

# Solseal Pile Cap Sealer

## Description:

Solseal Pile Cap Sealer is a surface applied system which waterproofs and protects concrete in depth, it consists of ordinary Portland cement, specially treated quartz sand and a compound of active chemicals.

When Solseal Pile Cap Sealer is applied to a concrete surface the active chemicals combine with the free lime and moisture present in the capillary track, to form insoluble crystalline complexes. These crystals block the capillaries and minor shrinkage cracks in the concrete to prevent any further water ingress (even under pressure). However, the layer will still allow the passage of water vapour through the structure (i.e. the concrete will still be able to "breathe").

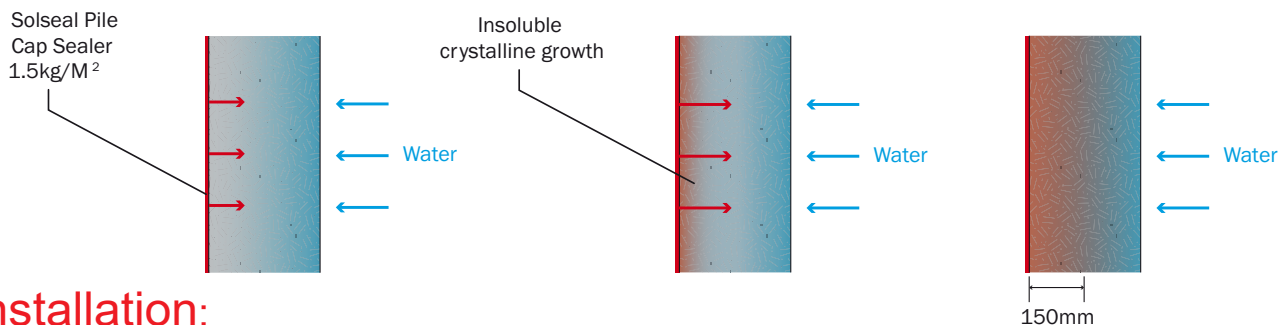
In addition to waterproofing the structure, Solseal Pile Cap Sealer protects concrete against seawater, wastewater, aggressive ground water and certain chemical solutions. Solseal Pile Cap Sealer is suitable for the treatment of water storage tanks, reservoirs, water towers, etc. Solseal Pile Cap Sealer is not a decorative material.

Solseal Pile Cap Sealer, suitably sealed and linked to suitable Solco membranes, ensures protection to the pile cap and eliminates the sheet membrane through the pile cap and floor slab construction detail, thus eliminating the "slip plane" through this detail.



## Typical Uses:

- Basements / retaining walls.
- Concrete slabs (floor/roof/ balcony).
- Construction joints.
- Water retaining structures.
- Swimming pools.
- Sewage treatment plants.

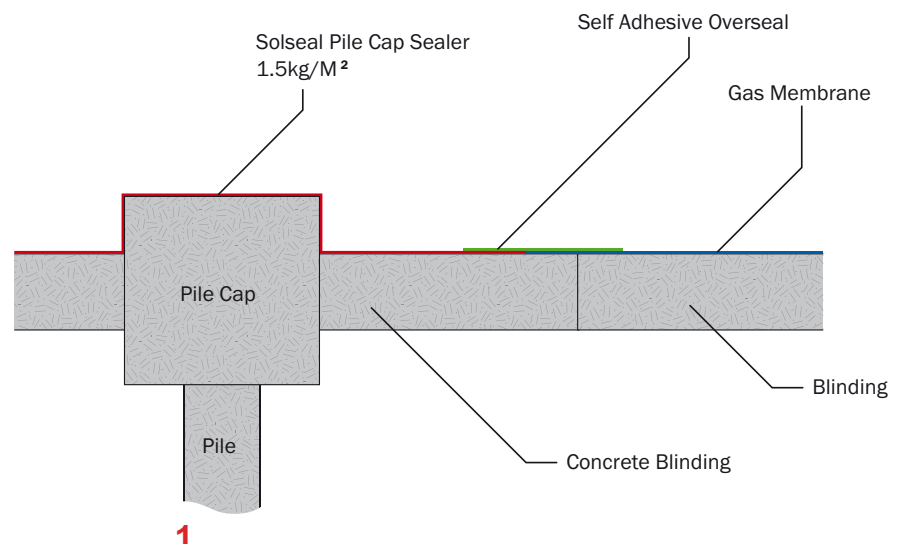


## Installation:

All concrete to be treated with Solseal Pile Cap Sealer must be clean and have an "open" capillary system. Remove laitance, dirt, grease, etc. by means of high pressure water jetting, wet sandblasting, or wire brushing.

Faulty concrete in the form of cracks, honeycombing, etc. must be chased out, coated with Solseal Pile Cap Sealer and filled flush with Solco Fillet Seal.

Surfaces must be carefully pre watered prior to the Solseal Pile Cap Sealer application. The concrete surface must be damp but not wet.



## Application:

Solseal Pile Cap Sealer is mechanically mixed with clean water to a consistency of thick oil paint. The approximate mixing ratio is 2 parts water to 5.0 parts of powder (by volume). Mix only as much as can be used within 20 minutes and stir mixture frequently. If the mixture starts to set do not add more water, simply re-stir to restore workability.

### Slurry Consistency:

Apply Solseal Pile Cap Sealer in one or two coats, according to specification, by masonry brush or appropriate power spray equipment. When two coats are specified apply the second coat whilst the first coat is still "green".

### Dry Powder Consistency:

The specified amount of Solseal Pile Cap Sealer is distributed in powder form through a sieve and trowelled into the freshly placed concrete once this has reached initial set.

### Post Treatment:

Once Solseal Pile Cap Sealer has reached initial set, it should be moist cured with a fine fog spray of water 2-3 times per day for three days. In hot or windy conditions it should be moist cured more frequently. During the curing period the Solseal Pile Cap Sealer treatment must be protected from rainfall, frost, or puddling of water.

Note: Do not apply Solseal Pile Cap Sealer at temperatures below +5°C. Solseal Pile Cap Sealer cannot be used as an additive to concrete.

## Coverage:

### Concrete Surfaces to be backfilled:

One coat of Solseal Pile Cap Sealer at 0.75kg/m<sup>2</sup> followed by one coat at 1kg/m<sup>2</sup>. Brush or spray applied.

### Water Retaining Structures or Internal Concrete Wall Surfaces:

Two coats of Solseal Pile Cap Sealer each at 0.75kg/m<sup>2</sup>. Brush or spray applied.

### Concrete Slabs:

Solseal Pile Cap Sealer at 1.00kg/m<sup>2</sup>, applied in one slurry coat to hardened concrete or dry sprinkled and trowel applied to fresh concrete when this has reached initial set.

### Construction Joints:

Solseal Pile Cap Sealer at 1.5kg/m<sup>2</sup>, applied in slurry or dry powder consistency immediately prior to placing the next lift/bay of concrete.

### Building Concrete:

Solseal Pile Cap Sealer at 1.2kg/m<sup>2</sup>, applied in slurry or dry powder consistency immediately prior to placing the overlay concrete slab.

## NBS Clause:

J10/130 Proprietary Crystallization Active Mortar.

## Storage:

When stored in a dry place in unopened, undamaged original packaging, shelf life is 12 months.

## Health and Safety:

Solseal Pile Cap Sealer contains cement and is Irritating to eyes and skin. The product may cause sensitisation by skin contact. Keep out of reach of children. Avoid contact with skin and eyes. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable gloves.

For full information, consult the relevant Material Safety Data Sheet.