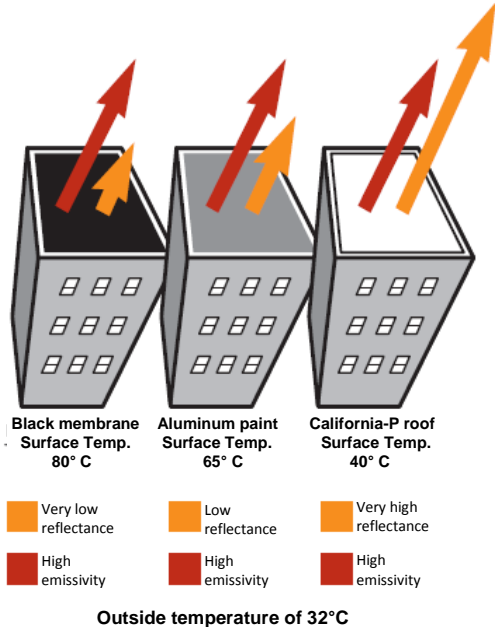


Technical commercial data sheet

California - P

High solar reflectance (SRI) paint for energy saving



- Reduction in the surface temperature of the roof
- Reduction in summer air conditioning costs of up to 30%
- Improving performance of thermal insulation
- Better living comfort, particularly for the top floor
- Protection of frames from day-night and seasonal temperature variations
- Increase in the yield of the photovoltaic modules placed on the roof
- Protection from UV rays
- Ease of application on a wide range of new and existing surfaces

Contributes to satisfy Credit SS 7.2 "Heat Island Effect: roofs" (according to the LEED NC 2009 Italia protocol).

Description

Water dispersion of special modified copolymers, aggregates, colored pigments, suspensives, jelling agent, various admixtures.

Recommended use

BITUVER CALIFORNIA – P is a mono-component high performance paint designed to be used in occasionally walkable roofs in concrete, fiber cement, wood, metal and on waterproofing membranes, protecting and giving a longer life to them thanks to its high protection from UV rays and thermic variations.

The principal advantage with respect to traditional protecting paints is the high reduction of the surface temperature of the roof thanks to a very high reflectance and emissivity that lasts for long time. These features are obtained with a specific formulation of the product and guarantees tangible improvements in living comfort and energy saving in buildings.

Energy saving:

In California and in other USA States, "cool roofs" are a subject of studies from long time. An energy consumption monitoring executed in different areas of United States has shown significant energy savings thanks to less demand on air conditioning both in insulated and not insulated buildings. The energy saving reaches up to 70% of air conditioning costs ascribable to a waterproof flat roof. Certainly, total saving is linked to the weight of the surface of roof on the total surface of the building and, more precisely, linked to the incidence of consumption ascribable to the roof on the total energy consumption of the building. In a building where the roof weights approx. 40%, the energy saving is estimated to be about 30%.

Applicazione

- Use Personal Protective Equipment as requested by law;
- Clean properly the surface on which membranes has to be applied;
- Apply on dry surfaces;
- Minimum slope > 3%, avoid water stagnation;
- Apply on membranes after 60 days from their application, excluded BITUVER DECOTEX treated ones;
- Suitable for occasionally walkable surfaces;
- Apply at least two layers, better if cross applied. Eventually, dilute only the first one with 10% - 15% of water;
- Apply the second hand after the first is totally dried, roughly after 24 hours;
- Apply always between +5° C and + 35° C, but > 10 °C is suggested;
- Apply with paintbrush, brash or spray;
- Plan a periodic cleaning in order to keep the maximum solar reflectance.

Storage

CALIFORNIA – P keep its technical features for 12 months, in original closed cans, protected from high temperatures and freeze. Do not expose product to a lower temperature than + 5° C; if the product freeze, it is no more usable.



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Technical commercial data sheet

California - P

High solar reflectance (SRI) paint for energy saving

Features	California - P											
Package	20 kg cans											
Colour	White											
Appearance after application	Opaque											
Density at 20 °C	1,15 - 1,35 kg/l											
Time of drying out of powder at 20 °C	30' - 60'											
Time of trying at touch at 20 °C	90' - 120'											
Deep drying at 20 °C	300 micron = 4 h											
	1 mm = 2 days											
Temperature reduction External temp. of 32 °C – Internal method	40° C											
Total consumption Depending on porosity of surface and thickness required	300 – 700 g/m ²											
pH	7 - 8,5											
Storage on original closed cans	12 months											
Dry matter at 130 C	58% - 64%											
Elongation at breaking at 20 °C UNI 8202	100 %											
Brookfield Viscosity at 20 °C Gir. 5, 10 RPM	4.000 - 5.000 cps											
VOC (2004/42/CE Directive)	0,05% - 0,62 g/litre											
VOC (volatile organic carbon)	0,02% - 0,25 g/litre											
Solar reflectance (R) ¹ ASTM E903	83 %											
Thermal emittance (E) ¹ ASTM C1371	90 %											
Solar Reflectance Index (SRI) ¹ ASTM E1980	$h_c = 5 \text{ W}/(\text{m}^2 \text{ K}) = 105\%$											
	$h_c = 12 \text{ W}/(\text{m}^2 \text{ K}) = 104\%$											
	$h_c = 30 \text{ W}/(\text{m}^2 \text{ K}) = 104\%$											
	<table border="1"> <thead> <tr> <th colspan="3">LEED Protocol limits - NC 2009 Italia</th> </tr> <tr> <th>Roof type</th> <th>Slope</th> <th>SRI</th> </tr> </thead> <tbody> <tr> <td>Low slope</td> <td>≤2:12</td> <td>≥78</td> </tr> <tr> <td>High slope</td> <td>>2:12</td> <td>≥29</td> </tr> </tbody> </table>	LEED Protocol limits - NC 2009 Italia			Roof type	Slope	SRI	Low slope	≤2:12	≥78	High slope	>2:12
LEED Protocol limits - NC 2009 Italia												
Roof type	Slope	SRI										
Low slope	≤2:12	≥78										
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¹ Test report of Mechanical and Civil Engineering dep. / EELab –Modena e Reggio Emilia University (Italy).

Our products foresee proper application and storage modalities.

Saint Gobain PPC Italia has the right to carry out the changes or variations believed to be proper any time with no need of notice.



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