

# CHEMFIT PROOF WP100

**Powder Integral Waterproofer for Mortar and Concrete – For Waterproofing Cement/Sand Mortars, Screeds, Renders for Walls, Facades, Floor Toppings & Hot Climates**

## PRODUCT DESCRIPTION

**ChemFit PROOF WP100** is a high-performance, powder integral waterproofer specifically formulated for cement/sand mortars, screeds, renders, and concrete. This advanced admixture is designed for hot climates where rapid evaporation and thermal stress challenge conventional waterproofing. The formulation reacts with cement hydration products to block capillaries and reduce water permeability, providing long-lasting, integral waterproofing protection. It improves workability, cohesion, and durability while maintaining breathability of the treated surface.

## PRIMARY APPLICATIONS

**ChemFit PROOF WP100** is recommended for use in conditions such as:

- Waterproofing cement/sand mortars for walls, facades, and external renderings
- Waterproofing floor screeds and floor toppings, particularly in hot climates
- Integral waterproofing for concrete (foundations, slabs, water tanks, basements)
- Waterproof renders for swimming pools, reservoirs, and water-retaining structures
- Plastering and masonry mortars requiring reduced water absorption
- Repair mortars and patching compounds for damp environments

## KEY FEATURES AND BENEFITS

- **Powder integral waterproofer** – Easy to use; blends uniformly with cement and sand
- **Hot climate performance** – Reduces rapid moisture loss and thermal cracking
- **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	0.80 – 1.05 kg/L (bulk density)
Chloride content	Nil
VOC content	Zero
Water reduction	5 – 10% (secondary plasticizing effect)
Water permeability reduction	≥ 50% (compared to control mix, per ASTM C1403)
Compressive strength effect	Neutral to slightly positive
Application temperature	+5°C to +45°C (hot climates suitable)
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 m<sup>2</sup> 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 WP100 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 WP100 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 WP100** 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 WP100** 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 for mortar applications)
- **IS 2645** – Integral Waterproofing Compounds for Cement Mortar and Concrete (where applicable)
- **NSF/ANSI 61** – Certified for contact with potable water (optional, confirm certification)
- **BS 8102:2022** – Type B structurally integral protection for below-ground structures
- **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.*

### **CHEMFIT CONSTRUCTION CHEMICAL AND SERVICES LIMITED**

Office No. 8, 1KM Near Gaey Soap, Sargodha Road, Faisalabad

Tel: +923364544837

Web: [www.chemfitchemicals.com](http://www.chemfitchemicals.com)

Email: [chemfit.pro@gmail.com](mailto:chemfit.pro@gmail.com)