



AQUACLAD™

AquaFlect™ Ultra Solar Reflective Elastomeric Coating

Features

- Retains flexibility and elasticity.
- Proven to increase solar panel performance.
- Can be used on asphalt-based smooth BUR, metal, modified bitumen and weathered single-ply membranes.
- 95% Reflectivity SRI.
- High UV resistance.
- Cool roof solution.
- Dramatic reduction in internal air temperature.
- Impervious to ponding water.



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PRODUCT DESCRIPTION

A one component, water based, developed as a highly solar reflective liquid applied seamless elastomeric roof coating for areas of high solar radiation.

INTENDED USES

AquaFlect™ Ultra, a cool roof coating system, is designed to reflect solar radiation. Decreasing the heat penetrating the building and reducing the ambient air temperature and thermal comfort. The result in cooling is significantly lowering energy consumption/cooling loads from air conditioning, and above all increasing the lifetime of roofs.

AquaFlect™ Ultra is designed to adhere to asphalt-based smooth BUR, metal, modified bitumen, weathered single-ply membranes and their substrates to protect, waterproof and reflect UV. It provides excellent durability and dirt resistance even after prolonged exposure unlike normal paints which darken over time and reduce energy efficiency.

AquaFlect™ Ultra prolongs the life of existing roof systems through refurbishment of aged bituminous membranes.

CHARACTERISTICS

- Outstanding exterior durability and UV Resistance.
- Long Last, low temperature flexibility and crack resistance to lengthen the life of the roof.
- High resistance to dirt pick-up for long term solar reflectivity.
- Very good adhesion to multiple roofing substrates i.e. metals, bitumen membranes etc.
- Good protection against carbonation.
- Good protection against environmental degradation.
- Very good resistance to transmission of ponded water.
- Forms a seamless waterproofing barrier.
- Retains flexibility and elasticity – expands and contracts alongside waterproofing membrane.
- Impervious to ponding water.
- Resistant to mildew
- Withstands pedestrian traffic to enable occasional maintenance and inspection.

MAINTENANCE PLAN

Your Titan Trade Co Com (PTY) Ltd 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.

Operation Life / Guarantee

Rural / Urban

- Product Guarantee without Maintenance - 15 Years
- Operational Life Expectancy - 20 Years
- Guarantee with Guardian™ Maintenance - 20 Years



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Heavy Industrial / Marine

- Product Guarantee without Maintenance - 15 Years
- Operational Life Expectancy - 20 Years
- Guarantee with Guardian™ Maintenance - 20 Years

All guarantees backed by a 90-year-old, international coating and waterproofing developer, manufacturer, and supplier with offices in every continent around the globe

PRODUCT INFORMATION

Colour:	High Reflective White or 26 standard colours.
Finish:	Low Sheen.
Density:	1.46 kg / litre
Volume Solids (approx.):	73%
Mass Solids:	69%
Typical Film Thickness:	365 µm DFT, in 1 coat.
Theoretical Coverage:	1.9 m²/litre at 365 µm DFT.
Method of Application:	Brush, Roller and Spray.
Number of Coats:	1 Coat is required to achieve the required DTF.
Viscosity:	50 g/l White

DRYING INFORMATION

	10°C	20°C	25°C	40°C	50°C
Touch Dry:	-	-	6 hrs	-	-
Hard Dry:	-	-	-	24 hrs	-

Overcoating Data – See Limitations.

	10°C	20°C	25°C	40°C	50°C
Minimum:	-	-	24 hrs	-	-
Maximum:	Extended	-	-	-	-



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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.

If the surface has a pre-existing coating or sealant, please contact Tremco Roofing for adhesion/compatibility testing and surface preparation recommendations.

Primers – further detailed application information is given in the product technical data sheets

Bituminous and porous surfaces: surfaces should be primed with BP Primer or Anti-Corrosive primer.

APPLICATION

Mixing: Pails: Use a heavy-duty corded power drill with Jiffy Mixer mixing blade. Mix until product is consistent in appearance and viscosity.
Do not thin.
Drums: Use industrial drum mixing equipment to mechanically mix each container. Mix until product is consistent in appearance and viscosity.
Do not thin.

Application: AquaFlect™ Ultra can be applied using airless spray equipment, brush or roller.

Thinner: No thinner should be used.

Airless Spray: -1500psi

Brush & Roller: Recommended Medium pile synthetic roller

Cleaner : AquaClad™ For dry paint and equipment
Cleaner:
Water: For wet paint

Work Stoppage: Do not allow material to remain in application equipment after use, thoroughly flush and clean all equipment with water. Seal the containers tightly after use to prevent drying out.

Clean Up: Clean all equipment immediately after use with water. It is advisable to periodically clean application equipment during the working day.



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Environment:

	<u>Surface Temperature -</u>	<u>Ambient Temperature -</u>	<u>Relative Humidity</u>
Minimum:	10°C*	10°C	No lower limit
Maximum:	54.4°C**	43.3°C	50%

* or 3°C above the dew point.

** Higher temperatures result in reduced sag resistance and faster cure.

*In the winter months due consideration must be given to the early onset of condensation formation early afternoon and application should be discontinued before this time.

SYSTEMS

Primer:

AquaClad™ Armour

Metals – Galv, Ferrous, Lead, Copper, Aluminium, Brass, or stainless steel.

Check for adhesion and compatibility, prime with AquaClad™ Bit Primer if necessary.

Bituminous Membranes & coatings

UNIT SIZE

20 Litre.

STORAGE

Shelf Life:

12 months shelf life in unopened containers when properly stored.

DO NOT FREEZE

Recommended storage is indoors in a ventilated, dry area removed from heat, open flame, ignition sources, and direct sunlight. Storage temperatures should range from 15-21°C and must not drop below 0°C or exceed 43°C.

On the job site, 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.



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PRECAUTIONS

Users must read container labels and Safety Data Sheets for health and safety precautions prior to use.

LIMITATIONS

Not recommended for use over the following:

- Roof Decks: Cementitious wood fibre, metal, poured-in-place gypsum, structural light weight 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, shingles, silicone-based products, and tar-based products.
- Not for use under continuous immersion





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IMPORTANT NOTE

Draft Specification for Titan Trade Co Com (PTY) Ltd 'AquaFlect™ Ultra'.

The purpose of this Draft Specification is to assist the Project Designer and Quantity Surveyor in producing their respective documentation for any project under consideration.

It is provided in good faith for use at the discretion of the respective consultant, to be amended and edited as required to suit the particular project requirements.

Titan Trade Co Com (PTY) Ltd is not privy to detailed contractual arrangements and documentation of an individual project and are therefore not in a position to co-ordinate related work by others. It is not the intention for this draft to relate to any particular project but to provide a guide to the more common items to be encountered in Titan Trade Co Com (PTY) Ltd Waterproofing Systems.

Whilst it is the Project Designer/Quantity Surveyors/Planning Supervisor's responsibility to produce their respective documents and we can assist them in their duties, we cannot accept responsibility for any errors or omissions which may occur in tender or contract documents or for compliance with the requirements of Health and Safety/Construction Design and Management Regulations which may be applicable.

Please check to ensure that any amendments to the standard draft, represents a true interpretation of the Project Designer's requirements.

Disclaimer

Titan Trade Co Com (PTY) Ltd provides all information contained in this publication based on data available at the time and reserves the right to amend such information from time to time.

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