



HydroBloc®Si 709

Reactive siloxane concentrate for horizontal barriers

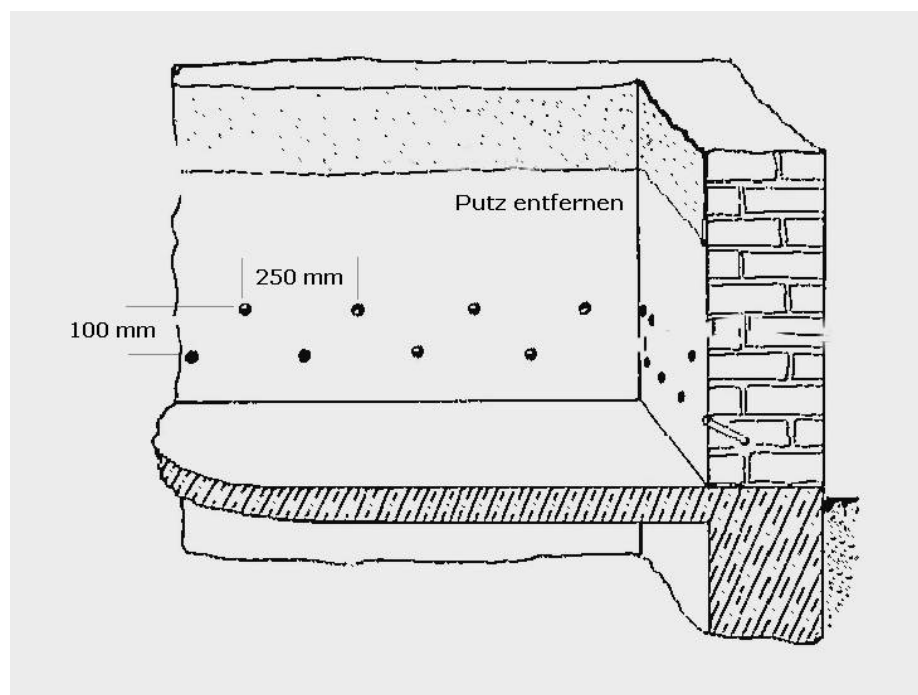
HydroBloc®Si 709 is a new reactive self-crosslink siloxane concentrate. Developed for highly efficient horizontal barriers against capillary ascending water in moistly water-saturated building materials. Effective sealings can still be done with HydroBloc®Si 709, even there where silicone and silane based injection agents fail long ago.

HydroBloc®Si 709 is a concentrate. Depending on consistence of the building material, HydroBloc®Si 709 must be diluted with 10 - 15 parts of water (tap water). So the product is very economically in use. By getting in contact with building material, HydroBloc®Si 709 is hardening per chemical reaction. Accordingly it is ir-resolvable from the structure of the building material. The crosslinking reaction takes place autonomous. HydroBloc®Si 709 contains already a reaction starter.

HydroBloc®Si 709 must be injected into the wall through modular grid laid bore holes. The leaking material is diffusing circularly in the wall. The bore holes must be placed like in the chart below, to reach a persistent barrier.

Injection can be done in all usual ways like pressure method with injection pumps, or pressureless with a feed bin / injection bottle. Injection under pressure is recommended by strong humidity penetration of the building material (Water content in masonry $\geq 50\%$). By humidity penetration $\geq 70\%$ injection under pressure is necessary. That's the only way to guarantee penetration of injection material into pores of the water-saturated building material. Grout jointed masonry antecedent with a cement suspension.

typical bore holes for chemical horizontal barriers



Important: Precondition for perfect working of the horizontal barrier is that the injection level must be totally soaked with injection material. Impregnation is dependend from structure, consistence and water content of the building material. It assumes a sufficient injection time. 7-10 minutes, by using injection with pressure and 8 hours by using pressureless method. These are minimum values, do not underrun.

The technical bases for horizontal barriers are defined in „Application technology for chemical injections against ascending humidity in masonry“ of WTA.

HydroBloc®Si 709 is tested after this instructions by IBAC Aachen and admitted by WTA*.

*WTA = Wissenschaftlich-technischer Arbeitskreis Denkmalpflege

WTA-instructions:
They subscribe the
standard of
technology for
chemical horizontal
barriers



Product data

Consistence	Reactive siloxane solvent
Body structure	Clear liquid
Density	~ 1,01 gr/ml at 20 °C
Viscosity (not diluted)	~ 2 mPa.s at 20 °C
Flash Point	> 75 °C
Odour	Weak, alcoholic

Processing Dilute HydroBloc®Si 709 before use with tap water. The grade of diluting is depending on humidity penetration and absorbency of the sealing wall. One part of HydroBloc®Si 709 can be diluted with 5 to 15 parts water.

Dilution ⇒ for lightly humid or highly absorbent building materials = 1:10 - 1:15
⇒ for wet or only weakly absorbent building materials = 1:5 - 1:9

Solutions of HydroBloc®Si 709 diluted with clean tap water have a shelf life of at least one week. In case of very hard (or dirty) water, diluted product may flocculate or gel and become unusable. We therefore recommend that the injection solutions are always freshly prepared daily.

HydroBloc®Si 709 is not corrosive. Processing equipment and building materials are not attacked by the product, so that no special equipment is required for processing.

Safety Storage Please attend the relevant national regulations for work with injection materials. Generally, we recommend to wear safety goggles and protective close.

HydroBloc®Si 709 contains small amounts of volatile and flammable organic ingredients. Look out for enough air ventilation during work with HydroBloc®Si 709.

Store HydroBloc®Si 709 coolish, but protect it of frost. HydroBloc®Si 709 is at least for 12 month durable by storing in original casks below 37 °C.

Store it inaccessible for children and for third inaccessible. The stockroom should be ventilated. Do not store together with food.

Not bedabble with water
Fraction of a brick, water-repellent with HydroBloc®Si 709.



These technical information describe the present-day state of knowledge these product. They should only inform about the possibilities of application and could not release the applicator of his commitment to check the possibility to use the product for the required application. Information for processing can be found in processing instructions of our product. Information about safe handling can be found in our current safety data sheet.

ATI-709
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