

HYDROSEAL

General Building Authority Test Certificate



Properties:

HYDROSEAL is a water-expanding rubber based on CR (CR = Chloroprene Rubber).

HYDROSEAL is used for sealing purposes in civil engineering, structural engineering as well as tunneling.

The expanding property results from the irrevocable bonding of the water-swellingable polymer resin with the rubber matrix by means of vulcanisation.

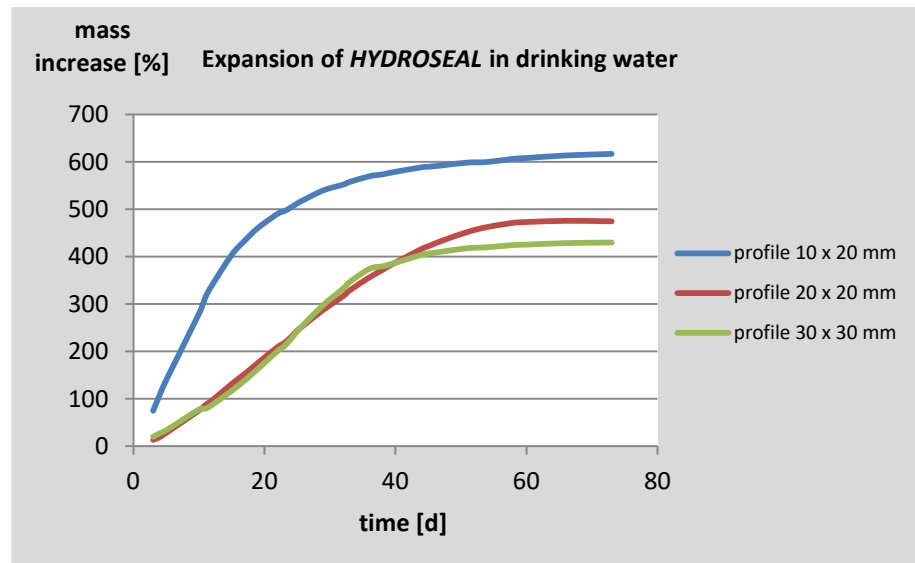
Depending on profile type *HYDROSEAL* can expand up to 600 vol.% by absorbing water, whereby the rubber matrix ensures strength of shape during swelling process.

HYDROSEAL is used for the sealing of construction joints, sealing of pre-cast concrete elements, sealing of joints between old and new concrete, pipe lead-throughs etc..

Technical data:

Rubber type	solid rubber	
Material basis	polychloroprene, vulcanised	
Colour	black	
Spec. density (20°C)	approx. 1.2 g/cm ³	
Shore A hardness	approx. 53	DIN ISO 7619-1
Tensile strength	≥ 4.5 N/mm ²	DIN EN ISO 527
Elongation at break	≥ 600 %	DIN EN ISO 527
Water absorbtion	400 - 600 %	DIN EN ISO 62

Mass expansion process:



Delay coating	yes
Profile types	10 x 20, 20 x 20 , 30 x 30 mm

Processing:

Sealing of construction joints:

For a successful application of *HYDROSEAL* in construction joints, the selected profile is placed with its cross-section in the centre or at a distance of 10 cm to the nearest concrete edge and bonded with its full surface to the existing concrete. It may also be nailed to aid bonding (or as an alternative).

Ensure that the water-expanding rubber is tightly fixed to its intended position and that it can not be buoyed upwards in green concrete.

Rough surfaces should be smoothed or sealed before the *HF-KLEBER* is applied. To do this you can use suitable permanently adhering filling compounds, or alternatively the sealing compound *QUELLFLEX* that can also be used as an adhesive substitute.

The *HF-ADHESIVE* or the *QUELLFLEX* sealing compound may only be applied to dry subsurfaces. *FIX-O-FLEX* adhesive and sealing compound must be used for fixing the water-expanding rubber profiles if the subsurface is wet.

Sealing of pre-cast concrete elements:

We recommend the inclusion of a slot when the concrete element is cast in cases where *HYDROSEAL* is used for the sealing of pre-cast segments.

When choosing the water-expanding rubber profile to be used, ensure that contact pressure is achieved when the elements are put together. Here again you should take care that the profiles are adequately insulated, either by using installation cement, e.g. *F60/F300*, or permanently elastic sealing, e.g. *FIX-O-FLEX H* depending on the composition of the joint.

Safety information:	No special measures required
Packaging:	Rolls in carton Packaging depending on profile type, see price list
Storage:	Shelf life at least 24 month in original packaging when stored in dry conditions between 15-25°C, protected from heat, frost and direct sunlight. After the expiration the use of the product is generally not recommended, unless an approval has been provided by TPH. This approval can only be obtained by the quality assurance department of TPH releasing the material after verification of main properties being within specification.
Disposal:	<u>Recommendation:</u> Small quantities of product residues can be disposed of as normal domestic waste. Dispose of bigger quantities must be effected in accordance with the corresponding local regulations.
Test certificates:	General Building Authority Test Certificate for <i>HYDROSEAL</i> water-expanding rubber profile; MFPA Leipzig 2014 Testing of fire behavior of construction materials, Ignitability of products subjected to direct impingement of flame according to DIN EN ISO 11925-2:2011-02; MFPA Leipzig 2014 Classification of fire behavior according to DIN EN 13501-1:2010-01; MFPA Leipzig 2014
Legal notice:	The correct and thus successful application of our products is not subject to our control. A guarantee can be issued for the quality of our products within the framework of our sales and supply conditions, however not for successful processing. All data and specifications in this specification sheet are based on the present state of the art and the right to changes and adaptations for the sake of development remains explicitly reserved. The consumption specifications designated by us can be only average empirical values, where deviations are possible on an individual basis and therefore cannot be excluded by us.

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