Multithane/Multithane ATC

System of Combined Technologies Designed for use in Pedestrian and UV Exposed Areas

PRODUCT DESCRIPTION

Multithane/Multithane ATC is a cross linked, moisture curing, liquid applied polyurethane waterproof system of combined technologies designed for use in pedestrian and UV exposed areas.
Multithane range has three versions which include: Multithane HV (high viscosity, high hold), Multithane STD (self-leveling) and Multithane UVR (UV resistant). Please refer to these product data sheets for more information.
Multithane/Multithane ATC meets the criteria of:

- ❑ AS4654.1-2012 Waterproofing membranes for external and above-ground use.
- ❑ The 'Green Star' environmental criteria.

USAGE/PURPOSE

Multithane/Multithane ATC has been formulated for long term UV exposed waterproofing applications making it ideal for:

- ❑ **Exposed Areas:** Roofs, decks, terraces, balconies, podiums

PACKAGING

- ❑ 15 Lt pail. 15 Litre of Multithane equates to 19.5kg.
- ❑ 15 Lt pail. 15 Litre of Multithane ATC equates to 17.5kg.

COLOUR

Grey.

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.

STORAGE

Keep in cool, dry place away from heat, flame, or combustible material. Product contains flammable solvents.

FEATURES & BENEFITS

- ❑ Tested to AS4654.1-2012 Waterproofing membranes for external and above-ground use.
- ❑ Single component UV top coat and base coat.
- ❑ Rapid cure (within 24 hours)
- ❑ Low VOC levels. Meets the 'Green Star' environmental criteria.
- ❑ It meets the Class III High Extensibility classification of AS4654.1 2012
- ❑ Excellent chemical & hydrostatic resistance.
- ❑ High strength and puncture resistant.
- ❑ Easily repaired and or maintained.
- ❑ Formulated to provide long term protection.
- ❑ Australian Made and a long history of Australian use.

TYPICAL PHYSICAL PERFORMANCE

PERFORMANCE TEST	METHOD	TYPICAL VALUES	
Abrasion Resistance Top Coat	AS1580.403.2	Pedestrian Traffic	
Bond Strength	ASTM C794	Concrete Masonry 121 N	
Cyclic movement	Moving Joint Test	Tested as Class III	
Dimensional stability	ASTM D6207	N/A	N/A
Elongation at break Base membrane	AS4654.1 Appendix A	312%	Class III
Field seam strength	N/A	N/A	N/A
Heat ageing Base membrane	AS/NZS4858	295%	Pass
Temperature resistance Base membrane	AS4654.1 Clause 2.6	305%	Pass
UV Resistance Base membrane & top coat	AS4654.1 Table A4	350%	Pass
Tensile strength Base membrane	AS4654.1 Table A4	1.58 MPa	N/A
Thickness[1]	Various methods	1.20	N/A
Durability[2] Base membrane	AS4654.1 Table A4		Pass
Water vapour transmission rate	ASTM E96	10.36 g/m²/d	Pass

Notes:
1. Thickness measurement the product is a liquid applied waterproofing membrane. The thickness of the membrane will be determined by application.
2. Durability of membranes is a combined group of assessments as detailed in AS4654.1 Appendix A, Table A4.

LIMITATIONS

- ❑ Not suitable for direct contact with high concentrations of chlorine above 10ppm.
- ❑ Cannot be applied directly to damp surfaces as this will cause gassing and bubbling of the membrane.
- ❑ Cannot be applied to slightly damp surfaces the product will not adhere. The surface must dry before the membrane can be applied, freedom from surface water and continual dampness is essential.

COVERAGE/YIELD

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

- ❑ **Multithane:** 1.5 Litres per m^2 for two coats combined, i.e. 0.75 Litres per m^2 per coat. Ensure that the DFT of the cured Multithane is 1.35mm (STD/HV) 1.5mm (UVR) for horizontal surfaces (minimum thickness per coat is 0.66mm WFT).
- ❑ **Multithane ATC:** 3m^2 per litre per coat application.
- ❑ Note: When used as a system minimum DFT is 1.2mm as per current Test Report DC12517-002

SUITABLE SURFACES

- ❑ Cement and Cement Render
- ❑ Concrete
- ❑ Block & Brick work
- ❑ Masonry/Stone
- ❑ FC, CFC, Asbestos and Blue board sheeting
- ❑ Bitumen (when primed with Duram Primeseal MC)
- ❑ Metal (when primed with Duram ME Primer / Primeseal MC)
- ❑ Timber, Particle Board, Plywood (when primed with Duram Primeseal MC)

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 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 4m^2 or Duram Primeseal SP applied at 1Lt per 7m^2 and allowed to dry. Primers need to be applied at no less than the relevant Duram Primer TDS.
- ❑ Duram Azcoseal/Multiseal may be used in areas where the moisture content of the surface is low, applied at no less than 1Lt per 4m^2.
- ❑ 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 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.

General:

- ❑ Apply Duram 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. Apply the Duram membrane directly over the sealant and on the 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 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.

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, lay a strip of Duram Leak-Seal Tape over the joint or crack pressing it firmly on to the substrate. Apply Multithane 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 FC. Butter the edges of each sheet prior to butting the sheets together. Alternatively, the joints should be suitably filled and sealed with Duram Resiflex FC and finished slightly proud of the surface and allowed to cure.
- ❑ After priming, lay a strip of Duram Leak-Seal Tape over the joint, pressing it firmly on to the substrate. Apply Multithane 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 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

Multithane:

- ❑ Apply Multithane by brush, roller, broom, or squeegee in a minimum of two coats, usually a day apart so that the dry film thickness is 1.35mm (STD/HV) 1.5mm (UVR). 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.
- ❑ **Thinning:** Multithane can be diluted with Duram Solvent (only) to

meet site demands or product viscosity. The maximum amount of solvent that can be added is 1 Litre per 15 Litre pail. It is recommended that the user contact Duram technical for assistance and guidance on method and ratio of Multithane to Duram Solvent. **Warning:** No alternative types of solvents should be used, using alternative types will lead to product related issues, including no setup & curing, drying, slow cure rate, gassing, gelling, failure of membrane.

Multithane ATC:

- ❑ Apply Multithane ATC by brush, roller, and broom or squeegee so that the dry film thickness is 300 microns.
- ❑ The second coat is best applied within 24 hours to achieve inter-coat adhesion bonding and avoid the need to reprime.
- ❑ When top coating Multithane with Multithane ATC, allow membrane to cure and then apply Multithane ATC at the approximate rate of 3 to 4 m^2 per litre.

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:

- ❑ Touch Dry: within 4 - 6 hours.
- ❑ Set Up Cure: 24 hours.
- ❑ Full Cure: 4 days/ 96 hours.
- ❑ Re-coat: between 6 - 24 hours.

Generally, Multithane ATC:

- ❑ Touch Dry: within 4 - 6 hours.
- ❑ Full Cure: within 24 hours.
- ❑ Re-coat: between 6 - 24 hours.

TILING, TOPPING OR TOP COATING

Multithane ATC is usually not tiled or covered.

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.

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

Use in well ventilated areas. Uncured product is combustible so keep all sources of ignition away from product and its vapours.

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.

TREMCO CPG AUSTRALIA

Duram a division of Tremco CPG Australia
ABN: 25 000 024 064
12/4 Southridge Street
Eastern Creek, NSW 2766

P: (02) 9624 4077
F: (02) 9624 4079
E: duram@duram.com.au