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PRODUCT DATA SHEET

PUDLO Render Seal

DESCRIPTION

PUDLO Render Seal is a Type A cementitious ready mixed surface waterproofer.

USES

For all aspects of waterproofing where a Grade 3 environment is required as part of a dual system recommended in BS8102:2009. **PUDLO Render Seal** is a robust solution for providing waterproofing to below ground structures against negative and positive water pressure.

BENEFITS

- Can be applied to concrete and masonry
- Used in drinking water structures
- Used on foundations, slabs, liner walls (external or internal application), lift pits, swimming pools and pile heads. **PUDLO Render Seal** can also be used for remediation measures
- Resistance to carbonation

TECHNICAL DATA

Tests	Results
Compressive Strength	Class R3 ≥ 25 MPa
Chloride Ion Content	$\leq 0.05\%$
Adhesive Bond	≥ 2.0 MPa
Carbonation Resistance	Passed
Modulus of elasticity	≥ 20 GPa
Thermal Compatibility	
Part 1: Freeze thaw with de-icing	
Salt Immersion	≥ 2.0 MPa
Part 4 Thermal Cycling	≥ 2.0 MPa
Capillary Absorption	$\leq 0.5 \text{ kg/m}^2 \cdot \text{h}^{0.5}$
Reaction to Fire	Class A1
Dangerous Substances	Complies with 5.4

Appearance	Grey Powder
Density of Wet Mix (kg/l)	Approx. 2.0
Workability at 20°C (min)	Approx. 45
Setting Time at 20°C (h)	Approx. 5-8
Compressive strength 28 days (MPa)	Approx. 40
Bending Tensile Strength 28 days (MPa)	Approx. 6
Static modulus of elasticity 28 days (GPa)	Approx. 28
Capillary Absorption (kg/m ² -h ^{0.5})	0.06



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PRODUCT DATA SHEET

SURFACE PREPARATION

Prior to application of **PUDLO Render Seal** the surface must be free from voids, large cracks or ridges. It is important grease, oil and other laitance is removed by suitable means. Water leaks must be stopped by means of plugging with **PUDLO Rapid 3mm Mortar** or resin injection by a 3rd party specialist.

Brick and Blockwork Surfaces

Prior to application, any remaining plaster or render must be removed as this will inhibit bonding of the material. Gypsum, remains of wood or other material must also be removed.

INSTRUCTIONS FOR USE / APPLICATION

Mixing

Mix 25kg of **PUDLO Render Seal** with 4.5-6 litres of tap water into a clean container for at least 3minutes. The material must be lump free and have a homogeneous consistency. When mixing it is important a mechanical mixer is used.

Application

PUDLO Render Seal can be brush, trowel or spray applied who is a trained / competent individual. A maximum of 2mm (approx. 4kg/m²) can be applied in one cycle. Most cases the application of more than one coat is recommended. Prior to application please contact **PUDLO Waterproofing Systems**. Where a second coat is being applied, this must be carried out whilst the first coat is still damp on the surface. Note: it is important that the previous coat is not damaged. The waiting time between coats is dependent on humidity and current temperature conditions. The previous coat is textured by suitable means whilst still plastic to form a key. In the event idle material is present in the mixing container, this can be re-worked simply by stirring and does not need more water to be added.

Brush Application – All cavities in the substrate must be filled.

Trowel Application – Scratch coat is applied for maximum adhesion to the surface, working from the bottom up. Ensure that all cavities in the substrate are filled in order to exclude any trapped air.

Spray Application – **PUDLO Render Seal** can be applied with a suitable fine mortar spraying device. Note; spray application should be carried out by a fully trained / qualified operative. For optimum application the nozzle should be approximately 6mm with the first layer applied in a circular motion with spray nozzle held at 90°. The material should then be flattened and keyed. The final coat can then be left as spray finished or treated to a specified finish.

Note: PUDLO Render Seal should not be applied in temperatures below +5°C or directly on to a frozen substrate.

Type of Water Impact	Recommended overall application rate	Total Layer Thickness (approx.)
Pressureless Water	3-4kg/m ²	1.5-2mm
Water Under Pressure	4-6 kg/m ² (depending on water pressure)	2-3mm



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Curing

Keep damp for at least 5 days and provide suitable protection against extreme weather conditions i.e. sun / wind / frost / snow etc. whilst setting. All freshly treated areas should be protected by wet conditions for a minimum of 24 hours.

Plastering / Coating

Surfaces treated with **PUDLO Render Seal** which need to be painted or coated should be left to cure for a minimum of 28 days. Prior to plastering / rendering, surfaces can be treated with a bonding agent prior to finishing. All coatings on top of **PUDLO Render Seal** treatment have to be alkali resistant.

ANCILLARY PRODUCTS

- **PUDLO Rapid 3min Mortar (contact PUDLO to discuss)**

HEALTH & SAFETY

Please refer to **PUDLO Render Seal** MSDS for further information.

STORAGE & SHELF LIFE

PUDLO Render Seal kept in a cool dry place, unopened and undamaged has a shelf life of 12 months.

For further information on accessories that are used with **PUDLO Render Seal** please contact PUDLO Head Office on 01954 780687 or email sales@pudlo.com.