

High-Performance Polyaspartic Polyurea Waterproof Coating

PFS ASP-1583: High-Performance Polyaspartic Polyurea Waterproof Coating

PFS ASP-1583 is a two-component, high-solids polyaspartic polyurea waterproof coating. The system consists of Part A (polyaspartic resin, pigments, and functional additives) and Part B (polyol-modified isocyanate hardener). Engineered for superior durability, it forms a tough, elastic, and weather-resistant membrane specifically designed for long-term waterproofing of concrete substrates.

Key Advantages

- **Excellent Mechanical Properties:** High tensile strength combined with exceptional elongation at break to bridge concrete cracks.
 - **Superior Weatherability:** Outstanding resistance to UV radiation, preventing chalking and degradation in outdoor environments.
 - **High Solids Content:** $\geq 95\%$ solids, ensuring a thick, robust protective layer with minimal solvent emissions.
 - **Efficient Application:** Optimized for excellent painting performance and rapid curing to reduce project downtime.
 - **Strong Adhesion:** Provides excellent bonding strength to concrete and various primer systems.
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Typical Applications

- **Concrete Waterproofing:** Ideal for roofs, podiums, and balconies of commercial and residential buildings.
- **Protective Coating:** Suitable for infrastructure projects requiring long-term corrosion and water protection.
- **Exposed Environments:** Perfect for areas requiring high UV resistance and aesthetic durability.

Application Guidelines

- **Mixing Ratio:** Weight Ratio A : B = 2 : 1 (Please refer to packaging labels for precise batch weights).

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● Surface Preparation :

- Substrate Condition: Ensure the concrete substrate is clean, dry, and free of oil, dust, and laitance.
- Moisture Content: Concrete moisture content should be below 8%.
- Priming: A suitable primer is recommended to seal the concrete pores and enhance the bond strength of ASP-1583.
- Interval: Pay close attention to the recoat interval if applying over a previous coating layer.

● Curing Profile (at 25°C):

- Tack-Free Time: 1.5 – 3 Hours
- Hard Dry: Approx. 6-8 Hours
- Full Cure: 7 Days



Storage & Packaging

- **Packaging:** Available in sets (A:B = 2:1). Standard sizes: 30kg/set (A: 20kg, B: 10kg) or smaller repair kits.
- **Shelf Life:** 12 months for both Part A and Part B when stored in original, unopened containers.
- **Storage Conditions:** Store in a cool, dry, and well-ventilated area at 5°C – 30°C. Protect from direct sunlight and moisture.

Safety & Personal Protective Equipment (PPE)

- **Skin Protection:** Wear impervious gloves and protective clothing. If skin contact occurs, wash with an appropriate cleaning agent followed by soap and water.

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- **Eye Protection:** Use safety goggles. In case of accidental contact, flush with plenty of water for at least 15 minutes and seek medical attention immediately.
 - **Ventilation:** Ensure adequate ventilation in the work area.
 - **Fire Safety:** Contains flammable substances. Keep away from sparks, open flames, and heat sources. Strictly no smoking in the vicinity.
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Technical & Physical Data

Property	Test Method	Result
Appearance	Visual	Grey (standard) / Customizable
Solid Content	—	≥ 95% (Mixed)
Density	—	1.4 ± 0.1 g/cm ³
Hardness (Shore A)	ASTM D2240	≥ 80
Tensile Strength	GB/T 16777	≥ 10 MPa
Elongation at Break	GB/T 16777	≥ 250%
Adhesive Strength	GB/T 16777	≥ 2.5 MPa (Concrete)
Water Impermeability	0.3MPa, 30min	No Leakage
Low Temperature Flexibility	—	-35°C, No cracks