

TECHNICAL DATA FOR BS MOISTUREZERO FPU

High Performance Polyurethane Based Hybrid Weatherproofing Membrane

Description of BS MoistureZero FPU:

BS MoistureZero FPU is a high-performance, single-component waterproofing membrane based on hybrid polyurethane technology. **Water-based, eco-friendly, and UV-stable, it delivers long-lasting flexibility and excellent adhesion across a wide range of surfaces.**

it creates a seamless, elastic, and durable barrier ideal for both weatherproofing and waterproofing applications. Exhibits good abrasion resistance suitable for pedestrian traffic (tested as per ASTM D4060 / internal test method)."

Key Benefits of BS MoistureZero FPU:

- Water-Based:** Easy application and cleanup using water.
- Highly Flexible:** Class 3 membrane with elongation over 300%.
- Eco-Friendly:** Low odor; safe for indoor and outdoor use.
- Fast Drying:** Recoatable in 5-8 hours at room temperature.
- UV Stable:** Non-yellowing performance under sunlight.
- Versatile:** Suitable for both interior and exterior applications across various substrates.
- Excellent Adhesion:** Bonds well with tile adhesives and construction surfaces.
- No Reinforcement not mandatory for standard application,** local reinforcement as needed may be done.
- Crack-Bridging:** Seals micro-cracks to prevent water ingress.
- Suitable for light pedestrian traffic** and maintenance access.

BS MoistureZero FPU is ideal for Use as:

- Structures with complicated profiles such as slopes & Curves
- TopCoat on Pitch Modified Waterproofing Systems
- GI Sheets and Metal Decks
- Fibre Cement Boards
- Concrete Slabs & Brickwork
- Podiums and Non-Tower Roof Areas
- Bathrooms, Kitchens, Balconies, and Basements
- Garden Beds, Planter Boxes & Retaining Walls
- Solar Reflective Coating

Application Instructions:

1. Surface Preparation

- Ensure the surface is clean, dry, and free of dust, oil, grease, or loose particles.
- Repair any cracks, blisters, seams, or damaged flashing prior to application.

2. Primer Coat

- Use BS SmartPrimer WB EP Primer as or use BS MoistureZero FPU diluted 1:1 with clean water as the primer for Concrete
- Apply uniformly over the prepared surface and allow it to dry for 4-5 hours

3. Main Coating

- Apply using a brush, roller, squeegee, or airless spray.
- First coat: Dilute with up to 10% water.
- Second coat: Dilution up to 5% water
- Allow 5-8 hours of curing between coats.
- Apply 2–3 coats to achieve a total dry film thickness (DFT) of 900 microns to 1.5 mm.

Properties of BS MoistureZero FPU

Property	Value
Appearance	White
Form	Viscous Liquid
Specific Gravity	1.30 ± 0.05 (ASTM D1475)
Solid Content (%)	60 ± 5 % (ASTM D1475)
Elongation at Break	≥ 300 % (ASTM D2370)
Viscosity Brookfield	50,000–70,000 cps @ 10 rpm, Spindle #7, 25 °C
Tensile Strength	≥ 2.7 MPa (ASTM D412))
Tear Resistance	≥ 28 N/mm (ASTM D624 / ISO 34)
Flash Point	Not Applicable
Tack Free Time @ 25°C	2-4 hours
SRI - White	101 (ASTM E1980)
Slip Resistance	≥ 0.50 SCOF (ASTM D2047)
Adhesion to Concrete	≥ 1.5 MPa (ASTM D4541)

Consumption Data

On Concrete surface approx. **1.2 kg/m²** total (for one coat of primer and top 2-3 top-coats to achieve 900 microns to 1.5 mm DFT

On Metal Surface consider 0.6-0.7Kg consumption due to smooth surface and special resin based priming system.

Packaging

BS MoistureZero FPU is available in **20 Kg** pail packaging.

Storage & Shelf Life

- Store in a cool, well-ventilated area, away from direct sunlight.
- Recommended storage temperature: below 30°C.
- Shelf life: 12 months from the date of manufacture, when stored in sealed, unopened containers.

Safety and Handling

- Non-toxic, eco-friendly, and presents no health hazard under normal use.
- Always wear gloves and goggles during application.
- Avoid inhalation of vapors or mist.
- In case of skin or eye contact, flush with water and seek medical attention if irritation persists. If ingested, do not induce vomiting; seek immediate medical help.

Disclaimer

The information in this sheet is provided for general guidance and is based on current knowledge and experience. Due to the variety of possible application methods and site conditions, no responsibility is assumed for results obtained under specific circumstances.