

# AQUATHANE-XR

## Data Sheet

### **Description:**

Aquathane-XR is a CSIRO certified (3062-1) class 3 – High extensibility (AS4858), fast cure, elasticised, latex, water-based, fiber reinforced waterproof membrane.

### **Limitations:**

Aquathane-XR is **not** classified as UV resistant and should **never** be used in any situation where it will be left exposed to sunlight for prolonged periods of time.

### **Applications:**

**Aquathane-XR** has been specifically designed for most waterproofing requirements including the long term waterproofing of wet areas within buildings (shower recesses, bathrooms, laundries), concrete and timber decks, terraces, balconies, roofs, flashings, planter boxes, retaining walls and more. It is suitable for tiling or topping. Aquathane-XR must be applied in accordance with all the appropriate sections of the AS3740/2004 and the Building Code of Australia.

### **Preparation:**

Substrates should be smooth, sound and free from oil, grease, wax, dust, laitance and any loose matter. Masonry surfaces must be pointed flush and surface defects repaired.

### **Substrates:**

Aquathane-XR is suitable for cementitious, concrete, masonry, fibre-cement sheeting, plaster board, brick, render, metal and timber surfaces. Aquathane-XR may be applied to damp surfaces although freedom from surface water and continual dampness is essential. Damp surfaces will increase drying/curing time. Applying membrane over screeds that are not cured or when you are not using a 2 pack water based epoxy primer can cause the migration of surfactants from the screed to the membrane and thereby unsettle the chemical composition and integrity of the membrane. Applying membrane on top of a screed is only recommended if there is also membrane application under the screed, because screeds notoriously crack and break-up under traffic, thereby exposing the membrane to stresses which it was not designed to handle.

### **Priming:**

All concrete, masonry, brick fibre-cement and timber surfaces must be primed with Aquaprime-XR. Metal surfaces must be free from rust, clean and should be primed with a suitable metal primer. Especially smooth surfaces such as FC sheeting may require keying prior to application. Where priming over non-paintable silicon is required, coat the silicon with an acrylic gap filler such as “no more gaps”, wait for drying and then apply primer over the top.

### **Application:**

***Stir the contents well prior to application.*** Apply by ***trowel, brush or super-nap roller*** to obtain a consistent and even coating. Aquathane-XR can be applied in a single coat to any thickness required, the product will not crack. However the membrane needs to be applied to at least 1mm dry film thickness. If the first coat does not result in a dry film thickness of at least 1mm, then a subsequent coat(s) will be required.

**Important-** If exposed to weather, do not apply if rain is imminent (within one hour at 20°C), or if the temperature is below 5°C or above 35°C. Also note that if applying the membrane during cold weather, where there is limited or no air flow over the membrane, may result in the membrane failing to dry.

### **Wet and High Movement Areas:**

Where potential high movement of the substrate is expected such as floor and wall corners of shower recesses, wet areas, floor joints, cracks and expansion joints a minimum of a 70mm bond breaking or reinforcing tape should be laid over these areas. A minimum 150mm wide coat of Aquathane-XR should be applied over these areas into which a reinforcing fabric should be embedded followed by a saturating coat (ensure that the reinforcing fabric is completely saturated) and allowed to dry. A second coat should be applied ensuring that the fabric is completely covered. Cracked concrete areas should be properly repaired prior to application of Aquathane-XR.

### **Concrete/Reinforced & Pre-Stressed Floor Systems:**

When used to waterproof concrete floor systems and any new non wet area concrete slab, it should be noted that there is a high probability of shrinkage cracking occurring in the concrete. Although some shrinkage cracking is acceptable, any significant shrinkage cracks (in excess of 0.4mm) will readily rupture the membrane. Construction engineers can determine the scope of the shrinkage cracking and location on the slab. It is important that such information is available prior to waterproofing. In pre-determined crack areas, steps need to be taken to overcome the movement issues, which can be done by way of bond breakers or the construction of a concrete expansion system over the area.

### **Coverage:**

Approximately 1.5 – 2.0 litres per square meter depending on the porosity of substrate.

### **Drying Time:**

Average drying time is approximately 60 minutes at 20 degrees Celsius in low humidity. Damp surfaces, low ventilation and cooler weather will increase drying times accordingly. The use of fans in internal situations accelerates the drying process.

### **Tile Adhesives:**

Suitable water-based tile adhesives such as Monoflex, Cemflex, Gripflex, Kemflex, Ultima or Kemgrip mixed with Elastacrete from the Construction Chemicals range are to be used when tiling over membrane. If using non Dribond tile adhesives, make sure to consult the relevant tiling guide. Do not use solvent based adhesives as failure of membrane and adhesive will occur. Premixed adhesives (mastik's) are not suitable for tiling over Aquathane-XR and should not be used.

### **Storage:**

Aquathane-XR can be stored for up to 18 months in sealed containers. The product is not freeze/thaw proof; do not allow it to freeze.

### **Clean Up:**

Utensils and minor spills can be cleaned up with water if still wet. Cured Aquathane-XR can be cleaned up with Xylene.

### **Physical Properties:**

CSIRO Test Report 3062-1

AS 4858/2004 Wet Area Membranes

#### **Durability of Membranes: Elongation at Break**

	Strain %	Class
Control	770%	Class 3
Water Immersion	1151% (56 Days)	Pass
Bleach Immersion	919% (56 Days)	Pass
Detergent Immersion	967% (56 Days)	Pass
Heat Ageing	685% (7 Days)	Pass

#### **Control Set: Elongation at Break**

<b>Sample Thickness</b>	<b>Max Load</b>	<b>Max Extension</b>	<b>Max Stress</b>	<b>Max Strain</b>
1.25mm	22.30(N)	254.21mm	3.06 MPa	770%
<b>Water Immersion – Elongation at Break – 56 Days:</b>				
1.15mm	21.01(N)	379.90mm	2.92 MPa	1151%
<b>Bleach Immersion – Elongation at Break – 56 Days:</b>				
1.20mm	17.11(N)	303.12mm	2.30 MPa	919%
<b>Detergent Immersion – Elongation at Break – 56 Days:</b>				
1.20mm	13.74(N)	319.02mm	1.91 MPa	967%
<b>Heat Ageing – Elongation at Break – 7 Days</b>				
1.10mm	23.61(N)	225.98mm	3.52MPa	685%

**Water Vapor Transmission (WVT) – Result – 0.37g/m<sup>2</sup>/24hrs**

**Moving Joint Test – Result – Pass**

**Water Absorption – Result – 0.58%**

# ***AQUATHANE-XR***

## **10 Year Product Guarantee**

When tiles are installed in accordance with AS3958 and waterproofing installed in accordance with AS3740 in conjunction with The WaterStop Shops written application instructions, good trade practices and any relevant local requirements, The WaterStop Shop guarantees the performance of Aquathane-XR when applied to structurally sound surfaces.

The guarantee is for a period of 10 (ten) years from the time of application and only covers the cost of materials and labour of the original installation when the product is proven and acknowledged to be faulty.



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