

## Technical Data Sheet ISSUED SEPTEMBER 2023

### **PRODUCT DESCRIPTION**

WPA 3480 is a two-component tough, resilient, polyurethane elastomer membrane producing long-life waterproof protection. It is a premium grade, elastomer comprising of a polyether polyol and MDI based isocyanate. The system has been formulated as a slow reacting waterproofing elastomer for hand applied applications. WPA 3480 uses the latest technology to provide long-life, protective barriers to prestigious construction projects.

WPA 3480 cures to form a high performance seamless, tough, durable, elastomeric waterproofing membrane, with good crack bridging properties. WPA 3480 has excellent adhesion to most suitably primed building substrates and is suitable for above ground applications.

Recommended for:

- Podiums
- Roofs
- Balconies
- Plant rooms
- Carparks

### **FEATURES AND BENEFITS**

- Class III membrane
- Hi abrasive resistance with  $80 \pm 5$  Shore A
- Permanently flexible
- Good chemical resistance
- 100% solids
- Excellent durability and abrasion resistance
- Mercury free

### **APPLICATION PROCEDURE**

#### **Substrates**

WPA 3480 is suitable for concrete, screeds, masonry block, steel and PAA certified exterior grade plywood.

#### **Substrate Preparation**

All surfaces to be waterproofed must be firm, clean, dry, sound and smooth. All laitance, grease, oil, wax, curing compounds, loose material, paint and any other contaminants which may reduce or prevent adhesion must be mechanically removed. Grinding, scarifying or shot blasting may be required to achieve an open, textured surface.

Masonry surfaces must be pointed flush and surface defects repaired. Repairs must be carried out using an appropriate concrete repair mortar.

New concrete must be cured for minimum 28 days. Render and cement screeds must be cured for minimum 7 days. Damp concrete render or screeds must be allowed to thoroughly dry.

The substrate temperature should be a minimum of 10°C to achieve good adhesion. For substrate temperatures below this, consult WPA Technical Department.

#### **Static Crack Treatment**

For cracks greater than 2mm, clean cracks thoroughly before filling with WPA FC sealant.

WPA 3480 cannot span gaps. For dynamic cracks/expansion joints and control joints, the use of WPA Elastoband or WPA Butyl Tape system is recommended. Contact the WPA Technical Department for further advice.

#### **Priming**

Substrates must be primed with WPA 560 Moisture Seal or WPA 3460 primer.

Metal surfaces must be prepared by blast cleaning and primed with an appropriate metal etch primer. Contact the WPA Technical Department if there is any doubt about the suitability of substrates.

#### **Component Preparation**

**Part A** - ISOCYANATE does not need to be mixed prior to use.

**Part B** - POLYOL should be mixed each day prior to use as the components can separate out overnight. It should also be mixed after extended breaks, such as lunch breaks. Please do not over mix as the aeration will reduce the physical properties of the resultant elastomer.

It is recommended that both components are preconditioned to 22-25°C to ensure that the system has consistent reactivity and performance. The drums must be above 10°C before application.

Individual measure each WPA 3480 Membrane Polyol and Isocyanate component accurately by weight into a clean container. Then thoroughly mix with an electric stirrer. The preferred material mixing, and application condition is between 10°C and 30°C.

The relative humidity should be <85%.

Pot Life once mixed 30 minutes at 22°C.

#### **Application**

WPA 3480 must be applied in accordance with AS 4654.2 and a fillet is required at all horizontal and vertical transitions. Install the fillets using WPA FC sealant.

Prior to application, confirm substrate temperature and moisture content, relative humidity and dew point.

WPA 3480 can be applied in temperature of up to 35°C.

#### **BEWARE OF CONDENSATION!**

The substrate temperature must be at least 3°C above dew point to reduce the risk of de-lamination due to condensation.

Apply WPA 3480 using either option below, at or above the minimum required thickness in:

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- One coat by 5mm notched trowel/notched squeegee.
- Two or more coats by roller, allowing to cure 12 to 24 hours between coats.

Apply WPA 3480 so that a minimum dry film thickness (DFT) of 1.5mm (1500 microns) is achieved (approximately 2.3kg/M<sup>2</sup>).

WPA 3480 must be applied with a minimum of two coats to achieve a dry film thickness of not less than 1.5mm (1500 microns). (Unless applied by a notched squeegee) Test the depth of coats with a wet film thickness gauge at regular intervals during installation.

Where applied by a brush or roller, apply the first coat of WPA 3480 after the primer has sufficiently dried. Apply an even and consistent coat of approximately 0.75mm film thickness.

Once the first coat has dried, apply a second coat of WPA 3480 at right angles to the first coat. Apply an even and consistent coat of approximately 0.75mm film thickness.

Where a UV protection or a non-slip finish is required, apply a top coat by a two-stage process as per the WPA ATC TDS.

To achieve a slip resistant coating for service foot traffic areas a topcoat of WPA ATC is required. Add 1 bag of WPA 36NS into 18.9lt of WPA ATC and mix with a mechanical mixer. Apply an even and consistent coat of approximately 0.31 litre/M<sup>2</sup>.

### Performance Data and Physical Properties @23°C & 55% RH

- Allow 8 hours between coats.
- Allow 24 hours drying prior to covering with cement screeds.
- Allow 24 hours to fully cure.

Polyol	
Appearance	Grey liquid
Specific Gravity	1.06 +- 0.02 g/ml
Brookfield Viscosity (22°C)	38,000 +- 5,000 mPa.s

Isocyanate	
Appearance	Clear Colourless liquid
Specific Gravity	1.1 +- 0.01 g/ml
Brookfield Viscosity (22°C)	500 +- 100 mPa.s

Mixed System Specification:	
Gel Time (22°C)	30 minutes
Cure Time (22°C)	120 minutes

Test	Method	Specification
Hardness (Shore A)	ASTM D1737	80 +- 5
Tensile Strength	ASTM D412	10.5 N/mm <sup>2</sup>
Elongation	ASTM D412	>300%
Tear Strength	ASTM D624 (Die C)	30N/mm

### LIMITATIONS

Do not apply **WPA 3480**:

- Over damp, wet or contaminated substrates;
- If it is raining or if rain is imminent;
- Directly over any existing coatings;
- As an exposed membrane. WPA ATC must be applied as atop coat;
- In water tanks containing potable water. Use WPA 3400 PW
- To areas subject to negative hydrostatic pressure or rising damp.

### Clean Up

Avoid spills. Equipment should be immediately cleaned with Xylene Solvent. Hardened or cured material can only be removed mechanically.

### Disposal

Liquid Systems: Liquid polyol or isocyanates should be disposed of with an EPA approved industrial waste company which meet all applicable federal, state and local laws and regulations.

Cured Urethanes: Fully reacted and cured polyurethanes are inert and can be disposed of as regular landfill.

Container: Dispose of decontaminated drums in accordance with all applicable federal, state and local laws and regulations.

**Do Not Re-use Empty Container.**

**Do Not Cut or Weld Empty Container.**

**WATER CONTAMINATION CAN CAUSE DANGEROUS PRESSURE BUILD UP IN ISOCYANATE DRUMS**

### Packaging

WPA 3480 is available in 24.5kg Kit.

- Polyol (C\_ES5168-1237) 12kg
- Isocyanate (WPA3480ISO) 12.5kg

### Coverage

2kg of WPA 3480 will cover approximately 1M<sup>2</sup> at 1.5 mm coating thickness. Allow for processing losses, wastage, etc.

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### Storage and Shelf Life

**POLYOL** should be stored in closed containers under dry conditions out of direct sunlight between 18 and 25°C.

**ISOCYANATE** should be stored separately from the polyol component but under the same conditions.

Both products will have a minimum shelf life of six months when stored under these conditions.

### SAFETY INSTRUCTIONS

For instructions on the safe use of WPA 3480 please refer to the latest version of the Safety Data Sheet available from our website [www.wpa-aus.com.au](http://www.wpa-aus.com.au).

### WARRANTY CONDITIONS

Bayset Pty Ltd trading as Waterproofing Products Australia (Bayset) offers a limited warranty in respect of this product, subject to certain terms and conditions set out in the warranty documentation which has been made available at [www.bayset.com.au](http://www.bayset.com.au). Please contact Bayset directly to obtain a copy of the warranty documentation relevant to this product.

### DISCLAIMER

The technical information and application advice given in this Technical Data Sheet is based on the present state of Bayset Pty Ltd's best scientific and practical knowledge and is intended to give a fair description of the product and its capabilities. As the information contained herein is of a general nature, no assumption can be made as to a product's suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness, either expressed or implied, is given other than those required by law. In practice, the substrate and environmental conditions vary widely, making it essential for the user to determine the product's suitability for a particular application and that the product is not used beyond its physical limitations. The user is responsible for checking the suitability of products for their intended use.

### \*NOTE

Field service where provided does not constitute supervisory responsibility. Suggestions made by Bayset Pty Ltd (trading as Waterproofing Products Australia) either orally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they, and not Waterproofing Products Australia, are responsible for carrying out procedures appropriate to a specific application.

DOCUMENT CONTROL	
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