

ACTECH AT-101 UV

TECHNICAL DATA SHEET

INTRODUCTION

ACTECH AT-101 UV is a class 111, pigmented, elastic, high solid, aliphatic hybrid polyurethane waterproofing membrane with excellent UV stability that meets the requirements of AS3740 and AS4654 by conforming to AS/NZS4858 "wet area membranes" and meets the Green Star Environmental criteria. For use in internal and external under tile applications.

For use in internal and external applications.

Actech AT-101 UV is a single pack, formulated for sunlight exposed areas such as decks, balconies, roofs, and gutters and wall facades.

On roofs and balconies, Actech AT-101 UV provides a durable, slip resistant, waterproof finish which will accept regular foot traffic. Suitable for application to many common substrates including concrete, bricks, fibrous cement products, metals and timber with priming required

It is based on aliphatic hybrid polyurethane resin, which results in excellent mechanical, chemical, thermal, UV and natural element properties.

COLOURS: Grey and White (Tint able*)

* Consult Manufacturer before Tinting

PACKAGING: 15 Litre

CHARACTERISTIC

- Simple application (roller, brush or airless spray)
- Strong and uniform adhesion on almost any type of surface
- Excellent UV Stability.
- When applied forms seamless membrane without joints
- Provides excellent adhesion to almost any type of surface
- Accepts light foot traffic.
- Excellent build properties enable application to both horizontal and vertical surfaces.
- Excellent resistance to UV, weathering, chloride ions and CO₂
- AT-101 UV requires polyester fabric reinforcement in corner junctions
- AT-101 UV is paintable with conventional acrylic paint.

ACTECH AT 101-UV is suitable for the following applications:

- Internal bathrooms, laundries and wet areas with positive falls.
- External exposed roof tops, balconies and gutters with positive falls.
- External podiums, parapet walls, and balconies with positive falls
- It can be used over many common substrates including, rendered brickwork, block work, fibrous cement products, concrete, cement, gyprock, timber and metal surfaces with priming required on these substrates
- AT-101 UV can be used for internal and external applications.

TECHNICAL DATA AND PROPERTIES

Form	Single component viscous liquid
Membrane Classification	Class III
Colour	Grey or White
Solid Content	70%
Elongation at break	>550%
Tensile Strength	1.9 Mpa
Tear Resistance	8-12 N/mm ²
Recoat Time at 25°C 50% RH	4-8 Hours
Tack Free Time 25°C 50% RH	24 Hours
Full Cure time 25°C 50% RH	5 Days
Application temperature	10-27°C

ACTECH AT-101 UV Advantages

- Meets the 'Green Star' environmental criteria.
- Highly Flexible.
- Fatigue Resistant.
- Stain Resistant.
- Very low VOC levels.
- Classified as non-hazardous and non-flammable.
- Meets the performance requirements of AS4858:2004 : Durability of Waterproof Membrane and is applied in accordance with AS3740:2010/AS4564.
- UV and weather resistant - suitable for exposed sunlight.
- Compatible with most tile adhesives.
- Virtually odourless.
- Will not stain grout or tiles.
- Once Cured AT-101 UV will allow for foot traffic.
- Formulated for wet area and under tile applications.
- Does not re-emulsify after proper curing.
- Tough, durable and flexible.
- Easy application by roller or brush.
- Non-slip.
- Can be tinted.
- Easy water clean up

LIMITATIONS

- Do not apply AT-101 UV in temperatures above 27°C and below 10°C.
- All silicon-based products are not compatible with Actech AT-101 UV.
- AT-101 UV must not come in contact with bitumen surfaces. In applications where trace quantities of bitumen are present, prime surface with 2 coats of EP-906 Hydro Static Epoxy Primer to be used to isolate the bitumen.
- AT-101 UV is not a vapour barrier and is not designed to stop negative head of hydrostatic pressure.
- Not to be applied direct over a substrate having moisture content.
- AT-101 UV cannot be immersed in water for at least 5 days after final application.
- Ensure the surface is totally dry.
- Do not apply if rain threatens.
- Must be cured for 5 days prior to application of cement screed or other finishes.
- Tinting may affect the solar and UV reflective properties of AT-102 UV.
- Do not tint with more than 1-2% tint colour.
- We recommend the AT-101 UV be laid on floors that provide positive falls to drainage out lets to eliminate water ponding.

- We do **not** recommend applications of AT-101 UV be applied on particle board, platform floor sheeting, yellow tongue or chipboard surfaces.

PREPARATION

- Ensure new concrete is allowed to cure for a minimum of 28 days in accordance with AS 3958.1-2007.
- Concrete areas to be waterproofed should be left with a Steel float finish.
- All rendered surfaces should be left with a steel float finish and left to cure for a minimum of 7 days prior to waterproofing application.
- Check that the surface of all substrates to be coated are: structurally sound, clean, dry, smooth and free of voids & protrusions, oils, grease, mould, dust, curing compounds, coatings, adhesive residues and are uncontaminated by preceding trade activities.
- Make good any defects and allow surfaces preparations and repairs to completely dry and cure.
- Actech AT-101 UV is to be laid on floors that provide positive falls to drainage outlets to eliminate water ponding.

APPLICATION

Thoroughly clean down surfaces by stiff bristle brush, scraper, vacuum etc. to remove all laitance, dirt, dust, mould, grease or other contamination to leave a sound clean **dry** surface free of residue.

All surfaces are to be sound, smooth, and free of cracks, voids, protrusions and imperfections.

*For Concrete slab Floors

After priming install ActNow Waterproofing Pipe Flange to all floor waste using a bead of MS bond breaker. All pipes to floor waste to be cut down with an angle grinder to provide a level edge flush with surfaces slab. Grind concrete slab with a cup grinder to ensure once the Actnow Waterproofing Pipe Flange is installed it is flush/level to existing floor.

PRIMER

For non-porous substrates- (*where surface is totally dry*) - To the previously prepared surfaces apply one coat of Actech AT-600 Primer (applied at the rate of approximately 6m² per litre)

- Allow primer to dry for approximately 2-3 hours before commencing waterproofing.

For porous and absorbent substrates-, apply 2 coats of EP-906 Hydro Static Epoxy Primer (applied at the rate of approx. 4m² per litre per coat) allowing 4 hours (at 25 °C and 50% R.H.) between coats and 24 hours after the last coat to cure.

Use on metal surfaces-

A suitable metal etch solution to suit acrylic coatings may be required prior to priming. Adhesion testing is advisable. Use an anti-corrosive metal primer. All metal surfaces should be cleaned and abraded prior to priming. After application, primers should be allowed to dry for the specified drying time before the application of AT-101 UV.

Rusty Metal

Remove loose rust and paint particles with wire brushing. Sound areas of remaining paint should be roughened to obtain a good mechanical key. Loose flakes or corroded metal must be chipped away.

- 1st Coat: rust converter
- Prime: anti corrosive primer

JOINTS SEALANT

All floor and wall corner junctions, water stops and drain outlets should be sealed with a bead of MS bond breaker joint sealant. Allow MS bond breaker to dry prior overcoating.

All bond breaker joint sealant profiles must be a minimum 10mm in depth at the midpoint of the joint. Substrate gaps at drainage outlets, flashings, and water stops, nail/screw holes etc. must also be sealed using sealant prior to membrane application.

CRACKS

Actech AT-101 UV is capable of accommodating movement of existing cracks up to a 1mm when applied at a minimum of 1500 microns dry film thickness.

* Cracks under 1mm in width, apply a thick coating of AT-101 UV extending 100 mm either side of the crack. Apply reinforcement fabric into wet coat. Ensure there are no bubbles or wrinkles. Allow to set/dry.

Apply a further coat of ACTECH AT-101 UV to fully penetrate and cover the reinforcement fabric, lapping all edges and/or ends a minimum of 100mm. Ensure there are no air bubbles or wrinkles in the reinforcement fabric.

Allow the fabric reinforced layer to dry overnight before applying the coats of membrane.

* Cracks greater than 1mm in width i.e. cracks that do not move or continue to grow, must be chased out to a minimum 2mm width and cleaned by vacuuming to remove all dust and residues.

* After cleaning fill all static cracks with a thick bead of MS Bond breaker.

Once cured apply reinforcement fabric as per directions above.

* Cracks greater than 2mm or subject to movement or growth must be referred to the builder or engineer for structure assessment.

* Allow all pre-treatment areas to dry before general application of the membrane.

MOVEMENT JOINTS

Actech AT-101 UV should not be applied over movement joints as the amount of movement may be more than the capability of the membrane. Seal Joints with the appropriate joint sealant then apply Actech AT-101 UV up to the edge of the joint. Polyurethane sealants should be avoided as they can bleed plasticisers into the coating above.

MIXING

AT 101 UV is a single pack membrane. Mix well before use.

Consumption

- 3 Coat application system for external sunlight exposed horizontal areas such as roof and floor areas.
- 2 Coat application system for vertical wall applications.
- 2 Coat application system for Internal applications.
- Allow 4-8 hours @ 20°-25°C (in a well-ventilated area) between coats
- Allow 5 days@20-25°C full cure
- Recommended dry film thickness is 1.5mm or 1500 microns over 3 coats
- Coverage – Approx. 1.5m² per litre per coat to give a 1.5mm dry film thickness over 3 coats

CLEAN UP Clean brushes and tools with water when wet, avoid spillage.

DO NOT discharge into sewer or waterways.

STORAGE and SHELF LIFE

Pails should be stored in dry and cool rooms for up to 12 months. Protect the material against moisture and direct sunlight. Storage temperature: 5°-25°C. Products should remain in their original, unopened containers, bearing the manufacturers name, product designation, and batch number and application precaution labels.

SAFETY:

The use of gloves and goggles (against splashes) are recommended. Use in ventilated areas. If spraying, in confined areas the use of self contained breathing apparatus is recommended.

When handling **DO NOT** eat, drink or smoke. 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 open lid to ensure any trapped product may be flushed away. If on skin, remove contaminated clothing and wash skin with soap and water. Ensure adequate ventilation.

For full safety data refer to the products Material Safety Data Sheet.

DATA

Data provided is typical but does not constitute a full specification. This should be sighted from the company for specific projects.

This Technical Data Sheet may be revised at any time to comply with relevant changes to the Australian Standards or to include changes to current technology. For up to date data it is always best to request a copy from Actech Protective Coatings on 02 8021 3517 or email actech.pc@optusnet.com.au.

WARRANTY

Actech protective Coatings Pty Ltd warrants its' products to be free of defects in materials but makes no warranty as to appearance or colour. Since methods of application and on-site conditions are beyond our control and can affect performance, Actech Protective Coatings Pty Ltd makes no other warranty, expressed or implied, including warranties of MERCHANTABILITY and FITNESS FOR A PARTICULAR PURPOSE, with respect to Actech Protective Coatings Pty Ltd, sole obligation shall be, at its option, to replace, or to refund the purchase price of the quantity of Actech Protective Coatings Pty Ltd proved to be defective and Actech protective Coatings Pty Ltd shall not be liable for any loss or damage.

IMPORTANT NOTICE

A Material Safety Data Sheet (MSDS) and Technical Data Sheet (TDS) are available from www.thewaterproofingshop.com.au or upon request from the office. Read the MSDS and TDS carefully prior to use as application or performance. Data may change from time to time so please call the office on 02 80213517 to ensure you have the most up to date version. In emergency, contact the Poisons Information Centre (phone 13 11 26 within Australia) or a doctor for advice.

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