









# SOLARIS

PROTECTIVE SOLVENT BASED METALLIC PAINT FOR WATERPROOFING BITUMINOUS AND GALVANISED ROOFS

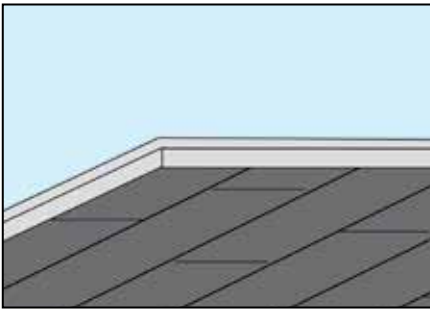
# SOLARIS PLUS

LONG-LASTING PROTECTIVE SOLVENT BASED METALLIC PAINT FOR WATERPROOFING BITUMINOUS AND GALVANISED ROOFS

| CHARACTERISTICS   |   | ENVIRONMENTAL | METHOD OF USE   |   |   |   | PRECAUTIONS |
|---|---|---------------|---|---|---|---|-------------|
|  |  |               |  |  |  |  |             |
| SOLVENT BASED   | ONE-COMPONENT   |               | MIX MECHANICALLY  | SPRAY APPLICATION   | APPLY BY BRUSH  | APPLY BY ROLLER   |             |

## PROBLEM

**PROTECTING BITUMEN POLYMER MEMBRANES AGAINST DETERIORATION CAUSED BY UV RAYS**



## SOLUTION

**SOLARIS** and **SOLARIS PLUS** are products based on particularly fine metallic aluminium, oxidised bitumen, reflective fillers and special solvents. They are bright silver and fluid in appearance. Once they have dried they form a waterproofing protective film that reflects the sun's rays, making a significant contribution to the thermal insulation of the protected parts. The film does not drip at high temperatures and is sufficiently elastic to follow the movements and expansion of bituminous membranes subjected to the most severe temperature variations. The special formulation of **SOLARIS PLUS** makes it more durable than traditional paints.

## APPLICATION FIELDS

**SOLARIS** and **SOLARIS PLUS** are used on hot- and cold-applied bituminous waterproofing and on bituminous membranes. Furthermore, when applied to slated membranes, they protect and fix the chippings onto the surface of the membranes, preventing separation and increasing durability.

## ADVANTAGES

- Can also be applied in winter.
- High reflecting power.
- The product follows the expansion of the bituminous covering even in the event of substantial temperature variations.
- Good covering power

## METHOD OF USE

### • PREPARING THE SUBSTRATE

The surfaces must be clean, dry and free from loose parts (1). **SOLARIS** and **SOLARIS PLUS** can be applied to bituminous coverings only after a certain time since laying the coverings themselves. This waiting time must be sufficient to eliminate the hydrocarbons contained in the bituminous waterproofing products (for more details see "Application warnings").

### • APPLICATION

**SOLARIS** and **SOLARIS PLUS** must be thoroughly mixed before use until the product is completely homogeneous and the sediment is dispersed. The presence of residues on the bottom of the tin is not an indication of a damaged product, but the natural sedimentation of the pigment and fillers.

Incomplete dispersion of the pigment causes

lower covering power. **SOLARIS** and **SOLARIS PLUS** are ready to use and can be applied by spraying, with a roller, with a paintbrush or with a floor brush (2).

One coat is sufficient to completely cover and metallise the bitumen surface. Two coats are recommended where greater protection and durability are required. **Apply the product in a single direction; application criss-cross or in different directions alters the "leafing" of the aluminium paste and therefore the appearance of the paint.** **SOLARIS** and **SOLARIS PLUS** are more resistant to stagnant water than common paints in aqueous emulsion. In any case the surfaces must be pitched sufficiently to drain rainwater. Over time, as well as reducing the adhesion of the paint, stagnant water leads to the accumulation of dirt and hence a reduction in the reflectance and performance of the photovoltaic panels.

The durability depends on the nature and condition of the waterproofing bitumen layer and is never the same as the life of the waterproofing. It also depends on the exposure, the aggressiveness of the industrial atmosphere and the climatic areas, and the presence of insulating materials.

### • COVERAGE

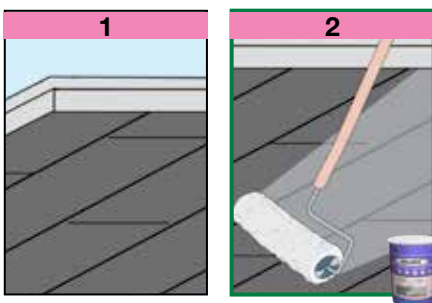
The coverage of the material depends on the nature of the surface, how porous it is and the

thickness required.

The coverage of **SOLARIS** is approximately 100-150 g/m<sup>2</sup> per coat, whereas that of **SOLARIS PLUS** is approximately 150-200 g/m<sup>2</sup> per coat.

### • PRECAUTIONS

- It can be applied on surfaces subject to the occasional presence of standing water. It is however essential to arrange the waterproofing so as to drain rainwater efficiently.
- Do not apply on wet or damp surfaces.
- Do not use for tanks, cellars or channels subject to strong water backflow or pressurised water.
- Do not use on surfaces or containers where edible liquids and drinking water are kept or which may come into contact with solvents or mineral oils.
- Mix the product thoroughly before use.
- Do not mix with water.
- Keep the containers sealed before use.
- Do not use high speed mechanical stirrers to mix the product (they may reduce the power of the aluminium flakes to come to the surface).
- The presence of residues on the bottom is



(See following)

## TECHNICAL CHARACTERISTICS

|  | Standard        | SOLARIS                    | SOLARIS PLUS               |
|--|-----------------|----------------------------|----------------------------|
| Appearance                                   |                 | Liquid                     | Liquid                     |
| Colour                                       |                 | Aluminium                  | Aluminium                  |
| Density                                      | EN 2811-1       | 1.00 ± 0.05 kg/L           | 1.00 ± 0.05 kg/L           |
| Dry residue - at 130°C                       | UNI EN ISO 3251 | 52 ± 3%                    | 50 ± 2%                    |
| Viscosità DIN4                               | Internal method | 25 ÷ 35 seconds            | 50 ÷ 70 seconds            |
| Flammability point - closed container        | ASTM D 3828-87  | > +23°C                    | > +23°C                    |
| Storage in original packaging in a dry place |                 | 24 months                  | 24 months                  |
| <b>Caratteristiche di lavorabilità</b>       |                 |                            |                            |
| Waiting time - for dust-free drying (*)      |                 | approx 30 ÷ 60 minutes     | approx 30 ÷ 60 minutes     |
| Waiting time - till tack-free drying (*)     |                 | approx 100 ÷ 140 minutes   | approx 7 ÷ 8 hours         |
| Waiting time - before overpainting (*)       |                 | approx 3 ÷ 4 hours         | approx 24 hours            |
| Waiting time - for total dry (*)             |                 | approx 12 ÷ 24 hours       | approx 12 ÷ 24 hours       |
| Application temperature                      |                 | +5°C ÷ +35°C               | +5°C ÷ +35°C               |
| Application                                  |                 | manual or spray            | manual or spray            |
| <b>Performance characteristics</b>           |                 | <b>Product performance</b> | <b>Product performance</b> |
| Emissivity in the infrared                   | ASTM C-1371     | <0.50                      | <0.50                      |

Test conditions: temperature 23±2°C, R.H. 50±5% and air speed in the test area <0.2 m/s. These figures may vary depending on the specific conditions of the worksite: temperature, humidity, ventilation, absorbency of the base coat.

(\*) The stated times may be longer or shorter as the temperature decreases or increases.

(See previous)

not an indication of a damaged product, but the normal stratification of the aluminium paste.

- Apply at temperatures between +5°C and +35°C. Do not apply in extremely hot or cold conditions. Do not apply when there is a risk of the temperature falling below +5°C while the paint film is drying. Do not apply on very hot surfaces because the film-forming process would be accelerated excessively, with negative consequences for the product's cohesion and adhesion to the surface.
- Even though it is a solvent-based product, do not apply if there is a risk of rain while the film is drying.
- In foggy or very humid conditions the formation of the film and hence the drying of the material takes longer. High thicknesses and dilutions can also increase drying time.

- Apply the second coat when the first coat is completely dry.
- The product must not be walked on, except occasionally for periodic maintenance.
- It is suitable for painting bitumen coverings with slate, sand and textile finish (Texflamina). If the surface is dirty, clean by brushing and washing with water.
- Newly applied bituminous surfaces usually have superficial 'outcrops' of hydrocarbons, which make perfect adhesion of paint films problematic. We recommend painting the coverings only after 6 months from laying: this period is usually sufficient to eliminate outcrops. However, just waiting is not always enough. We therefore recommend making an assessment of the surface, by empirical tests with adhesive tape, in order to evaluate the quantity of dirt and, if necessary, the adhesion of the paint (the

tests are described in the booklet entitled "Guide to waterproofing"). If the surface is dirty, clean by brushing and washing with water. If applying to a new covering, the surface of the last layer must be slated.

- Product applied to bitumen polymer membranes laid over insulation packages can form small surface cracks over time, which do not however jeopardise the waterproofing in any case.
- Clean tools thoroughly after use with white spirit or normal thinners.
- Store in original packaging, away from sources of heat and naked flames because the product is flammable.

The numerous possible uses and the possible interference of conditions or elements beyond our control, we assume no responsibility regarding the results which are obtained. The purchasers, of their own accord and under their own responsibility, must establish the suitability of the product for the envisaged use.

The figures shown are average indicative figures relevant to current production and may be changed or updated by INDEX at any time without previous warning. The advice and technical information provided, is what results from our best knowledge regarding the properties and the use of the product. Considering

## PACKAGING

### SOLARIS

- 20-litres Pail
- 10-litres Pail
- 5-litres Can

### SOLARIS PLUS

- 20-litres Pail
- 10-litres Pail

• FOR ANY FURTHER INFORMATION OR ADVICE ON PARTICULAR APPLICATIONS, CONTACT OUR TECHNICAL OFFICE • IN ORDER TO CORRECTLY USE OUR PRODUCTS, REFER TO INDEX TECHNICAL SPECIFICATIONS •

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