ENVIROSEAL

A WATER REPELLENT FOR EXTERNAL MASONRY

C1/SFB 1999

Yu6

JANUARY 2001

DATA SHEET

TECHNO

QUAY MANAGEMENT SERVICES LTD ACCREDITATION NO. 4112 REGISTERED TO BS EN ISO 9002

ASCH(E) Approved Contractor Scheme

DESCRIPTION

Enviroseal is an effective water repellent liquid based on a solvent free silicone/siloxane emulsion for use above ground on porous brickwork, cement renderings, asbestos, cement/mineral boards, unglazed tiles, cast concrete, roughcast, stonework (including calcareous materials, i.e. those containing limestone), wood, canvas and leather. Surfaces treated with Enviroseal remain permeable to vapour so that moisture within the structure does not remain trapped.

Enviroseal is clear and colourless and will not normally alter the appearance of treated surfaces. The treated masonry surface will not prevent the penetration of water at pressures greater than approx. 1.4 kg.cm^2 (20 lbs per square inch).

Note: Enviroseal is NOT a dust proofing sealer or a damp-proofing membrane.

General Information

Penetrating damp causes damp patches on exterior wall surfaces and in more serious cases on interior walls. This is caused by differences in the capillary absorption of masonry. Faulty damage can be caused such as wall tie corrosion and other structural damp.

Damage to the surface layer of the masonry (spalling) can be caused by the effects of frost damage. Water in the wall expands by 10% when it freezes setting up high pressures on the pore structure causing this problem.

Unsightly moss and mould growth can also occur on the surface. this will only occur on a wet surface.

Unsightly, generally white salts (efflorescence), can show themselves on the surface. There are water soluble salts in the masonry that are partially dissolved by the water and carried to the outside during drying forming crystals on the exterior surface. These salts dissolve when it rains again.

Heat loss through a wet wall is up to 3 times higher than through a dry wall. A wet wall is a cold wall and thermal insulation values are relative to the dampness of the wall.

Treatment with Enviroseal Water Repellent can help to prevent the accumulation of dirt on an exterior surface improving the visual effect of the property.

Buildings can be damaged by the effects of acid rain. Chemicals in the atmosphere are absorbed by the rain and carried into the masonry causing damage.

SPECIAL PROPERTIES

1) Deep Penetration
2) High Resistance to ALKALIS
3) Rapid Development of water repellency
4) Provides good adhesion for paints
5) Water-based
6) Stable in storage, even when diluted. Enviroseal reduces the capillary absorption of the building material which it has penetrated, but does not clog pores or capillaries. There is no impairment of the building materials ability to "breathe".

Application

The success or failure of Enviroseal Water Repellent treatments depends on applying sufficient solution in a uniform coating to the surface. The treatment can be applied by various methods including brush, lambswool roller or coarse spray.

Treatment should start at the highest point working from side to side whilst allowing a 'Run-Down' of up to 300mm.

Poorly absorbent dense surfaces will require one application. Highly absorbent surfaces are recommended to have two flood coats applied wet on wet.

SITE WORK

Preparation

Substrates should be prepared by cleaning to remove all surface contaminants, including fungal/mould growths (see e.g Wykamol Microtech Biocide Data Sheet). Mould release agents or decorative paints should be removed completely. Structural defects, particularly mortar joints, repointing (see our Colour point Mortar data Sheet) or rendering must be made good and allowed to cure for at least 1 month before treatment. Enviroseal will not prevent ingress of water through cracks or defective joints.

Where backings are heavily contaminated with salts, there is an increased risk of spalling of surfaces treated with water repellents. The application of Wykamol Waterseal is not recommended under these circumstances. If doubt exists, advice should be sought from The Technical Department of The Wykamol Group.

Application
Protect surfaces liable to be splashed during treatment, especially glass window panes, UPVC window frames and decorative coatings. In exceptional circumstances a further coat may be necessary. Allow at least 2 hours between coats and do not apply to surfaces affected by rain or frost.

Coverage will depend upon the porosity of the surfaces to be treated. Average consumption is 4-5m² per litre per coat; this may be reduced to 2m² per litre on highly absorbent surfaces.

Any overspray should be removed with water whilst wet. Treated surfaces may be overpainted with masonry paints from approximately 1 week.

Effectiveness
Enviroseal will become effective through moisture evaporation. Initial surface cure (beading) can occur within as little as one hour under good drying conditions, but cold temperatures, limited air movement and substrate moisture contact may all extend the time taken for surface water repellency to develop.

The depth of penetration will depend on the type of substrate and moisture content, but will generally be between 4-6mm.

Treated surfaces will remain permeable to water vapour since the rate of evaporation is not retarded allowing the surface to 'Breathe'.

Product Data

Packing	25 litre drums (ready-for-use) 200 lt drum or 1000 lt 1bls on request
Consumption	4-5m² per litre on dense substrates 2-3m² per litre on porous substrates per coat.

Target coverage rates should be 2-4 litres/m² per coat

TECHNICAL INFORMATION

This product is intended for use by professional contractors/specifiers and this data sheet is complied accordingly. Further information and advice is available from the Technical Department at The Wykamol Group.

The information contained here supersedes all previous datasheets.

Wykamol Group

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