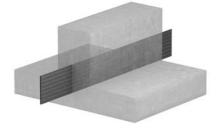




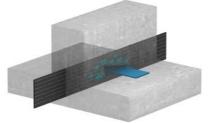
# **BPA-CEMflex**<sup>®</sup>

COATED STEEL PLATE WATERSTOP SOLUTIONS FOR CONCRETE STRUCTURES, FOUNDATIONS AND TUNNELS

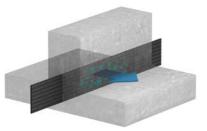
### FUNCTION HOW DOES BPA-CEMflex<sup>®</sup> WORK?



BPA-CEMflex<sup>®</sup> is cast centrally along and perpendicular to the construction joint.

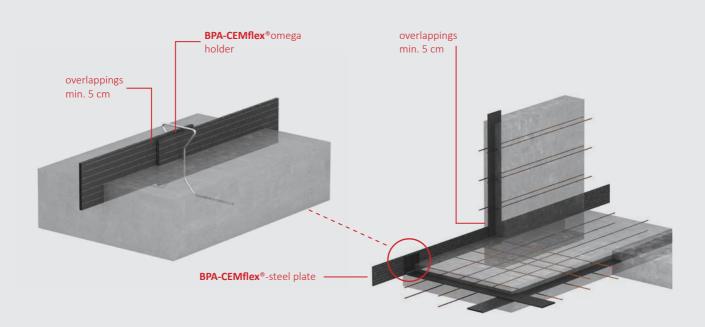


The fresh concrete activates the patented coating on the plate causing the coating to soften and expand slightly penetrating any cracks where it solidifies and seals the joint. The connection of the special coating to the concrete prevents any water-flow through the concrete construction joint.



This process is reactive every time water or moisture comes into contact with the coating during the lifetime of the structure and repeat the sealing process.

### **EXAMPLE OF INSTALLATION**



BPA-CEMflex<sup>®</sup> VB Plate Waterstop can be installed in two simple methods: either by fixing it to the steel reinforcement pre-pour using BPA-CEMflex<sup>®</sup> Omega Holders or alternatively by pushing the plate into the first pour of concrete to a depth of at least 30 mm, 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 with a clip. BPA-CEMflex<sup>®</sup> VB Plate Waterstop can be installed both horizontally and vertically. Bonding the overlappings is not required. No sticky protection tape has to be removed and disposed of BPA-CEMflex<sup>®</sup> prior to use (easy handling and time saving). The elements are strong yet malleable so angles/corners can be formed by hand without damage to the patented BPA-CEMflex<sup>®</sup> coating.

# ACTIVE WATERSTOP

BPA-CEMflex<sup>®</sup> Steel Plate Waterstop consists of a galvanised steel plate encapsulated in a special patented active coating which reacts with water and moisture when embedded in concrete to provide a watertight construction joint. It functions as both an active and passive barrier to the transmission of water through all non-movement construction joints (both horizontal and vertical) in in-situ reinforced concrete. It can be used in pressurized and non-pressurized water.

The connection of the special coating to the concrete prevents any water-flow through the concrete construction joint. Only 3 cm of concrete cover on both sides are necessary to seal cold joints up to 8 bar (80 m water pressure).

BPA-CEMflex<sup>®</sup> Active Waterstop has been designed to provide the highest level of efficacy of any joint waterstop available whilst also being the simplest to fit.

The effectiveness of the BPA-CEMflex<sup>®</sup> Active Waterstop has been tested successfully under more severe conditions than any other waterstops on the market, providing you with the reassurance that you need.

If you decide to install BPA-CEMflex<sup>®</sup> you can be confident choosing one of the best joint waterproofing solutions available.

#### **Application Areas**

- Construction joints in wall/floor areas in contact with pressurized and non-pressurized water
- Wall/wall and floor/floor construction joints or wall/ ceiling areas
- joints between prefabricated components: wall/floor, corner joints, and predetermined breaking points

## ADVANTAGES AND PRODUCT FEATURES

- special patented active coating reacts with alkaline water and moisture when embedded in concrete to provide a watertight construction joint
- Once installed, the patented coating on BPA-CEMflex<sup>®</sup>
   VB Plate Waterstop has infinite sealing ability. Should water or moisture come into contact with the coating at any time in the future, the coating will re-activate and repeat the sealing process.
- Fully Weatherproof System- no premature activation of the coating on contact with rainwater
- Excellent bond with the concrete

- Only 3 cm of concrete cover on both sides are necessary to seal cold joints up to 8 bar (80 m water pressure)
- Bonding the overlappings is not required. The overlapping has to be at least 5 cm.
- No sticky protection tape to be removed and disposed of from BPA-CEMflex® VB Plate Waterstop prior to use
- Simple design dramatically reduces the potential for poor installation or expensive remedial works
- Studies show up to 80% installation labour saving over traditional waterstops



# **PRODUCT-VARIATIONS**

#### **BPA-CEMflex®VB** STEEL PLATE WATERSTOP

BPA-CEMflex<sup>®</sup> VB consists of a galvanised steel plate encapsulated in a special patented active coating which reacts with water and moisture when embedded in concrete to provide a watertight construction joint.



For the BPA-CEMflex<sup>®</sup> LAU, with a general building permit (abZ) from DIBt. The construction of LAU systems acc. use WHG requirements.



### BPA-CEMflex<sup>®</sup> VB NG

#### STEEL PLATE WATERSTOP WITH 3 CM FOLD

BPA-CEMflex<sup>®</sup> NG is a steel plate waterstop coated with a patented special coating, which actively reacts with water when embedded in concrete to provide a watertight construction joint.

Due to the 3 cm fold, the BPA-CEMflex<sup>®</sup> VB NG can be used optimally even in difficult situations.





Sacrificial adjustable formwork BPA-CEMflex<sup>®</sup> A is a revolutionary new dual-purpose stop end formwork which doubles as a waterbar in non-movement joints. The BPA-CEMflex<sup>®</sup> A sacrificial formwork profiles are fully coated with the patented active crystalline BPA-CEMflex<sup>®</sup> coating and are suitable for use as both horizontal and vertical sacrificial stopend formwork.

### ACCESSORIES



**BPA-CEMflex®** OMEGA HOLDER

BPA-CEMflex® DER CLIP



BPA-CEMflex® CLIP SMALL



**BPA-CEMflex®** CLAMPING PLATE



**BPA-CEMflex®** FASTENER FOR TRIPLE WALLS

### FORM OF DELIVERY AND STORAGE

#### **BPA-CEMflex® VB**

 Lenght
 2.000 mm

 Width
 100 / 150 / 200 / 250 mm

 Thickness
 ~ 1,25 mm

packed in wooden boxes 50 pieces (2 m) = 100 m

#### Storage

Should be stored off the ground, in dry conditions which are free from frost

# INNOVATIVE, TESTED AND APPROVED

At BPA we see best in class as the minimum acceptable benchmark because we believe that there are always ways to make products safer, easier to use, and more efficient. Our products are regularly tested, both before and after their market launch, and at the same time continuously developed and improved. Therefore we can guarantee that by using BPA products our clients are always at the cutting edge of technology. Through successful certification in accordance with DIN EN ISO 9001:2015 by TÜV SÜD Management Service GmbH we fulfill the internationally approved standards for a quality management system and document its effectiveness in our company. That is why we are able to continually enhance internal work-flows and manufacturing processes to constantly deliver products of outstanding quality.



# IN USE WORLDWIDE

Internationally recognised technologies such as BPA-CEMflex<sup>®</sup>, BPA-Predimax<sup>®</sup>, BPA-Quellmax<sup>®</sup>, (joint sealing solutions) BPA-SilverSeal, BPA-DualProof, BPA-CEMdicht and BPA-Cemtobent<sup>®</sup> (external surface waterproofing solutions) place BPA at the forefront of Structural Waterproofing technology. We constantly pursue excellence in product design, manufacturing and performance.

Our efforts have been recognised both locally and internationally through the successful attainment of national and international standards and accreditations, including twice (2015 and 2017) being recognised as a leader in the evolution of construction, specifically structural waterproofing, by being honoured as one of Germany's Top 100 Innovative Companies.



Aviva Stadium Dublin | Ireland



Bjørvikatunnel Oslo | Norway



Wankdorf-Stadium Bern |Switzerland



Tunnel Küblis | Switzerland

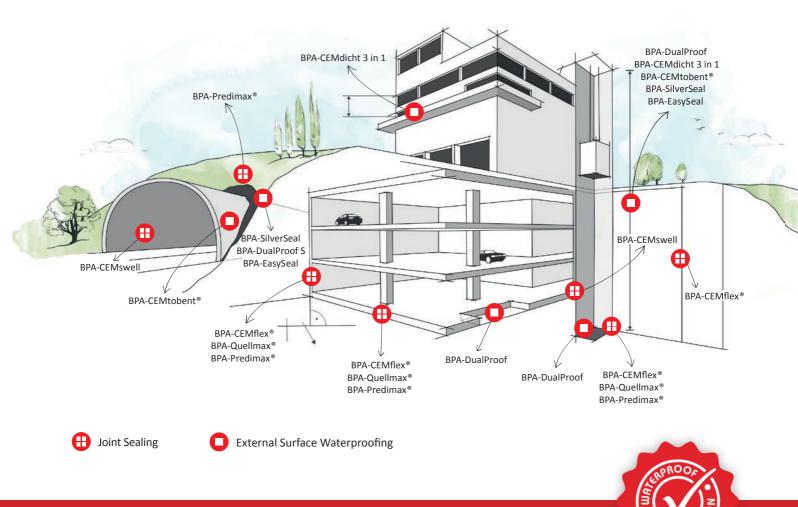


Train Station Zürich | Switzerland



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### FURTHER PRODUCTS AND THEIR FIELDS OF APPLICATION MADE BY BPA





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