Visqueen Pile Cap Sealer

- Specialised crystalline system for waterproofing pile caps
- Penetrates in depth capillaries within concrete
- BS8102:2009 compliant to all graded environments
- Easy to use: just add water

Description
Visqueen Pile Cap Sealer is a grey cementitious compound containing Portland cement, specially treated quartz sand and a compound of active chemicals. When applied to a concrete surface, the active chemicals react with the free lime and moisture within the concrete to form in depth, insoluble crystals which fill and block all capillaries, fissures, pores and minor cracks within the concrete. This effectively makes the concrete watertight for the lifetime of the structure. The 25 kilo Pile Cap Sealer buckets are supplied in powder form.

Application
Visqueen Pile Cap Sealer is a specialised formulation for use within ground pile caps. The system can be used in basements as described in BS8102:2009 for:

1. Grade 1 – car parking
2. Grade 2 – plant rooms, garages and workshops
3. Grade 3 – residential (living areas) and commercial applications

Pile Cap system components
- Visqueen Pile Cap Sealer
- Visqueen VX90 Waterstop – for 90° internal angles and seal around pipe penetrations including pile caps
- Visqueen Waterstop Mastic – secures VX Waterstops in vertical and pile cap applications

Storage and Handling
Store unopened in a warm - above 5oC - and dry environment. Shelf life 24 months
Protect eyes and skin from contact. Freshly mixed Visqueen Pile Cap Sealer is alkaline, the use of suitable gloves and eye protection is recommended.
A full MSDS is available at www.visqueenbuilding.co.uk
GENERAL
All construction should conform to the Building Regulations, Codes of Practice 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: 2009.

The confining concrete must be placed within 5 days of installation of the waterstop profile.

PREPARATION and POST APPLICATION
The surface MUST present an open capillary structure to allow penetration of the crystalline chemicals.

24 hours prior to application surfaces must be porous and wet - sprinkle with water where required.

Ensure the product is well ventilated for at least 3 days. Protect the coating against excessive fast evaporation in hot conditions or drying winds by mist spraying regularly.

Mixing ratio and application information
Please do not pour the water into the powder. The powder is added into a bucket of water at the ratios stated below.

Visqueen Pile Cap Sealer should be mixed with water at the following ratio by volume:
- 4 parts Visqueen Pile Cap
- 1 part clean water

For Example, one 25 kilo tub of Pile Cap Sealer requires c.6 litres of water,

It is important not to mix more material than can be applied within 30 minutes at 20°C, or less in hot temperatures.

Pour the required amount of water into a clean bucket and add the powder slowly, **mechanically** mixing to a smooth lump-free consistency. If the mixed materials becomes stiff, do not re-mix with water, but discard and prepare fresh material.

Pile cap sealing – High Risk

1. Clean surface by means of jet wash, grit blasting or scabbling.
2. Apply Visqueen Pile Cap Sealer to the full area of the pile cap including 100mm vertically by:
   - Mechanically mix Visqueen Pile Cap Sealer at an approximate ratio of 4:1 with clean water by volume by adding the **powder into the water**.
   - Coverage rate is 1.5kg/m². This can be achieved by applying one coat or two (2 x 0.75 kg/m²). The second coat should be applied whilst the first coat is still green. 1 tub of Pile Cap Sealer covers c. 16m²
3. Roll out Visqueen Pre Applied Membrane to the base of the ground pile cap. Do not cover the pile cap with the membrane.
4. Ensure the product is well ventilated for at least 3 days. Protect the coating against excessive fast evaporation in hot conditions or drying winds by mist spraying regularly.
5. Apply Visqueen Waterstop Mastic to the vertical and horizontal as per detail.
6. Place Visqueen VX90 Waterstop securely and press firmly around the full circumference of the pile cap. Butt joint and knead lengths together to form a continuous layer.
Usage information
In order to obtain the required quantity of Visqueen Pile Cap Sealer we have compiled below a usage guideline.

1 tub of Pile Cap Sealer covers c.16m² therefore one 25 kilo tub of Visqueen Pile Cap Sealer will waterproof the following amount of piles:

- 300mm diameter pile caps: 100 piles
- 450mm diameter pile caps: 66 piles
- 500mm diameter pile caps: 47 piles
- 600mm diameter pile caps: 35 piles

Visqueen Waterstop Mastic coverage
As a guideline Visqueen recommend a 2mm thick layer therefore for every 1m length equates to 200 grams of Visqueen Waterstop Mastic. By using this calculation, one tub of 10 kilos will cover (see detail for area covered) the following amount of piles:

- 300mm diameter = 53 piles
- 450mm diameter = 35 piles
- 500mm diameter = 32 piles
- 600mm diameter = 27 piles

Please note the above usage rates are for guideline purposes only and are based on the exact coverage rates. Please allow for some wastage.

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The information given in this datasheet is based on data and knowledge current at the time of printing. Statements made are of a general nature and are not intended to apply to any use or application outside any referred to in the datasheet. As conditions of usage and installation are beyond our control we do not warrant performance obtained but strongly recommend that our installation guidelines and the relevant British Standard Codes of Practice are adhered to. Please contact us if you are in any doubt as to the suitability of application.

SPECIFICATION SUPPORT
The following items are available to view online or to download from www.visqueenbuilding.co.uk
- Technical Datasheets
- Typical installation CAD details
- Health and Safety data

Register online for access to NBS Clauses and for information about our CPD Seminars

TECHNICAL SUPPORT
For advice on detailing or installation call Visqueen Building Products Technical Help Line 0845 302 4758. Pricing & Availability may be obtained from our UK Network of merchant stockists. For details of these call our Sales Office on 0845 302 4758.