



ALFA PU-1K

(Premium Quality Hybrid Water Base PU Membrane)

DESCRIPTION

High Performance, Polyurethane hybrid UV stable, Ecofriendly Flexible, Water-based modified water Proofing membrane.

Flexible single component liquid membrane. Based On an advanced polyurethane modified water based Polymer which is a proven solution for Weatherproofing & waterproofing applications for Use in roofing, basement, shower recesses etc.

STANDERD:

ALFA PU-1K is a Class III , international waterproofing building code of practice standards.

USES

Suitable for use on many porous substrates including Gyprock, fibre cement, concrete, render brickwork, render and plasterboard. ALFA PU-1K can be used to help water/damp proof basements, kitchens, bathrooms, balconies and decks, shower recesses, repair and restoration of leaking roofs as well as a damp proof membrane in sandwich panel construction. It is also suitable for Deck areas & can be used in planter boxes and retaining walls as long as it is protected by drainage or Corflute.

BENEFITES

provides many benefits to the user including

- **Water based** for easy clean up in water
- **Flexible** Class 3 membrane (350% + Elongation)
- **Eco-Friendly** low odor for easy use without irritation

- **Fast drying** can be recoated after 3-5 hours at normal room temperature
- **UV stable** non yellowing, can be used externally
- **ALFA PU-1K External/Internal applications** can be used both internally and externally(saves the user from buying two separate water proofing systems)
- **Compatible** works well with many cement based tile adhesive
- **Reinforcement** does not requiring reinforcing for it to be effective
- **Excellent crack-bridging** properties
- Substrate temperature reduction up to 8°C in the peak summer

ALFA PU-1K cures to a permanently flexible seamless membrane that has good adhesion to a wide range of substrates. Unlike more traditional bitumen based products,

ALFA PU-1K does not readily embrittle with age, exposure to ultra violet radiation or weathering, and hence it does not crack or craze due to it's flexible properties.



INSTRUCTIONS FOR USE

Surface Preparation

General – Surface should be sound, clean and free of dust, oil, grease and curing compound. Loosely adhered particles such as rust scale, cement smears should be thoroughly cleaned with a wire brush or another such implement.

Concrete all new concrete surfaces must be fully cured (6-8 weeks) with a semi-rough surface appearance. Rendered surfaces must be allowed to cure for a minimum of 7 days prior to the commencement of waterproofing. All surfaces must as level as possible with a slope variation not exceeding 4mm.

Gypsum/Plasterboard sheets must be installed to the manufacturer's guidelines with all joints being covered with a 50mm wide PP or PE tape whilst all screw/nail heads must be sealed with epoxy. When used as a wall substrate, sheet thickness should be a minimum 10mm thick.

Fibre Cement sheets when used as a floor/wall underlay sheets should be a minimum 6mm thick whilst compressed fibre cement sheets should be a minimum 9mm thick for walls and 15mm thick for floor applications.

Metal Surfaces ensure surfaces are rust free with any hairline cracks being filled with a suitable gap filler whilst cracks larger than 2mm should be filled.

PRIMING

All surfaces to be primed with the same product diluted with 20% water whilst metal surfaces need to be primed with a suitable water based primer.

The primer can be applied with a brush, roller or squeegee depending on the size of the area required to be primed. Allow 30–45 minutes at a temperature of 20 °C for the primer to dry before commencing to waterproof with ALFA PU-1K

METHOD OF APPLICATION

1. Remove all loose material by vigorous brushing, wire brush if necessary.
2. Treat any fungal growth with proprietary fungicide as recommended.
3. Allow surface to clean.
4. Fill cracks and voids with a mastic sealants.
5. Prime with **PRIMER** (40 – 60 sq / kg depending on substrate porosity) which within 1-3 hours.
6. Once the primer is completely dry then apply first coat which when dried follow it up with the second coat at 90° right angles to the first coat ensuring a complete coverage. Please note that air bubbles trapped under the surface must be removed in order to achieve the maximum waterproofing effect. Apply third coat if required



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7. ALFA PU-1K requires to applied at minimum thickness of 1.0 mm of DRY FILM THICKNESS (DFT) in 2 coats
8. Apply a minimum 1kg coverage @ 10 sq/f per two coats perpendicular to each other over a primed surface
9. In case of multi-coat application, the previous coat should be touch dry depending on the weather conditions).
10. Ensuring that the surface is smooth and without any pinholes allow 24 hours at 20°C before commencing to apply a suitable tile

Substrates with poor adhesion to the underlying structure (e.g. blistered roofing felt) may also cause problems in providing sound over-coating.

Preferential vapour drive in buildings must also be borne in mind when over-coating the roof and it may be judged expedient to employ ventilation to cope with transmission of high levels of moisture vapour.

Coverage rates may vary with surface and porosity. The information given is based on average usage. A site trial is recommended.

adhesive. Please note that a third coat may be required if any imperfections are present in the membrane.

11. ALFA PU-1K can be applied by brush or roller without the need to mix, stir or heat before application. ALFA PU-1K can be made into a sprayable grade.

Minor damage to ALFA PU-1K can be repaired by removing loose membrane; cleaning the surrounding area with water; overlapping by 150mm; priming the area with PRIMER and finishing with two coats of ALFA PU-1K.

ALFA PU-1K is available in various colours on request..

Cleaning

All tools and implements should be thoroughly cleaned with water immediately after use.

ALFA PU-1K works best when it is applied when the temperature is between 5°C and 40°C .

COVERAGE

Supplementary Notes

The dry film thickness (DFT) of ALFA PU-1K should not be less than 0.50mm or more than 0.90mm for each coat. Rough surfaces will reduce the coverage rate and consequently more material must be allowed to achieve the minimum DFT.

Surfaces previously treated with silicone-based materials will inevitably be difficult to overcoat and this should not be attempted with ALFA PU-1K

Coverage depends upon the nature of the surface to be applied. But on average, smooth surface will give approx 12 sq ft per kg in two coats. Two coats of the product will give 1000 microns dft.

And

Primer coverage is 40-60 sq.f / kg in 20% Dilution

PACKAGING

ALFA PU-1K can be supplied in 1, 5, 10, 20, 50, 200 kg pack

STORAGE / SHELF LIFE

When stored in a cool, dry place the contents of the original unopened container can typically be used approximately twelve (12) months from the date of manufacture.

Health, Safety and Handling

Avoid prolonged contact with skin. To avoid accidental contact with eyes please wear protective clothing, goggles, gloves, safety shoes etc if accidental contact with eyes does occur, immediately flush with water and seek medical advice.

Skin Contact

Flush with water or soap and water till all traces have been removed. Seek medical attention if required.

The information given in this Technical Data Sheet on **ALFA PU-1K** and its use and application is given in good faith and is based on knowledge and experience of the product.

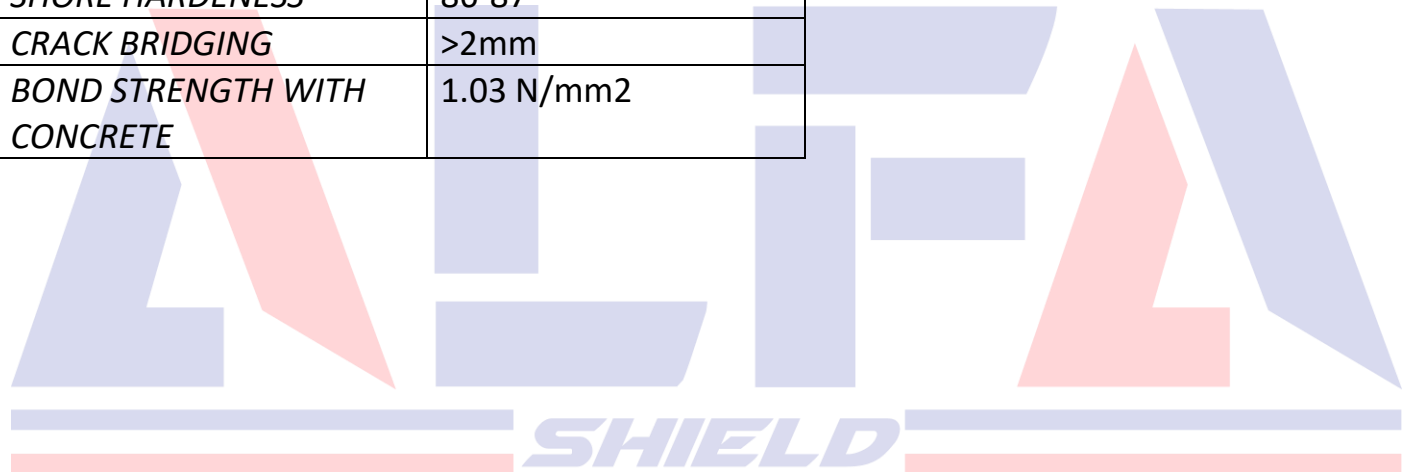
This information is given in accordance with the latest technical developments. In reality, differences in substrates, conditions and materials may occur which will void any warranty in respect to the fitness for any particular purpose of this product.

The Company does not accept any liability based on the advice given or the performance of this product.

ALFASHIELD POLYMER LLP

TECHNICAL SPECIFICATION:

APPEARANCE	WHITE THIXOTROPIC
<i>SOLID CONTENT</i>	60±2%
<i>ELONGATION AT BREAK</i>	>450%
<i>DENSITY</i>	1.3±0.01 G/ML
<i>VISCOCITY</i>	30000-40000 cps
<i>TENSILE STRENGTH</i>	3 N/mm ²
<i>TOUCH DRY TIME</i>	2 Hr. @30°c
<i>FULL CURE TIME</i>	5-6 days
<i>SHORE HARDENESS</i>	86-87
<i>CRACK BRIDGING</i>	>2mm
<i>BOND STRENGTH WITH CONCRETE</i>	1.03 N/mm ²



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