

GreenSeal 550

Acrylic reinforced cementitious, flexible waterproof coating.

DESCRIPTION

GreenSeal 550 is a two-component acrylic modified cementitious coating that requires only on site mixing to form the ideal product to waterproof and resurface concrete, masonry, and most other construction materials. Simply applied by stiff brush, roller, or trowel, it forms a waterproof, flexible coating. GreenSeal 550 provides an effective barrier to waterborne salts and atmospheric gases. Fluid applied, GreenSeal 550 provides a hard wearing, seamless, waterproof membrane for roofs and foundation protection. GreenSeal 550 is composed of specially selected cements, silica sand and reactive fillers supplied in powder form together with a liquid component of blended acrylic copolymers and wetting agents.

TYPICAL APPLICATIONS

- To reface and even out variations in concrete surfaces.
- As a waterproof lining for water retaining structures.
- · For coating seawater channels.
- Sealing and coating tie bar holes to ensure watertightness.
- For waterproofing and protection against brackish water.
- · To provide foundation protection.
- · As a waterproof coating for roofs.
- As a backing to marble and granite to prevent water ingress and thus alleviate surface staining.
- To provide protection to concrete surfaces from carbonation and chloride attack.
- For use on pedestrian walkways in marine areas
- · For waterproofing of wet areas under tiling.
- As a waterproof and protection coating on top of spray polyurethane foam roof insulation.

ADVANTAGES

- Waterproof
- Excellent adhesion. Bonds to porous and nonporous surfaces
- Flexible
- · Suitable for light pedestrian traffic

- Breathable whilst repelling water, allows substrate to breathe
- High resistance to chloride ion diffusion
- Unlike conventional coatings which require a 7-28 day cure of concrete, GreenSeal 550 can be applied to 24 hour-old concrete thereby giving immediate protection
- White color has high solar reflectivity index (SRI >78) to prevent heat island effect on roofs

PACKAGING AND COLORS

GreenSeal 550 is available in 20 kg double pack.

GreenSeal 550 is available in three standard colours: J-Light Grey, K-White and H-Dark Grey.

STANDARDS

BS 6920: Part 1 2000 - Suitable for use in contact with potable water.

TYPICAL PROPERTIES*	
Density	1826 kg/m³
Chloride ion diffusivity	Not measurable after 24 months of testing
Depth of water penetration under pressure BS EN 12390 Part 8: 2009	Nil
Liquid water permeability BS EN 1062-3: 2008	<0.1 kg (m²xh ^{0.5})
Carbon dioxide permeability BS EN 1062-6: 2002 Method A Equivalent air layer thickness (SD)	>50 m

APPLICATION GUIDELINES

SURFACE PREPARATION

As with all coating systems, surface preparation is of prime importance. Remove all grease, oil, dust, residual curing compound, mould release agent, laitance or other contaminant that could impair adhesion. Suitable cleaning methods include ultrahigh-pressure water jetting grit blasting and grinding. Spalled concrete should be cut back to sound concrete and made good with a suitable cementitious repair mortar such as

GS Rep Mortar. Conventional concrete curing compounds should be removed before application. The exception to this is when **GreenKure 181** has been used.



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Chloride Ion Diffusivity

GreenSeal 550 provides an effective barrier to waterborne salts such as chlorides and sulphates. independent assessment has shown that even after 12 months constant immersion the chloride ion diffusion co-efficient could not be measured for **GreenSeal 550**.

Chemical Resistance

GreenSeal 550 has outstanding wear and weather resistance and good resistance to sodium hydroxide, calcium chloride, de-icing salts. **GreenSeal 550** coated surfaces exhibit good resistance to mild acids.

Anti Carbonation Coating

GreenSeal 550 is an extremely effective barrier to atmospheric acidic gases which carbonation in concrete structures. GreenSeal 550 at an applied rate of 1.8 kg/m² gives an equivalent air layer thickness for carbon dioxide diffusion (R) of 92 m. The accepted minimum value for R is 50 m. Testing to confirm this was independently carried out by Taywood Engineering 2005. A report is available on request.

MIXING

GreenSeal 550 is supplied in premeasured units and should be mixed on site utilising clean containers. Slowly add the powder to the liquid and mix, using a slow speed drill fitted with a suitable paddle. MIX AND USE. Do not mix more material than can be used in one hour.

NOTE: Although **GreenSeal 550** is supplied in premeasured packs, part packs can be used by mixing 2 volumes of powder to 1 volume of liquid. Mix thoroughly and keep mixed during application. DO NOT RE-TEMPER WITH WATER.

PLACING / APPLICATION

Do not apply to dry concrete

Saturate concrete surfaces with clean water whilst still visibly damp, but free of standing water, apply, using a short, stiff bristle brush or roller. Trowel application can be undertaken as necessary. For heavy 6-10 mm depressions, honeycombs etc. use less gauging liquid and mix to the desired consistency. Where more than one coat is found necessary to achieve the desired thickness, apply the second or subsequent coats after the previous coat has dried.

It is recommended, for general resurfacing, that each coat should be a minimum of 1 mm thick. Spray application is recommended for large areas, details of suitable equipment can be provided by Green Builders Solutions Technical Service Department.

Notes

Where subsequent tiling works are to be carried out on vertical surfaces, contact the local Green Builders Solutions representative for advice.

COVERAGE / YIELD

1.8 kg / m² at 1 mm thickness.

STORAGE AND SHELF LIFE

Part A (powder): Shelf life is 12 months from date of manufacturing in unopened original bags. Product must be kept out of direct sunlight, in a dry, cool place, stored clear of the ground on pallets. Avoid excessive compaction. Part B (liquid): Shelf life is 12 months from date of manufacturing in unopened original containers. Product must be kept out of direct sunlight and in a dry, cool, preferably air-conditioned warehouse below 35°C temperature. Store clear of the ground on pallets. Do not stack pallets.





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HEALTH AND SAFETY

As with all chemical products, care should be taken during use and storage to avoid contact with eyes, mouth, skin and foodstuffs. Treat splashes to eyes and skin immediately. If accidentally ingested, seek immediate medical attention.