



Arrocrete WRP+

Single Component Acrylic Polymer
for Cement Based Waterproof
Composite Coating Membrane.



Description

ARROCRETE WRP+, popularly known as WRP+ is an acrylic based Polymer Modified Cementitious Flexible Composite coating system. ARROCRETE WRP+ 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. ARROCRETE WRP+ 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.

Features

- Combines a tough, flexible, hard-wearing surface with waterproofing.
- Allows trapped vapour 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 condition.
- 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 Application

1. Surface preparation

- Prior to application of ARROCRETE WRP+, 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 ARROCRETE WRP+ coating. This can be done by scarifying, grinding, water blasting, sand blasting, and acid washing or by any other approved method.
 - New flat surface like sub-base concrete shall be made reasonably smooth so as not to impede the application of ARROCRETE WRP+ coating and to avoid sharp projections.
- All concrete surfaces shall be thoroughly pre-wetted prior to the application of ARROCRETE WRP+ coating by pouring water on flat surface or by spraying water on vertical/inclined surfaces. Waterproofing Coating
 - When placing ARROCRETE WRP+ 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 ARROCRETE WRP+ fillers. For filler, the mixing ratio is 1 kg cement: 1.5 kg silica sand: 0.50 kg of ARROCRETE WRP+.



Uses

ARROCRETE WRP+ 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.

Application

ARROCRETE WRP+ polymer is mixed with neat fresh cement in the ratio of 1:2 by weight. The mix has to 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 has to be applied by brush on rendered and/or prepared surface. Two or more coats are recommended. First coat should be allowed to air dry for 5-6 hours prior to apply subsequent coat.

Properties

Properties:

- ▶ Water absorption: 1% maximum
- ▶ Pot life at 30°C: 30 min.
- ▶ Application temperature: Not less than 10°C
- ▶ Toxicity: Non-toxic
- ▶ Bond strength to concrete: Approx. 1 N/mm²

Coverage

- ▶ Priming coat: 16-17 sqm/L
Topcoat - 4.5 - 5.0 sqm/L/ coat.
However the practical consumption varies depending on the texture and porosity of the surface and the application thickness.

Disclaimer :

The product information and the recommendations relating to the application and end-use of Arrotile products, are based on Arrotile current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Arrotile recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Arrotile reserves the right to change the properties of its products without notice, so the company does not assume liability of any legal from this product information.

Curing

After application of final coat of ARROCRETE WRP+, 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 Parameters.

Parameters Appearance	Test Values - Typical	Protocol
	Milky white coloured free flowing liquid.	Visual
Viscosity, Seconds	12±1	IS 101
Solid content	30± 3 (w/w)	IS 101
pH Value	>7	IS 9103
14 days Bond Strength, N/mm ²	2.0 (Minimum or concrete failure)	ASTM C 882-87
28 days Compressive strength, N/mm ²	30 (Minimum)	IS 516
Recoating Time, at 27°C, 65% RH, HOURS	4-6	IS 101
Full Cure	14 days	IS 101
Ash Content, % (w/w)	< 1.0%	IS 101
Volatile organic Matter (VOC) %, (w/w)	<1.0	IS 101

Packaging

Available in 10 & 20 ltr packs.

Shelf Life

- Best before 12 Month from the date manufacture when in sealed pack and stored under proper condition.
- Store in a cool & dry place

For Feedback / Suggestion & Complaints :

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