

## REFLEXIL SELF-EXTINGUISHING HIGH REFLECTANCE AND PROTECTIVE PAINT

### TECHNICAL DATA SHEET

**DESCRIPTION:** High reflectance elastoplastic water - based white paint.

**ADVANTAGE:**

- Waterproofs and protects from atmospheric agents and from UV rays.
- Creates a highly reflective shield against UV rays, granting not only an excellent thermal insulation, but also a considerable energy saving.
- Reduces the energy consumption from summer air - conditioning.
- Improves the efficiency of photovoltaic panels.
- Prevents the surface aging.
- Easy to apply.
- Stable colouring over time.
- Low maintenance, additional protection is not needed.
- Odourless and non - flammable product.
- Non-toxic, solvent free

**COMPOSITION:** Water dispersion based on special modified copolymers, inert charges, coloured pigments, suspensive agents, thickening agents, ceramic microspheres, additives.

**FIELD OF USE:** Covers and decorates :

- Bitumen membranes and bituminous corrugates sheets.
- Waterproofing with hot - applied distilled bitumen or cold - applied bitumen emulsion.
- Surfaces made of concrete, fibre - cement, wood, metal, plaster, shingles and roof tiles.

**SURFACE PREPARATION:**

- Make sure that the surface is free from detached parts, loose debris or non - adherent parts, coatings, rust, powder, disarming oils and carefully clean the surfaces, that must be sound and dry. Before application fastness and efficiency of water run - off points must be checked.
- The product can also be applied on slightly damp surfaces provided that there is no water stagnation.
- Apply between +5°C and +35°C; avoid extreme hot or cold conditions during the application and drying time.

**APPLICATION:**

- It can be applied by brush, broom, roller or spray.
- Mix carefully before use.
- Apply the first coat after diluting the product up to 10% with water.
- The second or further layer should be applied perpendicular to the previous one without dilution or up to 5% and when the first layer is completely dried (at least 6 hours).
- After use, clean the tools with water. If the product had dried on them, remove it with warm water or white spirit.

**COVERAGE:** Apply at least 2 layers to give homogeneity. The total consumption depends on the treated surface and on desired thickness of the layer, usually it is between 200 and 300 gr /m<sup>2</sup> on old bitumen membranes and between 450 and 650 gr/m<sup>2</sup> on slated membranes.

**WARNING:** - We recommend to apply the product at room temperature not below +5° C, avoiding extreme weather conditions such as heat and cold or simply fog, rain and frost.

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- We recommend not to apply the product on just laid bituminous surfaces, which could still release hydrocarbons and cause adherence problems of the film on the liquid membrane.
  - If the surface is made of insulating panels, the time before renovation will be shorter.
  - During the winter the application should be ended during the first hours in the afternoon to allow a correct drying (excessively humid days are to be voided in any case).
  - Temperatures over 35° C may compromise the product workability because of too fast drying of the film surface.
  - Walkable only in case of maintenance.
  - Do not use it to seal surfaces or containers suitable for edible liquids, drinking water or others, that is in contact with solvents or mineral oils.
  - Do not use on surfaces subject to rising or strong water pressure.
  - Frequent maintenance and cleaning of the surface is suggested to maintain the high reflectance.
- For further information please ask for safety datasheet.



**PACKAGING:** Metal or plastic pails of 10, 20 and 25 kg.  
Keep the product away from frost., the product must be applied or stocked at a temperature above +5° C. Once the product gets frozen, it is not recoverable anymore.

### TECHNICAL INFORMATION:

| MAIN CHARACTERISTICS  |               |   |
|---|---------------|---|
| Aspect  |               | Thixotropic fluid paste                     |
| Colour  |               | White                                       |
| Shelf life in closed original container                         |               | 12 months                                   |
| Solid content at 130 °C   | EN ISO 3251   | 63 % - 69 %                                 |
| Viscosity Brookfield a t 20°C (Impeller 5, 10 rpm)              | EN ISO 3219   | 15.000 cP ± 1.000                           |
| Specific weight at 20 °C  | EN ISO 2811-1 | 1,34 kg/l ± 0,04                            |
| Drying time   |               | 30' – 60' *                                 |
| PERFORMANCES<br>(UNI EN 1504 - 2:2005 – C COVERINGS – PI MC IR) |               |   |
| Permeability to CO <sub>2</sub>                                 | EN 1062 -6    | S <sub>D</sub> > 50 m                       |
| Permeability to water vapour                                    | EN ISO 7783   | Class I - S <sub>D</sub> < 5 m              |
| Capillary absorption and water permeability                     | EN 1062 -3    | w < 0,1 Kg/m <sup>2</sup> ·h <sup>0,5</sup> |
| Adherence strength against direct traction                      | EN 1542       | ≥ 1 N/mm <sup>2</sup>                       |

\* Measures have been recorded with a temperature of 23°C and a moisture of 50%. Declared data can change depending on the thickness of applied product and on the specific conditions of the construction site: temperature, humidity, ventilation, absorption capacity of surfaces.

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| Solar reflectance measurement, thermal emissivity and Solar Reflectance Index<br>Test report Dep. of Engineering Enzo Ferrari / EELab<br>University of Modena e Reggio Emilia |  |                                 |  |                  |       |     |                |                   |    |                 |                   |    |
|---|--|---------------------------------|---|------------------|-------|-----|----------------|-------------------|----|-----------------|-------------------|----|
| Solar Reflectance Index (SRI) ASTM E1980  | Thermal emissivity (E) ASTM C1371  | Solar reflectance (R) ASTM E903 | Surface temperature   |                  |       |     |                |                   |    |                 |                   |    |
| 103 %   | 92 %   | 82 %                            | 43,4 °C   |                  |       |     |                |                   |    |                 |                   |    |
| Certification leed – protocol LEED NC 2009 italia   |  |                                 |  |                  |       |     |                |                   |    |                 |                   |    |
| SS Credit 7.2<br>Heat island effect:<br>covering  | Use roofing materials that have a solar reflection index (SRI) greater or equal to the reported value in the table below for a minimum of 75% of the roof area.  |                                 |   |                  |       |     |                |                   |    |                 |                   |    |
|   | <table border="1"> <thead> <tr> <th>Type of coverage</th> <th>Slope</th> <th>SRI</th> </tr> </thead> <tbody> <tr> <td>Low slope roof</td> <td>≤2:12(9,5°-16,7%)</td> <td>78</td> </tr> <tr> <td>High slope roof</td> <td>&gt;2:12(9,5°-16,7%)</td> <td>29</td> </tr> </tbody> </table> |                                 |   | Type of coverage | Slope | SRI | Low slope roof | ≤2:12(9,5°-16,7%) | 78 | High slope roof | >2:12(9,5°-16,7%) | 29 |
|   | Type of coverage   | Slope                           | SRI   |                  |       |     |                |                   |    |                 |                   |    |
| Low slope roof  | ≤2:12(9,5°-16,7%)  | 78                              |   |                  |       |     |                |                   |    |                 |                   |    |
| High slope roof   | >2:12(9,5°-16,7%)  | 29                              |   |                  |       |     |                |                   |    |                 |                   |    |
| The products painted with REFLEXIL are equipped with Solar Index Reflectance SRI > 78 %.  |  |                                 |   |                  |       |     |                |                   |    |                 |                   |    |
| System certification<br>B <sub>ROOF</sub> (t2) exposure to external fire  |  |                                 |   |                  |       |     |                |                   |    |                 |                   |    |
| Fire reaction classification report: 2619.0DC0051/17<br>LAPI Fire prevention laboratory s.p.a. – Notified Body 0987   |  |                                 |   |                  |       |     |                |                   |    |                 |                   |    |
| Classification method   | EN 13501-5 Fire classification of products and building elements.<br>Parte 5: classification based on the result of the tests of exposure in the roof to an external fire.   |                                 |   |                  |       |     |                |                   |    |                 |                   |    |
| Test method   | UNI CEN/TS 1187:2012 Prova 2   |                                 |   |                  |       |     |                |                   |    |                 |                   |    |
| Classification  | B <sub>ROOF</sub> (t2) Roof coating, any slope, non-combustible substrate with a density greater than 510 kg/m <sup>3</sup>  |                                 |   |                  |       |     |                |                   |    |                 |                   |    |

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