

# UNISEAL/CEM<sub>plus</sub>

## *Elastomeric Cement based Waterproof Coating*

**UNISEAL/CEM plus** is a High-technology 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, shower walls & Toilets) where tiles are to be installed directly on top of the membrane using a proprietary tile adhesive.
- Swimming pools Floors & walls, Concrete roof slabs and floors of balconies.
- 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**

Virgin polypropylene 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. Surrounding the pipes & fittings must be treated with Corners/edges should be carefully treated with fibre mesh reinforcement.

Two coat of **UNISEAL/CEM plus** applied @1kg/m<sup>2</sup> 1st coat by a masonry brush or appropriate power spray spray equipment. All applications where two coats are recommended, the 2nd coat shall be applied when the first coat is completely dried. Do not flood or over expose to water until it is completely cured. Total build up thickness >2-3 mm DFT. Recommended to apply two coats @ 2-3 mm thick at a coverage of approximately 2 kg/m<sup>2</sup>. an additional 0.5kg/sq.m /coat required when embedding reinforcing mess.

#### **Advantages**

- Provides a flexible low permeability surface.
- Excellent resistance to ingress of water
- Excellent adhesion to concrete, natural and artificial stone.
- Abrasion and UV rays.
- Slip resistant & waterproof for concrete.
- Resistance to chloride ion diffusion and carbondioxide.
- No Primer required

*Elastomeric Cement based System for  
Waterproofing, Weatherproofs and  
Protects concrete and Similar  
structures.*

**UNIROOF**®

Product Data Sheet  
Edition 5, 2010  
Identification no. UNCP  
UNISEAL/CEMplus

UNIROOF® International Limited

### Coverage

Approximately 2 kg/sq.m @ 2 mm thickness

### Shelf Life

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

### Standards

ASTM C836 & ASTM C1305, ANSI (A118.10), BS EN 14891.

### Packing

Kit	35 Kg
Powder	25 Kg
Liquid	10 Kg

### Technical Data

Testing	Results
Colour	Gery/White
Adhesion to substrate	1 N/mm <sup>2</sup>
Tensile strength (N/mm <sup>2</sup> )	>0.5 N/mm <sup>2</sup>
Elongation at break	>40%
Initial Tensile Adhesion	> 0.5MPa
Water impermeability	150 Kpa
Water Permeability	Nil
Water Penetration	Nil @ 7 bar pressure
Crack bridging	>0.6 mm
Crack bridging ability with reinforcing mesh	>1.5mm
Water Absorption	1.46%
Water resistance	
Positive pressure	7 bar
Negative pressure	1.0 bar
Flame Spread	0
Smoke developed	5
Volatile Organic Compounds (VOC)	<5g/L

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.

### Minimum Coating thickness

Swimming pools, Wet area, water tanks  
Recommended 2mm thickness  
Facades Recommended to apply one coat @ 1mm thick at a coverage of approximately 0.8 - 1kg/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 C1305, ANSI (A118.10),BS EN 14891. Uniroof International Limited reserves the right to change or modify the data without prior notice.

### UNIROOF® International Limited

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