

## **G18 – Two components, water based PU roof sealing system**

Cat no. 348

Version: 02/16

### **Product description**

**G18** is a highly reflective water based polyurethane membrane, that when dried becomes a resistant, long lasting roofing membrane, with excellent adhesion to the substrate, as well as a high bridging capability over structural cracks. **G18** is a paste material, easy to use for airless spray, roller or brush spreading. **G18** is a water-based, user friendly and non-inflammable material.

### **Application**

**G18** is used for sealing new concrete roofs, old bitumen sheets coated with aggregates, old acrylic coatings, old polyurethane coatings and metal roofs. **G18** extends the life of an existing roof and enhance the Solar Reflective Index (SRI) of the roof.

### **Technical specifications:**

	<b>PART A</b>	<b>PART B</b>
<b>Appearance:</b>	White paste material	Transparent liquid
<b>Specific gravity:</b>	1.35 gr/ml	1.10 gr/ml
<b>Viscosity:</b>	35,000 cps.	500-800 cps.
<b>Pot life after mixing:</b>	4 Hours in 20°C	
<b>Min application temp.</b>	8 °C	
<b>Elongation: (ASTM D-412)</b>	240%	
<b>Cold Flexibility: (ASTM D-522)</b>	-30°C	
<b>Tensile strength: (ASTM D-412)</b>	>2.60 MPA	
<b>Accelerated weathering in U.V. (2000 hours): TM D-4799</b>	Very good resistance	
<b>Water pressure resistance: (DIN 52123)</b>	1.0 Atm. , 24 hours	
<b>Adhesion: (ASTM C- 794)</b>	Excellent adhesion to concrete, bitumen membranes covered with aggregates, acrylic and PU coatings, metal.	
<b>Resistance to fungus (ASTM G 21)</b>	Resistant	

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### **Advantages**

- \* A complete liquid waterproofing system for a wide variety of applications.
- \* Fast application.
- \* Seamless
- \* improved resistance to standing water
- \* High UV resistance & Solar Reflectivity
- \* Resistant to bacterial attack.
- \* Resistant to algae and fungi
- \* VOC free

### **Instructions for use:**

Surface preparation:

Check that gutters are in good working order, that walls and floor meeting corners are rounded, and verify minimum slopes of 2%.

#### **For a new concrete roof:**

Application should be performed on a stable, clean and dry concrete (not foamed concrete) that was casted minimum 30 days prior to application.

Remove intensively all loose particles. Apply 200 gm/m<sup>2</sup> of **Aquapoxy**.

Drying time: 1-2 hours. In case of a porous concrete, apply additional layer of **Aquapoxy** in quantity of 150-200 gm/m<sup>2</sup>. Allow to dry 1-2 hours (in winter time: 4-5 hours).

#### **For a roof coated with old acrylic or old PU sealing product:**

Remove intensively loose membrane parts. Rinse intensively the roof to remove mud. In case the surfaces are chalked, remove this by polishing. Fill depressions deeper than 3mm with cement mortar, modified with acrylic polymer (in case of PU old coating, apply first a thin layer of **Aquapoxy**). Wait until completely dry. Apply 200 gm/m<sup>2</sup> of **Aquapoxy**. Drying time: 1-2 hours.

#### **For a roof coated with bitumen membranes covered by aggregate:**

Remove loose particles off the roof and fix with new bitumen membranes at these points. Rinse intensively the roof to remove the mud and wait until completely dry. Apply **Aquapoxy** at a quantity of 300 gm/m<sup>2</sup>. Allow to dry for 1-2 hours.

#### **For a metal roof (galvanized or paint coated):**

Remove intensively all sediments and loose particles. Strengthen the screws. Apply polyurethane mastic type BPU-2 at all overlap lines between two adjacent metal plates, over the joints and the screws. Apply **Primer MS-1** at a quantity of 200 gm/m<sup>2</sup> over the metal surface. Wait 1-2 hours for drying (in winter time: 4-5 hours) prior to application of **G18**.

In case of paint coated metal roof, it is highly recommended to apply first the waterproofing system on a small spot in order to verify the proper adhesion to the specific paint.

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### **For an old asbestos roofs:**

Remove intensively all sediment and loose particles. Rinse intensively the roof to remove the mud and wait until completely dry. Strengthen the screws. Apply polyurethane mastic type BPU-2 at open overlap lines between two adjacent plates and over the screws. Then, apply **Aquapoxy** in a quantity of 350 gm/m<sup>2</sup>. Allow to dry for 1-2 hours and then apply additional layer of **Aquapoxy**, 150-200 gm/m<sup>2</sup>. Allow to dry 1-2 hours (in winter time : 4-5 hours).

### **Preparation of the product:**

Add component B (small can) to component A (pail) while slow stirring with electric drill. Then continue to mix for additional 5 minutes until homogeneous paste is achieved.

## **Performing of sealing layer:**

1. Apply **G18** in quantity of 1.25 kg/m<sup>2</sup> along the wall/floor meeting corners, gutters, pipe penetration and along cracks (in 30 cm strips). Let it dry for 2 - 4 hours.
2. Apply a first layer of **G18** over the surfaces by spray or brush, in a quantity of 1 – 1.25 kg/m<sup>2</sup>. Letting to dry for 3 -5 hours.
3. Apply 1 – 3 layers of **G18** in a quantity of 1 – 1.25 kg/m<sup>2</sup>.  
Drying time between layers: 3 – 5 hours.  
Total quantity: 2.5 – 4.5 kg/m<sup>2</sup>, depends on slopes, type of substrate and dimensions of the roof.

For achieving a reliable and long lasting waterproofing system, It is recommended to reinforce the fresh **G18** with polyester fabric type POLYFABRIC (a glass net is acceptable as a less qualified reinforcement). A minimum quantity of 4 kg/m<sup>2</sup> **G18** is recommended in this case.

Apply **G18** also over the parapets in quantity of 1.6 kg/m<sup>2</sup> - 0.8 kg/m<sup>2</sup> for each layer.

When using a brush for coating, the layers should be performed in cross brushing directions.

## **Drying time:**

Contact dry time: 3-5 hours (in 25 °C and 50% R.H).

Final drying: 14 days.

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### **Storage:**

In the shadow, protected from extreme cold (below 5°C) and high temperature conditions.

### **Packaging:**

Part A : 20 kg pail.

Part B : 340 gm small can.

### **Warning and safety measures:**

- Do not swallow, wash hands with water and soap immediately after use.
- Drying time may change due to variation in temperature and relative humidity conditions, as well as layer thickness.
- Do not apply two days before rain or about 12 hours before dew.
- Do not apply in temperature below 8°C, and not more than 35°C.
- **G18** should not be diluted, do not add water or any other material.
- Flood test can be applied at least 14 days after application.
- **G18** should not be applied in a rate of more than 1.25 kg/m<sup>2</sup> for each layer.
- During the winter time (in temperature below 13 °C), let the first layer of **G18** dry for 12 hours prior to application of the second layer. The quantity for each layer will be 1 kg/m<sup>2</sup>.
- In case the drying time between the first and the second layer of the **G18** is more than 24 hours, you should apply a layer of **Aquapoxy**, 150 gm/m<sup>2</sup> on the first layer and wait 1-2 hours for drying, prior to the application of the second layer.