# Controll®Innerseal Plus(+)

Concrete surface protection and reinforcing


**Innerseal Plus(+) reinforces concrete surfaces against heavy wear and tear as well as providing protection against chlorides and aggressive liquids. The protection is open to diffusion, long-lasting and acid resistant.**

Innerseal Plus(+) is a surface reinforcement and protecting treatment for vulnerable concrete areas such as industrial floors and in multi-storey car parks. Innerseal Plus(+) is also used to harden surfaces and for binding dust during grinding and polishing of concrete floors. The result is a very impact and scratch resistant surface.

Innerseal Plus(+) penetrates deep into the capillaries, micro-cracks and pores. 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.

One treatment increases the durability (abrasion resistance) of new concrete by more than 35% as well as reinforcing older weathering concrete, plaster and cement-based self-leveling floor screed.

The treated surface becomes slightly water repellent (hydrophobic) and this is a final treatment. If there is excess damp in the substrate, a deep waterproofing pre-treatment should be done using Controll®Innerseal.

**Areas of use:**

- Concrete in harsh environments
- Roads, bridges, tunnels
- Car parks and garages
- Water & sewerage systems
- Industrial and warehouse floors
- Marine environments
- Vehicle washing stations and workshops
- Freezer rooms
- Agriculture, biogas silos
- Sawmills, paper mills
- Recycling and waste facilities
- Balconies, stairs

**Benefits:**

- Environmentally friendly
- Open for diffusion
- Acid resistant
- One-off treatment
- Increases the useful life
- Reduces the need for maintenance
- Binds dust
- Easier to keep clean

1504-2 System 2+

CE

**Performance tested and approved in accordance with:**

**EN 1504-2+** (SP/CBI) Products and systems for the protection and repair of concrete structures – Surface protection systems for concrete

**DIN 11622-2** (TÜV)
Chemical resistance for waste / biogas plants

# Controll®Innerseal Plus(+)

Concrete surface protection and reinforcing

TDS IS+ 2015/06

## APPLICATION:

Innerseal Plus(+) 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 (>1.0 mm) must be repaired prior to treatment. 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 spray or impregnation roller and carry out wet-in-wet at least twice with approx. 5-15 min between application, until full saturation is attained. Treat the spray mist with caution as it can travel long distances and cause damage to glass.

On horizontal concrete surfaces, Innerseal Plus(+) can be poured out and kept in motion with a rubber squeegee, brush or polish mop. Prevent dry patches from forming during treatment. Full saturation is attained after approx. 20-30 min. Stop when the Innerseal Plus(+) starts to "gel", which usually occurs sooner on new concrete. Remove excess, otherwise shiny or white patches may form.

## DRYING TIME:

Ready for foot traffic after approx. 3 hr. Can be exposed to water after 6 hr and heavier traffic after 24 hr. Full resistance to aggressive liquids is attained after 36 days.

## COVERAGE:

0.15-0.3 l/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:

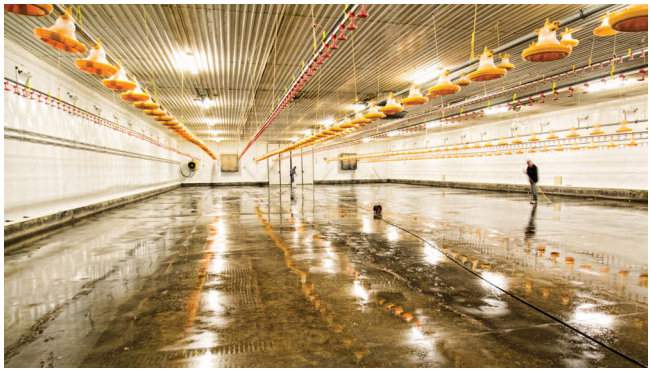
Do not use cleaners with pH < 7.
For floors, soap for concrete containing silicates is recommended.

## HEALTH & SAFETY:

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

## ENVIRONMENT CERTIFICATE / ASSESSMENTS:

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



## 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.1b / ZA.1c

*Extract from declaration of performance:*

| | |
|---|---|
| Depth of penetration | Class II >10 mm |
| Abrasion resistance | > 30% |
| Permeability | W < 0.1 kg/m²h$^{0.5}$ |
| Impact resistance | Class III: >20 Nm |
| Adhesion strength (pull off) | 3.0 N/mm² |
| Reaction to fire | Euro class 1 (fireproof) |
| Dangerous substances comply with | 5.4 / No requirements |

## PRODUCT DATA:

| | |
|---|---|
| Appearance | Slightly cloudy liquid |
| pH | 11.3 |
| VOC content | 0 g/l |
| Density | 1.2 g/cm3 |
| Flash point | Missing |
| Freezing point | 0° C |
| Fire | Non-flammable |
| Packaging | 20 l / 1000 l |
| Storage/shelf-life | Cool, dark / > 36 months. |

## MANUFACTURER:


Betongtett AS,
Storebotn 13d Kleppestø,
NORGE

Phone: +4746171700
E-mail: proff@betongtett.no
www.betongtett.no