

Alumanation 301

Premium Reflective Fibered Aluminium Coating

FEATURES

Proven performance
One coat application
Rust inhibitor
One component
Cold weather applications

BENEFITS

- Successfully used for over 70 years
- Fewer labour steps, does not require primer
- Can prevent future oxidation of existing rust
- No mixing errors, no extra labour steps
- Can be installed at 4.4°C and rising
- Applied at the appropriate thickness, it can be used as a waterproofing system

DESCRIPTION

Alumanation 301 is a premium grade, high solids, aluminium flake-filled industrial maintenance coating formulated from specially processed asphaltic liquids, non-drying oils, a proprietary blend of natural and synthetic fibers. It is formulated to meet ASTM D 2824 Standard Specification for Aluminium-pigmented Asphalt Roof Coatings, Non-fibered and Fibered without Asbestos.

BASIC USES

Alumanation 301 is used for rustproofing and weatherproofing metal roofs and protection of torch-on waterproofing systems. Alumanation 301 can also be used as a waterproofing system when applied at the appropriate thicknesses.

PACKAGING

5 litre & 20 litre

COLOUR

Silver

GRADE

Brush, Roller, Spray

STORAGE

12 Months shelf life in unopened containers, when properly stored.
Recommended storage conditions are indoors in a ventilated, dry area removed from heat, open flame, ignition sources and direct sunlight. Storage temperatures should range from 15°C to 21°C and must not drop below 0°C or exceed 43°C

On jobsite, materials should remain on the pallet until use and be stored in a shaded, ventilated area. Materials should be covered with a light-coloured, reflective tarp for protection against the elements. Allow for adequate air flow inside the pallets.

Shelf life could be affected if the product is not stored properly.

APPLICATION

Surface Preparation: Surface must be clean, dry, in sound condition and free of dirt, debris and contaminants. Rust must be abraded until it no longer exhibits flaking or chalking. Wet insulation must be identified and replaced. Deficient areas of existing system must be repaired. All repairs should be made with like materials matching the existing components and allowed to properly cure prior to application of liquid-applied products.

Mixing:

Pails: Use a heavy-duty corroded power drill with Jiffy Mixer mixing blade. Mix until product is consistent in appearance and viscosity. Product should be mixed regularly every 15 minutes to avoid segregation that might lead to uneven finishes. Do not thin.

ROOF SUBSTRATES / SURFACE APPLICATION CHART

| Product Type | Product Name | Torch-on | Metal |
|-------------------|---------------------|--|---|
| Detailing Product | Geogard Seam Sealer | Existing system | 3-Course 0.7 to 1.2 lm / 850ml cartridge at 200mm wide |
| Reinforcement | Pro-Struct 599 | N/A | 100 x 1m |
| Topcoat | Alumanation 301 | 2.35m ² /litre at 425µm WFT (200µm DFT) | See below |

NOTE: Alumanation 301 is not recommended for direct application to the following substrates: concrete, cementitious screeds, single ply membranes, polyurethane foams or masonry walls.

For metal roofs where only corrosion protection is required:

| Environment | WFT | DFT | Theoretical Coverage Rate |
|----------------------|-------|-------|---------------------------|
| Inland | 425µm | 200µm | 2.35m ² /l |
| Coastal & Industrial | 800µm | 375µm | 1.25m ² /l |

For application to torch-fused bituminous membranes:

| Requirements | WFT | DFT | Theoretical Coverage Rate |
|---|--------|-------|---------------------------|
| Torch-on UV Protection only | 425µm | 200µm | 2.35m ² /l |
| Waterproofing Over Torch-on Membranes (or sheeting) | 1000µm | 470µm | 0.83m ² /l |

COVERAGE RATES

TEMPERATURE RECOMMENDATIONS

CURE TIME

SPRAY EQUIPMENT RECOMMENDATIONS

CLEAN-UP

LIMITATIONS

Coverage rates are listed at minimum recommended rates. The application surface can affect the necessary coverage rate.

- Additional surface area must be accounted for on applications over corrugated or standing seam metal substrates. Coverage may require an additional 15 to 25% depending on profile.

Min Ambient: 4°C

Max Ambient: 43°C

- Minimum temperatures must be rising following application.
- Do not apply when dew point is within 3°C of ambient temperatures.
- Do not apply when precipitation, fog or dew is imminent prior to cure of product.

24 Hours at 25°C

General Guidelines

| Component | Pressure | Tip Size | Flow Rate | Filters | Hose Type | WHIP | Product Temp |
|---------------|-----------|-------------|---------------|---------|---------------|------------------|--------------|
| One-Component | 2,500 psi | .039 - .049 | 1.6 - 2.6 gpm | Remove | High Pressure | ½" High Pressure | Ambient |

- Must use heavy-duty or industrial grade spray tips.
- Properly clean and maintain spray equipment before, during and after use.
- Equipment should be properly grounded during use.

Carboline Thinner # 85

- Not recommended for use over the following:
 - Roof Decks:** Direct applications to cementitious wood fibre, metal, poured-in-place gypsum, structural lightweight or lightweight insulating concrete, and wood decks (includes plywood, tongue-and-groove, etc.).
 - Products / Systems:** Asphalt-based or coal tar gravel surfaced BUR systems, clay tile, expanded or extruded polystyrene insulation, fluoropolymer finished metal, shingles, silicone-based products, and tar-based products.
- Not for use under continuous immersion or prolonged (longer than 48 hours) ponding water.
- Not recommended for areas of high pedestrian traffic. Consult Tremco Roofing sales consultant for trafficable or walkway solutions.
- Asphalt liquids and non-drying oils form part of Alumanation 301's formulation. This provides the product with its proven performance characteristics such as superior flexibility and ability to accommodate fluctuating temperatures without cracking or peeling. As a result, Alumanation 301 does not dry to a hard surface and can be susceptible to mechanical damage if care is not taken.



www.stoncor.co.za
StonCor Africa
Tel: +27 11 254 5500
E-mail: stoncorsa@stoncor.com

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LIMITATIONS (CONTINUED)

- Heavy foot traffic should be avoided, whilst light foot traffic should be limited to cooler times of the day when the product exhibits a firmer film. Avoid stepping and turning or stepping on sharp edges or ridges. Where possible, confine foot traffic to designated walkways or localized areas. It is further recommended that subsequent third party contractors required to execute work on the roof take the necessary precautions to protect the roof coating surface from damage.

PHYSICAL PROPERTIES

| PROPERTY | TEST METHOD | TYPICAL VALUE |
|-----------------------------|-------------|----------------------------------|
| Low Temperature Flexibility | ASTM D1737 | Pass ¼" mandrel at 0°C |
| Metallic Content | ASTM D2824 | Min. 15% |
| Salt Spray – 100 hrs | ASTM B117 | No corrosion |
| Reflectance | ASTM C1549 | Initial - 0.66, 3 Yr aged - 0.49 |
| Emittance | ASTM C1371 | Initial - 0.39, 3 Yr aged - 0.52 |
| SRI | | Initial - 0.65, 3 Yr aged - 0.42 |
| Solids Content – Volume | ASTM D6511 | 47% |
| Solids Content – Weight | ASTM D6511 | 61% |
| VOC | | 321 g/litre |

MAINTENANCE

Your local Tremco Roofing sales representative can provide you with effective maintenance procedures which may vary depending upon specific conditions. Periodic inspections, early repairs and preventive maintenance are all part of a sound roof program.

PRECAUTIONS

Users must read container labels and safety data sheets for health and safety precautions prior to use.

TECHNICAL SUPPORT

Your local Tremco Roofing sales representative, working with the Technical Service staff, can help analyse conditions and needs to develop recommendations for special applications.



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