

THOROSEAL[®] SUPER

(Internationally known as MASTERSEAL[®] 583)

A Single Component Polymer Modified Waterproof Coating For
Concrete And Masonry



BBA CERTIFICATED

Description

THOROSEAL[®] SUPER, when mixed with clean water, forms an extremely durable waterproof coating for concrete and masonry which is easily applied by a stiff hand brush, broom or spray.

Fields of Application

Waterproofing of:

- Basements
- Foundations
- Water reservoirs
- Tunnels
- Floors and walls in shower and bathroom areas prior to the application of a decorative finish

Features and Benefits

- Resists positive and negative water pressure
- Suitable for interior and exterior use, above and below ground level
- Water vapour permeable
- High bond strength, becomes integral part of the substrate
- To be mixed with water only
- Can be brush or spray applied
- Is applied onto a damp substrate
- Equipment to be cleaned simply with water
- Solvent free

Technical Data/Typical Properties ^(a)

Mechanical characteristics ^(b)

	THOROSEAL [®] SUPER	
	Grey	White
Compressive strength (N/mm ²)	55.0	46.0
Tensile strength (N/mm ²)	4.0	4.5
Flexural strength (N/mm ²)	9.0	6.2
Pot life	45 min	45 min
Final setting time	350 min	350 min
Wet density (kg/m ³)	2060	2080

^(a) Typical values at 20°C

^(b) After 28 days, curing: 7 days water-immersed, 21 days ambient

Colours

Available in Grey and White

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Tests and approvals

Awarded British Board of Agrément Certificate No. 89/2138/C

BS 476:Part6:1981 *Methods of test for fire propagation of products*

l=1.5-Conforms to building regulations class 0 rating.

BS476:Part7:1971 *Surface spread of flame tests for material*

Class 1 – Nil spread of flame.

Application Procedure

Substrate Preparation

The surface to be coated must be clean and sound. Remove all traces of formwork, release agents, previous coatings, laitance and any contaminants that may effect the bond adversely. Suitable cleaning methods include high-pressure water treatment and abrasive blasting. Chemical cleaning treatments or aggressive percussive methods such as scabbling are NOT recommended. After the above treatment, surfaces must be thoroughly washed with clean potable water to remove all dust and loose particles. Cracks and bolt holes must be cut out and filled solid with THORO® WATERPLUG, THORO® STRUCTURITE or THORO® STRUCTURITE 300 prior to the application of THOROSEAL® SUPER.

Basements in areas containing high levels of soil or ground water sulphates may require a pre-treatment render. Consult Degussa Construction Chemicals (UK) for details.

Mixing

Mixing liquid

Blend 25kg of powder into approximately 5.4 litres of clean water. The quantity may vary slightly depending upon the ambient conditions. In all instances, it is important that the material is mixed to the correct consistency.

Keep the quantity of liquid the same for all mixes, in order to avoid as much as possible batch to batch variation.

A maximum of 5.8 litres of water should not be exceeded.

Power mixing

Gradually add the powder to the water and mix using a suitable mixing paddle in a slow-speed drill (400-600rpm). Mix until a thick, lump free consistency is obtained. Leave the THOROSEAL® SUPER to stand for 5-10 minutes to allow full saturation to take place.

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Re-mix, adding a small quantity of water if required, to restore the consistency. Do not exceed the maximum liquid demand.

Application

Note: Do not apply THOROSEAL⁰ SUPER to frozen substrates or if the ambient temperature is below 5°C or expected to fall below 5°C within 24 hours. Avoid application in direct sunlight.

Always apply the mix to a pre-dampened surface. High-suction substrates require more dampening than dense substrates. However, make sure there is no freestanding water. Apply by stiff brush or broom or with traditional mortar spraying equipment. Mixed material must be used within 45 minutes, or less under hot weather conditions. The actual nominal thickness per coat must be between 1.0 and 1.5mm.

First coat

Brush or broom the mix firmly onto the pre-dampened, prepared surface. After completing 2 or 3m², strike off with the brush or broom in one direction for aesthetic purposes. Care must be taken not to spread the material too thinly. When the material begins to drag or “ball”, do not add more water, but dampen the surface again.

Second coat

Allow at least overnight to cure before applying subsequent coats. Dampen the first coat and remove excess moisture. **If THOROSEAL⁰ SUPER is used in closed, poorly ventilated rooms, condensation may occur on the first coat. This condensation must be removed from the surface.** Apply the second coat at right angles to the first coat to ensure good covering.

THOROSEAL® SUPER can be spray applied but should afterwards be brushed well into the substrate to ensure proper adhesion. To improve the aesthetic appearance an additional layer can be applied by spray, eventually sponge floated to give a uniform surface.

Curing

With clean water, fog-spray after the initial set has taken place for as long as practicable. In cold, humid or unventilated areas it may be necessary to leave the application for a longer curing period or to introduce forced air movement. **NEVER** use dehumidifiers during curing periods.

Clean up and spillages

Non hardened material may simply be removed with water.

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Coverage

A two-layer application requires approximately 2.5 to 3.5 kg/m² of powder and will be strongly influenced by the roughness of the substrate.

Packaging

25kg sack

Storage

THOROSEAL[®] SUPER should be stored under cover, clear of the ground and stacked not more than 6 bags high. Protect the materials from all sources of moisture and frost.

Shelf Life

Rotate stock in order not to exceed the shelf life of 6 months.

THOROSEAL[®] SUPER Degussa Construction Chemicals UK Version 3**Health and Safety**

*For full information on Health and Safety matters regarding this product the relevant Health and Safety Data Sheet should be consulted.

The following general comments apply to all products.

As with all chemical products, care should be taken during use and storage to avoid contact with eyes, mouth, skin and foodstuffs, (which may also be tainted with vapour until the product is fully cured and dried). Treat splashes to eyes and skin immediately. If accidentally ingested, seek medical attention. Keep away from children and animals. Reseal containers after use.

Solvent Based Products

Use in well ventilated areas; avoid inhaling. Suitable respiratory equipment may be needed, eg when spraying. Can cause skin, eye irritation. Wear protective eye shields and gloves during use. Do not smoke or allow sparks or naked lights when stored or in use.

Powder Products

Should be handled to minimise dust formation; use light mask if excessive dust unavoidable. Cement powders when wet or moistened can cause burns to skin and eyes, which should be protected during use.

Resin Products

Can cause irritation, dermatitis or allergic reaction. Use protective equipment particularly for skin and eyes. Use only in well ventilated areas.

Spillage

Chemical products can cause damage; clean spillage immediately.

Disclaimer:

This information and all further technical advice is based on our present knowledge and experience. However, it implies no liability or other legal responsibility on our part, including with regard to existing third party intellectual property rights, especially patent rights. In particular, no warranty, whether express or implied, or guarantee of product properties in the legal sense is intended or implied. We reserve the right to make any changes according to technological progress or further developments. The customer is not released from the obligation to conduct careful inspection and testing of incoming goods. Performance of the product described herein should be verified by testing, which should be carried out only by qualified experts in the sole responsibility of a customer. Reference to trade names used by other companies is neither a recommendation, nor does it imply that similar products could not be used.

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