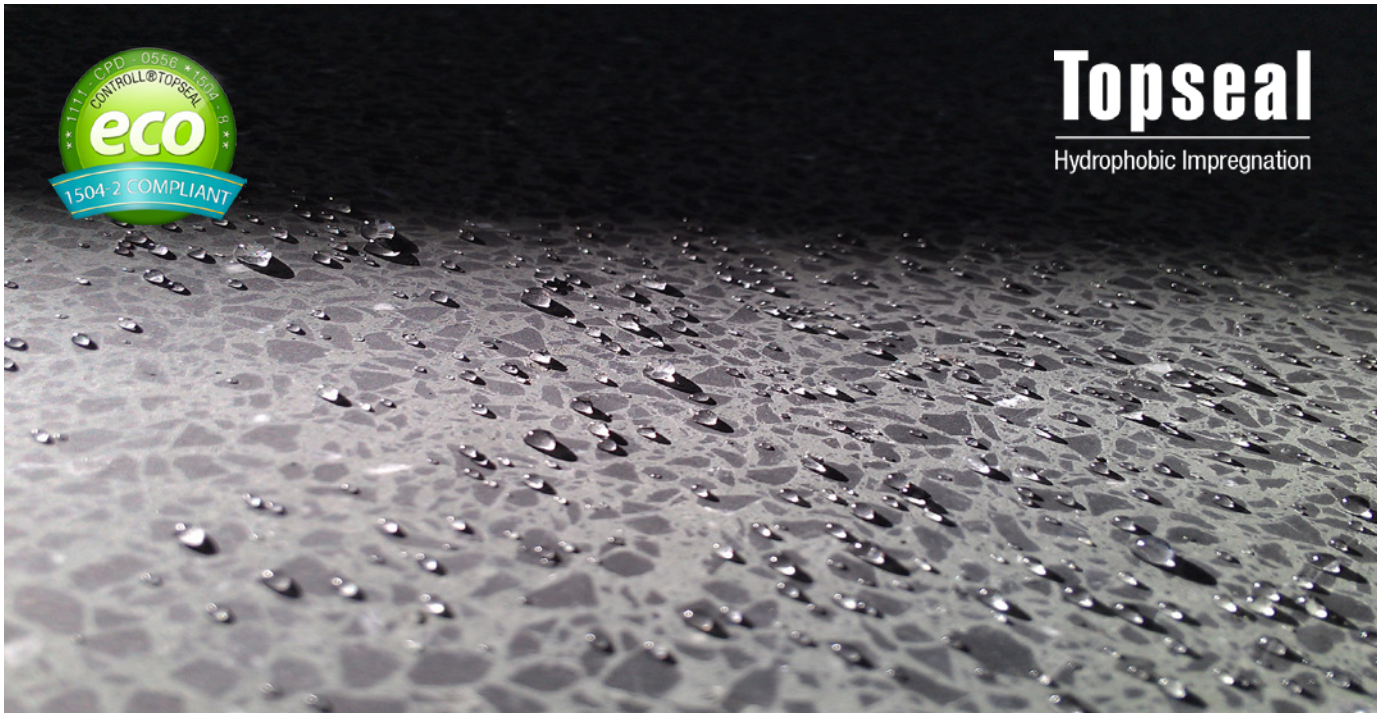
Controll®Topseal

Water repellent waterproofing for mineral materials



Topseal forms an effective barrier to damp in façades, walls and roof tiles. The protection is long-lasting, open to diffusion and protects the natural appearance.

Topseal provides water repellent (hydrophobic) waterproofing for strongly absorbent substrates, such as masonry, plaster and porous concrete.

Topseal is used to protect against water that causes damage due to damp, weathering, efflorescence and encrustation. Topseal also provides good protection against damaging UV radiation. The silicates in Topseal have a reinforcing effect and bind dust.

Topseal penetrates deep into capillaries, micro-cracks and pores without forming a sealed film. A reaction then takes place between salts and minerals to form a very hard calcium silicate hydride. This results in a crystalline structure that stops the transport of water but lets vapours pass through (diffusion). Because the protection is deeply seated, it is insensitive to external influences such as abrasion and impacts.

If the substrate is weathering, has problems with damp or increased risk of rebar corrosion, a pre-treatment and reinforcement using Controll®Innerseal should be performed first.

Topseal is not suitable for concrete surfaces that are subjected to heavy wear and tear or aggressive liquids. Instead use a combination treatment with the products Controll®Innerseal and Controll®Innerseal Plus(+).

Topseal is a final treatment and cannot be painted over during the following years.

1504-2 System 2+

CE

Areas of use:

- Façades
- Roof tiles
- Outdoor environments
- Foundations
- Bases
- Walls
- Chimneys
- Floors indoors

Substrates:

- Brick
- Plaster
- Concrete
- Limestone and sandstone
- White marble
- Joints round ceramic/ clinker tiles
- Porous natural stone

Benefits:

- Environmentally friendly - certified
- Water repellent
- High diffusion openness
- Counteracts weathering
- Increases the useful life
- Protects the appearance
- Effective barrier to damp
- Protection in depth

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TDS TS+ 2015/04

APPLICATION:

Topseal is delivered ready to use and must not be mixed with other liquids or diluted. Shake the container before use. The surface to be treated must be free of dust, paint, grease or any other coating that may obstruct the substrate's absorption.

Damage and visible cracks must be repaired prior to treatment. It is important to protect glass, aluminium and other polished or painted surfaces to prevent etching. In the case of splashes, flush immediately with water and, where necessary, clean with acid; e.g. Controll® ConClean.

The temperature during application and for the following 24 hours must be ≥ +5° C. Avoid application in direct sunlight.

Apply with a low pressure sprayer. On smaller areas, an impregnation roller can be used. Normally, one coat is sufficient but on very absorbent substrates, a further coat may be need wet-in-wet. It is best to test on a small area before full scale treatment and assess the result after 7-14 days.

Topseal dries and crystallises relatively quickly. For this reason, apply without pause on a limited area. Any excess has to be wiped off with a clean dry cloth.

For brick façades, specific regulations apply, and application may only be performed by certified personnel.

DRYING TIME:

Touch dry after approx. 20-30 min. Can be entered upon after 12 hr and exposed to water after 24 hr.

COVERAGE:

0.15-0.3 litre/m² depending on the absorptive capacity of the substrate and the penetration depth required. Perform a test to estimate the coverage.

CLEANING:

Tools: water of acidic solution. Skin: soap and water.

MAINTENANCE:

Do not use cleaners with pH < 7. The water repellent effect can be improved over time by repeated treatment.

HEALTH & SAFETY:

Use only in well-ventilated areas. Protect airways against the spray mist, which can cause irritation. No harmful effects are known but we recommend wearing gloves and goggles during application. Read carefully the safety sheet prior to starting work.

ENVIRONMENT CERTIFICATE / ASSESSMENTS:

Recommended by Scandinavian **Byggvarubedömningen (Green Building Material Assessment)** and **SundaHus.**

ECO Institute (Germany): Free from VOC, carcinogens, mutagens and substances hazardous to reproduction.

CE MARKING EN 1504-2:2004, SYSTEM 2+:

1504-2 System 2+

Products and systems for the protection and repair of concrete structures - part 2: Surface protection products for concrete, table: ZA.1A

Extract from declaration of performance:

Depth of penetration	Class I ≤ 10 mm
Drying rate coefficient	Class I > 30%
Reaction to fire	Euro class 1 (fireproof)
Dangerous substances comply with	5.4 / No requirements

PRODUCT DATA:

Appearance	Liquid
Active ingredients	Potassium methyl siliconate
pH	11
VOC content	0g/ml 20c
Density	1.0g/ml 20c
Flash point	Missing
Freezing point	0° C
Fire	Non-flammable
Reaction to fire	Euro class 1 (fireproof)
Packaging	20l / 1000l
Storage/shelf-life	Cool, dark / > 36 months.
Depth of penetration in concrete - according to NS-EN 14 630	≤ 4.3mm (Class 1)
Drying rate coefficient - according to SS-EN 13 579	68% (Class 1, requirement > 30%)
Permeability - brick - according to NS-EN 1062-3	w_{24h} < 0.018 kg/m² $h^{0,5}$ (requirement < 0.1)

MANUFACTURER:

Maynor A/S, Kleppsto, NORGE

INTERNATIONAL SALES, TRAINING AND SUPPORT:

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