POLY PROOF 8100 - TWO COMPONENT SEMI-FLEXIBLE WATERPROOFING COATING

DESCRIPTION :

POLYPROOF 8100 is a semi-flexible, two-component, cement-based waterproofing system designed to protect concrete and masonry structures against water penetration. The system forms a durable, semi-elastic coating suitable for positive and negative waterproofing applications. It consists of: Component A: Cement-based dry powder. Component B: Liquid polymer additive. POLYPROOF 8100 creates a dense, water-impermeable layer with good adhesion and moderate crack-bridging capacity.

ADVANTAGE:

- Two-component system ensuring consistent performance.
- Semi-flexible coating for moderate crack bridging.
- Excellent adhesion to concrete, masonry, and cementitious substrates.
- Resistant to positive and negative water pressure.
- Durable, long-lasting, and weather-resistant.
- Can be applied on slightly damp surfaces.
- Non-toxic, environmentally friendly.

AREA OF USE :

- Basements, foundations, and retaining walls.
- Water tanks, swimming pools.
- Bathrooms, balconies, terraces, and wet areas.
- Roof terraces and podium decks.
- Concrete repair areas requiring semi-flexible waterproofing.

SURFACE PREPARATION :

Proper surface preparation is crucial for ensuring optimal adhesion, durability, and performance of POLYPROOF 8100 semi-flexible waterproofing system. Follow these steps carefully:

6. Structural Assessment:
   - Inspect the substrate for any structural damage such as cracks, honeycombs, voids, or spalling.
   - Repair significant defects using suitable cementitious repair mortars or epoxy fillers before waterproofing.
7. Cleaning:
   - Remove all dust, dirt, grease, oil, laitance, curing compounds, or any loose particles from the substrate.
   - High-pressure water jetting or mechanical methods (grinding, sandblasting) can be used for heavily contaminated surfaces.
8. Moisture Control:
   - The substrate should be damp but not with standing water.
   - Surfaces that are too dry may absorb water from the mix, reducing adhesion; surfaces with excessive water may prevent proper curing.
1. Substrate Profile & Roughness:
   - Concrete or masonry should have a slightly roughened surface to improve mechanical bonding.
   - Smooth or troweled surfaces should be mechanically abraded or treated with a bonding primer.
2. Crack Treatment:
   - Hairline cracks (<0.3 mm) can be covered directly by the semi-flexible coating.
   - Cracks larger than 0.3 mm or moving cracks must be repaired using a suitable crack repair mortar, or a reinforcing fabric may be embedded within the first coat.
3. Priming (if required):
   - Highly porous substrates (e.g., lightweight concrete, cement blocks, or aerated concrete) may require a primer coat using Component B diluted with water (up to 10%) to improve adhesion and reduce absorption.
4. Temperature and Weather Considerations:
   - Avoid application on substrates below +5°C or above +35°C.
   - Protect the substrate from direct sunlight, wind, and frost before and during application to prevent rapid drying or curing issues.
5. Final Check Before Application:
   - Ensure all surfaces are structurally sound, clean, and properly pre-wetted.
   - Confirm that any repairs or priming layers have cured according to recommended times before applying POLYPROOF 8100.

   Note: Inadequate surface preparation can significantly reduce adhesion, crack-bridging capability, and long-term waterproofing performance.

CONSUMPTION :

- 1.8 – 2.0 kg/m² (per layer).

MIXTURE PREPARATION:

- Pour Component B (liquid polymer) into a clean mixing container.
- Gradually add Component A (powder) while stirring mechanically at 400–600 rpm.
- Mix for 2–3 minutes until homogeneous and lump-free.
- Let mixture rest 5 minutes, then remix before application.
- Do not add extra water.

STANDADS:

- EN 1504-2:2004

PACKING:

- Component A (powder): 20 kg bags
- Component B (liquid): 5 kg plastic drum

PRECAUTION IN APPLICATION:

- Proper application of POLYWATERPROOF 8100 waterproofing system is essential to achieve optimum performance. Follow these guidelines carefully:
- Mix Preparation:
- Prepare the mixture according to the Mixing Instructions section.
- Ensure a homogeneous, lump-free paste.
- Do not add extra water, as it may reduce adhesion and performance.
- Priming the Substrate (if required):
- For highly porous surfaces, apply a thin primer coat using Component B diluted with up to 10% clean water.
- Allow the primer to become tacky before applying the first coat.
- First Coat Application:
- Apply the first coat using a brush, roller, or trowel.
- Recommended thickness: 1–1.5 mm per coat.
- Ensure full coverage, paying extra attention to corners, joints, and protrusions.
- Embedding Reinforcement (optional):
- For areas with anticipated micro-cracking or substrate movement, embed a fiberglass or polypropylene reinforcing mesh into the first coat while still wet.
- Press gently to ensure full contact with the substrate.
- Curing Time Between Coats:
- Allow 4–6 hours drying time at 23°C before applying the second coat.
- In colder conditions, drying time may be longer.
- Avoid applying the second coat on a fully dry surface; a slightly tacky first layer improves intercut adhesion.
- Second Coat Application:
- Apply the second coat perpendicular to the first coat to ensure uniform coverage and full water-impermeable performance.
- Recommended total thickness: 2–3 mm.
- Corners, Joints, and Detailing:
- Pay special attention to corners, expansion joints, pipe penetrations, and other vulnerable points.
- Use additional layers or reinforcing fabric if necessary.
- Curing:
- Protect the applied coating from direct sun, strong wind, rain, and frost during the first 24 hours.
- Moist curing for 3–5 days is recommended to enhance performance and durability.

Inspection After Application:
Check for pinholes, thin spots, or uncovered areas.
Touch up as needed to maintain uniform waterproofing.

Note: Proper application ensures semi-flexible crack-bridging, excellent adhesion,
and long-term water impermeability. Avoid shortcuts in coating thickness or curing.

SECURITY INFORMATION :

Use protective clothes, gloves, glasses and mask compatible with Health and Safety regulations during the application. It should not contact skin and eyes. In case it contacts to skin and eyes, rinse it with water and if swallowed ask for medical help. Food and beverage should not be allowed in the application area. It should be stored at the reach out of the children. The Material Safety Data Sheet (MSDS) should be read for detailed information.

PRECAUTION IN APPLICATION:

- Do not apply the product on substrates with rising damp or standing water.
- Ensure the substrate is structurally sound, clean, and properly pre-wetted.
- Avoid application below +5°C or above +35°C.
- Do not apply in direct sunlight, strong wind, or rain to prevent rapid drying, cracking, or wash-off.
- Apply the recommended total thickness (2–3 mm); thinner layers may compromise waterproofing and crack-bridging.
- Do not add extra water to the mixture, as it reduces adhesion and durability.
- Use reinforcing fabric in high-stress or moving areas to improve crack-bridging.
- Protect freshly applied layers from mechanical damage and foot traffic until fully cured.
- Allow sufficient curing time between coats; do not apply second coat on fully dried first coat

TECHNICAL PROPERTIES:

Color	Grey	-
Mixing Ratio (A:B)	1:0.25 (by weight)	-
Aplication Tempeture	Between +5°C and +35°C	-
Open Time	30 – 40 Minutes	-
Pot Life	60 Minutes	
Consumption	1.8 – 2.0 kg/m² (per layer)	-
Working Time	20 – 30 minutes	-

PERFORMANCE

Adhesion to concrete	≥ 1 N/mm²	-EN 1542
Water Vapor Permeability	Claas 1	EN ISO 7783
Water Absorption and Water Permeability	≤ 0,10 kg/m².h$^{0.5}$	N 1062-3
Pressurised Water Strength	≥ 2,00 bar (Pozitif)	EN 1062-8
Reaction to Fire	A2-s1,d0	EN 13501-1

Hereby technical values and product application instructions are obtained in the wake of tests conducted in environment of +23±2°C temperature with relative humidity of %50±5. Higher temperatures will shorten the time span, while lower temperatures will extend it

STORAGE AND SHELF LIFE :

Must be stored at temperatures between +5°C and +35°C. Under proper storing conditions, the product's shelf life is 12 months from production date if kept in original packaging unopened and undamaged. Packaged products must be shaken before use.

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