

UNISEAL/CEM_{plus}

Elastomeric Cement based Waterproof Coating

UNISEAL/CEM *plus* is a two component elastomeric waterproofing protective coating for concrete and masonry substrate.

UNISEAL/CEM *plus* is a ready to use two part system, which waterproofs/weatherproofs and protects concrete and similar structures.

USES

UNISEAL/CEM *plus* can be applied for waterproof of water-retaining structures which may be subject to movement.

- Suitable for use in Wet areas (Bathrooms, Toilets, Balconies & Shower walls) where tiles are to be installed directly on top of the membrane using a proprietary tile adhesive.
- Swimming pools & inverted concrete roof decks.
- Bridge deck, structural surfaces of Dykes, Dam walls and Water features.
- To protect concrete from water, carbonation and deicing salts.
- Waterproof coating (bottom coat) for marble, granite and other natural stones.
- Weather-proof coating on building facades.
- Marble/ Stone base waterproof / vapour barrier coating.

Application Instructions

Mixing

Place the liquid component in a suitable mixing container and slowly add powder, mixing with a stirrer using power tool at slow speed.

Reinforcing Application

Fibreglass reinforcing mesh can be used over joints, cracks and pipe penetrations. After applying the first coat install the mesh tightly and overcoat the entire area.

Bathrooms/Wet Areas

Surface should be cleaned and remove all loose particles prior to applications. Wet the surface prior to application.

Two coats of UNISEAL/CEM *plus* applied @1.5-2kg/m² each coat by a masonry brush, roller or appropriate power spray equipment, depends on porosity and texture of the substrate. All applications where two coats are recommended, the 2nd coat shall be applied when the first coat is dry at least 5 hrs. Do not carry out flood test until Material is completely cured. Application temperature, +5^oc to +45^oc .

Advantages

- Excellent resistance to ingress of water
- Excellent adhesion to concrete, natural and artificial stone.
- Slip resistant & waterproof for concrete.
- Resistance to chloride ion diffusion and carbondioxide.
- No Primer required

Elastomeric cement based system to
Waterproof, Weatherproof and Protect
concrete and similar structures.

UNIROOF®

Product Data Sheet
Edition 13, 2024

Identification no. UNCP
UNISEAL/CEM_{plus}

UNIROOF® International Limited

Coverage

Approx. 1.75 kg/sq.m @ 1 mm thickness

Standards

ASTM, EN

Shelf Life

UNISEAL/CEM plus shelf life period of 12 months, if stored in a cool and dry environment.

Packing

Kit	28 Kg
Powder	20 Kg
Liquid	08 Kg

Technical Data

Testing	Results
Colour	Gery/White
Pot Life	60 min
Density	>1.5 Kg/l
Adhesion to substrate, ASTM C 321	>1.2 N/mm ²
Tensile strength, ASTM D 638	>1 N/mm ²
Elongation at break, ASTM D 638	>40%
Water Permeability, EN 1062	Nil
Water Penetration, EN 12390	Nil @ 7 bar pressure
Crack bridging Static, EN 14891	>1.5 mm
Crack bridging Dynamic, EN 1062	>500 microns
Water Absorption, ASTM C 642	1.50%
Water resistance, EN 12390	
Positive pressure	7 bar
Negative pressure	3 bar
Permeability to Carbon Dioxide, EN 1062	>100 M
Chloride Ion Penetration Resistance, ASTM C 1202	Passed

Test results are averages obtained under laboratory conditions. Reasonable variations can be expected.

Curing

It is essential that good concreting practice is performed and maintained at every stage of the application process. Ensure that **UNISEAL/CEM plus** is cured properly after application. Minimum 3 days curing is essential before flooding.

Coating thickness

Swimming pools, Wet area, Water tanks and Water features; recommended 2mm thickness in two coats
Shower areas; recommended to apply in two coats at a total coverage of 1.5kg/sq.m.

Technical Specifications

UNISEAL/CEM plus is a two-part system, powder is a blend of portland cements, selected silica sands and modifying agents. When mixed to a slurry consistency with liquid, an acrylic polymer emulsion, it cures to give an elastomeric flexible membrane.

Health and Safety

UNISEAL/CEM plus is alkaline and should not come into contact with skin or eyes. Avoid inhalation of dust during mixing. Gloves, goggles and dust masks should be worn. Splashes to eyes should be washed immediately with water & seek medical advice.

Technical Support

UNIROOF will be pleased to offer full technical support on specific applications.

Note:

The technical data given above are average values the results of which were carried out on the material. These tests are the Industry Standard for this type of material and comply with the criteria stipulated in: ASTM C836 & ASTM D751, ANSI (A118.10), BS EN 14891 & BS EN 12390. Uniroof International Limited reserves the right to change or modify the data without prior notice.

UNIROOF[®] International Limited

Worth Corner, Turners Hill Road, Pound Hill, Crawley, West Sussex RH10 7SL. England.

Tel: +44 (0)1293 889888 E-mail: waterproofing@uniroof.com Web Site: www.uniroof.com

UNIROOF[®]

UNIROOF[®] International Limited