



# MULTITHANE UVR

POLYURETHANE WATERPROOFING MEMBRANE FOR NON-EXPOSED AREAS

## DESCRIPTION

Multithane UVR is **Cross Linked Moisture curing Polyurethane single pack liquid applied waterproof membrane.**

Multithane UVR is a single pack, liquid applied, moisture curing, self-leveling, waterproofing membrane which cures to form a tough, seamless, durable, odourless and elastomeric (class 3) waterproofing membrane. Multithane UVR incorporates UV stabilisers and UV absorbers to enable the product to provide greater UV protection and stability than conventional aromatic polyurethane membranes.

Multithane UVR bonds well to most suitably primed building substrates. It is suitable for above and below ground applications. Once fully cured doesn't re-emulsify even when fully immersed in water, does not stain grout or tiles and has excellent resistance to hydrostatic pressure.

Colour: Grey.

Multithane UVR meets the criteria of:

- AS3740:2010 Waterproofing of Domestic Wet Areas
- AS4858:2004 Wet Area Membranes.
- AS4654.1 (Waterproofing membranes for external above-ground use) when exposed areas are top coated with **Multithane ATC**.
- The 'Green Star' environmental criteria.

**The Duram Polyurethane Range of products has been an industry leader for over 30 years.**

## USES

Multithane UVR is formulated to waterproof most applications within the building and construction industry requiring long term waterproofing for non UV exposed waterproofing applications making it ideal for:

- Balconies
- Terraces
- Decks
- Podiums
- Tiled or covered areas
- Roofs (non -exposed)
- Roofs (exposed ) when top coated with **Multithane ATC**
- Shower recess & wet areas (floors and upturns).
- Retaining walls
- Planters and landscaped areas
- Structural slabs
- Water retaining structures (e.g. tanks)
- Pits and banded areas
- Door flashings
- Box gutters
- Window hobs
- Concrete

## SUITABLE SURFACES

- Cement and cement render
- FC and CFC Sheeting
- Block & Brick work.
- Masonry/Stone.
- FC, CFC, asbestos and Blue board sheeting.
- Particle board (see notes below).
- Scyon & composite sheeting.
- Acrylic coatings
- Vitreous, ceramic & terra cotta tiles.
- Bitumen (when primed with **Duram Primeseal MC**)
- Metal (when primed with **Duram ME Primer**)
- Timber, Particle Board, Plywood (when primed with **Duram Primeseal MC**)\*
- Masonite.
- Plaster board.
- Extruded foam.
- Fibreglass/Gelcoat/PVC

Advice from Duram should be sort for the most appropriate priming method for these surfaces; Duram has a recommended system for all of the above.

**\*Note:** Particle Board is not regarded as a suitable substrate for wet areas and particularly shower recesses and should be replaced with CFC sheeting. As a minimum, Particle Board should be sealed with one to two coats of **Duram Primeseal MC**. All joints and corners must be sealed with a polyurethane sealant and a reinforced fabric used in conjunction with the membrane. Surfaces must be made good and should be sound, stable, dry, clean and free of dirt, dust and contaminants and suitably primed.

## BENEFITS AND ADVANTAGES

Multithane UVR represents the highest standards in polyurethane waterproofing technology and provides the following benefits and advantages:

- Single pack (no mixing) easy to apply anti-sag technology.
- Rapid cure (within 24 hours)
- Low VOC levels. Meets the 'Green Star' environmental criteria.
- Odourless when cured
- Bitumen and tar free will not stain grout or tiles.
- Self-leveling 100% bonded seamless membrane (no joints or laps)
- Overcoat with **Rocktuff** for trafficable areas or **Multithane ATC** for UV protection.
- It meets the Class III High Extensibility classification of AS4858.
- Permanently flexible (tests show flexibility > 500% - Class 3)
- Can be installed in accordance with AS3740 wet area and AS4654.2 exterior, in exposed membrane applications.
- Safe to use.
- Does not re-emulsify once fully cured, long term performance.
- Formulated for wet area and under tile use.
- Suitable for permanent immersion and the most demanding waterproofing applications:
- Excellent chemical & hydrostatic resistance.
- Tough, Durable and flexible
- High strength and puncture resistant
- Easily repaired and or maintained
- Easy to apply
- Formulated to provide long term protection
- Inhibits mould and biological growth
- Australian Made and a long history of Australian use

## 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 but 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.

## LIMITATIONS

- Multithane UVR is not designed for long term direct exposure to UV; it contains UV stabilizers for extended UV protection. Where extended UV resistance is required, Multithane UVR should be top coated with **Multithane ATC**.
- Multithane UVR is not designed as a trafficable membrane although infrequent maintenance foot-traffic is acceptable during the construction phase.
- Multithane UVR is not suitable for direct contact with high concentrations of chlorine.
- In exposed areas, Multithane UVR should be top coated with Duram **Multithane ATC** or covered.
- Multithane UVR cannot be applied to slightly damp surfaces the product will not adhere & will cause gassing and bubbling of the membrane. . The surface must dry before the membrane can be applied, freedom from surface water and continual dampness is essential
- **Important:** Although the product incorporates UV stabilisers, UV Absorbers and anti-oxidants to prolong its serviceable life when exposed to sunlight, the product being an aromatic polyurethane will nevertheless slowly degrade. It is therefore highly recommended that the product be over coated with Multithane ATC which is an aliphatic polyurethane formulated to withstand direct sunlight exposure, resist chalking and colour fading. In combination, the system provides the ultimate in long terms waterproofing membrane technology.

## PRECAUTIONS IN USE

Risk is considered low when properly used. Precautions on can, label and / or data sheets should be observed. Use in well ventilated areas. Uncured product is combustible so keep all sources of ignition away from product and its vapours.

## 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.

### **Blow Holes.**

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

## PRIMING

Surfaces should ideally be suitably primed with **Duram Primeseal MC** applied at no less than 1 Lt per 4m<sup>2</sup> or **Duram Primeseal SP** applied at 1Lt per 7m<sup>2</sup> and allowed to dry, primers need to be applied at no less than the relevant Duram Primer TDS

**Duram Azcoseal** may be used in areas where the moisture content of the surface is low, applied at no less than 1 Lt per 4m<sup>2</sup>.

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 Multithane UVR include **Multiseal** 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.

Apply **Duram Resiflex FC** (a flexible polyurethane sealant) and tool off to form a solid covered 45° fillet extending at least 10mm on to the adjacent surfaces. Allow to cure. Apply the Duram membrane directly over the sealant and on the adjacent surfaces.

*For Additional waterproofing protection 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.

### **Joins, gaps and Cracks**

#### General

Joins, gaps and cracks should be filled and sealed with **Duram 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 Multithane UVR.

#### Large or Live Cracks

Large cracks should be routed out to form a 'V' and then filled and sealed with **Duram 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 Multithane UVR directly to the **Duram Leak-Seal Tape** and extending at least 75mm on to the adjacent surfaces.

#### Joins - Particularly in CFC Sheeting and Timber sheeting

The sheets should be fully coated with **Duram 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 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 Multithane UVR directly to the **Duram Leak-Seal tape** extending. If the **Duram Leak-Seal Tape** 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 in to 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 stops they should be securely embedded in **Duram Resiflex FC**.

Note: Plastic floor waste, puddle to flanges, plumbing and water stop angles must be primed with **Duram Superprime 711**. If **Duram Leak-Seal Tape** is not used, utilise 50mm masking tape (seven day tape) to form a bond breaking junction.

## APPLICATION

Apply Multithane UVR by brush, roller, broom or squeegee in a minimum of two coats, usually a day apart so that the minimum dry film thickness is 1.2mm. The minimum wet coat thickness per coat is 0.667mm. The second coat is best applied within 36 hours to achieve inter-coat adhesion bonding and avoid the need to reprime.

### Reinforced System:

In areas such as corners and over joins and cracks the membrane should be used in conjunction with **Duram Durascrim tape**, a reinforcing polyester fabric. This application consists of applying a base coat in to which the reinforcing fabric is laid followed by the application of a saturating coat ensuring that the Multithane UVR is worked well in to the fabric and that no wrinkles or bubbles are present and that fabric is entirely saturated and covered with Duram 195. Allow to cure. Apply two further coats of Multithane UVR. Multithane UVR is suitable for use with **Duram Durascrim Reinforcing Tape** or **Leak Seal Tape**.

### Single Coat Application:

In ideal conditions, the membrane may be applied in a single coat after proper 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 over-rolled.

### Multithane ATC:

**Multithane ATC** is an aliphatic based polyurethane top coat which extends the life of the exposed membrane.

When top coating Multithane UVR with **Multithane ATC**, allow Duram 195 to cure and then apply **Multithane ATC** at the approximate rate of 3 to 4 m<sup>2</sup> per Lt.

## COVERAGE

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

Multithane UVR: Generally, 1.5 Litres per m<sup>2</sup> for two coats combined, i.e. 0.75 Litres per m<sup>2</sup> per coat. Ensure that the DFT of the cured Multithane UVR is at least 1.2mm for horizontal surfaces (minimum thickness per coat is 0.66mm WFT) and at least 1.0mm for vertical surfaces (0.55mm WFT).

## DRYING AND 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.

Generally, Multithane UVR is touch- dry within 4 to 6 hours with full cure within 24 hours. Recoat between 6-24 hours.

## TILING, TOPPING OR TOP COATING

Multithane UVR 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, AS 3958.1.

Covered Roofs – cover with protection sheeting, Geo Textile (drainage cell) pebbles.

Ground Works/Landscaped Areas – cover with protection sheeting and drainage cell prior to clean fill.

Direct tile adhesion is not advised.

For exposed applications, Multithane UVR must be top coated with **Multithane ATC**.

## COLOURS

Grey. Colour may lighten after application in direct sunlight. Note: Slight colour variation may occur between batches.

## CLEAN UP

Avoid spills. They are difficult to clean particularly on porous surfaces. On concrete and non-porous surfaces for wet spills use a cloth and **Duram Solvent**. 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 Duram Solvent.

## STORAGE AND PACKAGING

Keep in cool, dry place away from heat, flame or combustible material. Product contains flammable solvents. Available in 4 Lt and 15 Lt Pails. 15 litres equates to 19.5kg.

Shelf life: 6 months in unopened container, best used within that period. As this is a moisture curing polyurethane some skinning of the product may occur. This should be cut out and removed. Balance of the product will be suitable for use.

## SAFETY AND PRECAUTIONS

Multithane UVR is solvent based. Keep container in safe, ventilated area. Wear appropriate PPE during use. The use of solvent resistant gloves and goggles (against splashes) are recommended. If spraying, which is very rare, the use of self-contained breathing apparatus is recommended. If swallowed do not induce vomiting, give plenty of water to drink. Seek urgent medical advice. If in eyes, flush thoroughly with clean water, holding lid open to ensure any trapped product may be flushed away. Seek medical assistance. If on skin, remove contaminated clothing and wash skin with soap and water. This may not remove the product but will encourage it to cure and can later be peeled off. If inhaled, unlikely due to viscosity of the product, remove person to fresh air and apply artificial respiration if required and seek urgent medical attention. Ensure adequate ventilation. Vapours may collect in low lying areas.

For full safety data refer to the SDS. Observe precautions as per label.

## TESTS AND TECHNICAL DATA

Multithane UVR **the represents highest standards in Cross Linked Moisture curing Polyurethane waterproofing technology**

1. Multithane UVR meets the Class III High Extensibility classification of AS4858 as tested by the CSIRO Duram 195 formulation complies with AS4858 Appendix A: Durability of Waterproof Membranes
2. AS3740 Wet Area installation of membranes
3. AS4654.1 Exterior area installation of membranes (non UV exposed applications)
4. 'Green Star' environmental criteria

Tensile Bond	2N/mm after 14 days
Application temperature range	10 to 35°C
Elongation	> 300% (Class 111 Extensibility)
Moisture Vapour Transmission	0.26 g/m <sup>2</sup> /24 hours

Complete test summary and results are available from Duram upon request. Issued: 1 December 2018 | Valid to: December 2020

## 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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**The Ultimate in Waterproofing & Protective Coating Technology**

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