



CONCRETE

Sika[®] WT-200 P

WATER RESISTING AND CRYSTALLINE WATERPROOFING CONCRETE ADMIXTURE

BUILDING TRUST



EXCELLENCE IN WATERPROOF CONCRETE WITH Sika® WT-200 P

TECHNOLOGY

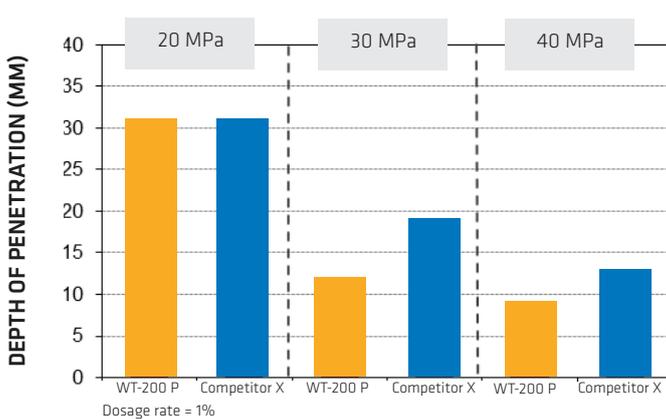
Impermeability of concrete against water is determined by the impermeability of the binder matrix, i.e. capillary porosity. These capillaries are the voids created by the excess water in the concrete that is not necessary for the chemical reaction for hardening known as hydration. These pores are the potential migratory paths for water through the concrete. Therefore concrete can be described as a porous material that allows the passage of water through a structure of capillary pores.

The addition of a water resisting admixtures is one measure to improve the impermeability of the concrete. For waterproof concrete Sika WT-200 P can be added, which consists of special components. These active components will form non-soluble materials throughout the pore and capillary structure of the concrete and seal the concrete permanently against penetration of water and other liquids. In addition the special formula and ingredients of Sika WT-200 P enhances the self-healing properties of concrete and will improve the ability to heal concrete cracks.

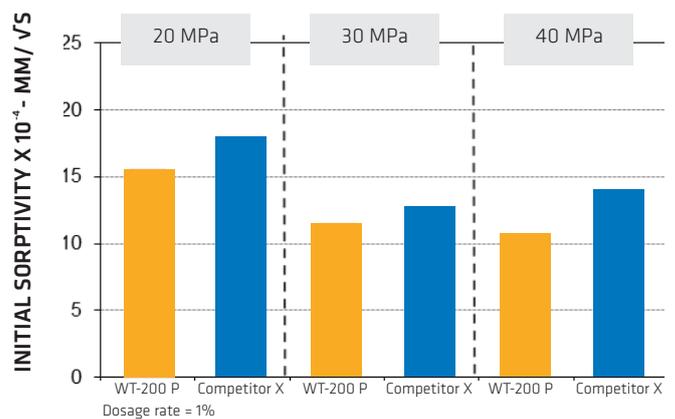


Crack sealed with the use of Sika WT-200 P

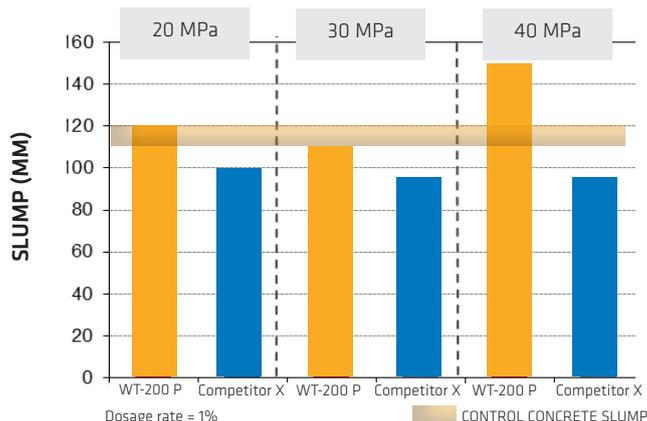
DEPTH OF WATER PENETRATION UNDER HYDROSTATIC PRESSURE (EN 12390-8)



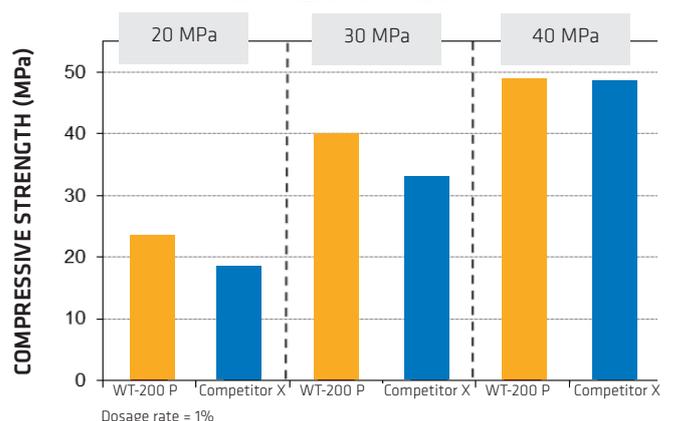
SORPTIVITY (ASTM C1585)



SLUMP



COMPRESSIVE STRENGTH



REQUIREMENTS

The water impermeability of a construction is determined by fulfillment of the decisive requirements regarding limitation of water permeability through the concrete. With the use of Sika WT-200 P the

- Water penetration depth
- Water conductivity
- Water absorption
- Self-healing properties of a concrete can be positively enhanced.

SIKA SOLUTIONS FOR WATERTIGHT CONCRETE SYSTEM

The Sika Watertight Concrete System offers a comprehensive solution for watertight structures. The system consists of concrete that has been specially modified with Sika admixtures to produce waterproof concrete; and carefully selected waterstops for construction and movement joints. Watertight concrete structures can be designed to keep water in or out or both. The need to maximize design flexibility has led clients and specifiers to look below ground as an alternative, whether for basement parking or a habitable environment.

STRUCTURES AND APPLICATIONS

The Sika Watertight Concrete System can be used for all types of below-ground structures, including habitable basements, car parks and areas for business use. As with all below-ground structures, adequate ventilation and air conditioning should be appropriate to the intended use.

According to the EN 12390-8 the waterpenetration depth tests has to be conducted over 72 hours with a water pressure of 5 bar. In order to gain knowledge after these three days the same tests have been performed with extended testing time up to 28 days.

BENEFITS OF Sika WT-200 P

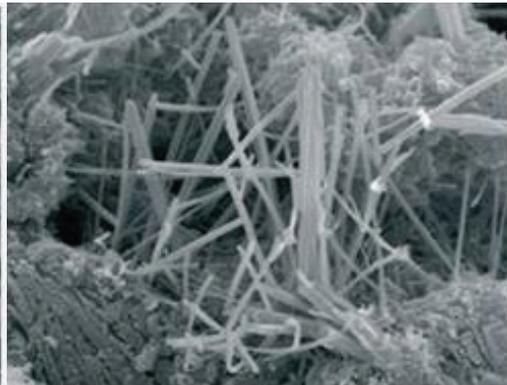
The use of Sika WT-200 P in waterproof concrete results in the following advantages:

- Increase in service life of the construction
- Significantly improved durability and sustainability of the hardened concrete
- Ensured watertightness without other expensive measures
- Reduced maintenance costs
- Sika WT-200 P additionally enhances the self-healing properties of concrete and promotes the ability to heal concrete cracks

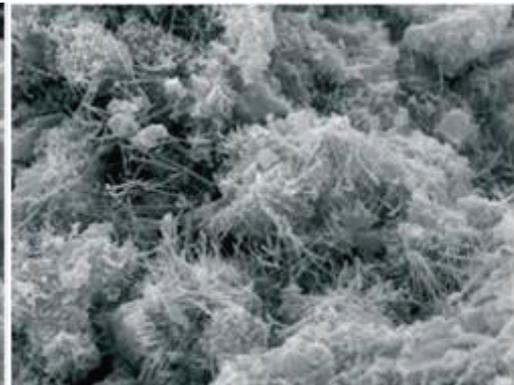
Keeping water OUT	Keeping water IN
Basement	Swimming pools
Habitate basements	Water retaining structures
Parking garages	Dams
Utility/plant rooms	Water structures
Tunnels	Waste water treatment structures



Clearly visible void



Crystalline growth



Sealed void



FOR MORE CONCRETE INFORMATION:



WHO WE ARE

Sika AG, Switzerland, is a globally active speciality chemicals company. Sika supplies the building and construction industry as well as manufacturing industries (automotive, bus, truck, rail, solar and wind power plants, façades). Sika is a leader in processing materials used in sealing, bonding, damping, reinforcing and protecting loadbearing structures. Sika's product lines feature high quality concrete admixtures, specialty mortars, sealants and adhesives, damping and reinforcing materials, structural strengthening systems, industrial flooring as well as roofing and waterproofing systems.

Our most current General Sales Conditions shall apply.
Please consult the Data Sheet prior to any use and processing.



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