



# BPA-Quellmax<sup>®</sup>

BENTONITE WATERSTOP TAPE  
SOLUTIONS FOR BELOW GROUND REINFORCED CONCRETE  
CONSTRUCTIONS, FOUNDATIONS AND TUNNELS

# ACTIVE JOINT PROTECTION

**BPA-Quellmax® Bentonite Waterstop Tapes are designed to stop water ingress through non-movement joints in reinforced concrete structures, even at complicated details. They are suitable for both vertical and horizontal application and provide reliable and fast expansion upon contact with water.**

What makes our BPA-Quellmax® Bentonite Waterstop Tapes so effective is their high sodium bentonite content embedded in a matrix of macromolecular natural rubber as well as their special fillers and crystalline admixtures.

Sodium bentonite expands upon contact with water to form a seal against the concrete. In addition to this immediate swelling process BPA-Quellmax® allows for an active long-term sealing of any non-movement joint by reacting with the alkalinity of the concrete to form Calcium Hydroxide (free lime) which supports the natural self-healing (sintering) process of the concrete.

BPA-Quellmax® has been successfully tested up to 7 bar hydrostatic pressure and is approved for the use both in continuous water immersion and changing water tables (wet/dry cycles).

BPA-Quellmax® provides superior protection and long-term safety in use.

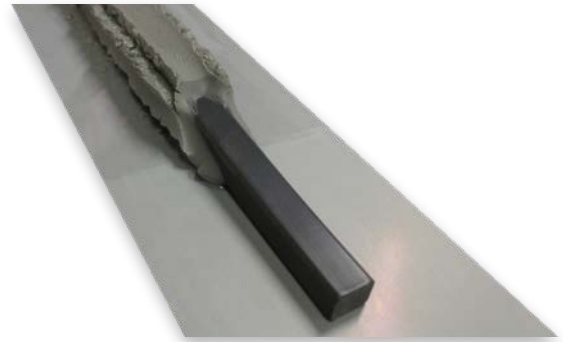
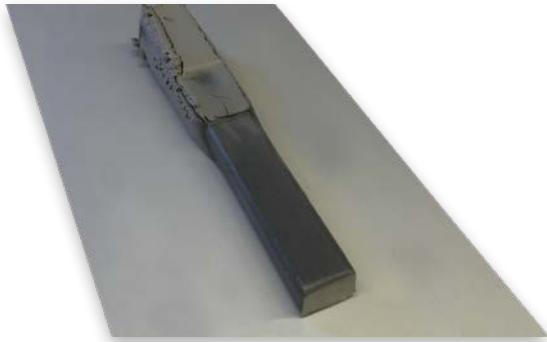
## ADVANTAGES OF THE BENTONITE WATERSTOP TAPE

- Sodium bentonite-based strip waterstop
- Approved for use in drinking water reservoirs
- Resistant to slurry and animal manure
- Provides reliable and fast expansion upon contact with water, up to 500 % swelling volume
- Active long-term sealing of any non-movement joint by sintering and formation of free lime
- Easy handling on site: non-sticky, light-weight, flexible and dimensionally stable even in high temperatures
- Self-injecting properties, seals and fills even the smallest voids and cracks
- Due to high content in sodium bentonite swelling and shrinking process are infinitely repeatable
- Sodium bentonite reacts even decades after installation
- Special coating prevents premature swelling for up to 3 days (BPA-Quellmax® Plus)





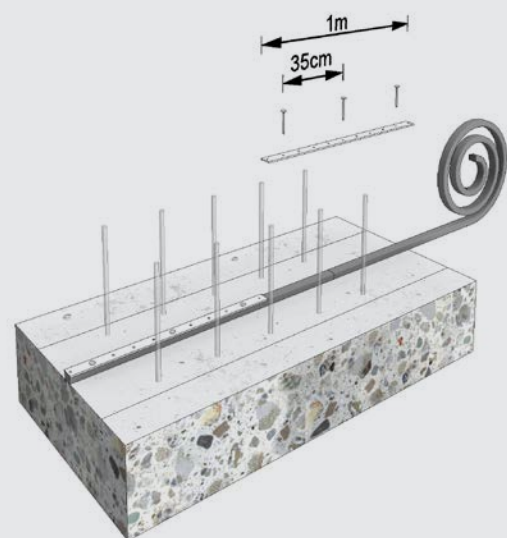
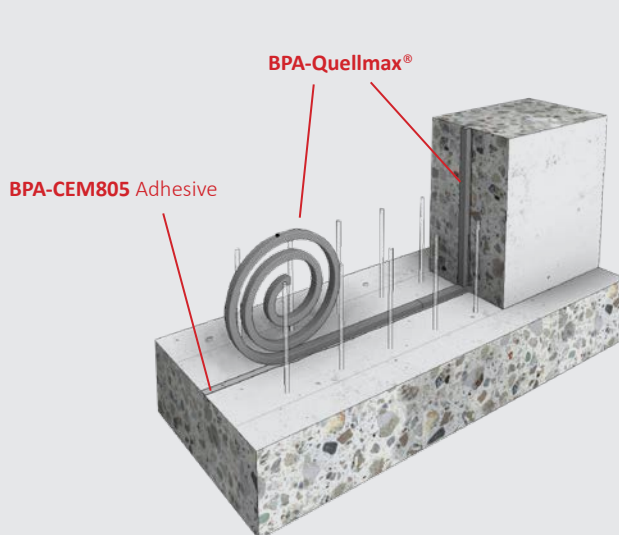
# FUNCTION OF THE BENTONITE WATERSTOP-TECHNOLOGY



BPA-Quellmax® is designed for use in non-movement joints of concrete. Upon contact with water BPA-Quellmax® expands and the sealing process to fill any voids and cracks in the concrete starts immediately. In addition an active long-term sintering process seals the joint from the inside out.

Pictures above show the expansion of a BPA-Quellmax® Blackstop 18x24 Waterstop Tape at 3 and 24 hours after being hydrated.

## APPLICATION AND INSTALLATION



BPA-Quellmax® is designed for application in both vertical and horizontal non-movement joints in reinforced concrete structures. Applications also include geometrically complicated details such as through-wall penetrations and concrete pilings.

BPA-Quellmax® should only be used in applications where it is completely covered by concrete (min. 8 cm). It is not designed for the protection of joints in prefabricated concrete elements. It can be installed by either using a sealant (for example BPA-CEM805) or fitting rails/bars.

# PRODUCT VARIATIONS



## BPA-Quellmax<sup>®</sup> Blackstop

### BENTONITE WATERSTOP TAPE

BPA-Quellmax<sup>®</sup> Blackstop is our Standard Bentonite Waterstop Tape with repeatable swelling capacity up to 500%. Once confined by concrete BPA-Quellmax<sup>®</sup> Blackstop expands upon contact with water and fills any voids and cracks in the concrete. The long-term sealing of any non-movement joint is ensured by the formation of free lime which supports the natural sintering process of the concrete. Both swelling and sintering are a natural and infinitely repeatable process.



## BPA-Quellmax<sup>®</sup> Plus

### BENTONITE WATERSTOP TAPE

In addition, BPA-Quellmax<sup>®</sup> Plus is coated with a unique, patented rain-protection coating that prevents premature swelling of the tape for up to 72 h. This allows for installation in any weather conditions! During concreting the alkalinity of the fresh concrete dissolves the protective coating and instantly activates the BPA-Quellmax<sup>®</sup> Plus Waterstop.

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# ACCESSORIES



**BPA-Quellmax<sup>®</sup>**  
FITTING RAIL



**BPA-Quellmax<sup>®</sup>**  
FITTING BAR



**BPA CEM805**  
ONE COMPONENT ADHESIVE  
FOR BPA-Quellmax<sup>®</sup>

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# FORM OF DELIVERY AND STORAGE

**Form** Rectangular and flexible

**Colour** black | dark grey

**Dimensions** 18 x 24 mm | 16 x 21 mm

Further dimensions on request

**Storage**

Shelf life is 5 years when stored off the ground in dry conditions and free from frost.

# INNOVATIVE, TESTED AND APPROVED

Our products are independently tested and approved by bodies such as the British Board of Agréement (BBA), MPA Braunschweig, MPA Stuttgart, MPA Leipzig, DIBT (Germany), and Vattenfall Sweden. BPA-Quellmax® meets the German General Building Code Test Certificate Standard. Relevant test reports and accreditations are available on request.

Our quality management system is accredited in accordance with the worldwide accepted standard DIN EN ISO 9001:2015. This accreditation guarantees the consistent, high quality of all BPA-products.

Our global success is based on our continuous strive for excellence and our long-lasting focus on improving construction techniques and performance by developing products that are easy to use and meet the performance criteria required to satisfy the most stringent construction standards worldwide. Due to this strong focus on developing high-quality systems and products we have been awarded a place in the TOP 100 Innovative Companies in Germany for two years in a row.



## IN USE WORLDWIDE

For many years we've been active in the production and international sales of our innovative Bentonite Waterstop Tape BPA-Quellmax. More than 6 million running meters have already been sold worldwide. Due to the simple and efficient application options products made by BPA

are first choice for the durable and fail-safe protection of below ground reinforced concrete constructions and tunnels worldwide.

Please find a small excerpt of our international reference list below:



**Aviva Stadium**  
Dublin | Ireland



**Bjørvikatunnel**  
Oslo | Norway



**Wankdorf-Stadium**  
Bern | Switzerland



**Tunnel**  
Küblis | Switzerland

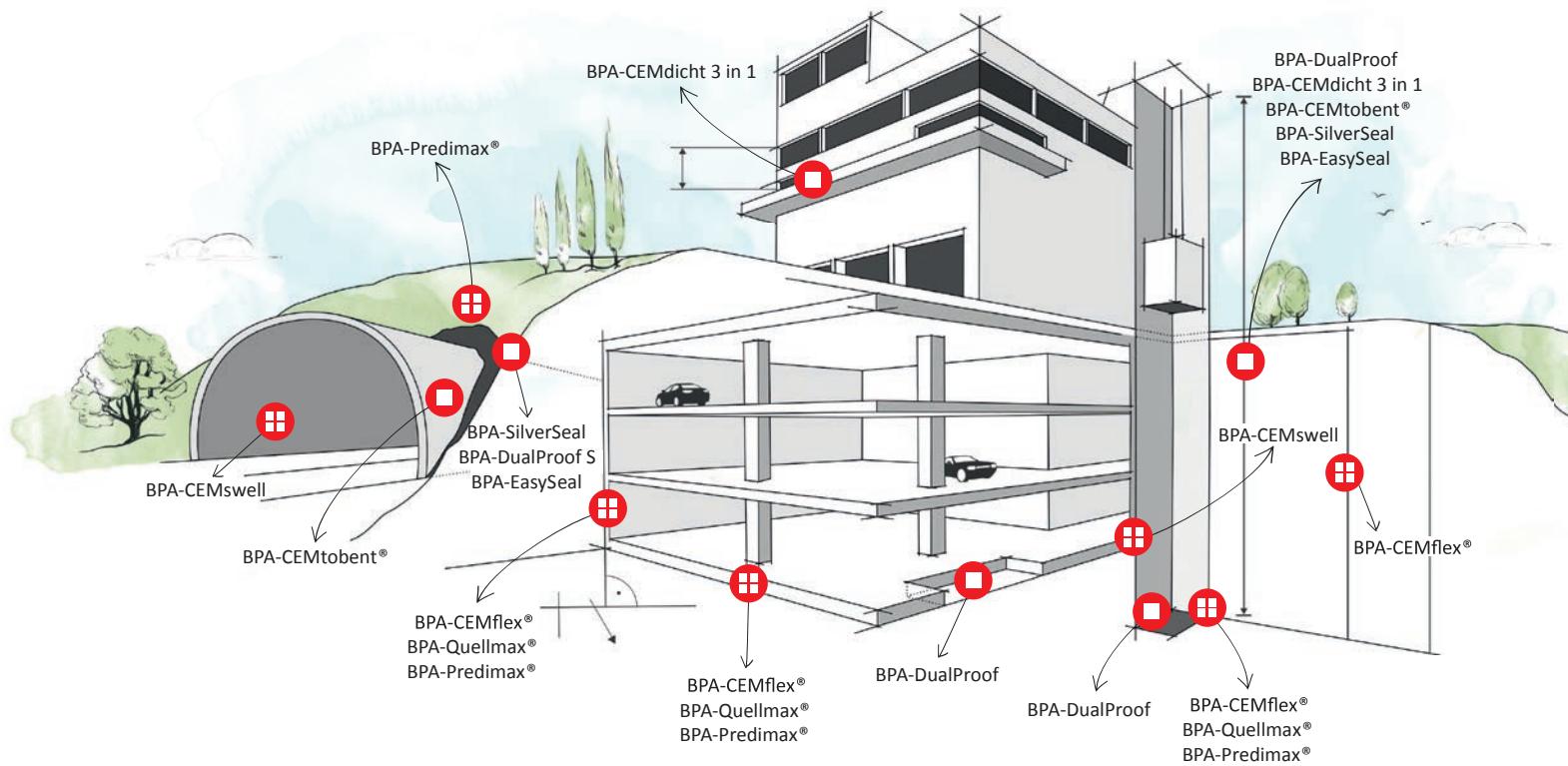


**Train Station**  
Zürich | Switzerland



**Train Station S21**  
Stuttgart | Germany

# FURTHER PRODUCTS AND THEIR FIELDS OF APPLICATION MADE BY BPA



 Joint Sealing

 External Surface Waterproofing



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WATERPROOFING SYSTEMS

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