FORSPEC PROTECTIVE COATINGS

# ACTFLEX MB200.




**Technical Data Sheet** | **One-Component Polyurethane Fast-Drying Primer and Moisture Vapour Retarder** | **Issue date: 12 November 2026**

## Description

ACTFLEX MB200 is a pure polyurethane resin primer engineered as a fast-drying, single-component moisture vapour retarder and bonding primer. With a certified VOC content of 93 g/L, it penetrates deeply into cementitious substrates, consolidates and strengthens weak surface layers, seals the substrate against dusting, and builds a continuous film that retards moisture vapour transmission from below.

Applied as a single coat it is a high-performance bonding primer. Applied as two crosswise coats it becomes a moisture vapour retarder rated to substrate relative humidity of up to 98%, opening up concrete slabs that would otherwise be unsuitable for timber, resilient and moisture-sensitive floor coverings. Cure is rapid — the primed surface accepts foot traffic and the next system layer within hours, not days — and a kiln-dried quartz sand broadcast into the wet final coat provides the mechanical key for levelling compounds and screeds. Supplied in 20 kg, 10 kg, 5 kg and 1 kg packs.

## Advantages

- One coat as a bonding primer; two crosswise coats as a moisture vapour retarder — a single product covering both duties.
- Moisture barrier performance to 98% substrate relative humidity when applied in two crosswise coats.
- Fast drying and curing — the surface is trafficable and ready to overcoat within hours.
- Certified low VOC - 93 g/L (CETEC certificate P25100001), below the GBCA Green Star limit for waterproofing membranes and sealants.
- Penetrates deeply, consolidates weak surface layers and seals against dusting.
- Excellent surface coverage — approximately 4 m² per kilogram per coat.
- Approved beneath timber flooring and resilient covering systems.
- Simple roller application with no mixing.

## Uses

- Bonding primer for FORSPEC membrane, screed and levelling systems on cementitious substrates.
- Moisture vapour retarder beneath timber, resilient and moisture-sensitive floor coverings.
- Concrete and cementitious subfloors with residual damp within the stated limit.
- Ceramic, terrazzo and natural stone substrates.
- Well-bonded adhesive and levelling compound residues.
- Interior and exterior applications.
- Surface consolidation of dusty and friable cementitious substrates.



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(02) 8021 3517 info@forspec.com.au 22/872 Canterbury Road, Roselands 2196 NSW (Head Office) www.forspec.com.au

## Compliance Status

ACTFLEX MB200 is certified to ASTM E96 for water vapour transmission under XTecGen Report 514-1. All other performance values are published as typical R&D characteristic values.

| STANDARD / TEST | STATUS | REFERENCE |
|---|---|---|
| **ASTM E96 — water vapour transmission, desiccant method** | Certified — moisture vapour transmission 4.34 g/m²/24 h | XTecGen Report 514-1 |
| **ASTM F2170 — in-situ relative humidity testing** | The governing site test method for substrate moisture | Design responsibility of the specifier |
| **VOC content (ASTM D3960)** | Certified - 93 g/L, below the 250 g/L GBCA Green Star Design & As Built V1.3-13.1.1B and Interiors V1.3-12.1.1B limit for waterproofing membranes and sealants | CETEC certificate P25100001 (tested by FORAY, NATA 1231), valid to 16/10/2030 |
| **Certified test build** | 2 coats at 0.2 mm, 0.3 mm DFT | XTecGen Report 514-1 |

## Technical Data

Certified values are stated against their governing report. All other values are typical R&D characteristic values and are asterisked.

| PROPERTY | VALUE | BASIS |
|---|---|---|
| **Product type** | One-component, low-VOC, moisture-curing pure polyurethane primer | — |
| **Colour** | Light yellowish | — |
| **Packaging** | 20 kg (≈18 L), 10 kg (≈9 L), 5 kg (≈4.5 L) and 1 kg (≈0.9 L) | — |
| **Density** | 1.10–1.15 g/cm³ | * |
| **Viscosity** | 600–800 mPa·s at 23°C | * |
| **Non-volatile content** | Approx. 92% - derived from the VOC certificate as (density - VOC) / density; an upper bound | Derived from CETEC P25100001 * |
| **Coats — as bonding primer** | 1 | — |
| **Coats — as moisture vapour retarder** | 2, applied crosswise | — |
| **Consumption** | Approx. 250 g/m² per coat (≈0.225 L/m²) | — |
| **Coverage** | Approx. 4 m²/kg; approx. 4.4 m²/L per coat | — |
| **Moisture barrier resistance** | Moisture vapour transmission 4.34 g/m²/24 h at 0.3 mm DFT; retards to 98% substrate RH in two crosswise coats | ASTM E96 — XTecGen Report 514-1 |
| **Maximum substrate moisture at application** | Substrate RH up to 98% by ASTM F2170 in the certified two-coat system | — |
| **Drying time — absorbent substrates (at 25°C, 50% RH)** | 60–90 minutes ‡ | * |
| **Drying time — dense substrates (at 25°C, 50% RH)** | 60–150 minutes ‡ | * |
| **Recoat interval (at 25°C, 50% RH)** | 1–4 hours, substrate absorbency dependent | — |
| **Foot traffic (at 25°C, 50% RH)** | Approx. 4 hours | — |
| **Full cure (at 25°C, 50% RH)** | Approx. 4 hours | — |



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## Technical Data (continued)

| PROPERTY | VALUE | BASIS |
|---|---|---|
| Application temperature | +5°C to +35°C | — |
| Service temperature once cured | −40°C to +80°C | — |
| Shelf life | 24 months, unopened, stored dry and frost-free | — |
| Certified film build — moisture vapour retarder | 2 coats at 0.2 mm wet film, 0.3 mm total DFT | ASTM E96 — XTecGen Report 514-1 |

† Drying times were stated at 20°C and 65% RH in the source and are restated here at the library reference condition of 25°C and 50% RH — refer to the Change Register. The moisture vapour transmission rate and the certified film build are accredited values from XTecGen Report 514-1, tested to ASTM E96 by the desiccant method. Substrate moisture must be verified on site by in-situ relative humidity probe to ASTM F2170.

* Typical R&D characteristic values, not for engineering design without written FORSPEC confirmation.

## Coverage and Yield

| PACK | APPROX. LITRES | COVERAGE AT 250 G/M² — ONE COAT | COVERAGE — TWO-COAT MVR SYSTEM |
|---|---|---|---|
| 20 kg | ≈18 L | Approx. 80 m² | Approx. 40 m² |
| 10 kg | ≈9 L | Approx. 40 m² | Approx. 20 m² |
| 5 kg | ≈4.5 L | Approx. 20 m² | Approx. 10 m² |
| 1 kg | ≈0.9 L | Approx. 4 m² | Approx. 2 m² |

Coverage varies with substrate porosity and surface profile. Porous and textured substrates increase consumption. Verify coverage on a trial area before ordering.

## Limitations

- Not a waterproofing membrane — ACTFLEX MB200 retards moisture vapour transmission; it does not resist hydrostatic pressure.
- Not for use where liquid water, rising damp or negative hydrostatic pressure is present.
- One coat as a primer; two crosswise coats as a moisture barrier — a single coat does not deliver the moisture vapour rating.
- Do not dilute under any circumstances.
- Do not apply below 5°C or above 35°C substrate and ambient temperature.
- Do not apply to loose, friable or contaminated substrates without full mechanical rectification.
- Avoid puddling and uneven film build — pooled material will not cure correctly and creates a weak layer.
- Where no sand broadcast is applied, the next layer must follow within 48 hours; beyond that the surface must be mechanically reactivated or re-primed.
- Direct bonding, screeds and levelling compounds may only be installed after the primer is fully cured and within 48 hours of application.
- Always confirm the coating specification and number of coats with a FORSPEC representative before work begins.

## Surface Preparation

- Confirm the substrate is structurally sound, dry and free from dust, grease, laitance, weak layers and all contaminants.
- Remove all loose and friable material by mechanical means — grinding, shot-blasting or sanding — and vacuum thoroughly.
- Test substrate moisture by in-situ relative humidity probe to ASTM F2170 and confirm the reading against the limit in the Technical Data before proceeding.
- Reinstate cracks, holes and surface irregularities with a FORSPEC concrete repair system such as FORBUILD 100 or FORCRETE 100, cured before priming.
- Confirm well-bonded adhesive and levelling compound residues are sound and firmly adhered — remove anything drummy or loose.
- Vacuum immediately before priming.



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## Application and Film Build

- Stir the contents thoroughly before use until a uniform consistency is achieved. Do not dilute.
- Apply an even coat with a fine-pored foam or velour roller, working in cross strokes to achieve full, continuous coverage.
- Avoid puddling and uneven film build.
- As a bonding primer: apply ONE coat at approximately 250 g/m².
- As a moisture vapour retarder: apply TWO coats crosswise, each a thin continuous film, allowing the first coat to dry fully before the second is applied.
- Sand broadcast — where a levelling compound or screed follows: while the final coat is still wet, broadcast kiln-dried quartz sand (70–140 mesh) at 0.5–1.0 kg/m². Once cured, remove all loose unbound sand before proceeding.
- Without sand broadcast: apply the next coating or levelling layer within 48 hours. If exceeded, mechanically reactivate or re-prime the surface.
- Inspect for pinholes, dry patches, glossy puddled areas and missed edges before overcoating.

## Drying, Curing and Testing Times

All times below are measured at 25°C and 50% RH. Low temperature, high humidity, poor ventilation and substrate porosity extend every stage — verify the primer is fully dry on site before overcoating.

| STAGE (AT 25°C, 50% RH) | TIME |
|---|---|
| **Drying — absorbent substrates** | 60–90 minutes ‡ |
| **Drying — dense substrates** | 60–150 minutes ‡ |
| **Recoat interval — second MVR coat** | 1–4 hours, substrate absorbency dependent |
| **Foot traffic** | Approx. 4 hours |
| **Full cure** | Approx. 4 hours |
| **Sand broadcast window** | While the final coat is still wet |
| **Overcoat window — without sand broadcast** | Within 48 hours; beyond that, reactivate or re-prime |
| **Screeds, levelling compounds and direct bonding** | After full cure and within 48 hours of application |

‡ Restated from the 20°C and 65% RH source condition — refer to the Change Register.

* Typical R&D characteristic values, not for engineering design without written FORSPEC confirmation.

## Clean Up

Remove excess uncured product immediately and clean tools and equipment with clean water while the product remains wet. Cured product can only be removed mechanically. Allow washings to settle, decant and dispose of residues in accordance with the relevant State or Territory environment protection legislation. Do not discharge wash water into drains, soil or waterways.

## Container and Waste Disposal

Allow residues to fully cure before disposal as construction waste in accordance with State and local requirements. Empty containers are disposed of or recycled per local council requirements. Refer to Section 13 of the SDS for detailed disposal requirements.

## Quality Records

Record the batch numbers of all ACTFLEX MB200 used, substrate preparation method, in-situ relative humidity readings and test locations to ASTM F2170, number of coats applied and their direction, consumption achieved per coat, sand broadcast rate where used, drying and cure confirmation, the interval between priming and the following layer, and inspection results, as part of the project quality assurance records.



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## Storage

Store in original, unopened containers in a cool, dry, frost-free place, tightly closed and protected from moisture — the product is moisture-curing and opened containers skin over. Shelf life: 24 months from the date of manufacture when stored as specified.

## Safety Precautions and First Aid

Refer to the current Safety Data Sheet before use. ACTFLEX MB200 is a moisture-curing polyurethane: the uncured product may cause skin and eye irritation and may cause respiratory irritation in poorly ventilated areas. Use in well-ventilated areas. Wear protective gloves, protective clothing and eye protection, with respiratory protection where ventilation is inadequate or where the SDS and workplace risk assessment require it. Do not eat, drink or smoke when handling; wash hands before breaks and after work. The Chemwatch SDS number for this product is to be confirmed — refer to the Change Register.

First aid — Eyes: rinse cautiously with water for several minutes; remove contact lenses if easy to do; continue rinsing and seek medical attention. Skin: wash with plenty of soap and water; remove contaminated clothing. Inhaled: move to fresh air and keep comfortable; seek medical attention if breathing difficulty occurs. Swallowed: do NOT induce vomiting; rinse mouth and seek medical attention. POISONS INFORMATION CENTRE: 13 11 26 (Australia-wide, 24 hours). In an emergency, dial 000. KEEP OUT OF REACH OF CHILDREN. Read the Safety Data Sheet (SDS) before use — available at www.forspec.com.au.

## Warranty

Standard Product and Performance Warranty: Forspec Protective Coatings Pty Ltd as Trustee for Forspec Protective Coatings (ABN 11 204 033 631) warrants that ACTFLEX MB200 will be free from manufacturing defects and will not fail under normal usage for a period of ten (10) years from the date of purchase, when installed and used strictly in accordance with this Technical Data Sheet and Forspec's written instructions. This warranty covers the supply of the product only; it does not cover installation, application or workmanship. Remedies are limited, at Forspec's discretion, to replacement of the defective product (or defective portion) or a refund of the purchase price. The full terms, conditions and exclusions are set out in the Forspec Standard Product and Performance Warranty, available at www.forspec.com.au — key conditions include application by a suitably qualified and, where required by law, licensed applicator; use within shelf life; and installation as part of a Forspec approved system without non-approved third-party products.

Project and system warranties: extended project-specific warranties are available at the request of the applicator and must be applied for using the Forspec Warranty Request Form prior to commencement of works. Issue is subject to Forspec approval and is conditional on the use of the complete specified FORSPEC system, application in strict accordance with the current TDS by suitably qualified applicators, and completion of the project quality records described above. The warranty period and terms are as stated in the issued warranty certificate.

Claims: notify Forspec in writing within thirty (30) days of discovery of the alleged defect and within the warranty period, by post to 22/872 Canterbury Road, Roselands NSW 2196 or by email to info@forspec.com.au, including proof of purchase, installation details (date, location, installer), a description of the defect with supporting evidence, and your contact details. Forspec may inspect the site, perform testing and collect samples before determining a claim.

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

## Data Sheet Currency

This Technical Data Sheet (TDS) and the corresponding Safety Data Sheet (SDS) are subject to revision as necessary to ensure compliance with relevant Australian Standards and to incorporate technological advancement. Read the most current versions before use, as application and performance data may be updated. For the latest technical information, contact Forspec Protective Coatings on (02) 8021 3517 or info@forspec.com.au. The information provided is representative and does not serve as a comprehensive specification. For specific projects, consult directly with Forspec Protective Coatings for tailored specifications. This data sheet was issued on 12/11/2026 and is valid for three years from the date of issue unless superseded by a later revision — always confirm the current version at www.forspec.com.au before use.



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