

DESCRIPTION

AC-500 is acrylic based, elastomeric, single pack roofing compound which is characterized by excellent hardness, strength, water resistance and weatherability.

USES

AC-500 is typically used for concrete roof, metal roof, polyurethane foam insulation, single ply roofing.

ADVANTGES

- Provides a seamless, durable membrane.
- Superior adhesion to various substrates.
- Excellent U.V protection for polyurethane foams.
- Heat reflective coating helps reduce cooling cost.
- Prevents premature degradation.
- Easy to use non-toxic water based coating.

COLORS

Satin white & gray

Other colors available on request.

INSTALLATION

Surface preparation

- All surfaces must be clean, dry and free from dust, rust and any laitance.
- Sweep and power wash area to remove all dust, dirt, loose granules and residue.
- Scrub the area where water ponds with detergent and water, and rinse well. Carefully inspect the area to be coated, including areas surrounding pipes, chimneys, equipment, roof edges and walls.
- Repair all cracks, breaks, splits and holes by embedding glass mesh between 2 heavy coats of **AC-500**.
- On metal roofs, tighten all fasteners, and seams with our Cap Mastic material.

Priming

- Old asphalt surfaces and bituminous roofing (if any) must be cut cross wise, dried and be

rebounded with suitable adhesive. Then prime the cleaned surface with **AC-500** diluted with 20% water.

- Concrete and Terrazzo tile roofs to be primed with **AC-500** diluted with 20% water.
- If metal roof, clean and remove all rust and apply a rust inhibitive primer.
- Other roofs - If the roof is affected by algae or fungal growth, use a stiff brush to remove it before treating the cleaned surface with a suitable fungicide. Apply primer coat by diluting **AC-500** with 20% water.

Application

- **AC-500** can be applied by brush, roller, squeegee or spray equipment.
- Apply on a clean dry surface, do not dilute the material.
- Stir material to a uniform consistency and apply by spray, deep pile paint roller, or brush, keep strokes in one direction.
- Apply in two coats at the recommended rate for substrate.
- Allow to dry thoroughly between two coats. Second coat should be applied as soon as first coat dried up.
- Apply second coat at right angles to first coat.
- Where substantial movement anticipated in the structure, reinforce **AC-500** by incorporating mesh as part of membrane system. Lay the mesh in wet first coat before application of subsequent coat.
- All detailing to pipes, up stands, drains, projected line etc. should be mesh reinforced in this way.

COVERAGE

- 1m² /per liter will provide 500-micron DFT.

MECAHNICAL PROTECTION

Accessible Roofs can be protected by in situ concrete screed. Place a non-woven polyester separation layer over the acrylic waterproofing membrane followed by insulation boards.

Lay Kraft paper or polyethylene sheet as a separation layer over the insulation boards and place the topping screed of 4 to 5 cm thickness or suitable cement tiles.

Non-Accessible Roof

Place non-woven polyester separation layer over the acrylic waterproofing membrane followed by insulation boards. Cover the insulation with another layer of non-woven polyester separation layer and place 15-30 mm wash gravel to a minimum depth of 5 cm. For thicker insulation boards, the gravel depth should be at least equivalent to that of board thickness.

PACKING

15 kg pail and 250 kg drum

STORAGE

Keep away from direct sun light and preferably store at 5-30⁰ C.

SHELF LIFE

12 months in unopened containers.

PRECAUTIONS

- Never apply if rain is imminent.
- Bitumen and asphalt surfaces should be thoroughly dry.
- Do not apply below 5⁰ C temperature.
- Do not use in areas which will be constantly submerged in water.

HEALTH AND SAFETY

AC-500 is non-toxic and non-flammable whilst wet. Avoid prolong skin contact. Use of barrier cream, gloves is advisable. If comes in contact with eyes, open eyelids widely and flush immediately with plenty of water. If ingested seek medical attention.

TECHNICAL DATA

Property	Values	Test Method	Specs
Color	White or any custom color		
Viscosity CPS	50,000-70,000	Brookfield	
Solid %age by Weight	> 60	ASTM D-1644	ASTM D-6083
Unit Weight Kg/Liter	1.30 ± 0.05	ASTM D-1475	
Tensile Strength Psi	≥ 200	ASTM D-2370	ASTM D-6083
Elongation %	≥ 100	ASTM D-2370	ASTM D-6083
Flexibility at 0 ⁰ C	Passes 1/2-inch Mandrel Test	ASTM D-522	
Water Swelling	≤ 20 % by Mass	ASTM D-471	ASTM D-6083
Flash Point	None (Water Based)		
Dry Time Hours @ 25 ⁰ C	Dry to touch in 4-6 Hours		
Recoating Time Hours @ 25 ⁰ C	12-24 Hours		

TECHNICAL SERVICE:

Our Technical Service Department is available at any time to advise you in the correct use of this product or any other Ahlia products.

Note : The information presented herein is based on the best of our knowledge and expertise for which every effort is made to ensure its reliability. Although all the products are subjected to rigid quality tests and are guaranteed against defective materials and manufacture, no specific guarantee can be extended because results depend not only on quality but also on other factors beyond our control.

As all Ahlia Technical Data Sheets are updated on a regular basis, it is the user responsibility to collect most recent issue.