

### HYDRO-SEAL HW-0520

Is a swelling type waterstop designed for waterproofing concrete construction joints in new and retrofit applications. Comprised of Non-Bentonite hydrophilic rubber, Hydro-Seal HW-0520 expands when exposed to water and seals gaps along concrete construction joints. Hydro-Seal all hydrophilic and co-extruded profiles are factory treated with DRC (Delay Reaction Coating) to resist premature expansion when exposed to heavy rain or short-term immersion in water. This Delay Reaction Coating also prevents Hydro-Seal from swelling prematurely in green concrete. Hydro-Seal products are safe and suitable for potable water tanks and environmentally sensitive applications.

### RECOMMENDED FOR

Sealing concrete construction joints in:

- Parking Garages
- Processing Plants
- Industrial, Commercial and Residential Poured Concrete Foundations
- Potable Water Reservoirs
- Cast-in-Place and Segmental Tunnels
- Sewage and Water Treatment Plants
- Hydro and Water Retention Dams
- Precast Box Culverts and Utility Chambers
- Swimming Pools
- Large Pipe Penetrations.
- Pile Caps

### FEATURES / BENEFITS

#### Active Protection –

Hydro-Seal HW-0520 swells in contact with water to form an effective and chemically resistant compression seal.

#### Fast, Simple and Easy Installation –

Hydro-Seal HW-0520 profiles are easy to install with readily available adhesive and/or anchors and no expensive split forming is required at joint locations.

#### Stable –

Hydro-Seal HW-0520 profiles are comprised of chemically resistant hydrophilic rubber and have the capacity to swell and shrink during repeated wet/dry cycles.

#### Chemically Resistant –

Hydro-Seal HW-0520 profiles are extruded from chemically resistant rubber and are resistant to micro-bacterial attack.

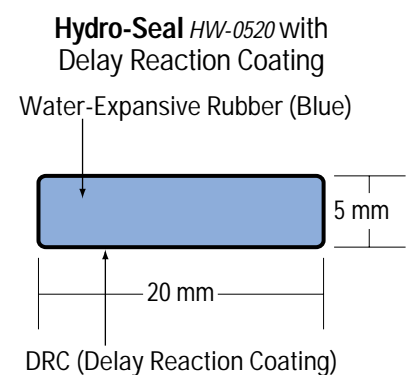
#### Advanced Design –

In addition to exceptional expansion properties, Hydro-Seal HW-0520 also has the DRC (Delay Reaction Coating) feature, which prevents premature swelling of the profiles prior to the concrete gaining strength.

## PHYSICAL AND PERFORMANCE CHARACTERISTICS

### HYDRO-SEAL HW-0520 – High Performance Hydrophilic Rubber Waterstop

Form	Solid Rectangular Elastomeric Strips	
Colour	Blue	
Hydro-Seal HW-0520	5 mm x 20 mm	
Roll Length	10 Metres	
Packaging	10 Rolls per Box	
Elongation	ASTM-D412	>500%
Tensile Strength	ASTM-D412	>20 kg/cm <sup>2</sup>
Volumetric Expansion Rate	>300%	
Shore A Hardness	>50	
Service Temperature Range	-30°C to 70°C	





## HYDRO-SEAL HW-0520 HIGH PERFORMANCE HYDROPHILIC RUBBER WATERSTOP

### INSTALLATION INFORMATION

#### 1 General

Bond Hydro-Seal HW-0520 profiles to smooth, even surfaces, free of dirt, oil or laitance for best results. Maintain a minimum of 50 mm concrete coverage over Hydro-Seal HW-0520 when using 25 mPa or greater compressive strength concrete. Increase the coverage to 100 mm on reduced strength concrete. Hydro-Seal HW-0520 profiles may be installed in a formed groove of appropriate dimensions or directly on a flat concrete surface.

#### 2 Forming Requirements

Hydro-Seal HW-0520 profiles are installed after the form is stripped from the first pour and before the second concrete pour is made. Therefore, splitting the form is not required. Due to the hydrophilic nature of the Hydro-Seal HW-0520 product, installation of the profile should be timed as close as possible to the second placement of concrete. This will reduce the chance for premature expansion of Hydro-Seal HW-0520 due to rain water or ground water exposure.

#### 3 Hydro-Seal HW-0520 / PVC Junctions

Hydro-Seal HW-0520 profiles are commonly used in conjunction with typical PVC waterstops. Hydro-Seal HW-0520 profiles should be cut to butt up directly to the PVC. Place several drops of cyanacrylate type adhesive (super glue) to the PVC and the cut end of Hydro-Seal HW-0520 and immediately join the ends together. Hold in position for approximately 30 seconds to allow the adhesive to set. Apply a sufficient bead of Hydro-Seal Sealmaster to the Hydro-Seal HW-0520 / PVC junction.

#### 4 Bonding to Concrete

Remove all dust, oil, laitance etc. from the concrete surface prior to installing Hydro-Seal HW-0520. Depending on concrete surface conditions, one of several adhesives can be used. Normal forming practice leaves a sufficiently smooth surface for direct bonding of

Hydro-Seal HW-0520 with a chloroprene rubber compatible adhesive such as gel contact cement. Concrete nails or special fasteners may be used as required to hold the profile in position while the adhesive cures.

Concrete surfaces left rough due to jack hammering, extensive weathering, etc. should be brought to a smooth level condition. Hydro-Seal Sealmaster, a single component swellable sealant, can be used for this purpose when the concrete surface is dry. Apply a sufficient bead of Hydro-Seal Sealmaster to the rough concrete to insure that a smooth level surface will result. The Hydro-Seal HW-0520 profile should be placed in position within 4 hours. Concrete nails or special fasteners may be used to hold the profile in position while the Hydro-Seal Sealmaster cures.

*Note: In all 3 installation methods, installed Hydro-Seal HW-0520 profiles should be inspected to insure that no separation exists between the Hydro-Seal HW-0520 profile and the substrate. If this is observed, apply a suitable bead of Hydro-Seal Sealmaster in the separation and secure with nails or special fasteners as required.*

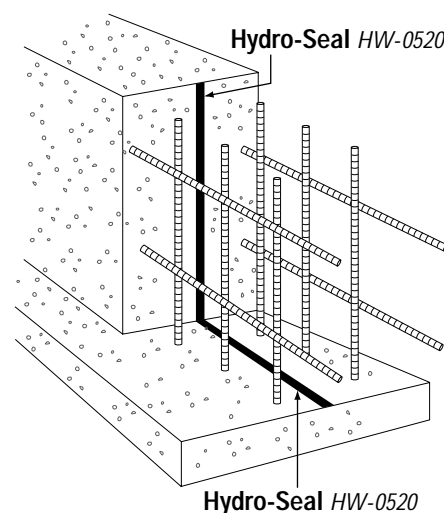
#### 5 Splicing

Straight lengths of Hydro-Seal HW-0520 profiles should be cut square with a sharp knife or good pair of shears. Place several drops of a cyanacrylate type adhesive (super glue) on the cut ends of Hydro-Seal HW-0520 and immediately join the ends together. Hold in position for approximately 30 seconds to allow the adhesive to set.

Flat 90° corners should be spliced by miter cutting the two ends at 45° and proceeding in a manner similar to the above. Where space permits, Hydro-Seal HW-0520 can be bent to an

inside radius of approximately 50 mm about its long axis, thus eliminating a spliced joint.

Flat "T"s and "X"s should be made by butt splicing and joining the pieces with the use of cyanacrylate adhesive (superglue).



Vertical 90° corners, vertical "T"s and vertical "X"s should be butted and bonded with cyanacrylate adhesive.

SPECTON offers contractors prefabricated and spliced components.

*Note: All splices must be further enhanced by placing a bead of Hydro-Seal Sealmaster at the splice.*

#### 6 Important Precautions

Cracking of the concrete, caused by the expansion of Hydro-Seal HW-0520, can be avoided by maintaining a 50 mm minimum concrete coverage. Increase this coverage if lightweight or low strength concrete (<25 mPa compressive strength) is used. Appropriate concrete placement techniques must be implemented to ensure proper concrete consolidation. Once installed, adequate measures should be taken to prevent exposure to rain water, ground water, etc. before the joint is covered with concrete.



## HYDRO-SEAL *HW-0520* HIGH PERFORMANCE HYDROPHILIC RUBBER WATERSTOP

### STORAGE

Hydro-Seal *HW-0520* should be stored in a cool, dark, dry place. Exposure to moisture prior to installation may expand Hydro-Seal *HW-0520* prematurely. If Hydro-Seal *HW-0520* is installed in an expanded condition, the effectiveness of the seal may be severely reduced.

### APPLICATION

Contact a Specton Technical Representative for specific installation methods for your project.

### SAFETY PRECAUTIONS

- **Install materials in a well ventilated area.**
- **Familiarize yourself with the MSDS and follow safety precautions indicated.**
- **Wear conventional construction safety equipment during installation.**

All recommendations, data and statements contained within this document are based on tests we believe to be correct, but are not to be construed as a warranty either expressed or implied. The user shall rely on his or her own tests and information to determine the suitability of the product for the application and assumes all risk and liability resulting from his or her use of the product. The seller's and manufacturer's sole responsibility shall be to replace that portion of product that is proven to be defective. Neither the seller nor the manufacturer shall be liable to the buyer or any third person for any injury, loss or damage directly or indirectly resulting from the use or inability to use the product.

### PLEASE CONTACT US FOR ADVICE AND PRODUCT INFORMATION

Specton Technical Representatives are available to assist you with specific guidelines for your project and product requirements. We can be reached at:

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