

# AquaArm WPU 1K-S

(Formerly known as MY K Coat WPU-1K (Spray-H))

Single Component Polyurethane Waterproof Coating



## TECHNICAL DATA SHEET

### Product Description

AquaArm WPU 1K-S is a single-component, liquid applied, elastomeric polyurethane coating for waterproofing Horizontal concrete surfaces. AquaArm WPU 1K-S provides excellent resistance to moisture, water and salts penetration into concrete and masonry surfaces.

#### Uses

AquaArm WPU 1K-S is used to protect and waterproof concrete and other masonry surfaces

AquaArm WPU 1K-S has the ability to uniformly and completely cover the surface, forming a continuous membrane that prevents water leakage and penetration of moisture into the substrate.

AquaArm WPU 1K-S is deal for waterproofing for roofs.

#### Features and Benefits

- Spray applied
- Non-toxic.
- Provides a seamless coating
- Highly Flexible with crack joint less bridging ability
- High bond strength to a variety of substrates and building materials
- Resists pressures Hydrostatic
- Excellent chemical resistance
- Excellent resistance to humidity and temperature
- Excellent resistance to Chlorides and Alkalies
- Good impact resistance and tensile strength.

### Application Methodology

#### Step no 1: Surface Preparation:

Surface need to be cleaned by wire brushing followed by vacuum cleaning so that surface is free of any loose particles, dust, laitance, mould release agents and curing compounds. Water jetting is not recommended. All cracks to be treated with Rearm SBR modified mortar. Surface is allowed to self cure for 24 hours. Ensure the moisture content of the surface is below 5% before Priming.

#### Step no. 2: Fillet preparation

Horizontal and vertical angle joints need to be prepared with 50x50mm concave fillet using concrete admixed with AquaArm Proof WP10 @ 150 g/50 Kg bag of cement. Fillet should be cured to gain strength and completely dry before Primer application.

#### Pipe penetration sealing

Clean around Pipe penetrations and seal the junction with low viscous solvent free epoxy ArmGrout Inject EP-LV admixed with Silica sand.

Alternate to the above conventional methods, AquaArm Aso Joint Tape system can be opted for Fillet and Pipe penetration sealings. For details, please contact MYK Arment technical team.

#### Step no 3: Priming:

Epoxy based FloArm Primer EPW-44 a two component primer is recommended before application of AquaArm WPU 1K-S. Mix both the components of Primer and apply by brush on cleaned concrete. Pot life of the mixed primer is only 30 minutes. Allow the primer to dry for 4-5 hours.

Apply the water proofing coating AquaArm WPU 1K-S when the Primer is tacky. If the Primer fully dries, repriming need to be done.

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#### Step no 3: Product Mixing:

Just prior to application, thoroughly mix the contents of the container using a heavy duty slow speed power drill with a jiffy mixing blade. Care should be taken to scrape the sides and bottom of the container with the mixer. Do not add solvent, thinners at any time.

#### Step no 4: Product Application:

Application of AquaArm WPU 1K-S involves the following steps,

1, Primer - FloArm Primer EPW-44  
coverage Approx 200 to 300 gms / Sqm,  
(depends on porosity substrate)

2, First coat of AquaArm WPU 1K-S

3, Second Coat of AquaArm WPU 1K-S

4, A separate wearing coarse of cement screed is required within 2-3 weeks, if there is a movement on the roof, applied with AquaArm WPU 1K-S (This protection necessary to avoid film punching).

**Coating:** - First coat of the material to be applied when primer is in tacky condition.

AquaArm WPU 1K-S should be immediately applied to the primer surface while ensuring a continuous coating of uniform thickness is obtained. A Special pump to be used along with the 2 mm nozzle is recommended for such application. A brush may be used for touch-up and edging work or for areas unsuitable for spray application.

AquaArm WPU 1K-S must be applied all along the angle fillet, corners, joints around the pipes, conduits etc. Apply AquaArm WPU 1K-S on surrounding walls up to a height of 150 mm. Always apply in two coats in order to avoid pinholes. The second coat can be applied as soon as the first coat has dried (12 - 16 hours) depending on the ambient and surface temperature. All surfaces should be sprayed with multi direction spray passes or rolled cross direction each coat to assure positive continuous film coverage.

A wet test may be performed when at least 72 hours have passed since application of the final coat.

#### Technical Data

Property	AquaArm WPU 1K-S
Density @ 27°C	1.20
Solid content, %	58 %
Colour of dry film	White
Tack free time @ 25°C	12 – 16 hrs
Time to full cure @ 25°C	72 hrs @ 1.2 mm thickness
<b>Typical cured membrane properties (@ 28 days)</b>	
Elongation (ASTM D412)	450%
Tensile strength, N/mm <sup>2</sup> (ASTM D 412)	1.0
Recovery from 200% elongation (ASTM D 412)	>80%
100% Modulus Elongation (ASTM D 412)	0.6 MPa
Shore Hardness (ASTM C 836)	50
Low Temp Crack Bridging (ASTM C 836-03)	No signs Upto 1.5 mm
Extensibility after heat ageing (ASTM C 836)	No cracks
Tear Resistance (ASTM D 624)	10 N
Service Temperature	5°C to 45°C
Peel adhesion to primed concrete surface (ASTM c 836)	1 MPa
Application Temperature:	+10°C to 40°C

#### Consumption

Application rate will vary according to surface conditions, application technique and job conditions. A coverage for various thickness application are mentioned below

For Terrace area	1.5-2 Kg/ m <sup>2</sup> for 1.1 mm DFT.
For Swimming Pool	2.5-3 kg/m <sup>2</sup> for 1.8 mm DFT
For Basement area	2.5-3 kg/m <sup>2</sup> for 1.8 mm DFT
For Podium slab area	2-3 kg/m <sup>2</sup> for 1.8 mm DFT

Primer consumption 200 to 250 gms / sqm

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#### Packaging

Available in 24 kg pails.

#### Storage and Shelf Life

Store in unopened containers in clear, dry conditions at 4 to 27°C.

During storage, an easily removed skin of AquaArmWPU1K-S may form, which does not affect the performance of the product.

Shelf life is 6 months from date of purchase in original unopened container at specified storage temperature.

#### Health & Safety

Use PPE such as coveralls, goggles and respiratory mask. If spilled into eyes, wash with plenty of water immediately and if irritation persists, seek medical treatment.

Non-flammable material:

Keep away from children. The application of material should be under good ventilation. Avoid inhalation of the vapours. Always wear protective clothing, goggles, vinyl gloves, and vapour mask.

Do not take internally, may be fatal if swallowed.

First aid: Eyes – flush with water and seek medical attention immediately. Do not use any solvents. Ingestions – give several glasses of water or milk and seek medical attention immediately. Contact with skin – wash affected area immediately. Inhalation – move to fresh air.

#### Legal Note

The information, and, in particular, the recommendations relating to the application and end-use of MYK Arment products, are given in good faith based on MYK Arment current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with MYK Arment's recommendations. In practice, the difference in materials, substrates and actual site conditions are such that no warranty in respect of merchant ability 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 & purpose. MYK Arment reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local product data sheet for the product concerned, copies of which will be supplied on request.



#### TECHNICAL DATA SHEET

#### Limitation

- Never apply to new concrete surfaces before they have been allowed to cure for a minimum of 28 days.
- Do not apply on wet or damp surfaces.
- Do not apply if rain is expected in the proceeding 24 hours.
- No dilution.
- Cannot be used for water bodies directly without external.
- Screed protection or plaster to the film.
- Do not apply if the temperature is in excess of 45°C or less than 12°C.
- Do not use where negative hydrostatic pressure is evident (i.e. rising damp) as it affects the bond of AquaArm WPU 1K-S.

#### Product Categories Available

