ACTFLEX EP 250.

Technical Data Sheet PRIMER / SEALER / COATING / MEMBRANE SYSTEM WATER BASED 2 PACK EPOXY 15/08/2023

Description

ACTFLEX EP 250 is a two-component waterborne epoxy polyamide coating engineered for superior moisture protection and substrate reinforcement. It forms an impermeable barrier against water ingress, mitigates rising damp, prevents efflorescence, and withstands hydrostatic pressure up to 250kPa, equivalent to a 25-metre head of water. Independently certified for use with potable water, it complies with AS4020 and SS375 standards. Its multifunctional design allows it to serve as both a primer and sealer for concrete, masonry, and cementitious surfaces, facilitating the adhesion of subsequent moisture-sensitive coatings. ACTFLEX EP 250 excels as a negative-side hydrostatic moisture barrier, providing exceptional adhesion to newly cured green concrete and degraded, dust-prone substrates. Non-flammable and low-odor, this formulation ensures enhanced durability and long-term structural protection.

Roller Or Brush Grade

Packaging (Weight)

- 4L kit (2L Part A & 2L Part B)
- 20L kit (10L Part A & 10L Part B)

Recommended Applications

- Waterproofing & Damp-Proofing: Acts as a hydrostatic moisture barrier for negative-side waterproofing applications.
- Potable Water Storage: Suitable for potable water tanks, reservoirs, and infrastructure, compliant with AS4020 and SS375 standards.
- Concrete Protection: Seals and primes concrete, masonry, and cementitious surfaces to prevent efflorescence and rising damp.
- Substrate Preparation: Enhances adhesion for subsequent coatings, including moisture-sensitive finishes.
- Green Concrete Sealer: Compatible with newly cured concrete, providing early-stage protection.
- Structural Rehabilitation: Strengthens degraded, porous, and dust-prone concrete substrates.
- Tunnels & Underground Structures: Prevents water ingress in basements, tunnels, and below-grade structures exposed to hydrostatic pressure.
- Industrial & Commercial Applications: Suitable for waterproofing areas requiring chemical and water resistance.

Advantages

- Non-flammable and negligible odour.
- Can be applied to damp surfaces.
- Very strong cured finish.
- Easy to use, water clean-up.
- When applied directly to the substrate the cured membrane will withstand 250kPa of hydrostatic pressure which is equivalent to a 25-metre head of water.
- Excellent adhesion to old, new and green concrete, stone, timber, masonry and concrete blocks.
- Conforms to the requirements of: Building Code of Australia 4020-2005 for use in contact with portable water.
- Prevents rising damp and the formation of efflorescence when applied in a two-coat system.
- Safe for use around food and water.
- When applied directly to the substrate the cured coating will withstand 250kPa of hydrostatic pressure which is the equivalent to a 25m head of water. **ACTFLEX EP 250** will be ready for foot traffic after 24 hours at 25°C and 50% R.H.
- Easy clean up using water.
- Can be over coated using almost any decorative or industrial paint.
- Low VOC
- Meets Green Building Council of Australia Greenstar requirements IEQ-13, IEQ-11

FORSPEC PROTECTIVE COATINGS

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Limitations

- Tiling can commence after 24 hours cure of FORSPEC EP 250 although and should not exceed a maximum of five days. Installer is to ensure that there is no surface contamination during this period. Sand Binding of the final wet coat is required.
- The product will cease to cure below 10˚C.
- Curing time will also be adversely affected in situations where relative humidity is >85%.
- In enclosed areas, ventilation must be provided during curing cycle to enable adequate evaporation of the water. Longer drying and curing times will be needed.
- Care should be taken when sandwiching adhesives between **ACTFLEX EP 250** and floor coverings to ensure the water vapour transmission of the covering is sufficient to allow the solvent to escape.
- **ACTFLEX EP 250** is not classified as a trafficable membrane.
- **ACTFLEX EP 250** is not UV resistant and should not be exposed to UV light.
- **ACTFLEX EP 250** is not classified as a trafficable membrane.

Technical/Performance Data

Colour	Grey	**Full Cure**	7 days at 25°C and 50% R.H.
Surface Appearance	Semi-Gloss progressing to matt over time.	**Waterproofing recoat time**	24hrs after final coat@ 25˚C and 50% R.H.
Solids	44%		(longer in confined areas)
Mixing Ratio	1:1 (Part A:/Part B) by volume	**VOC Content**	26g/L
Coverage	Must be applied at a rate of 1.5m²/L in total (equivalent to two coats at	**Wet Film Thickness**	300 microns (0.3mm) Per Coat
		Application Temperature	10°C – 26°C
	3.0m2/L per coat) to achieve an effective moisture barrier.	**Pot Life**	2 hours approx. at 25° C
			1 hour @ 35°C
Recoat Time	4 hours at 25°C and 50% R.H.	**KPa Pressure**	250kpa

Minimum 3 days cure when over coating with adhesives and solvent coatings.
The recommended WFT specified produces a nominal Dry Film Thickness DFT of 150 microns (0.15mm) per coat or 300 microns (0.3mm) for two coats on the surface. The apparent dry film thickness will reduce depending on the porosity of the substrate, however the product absorbed by the substrate still forms part of the waterproofing function.

Surface Preparation

- Ensure treated surfaces are structurally sound and devoid of dirt, grime, grease, oil, or wax-like substances, as well as standing and running water.
- Remove existing coatings, adhesives, and efflorescence to expose open-pore surfaces for optimal bond strength and hydrostatic pressure resistance.
- Address holes, non-structural cracks, or surface deformities by utilizing a concrete repair system, allowing curing before coating application.
- Pre-treat dry, porous surfaces by applying a fine mist of clean water before the introduction of **ACTFLEX EP 250**.
- Avoid application on substrates exhibiting surface temperatures below 10°C.

Product Preparation

- Mix each component separately.
- Thoroughly combine the two components in a 1:1 ratio by volume until achieving a uniform mixture.
- Limit mixing to the required quantity within the specified pot life and prevent excessive aeration during blending.
- On extremely dry and porous surfaces, apply a fine mist of clean water prior to the application of **ACTFLEX EP 250**.
- Allow for a 24-hour curing period before the application of water-based adhesives, mortars, levelling compounds, decorative coatings, or 3 days if overcoating with adhesives and solvent coatings.

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Application Method

- A single-coat application is typically utilized as a primer for subsequent FORSPEC PROTECTIVE COATINGS Liquid/sheet Applied Membranes.
- A dual-coat application is generally employed for creating a moisture barrier, addressing efflorescence and rising damp requirements, or for negative side applications involving hydrostatic pressure.
  For spray application of ACTFLEX EP-250 (Hydro Epoxy), incorporating 10% water during the initial coat aids in surface penetration and spray effectiveness.
- Avoid application on substrates with surface temperatures below 10°C.
- Floors: Apply the material using a squeegee, stiff nylon broom, or roller to ensure thorough integration into the prepared surface. Employ a medium to long nap roller to achieve the desired coverage for the final finish.
- Walls: Utilize a roller to apply the product, ensuring comprehensive integration into the prepared surface and achieving the intended coverage.

Thinning

The first coat should be thinned with water, as required depending on the porosity of the surface to be coated (up to 20% for dense surface to 5% for more porous surfaces) to ensure optimum penetration. Thinning of the second coat should be avoided. Always ensure that the required coverage ratios are adhered to.

Tiling

Prior to tiling, **ACTFLEX EP 250** can be applied to screeds, renders or levelling compounds after 3-4 days @ 25°C & 50% R.H in 2 coats at a coverage rate of 3m²/L. Whilst the final coat is wet, clean dry sand of 0.5mm diameter shall be broadcast over the surface at a rate of 700g/m² to achieve at least 90% coverage.

After 24 hours @ 25°C and 50% R.H. cure the excess sand shall be swept and vacuumed from the surface. The same instructions are to be used if tiling or levelling compounds are to be used over the **ACTFLEX EP 250**

Flooring Applications

Where concrete subfloors are damp (as defined in AS1884-2012 as exceeding 75% relative humidity when measured using ASTM F2170 methodology for resilient flooring, or exceeding 5% for other installations such as tiling and liquid applied membrane application, **ACTFLEX EP 250** can be applied as a moisture barrier – apply two coats at 3.0m²/L per coat. The second coat can be sand seeded as is done for tile applications.

As a moisture stop for 'green concrete' not subject to rising damp or permanent moisture – apply. 2 coats of **ACTFLEX EP 250** applied at 3m²/L per coat.

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

24 months when stored in the original, unopened packaging in a dry place @ 25°C & 50% R.H.
Keep containers in a well-ventilated place and tightly closed.

SAFETY - When handling DO NOT eat, drink or smoke

ACTFLEX EP 250 is hazardous and may cause skin and/or eye irritations. Always use in a well-ventilated area and wear Personal Protection Equipment (PPE). Use gloves, safety boots and protective eyewear (against splashes). Use breathing respirators at all times. Wash hands immediately after use and before breaks. Change soiled work clothes and DO NOT allow clothing wet with material to stay in contact with skin. In case of eye contact, rinse with plenty of water: If inhaled, remove to fresh air: if swallowed, 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.

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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 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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