

Cementseal

RIW Cementseal is a two component, polymer modified, cement based, waterproof coating for concrete and masonry.

BENEFITS

- Totally waterproof
- Resists up to 100m head of positive and negative water pressure
- Seamless and fully bonded
- Applied to damp surfaces
- Abrasion and impact resistant
- Quick and easy to apply by hand or spray
- Environmentally friendly
- Enhanced resistant to carbonation

APPLICATIONS

- Waterproofing of;
- Basements & sub-structures
 - Podium decks
 - Balconies & Terraces
 - Inverted roofs
 - Temporary waterproofing

APPLIED TO

- Concrete
- Masonry
- Steel

DESCRIPTION

RIW Cementseal is a two component polymer modified cement based waterproof coating with excellent adhesion to prepared concrete and masonry substrates. When mixed, it exhibits a good degree of thixotropy to enable ease of application by brush or spray techniques to give an even finish with no sagging even in vertical situations. It hydrates to form a durable, highly alkaline, tough and durable coating which not only protects the concrete, or other substrates, from water penetration and carbon dioxide diffusion.

TYPICAL USES

RIW Cementseal is used to prevent water ingress into basements, cellars and other below ground structures. The product is suitable for use on exposed or inverted roofing and for podium waterproofing. It can also be used for temporary waterproofing in new construction, to protect from water ingress in order to allow finishing trades to access areas underneath in fast track construction.

DURABILITY


Subject to normal conditions of use, **RIW Cementseal** will provide an effective barrier to the transmission of liquid water for the life of the structure.

SPECIFICATION

J10 – Cementitious mortar tanking / damp proofing in accordance with NBS Clauses.

Please consult RIW Limited for further information.

INDEPENDENT AUTHORITY

 RIW424	
RIW Limited Arc House, Terrace Road South, Binfield, Bracknell, Berkshire, RG42 4PZ, England 11 0086-CPD-530942	
EN1504-2: Surface Protection Systems - Coating Protection against Ingress (PIC) Rigid trafficked system	
Compressive Strength:	Class I ≥ 35 MPa
Permeability to CO ₂ : Equivalent to 100mm of concrete	
Permeability to Water Vapour:	Class I <5m
Capillary Absorption:	Class III < 0.1kg/(m ² h0.5)
Thermal Compatibility EN 13687-1:	> 2.0 Mpa
Adhesive Bond:	≥ 2.0 MPa
Dangerous Substances:	Complies with 5.4
Reaction to Fire:	Euroclass A2-s1, d0

PERFORMANCE & COMPOSITION

RIW CEMENTSEAL	
Density	1900 kg / m ³
Application thickness :	
Soffitts and vertical	2mm ; applied in two coats
Floors	2mm ; applied in one coat
Temporary waterproofing	1mm ; applied in one coat
Compressive strength	
1 day	3 – 7 N / mm ²
7 days	20 – 30 N / mm ²
28 days	40 – 45 N / mm ²
Waterproofing	Resists 10 bar pressure
Application temperature	5 – 35° C
Working Life	30 minutes at 20° C
Overcoating time	30 minutes to 24 hours

The above performance figures are typical values and should not be considered a product specification.

CONSTRUCTION

GENERAL

All construction should conform to the Building Regulations, Codes of Practices and British Standards in current use at the time the building is being constructed. In particular it is recommended that reference is made to BS 8102 : 1990

PREPARATION

The areas to be treated must be free from all unsound material, ie : dust, oil, grease, corrosion by-products and organic growth. All loose material and surface laitance should be removed ; preferably using wet grit or power washing techniques or equivalent approved methods. The strength of the concrete sub-base should be a minimum of 20 N / mm². The prepared substrate should be thoroughly soaked with clean water until uniformly saturated without standing water.

MIXING

The material should be mechanically mixed in the tub supplied, using a slow speed drill and paddle. A normal concrete mixer is not suitable. Supplied in measured packs, full units should be mixed wherever possible but for smaller areas of application, part packs can be mixed using an initial ratio of approximately 3.5 volumes of powder to 1 volume of liquid, which should then be adjusted to give the desired consistency. Always add powder to liquid. Mix for a minimum of 3 minutes, and use without delay.

PLACING

The mixed slurry can be applied by brush, squeegee or spray to a pre-soaked surface. Deck or floor areas should additionally be primed with **RIW Cementseal Primer**, see separate data sheet.

Take care to ensure that air is not entrapped into the surface. Apply as a single 1 or 2mm layer to horizontal surfaces and in two 1mm coats to other surfaces. The second coat should be applied when the first is stable but not fully set, after waiting approximately 30 - 60 minutes (depending on temperature).

CLEANING

All tools should be cleaned with water immediately after use.

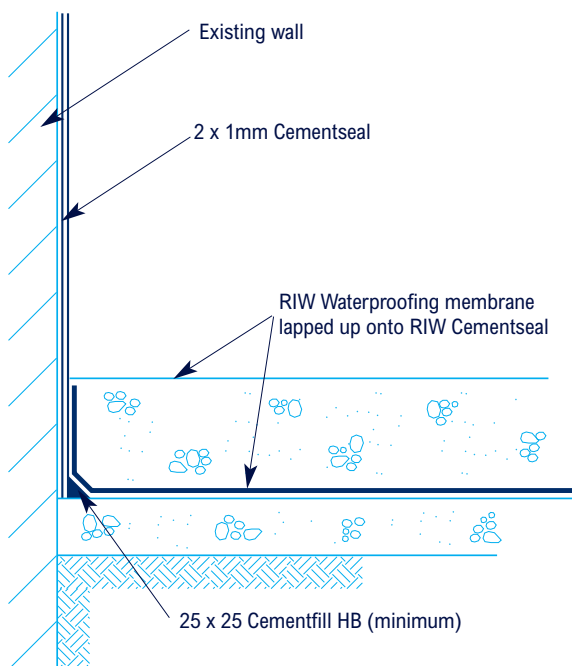
CURING

Normal concreting procedures should be strictly adhered to. It is important that the surface of the coating is protected from strong sunlight and drying winds with **RIW Cementseal Primer**, polythene sheeting, damp hessian or similar.

ADVANTAGES

- Dense matrix offers low permeability to water, even at 10 bar pressure.
- Totally waterproof and will also resist negative water pressure.
- Materials are pre-packaged and only require mixing on site to give a slurry, which can then be easily applied by brush, squeegee or spray.
- Economic formulation produces 7.9 litres of slurry, from a 15 kg pack ; sufficient to treat 4m² at 2mm thickness.
- Also gives enhanced resistance to carbonation.
- Polymer modified to give excellent adhesion, flexibility and abrasion resistance.
- Will readily accept flooring and other decorative finishes.
- Environmentally friendly, water based product which will not leach harmful chemicals.
- Non-toxic when cured.

DETAIL 1



SAFETY

Full health and safety instructions are contained on the product material safety data sheets and these must be referred to before use.

SUPPLY

AVAILABILITY

All RIW products can be obtained through Builders Merchants or approved stockists. A list of approved stockists is available from RIW Ltd's offices.

PACKAGING

Pack Size	15 kg (two part) in plastic tub
Yield	One pack yields 7.9 litres of slurry ; sufficient to treat 4 m ² at 2mm thickness

SHELF LIFE

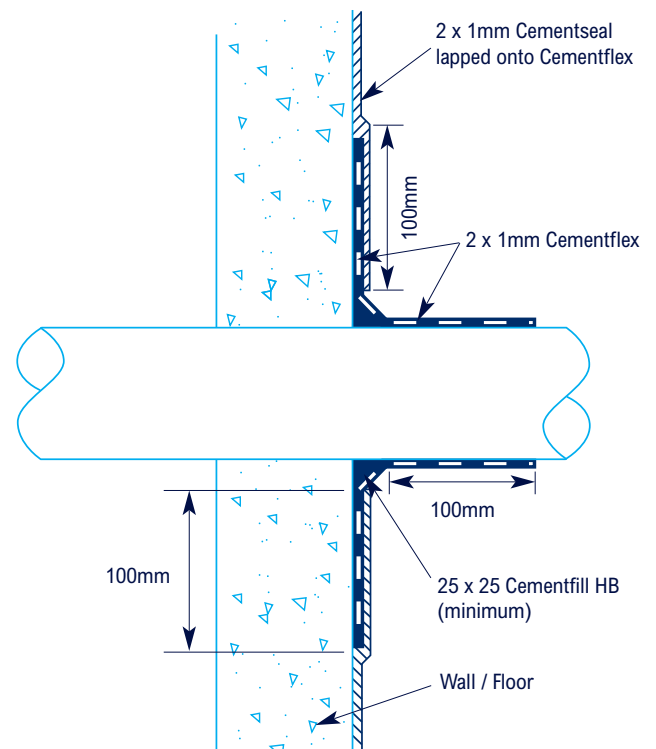
12 months in dry, frost free conditions with unopened containers at 20° C

TECHNICAL SERVICES

The RIW Technical Department is available to advise on individual projects and to prepare and assist in the preparation and specifications and drawings. A list of experienced applicators of RIW materials is available from RIW Ltd's offices.

DETAIL 2

PIPE ENTRY DETAIL



The information in this literature was correct at the time of going to press. However, we are committed to continually improving our products and reserve the right to change product specifications. For the latest information, please consult RIW Limited. Conditions of use are beyond our control, therefore we cannot warrant the results to be obtained.



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