

Technical data sheet

SINNODUR Waterproofing

One-component binder system, pressure water tight, waterproofing mortar

With official test certificate, conforms to the DVGW 270 and 347 "Recommendations for use as a waterproofing system in contact with potable water"

Product description and advantages

Sinnodur Waterproofing is a new binder system with three dimensional cross linking of the mortar matrix.

The main features are:

- High salt water resistance
- High pressure water tight
- Good resistance to chemicals and aggressive influence
- Resistant against sulphate up to 3.000 g sulphate per litre of water according to DIN 4030
- No efflorescence and no harmful influences on concrete and masonry
- High water resistance in case of pressing water on the reverse side
- Early load bearing capacity
- Water vapour permeable
- Easy to mix and pump
- Suitable for permanent wet areas
- Environmentally friendly due to low carbon foot print (Upcycling)
- Fire resistant

Application range

Sinnodur Waterproofing is excellent for waterproofing of building structures below ground level:

- Ground water
- Non pressure surface water and seepage water

- Water under positive pressure (immersion depth 15m maximum)

Sinnodur Waterproofing is also excellent for internal waterproofing (e.g. tanks, containers, ships, etc.) with maximum water level 5m. It is perfect for treatment of drinking water tanks. The selection of the required waterproofing layer thickness is depending on water stress, the nature of the soil and the building construction.



Properties

Binder	Silicate Hybrid
Solvent	Water
Colour	Grey
Consistency	Powder
Application	Smoothing trowel, pump, mason' swab
Required layer	2-3
Dry residue	100%

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Mixing ratio	100 parts powder with 22 parts water, for the 25kg bag max. 5,5
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	litre
Compressive strength	17,5 N/mm ²
Flexural strength 28d	3,0 N/mm ²
Fresh mortar density	ca. 1,9 kg / Litre
Consumption	4 - 6 kg / m ²
Application thickness	2 - 3 mm
Air- and surface-temperature	min. +5° C, max. +35° C
curing at 20° C*	1 day, walkable 3 days, full load

*= higher temperatures are lowering the curing time

Material consumption

Application	Min. [mm]	Consumption [kg/m ²]
Ground moisture And no pressure water	2,0	4,0
water under pressure (max. immersion depth 15 m)	3,0	6,0

Preparation of the substrate

The substrate should be sound, dimensionally stable, and free of loose particles. Laitance coatings, lime and binding coats of paint should be milled off or sandblasted. An open capillary system must be present. The waterproofing may only be applied on structural structures that remain crack-free. Application of waterproofing for areas with water under pressure is only possible on concrete surfaces. Cracks in the concrete may no longer occur. It is recommend to use Sinnodur Primer on the substrates like concrete, cement plaster, sand-lime brick (fully jointed with cement mortar), brick, heavy concrete and hollow block masonry walls. Pre-wetting according to moisture content of the substrate until the surface is dull-moist. In case of internal waterproofing against negative water pressure the substrate must provide a sufficient bonding strength (only concrete surfaces).

Mixing and application

Mix 25 kg (1 bag) **Sinnotec Waterproofing** with 5,5 litres water until it is lump-free. (Use an electric mixer). After a maturing time of 3 - 5 minutes mix again shortly. Only mix material that can be applied within 60

minutes. Do not mix **Sinnotec Waterproofing** with other liquid component, except water. After priming the substrate with **Sinnodur Primer** it must dry for 2h before coating. **Sinnotec Waterproofing** is usually applied with a mason's swab or trowel and it is pumpable. The consumption for each operation should be approx. 2 kg/m². The first coat must be applied by brush. The next coats might be applied by trowel and must be rubbed off with the brush afterwards. The total thickness of the coating is max. 4mm. In order to achieve a good bonding to horizontal surfaces, the first coat should be worked onto the substrate using a broom with hard bristles. Apply the waterproofing in at least 2 coats. In the case of water under pressure or in the case of water containers, apply 3 coats with full-coverage. At each point, the coating must have the minimum thickness as specified according to the expected water stress (2 or 3 mm).

Aftercare

After applying the waterproofing slurry the coating must be kept moist for at least 24 hours and must be protected from direct solar radiation and frost for additional 5 days.

Protection

Protective coatings, slabs, tiles, gypsum-free mortar may only be applied on the walls or on the floor when **Sinnotec Waterproofing** has sufficiently hardened.

Delivery and storage

Sinnodur Waterproofing is supplied in the colour grey in 25 kg bag (net weight).

It can be stored dry and frost free in its original sealed packaging for at least 12 months.

Safety instructions

Sinnodur Waterproofing reacts alkaline with moisture. When processing please protect skin and eyes. For irritation rinse thoroughly with water, with eye contact please consult a doctor.

For more information on safety during transportation, storage and handling as well as the disposal and environmental protection please consult the latest safety data sheet. This can be downloaded via the Internet at

www.sinnotec.eu, note also the instructions on the packaging.

Notes

Sinnodur Waterproofing is not to be applied on heated surfaces or during strong cold, heat or wind exposure (processing from +8 °C to +35 °C). The temperature of the relevant undergrounds must be at least 3 °C above the dew point.

Do not apply **Sinnotec Waterproofing** on frozen substrate or in freezing conditions and do not apply during rain. Use structural measures such as expansion joints to prevent the formation of cracks in buildings. An appropriate flexible or elastomeric sealant must be used to waterproof joints. As a rule, waterproofing a structure requires the application of waterproofing slurry to the surface exposed to the water (positive stress). When internal waterproofing of a building is necessary (negative stress) - in particular when renovating existing buildings - the structure must be capable of withstanding the water pressure. For waterproofing against pressure water, supply lines should be routed above the level of the waterproofing if possible.

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