



COOL ROOFS
COATINGS TECHNOLOGY

Thermo-reflecting coating for roof protection
Limits heat transfers in the buildings
Improves rooms' summer comfort
Reduces the needs for air conditioning and its related environmental impacts

PURPOSE High solar reflectance paint coating for the protection of sloped roofs. Velvet matt finish. Formulated from flexible acrylic resins in aqueous phase and pigments with specific optical properties, REVSUN ROOFING works as a real thermo-reflecting barrier, which efficiently improves the roofs' capacity to reflect and re-emit solar heat towards the sky instead of transferring it inside buildings.

CSTB certified energetic characteristics. For white:

- * Up to 90 % of reflected or re-emitted solar input by the coated roof
- * Residual efficiency of ca. 90 % after 4 years over roofs

Applications focussed on the coating's high reflectivity:

- * Renovation / protection of insufficiently insulated individual houses, industrial, commercial, agricultural, tertiary and sports buildings, warehouses, factories, administrative restaurants, etc. A simple, sustainable and economically efficient alternative to classical roof coatings to limit the rooms' summer overheating of buildings not equipped with air conditioning (gain between 1.5 and 3°C) or, otherwise, to reduce the needs of air conditioning (15 to 30 %)
- * Increases the solar input in cylindrical photovoltaic systems set up on industrial or commercial roofs by adding to the direct and diffuse energy received by the equipments the effects of the solar energy reflected on the sensor' lower part (up to 30 % in comparison with a black roof)

SURFACES * Concrete and derived products, fibre cement, approved wood-cement composite boards
 * Asphalt shakes, slate roofing, shingles
 * Asphalt, bitumen
 * Old adhesive paint coatings in good condition (favourable technical study)
 * Old waterproofing coatings in aqueous phase in good condition (REVCOAT type). Prior feasibility technical study
 NB: The application must be done over roofs with a sufficient slope and suitable water evacuation possibilities to ensure proper rainwater drainage

MAIN FEATURES High covering power for optimized protection of salient parts of complex shape or difficult to access
 Excellent mechanical characteristics, resistance to weathering, flexibility of the film
 Manual or mechanical application
 Rapidly impervious to rain
 Resistance to atmospheric dirt, UV yellowing and biological pollution
 Reduced maintenance, easy servicing
 Product in aqueous phase: easy and safe use, environmentally friendly

IDENTIFICATION CHARACTERISTICS **In accordance with official standards or, if none applicable, with internal standards**

Aspect Semi-thick paint

Dry matter * in weight: 62 ± 2 %
 * in volume: 51 ± 2 %

Density 1.30 ± 0.05

Flash point n/a

VOC concentrations Max. 9 g/l EU threshold value for this product (cat A/i): 140 g/l

Dry time (20°C, 65 % RH) Dry: 4 hours - Between coats: 24 hours
Drying delayed in cold and damp weather

Consumption 1 to 1.2 kg/sqm in 2 coats over smooth surface for a minimal dry thickness of 500 µm
Depending on surface porosity and roughness and of product waste during the application
Extended surfaces must be taken into account (up to + 50 % consumption over corrugated surfaces)

Classification NF T36-005: Family I class 7b2

	Blanc	RAL 1015	RAL 7035
Sun reflectance	70 %	62 %	50 %
Thermal emissivity	91 %	92 %	92 %

USE Surfaces, preparatory work and application conditions must comply with the applicable standards/DTU (French standards).

BASE PREPARATION Bases must be sound, dry, cohesive and consistent with the product application
They must be exempt from any external matter (leaves, moss, earth, etc.)
Surface's roughness potentially harmful for the coating's regularity must be eliminated
The preparation must be adapted to the type and condition of the surface in order to remove all chipped, friable or non-cohesive parts, greasy residues, dirt of all kinds and any product incompatible with the subsequent treatment
The appropriate preparation of the bases conditions the coating's good adherence and durability
For further details, refer to the Technical File of the selected primer:
* Concrete and fibre cement (non-defibrated surfaces): REVPRIM (4 to 6 sqm/l)
* Metals: REVSUN ANTICO (ca. 4 sqm/l, i.e. \pm 300 g/sqm)
* Old coatings in good condition: diluted REVSUN ROOFING if not chalking or REVPRIM if superficially powdery (prior compatibility test)
* Bituminous: REVLITH or ZOLPAFIX 100 (preliminary study)
When in doubt, refer to our TECHNICAL SERVICES

PRODUCT APPLICATION

Process Min. 2 x 0.5 to 0.6 kg/sqm over imprinted surfaces (min. 500 microns when dry)
Equipment * Airless sprayer (21 to 23 % nozzle): application mode recommended for large surfaces
Process by light successive passes without loading so as to avoid overthickness running and bubbling and to ensure a good thickness and aspect regularity. Particularly important in case of relief surfaces such as ribbed roofs. Regularly check the applied quantities.
* Long-pile roller, brush (small surfaces): process by regular cross-coat and even without stretching
24 hours between coats for both application modes (required minimum)
Dilution Ready-to-use product for manual application
Up to 3 % water for mechanical application to adjust the correct product bursting
Equipment cleaning WATER, immediately after use
Practical advice * Application conditions:
. Ambient and surface temperature above 5°C (caution if $T > 35^{\circ}\text{C}$)
. Relative humidity below 80 %
. Dry weather, sheltered from strong winds and direct sunlight
. Dry and condensation-free surface (surface temperature $>$ min. 3°C above dew point)
* Make sure that reliefs are properly covered on both sides (backside of the curves or bends)
* Extended surfaces must be taken into account in terms of consumption (up to + 50 %)
* Mind the risk of blemishes in case of excessively hot surfaces during the application
* Respect the safety measures applicable to roof walkability for large elements deemed of little resistance (fibre cement boards for example)

COLOURS White, beige RAL 1015, grey RAL 7035

PACKAGING 20 kg

CONSERVATION 24 months in unopened original packaging
Store away from frost and temperatures above 35°C

HEALTH AND SAFETY Refer to:
* The safety information label on the packaging
* Safety Data Sheet (Fiche de Données de Sécurité) on the INTERNET: www.zolpan.fr

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NB: The information given in this sheet only has an indicative value and cannot replace the specific data relating to the type and condition of the surface to be treated.

