

# **TECHNICAL DATA SHEET**

# **AQUA-STICK 1000**



Aqua-Stick WPM is a durable, self-adhering, butyl rubber sheet waterproof membrane with a polypropylene fleece backing, suitable for internal and external use. Aqua-Stick WPM has excellent crack bridging capabilities and is suitable for use as a crack suppression membrane underneath tile or stone.

Aqua-Stick WPM is compatible with Aus-Bond Ultra Prime, as well as with all Aqua-Flex, Aqua-Band, Aqua-Fab, Hydropel, and Aqua-Stick products.

**Aqua-Stick WPM** is a permanently flexible waterproof membrane that has excellent adhesion to a wide range of substrates (note that **Aus-Bond Ultra Prime** or **Hydropel 2 Part Epoxy** must be used on porous substrates before the application of **Aqua-Stick WPM**).

**Aqua-Stick WPM** will bond to existing acrylic and SBR membranes, and nonporous substrates.

**Aqua-Stick WPM** has high resistance to aging. Hence it does not crack or craze due to its flexible properties. Since **Aqua-Stick WPM** is elastomeric it is not adversely affected by extreme temperatures. Consequently, it does not crack at low temperatures or suffer thermal flow at elevated temperatures.

Suitable for hot or cold climates, will not break down or bleed.



#### **Uses:**

**Aqua-Stick WPM** is suitable for use on many porous and nonporous substrates including Gyprock, fibre cement sheet, concrete, render, screeds and plasterboard when used in conjunction with **Aus-Bond Ultra Prime** or **Hydropel 2 Part Epoxy Primer** (must be applied to a smooth, prepared substrate). **Aqua-Stick WPM** will bond directly to existing ceramic tile, glass, steel, laminate surfaces, colorbond sheeting, prepared fibreglass and sealed cement sheet flooring.

After installation, Aqua-Stick must be protected from long-term exposure to sunlight and weathering, to achieve this tiled on or overcoated with Aqua-Flex WPM C3 within 48 hours.

**Aqua-Stick WPM** can be used to water/damp proof basements, kitchens, bathrooms, balconies and decks, shower recesses, to repair and restore leaking roofs, and to provide a damp proof membrane in a sandwich panel construction. It is also suitable for deck areas, planter boxes and retaining walls as long as they are protected by a drainage mat or corflute protection sheet. Can be used as a flashing from window reveals to the main structure of the buildings.

#### **Benefits:**

- Flexible membrane (100% + elongation).
- Eco-friendly. No odour for easy use without irritation.
- No drying required can be tiled on immediately.
- Can be used both internally and externally.
- High resistance to aging.
- Compatible with good quality, polymer fortified, cement based tile adhesives.
- Does not require reinforcing to be effective.
- Excellent crack-bridging properties. Suitable as a crack suppression membrane over hairline cracks of up to 2.5mm. For cracks over this size consult ATA.
- For use as a decoupling mat over problem substrates.
- Use over cold joints to prevent cracking.
- Bonds directly to PVC and other plumbing fixtures.
- Aqua-Stick WPM will bond to Aqua-Flex WPM C3.



# **Typical Properties:**

Light grey rubber adhesive with a white
polypropylene fleece backing
Butyl Rubber Sheet
1.0mm
100%
N/A
Immediately
1.45g/cm <sup>3</sup>
100%+ AT 20°C
>100N longitudinal & transverse directions
>80N
>70N
<10mm
0°C to 40°C
-30°C to 90°C
C2 on Fleece
Heavy Duty

### **Primer:**

All porous areas to be waterproofed must be primed with **Aus-Bond Ultra Prime** or **Hydropel 2 Part Epoxy** primer and must be dry before the application of **Aqua-Stick**.

#### Instructions for Use:

### **Surface Preparation:**

Surfaces should be sound, clean and free of dust, oil, laitance, grease and curing compounds. Loosely adhered particles such as rust scale and cement smears should be thoroughly cleaned with a wire brush or another such implement. Scyon or other such sheeting must be thoroughly cleaned and sound.

## Concrete:

All new concrete surfaces must be cured (4 weeks old). Rendered surfaces must be allowed to cure for a minimum of 7 days prior to the commencement of priming and waterproofing.

### **Gypsum/Plasterboard Sheets:**

Must be installed to the manufacturer's guidelines.



#### **Bond Breakers:**

Use either **Aqua-Band** or **Aqua-Stick** in all internal corners, or follow the Australian Standards and install a 12mm bond breaker using a paintable silicone or urethane sealant.

**Aqua-Stick WPM** can be laid on horizontal surfaces and turned up vertical surfaces in one application (be sure to achieve a tight fit into the internal corners).

# **Light Weight Decks:**

When applying the membrane over a lightweight construction (timber and steel frames, cement sheet walls and floors) it is important to follow the guidelines and technical information supplied by the manufacturer. Some cement sheet suppliers recommend placing control joints directly over the joints in each of the sheets, some recommend that the sheets should be epoxy jointed, while others state the sheets should have silicone or urethane joints. Irrespective of all other information, we recommend that bond breakers be applied to all joints in the sheets where the sheets are not tongue and grooved. This can be achieved by using **Aqua-Stick 80** or **Aqua-Band**. All wall and floor building boards must be firmly fixed in accordance with the manufacturer's instructions and appropriate Australian Standards. Such boards include plasterboard, compressed cement sheet, fibre cement sheeting, marine grade ply, and wet area composition board.

When installing membranes on lightweight external decks that are to be tiled there are a few items that should be considered before starting the project.

- Type of floor sheeting (follow manufacturer's recommendations).
- Deflection of the deck under live loads. The deck should be rigid enough to accept tile or stone. L/360 is the maximum allowable deflection for tile, this is 1mm deflection in 360mm, and L/480 for stone.
- Size of tile or stone, the larger the tile or stone the more rigid the deck should be.
- Fall to waste outlets that remove standing water. It is recommended that a minimum fall of 1.25%, that is a 12.5mm in 1m fall be created to remove standing water. The installation must comply with applicable local standards.
- Rather than tile directly to the deck, a 40mm wire reinforced screed can be installed over a slip sheet on the deck, with the membrane and tile work installed above the screed. This is recommended by Australian Standards.
- Termination of the membrane to other finishes.
- Treatment of expansion joints. Membrane should loop down into an expansion joint to allow for additional movement.



#### **Fibre Cement Sheets:**

Follow cement sheet manufacturer's recommendations for expansion joint set out.

#### **Metal Surfaces:**

Ensure surfaces are rust free and clean. Aqua-Stick WPM will bond directly to clean steel.

#### **Primer:**

A primer is only required for porous substrates. **Aqua-Stick WPM** will bond directly to clean nonporous substrates. For porous substrates use **Aus-Bond Ultra Prime** or **Hydropel 2 Part Epoxy** primer.

# **Method of Application:**

- 1. Remove all loose material by vigorous brushing, hydro-blasting, mechanical scabbling, or by using a wire brush if necessary.
- 2. Treat any fungal growth with proprietary fungicide as recommended.
- 3. Allow surface to dry.
- 4. Install bond breakers where required.
- 5. Fill cracks and voids with a mastic sealant or suitable cement based mortar.
- 6. Prime with PRIMER where required, allow primer to dry.
- 7. Once the primer is completely dry, start installing Aqua-Stick WPM.
- 8. Pre-cut the Aqua-Stick WPM sheets to suit the project.
- 9. Start installing the sheets at the lowest area of the project, which is usually around the floor waste area or the edge of a balcony. Loose lay the Aqua-Stick WPM sheet, ensuring it is in the correct position (Aqua-Stick WPM is easily cut to size using a utility knife or scissors). Lift one corner and peel back the paper film whilst positioning the Aqua-Stick WPM. Firmly press the Aqua-Stick WPM to the substrate, ensuring there are no air bubbles trapped underneath. Pull back the remainder of the paper backing and fully pat or press down the Aqua-Stick WPM onto the substrate, removing any trapped air pockets.
- 10. When installing the second sheet be sure to overlap the first sheet by 50mm.
- 11. It is best to install all horizontal areas prior to installing the detail work around penetrations and vertical upstands.
- 12. **Aqua-Stick WPM** will bond back to the fleece backing when overlapping the sheet. Ensure the fleece is clean and dry.



# TECHNICAL DATA SHEET

# **AQUA-STICK 1000**

13. **Aqua-Flex WPM C3** must be applied 50mm wide over all joints in the **Aqua-Stick WPM** sheeting to ensure a fully sealed overlap.

## **Supplementary Notes:**

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 considered when over-coating the roof, and ventilation may be needed to cope with the transmission of high levels of moisture vapour. Minor damage to **Aqua-Stick WPM** can be repaired with **Aqua-Flex WPM C3** or following the overlapping procedure.

Aqua-Stick WPM not to be used as an exposed membrane finish or exposed to long-term sunlight and weathering, must be finished over with a surface covering either tiled on or overcoated within 48 hours.

### Tiling:

The installation of tile or stone can commence immediately after the **Aqua-Stick WPM** has been installed (areas that have been sealed with **Aqua-Flex WPM C3** must be touch dry before tiling). For best results in external areas install tile and stone with **Aus-Crete Premium Industrial Adhesive**, and ensure that the tile or stone is fully bedded. For internal areas use **Aus-Crete** or **Aus-Flex** adhesives.

# **Expansion/Control Joints:**

Membranes should not be applied directly over expansion/control joints. Depending on the type of joint, the membrane should pre-fabricated into 150mm wide strips and looped down into the joint. This allows for additional movement without causing excess stress to the membrane. Alternately, a closed cell foam backer rod can be placed over the joint, with the membrane applied over the backer rod to allow for additional movement. All expansion/control joints should be carried up through screeds and tile work and must conform to Australian Standards and good trade practices. In external areas do not exceed 3.6m in any direction without installing an expansion/control joint. Expansion/control joints should be installed where all tile and stone abuts a restraining wall, curb, column or plumbing. Consult ATA for technical service if you have any questions.

#### Test Area:

A 50mm x 50mm sample of **Aqua-Stick WPM** should be applied to the proposed area. The test sample must be pressed firmly into position and allowed to bond for 1 hour. Lift a corner of the sample to check the bond to the substrate (the sample should still be removable, but



not come away from the substrate easily). **Aqua-Stick WPM** will increase in bond strength to the substrate over the following 48 hours.

#### Caution:

When installing water/moisture sensitive tile or stone consult ATA prior to starting the project. Water/moisture sensitive tile or stone is not suitable for external areas or wet areas. ATA does not accept any responsibility for problems associated with unstable tile or stone, this is the responsibility of the manufacturer to ensure their products are fit for purpose. ATA does not recommend moisture sensitive stone be installed on waterproof membranes or sound control underlayments.

# Storage/Shelf Life:

When stored in a cool, dry place the contents of the original unopened container can be used approximately thirty-six (36) months from the date of manufacture.

# Packaging:

**Aqua-Stick WPM 1000** is supplied in 1m x 10m rolls.

**Aqua-Stick WPM 80** is supplied in 80mm x 5m rolls.

### Health, Safety, and Handling:

Refer to the Safety Data Sheet for full, detailed instructions in accordance with the hazardous chemicals code of practice.

There are no adverse health effects when handling or installing Aqua-Stick WPM.

#### Warranty:

"Australasian Tiling Adhesives Pty Ltd ("ATA") warrants that Aqua-Stick WPM ("the goods") will be free of defects for a period of up to Fifteen Years from date of installation, subject to the goods being utilized and installed strictly in accordance with Australian Standards and industry guidelines. The use of the goods is beyond the control of ATA and/or the supplier and the liability of ATA under this warranty is restricted only to the replacement of the material found to be defective. Structural failure of the substrate is not covered by this warranty and the manufacturer and/or supplier of the goods will not be liable for any damage whatsoever arising from the incorrect use of the goods. A warranty claim must be made in writing by email to [admin@ata.com.au] by you within seven days of becoming aware of the defect. Proof of purchase by you, the date of purchase, and evidence of who installed the product, with relevant contact details, must accompany all claims. In the event of a dispute arising in relation to a claimed defect, ATA reserves the right to engage an



independent expert to investigate and report, and the cost of the expert will be borne by the party at fault. The benefits to you given by this warranty are in addition to other rights and remedies you may have under any law in relation to the goods to which the warranty relates. Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods replaced or repaired if the goods fail to be of acceptable quality and the failure does not amount to a major failure."

## **Contact Details:**

Australasian Tiling Adhesives Pty Ltd (ATA), ABN: 92 154 228 207, ACN: 154 228 207,

Mobile: 0448 404 333, Email: admin@ata.com.au, Web: ata.com.au