

TYPE B INTEGRAL WATERPROOFING

# UNIVERSAL WATERTIGHT

Universal Watertight is a hydrophobic, pore-blocking admixture. Multi-component powdered admixture comprising a single dosage pack providing durability and waterproofing properties to all concrete mixes



- Below ground structures (habitable and car parks) including (not limited to) lift pits, slabs, liner walls and capping beams
- · Podium decks & green roofs
- · Water retaining structures (inc swimming pools)
- Volatile ground conditions e.g. waste transfer stations

# **APPLICATION & INSTALLATION-**

- It's essential that good concreting practice is carried out and maintained when applying.
- Universal Watertight should be placed without segregation, fully compacted and correctly cured in accordance with industry guidelines / standards.

### MIXING INSTRUCTIONS-

- The dosage for Universal Watertight should be trialled first using site conditions and materials
- Ikg Universal Watertight/ 350kg of cement. Part loads must be rounded up to full bags. Do not under dose
- 1 x lkg bag Universal Watertight per m3 of concrete
- · Maximum water cement ratio 0.40
- Once correct dosage has been determined, it should be added to the mix, preferably with or immediately after cement addition

### **HEALTH & SAFETY-**

P3 dust mask or similar respirator, protective gloves, eye protection, and protective work clothing are worn when using Universal Watertight



### **BENEFITS-**

- Can be used as a single or dual waterproofing system
- Suitable for use with all CEM I mixes (100% OPC) and cement replacement mix designs using GGBS, PFA and Microsillica
- Provides reduction in permeability, carbonation of concrete and increases durability
- Suitable for use with all structural concrete mixes including ready-mix, volumetric, precast and spray applied application
- Reduces bleed, segregation, efflorescence and staining
- Pre-weighed 1kg water soluble bags Improves resistance to sulphate, chloride and chemical attack including leachates. Reduces shrinkage, enhances protection against frost attack provides sound concrete for the protection of reinforcement steel

### STORAGE & SHELF LIFE-

- Store in dry area and keep bags protected from frost, sunlight and moisture
- Universal Watertight has 12-month shelf-life when stored in the correct conditions as stated







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# PRODUCT DIMENSIONS, COVERAGE AND PACKAGING

Universal Watertight is packaged in 1kg water soluble bags. Supplied in 10 x 1kg bags per outer box. Bulk options are available – please contact us for details

### **FURTHER INFORMATION**

For further assistance we have a dedicated technical department that is TechICT / AMICT and CSSW accredited who is on hand to help with any technical queries.

Universal Watertight is not included under our performance-based warranty. PUDLO can provide some technical assistance on the product. However, this system does not come with on-site support / in house design or design responsibility.

# **TECHNICAL DATA**

### PHYSICAL PROPERTIES -

Property	Control (plain) concrete	Universal Watertight	Test reference
Water vapour permeability (g m-224h-1)	9.633	8.259	BS3177
Water permeability (mm)	Wet: 150	Wet: 12	BSEN12390-8
	Dry: 110	Dry: 62	
Drying shrinkage (%)	0.047	0.047	BS1881-5:1970
Wetting expansion (%)	0.018	0.018	BS1881-5:1970
Compressive strength (MPa) 28 days	61.8	67.2	BSEN12390-3
Capillary absorption (g.mm-2 x 10-3) 7-day cure 90-day cure	0.0042 0.0074	0.0019 0.0040	EN480-5

PUDLO Waterproofing Systems / DB Group Holdings Ltd can provide technical assistance on the use of this product. However, PUDLO/DB Group Ltd are not responsible for design of waterproofing where Universal Wtertight is used. Universal Watertight is not covered under our on-site quality management system, nor is it included in our performance warranty offering. Universal Watertight is only covered under a product warranty. For other warranty options please contact PUDLO

