



UV Resistant



Product description

Ready to use, high reflectance protective coating made from synthetic resins in water dispersion.

Uses

Highly reflective coating for:

- Built-up roofs.
- Masonry and plastered walls.
- Prefabricated concrete structures.

Features / Benefits

- Resistant to UV and to industrial and marine environments.
- SRI (Solar Reflectance Index) 107.
- Solar Reflectance Factor 0.85.
- Solar Absorptance Factor 0.15.
- Emissivity 0.87.

Surface preparation

- Clean thoroughly and remove flaking paint to ensure proper adhesion.
- Substrate must be cured, clean, dry, sound, solid and not exposed to rising damp, negative hydrostatic pressure or evaporative flows.
- Prime porous substrates with a coat of ICOPROT STAR diluted with 15-20% water.



Solar Reflectance Index "SRI" 107

Solar Reflectance " ρ_e ": 0.85

Solar Absorptance " $\alpha_{a,average}$ ": 0.15

Emissivity " ϵ ": 0.87



Application instructions

- Apply two or more coats of ICOPROT STAR at a minimum overall rate of 400 gr/m².
- Tools can be cleaned with water while product is fresh.

Precautions

- Do not use in areas prone to water stagnation.
- Apply at temperatures between +5°C and + 35°C.
- Allow new built-up roofs to age at least three months before applying ICOPROT STAR. That helps preventing oil bleed through, which may result in delamination or alligator cracking.
- Stir before use to mix any sediments that may have settled to the bottom of the pail.
- Do not apply if rain, fog or dew are expected.



PRODUCT PERFORMANCES

HARMONIZED STANDARD EN 1504-2:2004

TEST METHODS	ESSENTIAL CHARACTERISTICS	REQUIREMENTS
EN 1062-6	Permeability to CO ₂	$S_D > 50m$
EN ISO 7783-1-2	Water vapor permeability	CLASS II ($5 < S_D < 50m$)
EN 1062-3	Capillary absorption and water permeability	$w < 0.1 \text{ Kg/m}^2 \cdot h^{0.5}$
EN 1542	Bond strength by pull off test	$\geq 0.8 \text{ MPa}$
EN 1062-11:2002	Exposure to artificial atmospheric agents	No visible defects
EN 1062-7	Crack bridging properties	Class A5 (-5°C)
EN 13501-1	Reaction to fire	Euroclass E



Solar reflective waterproofing

What's a "COOL ROOF"?

The term refers to roofs that have the ability to improve energy efficiency by reflecting solar heat, thus minimizing air-conditioning energy consumption and the resulting polluting emissions (CO_2 , SO_2 , NO_x and heavy metals, among others). Cool roofs increase indoor thermal comfort and help save on energy costs. In fact, a dark, "non-cool" roof entails bigger heat absorption and heat transfer to the premises situated underneath, which result in worse living comfort and high cooling energy costs. Furthermore, the heat buildup in the various elements of a roofing system contributes to the so-called "urban heat island" effect, i.e. the temperature gap between urban and rural areas. The use of highly solar reflective waterproofing is conducive to limiting greenhouse gas emissions and to mitigating heat buildup and heat islands.

The three main features that qualify a "cool roof" are the following:

- **Solar Reflectance or "Albedo"**: the ability to reflect sunlight, or more specifically a measure of the reflected portion out of the total solar radiation in the spectrum of thermal energy (IR) and visible light (VIS). It is dimensionless and measured on a scale from 0 to 1 or in percentage.
- **Thermal Emittance (or Emissivity)**: the ability to release absorbed heat back into the atmosphere. It is also expressed either as a decimal between 0 and 1 or in percentage.
- **SRI (Solar Reflectance Index)**: it incorporates both Solar Reflectance and Thermal Emittance in a single value that indicates the roof's ability to reject solar heat in different conditions.

ICOPROT STAR in white color offers important benefits:

- **Improved living comfort;**
- **Energy cost saving** as a result of reduced cooling needs;
- **Protection** against water ingress;
- **Protection of the entire build-up** from thermal-induced expansion and shrinkage;
- **Improved solar roof efficiency** thanks to a lower roof temperature.

Solar Reflectance Index "SRI" 107

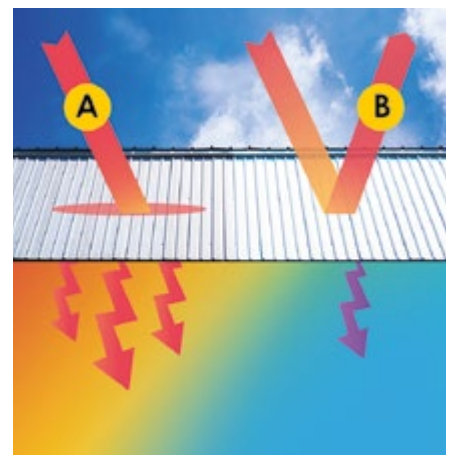
Solar Reflectance " ρ_e ": 0.85

Solar Absorptance " α_{average} ": 0.15

Emissivity " ε ": 0.87



ENERGY COST SAVING



PRODUCT FEATURE	MEASURE	UNIT
Product type	one component	
Density	1.40 (± 0.05)	kg/Lt
Solid content (weight)	57 ($\pm 2\%$)	%
Touch dry at 20°C ($\pm 3^\circ\text{C}$)	20	minutes
Hard dry at 23°C ($\pm 3^\circ\text{C}$)	60	minutes
Number of coats	2	
Spread rate per coat	200	gr/m ²
Coverage	2.5	m ² /kg
Dry Film Thickness (at 400 gr/m ²)	0.16	mm
Dilution	max 5% water	
Shelf life	12	months

Safety measures

- See SDS

Storage

- Store in a dry, well-ventilated place at temperatures above freezing.

Color



White



Please contact our technical support at:
assistenza@icobititalia.com

Ensure that the TDS is up to date: the latest version can be viewed and downloaded at icobit.com. The manufacturer reserves the right to amend product specifications without notice. The above performances were measured according to the standards in force at the time of issue and represent the average results of our tests. Although highly reliable, they do not constitute a binding commitment nor liability for Icobit Italia S.r.l. The purchaser and the end consumer acknowledge responsibility for the product suitability to the intended use.



ICOBIT ITALIA SRL
 Via Vittorio Veneto 54b 00187 Roma (Italy)
 C.F e P.I. 12428711001
www.icobit.com | info@icobititalia.com

PACKAGING



APPLICATION METHODS



BRUSH



ROLLER



AIRLESS SPRAY