

## **AQUACRETE**

### *Acrylic Polymer Modified Cementitious Coating for Water Proofing*

#### Product Description

Aquolac Aquacrete, is an acrylic based Polymer Modified Cementitious Flexible Composite coating system. AQUACRETE in conjunction with cement provides properties to combat the shortcomings of plain cement, particularly its poor adhesion properties, low impact strength, low flexural strength and thin section fragility. AQUACRETE polymer adds to the potential use as well as enhances the properties of cement slurry/ mortar/concrete making them excellent choice for use in new as well as renovation work.



#### Recommended Areas of Application:

AQUACRETE is used for surface treatment, protecting, waterproofing, and repairing concrete and masonry. Waterproofing of basements, toilets, terraces, roofs, swimming pools, water towers etc. General concrete repairs. Protection of concrete against corrosion, salt attack etc.

#### Features:

- Combines a tough, flexible, hard-wearing surface with waterproofing.
- Allows trapped vapors to escape thus preventing peeling and blistering.
- Can be applied in uniform thickness to horizontal and vertical surfaces.
- Develops excellent bond to most building materials.
- Reduces or prevents salt penetration into concrete.
- Is not affected by ultraviolet light or by chemicals ranging from mild acids to strong alkalis.
- Is highly durable in continuous wet conditions.
- Is non-flammable and does not give off toxic gases when exposed to fire.
- Will not rot or corrode.
- Most properties improve with age.
- Is not harmful to the health of workman.

## Method of Use:

### Surface Preparation:

- Prior to application of **Aquacrete**, surface must be prepared as mentioned below to avoid failure and to achieve maximum beneficial properties.
- The surface shall be cleaned to remove all dust, foreign matters, loose materials or any deposits of contamination which could affect the bond between the surface and the **Aquacrete** coating. This can be done by scarifying, grinding, water blasting, sand blasting, and acid washing or by any other approved method.
- A new flat surface like sub-base concrete shall be made reasonably smooth so as not to impede the application of **Aquacrete** coating and to avoid sharp projections.
- All concrete surfaces shall be thoroughly pre-wetted prior to the application of **Aquacrete** coating by pouring water on flat surface or by spraying water on vertical/inclined surfaces.
- When placing **Aquacrete** coating, water should be removed so that surface is only damp. In no case there should be standing water.
- Depressions are to be filled and levelled using **Aquacrete** fillers. For filler, the mixing ratio is 1 kg cement: 1.5 kg silica sand: 0.50 kg of **Aquacrete**.

### Application:

**Aquacrete** polymer is mixed with neat fresh cement in the ratio of 1:2 by weight. The mix must be stirred thoroughly until smooth homogeneous slurry is obtained. Wait for 5-10 minutes to release entrapped air bubbles. Any lump found in the mix should be removed or mixed thoroughly. The mix must be applied by brush on rendered and/or prepared surface. Two or more coats are recommended. The first coat should be allowed to air dry for 5-6 hours prior to applying subsequent coat.

### Curing:

After application of final coat of **Aquacrete**, initial air drying shall be done for 2-6 hours. During this period no water is to be used for curing. In case of high temperature and low humidity combined with high wind condition, the coating shall be covered with polythene sheet to avoid rapid drying of the coating. After maximum period of 6 hours after the final application, moist curing shall be done for the next 24 hours by spraying/sprinkling of potable water on **Aquacrete** coating. During this period at no point of time should the **Aquacrete** coating be left completely dry or submerged in water. Following moist curing, the **Aquacrete** coating shall be allowed to air dry for 2 days before submersion in water.

### Precautions:

**Aquacrete** system must be applied with temperature above 10°C and below 40°C.  
**Aquacrete** should not be used without addition of cement.

### Storage:

- Store in dry cool place in the temperature range from 5°C to 30°C in sealed condition. Do not allow it to freeze. Keep away from direct sunlight.

### Packaging Size:

1, 5, 20 and 50 Ltr. Plastic Container.

### Technical Data:

Parameters	Test Values – Typical	Protocol
Appearance	Milky white coloured free flowing liquid.	Visual
Viscosity (in Seconds)	14±1	IS 101
Solid Content	32± 3 (w/w)	IS 101
pH Value	>7	IS 9103
Recoating Time, at 27°C, 65% RH, Hours	4 – 6	IS 101
Full Cure	3 - 4 days	IS 101
Volatile organic Matter (VOC) %, (w/w)	<1.0	IS 101

### Covering Consumption:

	Mixing Ration with Cement	Coverage/Consumption
Waterproof Coating	1:2	25 - 30 sq.ft / 2 coats
Bonding Coat	1:1	40 - 45 sq.ft / 1 coat (depends upon the substrate)
For mortars of repair of RCC		15 - 20% by weight of cement
For Flooring screeds		18 - 20% by weight of cement