Cemcoat Smooth

Details

Tough, fast curing cementitious coating that provides a durable finish strongly bonded to the substrate.

Cemcoat Smooth is a two stage product application. Each step is fast curing and the end result is a durable cementitious screed that can be used for many applications, whether it be the protection of old concrete from freeze/thaw issues to the coating of wooden sheeting for a temporary pathway across a building site. It is extremely strong and can withstand both heavy vehicular and heavy foot traffic. Cemcoat is a polymer/cement based product designed to be applied over a wide range of surfaces to provide a durable surface strongly bonded to the substrate with a degree of flexibility to enable the accommodation of movement in the substrate and structure of the building. Cemcoat can be applied to both horizontal and vertical surfaces and finished with a variety of textured and decorative effects.

Stage 1 – Squeegee and roller apply the Cemcoat Base – This an off-white, strong, polymer modified coating that provides the surface protection and help bind the concrete finish.

Stage 2 – Roller apply the Cemcoat Sealer – This is the final sealer that provides whatever colour you choose to further enhance the decorative and functional properties of the surface.

Use on:
Concrete, tarmac, wood, metal, plastic, galvanised metal, iron, fibreglass, asbestos, PU foam, etc

Use where:
Internal/External

Typical industries:
Used in all industrial, commercial and domestic areas. Heavily used in multi-story car parks, industrial yards and within the farming industry in areas such as grain stores, dairies, piggeries, abattoirs and silage clamps

Type of job:
Cemcoat is commonly used for adding slip resistance and smoothing out and protecting surfaces on loading and parking bays, ramps, wooden walkways, decking, driveways and footpaths. Cemcoat is excellent for vertical surfaces and decorative effects, columns, plinths, planters, etc. and can be easily over coated to further enhance the appearance and / or functional properties

Approximate coverage:
Cemcoat Base – 17.5 kg unit – 7.5-9 sq.m @ 1mm nominal thickness.
Cemcoat Sealer – 1.7 kg unit – 10 sq.m

For more information of the above stages, please refer to:-

- Cemcoat Base **(Stage 1)** on page 2-3
- Cemcoat Sealer **(Stage 2)** on page 4-5

Polycote UK LLP
01234 846400 | uksales@polycote.com | www.polycote.com

Cemcoat Base

An incredibly tough, highly flexible 100% waterproof system

Product Description

Cemcoat is a polymer/cement based product designed to be applied over a wide range of surfaces to provide a durable surface strongly bonded to the substrate with a degree of flexibility to enable the accommodation of movement in the substrate and structure of the building.

Cemcoat can be applied to both horizontal and vertical surfaces and finished with a variety of textured and decorative effects. It can be over-coated to further enhance the decorative and functional properties of the surface. Cemcoat can be used as a thin section underlayment to provide a tough and durable profiled base for the application of the Flortex Range, in medium to heavy duty areas.

Typical Uses

Cemcoat is ideal an ideal solution to many long standing waterproofing problems, such as balconies, walkways, car park decks, basements, abattoirs, silage clamps, grain stores, dairies, piggeries, changing rooms and footpaths. Cemcoat may be applied to tiles, asphalt, concrete, plasterboard, plaster, plywood, brick, glass, rubber, steel, lead, asbestos, tarmac, floor screeds.

Direction For Use

Surface Preparation

THOROUGH SUBSTRATE PREPARATION IS ESSENTIAL.

The substrate must be sound, clean and free of loose or friable materials, dust, chalk, oil and grease contamination, mould or algae. Remove any oil or grease using Polycote Degrease IT.

Any damaged areas should be repaired and primed – please contact the Polycote Technical Helpline for further advice.

New concrete should be at least 4 weeks old and the weak dusty laitance should be removed using Polycote Etch IT.

Priming

If applying to steel in damp or corrosive environments, a corrosion inhibitive primer should be applied before application of the membrane.

Mixing

The ideal mixing tool is a slow speed drill fitted with a multi action mixing paddle. Suitable mixing paddles can be purchased from Polycote.

The unit of material supplied is based on the standard mix of 4.7 litres of liquid to 12.5kgs of filler but it should be noted the ratio of liquid to filler can be adjusted to suit individual applications in terms of surface, usage and prevailing temperature.

The liquid should be pre-stirred vigorously prior to measuring out the required quantity and adding the appropriate amount of filler. Pour the liquid into a clean open mixing vessel and always add the filler into the liquid slowly, continually mixing until all the filler to be used is added. Continue mixing for a further 2 to 3 minutes ensuring there are no lumps in the mix. The final consistency should be similar to that of a thick cream.

Application

Before application of Cemcoat Base to horizontal or vertical surfaces, ensure that surfaces are sound, clean and free of loose or friable materials, dust, chalk, oil and grease contamination, mould or algae.

Please note: by following this procedure and prior to applying succeeding coats the same procedure will aid the spread of the material.

CAUTION: Do not apply Cemcoat Base on hot surfaces or at times of very strong sunlight and high temperatures as this could accelerate the drying of mixed concrete and produce a very rapid cure of the applied material.

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Application (cont)

Cemcoat Base is extremely simple to apply. Apply by brush, roller, trowel or squeegee.

From the mixing vessel pour out a quantity of material that can be easily and uniformly spread using the selected tool over the appropriate area and finish to the desired texture before moving on to the next part of the mix. Repeat the mixing and application method until the selected area has been completed.

Application Conditions

The recommended application temperature is between 10°C and 30°C. Do not apply if the temperature is likely to fall below 5°C or if there is a risk of rainfall prior to full curing being achieved, as this may result in a non-cure situation.

Pot Life & Curing Times

The pot life of Cemcoat Base once mixed is approximately 60 minutes at 20°C & it is essential to use all mixed product within this time frame. The curing time is within 4-6 hours, dependent on atmospheric conditions.

Cure Times

Minimum recoating interval:	4 to 6 hours
Light Traffic:	12 to 16 hours
Full Traffic:	72 hours
Full Chemical Cure:	7 to 10 days

Typical Consumption (Theoretical)

1.0 - 5.0 kg/m2.

The coverage rate will vary depending on the texture and porosity of the substrate, site conditions, film thickness and method of application.

Coverage

7.5-9 sq.m @ 1mm nominal thickness.

Cleaning

Tools and equipment should be cleaned whilst product is still wet, using warm soapy water. Hands and skin should be cleaned immediately with Organic Hand Cleaner.

Shelf Life & Storage

Shelf life in unopened containers is approximately 12 months for the liquid and 6 months for the powder, subject to good conditions of storage.

Store in a cool, dry, frost-free environment away from sources of ignition, at a temperature not below 15°C.

Technical Data

Pack Weights:	4.7 kg liquid/12.5 kg filler
Mixed Density:	1.89 g/cm³
Volume Solids	62%
VOC:	<5 g/l
Cleanser/Thinner:	Use water to clean. Thinning is not advised.

Health & Safety

Before using this product, please ensure you have received and read carefully both the Hazard Label applied to the container and the relevant Material Safety Data Sheets.

Any Questions

Please do not hesitate to contact us for advice regarding the use of this product or its suitability for your particular application.

Our aim is to provide all the technical help you need to make an informed choice and achieve total success.

Polycote Technical Helpline:

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Cemcoat Sealer

A twin pack, highly effective pigmented sealer with a matt finish available in buff, grey, white, terracotta, green and black.

Product Description

Cemcoat Sealer has been created to provide a totally impervious hard wearing floor sealer without the glossy shine. The aliphatic solvent-based UV resistant polyurethane formulation will adhere to a wide range of substrates including walls and floors and will reduce porosity whilst providing a dustproof surface. The coating is not only UV light resistant but is also extremely easy to clean. Impact and abrasive resistance clear surface sealer. Resistant to hot water. Good chemical resistance.

Suitable Substrates

Cemcoat Sealer is designed for application onto epoxy resin based screeds to reduce surface absorbency and ensure ease of cleaning in hygienic locations. Cemcoat Sealer can also be applied onto walls as a clear, durable seal coating.

Packaging

Cemcoat Sealer is supplied in 1.7 kg units.

Typical Uses

Cemcoat Sealer is ideal for treatment of dusting concrete floors in factories, warehouses, garages, workshops, pharmaceutical, production and plant areas.

Direction For Use

Surface Preparation

THOROUGH SUBSTRATE PREPARATION IS ESSENTIAL.

Surfaces to be coated must be clean, dry and free of loose contaminants. Lightly abread the surface to provide a key. The concrete substrate must be sound with a minimum compressive strength of 25 N/mm2, a minimum pull-off strength of 1.5 N/mm2 and should be a minimum of 28 days old. Concrete substrates should be mechanically prepared using a vacuum assisted shotblasting or diamond grinder, to remove any weak surface laitance and/or previous surface treatments. Weak or damaged concrete should be removed and repaired using a relevant Polycote repair material. If unsure of the best option, please ask.

The ideal air temperature at the time of application is 15°C to 25°C, with a maximum relative humidity (RH) level of 75%. Ensure good drying conditions are likely throughout the application and curing process, before the coating is subjected to water or rainfall.

Mixing

Having fully prepared the substrate, stir the individual components before mixing together. Add Part 'B' to Part 'A' and thoroughly mix for at least 3 minutes. For best results use a heavy-duty slow speed drill with a mixing paddle.

Care must be taken when mixing to ensure that the hardener is properly dispersed.

ENSURE THOROUGH MIXING AS AN UNMIXED PRODUCT WILL RESULT IN A POOR OR NON-CURE SITUATION.

Application

Cemcoat Sealer can be applied by brush or roller at a thickness of 40 microns. Use a short nap ling-free mohair roller.

It is recommended that at least two people are involved in the application process. The second person rolls the sealer at 90 degrees to the first. The roller must be saturated with material so that work is always carried out wet-on-wet. Change rollers every 30 minutes. Ensure that material is not applied more than once or overlapped in any area.

Application Temperature

Normal application temperature is between 15°C and 25°C. Surface temperature must be above 5°C. Where possible it is recommended that the application area is heated to a minimum temperature of 15°C for 24 hours prior to application to allow the ambient and substrate temperature to stabilise prior to installation.

The maximum relative humidity should be 75%.

Coverage

The coverage will vary according to the texture and porosity of the substrate and the film thickness required. As a guide, the coverage is 6-10m2 per kg, per coat.

Pot Life & Curing Times @ 20°C

The pot life is approximately 40 minutes. Curing time is dependent on temperature and humidity. Initial curing for light foot traffic is 12 hours.

The second coat must be applied between 16 and 36 hours of the first to ensure a good chemical bond. If this interval is exceeded, abrade the first coat to ensure intercoat adhesion. Full traffic time is 48 hours. Full chemical resistance in 7 days.

Curing Schedule at 20°C

Pot Life:	40 minutes
Pedestrian Traffic:	12 hours
Light Wheeled Traffic:	24 hours
Full Traffic:	48 hours
Full Cure:	7 days

Please note: At lower temperatures the above cure times will be increased

Technical data after 28 Days at 20°C

Compressive Strength:	N/A
Tensile Strength:	N/A
Bond Strength:	> 2.0 N/mm2 (Concrete Failure)
Abrasion Resistance:	N/A
Slip Resistance Pendulum Test to BS7976-2:	Consult Polycote
VOC:	20g/l - Based on a fully mixed unit
Chemical Resistance:	Good general chemical resistance. For specific reagents contact Polycote Technical Department

Cleaning

Tools and equipment should be cleaned whilst resin is still wet with clean water. Reacted material can only be cleaned mechanically. Clean all equipment immediately after use of the twin pack sealer with the aid of Polycote Solvent Cleaner.

Hands and skin should be cleaned immediately with Organic Hand Cleaner.

Shelf Life & Storage

Shelf life in unopened containers is approximately 12 months subject to conditions of storage.

Store in a cool, dry, frost-free environment at temperatures between 10°C and 25°C and away from sources of ignition and out of direct sunlight.

Health & Safety

Before using this product, please ensure you have received and read carefully both the Hazard Label applied to the container and the relevant Material Safety Data Sheets.

Any Questions

Please do not hesitate to contact us for advice regarding the use of this product or its suitability for your particular application.

Our aim is to provide all the technical help you need to make an informed choice and achieve total success.

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