

STRAIGHT MASTER 688

高彈性環保型亞加力防水膜

High-elasticity acrylic waterproofing membrane



Product Description

STRAIGHT MASTER 688 is a tough, UV-stable, mildew-resistant, and highly elastic pre-mixed liquid acrylic waterproofing membrane. It is specially designed for exposed outdoor environments and is available in a variety of standard colors.

Scope of Application

STRAIGHT MASTER 688 is specifically designed for exposed waterproofing requirements in both new construction and renovation projects, suitable for waterproofing and decorative protection of various building components. The product can be directly applied to red bricks, lightweight concrete, brick-concrete roofs, tile surfaces, exterior walls, metal roofs, terraces, and canopies, providing an excellent waterproof barrier and weather-resistant decorative finish.

Whether it is balcony and exterior wall renovation for residential buildings, roof waterproofing maintenance for commercial buildings, or metal roof protection for industrial plants, this product excels in all applications. In addition, this product is particularly suitable for the facade renovation of existing buildings, as it can be applied directly onto the original surface without demolition, achieving both waterproofing and appearance renewal in a single application.

Product Advantages

Water-based & Eco-friendly: Single-component, ready to use upon opening, free of organic solvents, with very low odor and near-zero VOC content, making it safe and friendly for workers and the environment.

Superior Elasticity: Forms a highly elastic continuous waterproof membrane after curing, effectively bridging hairline cracks in the substrate and accommodating dimensional changes caused by thermal expansion and contraction.

Weather & UV Resistant: Exhibits outstanding weather resistance and UV stability, non-yellowing and non-chalking under long-term exposure, maintaining original color and finish effects.

Strong Adhesion: Provides excellent adhesion to various substrates such as concrete, mortar, and metal.

Tough & Wear-resistant: The coating surface is tough and can withstand pedestrian loads required for inspection and maintenance, facilitating future upkeep.

Decorative & Waterproof Integration: Provides an aesthetic finish without the need for an additional topcoat, offering an economical and durable overall solution for roofs, exterior walls, and equipment bases. Available in standard colors (white, green, gray, black, transparent).

Technical Performance Data

Technical Characteristics	Performance Specification / Standard
Form & Colour	Medium viscosity liquid, standard colors (white, gray, green, black, transparent)
Specific Gravity	Approx. 1.206 g/cm ³
Tensile Strength	1.3 MPa
Elongation at Break	320%
Application Temperature	5°C – 30°C (Surface temperature)
Overcoat Time	4 hours (@ 23°C, 50% RH)
Full Cure Time	7 days (@ 23°C, 50% RH)
Coverage Rate	Approx. 12–15 m ² / 20-litre unit (Wet/dry film thickness 1.0–1.2 mm, horizontal surfaces)

Product Characteristics & Packaging

Item	Specification
Appearance	Viscous liquid
Color Options	White / Gray / Green / Black / Transparent
Packaging	Plastic bucket
Package Size	20 kg / bucket
Shelf Life	24 months (Under normal storage conditions)
Storage Conditions	Store at 5°C – 35°C, avoid direct sunlight and frost

Application Instructions

The ambient temperature for application should be between 5°C and 35°C. Outdoor application is strictly prohibited during rain or snow.

Substrate Preparation:

- Substrates must be flat, sound, clean, and free of standing water, dust, oil, and grease.
- Newly poured concrete must cure for at least 28 days before application, and the substrate must be completely dry.
- In case of rain, wait until the concrete substrate is dry for 3 days before proceeding with application.
- For porous surfaces (such as mortar or concrete), a suitable primer should be applied to ensure good adhesion.
- Internal/external corners and pipe penetrations should be rounded into coving details.
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First Coat Application:

- Apply the first coat overall by brushing, rolling, or troweling, paying special attention to uniform coverage on rough surfaces.
- Recommended consumption: Flat roofs approx. 1.0 kg/m²/coat; Walls approx. 0.75 kg/m²/coat.
- Allow the first coat to dry for 8 hours before applying the second coat.

Second and Top Coat Application:

- The second coat should be applied perpendicular to the first coat using spraying, brushing, troweling, or rolling, with the same consumption rate as the first coat.
- If a third coat is required, apply it in the same manner after the second coat has dried for 8 hours.

Post-Application Curing:

- Curing time depends on environmental conditions. The coated surface should be left undisturbed at least until the following day, preferably for 2 to 3 days. This is especially important when temperatures are below 20°C. If applied indoors or in poorly ventilated areas, using a fan helps shorten the curing time.

Tool Cleaning

Clean all tools and equipment immediately with water after application.

Dosage and Coverage Rate

Parameter	Value / Description
Theoretical Consumption*	Approx. 1.3–1.7 kg/m ² (per millimeter of dry film thickness)
Coverage (per 20-litre bucket)	Horizontal surfaces: Approx. 12–15 m ² (Dry film thickness 1.0–1.2 mm) Vertical surfaces: Approx. 30 m ² (Dry film thickness 350 µm)
Recommended Total Thickness	1.0–1.2 mm (Horizontal surfaces, applied in 2 coats) 0.35 mm (Vertical surfaces, applied in 2 coats)
Wet Film Thickness per Coat	Approx. 0.8–1.8 kg/m ² (Depending on substrate absorption rate)
Environmental Temperature	Min. 5°C – Max. 35°C
Relative Humidity	< 85%
Substrate Temperature	Min. 5°C – Max. 35°C (Must be at least 3°C above the dew point; watch out for condensation)

*Note: Actual consumption will vary depending on substrate condition, roughness, and application technique.

Drying and Curing Time

- Recoat Interval: Minimum 4 hours when no reinforcing layer is used (at 23°C, 50% RH).
- When Using a Reinforcing Layer: It should be embedded into the wet membrane and immediately overcoated.
- Touch Dry Time: Approx. 24 hours (at 23°C, 50% RH), after which it can withstand light pedestrian traffic.
- Full Cure: Approx. 7 days (at 23°C, 50% RH), after which normal service loads can be applied.
- Pot Life: Approx. 3 hours (at 23°C, 50% RH).
- Drying and curing times will vary depending on temperature, humidity, and substrate porosity.
- Do not apply on substrates with a surface temperature below 5°C or above 35°C.

Transport and Storage

- Transportation: Protect from sunlight, rain, freezing, compression, and collisions during transit to ensure packaging remains intact.
- Storage: Store in a cool, ventilated, and dry warehouse, away from direct sunlight and fire sources.
- Storage Temperature: Maintain between 5°C and 35°C.
- Under normal transport and storage conditions, the shelf life is 24 months.

Precautions

Application temperature must be between 5°C and 35°C. Application during rain or snow is prohibited.

If the coating is exposed to rain before it is completely dry, immediate covering protection must be provided.

Stir thoroughly before use. Minor separation may occur after long-term storage, which is normal; use a low-speed mixer or hand-stir gently to restore uniformity.

Strictly prohibiting adding water or other thinners without instructions from technical personnel.

Please read all application guidelines provided by the manufacturer carefully before execution.

Contact Information

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