

Product Data Sheet

CasTech Proof FX 100

Nov-2025, Ver. 01.01



Two-Component Acrylic Co-Polymer Flexible Cementitious Waterproofing

DESCRIPTION

CasTech Proof FX 100 is a two-component, acrylic co-polymer based flexible cementitious waterproofing system, designed to provide durable and reliable protection for a wide range of surfaces.

TYPICAL USES

Swimming pools; water tanks, tanks and reservoirs; potable water containers; silos; balconies; bathrooms and wet areas; basements; roof waterproofing; lift pits; challenging damp conditions; backing coat for cladding; foundation protection; protection of concrete against carbonation and chloride ion attack.

KEY BENEFITS

- Long-lasting protection
- Resistance to weather conditions
- Application in challenging damp conditions
- Protection against carbonation and chloride ion attack
- Potable water compliance

ADVANTAGES

Key advantages:

- Flexibility and adaptability
- Versatility in applications
- Robust waterproof barrier
- Ease of application

STANDARDS

- BS 6920 – Effect on water quality
- BS 1881-122 – Water absorption
- DIN 1048 – Water penetration test

COMPATIBILITY

CasTech Proof FX 100 is compatible with concrete, masonry, marble and stone surfaces, and is resistant to diesel, petrol and mild acidic conditions.

TYPICAL PROPERTIES

Typical properties at $25 \pm 2^\circ\text{C}$, humidity $50 \pm 5\%$:

Components	Part A – liquid Part B – powder
Mixed Form	Slurry
Colour	Grey; off-white on request
Mixed Density (BS EN 12350-6)	$2.00 \pm 0.05 \text{ kg/L}$
Toxicity (BS 6920-1)	Non-toxic
Working Time	25 – 40 minutes
Setting Time	3 – 4 hours
Water Absorption (BS 1881-208)	> 95% reduction over control
Bond Strength (ASTM D4541)	> 0.5 N/mm^2
Water Permeability at 5 bar (BS EN 12390-8)	Nil
Crack Bridging (ASTM C836)	No crack at 0.49 mm width

SURFACE PREPARATION

- Surface must be clean and sound, free from dust, loose particles, grease, oil and any primers or bitumen from previous membrane systems
- Remove bitumen or primers by shot blasting or mechanical means; repair spalled concrete by cutting back to sound concrete and patching with CasTech repair grouts
- At intersections, corner joints, floor/wall junctions and around pipelines, use CasTape before applying the membrane

MIXING

- Transfer Part A (liquid) into the mixing container
- Add 1.5 parts of water and mix for one minute
- Slowly add Part B (powder) while mixing; continue for at least 2 minutes until lump-free
- Scrape the sides and bottom of the container and re-mix for one minute, avoiding air entrainment
- Do not mix more material than can be applied within the pot life

APPLICATION

Concrete surfaces: saturate the surface with clean water. Apply the first coat while the surface is still damp, using a short stiff-bristle brush or roller, at a minimum of 1.0 mm per coat. After 2 – 6 hours, apply the second coat perpendicular to the first; it can be finished with a soft sponge. Spray or trowel application is

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acceptable with the mix consistency adjusted. Two coats are mandatory for water tanks and swimming pools.

Tiles/marble: apply a single coat on the back of tiles or marble as a water-repellent and anti-carbonation coating.

Coverage: ~ 1.0 - 1.5 kg/m² per coat (2 coats recommended for tanks and pools).

CURING

Curing is not essential; however, protect from direct sunlight, high wind and rain.

PACKAGING

22.5 kg set (Part A 5 kg liquid and Part B 17.5 kg powder).

STORAGE AND SHELF LIFE

12 months from date of manufacture when stored under warehouse conditions in original unopened packing. Extreme temperature/humidity may reduce shelf life.

HEALTH AND SAFETY

PPE: Suitable protective goggles, gloves and mask must be worn; work in ventilated areas and avoid prolonged skin contact.

Precautions: In case of contact with eyes, rinse immediately with plenty of water; in case of contact with skin, wash off immediately with soap and water. If swallowed, seek medical attention immediately.

Hazard: Regarded as non-hazardous for transportation.

Disposal: Do not reuse containers. Dispose of as per local rules and regulations.

Additional information: Refer to MSDS (available on request).

TECHNICAL SUPPORT

CasTech provides on-site assistance and consulting services on projects when requested. Technical data sheets on other CasTech products and guidance on their use are available on request.