

CEMproof® SilverSeal „active“

SilverSeal swelling non-woven, laminated with PE-membrane. SilverSeal is a light weight, swelling, water-reactive, selfhealing sealing membrane.

SilverSeal is a needle-punched non-woven impregnated with water absorbing and water swelling polymer combined with a high density silver-colored PE-membrane

SilverSeal

CEMproof® EasySeal is a “light-weight” waterproofing system for the use of any water-sealing applications.

CEMproof® SilverSeal is a needle-punched non-woven impregnated with water absorbing and water swelling polymer coated with a silver shining PE-sheet. SilverSeal is a well-tested double-sealing system!

Field of application

CEMproof SilverSeal is a waterproofing system, which:

- consist of a needle punched non-woven, fully impregnated with water absorbing, water reacting and water swelling polymer
- combined with a high density PE – membrane.

SilverSeal is modified especially for the field of structural waterproofing as well as tunnel sealing. The self healing properties of the hydrophilic, waterreactive polymers secure the integrity of the system, even if the PE-membrane, which is on the upstream face, is damaged during installation or backfilling.

Penetrating water causes the polymers to swell and thus renders the CEMproof® SilverSeal impermeable. The building structure is permanently protected against penetrating water, even small cracks and voids in the concrete are sealed.

CEMproof® SilverSeal can be optimized for the use in salt water!

Technical data sheet

Areas of use

CEMproof® SilverSeal is used in all applications, where structures have to be protected against groundwater and seepage. For the waterproofing of foundations, basements, tunnels, garages and any underground / below ground concrete constructions. CEMproof® SilverSeal is an economically and environmentally friendly alternative to synthetic liners, bituminous products and coatings.

Advantages of SilverSeal

- Tough and resistant, quick and easy to install, high compound shear strength
- Can be installed in every season, independently of temperature and weather condition
- No use of complicated welding equipment and specially trained personnel, overlapping can be easily secured with CEM805 bonding agent
- Quality control (**CE-Certification**)
- Self-healing properties of the system based on swelling pressure of the activated swelling polymers
- Seals small cracks in the concrete by the pressure of the swelling polymer
- Flexibility in roll dimensions (2,00m x 50,00m)
- Can be optimized for salt-water usage
- Several tests have been made at the University of Braunschweig/Germany and STFI Chemnitz
- Easy handling of CEMproof SilverSeal because of the extreme light weight (approx. 500g/m²)
- Enormous water absorbing capacity and therefore enormous swelling and sealing capacity because of embedded high swelling absorbing polymer

characteristics	test methods	unit	average	tolerance
weight	DIN EN 1849-2	g/m ²	530	450 - 620
thickness (20 kPa)	DIN EN 1849-2	mm	2,5	± 1,0
maximum tensile MD	DIN EN ISO 12311-2	N/5cm	600	>550
maximum tensile CD		N/5cm	1100	>900
Elongation at break MD	DIN EN ISO 12311-2	%	90	>70
Elongation at break CD		%	80	>55
Tear Resistance MD (nail shank)	DIN EN 12310-1	N	500	>280
Tear Resistance CD (nail shank)	DIN EN 12310-1	N	454	>280
Water tightness	DIN EN 1928 B		close	
Resistance to impact	DIN EN 12691		close	

Storage

CEMproof® SilverSeal has to be stored dry and frost-free. SilverSeal has to be protected during storage against UV. Shelf life is 5 years.



Package

SilverSeal roll dimension:
width x length = 2,0 m x 50 m
diameter Ø 0,50 m/roll, weight 47 kg

SilverSeal with additional PE-sheet roll dimension:
width x length = 2,0 m x 50 m / roll diameter Ø 0,57 m/roll, weight 57 kg
5 rolls on one palette = 500 m²/palette

Pictures / Application

SilverSeal is a public-tested double-sealing membrane. The overlapping are tested up to 2.5 bar water-pressure (5cm minimum overlapping bonded together with CEM805).

The water constancy (alkaline water, salt water a.s.o.) has no influence of the water-penetration along and through SilverSeal swelling non-woven. (See actual test report of the Technical University BS / Germany!)

SilverSeal swelling non-woven is an unique technology made in Germany! The handling is very easy compared to any other systems available on the market. Overlapping areas are glued with CEM 805 and are absolutely waterproof sealed up to 2.5 bar water-pressure (see several different test reports of different public laboratories).

