

PU based Waterproofing Coating for Metal/Concrete/Non-metal
Surfaces

INTRODUCTION:

AQUASMART-PU is a high quality polyurethane based waterproofing coating for metal, concrete and other surfaces. Highest quality polyurethane resins are combined with reinforcing laminar pigments, and non-migrating fire retardant, resulting in superior durability, weatherproofing, ultraviolet resistance, algae/mildew resistance and fire retardancy. **AQUASMART-PU** is highly reflective, thermal insulating, permanently flexible, waterproofing membrane remaining impervious to mass water penetration from the exterior.

Uses:

J	All metal roofs
J	Cured concrete substrate (Flat, sloping or wall), brick wall, plaster, stones and
	tiles

General Introduction:

AQUASMART-PU is manufactured with polyurethane combined with unique chemistries that provide both long term dirt pick-up resistance and outstanding adhesion to many roofing substrates.

The durable coating can be easily applied over a variety of substrates including asbestos, galvanized steel, asphalt shingles, or cured concrete, with suitable primer and offer the following benefits:

J	Excellent waterproofing characteristics
J	Superior exterior durability and UV light resistance.
J	High temperature stability.
J	Dirt pick-up resistance.
J	Easy application by spray, brush, or roller-thus lowering application costs.
J	Resistant to common chemicals

Colours

AQUASMART-PU is stocked in white colours. Other colours available are yellow, Blue, red, brown, gray and black.





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Warranty

AQUASMART-PU warranty available in five (5), ten (10) and fifteen (15) year periods. The warrantor guarantees the installations against leaks caused by normal weather. Refer to individual warranty document for additional information.

TYPICAL CHARACTERISTICS:

Nature	Two-component PU based coating
Colour	White / Other Colours
Application time at 30°C	3 to 4 hours
Surface dry time at 30°C	2 to 3 hours
Hard dry time at 30°C	8 to 10 hours
Complete curing time at 30°C	3 days
Recoat ability time at 30°C	4 to 5 hours
Finish	Smooth and matt
Dry film thickness	120 µm (two coats) for metal, 250 micron for concrete
Coverage	70-80 ft ² /kg (120 microns) (as per roughness or porosity of surface)
Tensile Strength (ASTM D412)	>20 MPa @ 25 °C (for Concrete Substrate)
Elongation	50%
Recommended Coats	2 to 3 coats depending upon the substrate
Shore D Hardness	78
Colours	RAL 9003 (white), RAL 5012 (blue), special colours
Packing	5kg, 20kg pack

Mixing

Use a power mixer capable of uniformly mixing the entire container prior to use. Reducing the mixture is not recommended, as it affects the coatings ability to achieve a heavy film build with excellent verticle hold and hide.

Surface Preparation

All surface must be clean and dry and free of any dust, dirt, oil, surface chemicals or other chemicals or other contaminants that may interface with optimum adhesion. All loose gravel, if present, shall be removed by power sweeping and/or vacuuming. Remaining gravel shall be power spud to achieve the smoothest surface possible.





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Any unsound areas in the substrate, i.e. blisters, delamination, deterioration, moisture saturation, severe corrosion, sharp projections, ridges, etc. shall be repaired or replaced.

Low areas that hold excessive ponding water must be brought into conformance by installing additional drains or adding additional slope to the existing drains.

Application

Reinforce all moving cracks, seams, splits, control joints, verticle/ horizontal interfaces, roof termination pints, openings, transition areas, around the base of all vents pipes and other protrusions, as well as around HVAC units and other roof mounted equipment with **Fibrecon Mesh**, a polyester reinforcement fabric, embedded in to **MULTITHANE PRIMER 21** followed by **AQUASMART-PU**.

All surface preparation materials shall be allowed to dry thoroughly prior to application of the coating.

Immediately prior to the application of the coating system, all dust, dirt, and other contaminants shall be flown off the roof surfaces to be coated using high pressure compressed air.

- 1. Apply high quality PU primer such as **Multicoat MultiDur ZR Primer** (25-35 micron) for metal and **Multithane Primer 21** for concrete and similar surface in one coat.
- 2. Apply **AQUASMART-PU** after mixing component A and B to uniform consistency, at a minimum rate of 0.65 kg/m² or as per desired thickness.
- 3. After allowing the first coat to dry, apply second coat **AQUASMRT-PU** at a minimum rate of 0.65 kg/m² or as per desired thickness.
- 4. The total coat, minimum dry film thickness required at any location shall be 120-150 micron for metal roofing and 1.00-1.50 mm for concrete roof (excluding primer).

Upon completion of the coating system, Multichem, Architect, or Applicator shall make final inspection to determine the dry film thickness of the coating and to verify that systems meets the manufacturers requirement of Warranty.

Thinning





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None required.

CLEAN UP

Clean all tools and equipment with warm soapy water or MultiKleen® products.

SAFETY DATA:

J	Irritating to eyes, respiratory systems and skin.
J	Risk of serious damage to eyes.
	Keep out of reach of children. In case of contact with eyes, rinse immediately with
	plenty of clean water and seek medical advice.
J	After contact with skin, wash immediately with plenty of clean water.
	Wear suitable protective clothing, cloves and eye/face protection.

Please consult our technical department for further information.

WARRANTY

Multichem warrants **AQUASMART-PU** to be free from manufacturing defects as defined in this warranty. Manufacturing defects are considered to be those defects that occur due to the quality of the ingredients or from the manufacturing process itself. This warranty does not include labor costs and other costs or expenses associated with the removal or installation of **AQUASMART-PU**.

Because the Multichem does not perform the actual installation, it cannot be held responsible for the results of the application. Multichem specifically disclaims problems that occur due to weather conditions, structural movement, structural design flaws and application techniques.

This warranty is in lieu of all other warranties expressed or implied including the warranty of merchantability and fitness of purpose and of all other obligations or liabilities on Multichem part. Multichem neither assumes nor authorizes any person to assume for Multichem any liability in connection with the sale and installation of AQUASMART-PU.

Because of constant improvement of manufacturing techniques and formulations, Company reserves rights to change this datasheet and its contents without prior notice.

