

ACTFLEX 101 UV

TECHNICAL DATA SHEET

ACRYLIC UV STABLE WATERPROOFING MEMBRANE

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DESCRIPTION

ACTFLEX 101 UV is a Class 111, exceptional UV acrylic-based waterproofing membrane designed to provide robust protection against water-related damage for various building structures. Crafted from UV-resistant components, this membrane is engineered to endure extreme weather conditions while offering long-lasting durability. Its versatility and strong bonding properties make it a preferred choice for both residential and commercial applications.

ROLLER OR BRUSH GRADE

COLOUR

Grey or White

PACKAGING (weight)

• 15L (20kg)

STANDARDS COMPLIANCE

- Meets the requirements of AS4654.1 – “Waterproofing membranes for external above-ground use”.
- LOW VOC - Meets Green Building Council of Australia Greenstar requirements IEQ-13, IEQ-11
- Classified as Non- Hazardous and Non-Flammable.

SUITABLE FOR THE FOLLOWING APPLICATIONS

- Exposed roof tops
- Wall facades
- Balconies
- Box gutters
- Exposed podiums
- Parapet walls.

CAN BE USED OVER THE FOLLOWING SUBSTRATES

Priming required on all substrates.

- Fibre Cement Sheets - Walls (min. 6mm). Wet area grade only.
- Concrete - Cured for min. 28 days and left with a wood trowel finish.
- Renders and Screeds - Cured for min. 7 days and left with a wood trowel finish.
- Compressed Fibre Cement (min. 15mm). Wet area grade only.
- Plasterboard walls - (min. 10mm). Wet area grade only.
- Brickwork, block work, masonry, asbestos, sycon, cement, timber, metal, and PVC surfaces.

We do **not** recommend applications of ACTFLEX 101 UV be applied on particle board, platform floor sheeting, yellow tongue, or chipboard surfaces as they are not a suitable substrate for wet areas. This should be replaced with Wet Grade CFC sheeting.

ADVANTAGES

- Provides excellent resistance to UV, weathering, and CO2.
- Class 111 – highly flexible, tough, and durable.
- Meets the 'Green Star' environmental criteria.
- Low VOC levels. Low odour.
- ACTFLEX 101 UV is classified as non-hazardous and non-flammable.
- Does not re-emulsify after proper curing.
- Does not embrittle with age.
- Suitable to use in confined spaces.
- Meets the criteria AS4564.
- Compatible bonding properties with most screeds and renders.
- Excellent adhesion to primed surfaces.
- Paintable with conventional acrylic paint.
- May be tinted with up to 1% acrylic tint - always consult the manufacturer before tinting.
- Once cured will accept light maintenance foot traffic.
- Easy application by roller or brush.
- Excellent build properties enable application to both horizontal and vertical surfaces.

ACTFLEX 101 UV PROPERTIES

Form	Single Component Viscous Liquid	No Fatigue Cracking	Pass
Membrane Classification	Class III	Tear Resistance	8-12 N/Mm ²
Colour	Grey Or White	Recoat Time At 25°C 50% R.H.	6 Hours
Solid Content	65%	Tack Free Time 25°C 50% R.H.	6 Hours
Elongation At Break	>450%	Full Cure Time 25°C 50% R.H.	14 Days
Tensile Strength	1.6 Mpa	Application Temperature	10-26°C
Shore Hardness	60>		

FALLS TO DRAINS

We recommend that ACTFLEX 101 UV be laid on floors that provide positive falls to drainage outlets to eliminate water ponding. The slope of this fall should be:

- External balconies, rooftops etc. 1:100 – which equates to a 10mm fall over 1m.

PREPARATION

- Remove any protrusions from the surface that may pierce the membrane.
- Surface Condition: Ensure surfaces are structurally sound, clean, dry, and free from contaminants that hinder adhesion
- Make good any defects such as voids, blowholes and surface imperfections using an appropriately high strength non shrink mortar.
- Ensure all applied surfaces including screeds are solid and not crumbly.
- Mix well before use.

MOVEMENT JOINTS

ACTFLEX 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 V-TECH MS joint sealant then apply ACTFLEX 101 UV up to the edge of the joint.

CRACKS

- Cracks under 1mm in width – Can be covered with a Self Adhesive Butynol Tape or by embedding ACTECH AT Mesh into a wet coat of ACTFLEX 101 UV – (See ACTECH AT Mesh Reinforcement Fabric directions below).
- Cracks greater than 1mm and up to 2mm 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 ACTECH AT Mesh as per directions below.
- Cracks greater than 2mm or subject to movement or growth must be referred to the builder or engineer for structure assessment.

PRIMING

- Ensure primers are allowed to dry according to specified drying times before proceeding with over coating.
- Apply primers by scrubbing, rolling, or spraying onto absorbent surfaces like porous concrete or sand/cement screeds.
- This helps seal pin holes and reduces excess absorption of ACTFLEX 101 UV.
- Insufficient priming could result in pin holes being visible through the waterproofing membrane.

Floor and Wall Surfaces:

- Apply 2 coats of ACTFLEX EP 250 on both floor and wall surfaces.
- This provides a solid foundation for the subsequent waterproofing application.

Metal Surfaces:

- If necessary, utilize a metal rust converter prior to application.
- Follow this by applying an anti-corrosive metal primer to ensure proper adhesion and corrosion resistance.

Rusty Metal:

- Remove loose rust and paint particles using wire brushing.
- Roughen any sound areas of remaining paint to establish a robust mechanical bond.
- Eliminate any loose flakes or corroded metal by chipping them away.
- Apply a coat of rust converter followed by a layer of anti-corrosive primer for comprehensive protection.

Please note: These steps are essential to ensure optimal adhesion and performance of the ACTFLEX 101 UV waterproofing membrane.

MS BOND BREAKER/JOINT SEALANT

1. Avoid Polyurethane Sealants: Steer clear of using polyurethane sealants, as they have the potential to release plasticisers into the coating above, compromising its integrity.
2. Horizontal/Vertical Junctions and Corner Junctions: Seal all horizontal and vertical junctions, such as wall/floor connections, hobs/walls, and corner junctions, using a bead of V-TECH MS Bond breaker. Allow the applied bead to fully dry and cure before proceeding.
3. Drain Outlets, Screw, and Nail Heads: Thoroughly seal drain outlets, screw, and nail heads using V-TECH MS Bond breaker to prevent potential water infiltration. Ensure complete drying and curing before further steps.
4. Joint Sealant Profiles: When applying joint sealant, ensure a minimum depth of 12mm at the midpoint of the joint. This depth guarantees effective sealing and durability.
5. Substrate Gaps and Flashings: Seal all substrate gaps at drainage outlets, flashings, nail/screw holes, and other similar areas with joint sealant before applying the membrane. This practice helps prevent moisture intrusion and maintains the membrane's performance.

SHEETED FLOORS AND WALLS (WET AREA GRADE ONLY) - SELF ADHESIVE BUTYNOL TAPE

In applications where fibro cement floors and/or walls are used, apply a suitable ACTFLEX SA TAPE over the cured joint sealant in all corner junctions and over sheet joints. Use a pressure roller to ensure that a secure bond is made between the tape and substrate and carefully moulded into the corners.

ACTECH AT MESH POLYESTER TAPE FOR CONCRETE AND MASONRY CORNER JUNCTIONS

- ACTFLEX 101 UV being an acrylic membrane requires ACTFLEX AT Mesh Tape over the cured V-TECH MS joint sealant in all corner junctions where junctions have excessive movement.
- We do not recommend the use of fibreglass reinforcing, as it reduces the elasticity of the membrane.

ACTECH AT Mesh Tape Application:

1. Apply one coat of ACTFLEX 101 UV, extending at least 50mm either side of AT Mesh Tape.
2. Embed the AT Mesh Tape into the wet coat.
3. Brush out any bubbles or wrinkles and ensure that a secure bond is made between the tape and substrate and carefully moulded into the corners. Allow to set/dry.

Note: If installing the [ActNow Waterproofing Pipe Flange](#) please seek Actech Protective Coatings technical assistance for guidance. We recommend a final inspection over the surface to make sure no pinholes are evident.

APPLICATION

1. Start by applying a generous coating of ACTFLEX 101 UV over the entire surface to be waterproofed. Utilize either a brush or a roller for this task. We recommend using a medium nap (8–12mm pile) roller or a 50mm long bristle paint brush. This initial coat should be administered at a wet film thickness of 0.62, resulting in a dry film thickness of 0.4mm once dried. Allow the first coat to thoroughly dry.
2. The drying process typically takes around 4-6 hours at a temperature of 23°C and a relative humidity of 50%.
3. Proceed to apply a second coat of the ACTFLEX 101 UV membrane. Apply this coat at a wet film thickness of 0.62mm to achieve a dry film thickness of 0.4mm.
4. Finally, add a third coat of the ACTFLEX 101 UV membrane, ensuring a consistent application at a wet film thickness of 0.62mm. This coat is also designed to achieve a dry film thickness of 0.4mm.
5. The cumulative effect of these three coats will result in a total dry film thickness of 1.2mm, providing robust waterproofing protection.

By following these steps meticulously, you will achieve the desired waterproofing outcome using ACTFLEX 101 UV. Always adhere to recommended dry times and film thicknesses for optimal performance.

REPAIRS AND OVERCOATING OF OLD ACTECH ACTFLEX 101 UV

1. Cleaning: Begin by cleaning the surface using a mild detergent. Thoroughly rinse with clean water, ensuring the removal of all contaminants. Allow the surface to air dry completely. It's imperative that the surface is not only dry but also free from any dust or residues.
2. Overlapping Membranes: When conducting repairs or over-coating, ensure both the primer and the new membrane extend over the existing membrane by a minimum of 100mm. This overlap is essential to establish a secure and robust bond between the existing and new membranes.
3. Existing Membrane in Good Condition: If the current ACTFLEX 101 UV membrane is dry, sound, and in satisfactory condition, begin by priming with a single coat of ACTFLEX EP 250. This step enhances the bond between the existing and new coatings.
4. Existing Membrane Delaminating: In instances where the existing ACTFLEX 101 UV membrane is delaminating, remove all delaminated coatings back to a firmly adhered edge. After removal, apply two coats of ACTFLEX EP 250. This process ensures proper adhesion and stability.
5. Coating Application: Apply a total of three coats of ACTFLEX 101 UV after surface preparation. Follow the application guidelines for each coat to ensure uniformity and effective waterproofing.



ACTECH PROTECTIVE COATINGS

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APPLICATION RATES

	DFT RATE	Number Of Coats	Recoat Time At 25°C 50%R.H.	Full Cure Time At 25°C 50%R.H.
External Exposed Wall Applications	8mm Or 800 Microns	2	6 Hours	14 Days After Final Coat
Roof Tops, Gutters And Exposed Horizontal Surfaces	1.2mm Or 1200 Microns	3	6 Hours	14 Days After Final Coat

MAINTENANCE

Clean and inspect periodically to maintain surface. Any damage identified during normal inspections should be repaired or replaced as appropriate. Re-coat when necessary.

TILING

We do not recommend tiling over ACTFLEX 101 UV.

LIMITATIONS

- Not compatible with all silicon-based and bitumen surfaces/products.
- Not recommended for constantly submerged applications such as swimming pools and ponds.
- Not suitable for use in chlorine environments.
- Is not a vapour barrier and is not designed to withstand negative side substrate head of pressure.
- ACTFLEX 101 UV must be applied to a dry surface which is free from dampness.
- Do not apply if rain threatens.
- Tinting may affect the solar and UV reflective properties of ACTFLEX 101 UV.
- Do not tint with more than 1% tint acrylic colour.
- Care should be taken when coating over movement joints as in some cases the amount of movement may be more than the capability of the membrane.
- ACTFLEX 101 UV accepts maintenance foot traffic only.

COVERAGE, DRYING AND CURING

Coverage, drying, and curing rates are provided as indicative benchmarks, recognizing their susceptibility to various influencing factors including surface porosity, humidity, temperature, climatic conditions, ventilation, application methodology, and dry film thickness. A 15-litre (20kg) container of ACTFLEX 101 UV is anticipated to adequately cover approximately three coats over a range of 8-10m² each.

The coverage rate, ranging from 1.5 to 1.875 m² per liter, is established based on a total Dry Film Thickness (DFT) of 1.2mm. This measurement does not account for potential material wastages during application.

SAFETY - WHEN HANDLING DO NOT EAT, DRINK OR SMOKE

Always use in a well-ventilated area and wear Personal Protection Equipment (PPE).

Use breathing respirators at all times. Wash hands immediately after use and before breaks.

DO NOT allow material to contact humans, exposed food or food utensils.

In case of eye contact, rinse with plenty of water: If inhaled, remove to fresh air: if swallowed (DO NOT INDUCE VOMITING)

and immediately contact Doctor or Poisons Information centre on 131 126 (AUS) and 0800 764 766 (NZ). IN TRANSPORT

EMERGENCY DIAL 000 – POLICE-FIRE BRIGADE

Local regulations as well as health and safety advice on packaging labels must be observed.

For more information, please download a copy of the SDS from www.thewaterproofingshop.com.au

KEEP OUT OF REACH OF CHILDREN.

CLEAN UP:

Wash all equipment in soapy water immediately after use. Avoid spillage as it is difficult to remove entirely from surfaces.

DO NOT discharge into sewer or waterways.

DO NOT allow wash water from cleaning or process equipment to enter drains.

STORAGE:

12 months when stored in the original, unopened containers in a dry place @ 10-26°C & 50% R.H. Keep containers in a well-ventilated place, away from sunlight and moisture and tightly closed.

Storage above this temperature may reduce storage life.

Data Sheet

This Technical Data Sheet and the Material Safety Data Sheet (SDS) may be revised at any time to comply with relevant changes to the Australian Standards or to include changes to current technology. Always read the current SDS and TDS carefully prior to use as application and performance data may change from time to time. It is always best to request a copy of the latest technical data from Actech Protective Coatings by calling 02 8021 3517 or emailing admin@actechpc.com.au. Data provided is typical but does not constitute a full specification. This should be sighted from the company for specific projects.

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