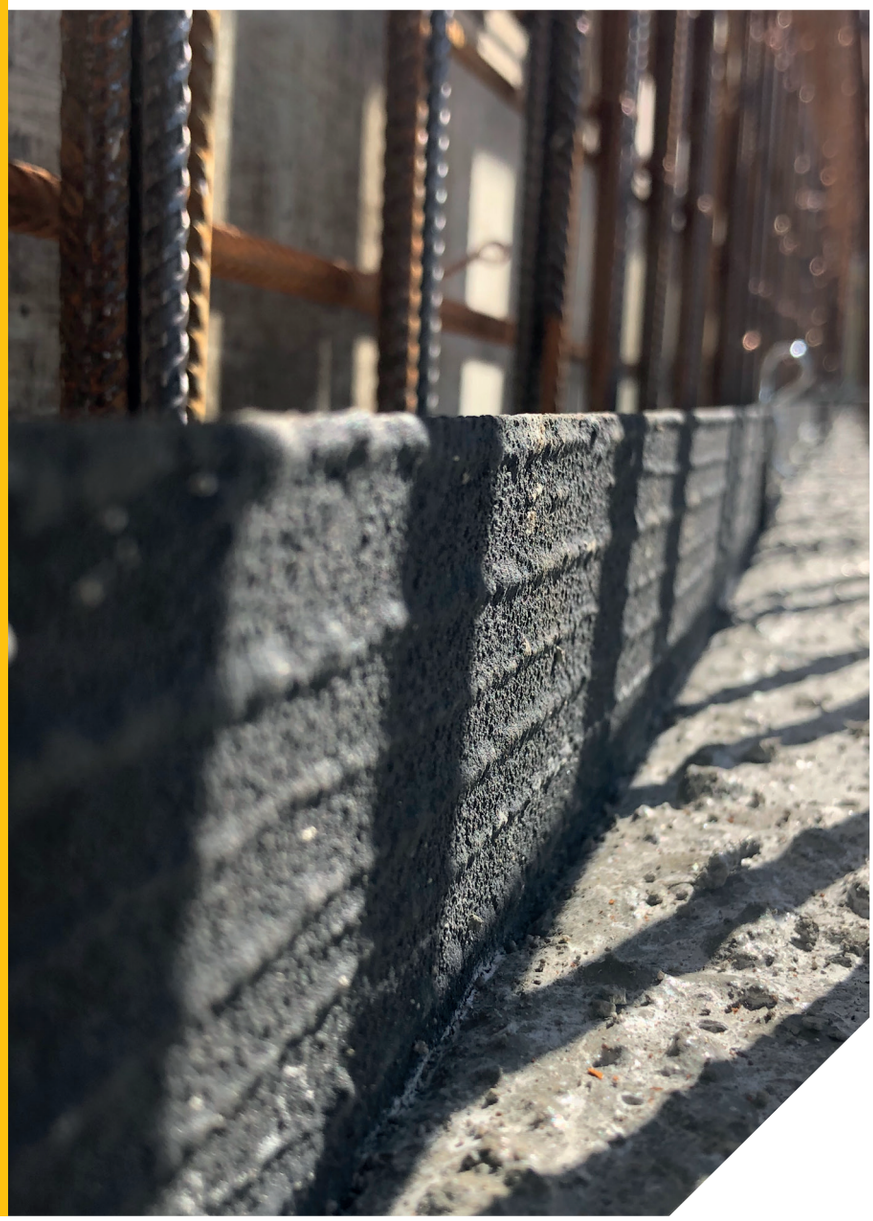
# CEMflex Waterstop

## Active joint sealing with coated steel plate





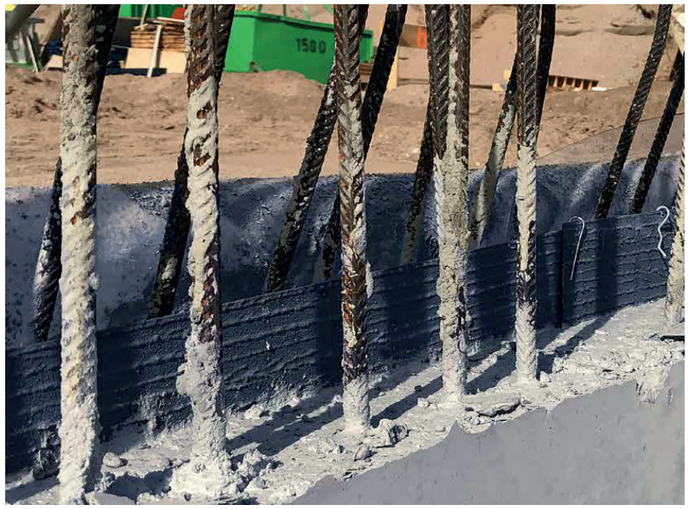
BPA WATERPROOFING SYSTEMS

PERI

# CEMflex Waterstop

## Active joint sealing with coated steel plate

**Water resistant concrete structures continue to gain importance. However, construction joints have often proven to be the achilles heel in water tight structures. Through its water impermeability, the paten ted CEMflex Waterstop convinces contractors, engineers and the site personnel alike.**



The patented CEMflex Waterstop provides full efficacy whilst also being very simple to fit.

CEMflex ensures that your concrete structures, foundations and tunnels are completely waterproof. It functions as an active and passive barrier for the transmission of water at the construction joint.

Additionally, the design allows a simple and fast installation by hand. It is possible to install CEMflex either before the concrete is poured or in the fresh concrete.

Furthermore, CEMflex enables the sealing of vertical and horizontal joints in concrete structures. Its unique functionality is proven and certified by a variety of independent test laboratories.

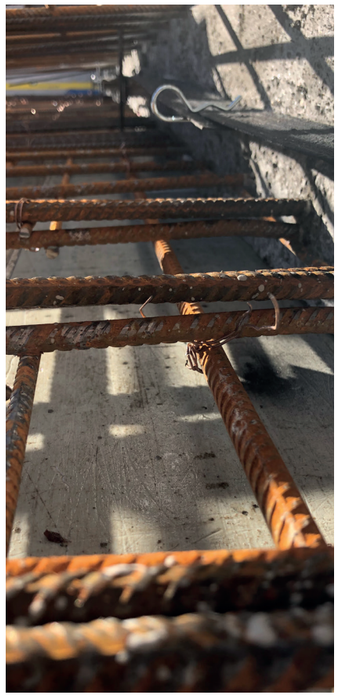
**Simple and fast installation by hand** possible pre-applied, attached to the reinforcement, or post applied in the fresh concrete.

**Highly effective waterproofing** verified and certified by independent test laboratories.

**Unique functionality** as the active crystallization process ensures water-proof concrete structures, up to 8 bar water pressure.

# Simple and fast installation by hand

## Possible pre-applied, attached to the reinforcement, or post applied in the fresh concrete



**The simple design of CEMFlex ensures an easy to understand and fast installation process and minimises the need for expensive remedial work. You can install CEMflex flexibly either before or after the concrete pouring.**

### Cost savings

Experience and feedback from site show that the usage of CEMflex minimises your expenses significantly:

- You can save up to 80 percent installation costs compared to conventional PVC waterstops
- You can save up to 80 percent installation costs compared to hydrophilic waterstops

### Installation before pouring

For the installation before the pouring takes place, only a few steps are necessary that you can carry out quick and easily.

Firstly, place CEMflex in the middle of the joint and attach it to the steel reinforcement. Therefore, you can either use a CEMflex Omega Holder or alternatively a CEMflex Clip. By doing so, ensure that CEMflex is embedded at least 3 cm into the first pour of concrete. It is also necessary that the overlap is at least 5 cm.

### Installation after pouring

It is also possible to insert CEMflex easily into the fresh concrete. By doing so, make sure that the plate is embedded at least 3 cm, allowing the remainder of the plate to be covered by the next pour of concrete.

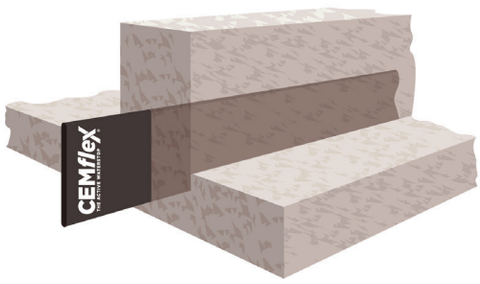
To connect elements, simply overlap the plates by 5 cm and secure them with a CEMflex Clip.

### Easy and fast forming by hand

Due to its high malleability, CEMflex plates can be easily formed to any shape and even difficult angles by hand. Therefore, you can even install round forms and difficult angles, for example at corners and wall intersections.

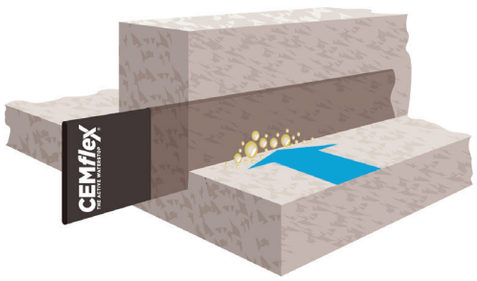
# Unique functionality

*as the active crystallization process ensures water-proof concrete structures, up to 8 bar water pressure*



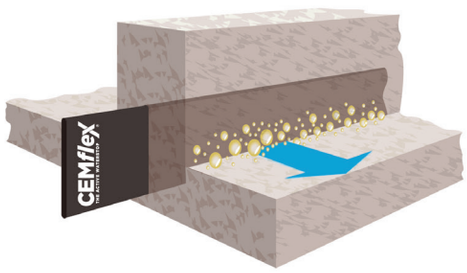

**Physical barrier**

*The CEMflex plate is cast centrally along and perpendicular to the construction joint. By doing so, it creates a physical barrier and prevents the transmission of water at the construction joint.*




**Chemical barrier**

*At the same time, the CEMflex plate creates also a chemical barrier. The fresh concrete activates the patented coating on the CEMflex plate causing the coating to soften and expand slightly penetrating any cracks where it solidifies and seals the joint. The connection of the special coating to the concrete prevents any waterflow through the concrete construction joint.*




**Unlimited sealing capacity**

*Once installed the coating has unlimited sealing capabilities. In the event of water ingress, the coating will be reactivated at any time throughout its lifetime – with a life expectancy of 100 years.*

**The crystallization process under the microscope**

*You can observe the active self-healing process of CEMflex under a microscope. When the chemical reaction of the coating takes place, calciumhydroxy-based crystalline fibres and needles are created.*