

# HYDRO-STOP® PVC WATERSTOP INTERNATIONAL PROFILES

(STANDARD PERFORMANCE GRADE SPECIFICATION)

#### **PRODUCT DESCRIPTION**

CJS Hydro-Stop PVC Waterstops lead the way in high technology waterstops and comply with international standards. Hydro-Stop PVC Waterstops are extruded from specially compounded PVC in accordance with BS2571 and they are designed for use in water retaining and water excluding structures where a positive seal is required for poured in-situ concrete expansion, construction and contraction joints.

Hydro-Stop PVC Waterstops are designed for use in many types of applications and structures, and are available in a number of different size profiles that are for use in construction, contraction or expansion joints. Hydro-Stop PVC Waterstops are available in rolls with separate intersections supplied to simplify and minimise on-site fabrication. The waterstop is heat weldable and allows for fast and easy on-site welding/joining.

The efficiency of any waterstop is very dependant on good workmanship, installation, and on full compaction of the surrounding concrete around the waterstop during concrete placement. Optimum performance will be achieved if the waterstop is installed by keeping these important factors in mind.

#### **ADVANTAGES**

- A full range of profiles and sizes to suit all construction requirements
- Hydro-Stop PVC Waterstops conform to and exceed all major international standards
- High quality compounded PVC for long term durability and integrity
- Factory made intersections to simplify and minimise on-site fabrication
- On-site welding equipment is available upon request
- Internal profiles come with factory pre-punched eyelets for easy and secure wire tying to reinforcement
- Ability to withstand high hydrostatic head pressures

### AREAS OF APPLICATION

WATER RETAINING STRUCTURES	WATER EXCLUDING STRUCTURES
• Water tanks	• Basements
• Bund walls	<ul> <li>Underground car parks</li> </ul>
<ul> <li>Sewage treatment plants</li> </ul>	• Tunnels
Reservoirs	Retaining walls
<ul> <li>Dams and spillwayst</li> </ul>	<ul> <li>Suspended slabs</li> </ul>
Water treatment plants	<ul> <li>Below ground slabs</li> </ul>
Swimming pools	Roof slabs

## Big expertise. Real convenience. Concrete commitment.

### **TYPICAL APPLICATIONS**



#### **TECHNICAL FEATURES**

COLOUR	Orange
PACKAGING)	150mm - 200m = 20m roll, 250mm = 15m roll, 320mm = 12m roll
ROLL WEIGHT	Dependent upon profile type
STORAGE CONDITIONS/SHELF LIFE	5 years from the date of production if stored properly in original,unopened and undamaged sealed packaging in dry conditions out of direct sunlight at temperatures between +10oC and +40oC
MATERIAL TYPE	Polyvinyl Chloride (PVC)
WELDING TEMPERATURE	Approximately 190oC-200oC
SERVICE TEMPERATURE	-25oC to 70oC

#### **PHYSICAL PROPERTIES**

PROPERTIES	TEST METHOD	REQUIREMENT	RESULT
1. Tensile Strength (N/mm2)	BS 2782:320A	Min. 12.00	15.69
2. Elongation At Break (%)	BS 2782:320A	Min. 300	320
3. Loss of Mass Test (mg/cm2)	BS EN 60811-3-2:1995	N/A	1.69
4. Water Absorption at 23oC (mg)	ISO 62	Max. 1.0	0.19
5. Specific Gravity (g/cm3)	BS 2782:620B	1.38±0.03	1.41
6. Thermal Stability, Congo Red Test at 180oC, min	BS 2782:130A	N/A	50
7. Hardness, Shore A	BS 2782:365B	75 ± 5 Shore A (BSS 45 ± 10)	75 Shore A (BSS 42)

Note : The above test results are from an internal certificate of analysis dated 21/11/2016. Project specific material properties can be custom compounded to suit. Material properties can vary between batches.

#### **PROFILE WIDTH SELECTION**

The width of waterstop depends upon the thickness of the concrete and positioning of the reinforcement. The thickness of the concrete should be greater than or equal to the width of the waterstop profile. Refer to your engineer for further clarification and approval.



### **PROFILE DRAWINGS**



Note : Full dimension drawings available upon request

#### SITE JOINING

CJS recommends the use of its specialized welding equipment for on-site welding which consists of thermostatically-controlled welding blades and special welding jigs (each type of Hydro-Stop PVC Waterstop requires its own welding jig to suit the particular shape). On-site joining is a simple exercise using CJS Heat Welding Equipment comprising of an adjustable welding jig and welding iron. The ends of the waterstop are cut square and placed into the adjustable jig. The ends of the waterstop then slide up against the welding iron and bring the two ends together until the molten ends of the PVC fuse. When ordering welding equipment, please advise profile number of waterstop required.

### FACTORY MADE INTERSECTIONS

A wide range of standardized prefabricated intersection pieces are available allowing easy site welding of butt joints to Hydro-Stop PVC Waterstop junction pieces. Customised pieces can be made to suit, and in such cases, drawings must be provided giving exact dimensions and jointing details.



### WRITTEN SPECIFICATION

Where shown on the drawings all PVC waterstops shall be Hydro-Stop (state profile number required) as supplied by Form Direct. Provide factory made waterstop fabrications for all changes of direction, intersections and transitions, leaving only straight butt joined splices for on-site fabrication. sales@formdirect.com.au

#### **HEALTH AND SAFETY**

Joining of PVC Waterstops is performed by heat welding which results in the discharge of hydrogen chloride mist and vapour. In confined spaces or in still air conditions, the use of a ventilation fan or suitable respirator should be used, and the advice and approval of the Site Safety Supervisor is essential. For further information or advice on health and safety precautions, safe handling, storage and correct disposal of products, please refer to the most recent product Material Safety Data Sheet (MSDS), which is available upon request.

#### DISCLAIMER

The information and the recommendations relating to the application and end use of this product are given in good faith and are based on the information rovided by the manufacturer of the product and/or the Company's current knowledge and experience in connection with the product when properly stored, handled and applied under normal conditions and no liability of final function at the job site is assumed. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability of or fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written and/or oral recommendations, or from any other advice offered by the Company. No responsibility or liability by the Company will be accepted for misuse, misreading or derivation from the recommended guidelines in respect of this product and the user shall determine the suitability of the product for his intended use and assume all risks and liability in connection therewith. The information contained in this brochure may change at any time without notice



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