

THOROSEAL[®] SUPER

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. It is applied to a minimum 2 mm thickness in two coats by stiff 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
- Applied onto a damp substrate
- Equipment to be cleaned simply with water
- Solvent free

Typical Properties/ Technical Data ^(a)

	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, samples cured for 28 days: 7 days water-immersed, 21 days ambient

Colours

Available in Grey and White

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

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

Class 1 – Nil spread of flame.

Conforms to class 0 rating as defined in Building Regulations 1991 for England and Wales, approved Document B, Appendix A12.

Application Procedure

For tanking applications refer to the Thoro Basement Waterproofing Guide.

Substrate quality

Substrates to be treated must be completely clean, structurally sound and mechanically keyed. All substrate coatings, defective renders, foreign matter, formwork treatments and other contaminants that may affect the bond adversely should be removed.

Substrate Preparation

Substrates should be prepared by abrasive blasting or high-pressure water treatment. *Do not* use scabbling or any other aggressive method.

All mortar joints to be flush-pointed.

Repair with WATERPLUG and/or THORO[®] STRUCTURITE as required.

All wall/floor intersections to be prepared by cutting a 20mm by 20mm chase along the junctions and filling with WATERPLUG, finishing in an angle fillet to "round out" the junction.

Water infiltration through the substrate to be treated should be either diverted by drainage or concentrated at weepholes, which will be plugged with WATERPLUG after the application of the final coat of THOROSEAL[®] SUPER

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

Mixing

Water content

5.0 – 5.8 litres per 25 kg bag.

Typically 5.4 litres of clean water per bag .

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, to avoid batch-to-batch variation.

Do not exceed 5.8 litres of water per bag.

Mechanical mixing

Blend the powder into the mixing liquid. Use 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.

Re-mix, adding a small quantity of water if required, to restore the consistency.

Consistency

Do not exceed the maximum liquid requirement.

The material should be mixed to a thick, creamy, lump-free consistency that will just support the weight of the stiff brush.

Mixed material must be used within 60 minutes from the start of mixing, or less under hot weather conditions.

Do not re-temper the mix.

Application

Note: Do not apply THOROSEAL[®] 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 substrate. High-suction substrates require more dampening than dense substrates. Ensure there is no free standing water on the substrate prior to application. The nominal thickness per coat must be between 1.0 and 1.5mm.

Application methods

THOROSEAL[®] SUPER can be applied by *THORO BRUSH, broom or spray. **THOROSEAL[®] SUPER must not be applied by trowel.**

* A suitable brush will be 6" (150mm) in width and have a short pile comprising stiff nylon bristles of 3" (80mm) in length.

The first coat **MUST** be worked into the substrate with a stiff brush, while still wet, to ensure an intimate bond to the substrate, even when applied by spray.

First coat

Apply a first coat of THOROSEAL[®] SUPER at a minimum thickness of 1mm by brush, broom or spray. Work the mix firmly onto the pre-dampened, prepared substrate by brush or broom. After completing 2 or 3m², strike off with the brush or broom in one direction for a neat appearance and to provide a mechanical key for the second coat.

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 substrate again. When applying by spray use a 3-4mm nozzle at a pressure of 3.6 - 5.0 bar (50-70lb/in²).

Allow at least an overnight cure before applying a second coat. Apply the second coat when the first coat is sound enough to receive it without damage.

Second coat

Dampen the first coat and remove excess moisture. Brush, broom or spray the second coat of THOROSEAL® SUPER at a minimum thickness of 1mm, onto the substrate (as above) and finish at right angles to the previous coat .

To aid proper coverage the second coat should be a different colour, for example, white on grey.

If the second coat is to be the final finish, it may be finished with a brush or sponge float to give a uniform surface.

If a cementitious plaster or render is to be applied then finish the THOROSEAL® SUPER with horizontal brush strokes to give more grip. In most situations, these can be applied the next day. If this is likely to be delayed for some time, then the THOROSEAL® SUPER should be sand dashed immediately after application to aid adhesion.

Never use a gypsum based plaster to cover THOROSEAL® SUPER in a tanking application.

Curing

Damp cure for 24 hours after which time the THOROSEAL® SUPER must be allowed to air dry. 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

Tools, equipment and spillages should be cleaned immediately with clean water.

Additional Information

THOROSEAL® SUPER stops running water but remains vapour permeable throughout its life. Only vapour permeable coatings and finishes can be applied on to the substrate.

In above ground conditions, MASTERSEAL F1131 is recommended.

All closed areas such as basements or cellars must have adequate ventilation or condensation on the walls will occur. It is most likely to form in areas, which were previously damp. Increasing the ventilation and/or plastering the walls with a lightweight, **cement-based** plaster can alleviate the formation of condensation.

If THOROSEAL® SUPER is used to waterproof fish tanks or swimming pools, it should be washed down after curing is complete with salt water and rinsed with clean water. Repeat the rinsing until the required pH conditions are obtained. Failure to do this and to monitor the pH of the water until stable can lead to the death of fish.

Coverage

Approximately 15m² per bag at 1mm thickness in one coat.

Apply two coats.

Coverage is influenced by the roughness of the substrate. On rough substrates the quantities required will increase significantly.

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.

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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.

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.

Spillage

Chemical products can cause damage; clean spillage immediately.

Disclaimer:

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