



Clitherm AC

Single Pack Acrylic Heat reflective Coating

Pack Size
20Kgs & 10Kgs

TDS
Technical Data Sheet



Description

Clitherm AC is a high-performance, single-component, liquid-applied acrylic waterproofing membrane with heat-reflective properties. It is specially designed for exposed roof slabs, terraces, and external surfaces, offering UV and weather resistance. The advanced formulation contains cross-linking polymers, microfibers, pigments, and antifungal additives, ensuring long-lasting protection while keeping the interior cooler due to its high Solar Reflective Index (SRI).

Key Features & Benefits

- High Solar Reflectance Index (SRI) reduces heat ingress, keeping interiors cooler.
- Cross-linking polymer technology enhances weather resistance and service life.
- Excellent Crack-Bridging Ability ensuring durability.
- Highly resistant to chloride penetration, suitable for saline environments.
- Algae & Fungi Resistant ensuring long-term performance.
- Eco-Friendly & Low VOC with simple, fast application.
- Superior adhesion to concrete, bituminous membranes, asbestos, metal decks, and more.
- UV and Weather Resistant protecting the substrate from environmental damage.

Recommended Uses

Clitherm AC is suitable for various applications, including:

- Roof slabs (flat & sloped) including RCC, lime terraced roofs, and clay tiles.
- Sunshades and exterior walls exposed to direct sunlight.
- PVC water tanks to maintain a cooler internal water temperature.
- Balconies and walkways requiring a heat-reflective and waterproof surface.
- As a protective topcoat over bituminous membranes for additional durability.

Technical Information

Property	Value / Standard
Appearance	White & Grey (Light shades available)
Chemical Base	Acrylic Polymer Dispersion
Packaging	20 kg, 10 kg

Shelf Life	12 months (sealed, unopened)
Storage Conditions	Store in dry conditions (5°C - 40°C)
Density	~1.35 kg/l @ 27°C
Solid Content by Weight	~66%
VOC Content	<10 g/l
Overall Thickness	~1.0 - 1.2 mm (with reinforcement)
Tensile Strength (ASTM D412)	≥ 1.5 MPa
Elongation at Break (ASTM D412)	> 200%
Adhesion to Concrete (EN 1542)	> 1.5 MPa
Crack Bridging (ASTM C1305)	Passes up to 3.2 mm width
Water Vapor Permeability (ASTM E96)	~23 g/m ² /24hr
Water Absorption (ASTM D570)	< 10% (by mass)
Microbiological Resistance (ASTM D5590)	No algae & fungal growth
Solar Reflectance Index (ASTM E1980)	102

System Information

System Structure for Different Applications

For Roof Without Reinforcement Fabric

Coat	Product	Consumption (kg/m ²)
Primer Coat	Clitherm AC	Primer 0.2 - 0.3
First Coat	Clitherm AC	0.75
Second Coat	Clitherm AC	0.75
Top Coat	Clitherm AC	Primer 0.05 - 0.08

For Roof With Reinforcement Fabric

Coat	Product	Consumption (kg/m ²)
Primer Coat	Clitherm AC	Primer 0.2 - 0.3
First Coat	Clitherm AC	0.75
Fabric Reinforcement	Clitherm Fabric	1 m ² /m ²
Second Coat	Clitherm AC	0.75
Top Coat	Clitherm AC	Primer 0.05 - 0.08

For Walls

Coat	Product	Consumption (kg/m ²)
Primer Coat	Clitherm AC	Primer 0.2 - 0.3
First Coat	Clitherm AC	0.3 - 0.4
Fabric Reinforcement	Clitherm AC	0.3 - 0.4
Top Coat	Clitherm AC	Primer 0.05 - 0.08

Application Guidelines

Surface Preparation

- Ensure the surface is clean, dry, and free from dust, grease, and contaminants.
- For old surfaces, remove any existing coatings, membranes, or weak material.
- For clay tiles, roughen the surface before application.
- For bituminous membranes, apply Clitherm Primer and allow it to dry before applying the system.

Mixing & Application

- Stir Clitherm AC thoroughly before application using a mechanical stirrer.
- Apply primer coat using a brush, roller, or spray.

- Apply the first coat, ensuring uniform coverage.
- Place reinforcement fabric immediately after the first coat while still tacky.
- Apply the second coat after 6-8 hours.
- Apply a top coat for additional durability and aesthetics.

Curing & Drying Time

Condition	Time
Touch Dry	1-2 hours
Overcoating Interval	6-8 hours
Full Cure	7 days

Cleaning of Tools & Equipment

- Wash tools immediately with clean water after use. Hardened material can only be removed mechanically.

Packaging & Storage

Packaging	Storage Conditions	Shelf Life
20 kg, 10 kg	Store in dry conditions at 5°C - 40°C	12 months in unopened packaging

Health & Safety Precautions

- Wear protective gloves, goggles, and a dust mask during application.
- Avoid direct contact with skin and eyes.
- In case of eye contact, rinse immediately with plenty of water and seek medical attention.
- Avoid inhalation of dust; use in well-ventilated areas.
- Keep out of reach of children.

Pack Size

20Kgs & 10Kgs



Data Reliability

All technical data provided in this document are based on laboratory tests. Actual performance may vary due to factors beyond our control.

Regional Compliance

Product specifications may vary based on local regulations. Please refer to the local Product Data Sheet for precise information.

Legal Disclaimer

The information and recommendations regarding the application and end-use of Carbolink products are provided in good faith based on our current knowledge and experience. Due to variations in materials, substrates, and actual site conditions, no warranty of merchantability or fitness for a specific purpose can be inferred. The user must determine the product's suitability for the intended application. Carbolink reserves the right to change the properties of its products. All proprietary rights of third parties must be observed. Orders are subject to our current terms of sale and delivery. Always refer to the most recent local Product Data Sheet, available upon request.