



# ACTFLEX 929 SL.

## Technical Data Sheet

ONE COMPONENT MOISTURE CURED SELF LEVELLING POLYURETHANE WATERPROOFING MEMBRANE

21/03/2025

### Description

**ACTFLEX 929 SL** is a high-performance, Class III self-leveling polyurethane waterproofing membrane designed for internal and external under-tile applications, including non-exposed wet areas. This advanced membrane provides a tough, highly flexible, and root-resistant waterproof barrier. As a single-component system, **ACTFLEX 929 SL** cures upon exposure to atmospheric moisture, forming a durable elastomeric membrane. Its self-leveling formula ensures a smooth, seamless, and flat finish, making it ideal for applications requiring an even surface across both horizontal and vertical areas.

Roller, Brush,

Colour

GREY

Packaging (Weight)

15L (20kg)

### Standards Compliance

- Meets the requirements of AS3740:2021 (Waterproofing of Wet areas within a Domestic building) by complying with AS/NZ 4858 (Wet Area Membranes as a Class III membrane).
- Meets the requirements of AS4654.1 2012 – “Waterproofing membranes for external above ground use”

### ACTFLEX 929 SL is suitable for the following applications:

- Internal and external wet area.
- Foundations, basements, ground floors, suspended slabs.
- Roof terraces and roofs (non - exposed), balconies, patios.
- Planter boxes, above ground pits.
- Bridges, walkways, sub stations, parking decks.
- Industrial floors and warehouse surfaces
- Concrete and metal surfaces
- General maintenance and repairs

### Advantages

- Does not re-emulsify after proper curing. Immersion tolerant.
- Chemically resistant.
- High strength.
- Root resistant
- After curing is permanently flexible (tested to class 111) with high tensibility.
- Self Levelling
- Once cured will accept light foot traffic.
- Easy application by roller, brush or squeegee.
- Excellent resistance to embrittlement.
- Reaches sufficient cure 48 hours after final coat (at 25°C 50% R.H.), allowing for fast placement of mortar beds and screeds.

### Can be used over the following substrates \* Priming required on all substrates

- Concrete - Cured for min. 28 days and left with a wood trowel finish.
- Render and Screeds - Cured for min. 7 days and left with a wood trowel finish.
- Fibre Cement Sheets - Walls (min. 6mm) Wet area grade only.
- Compressed Fibre Cement (min. 15mm) Wet area grade only.
- Brickwork, Block work, masonry, asbestos, sycon, cement, timber, metal and PVC surfaces.
- We do **not** recommend applications of **ACTFLEX 929 SL** be applied on particle board, platform floor sheeting, yellow tongue or chipboard as they are not a suitable substrate for wet areas. This should be replaced with Wet Grade CFC sheeting.

## ACTFLEX 929 SL Properties

<b>Membrane Classification</b>	Class III	<b>No Fatigue Cracking</b>	Pass
<b>Colour</b>	Grey	<b>Recoat time at 25°C 50% R.H.</b>	24 Hours and a Maximum 48 Hours
<b>Solids Content</b>	90% (+/- 2%)	<b>Tack free time at 25°C 50% R.H.</b>	12 Hours in an aerated area
<b>Density</b>	1.1 - 1.3 g/cm <sup>3</sup>	<b>Full cure time at 25°C 50% R.H.</b>	48 Hours at 1.2mm DFT in an aerated area
<b>Elongation at break</b>	>750%	<b>Application Temperature</b>	10-30°C
<b>ASTM E96 Moisture Vapour Transmission</b>	Pass	<b>Shore Hardness A</b>	55
<b>Physical or Chemical Damage</b>	Chemical Cure by Reaction with Atmospheric Moisture	<b>Appearance</b>	Viscous Liquid
<b>Tensile Strength</b>	4.09MPa	<b>Shelf Life</b>	12 Months in Unopened Containers

## Limitations

- Not suitable for direct sunlight or UV exposure; must be protected after curing.
- Direct tile adhesion to the cured membrane is not recommended.
- Requires 48 hours curing at 25°C and 50% R.H. before tiling, backfilling, topping, or water immersion.
- Not compatible with silicone-based or bitumen surfaces/products.
- Not recommended for swimming pools or ponds (constant submersion).
- Not suitable for chlorine environments.
- Not a vapour barrier; cannot withstand negative-side water pressure.
- Must be applied to a dry, damp-free surface; do not apply if rain threatens.
- Movement joints may exceed the membrane's flexibility.
- May slump on vertical surfaces.
- May flow towards drains, potentially blocking drainage points or pipes.
- Can be left uncovered in internal plant rooms with light maintenance foot traffic.
- Not designed for daily foot traffic, sharp footwear, or machinery.
- Do not apply on substrates below 10°C. ACTFLEX 929 SL has limited root resistance and is only suitable for areas with non-aggressive root systems, such as small garden trees, hedges, and shrubs. It is not designed to withstand aggressive or deep-rooted species, including large trees and palms. For environments with potential root intrusion risks, additional root-resistant measures, such as a root barrier or additive, must be considered. The suitability of this product for specific applications should be assessed by a qualified professional.

## Preparation

- Ensure surfaces are installed per manufacturer instructions and Australian Standards, and are structurally sound.
- Surface must be clean, dry, smooth, and free of contaminants such as oils, grease, wax, mould, dust, curing compounds, release agents, coatings, adhesives, loose particles, rust, paint, and efflorescence.
- Damaged concrete (2mm-30mm) can be treated with **ACTFLEX POLYCRETE**.
- Spalling concrete must be repaired using the **FORSPEC epoxy range** (refer to product data sheets).
- Remove high points or protrusions that could pierce the membrane.
- Fill blowholes and surface imperfections with a high-strength, non-shrink mortar.
- Ensure all applied surfaces, including screeds, are solid and not crumbly.
- If skinning occurs in the pail, cut and remove before mixing.
- Mix well before use with an electric drill and low-speed mixer attachment.
- Internal wet areas: Minimum fall of 1:80 (12.5mm per 1m).
- External areas (balconies, rooftops): Minimum fall of 1:100 (10mm per 1m).

## Crack Preparation

### Surface Cleaning:

- Remove all loose debris, dirt, dust, curing compounds, oils, grease, surface sealers, existing coatings, and any other contaminants from the crack area. Allow any pre-treated cracks to fully cure before applying FORSPEC materials.

### Static Cracks < 2.0mm (Using FORSPEC SA Tape):

- Apply a suitable FORSPEC primer 200mm across and along the crack. Once the primer has dried, centrally place **FORSPEC SA Tape** over the prepared crack.

- Use the **FORSPEC Brass Roller** and **FORSPEC Small Hand Roller** to ensure uniform adhesion to the substrate and remove any air bubbles or wrinkles.
- Apply two coats of **ACTFLEX 929 SL** to encapsulate the tape, ensuring the overlap of tape sections is at least 50mm.

### Static Cracks > 2.0mm (Using ACTFLEX MS PRO):

- Grind out the crack to a minimum width of 6mm and depth of 6mm.
- Use ACTFLEX MS PRO joint sealant in the reglet that has been chased out
- Tool the sealant flush with the surface, then cover with a suitable bond breaker tape.

- Apply two coats of **ACTFLEX 929 SL** once the sealant has dried for at least 1-2 hours.
- For cracks requiring enhanced shear strength and durability, consider additional crack rectification methods:
  - **PROBOND 1100PS**
  - **PROBOND 1100**

- **CRACK PRO 1200PS**
- **CRACK LOCK E400L**

Follow the product data sheets for each method, available at [www.forspec.com.au](http://www.forspec.com.au).

## Priming

- ACTFLEX 700 PU PRIMER must be used on porous substrates such as concrete, masonry, blockwork, and brick.
- Allow primer to fully dry before proceeding (typically 1 hour at 23°C / 50% RH).
- ACTFLEX 700 PU PRIMER must be overcoated within 24 hours to prevent potential intercoat contamination.
- If the moisture content in masonry or concrete exceeds 80% RH (ASTM F2170) or 15g/m<sup>2</sup>/24hrs (ASTM F1869), a

minimum of two coats of ACTFLEX EP 250 epoxy primer must be applied.

- This moisture level is generally equivalent to 5% or higher on a non-destructive moisture meter, but Australian Standards must be adhered to.
- For non-porous surfaces such as aluminum, PVC, or glass, ACTFLEX SUPERBOND 007 must be used as the primer.

## Joint Sealant

### Using ACTFLEX SA TAPE with ACTFLEX 929 SL

- Remove the **release paper** and centrally position the **ACTFLEX SA TAPE** over the joint.
- Use a **roller** to apply pressure, ensuring **uniform adhesion** and eliminating any air pockets.
- Overlap tape ends by at least **50mm** to maintain a **continuous waterproof seal**.
- **Sealing with ACTFLEX 929 SL:**
- Once the **ACTFLEX SA TAPE** is securely in place, apply **ACTFLEX 929 SL** over the tape.

### Using ACTFLEX 75FC Joint Sealant

- For internal wet areas, apply a 12mm diagonal fillet bead to all corner junctions and around all fixings.
- For external wet areas, apply a 15mm x 15mm fillet bead to all corner junctions and fixings.
- Tool off the sealant smoothly to ensure a seamless finish.
- **ACTFLEX 929 SL** waterproofing can be applied directly over uncured ACTFLEX 75FC.
- Ensure the appropriate primer is used on all fixings before applying the fillet joint treatment.

## Application

### Pre-Mixing Guide:

- Before use, mix well using an electric drill with a paddle mixer at low speed (300-500 RPM) for at least 2-3 minutes.
- Ensure a consistent, lump-free mixture before application.
- Avoid high-speed mixing, as this may introduce air bubbles.

### Application:

- Apply by brush or roller in a minimum two-coat system to achieve a total dry film thickness (DFT) of 1.2mm.
- Wet film thickness (WFT) per coat: 0.7mm
- DFT per coat: 0.6mm
- Total DFT (after 2 coats): 1.2mm

- Allow 4-6 hours between coats at 23°C / 50% RH. Ensure the first coat is completely dry and free from water or condensation before applying the next.
- Recoat within 24 hours to ensure proper adhesion.
- Drying and curing times may vary based on ambient and substrate temperatures.

### Dilution Guidelines:

- For dry, highly porous substrates, the first coat may be diluted with up to 10% Xylene per drum for better penetration.
- In colder conditions, dilution with up to 10% Xylene can improve workability.
- Do not exceed 10% dilution, as this may compromise performance.

## Application Rates

	DFT RATE	Number of Coats	Recoat Time at 25°C 50%RH	Full Cure Time at 25°C 50%RH
Floor & Upturn Applications	1.2mm or 1200 microns	2	24 Hours	48 Hours After Final Coat

## Prior Screeding

In applications where the cured membrane system is to be covered with a self-supporting concrete screed which may be exposed to thermal or shrinkage movement, it is recommended that a 200micron plastic sheet be laid over the entire membrane surface to act as a slip sheet system prior to screeding.

## Tiling

Direct adhesion of tiling to cured membrane is not recommended. In applications where tiles are to be laid over **ACTFLEX 929 SL**, a cement-based screed must be laid over the membrane. When screeding over **ACTFLEX 929 SL** in sunlight or UV exposed areas, we recommend applying 2 coats of ACTFLEX 988 CWP over the screed as an anti-efflorescent coating before tiling.

## Paver Pedestals System

### ACTFLEX 929 SL - Post-Cure Requirements:

After full cure, **ACTFLEX 929 SL** must be UV top-coated with either ACTFLEX ATC or ACTFLEX ULTRA FC to ensure long-term durability and protection against UV damage.

### Paver Pad (Tiling Pedestal) Installation:

Paver pads (tiling pedestals) can be used over **ACTFLEX 929 SL** and should be installed as per the manufacturer's instructions. When installing paver pads over the waterproofing membrane, rubber matting must be placed under each pedestal to minimize damage to the membrane and extend its service life.

## Underground/Landscaping Areas

Always cover cured membrane with HIFLOW drainage cell prior to clean fill. The installation of ballast, such as back filler, river pebbles or similar loose laid unbound coverings must be

isolated from the cured membrane by a compatible drainage cell and filter fabric system or protection board.

## Coverage, Drying and Curing

### Coverage:

The coverage of **ACTFLEX 929 SL** is typically between 8m<sup>2</sup> and 10m<sup>2</sup> at a total dry film thickness (DFT) of 1.2mm, equating to approximately 1.04kg/m<sup>2</sup> or 0.8L/m<sup>2</sup>. However, coverage may vary depending on the application technique and the porosity of the substrate.

### Curing:

Allow a **minimum of 48 hours** curing time after the final coat, based on ambient conditions of **23°C @ 50% RH**, before applying protection or covering the membrane.

The slowest drying areas will be those applied over ACTFLEX SA Tape or ACTFLEX 75FC sealant. These areas must be fully dry before covering.

Temperature and substrate conditions will affect drying and curing times.

It is recommended that after curing and prior to placement of protection or screeding, flood to a minimum depth of 50 mm of water for 24 hours. Drains should be plugged and barriers placed to contain the water.

## Clean Up

### Clean-Up:

It is essential to clean tools and equipment immediately while the product is still wet. Use a solvent to wipe down and remove excess product from surfaces. Once dry, **ACTFLEX 929 SL** becomes difficult to remove, and mechanical methods may be required for cleaning.

### Safety:

Always follow the appropriate **OH&S** guidelines and refer to the **MSDS** for safe handling and usage of solvents. It is crucial that no product or cleaning water is discharged into sewers or waterways. Additionally, avoid contact with spilled material to prevent any risk of contamination or harm.

## Storage

**ACTFLEX 929 SL** should be stored in cool, dry conditions (10-22°C) in its original, unopened containers. Protect the material from moisture and direct sunlight, as exposure to temperatures above the recommended range may reduce the shelf life of the product. The product is **combustible** when

uncured, so it is important to keep it away from any ignition sources and avoid storing it in areas such as pits, depressions, basements, or spaces where vapours may accumulate. Once the container is opened, it is preferable to use all contents, as the product is sensitive to airborne moisture.

### Shelf Life:

When stored in proper conditions, **ACTFLEX 929 SL** has a shelf life of **12 months** from the date of manufacture.

## Safety Precautions

**ACTFLEX 929 SL** is classified as hazardous and may cause skin and eye irritation. Always use this product in a well-ventilated area, and wear the appropriate personal protective equipment (PPE), including chemical-resistant gloves, safety boots, and protective eyewear (to guard against splashes). Inhalation of vapours may also pose a risk, so it is essential to wear a suitable respiratory protection device. Note that **organic vapour respirators with particulate pre-filters** and **powered air-purifying respirators** are **not suitable** for use with this product.

To minimize exposure, ensure that soiled clothing is changed immediately and wash hands thoroughly before taking breaks or finishing work. In the event of eye contact, rinse immediately with plenty of water. If inhaled, move the affected person to

fresh air, and if discomfort persists or if breathing difficulties occur, seek medical attention without delay. If swallowed, **do not induce vomiting**. Contact the Poisons Information Centre (13 11 26 within Australia or 0800 764 766 in New Zealand) for advice.

**IMPORTANT:** The uncured product is **combustible**, so keep all sources of ignition away from the product and its vapours. For emergency situations, dial **000** for assistance from the **Police or Fire Brigade**.

Always comply with **local regulations** and follow the safety instructions outlined on the packaging. For additional safety information, refer to the **Safety Data Sheet (SDS)** available at [www.forspec.com.au](http://www.forspec.com.au).

## Data Sheet

This Technical Data Sheet (TDS) and Material Safety Data Sheet (SDS) are subject to revision as necessary to ensure compliance with relevant Australian Standards and incorporate technological advancements. It is crucial to read the most current versions of the SDS and TDS before use, as application and performance data may be updated. For the latest technical

information, please contact Forspec Protective Coatings at (02) 8021 3517 or email [info@forspec.com.au](mailto:info@forspec.com.au) to request a copy. The information provided is representative but does not serve as a comprehensive specification. For specific projects, we recommend consulting directly with the company for tailored specifications.

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