



PC-Conblend® WP

Integral Waterproofing Liquid Admixture for Durable & Impermeable Concrete

PC-Conblend® WP is a high-performance integral waterproofing liquid admixture designed for use in concrete and mortar. It is added directly during the batching or mixing process to significantly reduce water penetration caused by capillary action and hydrostatic pressure in hardened concrete. By forming a dense and impermeable concrete matrix, PC-Conblend® WP enhances long-term durability and protects structures against moisture ingress. In addition to waterproofing performance, it improves workability and cohesion of fresh concrete and mortar without increasing water content, ensuring consistent quality and ease of placement on site.

FEATURES

- Liquid admixture for integral waterproofing
- Reduces permeability of concrete and mortar
- Improves workability and cohesion of fresh mix
- Enhances durability of hardened concrete
- Minimizes shrinkage-related cracks
- Reduces efflorescence and surface defects
- Compatible with most common concrete admixtures
- Cost-effective due to low dosage requirement

ADVANTAGES

- Provides effective resistance against water penetration
- Produces dense, impermeable concrete
- Improves pumpability and reduces segregation
- Does not reduce compressive strength
- Enhances resistance to sulphate attack
- Reduces risk of reinforcement corrosion
- Improves overall service life of structures

PRODUCTS PROPERTIES

Physical Properties	Description
Form	Liquid
Colour	Dark Brown
Relative Density	Approx. 1.09 ± 0.02 at 25°C
pH Value	> 6
Chloride Ion Content	Nil (Chloride-free)
Solubility	Soluble in water
Type	Integral Waterproofing Liquid Admixture

USES

Recommended for use in structural and non-structural concrete where waterproofing and reduced permeability are required. It is suitable for roof slabs, screeds, basements, water-retaining structures, foundations, external plastering, canals, culverts, tunnels, and sewerage works where long-term protection against moisture is essential.

DOSAGE

The optimum dosage of PC-Conblend® WP should be determined through site trials using the actual materials, mix design, and site conditions. As a general guideline, the recommended dosage ranges from 0.1% to 0.4% by weight of cementitious material, depending on cement content, exposure conditions, and required waterproofing performance. Variations in aggregates, cement type, or environmental conditions may require dosage adjustments. For applications outside the recommended range, consultation with the technical team is advised.

APPLICATION

PC-Conblend® WP is supplied as a ready-to-use liquid admixture. For best results, the measured quantity should be diluted with the mixing water to ensure uniform dispersion before adding to the concrete or mortar mix. It should be introduced during the batching or mixing stage. Maintain the water-cement ratio as low as possible to achieve the desired workability and waterproofing performance. Concrete or mortar should be placed, compacted, and cured properly in accordance with good construction practices to achieve maximum durability and impermeability.

PACKAGING

Available in 20 kg, 50 kg, and 200 kg drums, with bulk supply available upon request. Packaging is designed to ensure safe handling, storage, and ease of use on construction sites.

STORAGE & SHELF LIFE

The product should be stored in its original, unopened containers in a cool, dry, and covered area, protected from direct sunlight and extreme temperatures. Storage temperatures should not fall below +5°C. If the product becomes frozen, it should be thawed naturally at temperatures above +5°C and gently mixed before use. When stored under recommended conditions, the shelf life is 12 months from the date of manufacture.

COMPATIBILITY

Compatible with most commonly used Portland cements, including ordinary Portland cement, Portland pozzolana cement, and Portland slag cement. It can be safely used with most concrete admixtures such as plasticizers, superplasticizers, retarders, accelerators, air-entrainers, viscosity modifying agents, corrosion inhibitors, and shrinkage-reducing admixtures. However, it is not recommended for use with high alumina cement. Site trials are strongly advised to confirm compatibility and optimize performance when used in combination with other admixtures.

CORROSION

PC-Conblend® WP is chloride-free and does not initiate or promote corrosion of steel reinforcement or embedded metal components. By minimizing water penetration and reducing the movement of aggressive ions within the concrete, it lowers the risk of reinforcement corrosion. This protective action helps maintain the structural integrity of reinforced concrete and enhances overall durability in both normal and aggressive exposure conditions.

SAFETY PRECAUTIONS

Non-hazardous and water-based; however, standard safety precautions should be followed. Avoid ingestion and prolonged contact with skin or eyes. Protective gloves and safety goggles are recommended during handling. In case of skin contact, wash immediately with clean water. If the product comes into contact with the eyes, rinse thoroughly with plenty of water and seek medical advice. If swallowed, seek medical attention immediately and do not induce vomiting. Keep out of reach of children.

DURABILITY

Significantly enhances the durability of concrete by reducing permeability and limiting the ingress of water and aggressive agents. By producing a dense and impermeable concrete matrix, it protects the structure from moisture-related deterioration, chemical attack, and environmental exposure. This improvement in impermeability contributes to extended service life and long-term structural performance, particularly in water-retaining and moisture-exposed structures.



PC-WC GLOBAL FZ-LLC

Compass Building, Al Shohada Road Al-Hamra Industrial Zone-FZ,
Ras Al-Khaimah, UAE
Email : info@pc-wc.com
Phone +971542455817 , www.pc-wc.com

TECHNICAL DATA SHEET UPDATED IN
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All technical data in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

The information, particularly the recommendations relating to the application and end-use of PC-WC products, are given in good faith based on PC-WC's current knowledge and experience of the products when properly stored, handled and applied under normal conditions by PC-WC recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or any other advice offered. The user must test the product's suitability for the intended application and purpose. PC-WC Global FZ-LLC reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Our technical assistance is at the disposal of the users. Consult the latest update of the technical data sheet on our website www.pc-wc.com