

Technical Data Sheet

X-Stop HWS Waterstops

Extruded hydrophilic waterstop

60261018

Product Description

X-Stop HWS hydrophilic waterstops are swellable waterstops developed for use in construction joints. X-Stop HWS are hydrophilic composites developed to perform in saline, potable and ground water conditions.

X-Stop HWS Waterstops is available in three profiles:

HWS 520: General purpose rectangular sections for

use in construction joints.

HWS 1020: Thicker section used in high security

construction joints and as an internal

waterstop for penetrations.

HWS 1020R: Stainless steel reinforced for long lengths

to restrict longitudinal swelling.

Advantages

- Easy to install
- Easy to join
- High swell
- · Works in saline conditions
- Works in contaminated ground water
- Non toxic

Uses

- · Construction joints
- Pile caps
- Basements
- Raft slabs
- Secant piles
- Sheet piles

Physical Properties

Elongation	>450%
Hydrostatic pressure resistance	100m

Swell Test Data

	Typical Results
Fresh potable water	>300%
Water containing 500 ppm CaCl ₂	>200%
Sea water	>160%

Nominal Sizes and Lengths

Profile	Size	Length
HWS 520	5 x 20mm	20m rolls
HWS 1020 + 1020R	10 x 20mm	10m rolls

Color

HWS 520 - Black

HWS 1020 and 1020R - Grey

Installation Guidelines

X-Stop HWS Waterstops should be installed by experienced operatives. X-Calibur provides detailed method statements on all its products for use in various applications. These must be referred to prior to starting work. The information below is a summary intended for guidance only.

It is recommended that HWS 520 and 1020 should be positioned and bonded using X-Stop SwellSeal, hydrophilic adhesive and sealant. The waterstop can also be installed either in a pre-formed groove cast into the concrete or bonded directly on top of the concrete.

For added security the strip can be screwed using a nail gun. The nails should be 20 to 30mm long with washers (same to Hilti X-C 22 P8 S15 TH) and fixed every 150mm. After fixing the nail bead should be covered with a small spot of X-Stop SwellSeal.

Jointing

Do not overlap. Simply provide butt joints.

Surplus Material

Surplus material may be reused provided that it is immediately rewrapped and sealed using cling film.

Expansion Joints

X-Stop HWS Waterstops are not intended for use in expansion joints.

Limitations

Do not install if concrete cover is less than 75mm. Do not install onto iced surfaces. Do not install into standing water.

Health and Safety

This product is for industrial use only by trained operatives. It is not considered hazardous in normal use. Please refer to the Material Safety Data Sheet (MSDS) before use. The MSDS can be obtained via our website www.x-calibur.us.

Authorized Technical Specialist

Please note that only X-Calibur Authorized Technical Specialists ('ATSs') are permitted to change any of the information in this data sheet or to provide written recommendations concerning the use of this product. Visit www.x-calibur.us for a full list of X-Calibur ATSs.

Datasheet Validity

X-Calibur makes modifications to its product datasheets on a continuous basis. Please check the datasheet update section on www.x-calibur.us to ensure you have the latest version.

Warranties

X-Calibur supplies products that comply with the properties shown on the current datasheets. In the unlikely event that products supplied are proved not to comply with these properties, then we will replace the non-compliant product or refund the purchase price. X-Calibur does not warrant or guarantee the installation of the products as it does not have control over the installation or end use of the products. Any suspected defects must be reported to X-Calibur in writing within five working days of being detected. X-Calibur Construction Chemistry Inc. makes no warranty as to merchantability or fitness for a particular purpose and this warranty is in lieu of all other warranties **express or implied.** X-Calibur Construction Chemistry Inc. shall not be liable for damages of any sort including remote or consequential damages, down time, or delay.



Technical Data Sheet

X-Stop SwellSeal

One part hydrophilic adhesive and sealant

60540312

Product Description

X-Stop SwellSeal is a high performance hydrophilic polymer adhesive and sealant that is used on its own or in conjunction with X-Stop HWS waterstops to provide a permanent watertight seal in the presence of water in a variety of applications.

Uses

- Bonding of hydrophilic waterstops
- Construction joints
- Watertight pipe penetrations
- Sealing of reinforcing bars in pile caps
- Sheet pile connecting joints
- Diaphragm walls joints

Advantages

- Single component, no mixing required
- Easy to use
- High swell capacity
- Suitable for a wide variety of substrates
- Good chemical & saline resistance

Physical Properties

Color	Grey
Tack-free time	1 to 2 hours
Volume Expansion	100%

Volatile Organic Content

VOC = 40 g/L

Packaging

320ml cartridges

Shelf Life

12 months when stored under 35C in dry conditions.

Installation Guidelines Application

Ensure the surface to be sealed is clean and free from contaminants. Use a standard caulking gun and apply at apply in layers or beads 5 to 10mm thick to suit the particular application the product is being used for. Let the product cure for a minimum of 24 hours before casting concrete against it. Protect from rain to prevent premature swelling before casting concrete.

Limitations

Concrete cover over the product should be a minimum of 50mm

Do not apply at temperatures below 5C or above 40C Do not apply to frozen substrates Do not use in expansion joints

Health and Safety

This product is for industrial use only by trained operatives. It is potentially hazardous if not used correctly. Please refer to the Material Safety Data Sheet (MSDS) prior to the purchase and use of this product. The MSDS can be obtained via our website www.x-calibur.us.

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