



HYDROSTOP-MIX

Dry compound for crystalline waterproofing of reinforced concrete



PRODUCT PROPERTIES

- Penetrates concrete to at least 5cm deep,
- Water permeability at a minimum of 60m of water column,
- Water access renews sealing capacity,
- Makes waterproofing slab bottoms easy,
- Unlimited durability of waterproofing,
- Resistant to XA1 and XA2 aggressive water,
- Concrete-compatible
- Also waterproofs basements from inside,
- Environmentally friendly, harmless.

USE

Hydrostop-Mix is used for waterproofing concrete structures against water pressure and for protection against environmental factors up to XA2 aggressive. The waterproofing of concrete and reinforced concrete is done by covering the bottoms of slabs with a thin layer that integrates with the slab material and crystallizes inside, which is incomparably more effective than bituminous and bentonite waterproofing. Primarily used for foundation slab bottoms, spread and strip footings, and reinforced floors. The product is also used to waterproof water tanks, sewage treatment plants, septic tanks, swimming pools, basement parts (cellars, shelters, underground garages) tunnels, installation pits and chambers, wet areas (e.g. baths). Applicable up to XA2 aggressiveness levels. Used for waterproofing work during construction stages. The product is used as indicated above in residential, industrial and public utility construction, both on the inside and on the outside. It is not flammable and does not contain ingredients that react with oxygen. This compound does not reduce electrical conductivity between ground and slab reinforcement. **Hydrostop-Mix** is mainly used as a waterproofing base prior to pouring of concrete; for waterproofing by brush or rubbing in, product no. 209 **Hydrostop-Professional Compound** is recommended. Masonry walls and prefabricated roofs should be waterproofed with other Hydrostop products.

WORKING PRINCIPLE

Hydrostop-Mix is a cement-and-sand powder that is sifted under concrete to be poured. The penetrating effect is obtained by the ingredients migrating into the wet concrete to at least 5cm deep and crystallizing in the capillaries, which permanently prevents water seepage and results in drying while not stopping water vapor from permeating. The crystallizing capacity is renewed under water pressure, a self-sealing property often observed on the surface of reinforced concrete water tanks. The very low water impermeability of W2 is upgraded to at least W6 while for higher initial values the property reaches at least W8. Once waterproofed, concrete is resistant to slightly acidic and alkaline water with a pH between 4.5 and 12.5.

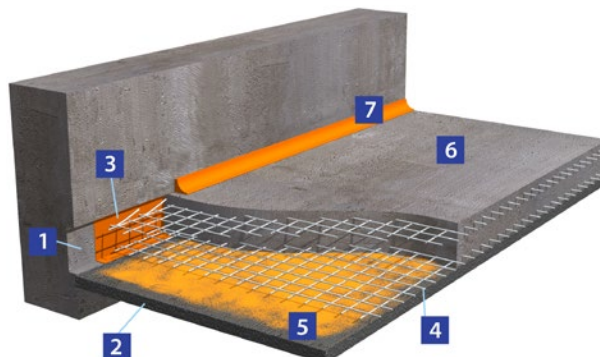


Fig. 1. Waterproofing the slab bottom and slurry wall
keyway: 1 - keyway; 2 - lean concrete under slab; 3 - keyway seal; 4 - reinforcement; 5 - **Hydrostop-Mix** sifted evenly; 6 - slab concrete; 7 - wedge-shaped seal at wall.

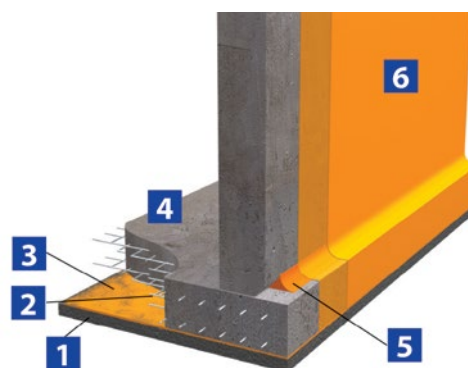


Fig. 2. Recommended waterproofing method for the foundation slab: 1 - lean concrete; 2 - reinforcement; 3 - **Hydrostop-Mix** sifted under slab (3kg/m²); 4 - edge of slab sealed with **Hydrostop-Professional Compound**; 5 - wedge-shaped seal from **Hydrostop-Mortar**; 6 - vertical waterproofing from **Hydrostop-Professional Compound**.

PREPARATION OF THE SUBSTRATE

The substrate needs to be cleaned of any dirt, mud, sawdust and debris. Pools no deeper than 1cm are acceptable prior to pouring concrete. If there is more water, it must be removed depending on the space available and access to the location of the slab bottom. A water pump or a water vacuum cleaner can be used. Sometimes a hole can be drilled in the thin concrete subbase to let the water soak into permeable ground layers. If concrete is to be poured into a dig subject to groundwater flooding, use of wellpoints is usually necessary.

APPLICATION OF THE PRODUCT

In dry weather the product is typically applied no sooner than 2 days before pouring concrete. It can also be done a few hours or immediately before pouring concrete. The work order for a foundation slab bottom is as follows:

Spread construction sheeting over compacted ground and pour a 5cm layer of lean concrete. If there are slopes that are accessible, coat them by sifting ~1.5kg/m² in two layers. Next, install reinforcement and formwork. Just before pouring the foundation slab, apply 3kg/m² of the dry pro-

duct through the reinforcement over the lean concrete using a 2mm sieve. The allowed width of reinforcement supports on the lean concrete is 5cm. Sweep the powder off the upper mesh. If there is rainfall between the sifting and the concrete pour, check the substrate and re-sift the dry product where necessary. Pour concrete ensuring that the strong stream is not aimed directly at the coating. If necessary, use 2x2cm reinforcement mesh and start pouring the concrete through it.

CARE

Waterproofing made by sifting prior to pouring concrete does not require any maintenance.

REMARKS

Concrete floors subject to hydrostatic pressure (even a water column of several dozen centimeters) sustain strong forces and must have adequate thickness and reinforcement. The waterproofing should reach 50cm above the top water levels. Floor-to-wall joints and construction joints in reinforced concrete structures require a wedge-shaped seal made from [Hydrostop-Mortar](#). The seal is set into the wall or the floor, or it forms a round corner (fig. 2, item 5). If the length of the seal is over 5m in a straight line while the floor and the wall do not constitute a monolithic box, additional sealing is recommended due to the risk of cracking along the seal (see the instructions for [Hydrostop-Mortar](#), [Hydrostop-Superelastyczny](#) and the tape for [Hydrostop-Elastyczny Zbrojony](#)).

SAFETY PRECAUTIONS

Mieszanka contains cement clinker, which can cause drying and irritation of the skin and mucous membranes. Use of resistant gloves is therefore advised. A safety sheet and attestation can be provided upon request.

TECHNICAL DATA

Name and no.:	Hydrostop-Mix 203
Product type:	Dry mixture for concrete waterproofing coatings through crystallization
Form:	gray powder
Approx. total yield:	2 to 3kg/m ²
Packaging size:	25kg,
Dry weight:	1,15 kg/dm ³ ±10%
Application temperature:	same as for correct concrete pouring
Exposure class:	XA2, pH 5.5 to 12.5, including groundwater, sewage and agricultural waste, chlorine water for drinking and swimming pools (XD2), fats, mineral oils, food oils, transformer oils, rainwater, river water, lake water, irrigation water. According to ITB approval the product is resistant to sulfates, phenols and lactic acid. Resistance to industrial waste aggressive on concrete is not guaranteed.
Application by brush:	
Substrate:	Typically lean concrete (C8/10 to C20/25)
Reaction-to-fire Euroclass:	A1,
Use before:	1 year from production (full package) Protect from moisture.
Reference documents:	PZH no. HK/B/0397/01/2013; Technical approval ITB AT-15-2680/2007; safety sheet. Updates at www.hydrostop.eu

Being an excellent waterproofing product, HYDROSTOP has received numerous awards over the years. It was awarded at INBUD '90 (medal), at NOWE MATERIAŁY '92 and ZŁOTA SYRENKA in 1999. In 2003 it was recognized as an eco-friendly construction material. It was also awarded at WPPK in Szczyrk in 2007 and 2011 whereas the key product, Hydrostop-[Mieszanka Profesjonalna](#), became a product of the year at TopBuilder.

HYDROSTOP®

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Sales include courier delivery or in-store pick-up. The manufacturer guarantees product quality whereas the buyer is responsible for the selection of the product as well as its application and conditions of use. Hydrostop is a trademark protected by the Patent Office. The use of Hydrostop means the Delivery Terms have been accepted. This information is subject to change without notice. Last updated on 20 September 2013.