

PU-XSEAL ULTRA



HIGH-PERFORMANCE WATER-BASED POLYURETHANE ELASTOMERIC WATERPROOFING COATING

hahne PU-XSEAL ULTRA is a water-based, low-solvent, high-performance elastomeric waterproofing membrane designed to form a seamless, flexible and durable protective layer over suitable building substrates. Its high elasticity and crack-bridging capability enable the membrane to accommodate substrate movement and provide reliable waterproofing performance. The product is suitable for exposed exterior applications and is designed for applications requiring enhanced flexibility and crack-bridging performance.



PRODUCT INFORMATION

Area of Applications

- Concrete roof slabs and terraces.
- New and existing roofs and walls.
- Exposed exterior waterproofing applications.
- Car porch roofs and suitable deck areas.
- Tile roofs and suitable tiled surfaces.
- Fiber cement boards and suitable building boards.
- Metal surfaces and gutters.
- Fire walls and other suitable waterproofing applications.

Features and Benefits

- Water-based and low-solvent formulation with low VOC content.
- Crack bridging capability up to 4 mm.
- High elasticity with more than 600% elongation at break.
- Excellent tensile and tear strength for a flexible waterproofing membrane.
- Seamless, liquid-applied waterproofing system.
- Good resistance to water penetration and water absorption.
- Dynamic crack bridging performance at sub-zero temperature.
- Suitable for reinforced waterproofing systems using compatible non-woven polyester reinforcement.

Consumption

Approx. 2 kg/m² @ 1 mm DFT in two coats.

*Consumption will vary depending on site and substrate conditions

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TECHNICAL SPECIFICATIONS

Property	Test Method	Result
Density	ASTM D 1475-2013	1.45 ± 5 g/cc
Non-Volatile Content (Solid Content)	ASTM D 6511-2018	70-73 %
Tensile Strength	ASTM D 412-2016	4 ± 0.4 N/mm ²
Elongation at Break	ASTM D 412-2016	> 600 %
Tear Strength	ASTM D 624-2000	> 12 N/mm
Crack Bridging Ability	EN 1062-7(A)-2004	> 4 mm
Puncture Resistance	ASTM E 154-2008	> 50 N
Shore A Hardness	ASTM D 2240-2015	> 60
Pull-off Adhesion Strength to Concrete	ASTM D 7234-2022	> 1.5 N/mm ²
Average Adhesion in Peel after Water Immersion	ASTM C 794-2018	> 10 N
Depth of Water Permeability @ 5 Bar	EN 12390-8-2019	Nil
Water Absorption, 24 Hrs.	ASTM D 570-2022	< 10 %
VOC Content	IS 101: Part 2, Sec 3: 2015	< 50 g/Ltr.
Water Vapour Transmission Rate	ASTM D1653-2013	< 50 g/m ² ·Day
Dynamic Crack Bridging Ability @ - 26°C	ASTM C 1305-2025	Pass
Root Resistance	CEN-TS-14416-2014	No Penetration

APPLICATION PROCEDURE

Surface Preparation

- The substrate must be sound, stable, clean and free from dust, loose particles, oil, grease, algae, fungus and other contaminants that may adversely affect adhesion.
- Remove all weak, loose or poorly bonded material from the substrate by suitable mechanical means and ensure that the surface is adequately prepared before commencing application.
- Existing cracks, joints, surface undulations and other visible defects should be suitably repaired using compatible repair materials before application of the waterproofing system.
- Ensure that the substrate has a suitable surface profile and is free from standing water. The surface should be allowed to attain suitable conditions before priming.

Priming

- Mix component A and B of **hahne PrimeStick-WEP** thoroughly before application to ensure uniform consistency.
- Apply a single, uniform coat of **hahne PrimeStick-WEP** over the prepared substrate using a suitable brush or roller.
- Ensure complete and uniform coverage, particularly over porous areas, corners and other locations where additional penetration may be required.
- Allow the primer to dry completely before proceeding with the application of **hahne PU-XSEAL ULTRA**. The primer should not remain wet or tacky at the time of membrane application.

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Application

- Stir **hahne PU-XSEAL ULTRA** thoroughly before application to ensure a uniform and homogeneous material.
- Apply **hahne PU-XSEAL ULTRA** using a suitable brush or roller in two uniform coats, maintaining the recommended consumption for achieving the required dry film thickness.
- Apply the first coat uniformly over the primed substrate, ensuring that the material is evenly distributed without excessive build-up, pinholes or missed areas.
- Where reinforcement is specified as part of the waterproofing system, immediately embed the recommended non-woven polyester reinforcement into the first coat while the material is still wet. Use a suitable roller to ensure proper wetting of the reinforcement and to remove trapped air or wrinkles.
- Allow the first coat to dry adequately before applying the second coat. The second coat should be applied uniformly and preferably in a direction perpendicular to the first coat to ensure consistent coverage.
- Ensure that the required total dry film thickness is achieved after completion of the specified coats. Additional material may be required depending on substrate porosity, surface profile and site conditions.
- Protect the freshly applied coating from rain, water, dust and other contamination until it has sufficiently dried.
- Avoid application when the ambient or substrate temperature is below 5°C or above 35°C, and do not apply during foggy conditions.

PACKAGING, STORAGE AND SAFETY

Packaging

- **hahne PU-XSEAL ULTRA** is available in 25 kg buckets.

Storage and Shelf Life

- Store the adhesive in a cool, dry place, away from direct sunlight and moisture, to maintain its quality.
- The shelf life of the product is 12 months if stored in its original sealed packaging.

Safety Instructions

- Use protective gloves and safety glasses during application.
- Avoid contact with eyes or prolonged contact with skin. In case of contact, flush thoroughly with water. Do not ingest.
- Non-toxic and non-flammable.
- Refer to the Safety Data Sheet before use.

DISCLAIMER: The information and application guidelines provided by the company and its representatives are intended solely as a general reference. Users are strongly encouraged to conduct their own tests and trials to verify the product's suitability for their specific requirements before proceeding with full-scale use. As the identification of underlying issues, the quality of other materials and the workmanship on-site are beyond our control, we cannot offer any express or implied guarantees regarding the results. The company disclaims any liability for damages or unsatisfactory outcomes that may arise from the use of our products.