

CHEMFIT PROOF WP101

Powder Integral Waterproofer for Mortar and Concrete – For Waterproofing Cement/Sand Mortars, Screeds & Renders

PRODUCT DESCRIPTION

ChemFit PROOF WP101 is a high-performance, powder integral waterproofer specifically formulated for cement/sand mortars, screeds, and renders. This advanced admixture reacts with cement hydration products to block capillary pores and reduce water permeability, providing long-lasting, integral waterproofing protection. It improves workability, cohesion, and durability while maintaining the breathability of the treated surface. Ideal for general waterproofing applications in walls, facades, floor toppings, and below-grade structures.

PRIMARY APPLICATIONS

ChemFit PROOF WP101 is recommended for use in conditions such as:

- Waterproofing cement/sand mortars for walls, facades, and external renderings
- Waterproofing floor screeds and floor toppings
- Integral waterproofing for concrete (foundations, slabs, basements, water tanks)
- Waterproof renders for swimming pools and water-retaining structures
- Plastering and masonry mortars requiring reduced water absorption

KEY FEATURES AND BENEFITS

- **Powder integral waterproofer** – Easy to use; blends uniformly with cement and sand
- **Reduces water permeability** – Blocks capillaries for long-term waterproofing
- **Improves workability** – Enhances cohesion and plasticity of mortar mixes
- **Chloride free** – Safe for use with reinforcing steel
- **Compatible with all cements** – OPC, PPC, PSC, and blended cements
- **Non-toxic** – Safe for potable water structures (when fully cured)
- **Good yield** – 2% by weight of cement
- **Cost-effective** – Low dosage provides high performance

PHYSICAL AND CHEMICAL PROPERTIES

Property	Specification
Appearance	Fine, free-flowing powder
Color	Gray / Off-white
Form	Powder
Basis	Proprietary blend of hydrophobic and pore-blocking ingredients
Specific gravity (bulk)	0.80 – 1.05 kg/L
Chloride content	Nil
VOC content	Zero
Water reduction (secondary effect)	5 – 10%
Water permeability reduction	≥ 50% (vs. control, ASTM C1403)
Compressive strength effect	Neutral to slightly positive
Application temperature	+5°C to +45°C
Storage	Keep dry in sealed containers

PACKAGING AND STORAGE

Packaging:

- 25 kg bags with moisture barrier

Storage:

- Store in original sealed bags in a cool, dry location
- Protect from moisture, humidity, and direct sunlight
- Stack pallets off the ground on wooden pallets
- Keep bags intact and sealed until ready for use

Shelf life: 12 months from date of manufacture when stored properly

DOSAGE AND COVERAGE RATES

- **Recommended dosage:** 2% by weight of cement (e.g., 1 kg per 50 kg bag of cement)
- **Adjustment:** In hot climates or for high permeability requirements, dosage may be increased to 2.5 – 3.0% by weight of cement

Yield per 25 kg bag:

- At 2% dosage (1 kg per 50 kg cement): One 25 kg bag treats 1,250 kg of cement (25 bags of 50 kg)
- Approximate coverage (as a guide): 25 kg bag treats approximately 17 – 20 m² per coat (when used as slurry)

NOTE: Conduct trial mixes to determine optimal dosage for specific site conditions.

APPLICATION GUIDELINES

For Mortars, Renders & Screeds:

- Add ChemFit PROOF WP101 to the dry cement and sand mix before adding water
- Mix dry materials thoroughly until uniformly blended
- Add clean water and mix to desired consistency
- Apply as per standard mortar/render procedures
- Protect from rapid drying in hot climates

For Concrete:

- Add ChemFit PROOF WP101 to the aggregate or dry mix during batching
- Mix for minimum 2-3 minutes after all materials are combined
- Ensure uniform dispersion throughout the mix

General Notes:

- In hot climates, use cool mixing water and protect fresh mortar/concrete from direct sunlight and wind
- Maintain proper curing for minimum 3 days (7 days for critical water-retaining structures)
- Do not apply below +5°C or if freezing expected within 24 hours

HEALTH AND SAFETY

ChemFit PROOF WP101 is alkaline and may cause severe eye and skin irritation. In fresh, wet state, the product is caustic. If eye contact occurs, rinse immediately with plenty of water for 15-20 minutes and seek medical attention immediately. For skin contact, wash immediately with soap and water; remove contaminated clothing. If swallowed, do not induce vomiting; rinse mouth and drink water, then seek medical attention immediately. Use gloves (nitrile/rubber), safety glasses, and protective clothing during handling. Avoid inhalation of dust – use dust mask if ventilation is poor. Refer to the Safety Data Sheet for detailed information.

CLEAING OF TOOLS

Clean all mixing equipment, trowels, and spillages with water immediately after use. Dried or cured material requires mechanical removal.

APPROVALS AND STANDARDS

ChemFit PROOF WP101 conforms to the following standards:

- **ASTM C494 / C494M** – Type S (Specific Performance Admixture)
- **EN 934-2:T9** – Water resisting admixture for concrete (CE marking available)
- **ACI 212.3R** – Classified as Permeability Reducing Admixture for Hydrostatic Conditions (PRAH)
- **ASTM C1384** – Admixtures for Masonry Mortars (where applicable)
- **IS 2645** – Integral Waterproofing Compounds for Cement Mortar and Concrete (where applicable)
- **BS 8102:2022** – Type B structurally integral protection for below-ground structures
- **NSF/ANSI 61** – Certified for contact with potable water (optional, confirm certification)
- **ISO 9001** – Quality management system certified
- **CRD-C48** – Permeability of concrete tested, no water passage at 200 psi hydrostatic head
- **LEED v4** – Contributes to low-emitting materials credits (zero VOC)

LEGAL NOTES

All technical data provided in this Product Data Sheet is based on laboratory testing under controlled conditions. Actual field performance may vary due to differences in substrates, application methods, site conditions, and environmental factors. ChemFit makes no warranty of merchantability or fitness for a particular purpose. Users shall conduct their own trials to validate product suitability for the intended application. ChemFit reserves the right to modify product specifications without prior notice. For the most current documentation, request the latest Product Data Sheet and Safety Data Sheet from ChemFit.

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