

# POLY PU™ 1000

## MODIFIED POLYURETHANE/BITUMEN WATERPROOFING LIQUID MEMBRANE

### DESCRIPTION

POLY PU™ 1000 one-component polyurethane modified, moisture curing waterproofing membrane. After curing it provides a tough elastomeric, impervious moisture barrier that bonded to almost all surfaces. Suitable for application by brush, roller or trowel.



### AREAS

- Roof tops- To be protected with Screed
- Gutters
- Retaining walls
- Terraces, balconies and patios
- Bathroom
- Planter Boxes
- Pools decks
- Basement Exterior Walls
- Courtyard

### FEATURES & BENEFITS

- + Easy to apply
- + Excellent adhesion to substrates
- + Water based and environment friendly
- + High flexibility and elastic
- + Suitable for wet and damp conditions.
- + Easy Application.

### TECHNICAL CHARACTERISTIC

	Result
Form	Brownish Black Liquid
Density, Kg/m <sup>3</sup>	1.35
Adhesion to substrate, N/mm <sup>2</sup>	> 1
Elongation at Break, % ASTM D 412	>800
Tensile Strength, MPa ASTM D 412	1.6
Water Vapour Transmission, gr/m <sup>2</sup> .hr ASTM E 96	3.7
Shore Hardness Type A,	50
Tear Strength, kgf/cm <sup>2</sup>	7.6
Modulus of Elasticity kgf/cm <sup>2</sup>	5.8
Puncture Resistant, Kgf ASTM E 154	3.6
Chemical Resistance ASTM D 543 (saturated calcium hydroxide)	No visible change
Adhesion to concrete, N/mm <sup>2</sup> JIS A 6909	2.1

### PRODUCT PACKING

Packing	: 20 kg/pail
Shelf life (un-open)	: 12 months

## APPLICATION

### **SURFACE PREPARATION**

All substrate should be free from oil, grease, wax, dirt or any other form of foreign matter which might affect adhesion. Spalled and deeply disintegrated concrete should be removed to sound concrete and repaired.

Newly placed concrete should be cured for minimum 14 days before application.

### **APPLICATION**

#### **Priming**

Priming is required for highly porous areas. Apply primer layer at rate of 0.1-0.3 kg/m<sup>2</sup>/coat of **POLY PU™ 1000** (5% dilution with water).

#### **Application**

Apply first neat coat by roller, brush or squeegee to the substrate. Allow the first neat coat to cure approximately 4 hours before applying another coat.

**POLY PU™ 1000** should be applied to the recommended coverage as stated.

### **CURING and PROTECTION**

Allow to the first coat to cure for approximately four hours before applying the second coat. For optimum performance, **POLY PU™ 1000** should be allowed to cure for **72 hours** before any tiling works or water-ponding test/water sheet test. During that time, precautions must be taken to avoid damaging the coating.

For temperature above 27°C, add water to liquid to adjust the consistency to achieve the coating thickness of 1 mm (in 2 coats). For areas where cracking on substrate is expected, such as movement joints, contraction joints etc, fabric reinforcements are required.

## **MAINTENANCE OF MACHINERY & TOOLS**

**POLY PU™ 1000** should be removed from tools and equipment immediately after use with clean water. Hardened material can only be removed mechanically.

### **COVERAGE**

0.5 kg/m<sup>2</sup>/coat

10 m<sup>2</sup>/ 20 kg/ 2 Coats – Depending on substrate condition and wastage.

### **HEALTH & SAFETY**

Use protective clothing, gloves and goggles at all time when handling materials and high pressure machine.

Wash with plenty of water and soap if liquid is smeared on skin. Seek immediate medical advice in case of material comes in contact of eyes or swallow. Make sure proper ventilation at work site is adequate.

### **POLYCELL TECHNICAL DEPARTMENT**

OUR COMPANY COMMITMENT – Polycell's personnel are all fully trained to provide product information, guideline, training and technical assistance. We also provide product presentation and technical specification to Architects and Engineers.

The information and recommendations relating to the application and end-use of the product are given in good faith and based on tests which we believe to be reliable. However, 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. No guarantee of their accuracy can be made because of the great range of field conditions and variations encountered in raw materials, manufacturing equipment and methods. Thus, the products are sold with limited warranty only, and on condition that purchasers will make their own tests to determine the suitability of the product for their particular purposes. Under no circumstances will Polycell be liable to anyone except for replacement of the products or refund of the purchase price.

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