



SunfleX™

Green Label ID : 032-075

IR Reflection & Thermal-Moderating™ Coating

PRODUCT DESCRIPTION

SunfleX™ is designed as an effective Infra-red reflection and thermal-moderating™ coating, functioning as an insulation medium to moderate temperature migration between coated area and its environment. SunfleX™ a low V.O.C. product that complies with SEC & SGBC green paint criteria. It keeps building cool in warm climate and warmth in cool climate. Thus helps reduce electricity consume by air-conditioner or heater.

SUITABLE USES

SunfleX™ can be used on internal and external plaster, concrete, masonry and sound cement panel including primed ferrous and non-ferrous metals. It is suitable on new or existing facilities like;

- Education, residential, industrial, commercial, military, hospital, embassies, and many more
- Containment tanks, warehouses, research centre, water and waste treatment plant, etc.
- Green buildings

ADVANTAGES

- Low V.O.C. non-toxic and odorless
- Low dirt pick up, and resistive to algae growth
- Infra-red reflection & thermal-moderating™
- Non combustible, UV stable and durable

SUBSTRATE REQUIREMENT

To obtain desirable result, it is important that SunfleX™ is applied onto clean, sound and water -tight substrates free of dirt, oil, grease, soot, adhesive, laitance and other surface contamination and defect.

SURFACE PREPARATION

New concrete must be at least 14 days old or moisture content $\leq 16\%$ when check with Protimeter. Remove all surface laitance. Repair material should have bond strength ≥ 1.0 N/mm² and must not appear powdery. External repair material must not lose its property when expose to frost, rain and shine

WORKING WITH SUNFLEX™

SunfleX™ a high solid coating and we recommend to apply ≥ 0.65 kg/m². This give an average D.F.T. of 0.5 mm (varies with substrate porosity and how it is applied).

We recommend only trained and approved applicator be engaged for the application of SunfleX™. Where texture is preferred, you may use Tex-10 (white), Thermal-Moderating™ spray texture undercoat.

APPLICATION OF SUNFLEX™

Equip with right tool and equipment before preparing of SunfleX™. Sample stirrer is shown.

Set to low speed (100-150 rpm) and move the MG peddler in the direction opposite to MG peddler blade rotation for 2-3 minutes to obtain a homogenous and uniform mass.



For spray application, we recommend Graco airless spray-pump. Make sure that all pump and gun filters are removed before using. This is a ready to use coating, no dilution is needed. Contact your local pump supplier for detail.



COVERAGE

As IR reflecting & heat insulating coating for facade

500 μ D.F.T. requires about 0.65 kg/m²
1,000 μ D.F.T. requires about 1.25 kg/m²

As an anti condensation coating with HL470

Sample system

Primer HL470 Primer	100 μ m
HL470 condensation barrier	1,000 μ m*
SunfleX™ IR reflect barrier	300 μ m

*Thickness of "HL470" depends on thermal-moderating™ criteria.





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IR Reflection & Energy Efficient Thermal-ModeratingTM Coating

PHYSICAL PROPERTIES

Basic properties	
Appearance	Pigment Paste
Colour	White & standard colours
Resin type	Modified Acrylic
Typical usage	0.65 kg/m ² (minimal)
V.O.C content	< 3.5g / L
Solid content	> 80%
Curing process	
Touch dry	0.5 hrs/30°C/ 0.5mm thk
Initial curing	2 hrs/30°C/ 0.5mm thk
Full Curing	12 hrs/30°C/ 0.5mm thk
Reflection & Conductivity	
Solar reflectance index Solar reflectance ASTM E1331-09	104 .06 to 104.27 88.0% after 3 mths weathering
Thermal Resistance Thermal Conductivity ASTM E1530-06	4.03 ⁻⁰³ m ² .K/W 0.14 W/m.K
Resistance and Weathering	
Accelerated weathering SS5 : Part G4: 2003	Grey Scale 4/5. No blister, crack or chalk
Adhesion test ASTM D3359 : 2009	5A
Algae resistance SS 345 : 1999 Appendix B	Passed No algae growth
Dirt pickup, D _c SS 500 : 2002 Section 5.7.1	96.0 (before wash) 97.7 (after wash)
Tensile strength Elongation at break ASTM D412:2003	0.80 ± 0.20 N/mm ² 90% ± 50% (DFT: 247-300µm)
Washability SS 5 : Part F5 : 2003	Passed ≥1000 cycles
Water vapour transmission SS 500 : 2002 Section 5.6.2	222 g/m ² /24 hours

PACK SIZE

15kg can

POTLIFE & SHELF LIFE

Pot Life – 1 month after mix and kept under close lid and cool condition

Shelf life – 12 months in sealed condition
Remove any skin form on top before use

STORAGE & TRANSPORTION

Keep SunflexTM in cool and dry condition. Store it in its original sealed condition.

LIMITATIONS

SunflexTM may not bond properly to curing compounds or other coatings on concrete. Bond or pull off test is recommended to determine suitability before actual application. Coverage and consumption vary depending on porosity and roughness of substrate. Apply product when air temperature is 15°C to 45°C and relative Humidity below 75%.

DISCLAIMER CLAUSE

This TDS summarizes our best knowledge of this product, including how to use the product based on the information available at the time of publication. You should read this TDS carefully, consider and try out the information in the context of how the product will be used, including in conjunction with any other product, type of surfaces to, and the manner the product will be applied.

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