

NBS PLUS MANUFACTURER'S PRODUCT PAGE

Product name: PUDLO WATERPROOF
CONCRETE SYSTEM



Product summary:

Concrete admixture.

Product general description:

PUDLO provides full design and specification service.

A chloride-free, hydrophobic, pore-blocking admixture which can improve the performance of concrete by reducing water absorption, permeability, drying shrinkage and therefore the risk of cracking.

It enables a significant reduction in the water/ cement ratio of the mix while enhancing the workability, increasing strength by a minimum 10% and improving dimensional stability and durability of the concrete. The improved waterproofing performance of the concrete can remove the need for an impervious membrane and the costs and risks associated with its installation.

Benefits:

- Enhanced durability.
- Improved resistance of concrete to chemical attack and corrosion and therefore to corrosion of reinforcement.
- Enhanced resistance to frost attack.
- Reduced shrinkage.
- Increased compressive and tensile strength without increase in cement content.
- Reduced risk of efflorescence and staining.
- Increased resistance to water penetration.
- Acid resistant.
- 20 year warranty and full technical support*.

How Pudlo works:

- Capillary restriction: PUDLO modified concrete has a distinct microstructure characterised by discontinuous pore formation and an order of magnitude reduction in the size of the capillary pore network.
- Capillary blocking: In addition to altering the microstructure, PUDLO contains hydrophobic pore-blocking compounds. These permanently seal remaining voids in the concrete to further increase structural durability, providing an additional level of protection against water migration and corrosive attack.
- Pudlo will also attend site to give initial training, then assign a dedicated Site Inspector to work alongside the site team who will visit the site, approve and sign-off each sectional joint before and after pouring concrete. This on-site QA support is designed to ensure that a watertight structure is achieved and the highest standards are met at every stage of construction and subsequently Pudlo will issue a full 20 year warranty for the entire structure including the joints – not just the concrete itself. This can be further supported by an independent insurance-backed guarantee.

Concrete mix:

Pudlo recommend the following concrete mix which must be used when specifying the Cement Waterproofing Powder:

- Cement/ combination content (minimum): 350 kg/m³.
- Water:cement ratio (maximum): 0.40.
- Consistence class: S3 (100–120 mm).

Additional products (PS BFG and PS X2 BFG Membranes) are available to be specified separately.

Product specification clause

Product reference:

Pudlo CWP

Product properties:

No product properties

End of product specification clause

As standard:

General:

Structures built incorporating Pudlo CWP (Cement Waterproofing Powder) should be designed to the relevant sections of BS 8007:1987, BS 8102:2009, BS 8110-1:1997, BS EN 1992-1-1:2004 and BS EN 1992-1-2:2004.

Performance:

The following performance criteria were achieved using concrete designed to the mix specification given in the British Board of Agrément (BBA) certificate 01/3843:

- Water permeability: 0.64×10 (to the power of -15).
- Compressive strength to BS 1881-116: 82 N/mm² after 28 days.

Options:

No optional features

Approvals:

- Organisation: British Board of Agrément
 - Standard/ Certificate: 01/3843
 - Details:
- Organisation: ISO
 - Standard/ Certificate: 9001
 - Details:
- Organisation: ISO
 - Standard/ Certificate: 14001
 - Details:
- Organisation: WRAS
 - Standard/ Certificate:
 - Details:
- Organisation: CE
 - Standard/ Certificate: Mark
 - Details:
- Organisation: NHBC
 - Standard/ Certificate:
 - Details: