

# **Azcothane Reo**

Polyurethane Fortified Water Based
Waterproofing Membrane

#### PRODUCT DESCRIPTION

Duram Azcothane Reo is a modified Azcothane water-based Polyurethane Dispersion Fortified Acrylic Hybrid. It is flexible, high performance, fortified with the addition of micro fibres, UV resistant liquid applied waterproofing membrane formulated for use in demanding exposed, under tile, underground and immersed waterproofing applications. Being internally reinforced, the need for external reinforcing is eliminated thereby making it easier and quicker to use.

Azcothane meets the criteria of the following standards, ensuring it meets the requirements of the National Construction Code of Australia:

- AS4858:2004 Wet Area Membranes.
- AS4654.1 2012 Waterproofing membranes for external above ground use.
- AS4654.2 2012 Exterior Resistance to ultraviolet Appendix A.
- The 'Green Star' environmental criteria.

#### **USAGE/PURPOSE**

Azcothane has been formulated for most waterproofing applications requiring long term UV exposed waterproofing applications making it ideal for:

- Balconies
- □ Terraces
- Decks
- Podiums
- □ Tiled or covered areas
- ☐ Metal Roofs
- □ Roofs (UV- exposed)
- ☐ Shower recess & wet areas
- Retaining walls
- lacksquare Planters and landscaped areas
- Structural slabs
- Pits and bunded areas
- Door flashings

## **PACKAGING**

4Lt and 15 Lt pails. 15 Litres equates to 16kg.

## COLOUR

White, Grey, Light Blue and Black.

#### **SHELF LIFE**

12 months in unopened container, best used within that period.



#### **STORAGE**

Keep in cool, dry place away from heat, do not allow to freeze.

### **FEATURES & BENEFITS**

- Contains microfibers (internally reinforced) eliminating the need to use external reinforcing.
- ☐ Single pack (no mixing) easy to apply anti-sag technology.
- ☐ Low VOC levels. Meets the 'Green Star' environmental criteria.
- It meets the Class III High Extensibility classification of AS4858:2004.
- ☐ Can be installed in accordance with AS3740:2021 wet area and AS4654.2 exterior, in exposed membrane applications.
- ☐ Flexible (tests show flexibility > 300% Class 3).
- ☐ Self-leveling 100% bonded seamless membrane (no joints or laps).
- Suitable for immersion and the most demanding waterproofing applications.
- Overcoat with Virotuff for trafficable areas extended UV protection.
- ☐ Formulated for wet area and under tile use, compatible with most tile adhesives.
- Can be rendered with polymer render and standard render (with bonding additive).
- ☐ Excellent chemical & positive hydrostatic resistance.
- ☐ Does not re-emulsify once fully cured, long term performance.
- ☐ Bitumen and tar free will not stain grout or tiles.
- ☐ Has been formulated to inhibit biological growth.
- Australian made with a long history of Australian use.

TYPICAL PHYSICAL PERFORMANCE	
PERFORMANCE TEST	TYPICAL VALUES
Tensile Strength	1.9 MPa
Application/surface temperature range	10°C to 35°C Substrate Surface Temperature
Elongation	> 300% (Class III Extensibility)
Moisture Vapour Transmission	6.4g/m²/24 hours



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### **LIMITATIONS**

- Azcothane Reo is not designed as a trafficable membrane although infrequent maintenance foot-traffic is acceptable during the construction phase. Please note a protective coat of Duram Virotuff is recommended for trafficable areas for example: terraces, balconies, barbecue areas, etc.
- Azcothane Reo is not suitable for direct contact with high concentrations of chlorine.
- Azcothane Reo cannot be applied directly on wet surfaces, this will cause gassing and bubbling of the membrane.
- Azcothane Reo cannot be applied on slightly damp surfaces as the product will not adhere. The surface must be dry and sound before the membrane can be applied, freedom from surface water and continual dampness is essential.
- Given that Azcothane Reo incorporates micro-fibers, the elongation will be slightly reduced as compared with Azcothane.

#### **COVERAGE/YIELD**

Coverage rate varies depending upon type, condition, porosity, texture of the surface and application technique.

- Minimum 1.7L/m², i.e. 0.85L/m² per coat. A 15Lt pail will cover 18m² for 1 coat at 0.5mm DFT.
- ☐ Water Resistant Non-Tanking Walls: Minimum 0.85L/m² at 0.5mm DFT.
- The dry film thickness of the membrane on floors and tanking areas must be 1.0mm DFT with each coat being 500 microns dry film (0.5mmDFT).

#### **SUITABLE SURFACES**

- ☐ Cement and Cement Render
- □ Concrete
- Block & Brick work
- Masonry/Stone
- ☐ FC, CFC, Asbestos and Blue board sheeting
- Scyon & Composite Sheeting
- Acrylic Coatings
- Vitreous, Ceramic & Terra Cotta Tiles
- ☐ Bitumen (when primed with Duram Primeseal MC)
- ☐ Metal (when primed with Duram ME Primer / Primeseal MC)
- Timber, Particle Board that complies with AZ/NZS 1859.1, Plywood (when primed with Duram Primeseal MC or Maxiprime)
- Masonite
- □ Plaster Board
- Extruded Foam
- ☐ Fibreglass/Gelcoat/PVC

## **SURFACE PREPARATION**

Good preparation is essential. Surfaces must be sound, stable, dry, clean, and free of dust, loose, flaking, friable material and substances that may diminish adhesion.

## **BLOWHOLES**

Blowholes and surface imperfections must be made sound and filled with Duram Resiflex FC or Resiflex Hybrid sealant or alternatively a non-shrink mortar, finished flush with the surface. Allow to cure and dry.

## **PRIMING**

□ Surfaces should ideally be primed with Duram Primeseal MC applied at no less than 1 Lt per 4m² or Duram WB Primer applied at

- 1Lt per 5m<sup>2</sup> or Maxiprime undiluted at 6m<sup>2</sup> to 8m<sup>2</sup> per litre per coat, usually applied in one coat and allowed to dry. Primers need to be applied at no less than the relevant Duram Primer TDS.
- ☐ If there is a risk of entrapped moisture in the substrate which may cause the membrane to bubble or outgas, two coats of Duram Primeseal MC should be applied.
- Excessively porous, friable, and dusty surfaces may require an additional priming coat.
- Metal surfaces must be clean and free of contaminants and then apply Duram ME Primer. If rusted, treat to remove rust, apply a rust converter, and then apply Duram ME Primer.
- Other Duram primers suitable for use with Azcothane Reo include Duram Primeseal SP and Superprime 711.
- Allow primers to touch dry before applying the membrane and refer to the TDS of the relevant primer.

### **DETAILING PREPARATION**

Corners: Prime as required.

#### General:

- □ Apply Duram Resiflex Hybrid or Resiflex FC (a flexible polyurethane sealant) and tool off to form a solid coved 45° fillet extending 10mm on to the adjacent surfaces. Allow to cure. Then apply the Duram membrane directly over the sealant and on adjacent surfaces.
- □ For Additional waterproofing protection or expansion joint requirements the following additional steps may be taken.

  Lay a strip of Duram Leak-Seal Tape (self-stick, butyl mastic waterproofing membrane with a polyester backed reinforcing fabric) over the cured polyurethane sealant pressing it firmly on the surface. Apply the Duram membrane directly over the tape and on the adjacent surfaces.

### JOINTS, GAPS, AND CRACKS

## General:

- ☐ Joints, gaps and cracks should be filled and sealed with Duram Resiflex Hybrid or Resiflex FC and allowed to cure.
- Recommendation: The movement of small cracks should not be underestimated and must be covered with a flexible polyurethane sealant and an additional coat of Azcothane Reo.

### Large or Live Cracks:

- □ Large cracks should be routed out to form a 'V' and then filled and sealed with Duram Resiflex Hybrid or Resiflex FC joint sealant, as per the TDS. The sealant should be finished slightly proud of the surface and allowed to cure.
- After priming, as required, lay a strip of Duram Leak-Seal Tape over the joint or crack pressing it firmly on to the substrate. Apply Azcothane Reo directly to the Duram Leak-Seal Tape and extending at least 75mm on to the adjacent surfaces.

## Joints - Particularly in CFC Sheeting and Timber sheeting:

- □ The sheets should be fully coated with Duram Resiflex Hybrid or Resiflex FC. Butter the edges of each sheet prior to butting the sheets together. Alternatively, the joins should be suitably filled and sealed with Duram Resiflex Hybrid or Resiflex FC and finished slightly proud of the surface and allowed to cure.
- After priming as required, lay a strip of Duram Leak-Seal Tape over the join, pressing it firmly on to the substrate. Apply Azcothane Reo directly to the Duram Leak-Seal Tape extending at least 75mm on to the adjacent surfaces. If the Duram Leak-Seal is not used, then follow the procedure as described under 'Large or Live Cracks'.

## Waste Outlets, Penetrations and Angles

- Waste Outlets: Floor wastes and puddle flanges should be rebated into the floor to allow water to readily drain. Fill all gaps and perimeters with Duram Resiflex FC.
- Plastic or metal angles: Where required by the Building Code including exterior door barriers and plastic corner angles, or water

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stops they should be securely embedded in Duram Resiflex FC.

Note: Plastic floor waste, puddle flanges, plumbing and water stop angles can be primed with Duram Superprime 711.

Note: Some retrofitted flanges may not require priming, seek Duram technical assistance for guidance.

#### **APPLICATION**

#### Waterproofing Applications:

Stir well. Apply Azcothane Reo by brush, roller, broom, or squeegee in a minimum of two coats, usually a day apart so that the dry film thickness is 1.0mm DFT. The minimum wet coat thickness per coat is 0.85mm. The second coat is best applied within 36 hours to achieve inter-coat adhesion bonding and to avoid the need to reprime.

#### Water Resistant Applications:

 Apply Azcothane Reo by brush, roller, broom, or squeegee to a dry film thickness 0.5 mm DFT. The minimum wet coat thickness is 0.85mm.

## Reinforced System:

□ In areas such as corners and over joins and cracks the membrane should be used in conjunction with Duram Durascrim matting, a reinforcing polyester fabric. This application consists of applying a base coat into which the reinforcing fabric is laid followed by the application of a saturating coat ensuring that the Azcothane Reo is worked well into the fabric and that no wrinkles or bubbles are present, and that fabric is entirely saturated and covered with Azcothane Reo. Allow to cure and apply two further coats of Azcothane Reo.

#### Single Coat Application:

☐ In ideal conditions - Warm, dry weather, the membrane may be applied in a single coat after correct priming and at prescribed coverage rate and dry film thickness as for 2 coats. The membrane should be monitored to ensure bubbling, pin holing or damage does not occur. If this occurs, the wet membrane should be lightly overrolled.

#### **CURING**

Drying and curing of the product is affected by type, dryness and porosity of the surface, temperature, humidity, ventilation, climate conditions and application technique and therefore drying and curing can only be given as a guide.

Duram Azcothane Reo is a fast-drying water-based product. Expected curing at  $25^{\circ}\text{C}$  at  $50^{\circ}\text{RH}$ :

- Touch Dry: 2 4 hours per coat.
- Setup Cure: 24 hours per coat.
- Full Cure: 4 days/ 96 hours.
- Re-coat between 4 24 hours.

Ensure membrane is fully cured before tiling or topping.

#### **TILING. TOPPING OR TOP COATING**

Duram Azcothane Reo is compatible with most tile adhesives and 3:1 sand: cement beds. Ideally the beds should be sealed / waterproofed to prevent the bed absorbing and holding water. Selection of the tile adhesive should be compatible with the flexibility of the substrate. Tiling must be done in accordance with AS3958.1- 2007 with adequate expansion joints installed.

Azcothane Reo can withstand maintenance traffic. For any greater exposure to traffic, Virotuff should be applied over the Azcothane Reo for protection. Azcothane Reo is usually covered.

□ For Tiling: Topped with a bedding of sand /cement screed. Acrylic bonding agents can be used in conjunction with sand/cement screed mixes for better strength and adhesion properties. When tiling, it is essential that adequate expansion joints are installed in accordance with good tiling practice, AS3958.1-2007

- Covered Roofs: Covered roofs change wording Cover with drainage cell/ protection sheeting geo textile fabric- drainage cell ballast, pebbles.
- □ Ground Works/Landscaped Areas: Cover with protection sheeting and drainage cell prior to clean fill.

#### CLEAN UP

Avoid spills. Wet spills can be cleaned with water. They are difficult to clean particularly on porous surfaces. On concrete and non-porous surfaces for wet spills use a cloth and water. Do not clean off carpets as it is better to allow product to cure and then shave the carpet. Equipment should be immediately cleaned with water.

## **SPECIFICATION**

The information contained in this product data sheet is typical but does not constitute a full specification as conditions and specific requirements may vary from project to project. The instructions should be considered as a minimum requirement. The applicator or contractor must use their skill, knowledge, and experience to carry out additional works as may be necessary to meet the requirements of the project. Specification for specific projects should be sought from the company in writing.

### **HEALTH & SAFETY PRECAUTIONS**

Duram Azcothane Reo is user friendly and safe to use if used as intended. Use in well ventilated areas.

The Safety Data Sheet (SDS) must be read and understood prior to use.

#### **CONDITIONS OF USE AND DISCLAIMER**

The information contained in this TDS is given in good faith based upon our current knowledge and does not imply warranty, express or implied. The information is provided and the product is sold on the basis that the product is used for its intended purpose and is used in a proper workmanlike manner in accordance with the instructions of the TDS in suitable and safe working conditions. Under no circumstances will the Company be liable for loss, consequential or otherwise, arising from the use of the product.

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