

## CEMProof® DualProof

Type A external (positive side) waterproofing

DualProof is a fully and permanently bonded, self-adhesive, composite sheet which does not only waterproof but protects against gas and chemicals.

It consists of a sealed two layer highly flexible PVC membrane laminated with a non-woven PP-fleece.

DualProof is cold/pre-applied, and is installed without heat or open-flame. It is applied before the steel reinforcement is fixed and the concrete poured.

### General Applications

#### Damp-proofing against:

- Rising humidity caused by capillary action
- Standing water, for slab-on-ground foundations, column footings, strip foundations, and walls
- diffusion, effusion, absorption

#### Concrete protection against:

- Various ground gases
- Chemicals such as (sulphate, chloride, carbonate, hydrogen carbonate, etc.)
- Contaminated ground water

#### Waterproofing Resistance:

- Water under hydrostatic pressure
- Lateral water migration for deep, one or multi-level below grade structures.
- Approved to German DIN standard 18195 'pressurized water situations'
- An additional sealing membrane for all watertight concrete structures

### Specifications

Dimensions	1.2m x 25m (30m <sup>2</sup> )
Thickness	1.7mm
Weight	44kg
Pallet	12 rolls
Storage	Dry, frost-free and protected against UV.
Shelf life	5 years



### Areas of use

DualProof can be applied horizontally as well as vertically and is used in all applications where structures require protection against groundwater and seepage. Typically used in the following constructions:

- New build basements
- Foundations
- Tunnels
- Garages
- Concrete constructions below ground

### Advantages of DualProof

- Waterproof, gas proof and gives concrete protection against chemicals such as sulphate, chloride, carbonate, hydrogen carbonate etc.
- Tough and resistant, quick and easy to install, high compound shear strength
- Can be installed in every season regardless of temperature and weather condition
- No need for complicated welding equipment and specially trained staff, overlapping can be easily secured with CEM 805 adhesive
- Self-adhesive bonding properties on contact with poured concrete
- Seals small cracks in the concrete
- Can be used in saltwater conditions
- CE marked and DIN certified



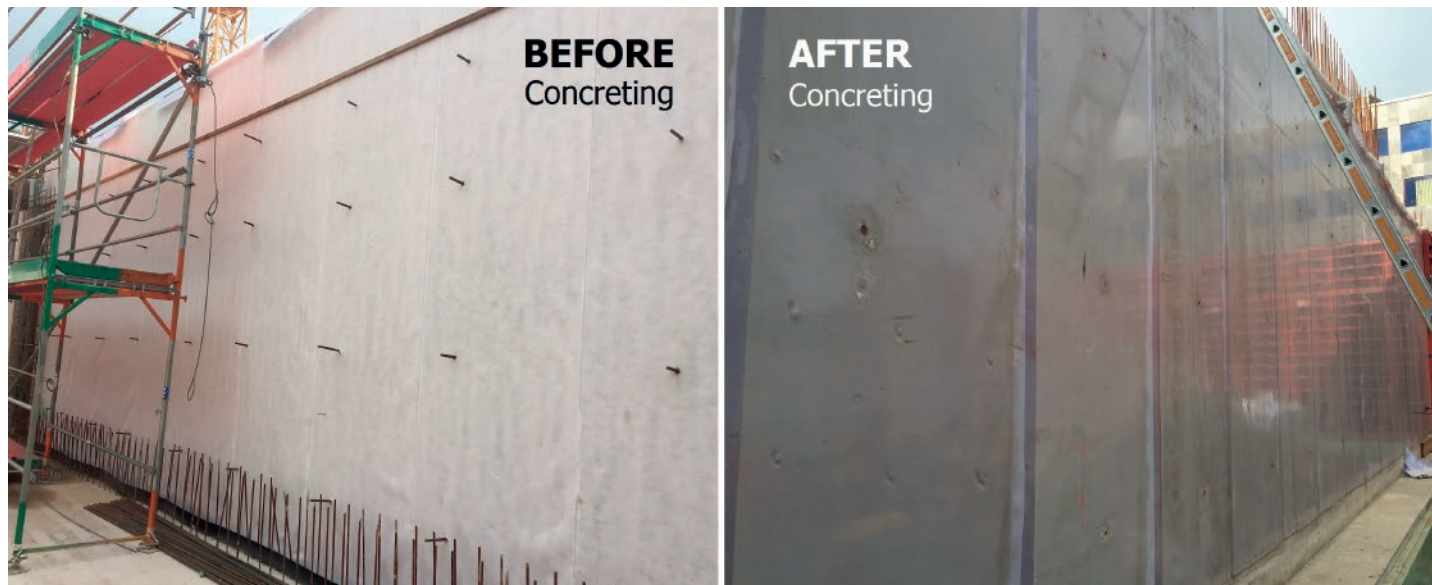
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**DualProof** is an innovative German made system that prevents any lateral water migration between the waterproofing membrane and the structural concrete.

The system provides a highly durable watertight solution and is the combination of a special designed non-woven PP-fleece (**New PP FiberTex technology**) and a highly flexible PVC-membrane. The fleece is embedded into the fresh concrete and creates a full and durable mechanical bond between the PVC membrane layer of DualProof and the cured concrete. The two layers cannot separate.

The unique manufacturing process creates a complete and continuous watertight bonding with fresh concrete. This self-adhesive characteristic blocks any lateral water migration, even in the event of local damage to the membrane.



Characteristics	Test methods	Unit	Average	Tolerance
Weight	DIN EN 1849-2	g/m <sup>2</sup>	1470	1320-1620
Thickness (20 kPa)	DIN EN 1849-2	mm	1.7	± 0.5
Thickness PVC membrane	DIN EN 1849-2	mm	1.2	-0.5% / +10%
Maximum tensile MD	DIN EN ISO 12311-2	N/5cm	1254	>1000
Maximum tensile CD		N/5cm	1054	>800
Elongation at break MD	DIN EN ISO 12311-2	%	110	>80
Elongation at break CD		%	96.5	>70
Tear Resistance MD (nail shank)	DIN EN 12310-1	N/5cm	641	>500
Tear Resistance CD (nail shank)	DIN EN 12310-1	N/5cm	627	>500
Water tightness	DIN EN 1928 B	Watertight		
Resistance to impact	DIN EN 12691	Watertight		
Shear resistance in the overlapping	DIN EN 12317-2	Collapse outside of the overlapping ≥300		
Reaction to fire	DIN EN ISO 11925-2	Class E		
	EN 13501-1			

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