

MC-Proof PU 800

High-performance Aliphatic Polyurethane-based liquid-applied elastic waterproofing membrane.

PRODUCT PROPERTIES:

- Single-component, ready to use.
- Aliphatic Polyurethane-based, UV-resistant.
- High elasticity and elongation; maintains elasticity within a temperature range of -40°C to +60°C.
- Excellent coverage, forming a seamless membrane on both vertical and horizontal surfaces.
- Outstanding adhesion to various substrates.
- Fully waterproof while allowing vapor and air permeability.
- Resistant to hydrolysis and microbial attack.
- Low solvent content, non-flammable, non-toxic.

AREAS OF APPLICATION:

- Suitable for both new construction and refurbishment projects.
- Flat roofs and complex-shaped roof structures.
- Terraces, balconies, and other wet areas.
- Landscaping areas, planter boxes.
- Industrial water tanks.
- Applicable on concrete, mortar, tiles, wood, metal, and galvanized steel substrates.

APPLICATION NOTES:

- **Surface preparation:**
 - The substrate must be clean, sound, and free from laitance, dust, oil, grease, form-release agents, old coatings, existing membranes, and any contaminants that may affect adhesion.
 - Clean the surface using high-pressure water jet (if possible) to remove weak areas before application.
- **Application on Concrete/Mortar substrates (Recommended thickness ~1.5 mm):**
 - **Primer:** Generally not required. However, in cases where proper surface cleaning is not achievable, apply a primer coat using **MC-Proof SP 150** at approximately 1 kg/m², and allow it to dry for 6–8 hours before further application.
 - **Waterproofing layer:** Apply 2 coats of **MC-Proof PU 800** at a consumption rate of 0.5–1.0 kg/m² per coat. Waiting time between coats: approximately 6–8 hours. For other substrate types, consult MC technical department regarding suitable primer systems.
- **Application method :**
 - The product can be applied using roller, brush, squeegee, or airless spray equipment (pressure: 200–250 bar) in 1–2 coats. Maximum recoat interval: not exceeding 48 hours.
 - When using spray application, dilute with 5–10% solvent and mix using a low-speed mixer (~300 rpm).
 - Consumption rate: Approximately 0.5–1.0 kg/m² per coat.
- **Cleaning:** Clean all tools and equipment with solvent immediately after use. Hardened material can only be removed mechanically.

TECHNICAL DATA:

Characteristic	Unit	Value	Comments
Viscosity	cP	5,000 – 6,000	ASTM D2196-86
Density	gr/cm ³	1.5	ASTM D1475 / DIN 53217 / ISO 2811
Heat resistance	°C	-40 to +60	
Hardness (Shore A)		60	ASTM D2240 / DIN 53505 / ISO R868
Tensile strength	Kg/cm ² N/mm ²	> 30 > 2.0	ASTM D412 EN-ISO-527-3
Adhesion to concrete	N/mm ²	≥ 1.5	≥ 1.5
Elongation at break	%	> 800	ASTM D412 / EN-ISO-527-3
Crack bridging ability	mm	3	BS EN 14891 : 2017
Water vapor permeability	g/(m ² ·h)	0.8	ASTM E96 (water method)
Water permeability		Impermeable	
Water absorption (7 days)	%	1	Internal standard
QUV weathering test		Passed 2,000 hours	ASTM G53 4 hours UV at 60°C (UVB lamp) and 4 hours condensation at 50°C

** Technical data are based on laboratory conditions (23°C ± 2°C and 60% RH) and may vary under actual site conditions. For project specific requirements, preliminary testing under actual conditions is recommended.*

PRODUCT CHARACTERISTICS:

Form	Liquid.
Color	White, grey, green, and black.
Packaging	20 kg pail.
Storage	Store in a dry, cool, and well-ventilated area.
Shelf-life	Minimum 12 months from date of manufacture if stored properly in unopened original packaging.

Note: The information provided here is based on our experience and correct to the best of our knowledge. It is, however, not binding. It will need to be adapted to the requirements of the individual building projects, to the specific application and to non-standard local conditions. Our data refers to the accepted engineering rules, which have to be observed during application. Given these preconditions we shall be liable for the accuracy of the information given as outlined in our sales and delivery terms and conditions. Recommendations by our employees that deviate from this information are only binding for us if they have been confirmed in writing. In all cases, the generally accepted rules and practices reflecting the current state of the art must be adhered.

Edition **01/2024**. Some technical changes have been made to this print medium. Older editions are invalid and may not be used.