

SolarSHIELD

ELASTIC ACRYLIC WATERPROOFING
WHITE, HIGH HEAT REFLECTIVITY

PRODUCT DESCRIPTION

SolarSHIELD is a high-performance waterproofing and heat-reflective coating for metal and industrial profiled sheet roofs, developed from high-quality acrylic resin combined with glass microspheres, UV-resistant components and a premium additive system. Once cured, SolarSHIELD forms a continuous, elastic and strongly bonded coating that protects the roof against rainwater, UV radiation and weathering; the microsphere system increases solar reflectance, limiting heat absorption and heat transfer through the roof and improving thermal conditions inside the building. It is particularly suited to factory and warehouse roofs and to large-area industrial projects; easily applied by spray to give a uniform coating — a combined waterproofing, heat-reduction and roof-protection system in one.



ILLUSTRATIVE IMAGE Spraying SolarSHIELD for heat reduction on a factory sheet roof



ILLUSTRATIVE IMAGE Profiled sheet roof coated with highly reflective SolarSHIELD



ILLUSTRATIVE IMAGE Fastener heads and roof ribs fully coated

USES

- Heat reduction and waterproofing for profiled sheet roofs, metal roofs, concrete roofs and external walls
- Reduces solar absorption and limits heat transfer into the building
- Protects the surface against rainwater, UV radiation and weathering
- Refurbishes existing roofs and walls, improving protection and extending surface life
- Suitable for factories, warehouses, logistics centres, pre-engineered buildings and commercial and residential projects
- Suitable for large surface areas, applied by spray, roller or brush

SUITABLE SUBSTRATES

- Galvanised sheet, aluminium-zinc alloy coated sheet and colour-coated sheet
- Steel and other metal surfaces
- Concrete and cement mortar; pitched concrete roofs
- Concrete walls and externally rendered walls
- Existing profiled sheet roofs and metal surfaces that remain sound; previously coated surfaces that remain well bonded

TECHNICAL DATA

Property	Standard	Result
Density	ASTM D1475-13(2020)	0.80 ± 0.05g/cm³
Elongation at break after 28 days	ASTM D412-16(2021)	30% ± 3%
Maximum tensile strength		≥ 2.0MPa
Adhesion strength to concrete	ASTM D7234-21	≥ 1.1MPa
Adhesion strength after heat aging		≥ 1.5MPa
Shore A hardness	ASTM D2240-15	≥ 50
Liquid water permeability	EN 1062-3:2008	< 0.1kg/m²·h$^{0.5}$
Crack bridging ability	BS EN 14891:2017	≥ 0.75mm
Solar reflectance – ρ	ASTM E903-20	≥ 88%
Thermal emittance – ε	BS EN 15976:2011	≥ 0.88
Solar Reflectance Index (SRI)	ASTM E1980-24	≥ 112

The above results and recommendations are based on laboratory testing; actual performance may vary depending on the application method and specific site conditions

QUICK SPECIFICATIONS

PACKAGING	03kg/pail and 15kg/pail
COLOUR	White
SHELF LIFE	24 months (unopened container)
COVERAGE	0.3 - 0.6kg/m²: previously painted surfaces and new walls 1.0 - 2.0kg/m²: metal and concrete roofs
WAITING TIME BETWEEN COATS	20 - 45 minutes (or longer depending on site conditions; touch dry)
FULL CURE	~5 - 7 days

SAFETY INFORMATION

- **Skin and eyes:** the product is alkaline and, in contact with perspiration or body fluids, may cause skin irritation or an allergic reaction in sensitive individuals; it may cause serious eye damage on direct contact
- **Eye contact:** rinse immediately under gently running clean water for 10 - 15 minutes without rubbing; if stinging persists, go to the nearest medical facility
- **Protective equipment:** Gloves · Safety goggles and dust mask (when mixing the product or dry-grinding the substrate) · Protective clothing
- **Working environment:** work in a well-ventilated area; avoid confined spaces, children and pets; avoid inhaling dust when preparing the substrate by dry grinding
- **Surplus material:** reseal the container after use for best storage; do not discharge into drains — allow to dry and dispose of as construction waste
- Refer to the latest **Safety Data Sheet (SDS)** on the official BUMATECH website, or contact the technical department

PRECAUTIONS & DISCLAIMER

- DO NOT use over movement joints, structural cracks or locations with differential vertical displacement; DO NOT use over cracks wider than 1.0mm
- DO NOT apply at more than 0.5kg/m² per coat; DO NOT apply when the substrate moisture content exceeds 6% or the surface temperature is below dew point + 3°C
- DO NOT use in locations subject to negative hydrostatic pressure or high rates of moisture vapour transmission; DO NOT apply directly to lightweight concrete (AAC panels, AAC blocks and similar)
- The figures in this document were established by laboratory testing under standard conditions; actual values vary with temperature, humidity, accompanying materials, application method and workmanship. The user is responsible for verifying suitability for the intended use
- BUMATECH accepts no liability for loss arising from misuse, application contrary to these instructions, or combination with incompatible materials not confirmed in writing, and reserves the right to update technical information without prior notice. Check the latest TDS version on the website before every project

BUMATECH CO., LTD

Head Office: 154/1/5 Cong Lo, Tan Son Ward, Ho Chi Minh City
Office: 91 Hoang Bat Dat, Tan Son Ward, Ho Chi Minh City
Factory: 820 Ap Chanh, Duc Lap Commune, Tay Ninh Province

TECHNICAL 0979 793 804
SALES 0914 765 778
bumagreen@bumatech.com.vn
www.bumatech.vn

SolarSHIELD
BROCHURE WATERPROOFING
COMPANY PROFILE BUMATECH

