WPA 100

WPA WATERPROOFING PRODUCTS AUSTRALIA 100 FIBRE-REINFORCED WATERPROOFING MEMBRANE

Technical Data Sheet ISSUED FEBRUARY 2025

PRODUCT DESCRIPTION

WPA 100 is a single component, fibre reinforced, rapid drying, cementitious waterproofing membrane. It is based on special cements, modified with polymers, selected graded aggregates and special waterproofing additives to produce a flexible waterproofing compound.

WPA 100 is suitable for both positive and negative side waterproofing applications and is capable of withstanding significant strain.

WPA 100 has excellent adhesion to concrete, block work, cement render and most cementitious substrates. WPA 100 is to be used in conjunction with WPA Elastoband SG or WPA Butyl Tape for maximum performance.

Recommended for:

- Lift Pits
- Retaining Walls
- Basement Walls as a damproof membrane
- Planter Boxes
- Water Tanks
- Swimming Pools & Spas
- Water Features
- Fish Ponds
- Facade Walls under tile & stone
- Internal Wet Areas
- Balconies & Decks

FEATURES AND BENEFITS

- Class I membrane in accordance with AS/NZS 4858 & AS 4654.1
- AS 4020:2018 approval for use with potable water
- Fast curing
- Suitable for both positive and negative hydrostatic water pressure applications
- Permanently flexible
- Completely resistant to emulsification

APPLICATION PROCEDURE

Substrates

WPA 100 is suitable for concrete, render, screeds, block work and most types of cementitious substrates.

Always contact the manufacturer if there is any doubt about the suitability of the 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. Masonry surfaces must be pointed flush and surface defects repaired.

When used in area subject to negative hydrostatic pressures, all active leaks are to be treated with WPA Plug. New concrete must be cured for a minimum of 28 days.

CodeMark Australia | CMI CERTIFICATION
Certificate CM40317
Certificate CM40318

Render, cement screeds and core-filled block work must be cured for a minimum of 7 days.

WPA 100 is suitable for use in concrete and masonry swimming pools, spas and ponds provided they are rendered prior to the application of WPA 100 and the membrane is covered by suitable tile finishes installed with TPA Lite tile adhesive. Cementitious swimming pool finishes may also be applied to WPA 100.
A bond coat may be required, refer to coating manufacturer.

Static Crack Treatment

WPA 100 cannot span gaps. For dynamic cracks/expansion joints and control joints, the use of the WPA Elastoband SG or WPA Butyl Tape systems are recommended. Contact the WPA Technical Department for further advice.

Priming

Porous substrates must be adequately dampened to a point of dry saturation with clean water prior to the application of WPA 100.

Dense substrates, such as metals or PVC must be primed with WPA 160.

Mixing

WPA 100 is mixed with water according to the intended application method. Add the appropriate amount of water into a bucket and slowly add the WPA 100 powder while slowly stirring with a mechanical mixer. Continue to stir until homogenous, lump free mixture is obtained. Do not mix by hand.

Mixing ratios may be adjusted as follows:

Roller or Brush application	5.6 L water / 20kg bag
Trowel application	4.3 L water / 20kg bag

Product that has been mixed and allowed to stand for longer than 2 hours, or has become very thick, should be discarded.

Application

WPA 100 must be applied in accordance with the applicable provisions of the National Construction Code.

WPA 100 requires a suitable detailing system for all horizontal and vertical transitions. Positive applications will require WPA Elastoband SG or WPA Butyl Tape at all transitions.

Negative applications will require a suitable cove utilizing RLA HB80 grout at all transitions.

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Using a brush, roller or trowel, apply the first coat Of WPA 100 after the substrate has been properly prepared. Apply an even and consistent coat of a minimum 1mm and a maximum 2mm wet film thickness.

Once the first coat has dried, apply a second coat of WPA 100 at right angles to the first coat. Apply an even and consistent coat of a minimum of 1mm and a maximum 2mm wet film thickness. Test the depth of coats with a wet film thickness gauge at regular intervals during installation. Allow the final coat to cure for 24 hours prior to installing tiles. Allow the membrane to cure for 7 days in swimming pools and 14 days in water tanks.

Retaining walls and planter box applications will require WPA Drainage Cell to be installed to the entire waterproofed area, once the membrane has fully cured.

The final dry film thickness for applications subject to positive hydrostatic pressure must be no less than 2.0mm and 3.0mm for applications subject to negative hydrostatic pressure.

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

Recoat time	• 2-4 hours between coats
Curing Time Prior to Following Trades	• 24 hours for tiling / screeds • 10 days for cementitious swimming pool finishes • 14 days if in contact with potable water • 48 hours prior to installing WPA Drainage Cell • Allow longer drying times in cool temperatures and higher humidity conditions
Resistance to Hydrostatic Pressure	• 5.0 bar (50m) for both negative and positive hydrostatic pressure
Pot Life	• 1 hour
SG of Mixed Product	• 1.50 g/cm^3
Water Vapour Transmition	• 0.65g/24h/m^2
Water Absorption	• 8.6%
Tensile Strength	• 2.4 Mpa
Dry Film Thickness	• Positive: 2mm • Negative: 3mm

Tiles & Screeds

Polymer modified adhesives must be used for direct fixing of tile installations over WPA 100 membrane.
When installing screeds, refer to the TPA range of bagged screed.

To reduce the possibility of surface contamination, it is recommended that tiling be carried out as soon as the membrane has cured.

LIMITATIONS

Do not apply **WPA 100**:

- Over wet (standing water) or contaminated substrates
- If it is raining or if rain is imminent
- Directly over any existing coatings
- As a high wear surface for foot or vehicle traffic
- Where ambient or surface temperatures are below 10°C or greater than 35°C

To reduce the possibility of surface contamination, it is recommended that tiling be carried out as soon as the membrane has cured.

Clean Up

Tools and minor spills can be cleaned with water while product is still wet. Cured WPA 100 can only be cleaned by mechanical means.

Packaging

WPA 100 is available in a 20kg bag.

Coverage

1.3 kg per M^2 at 1mm dry film.

The coverage figures are theoretical due to wastage and depending on the porosity and profile of the substrate, coverage figures may be reduced.

Shelf Life

Unopened bags can be stored for up to 12 months in a cool, dry and weatherproof environment. If stored at high temperatures, the shelf life may be reduced.

SAFETY INSTRUCTIONS

For instructions on the safe use of WPA 100 please refer to the latest version of the Safety Data Sheet available from our website www.wpa-aus.com.au.

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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. 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 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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Technical Data Sheets are subject to change without notice.
For latest revision, check our website at www.wpa-aus.com.au

This is a CONTROLLED document under WPA's Quality System.

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