SiliconSeal Datasheet

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A colourless, low viscosity, penetrating liquid for application to masonry or concrete surfaces. Based on silicones, it is supplied ready for application by brush, roller or spray. **SiliconSeal** combines the properties of both organic polymers and inorganic silicates like quartz, and cures to form durable cross-linked resins. Depending on porosity of the surface to be treated, Siliconseal penetrates the pore structure to a depth of about 10mm and alters the masonry/water interfacial tension in this region. Masonry treated in this way can still "breathe" and moisture can dry out through the surface.

Technical Data

Type	Based on Silicones
Colour	Transparent
Pot life	Solvent slow to evaporate but keep sealed
Initial set	Solvents evaporate after 2 days plus
Final cure	22 days
Working time after mixing	Not applicable
Application temperature (ambient)	5°C-30°C
Substrate temperature	5°C-30°C
pH scale	Acidic
UV resistance	Stable
Abrasive resistance	Penetrative sealer. As good as substrate.
Density	0.8kg/litre
Protection during application	Use sun and wind barriers
Safety	See MSDS

Purpose

SiliconSeal greatly reduces the water absorption of concrete, clay bricks, natural stone, fibre bement board and plaster. **SiliconSeal** can also be used for the prevention of rising damp in brick walls by pumping the fluid into previously drilled holes along the course immediately above the faulty damp-proof membrane. Improves the light reflectivity of bridges, and therefore their visibility at night in wet weather, by keeping the surface dry. **SiliconSeal** is also an effective primer for a wide variety of sealers, and can be used to minimize wetback on breathable sealers where spillages occur.

Applications

Surface coating for building restoration and protection against spalling, cracking, efflorescence and fungal growth. **SiliconSeal** is a wet-on-wet application and should be applied until the substrate is properly saturated.

Colours

An absolutely clear treatment which does not darken or change the colour of the surface to which it is applied.

Specifying

Surface treatment: Surface treatment: **SiliconSeal** applied liberally by brush, roller or spray, two coats wet on wet. **SiliconSeal** should be applied to a substrate to a point of saturation (until surface absorbs no more). Be sure to remove any 'pooled' **Siliconseal**, do not allow this to dry on the surface. **SiliconSeal** is not film building, but rather crystalline in structure for water repellence and in certain applications it should be over coated with a film forming sealer to stop dirt retention i.e. wet areas, children's rooms or wherever a wall could get dirty.

Damp-course repair: One course of bricks at damp-proof course level to be drilled and saturated with **SiliconSeal**. All in strict accordance with the manufacturer's instructions.

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Specimen finish

A trial area should be treated on-site for the architect or engineer's approval.

Suitable surfaces

Concrete, cement plaster, mortar, sandstone, clay- and cement bricks, gypsum plaster, asbestos, cement, terrazzo and coloured cement finishes.

Site Work

Storage

Store at room temperature in unopened drums for a maximum of 4 months from date of invoice.

Weather

Do not apply during wet or freezing weather conditions.

Surface preparation

Surfaces should be clean and dry. Concrete, plaster or cement bricks should be at least 1 month old.

Masking

Mask all adjacent surfaces, especially glass or aluminium to prevent etching or staining.

Mixing

Rock drum in inverted position for a few minutes before opening and stir contents thoroughly before use.

Application

Surface treatment: Apply liberally from bottom to top using a brush, roller or low pressure spray to dry surfaces.

Damp-course repair: Strip plaster from brickwork and drill at an angle of 30 to 60 degrees at least 50mm into the brick about 100mm apart. The liquid can be gravity fed using a funnel into each brick in the course immediately above the faulty damp proof-course. If pressure injection is used, 30-50psi is common. Inject until **SiliconSeal** bleeds back through the face of the brick. Wash equipment in turpentine.

Curing

SiliconSeal should be allowed to dry for at least 2 to 3 days depending on the weather to allow the solvent to fully evaporate. The best time to overcoat **SiliconSeal** with a sealer would be between 2 to 7 days after application. Application before or after this window will result in adhesion problems. Full cure takes place after 22 days.

Coverage

Face bricks	6m²/litre
Porous bricks	3m²/litre
Concrete	4m²/litre

These figures are approximate and will vary according to the texture and porosity of the particular surface.

Packaging

Available in 5 litre and 25 litre non-returnable drums.