



TECHNICAL SPECIFICATIONS GUIDELINE

DAC HYDRO ALU ROOF COATING

Durable reflective and protective coating for roofs

CHARACTERISTICS

- Water-based, low odour
- Waterproof, 400% elasticity, seamless and jointless
- Prevent from intensive surface heating thanks to aluminum particles
- Resists UV and variations of temperature
- Can be reinforced with a fleece

ACCEPTABLE SUBSTRATES

MINERAL SUBSTRATES

Surface condition

Mineral substrates, such like concrete, fibro-cement etc, will be in good condition and of solid structure; roof should be isolated in order to prevent humidity rising. In compliance with usual standard, mass humidity should not exceed 6%. This will be checked by use of a humidity tester, or with a taped plastic sheet under which no formation of condensation should be observed overnight. Surface must be clean and dry during application.

METALLIC SUBSTRATES

Surface condition

Steel substrates must be properly supported to avoid warping, which could cause the coating to work and lead to cleavage.

A: Steel substrate extensively covered with adhered mill scale but with few or no rust at all.

B: Steel substrate that has started to rust and whose mill scale has started to delaminate.

C: Steel substrate from which mill scale has disappeared under action of rust, or that can be removed by scrapping, but showing some rust cankers visible by naked eye.

D: Steel substrate from which mill scale has disappeared under action of rust, or that can be removed by scrapping, but showing a lot of rust cankers visible by naked eye.

BITUMINOUS SUBSTRATES

Surface condition

Bituminous substrates will be aged of at least one year, and perfectly adhered to their supporting structure.

OLD COATINGS

Surface condition

Old paints and coatings should be perfectly adherent and compatible with a water-based acrylic system. In case of doubt, carry out a test on a small control-surface. Compatible glossy coatings will be sanded mechanically.



SURFACE PREPARATION

GENERAL

Remove any dust, debris etc ; degrease and eliminate any contamination by alkaline cleaning with Cleaner-Degreaser RUST-OLEUM ND14 or high pressure cleaning combines with appropriate detergent, followed by thorough rinsing and full drying. In case of presence of mould (moss, lichens etc), decontaminate concerned surfaces with AMW Concentrate, followed by thorough rinsing and full drying. For severely contaminated areas, it is recommended to double the fungicidal treatment.

STEEL

See General.

Remove rust, rust scales, mill scale and old paints in bad condition, either manually or mechanically, according to the surface* :

Grades A and B : abrasive blasting SA 2 ½ (ISO 8501-01), max. rugosity 50 µm.

Grades C and D : pitting, grinding or scrapping-wire brushing to degree of care St 2/3 (ISO 8501-01), abrasive blasting SA 2 ½ (ISO 8501-01), max. rugosity 50 µm.

** Large surfaces will be preferably treated by abrasive blasting, or high/very high pressure cleaning, minimum 400 bars*

GALVANIZED STEEL

See General.

New galvanized steel will be degreased and etched with acidic etching solution RUST-OLEUM SURFA-ETCH 108 followed by thorough rinsing with fresh water.

Zinc oxides, « white rust » will be eliminated with acidic etching solution RUST-OLEUM SURFA-ETCH 108 followed by thorough rinsing with fresh water. Abrasive blasting to SA1 or higher is an alternative, as purpose is to remove those soluble salts.

NON-FERROUS METALS

See General.

New aluminum will be degreased and etched with acidic etching solution RUST-OLEUM SURFA-ETCH 108 followed by thorough rinsing with fresh water.

Salts and oxides will be eliminated with acidic etching solution RUST-OLEUM SURFA-ETCH 108 followed by thorough rinsing with fresh water. Abrasive blasting to SA1 or higher is an alternative, as purpose is to remove those soluble salts.

RECOMMENDED WORKING PROCEDURES

PRECAUTIONS

During application and first phase of drying (± 8 hours), low temperatures and high humidity and/or condensation can delay the evaporation and drying process, and possibly cause a re-wetting of the applied coat. Do not apply if rain is imminent or expected.

PREPARATION

It is recommended to define with tape the surface to be treated per packaging . This will allow to better control product consumption and respect les recommended quantities, making possible necessary adjustments on the job. For an optimal organization, it is advised to start with the details and difficult areas as those are more time consuming, since they require reinforcement, either with installation of a fleece or with a special fibers-containing coating.

REPAIRS (CONCRETE)

Surface imperfections, holes, cracks etc in the concrete will be repaired with appropriate RUST-OLEUM repair products: Pegacrete mortar, Elastofill sealant, Noxyde Tape... following depth of repair to be carried out.

PRIMERS

Porous mineral substrates will be primed with RUST-OLEUM PRIMER 44 HS.

Metallic substrates will be primed with Noxyde Plus.

Bituminous substrates will be primed with Parafix.

APPLICATION CONDITIONS

Temperature of air, substrate and product should be between 5 and 35°C, and relative humidity below 80%. Substrate temperature will be 3°C superior to dew point.

Product mixing: mix base material with a slow speed electric mixing machine, maximum 300 rounds/minutes, until homogeneous result is obtained.

Consult technical data sheets for details on drying times, induction times, pot-life, dilution and recommended application methods. Consult safety data sheets for any information related to safety during use of products.

SURFACE MAINTENANCE

It is owner's or occupant's responsibility to carry out regular inspections of the roof and do required maintenance in order to preserve the coating in best conditions possible. A RUST-OLEUM DAC HYDRO ALU system can be maintained by cleaning with alkaline detergent RUST-OLEUM ND14 concentrated at 3 to 10% in water, depending on how dirt is the surface.

SYSTEMS OVERVIEW

WATERPROOF AND REFLECTIVE PROTECTION SYSTEMS

SUBSTRATE	CONCRETE/MINERAL	BITUMEN	METAL			
Slope > 5%	System : Primer 44HS 1st coat 2nd coat	D.F.S. : 30 µm 400 µm 480 µm	System : Parafix Dacfill Dac Hydro Alu	D.F.S. : 25 µm 400 µm 480 µm	System : Noxyde Plus Dacfill Dac Hydro Alu	D.F.S. : 175 µm 400 µm 480 µm
Total film thickness	910 µm		905 µm		1055 µm	
Slope < 5%	System : Primer 44HS Reinforcement 1st coat 2nd coat	D.F.S. : 30 µm 600 µm 480 µm	System : Parafix Dacfill Fleece Dacfill Dac Hydro Alu	D.F.S. : 25 µm 600 µm 480 µm	System : Noxyde Plus Dacfill Fleece Dacfill Dac Hydro Alu	D.F.S. : 175 µm 600 µm 480 µm
Total film thickness	1110 µm		1105 µm		1255 µm	
Remarks :						
(1) In case of ponding water, Dac Hydro Alu will be applied at a quantity of 2L/m ² and reinforced with Dacfill Fleece.						

DECORATIVE AND REFLECTIVE PROTECTION SYSTEMS

SUBSTRATE	CONCRETE	BITUMEN	METAL			
Primer 1st coat 2nd coat	System : Primer 44HS Dac Hydro Alu	D.F.S. : 30 µm 240 µm	System : Parafix Dac Hydro Alu	D.F.S. : 25 µm 240 µm	System : Noxyde Plus Dac Hydro Alu	D.F.S. : 175 µm 240 µm
Total film thickness	270 µm		265 µm		375 µm	

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Available colours and pack sizes: See the relevant product page at www.rust-oleum.eu for actual available colours and pack sizes.

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