

TOPSEAL AQ 230 PRO

High-Performance One-Component Water-Based Polyurethane Waterproofing Membrane

Description

Topseal AQ 230 PRO is a high-performance, elastomeric, water-based polyurethane waterproofing membrane designed for seamless waterproofing of concrete and cementitious substrates.

The cured membrane forms a flexible, crack-bridging, and durable waterproofing system with controlled water vapour permeability, suitable for both protected and lightly exposed applications.

Classification & Compliance

EN / EUROPEAN STANDARDS POSITIONING

- **EN 1504-2**
Surface protection system for concrete
→ Coating(C) – Moisture Control (MC)
+ Physical Resistance (PR)
- **EN 1062-7**
Crack bridging capability
- **EN ISO 7783**
Water vapor permeability

ASTM / International Standards

- ASTM D412 – Tensile & elongation
- ASTM D4541 – Pull- off adhesion
- ASTM E96 – Water vapor transmission
- ASTM D5385 – Hydrostatic resistance

Typical Application

A. Exposed / Semi-Exposed

- Roof slabs
- Balconies
- Terraces
- Podium decks

B. non-exposed

- Toilets / bathrooms
- Kitchen
- Planter
- Concrete gutters

Features & Benefits

- One-component, ready-to-use system
- Seamless, joint-free waterproofing
- Excellent crack-bridging performance
- High elasticity (>600%)
- Good adhesion to concrete and masonry
- Breathable membrane (vapor permeable)
- Low VOC, environmentally friendly
- Easy application and repair
- Compatible with tile finishes (with screed / protection layer)

Product Information

Property	Value
Chemical Base	Water-based polyurethane dispersion
Appearance	Viscous liquid
Colour	Grey / White
Packaging	20 kg pail
Shelf Life	12 months
Storage	+5°C to +35°C

Technical Data

Property	Value	Standard
Solid Content	~65%	ASTM D2369
Tensile Strength	≥ 1.0 N/mm ²	ASTM D412
Elongation	≥ 600%	ASTM D412
Adhesion to Concrete	≥ 1.0 N/mm ²	ASTM D4541
Crack Bridging	≥ 1.0 mm	EN 1062-7
Water Vapor Permeability	Class I / II (target)	EN ISO 7783
Water Absorption	<0.1 kg/m ² -h ^{0.5}	EN 1062-3
Hydrostatic Resistance	No leakage	ASTM D5385
UV Resistance	Moderate (upgrade test recommended)	ASTM G154
Service Temperature	-10°C to +70°C	-

System Build-Up

Standard Waterproofing System

1. Primer
 - AQ 230 diluted with 10% water
2. Base Coat
 - AQ 230 applied at ~0.5-0.8 kg/m²
3. Reinforcement (Optional but recommended)
 - Polyester mesh embedded in wet coat
4. Top Coat
 - AQ 230 applied at ~0.5-1.0 kg/m²

Total Consumption

- ❖ 1.5 – 2.0 kg/m²

Dry Film Thickness (DFT)

- ❖ 1.0 – 1.5 mm

Application Details

Substrate

- Minimum 28 days cured concrete
- Moisture <6%
- No rising damp

Application Conditions

Parameter	Requirement
Temperature	+5°C to +35°C
Humidity	<85%
Substrate	Dry

Recoating Time

- 4 – 12 hours

Full Cure

- 24 hours

Detailing Requirements

Must reinforce:

- Internal / external corners
- Pipe penetrations
- Drain outlets
- Expansion joints

Use:

- ❖ Polyester fleece / mesh
- ❖ Sealant for joints (PU sealant recommended)

Limitations

- Not suitable for permanent water immersion
- Not suitable for negative-side waterproofing
- Must be protected if used under heavy traffic
- UV resistance limited unless topcoat applied
- Not for application on wet or contaminated surfaces

Compatibility

Substrate	Suitability
Concrete	✓
Screed	✓
Brickwork	✓
Metal	Requires primer
Bitumen	Test required

Health & Safety

- Use PPE (gloves, goggles)
- Avoid inhalation and contact
- Refer SDS

Packaging

- 20 kg pail

Storage

- Store dry, shaded area
- Protect from freezing

Technical Support

Topkrete provides:

- Specification support
- Method statements
- Site inspection

Legal Disclaimer

Performance values are obtained under laboratory conditions. Actual results may vary depending on substrate, application method, and environmental conditions. Users must verify suitability through site trials.

Warranty

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