



ACTFLEX 300.

Technical Data Sheet

High Adhesion Primer

Description

ACTFLEX 300 is a **high-adhesion primer** formulated for PVC, masonry, and concrete substrates. It is engineered for multiple roles within Forspec systems:

- Designed for use with the Butyl series waterproofing membranes
- Acts as a chemical binder for Forspec screed systems (slurry coats & admixtures)
- Functions as a primer for Forspec cementitious and water-based waterproofing membranes (when approved by a Forspec representative)

Its deep penetration and bonding performance provide a secure interface between substrates and subsequent systems, improving adhesion, reducing dusting, and ensuring durability.

Advantages

- Exceptional adhesion to PVC, concrete, masonry, and porous surfaces
- Specially formulated to enhance bonding of Forspec **Butyl membranes**
- Can be used as a slurry coat binder or within screed mixes
- Improves screed strength, reduces shrinkage, and prevents delamination
- Suitable as a primer under cementitious and water-based membranes
- Easy to apply by brush, roller, or spray

Application Method – Standard Primer Use

- **Mixing / Preparation**
 - Mechanically stir ACTFLEX 300 with a low-speed paddle mixer (300–500 RPM) for 2–3 minutes to achieve a homogeneous liquid.
 - Ensure all settled material from the base of the container is fully incorporated before use.
 - Do not aerate the primer during mixing, as entrapped air can reduce adhesion performance.
- **Application**
 - Apply a continuous, even film by brush, roller, or airless spray.
 - Recommended application thickness: 80–120 microns wet film thickness (WFT), equating to a coverage rate of ~3–5 m²/kg, depending on porosity and profile of the substrate.
 - Avoid puddling or over-application, as this may compromise drying and bond performance.
- Ensure complete coverage across the substrate, including all edges, junctions, and penetrations.
- **Drying / Recoat Window**
 - At 25°C and 50% RH, allow 1–2 hours for the primer to reach a tack-free state.
 - Ensure the primer is fully dry before applying membranes or screed systems.
 - Do not leave primed surfaces exposed for longer than 24 hours before overcoating. If this period is exceeded, lightly abrade and reapply a fresh coat.
- **Inspection**
 - A properly primed surface will present a uniform, non-glossy finish with no pinholes or dry spots.
 - Verify adhesion by a simple tape-pull test in critical areas if required.

Screed Binder Applications

- **Mix Ratio (by weight):**
 - **FORCEM Binder** – 3 parts washed river sand (structural grade)
 - **ACTFLEX 300** – 2 parts fine Sydney sand (blend with coarser aggregates where required)
 - **Water** – adjust gradually to achieve a dense, brushable slurry consistency
- **Substrate Preparation:**
 - Mechanically clean the concrete base to remove laitance, dust, and contaminants.
 - Surface must be **structurally sound, roughened, and pre-dampened** (SSD – saturated surface dry) to ensure optimum bonding.

Application:

- Apply slurry coat at a uniform thickness of 2–3 mm using a stiff bristle brush.
- Ensure full coverage across the entire bonding surface with no pinholes or voids.
- Place the screed immediately while slurry remains wet and tacky.
- Do not allow slurry to dry or skin before screed installation, as this will compromise adhesion.

Sand Guidelines:

- Washed River Sand – best for high-strength structural screeds
- Sydney Sand – fine grade; ideal for blending and smoothing the slurry
- Plasterer's Sand – suitable under tile and membrane applications where finer finishing is required

Screed Mix Admixture

Mix Ratio:

- 4:1 (sand : ACTFLEX 300 + water solution) by weight.
- Adjust water content to achieve a cohesive, workable mix without segregation.

Performance Benefits:

- Provides chemical bonding within the screed matrix, significantly increasing bond strength to the substrate.
- Enhances compressive and flexural strength, delivering higher durability under load.
- Reduces shrinkage cracking and curling by improving hydration control.

- Optimises adhesion for tiled finishes, podium screeds, balconies, and other external screed systems exposed to movement and weathering.

Application Notes:

- Always prepare the substrate to a sound, clean, and pre-dampened (SSD) condition before placing screed.
- Compact screed thoroughly to eliminate voids and achieve a dense, uniform finish.
- Protect fresh screeds from premature drying or rapid moisture loss during curing.

Compatibility

- Approved for use with Forspec **Butyl series membranes**
- Suitable primer for Forspec **cementitious (e.g. 988 CWP, 989 CWP)** and **water-based membranes** (if specified and approved by Forspec representative)
- Recommended for use with Forspec **screed and repair systems**

Limitations

- Do not apply on substrates with moisture content **>5% by weight** or **>80% relative humidity** unless pre-treated with an **approved epoxy moisture barrier**.
- Not suitable for **negative-side waterproofing** or applications subject to continuous hydrostatic pressure.
- Surfaces must be **sound, stable, and free from movement** – not recommended on particleboard, yellow tongue, or untreated timber-based flooring.
- Do not apply over **contaminated, friable, or powdery substrates** without prior rectification.
- Application outside the temperature range of **+5°C to +35°C** may adversely affect curing, adhesion, and film formation.
- Protect freshly applied primer from **rain, condensation, or surface water** until fully cured.
- Over-application leading to **puddling or film build-up** can cause extended drying times and adhesion failure.
- Not compatible with **silicone, oil-based coatings, or bituminous surfaces** unless approved by Forspec technical representatives.
- All applications under warranty must follow **Forspec specification and system guidance**.

Data Sheet

This Technical Data Sheet (TDS) and the Material Safety Data Sheet (SDS) are subject to revision at any time to ensure compliance with relevant Australian Standards and to incorporate advancements in technology. Before use, it is essential to read the most current SDS and TDS thoroughly, as application and performance data may be updated periodically. 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 data provided here is representative but does not constitute a comprehensive specification. For specific projects, it is advisable to consult directly with the company for tailored specifications.

Conditions of Use, Product Disclaimer, and Statement of Responsibility

The information provided is given in good faith and, to the best of our knowledge, is true and accurate at the time of printing. However, as the information is of a general nature, no assumption can be made regarding the suitability of a product for any specific use or application. Forspec Protective Coatings makes no warranty, either expressed or implied, regarding the accuracy, reliability, or completeness of this information, other than those required by Commonwealth or State legislation. We reserve the right to update or modify the information without prior notice, reflecting our ongoing research and development program. It is the responsibility of the customer or contractor to ensure the suitability of our products for their intended use and to verify compliance with relevant Australian Standards. The customer is responsible for ensuring that our products are used, handled, and applied correctly and in accordance with applicable regulations and standards. Our instructions and recommendations are for the intended users only. Any advice, recommendation, information, assistance, or service provided by Forspec Protective Coatings regarding its products or their use is given in good faith. However, Forspec Protective Coatings assumes no responsibility or liability for any actions or outcomes arising from the use of the products. To the fullest extent permitted by law, Forspec Protective Coatings' liability is limited, at its discretion, to replacing or refunding the purchase price of the products supplied. Forspec Protective Coatings does not exclude rights and remedies that cannot be excluded by law, such as those under the Consumer Guarantees Act 1993. Under no circumstances will Forspec Protective Coatings be liable for any loss, whether consequential or otherwise, arising from the use of its products.



Your Trusted Partner.

