

FUERZA PU-BRANE

SINGLE COMPONENT BITUMEN MODIFIED POLYURETHANE LIQUID WATERPROOFING MEMBRANE

FUERZA PU-BRANE is a **single-component, bitumen-modified polyurethane liquid membrane** that cures to form a **seamless, continuous, and highly elastic waterproofing layer**, eliminating the requirement for joints, overlaps, or embedded reinforcement mesh. Its elastomeric and impermeable characteristics provide **excellent air-tightness, waterproofing integrity, and substrate conformability** across a wide range of construction surfaces. The membrane is suitable for **manual application by brush or roller** and, where required, can also be applied using **compatible specialized spray equipment** for larger-scale installations.

APPLICATIONS

FUERZA PU-BRANE is a **polyurethane liquid waterproofing membrane system** suitable for waterproofing and protective coating applications, including:

- **Roofing:** Flat, low-slope, steep-slope roofs, balconies, and overhangs.
- **Flooring:** Walkable floors requiring **waterproofing, abrasion resistance, and durable non-slip finishes**.
- **Structural Concrete:** Concrete slabs, walls, foundations, and associated structural elements.
- **Metal & Asbestos Roofing:** Waterproofing and protective coating of existing roof surfaces.
- **Water-Retaining Structures:** Swimming pools, artificial lakes, ponds, and similar hydraulic structures.
- **Green Roofs & Walls:** Waterproofing and protective treatment for vegetated roofing and vertical landscaping systems.
- **IRMA Roofing Systems:** Compatible waterproofing applications within **inverted roof membrane assemblies**.
- **PU Foam Protection:** Protective waterproof coating over **CHEMFOAM spray-applied polyurethane foam** systems.

SURFACE PREPARATION

Prior to application of FUERZA PU-BRANE, the substrate shall be **structurally sound, stable, clean, and completely dry**. All cracks, fissures, surface defects, and irregularities shall be suitably repaired and levelled, while existing waterproofing coatings or incompatible surface treatments shall be completely removed. The substrate shall then be thoroughly cleaned to eliminate **dust, dirt, oils, grease, vegetation, loose particles, aggregate chippings, and other contaminants** that may impair adhesion. The prepared substrate must possess adequate mechanical integrity and shall be free from **surface moisture, rising damp, capillary moisture, or hydrostatic moisture originating from the underlying structure or backfill**. Application shall only proceed when the substrate is sufficiently dry and suitable for the specified primer and membrane system.

TECHNICAL INFORMATION

Recommended thickness:	± 1.5mm
Dry time at 23° C:	± 5-6 hours
Elongation at break at 23° C:	>600%
Tensile strength at 23° C:	2-3 MPa
Color:	Black

GENERAL FEATURES

- **High Elasticity & Wear Resistance:** FUERZA PU-BRANE forms a highly elastic, abrasion-resistant, and durable waterproofing membrane, providing long-term dimensional stability and certified waterproofing performance.
- **Exceptional Substrate Conformability:** Its high flexibility and adhesion enable application over substrates of varying geometries, including **irregular, curved, inclined, and complex-shaped surfaces**.
- **Single-Layer Application:** The membrane can be applied as a **single-layer system with a recommended minimum thickness of 1.5 mm** when used with the specified FUERZA additive. This enhances physical performance, accelerates installation, reduces application costs, and produces a **dense, homogeneous membrane with minimized internal bubble formation**. When this additive system is used, **airless spray equipment shall not be employed**. The additive shall not be used at temperatures exceeding **35°C**, and containers shall be stored in a cool location protected from direct sunlight.
- **Seamless Waterproofing:** The continuous membrane eliminates conventional **joints, seams, and overlapping requirements**, producing a uniform surface with improved durability, maintainability, and ease of cleaning.
- **Moisture-Controlled Application:** Application shall be performed under **dry substrate and ambient conditions**. The substrate must be free from active moisture, surface water, and hydrostatic pressure from groundwater during and after application. Where substrate moisture is present, the applicable **FUERZA primer system and its permissible substrate moisture limits** shall be verified prior to application.
- **UV Protection:** FUERZA PU-BRANE is an **aromatic polyurethane membrane** and therefore requires protection against prolonged UV exposure. Where no other physical protection is provided, application of a suitable **FUERZA UV-resistant coloured resin/topcoat** is recommended.
- **Broad Substrate Compatibility:** The membrane exhibits strong adhesion to a wide range of substrates, including **cementitious surfaces, concrete, polyurethane foam, butyl membranes, bituminous sheets, timber, polyurethane boards, and metals**, subject to appropriate substrate preparation and priming.
- **Trafficable & Anti-Slip:** Following curing, the membrane can withstand **pedestrian traffic** and may be rendered slip-resistant by broadcasting **silica sand** into the designated surface layer.
- **Wide Service-Temperature Range:** FUERZA PU-BRANE maintains its elastic characteristics across a service temperature range of approximately **-40°C to +80°C**, providing reliable performance under substantial thermal cycling.
- **Self-Leveling Characteristics:** Its self-leveling rheology enables uniform film formation and makes the system suitable for both **low-slope and steep-slope roofing applications**, subject to appropriate application controls.
- **Ceramic Tile Compatibility:** Ceramic tiles may be installed over the cured membrane. For enhanced mechanical interlock, a **uniformly distributed layer of silica sand** should be incorporated into the final FUERZA PU-BRANE layer as specified by the system design.
- **Crack & Joint Bridging:** The elastomeric membrane can be utilized for the **sealing and bridging of suitable cracks, fissures, and joints**, subject to proper detailing and preparation.
- **Localized Repairability:** Damaged or defective areas can be **readily identified, locally repaired, and seamlessly reinstated**, facilitating efficient maintenance and minimizing disruption to the waterproofing system.

THICKNESS & RECOMMENDED COVERAGE

The recommended **minimum cured film thickness (DFT)** is **1.5 mm**, corresponding to an approximate material consumption of **up to 2.4 kg/m²**. The specified thickness may be achieved in **one or multiple coats**, depending on the application technique, substrate characteristics, and prevailing site conditions.

PACKAGING & SHELF LIFE

FUERZA PU-BRANE is supplied in **6 kg and 15 kg units** and has a **12-month shelf life** when stored in a dry environment at **5°C–35°C**. Once opened, the product should be **used immediately**.

