POLYSINT SUN REFLECT is suitable and recommended as a protective solution for waterproofing systems produced using polymer distilled bitumen membranes surfaced with talc, sand or slate chippings.

POLYSINT SUN REFLECT can be applied to waterproofing produced using liquid membranes.

POLYSINT SUN REFLECT is suitable for coating and protecting concrete structures.

The product is not designed to cope with water ponding, meaning substrates must have a minimum gradient of 3% to allow rainwater to run off correctly.

Applied as a top coat, the product creates a barrier with high UV reflectance, lowers the service temperature of the whole built-up roofing system, helping ensure it delivers in both performance and longevity.

POLYSINT SUN REFLECT improves the efficiency and performance of electricity-producing systems using photovoltaic panels. The product reduces roof surface temperature by up to 50% compared to a dark/black-coloured roof; **POLYSINT SUN REFLECT** improves the reflective properties of the whole built-up roofing system considerably, giving the whole structure a solar reflectance index (SRI) of 105, helping reduce the heat island effect.

Applied to the mineral-surfaced bitumen membrane FUTURA X FIRE P G F and FUTURA RS4 AF P, **POLYSINT SUN REFLECT** retains the B_{ROOF}(t2) external fire performance rating in line with the requirements of standard EN 13501-5.

INSTALLATION TIPS

POLYSINT SUN REFLECT is a ready product and must be stirred before being applied; do not dilute with water or solvents. It is applied in 2 coats at right angles to each other using a brush, roller or airless spray gun; apply the second coat undiluted 24 hours after applying the first coat, provided it has dried fully. Surfaces due to be coated with the product must be perfectly dry, free of dust and dirt, and must be sound and securely attached to the substrates. Do not apply to substrates affected by rising damp, or if rain is imminent or forecast, or with temperatures lower than +5 °C or higher than +35 °C.

Before applying to mineral-surfaced polymer distilled bitumen membranes, we recommend cleaning the surface with a broom, blower or industrial vacuum so as to remove any loose slate chippings that are not fully incorporated into the bitumen material.

When applying, we recommend waiting at least 6 months when dealing with torched-on bitumen membranes or other bituminous materials, and 3 months on cold-applied bituminous materials; in all cases, give the surfaces to be treated time to oxidize. Given the natural small amount of migration of oils in the compound, the product may fail to adhere perfectly if applied to newly laid bitumen membranes.

The consumption rate varies depending on the nature and porosity of the substrate. Used as a liquid membrane on concrete surfaces, the required consumption rate for the application of two coats is approx. 2-2.5 kg/m².

When using **POLYSINT SUN REFLECT** as a protective coating on bitumen membranes, the consumption rates for the application of two coats are approx.

- 700 g/m² on smooth membranes
- 1000 g/m² on mineral-surfaced membranes.

Please note, product certifications are valid for applications with a minimum consumption rate for the two coats of 2.5 kg/m².

Surfaces protected with the product can be walked on only for maintenance purposes or where repairs are required.

Polysint Sun Reflect

TECHNICAL CHARACTERISTICS

STANDARD	TECHNICAL CHARACTERISTICS	UNIT OF MEASURE	NOMINAL VALUES
-	APPEARANCE	-	Paste
-	COLOUR	-	White
-	DENSITY	g/cm³	1,35
-	SOLIDS CONTENT	%	61,4
EN ISO 3219	BROOKFIELD VISCOSITY (5-10 rpm)	mPa-s	16000
-	APPLICATION TEMPERATURE	°C	+5/+35
-	READY FOR SERVICE AT +23 °C AND 50% RH	hours	Approx. 48.
-	ULTIMATE ELONGATION ISO 37	%	200
-	TENSILE STRENGTH ISO 37	N/mm²	1,5
-	WAITING TIME BETWEEN FIRST AND SECOND COAT AT +23 °C, 50% RH	hours	Approx. 8 - 12
EN 1542	ADHESION TO CONCRETE - AFTER 28 DAYS AT +20 °C and 50% RH	N/mm²	1,3
EN 1062-7	STATIC CRACK BRIDGING AT +23 °C (mm)	Class	A4
EN 1062-7	STATIC CRACK BRIDGING AT 0 °C (mm)	Class	A4
EN 1062-7	DYNAMIC CRACK BRIDGING AT 0 °C (mm)	Class	B2
EN ISO 7783-1	WATER VAPOUR DIFFUSION - EQUIVALENT AIR LAYER THICKNESS (CLASS 1)	S ₀ m	1,38
EN 1062-3	WATER PERMEABILITY	kg/m² · h 0,5	0,02
EN 1062-6	CARBON DIOXIDE PERMEABILITY	m	400
EN 13501-1	REACTION TO FIRE	Euroclass	B-s1-d0
ASTM E1980	SOLAR REFLECTANCE INDEX (6-10 m/s)	-	105
ASTM E903	SOLAR REFLECTANCE	%	83
ASTM C1371	THERMAL EMISSIVITY	%	91

PACKAGING

20 kg tub.

STORAGE

Shelf life of product in correctly sealed container, kept in a dry place, out of sunlight and not exposed to freezing temperatures: 12 months.

EQUIPMENT CLEANING

Clean equipment with water after use.

SAFETY RULES

See safety data sheet.

LEGAL RULES

Instructions and technical details given herein are correct to the best of our knowledge and experience.
Anyone planning to use **POLYSINT SUN REFLECT** must ensure that it is suitable for the intended purpose and application. In all cases, the installer is solely responsible for the product's installation and for all consequences arising therefrom.
The data given are approximate average data relating to the current product range and may be changed and updated by Polyglass SpA at any time without prior notice. As the Customer or user, it is your responsibility to check that the technical data sheet you have is valid for the batch of product in question and, whatever the case, that you have the latest version issued. Always refer to the latest up-to-date version of the technical data sheet, which you can find on our site www.polyglass.com.
It is your responsibility to check that the product is fit for its intended purpose.

PRODUCT FOR PROFESSIONAL USE

