

AquaArm Purtech H

(Formerly known as AquaArm Gepotech H)

Two component spray applied rapid setting waterproofing coating



TECHNICAL DATA SHEET

Product Description

AquaArm Purtech H is a two component, spray applied fast setting coating based out of modified polyurethane/ Hybrid Polyurea Hybrid to achieve an elastic, high crack bridging waterproofing coating with long life expectancy.

Uses

AquaArm Purtech H is applied to protect and waterproof concrete structure like terrace, podium as a concealed system.

Application Area

- Podium slabs
- Terraces
- Roof Garden
- Cut & Cover tunnels Systems
- Service roofs
- Reroofing
- Metal deck roofs
- Stadium stands
- Jetties, Piers etc

Features and Benefits

- Spray applied coating
- Fast setting
- Provides a seamless coating
- Flexible with crack bridging (>2mm) ability
- High bond strength to a variety of substrates and building materials
- Resists positive water pressure
- 100% solid, solvent free
- Faster application, less labour intensive
- Low Viscous material
- Protects against corrosion
- Fully bonded (eliminates chance of water collection below membrane even if punctured)

Application Methodology

Step no 1: Surface Preparation:

All surfaces should be clean, dry and free from dust and other contaminants.

Treat oil or grease contamination with degreaser followed by water or steam cleaning.

Surface shall be thoroughly cleaned, dry and free of dust, loose cement mortar, grease, oil, and other contaminants.

New Concrete:

Should be at least 28 days old and have a moisture content of less than 5% - no rising moisture according to ASTM D 4263 (Polythene Sheet Method) and above 3°C dew point. Excessive laitance should be removed by mechanical methods. Dust and other debris should be removed by air pressure.

Old Concrete:

Damaged areas, surface irregularities and cracks should be repaired using SBR modified/epoxy mortar.

All delaminated and splashed areas of concrete shall be repaired prior to application of AquaArm Purtech H.

Wall to floor Joints, corners and dynamic cracks etc. require to be fixed with the SealArm tape 2000 using ReArm Bond 4031 before application of AquaArm Purtech H.

Step no 2: Priming:

FloArm Primer 1260 is recommended to be applied as Primer or as suggested by MYKA technical team is recommended as primer. FloArm Primer 1260 is two component primer mix both the component and apply the same by brush on cleaned concrete. Pot life of the mixed primer is only 30 minutes. Do not use the primer after its 30 minutes of mixing. Allow it to become tacky, it may take 10.

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Step no 3: Preparation prior to processing:

The component A must be stirred for 10 to 15 minutes using a suitable propeller stirrer. The component B does not require stirring.

Working equipment:

To apply AquaArm Purtech H heatable two component high pressure spray equipment is required. We recommend: Duo Mix 2K-apparatus from IMT.

Both components are to be brought to an operating temperature of approx. +60° – +70°C over separate heating elements, in order to achieve the optimum viscosity. The tempered material is transported via a heated pipe feeder. During the application the temperature is kept constant.

The two components are mixed together in the mixing head of the spray gun and must be carried out at a pressure of >120 Bar. Tools must be cleaned immediately with an organic solvent. Pipe work can be rinsed out e.g. with Mesamoll. Cured residues can only be mechanically removed.

Technical Data

Physical Properties

Characteristics	Value
Type	Hybrid
Solids content	100%
VOC (ASTM D 2369)	Nil
Color	Grey
Viscosity (Part-A) at +25°C	1000 ± 200 mPa.s
Viscosity (Part-B) at +25°C	1250 ± 200 mPa.s
Density (Part-A) at +25°C	1.03 ± 0.05 g/cm ³
Density (Part-B) at +25°C	1.08 ± 0.05 g/cm ³

Typical Properties

Shore A Hardness (ASTM D 2240)	~ 85
Shore D Hardness (ASTM D 2240)	~ 33
Tensile strength (ASTM D 412)	>16 N/mm ²
Elongation at break (ASTM D 412)	>500 %
Recovery at 100 % Elongation (ASTM D 412)	>90 %
Impact resistance (ASTM D2794)	>15 Nm
Tear Strength (ASTM D 624)	>50 N/mm
Fully cured at 27°C	>60 Hrs
Resistance to chemicals at 27°C	>60 Hrs
Fire behavior (EN 13501-1)	Class E
Resistance to root penetration (DIN 4062 (ch.5.7))	Passes
Capillary water absorption (EN 1062-3)	0.002 Kg/m ² /h ^{0.5}
Water vapor permeability (EN ISO 7783-1)	Class I
CO2 permeability (SD) (EN 1062-6 method A)	>120 M
Adhesion to concrete (ASTM D 4541-02)	>1.5 N/mm ² (concrete failure)
Adhesion to steel (ASTM D 4541-02)	>10 N/mm ²
Abrasion resistance (Taber H22, 1000 g, 300 c) (ASTM D 4060-10)	>250 mg
Electrical surface resistance (EN 1081-1988)	>1 Giga ohm
Flexibility (over 3 mm mandrel) (ASTM D 522)	Passes
Skid resistance (ASTM E 303-93)	Dry: 55 , Wet: 25
Service temperature (Dry)	-20°C to + 80°C

Processing

Machine Type	Graco/Gusmer Spray machine
Material Pressure	>120 Bar
Material Temperature (Part-A) & (Part-B)	60 -70°C
Mixing ratio by volume	1 : 1
Pot life	10 ± 2 Seconds
Gel Time	10 -15 Seconds
Tack free time at 25°C	60 -120 Seconds
Recommended film Thickness	1.5 - 3 mm
Permissible Relative Humidity	<85 %
Application temperature (Ambient & surface) °C	10°C - 40°C

Waterproofing Systems

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Coverage

1 Kg/m²/mm.

Application rate will vary according to surface conditions, application technique environmental conditions and applications capability efficiency.

In case of exposure to UV & weathering, it needs to be protected with UV stable aliphatic Polyurea/PU coating.

Packaging

The packing material is supplied as separate component in fixed lid metal drum

400 kg unit:

1 x 200 kg component A

1 x 200 kg component B

The weight ratios given relate to a balanced volume ratio of 1:1 Before filling the heated spray equipment containers, thoroughly mix the pigmented component A until a homogeneous even cloud is achieved. Use an appropriate drum stirrer.

Storage and Shelf Life

6 months in the original unopened packaging (on pallets)
When stored dry at a room temperature of +15°C to +25°C.

Annotation

Avoid direct sunlight.

The Substrate must be dry & inaccessible to other agencies during the application of material.

Avoid spray application when rain is approaching.

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.



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Health & Safety

Protective clothes such as coveralls, goggles and respiratory masks shall be worn. If spilled into eyes, wash with plenty of water immediately and if irritation persists seek medical treatment. Please refer to the most recent Material Safety Data Sheet containing physical, ecological, toxicological and other safety-related data. 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.

Product Categories Available



MYK Arment Private Limited
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