



# PVC Waterstop

*for Joints in Concrete*

Vinylex PVC Waterstop prevents water movement through concrete joints and are a critical component to many structures including reservoirs, locks, canals, dams, sewage and water treatment plants, bridges, stadiums, basements, floor slabs, and parking garages.

Vinylex Waterstop & Accessories has established a reputation for producing only the finest extruded plastic products. Only virgin resins are used in Vinylex Waterstop. . . never reprocessed or reclaimed materials. The elastic and abrasion resistant qualities of Vinylex Waterstop, together with high resistance to oxygen, ozone, alkalis or waterborne chemicals allow its use in a variety of subterranean and surface structures.

[www.VinylexWaterstop.com](http://www.VinylexWaterstop.com)



Also featuring

**BlueStop, ULTRASTOP,  
DUROSEAL & PETROSTOP**

## SHAPE TYPE

	Joint Type		
	Construction	Contraction	Expansion
Ribbed with Center Bulb	•	•	•
Flat Ribbed	•	•	
Dumbbell with Center Bulb	•	•	•
Dumbbell	•	•	
Ribbed Tear Web	•	•	•
Base Seal	•	•	
Labyrinth	•		

Vinylex PVC Waterstop is formulated using only virgin resins and is manufactured to satisfy the requirements of these industry standards:

- Corps of Engineers CRD-C-572
- Bureau of Reclamation
- Various state and federal agencies

Physical Properties of PVC Waterstop	Test Method	Value
Tensile Strength	ASTM D-638	2000 PSI Min.
Ultimate Elongation	ASTM D-638	300% Min.
Specific Gravity	ASTM D-792	1.35
Stiffness in Flexure	ASTM D-747	600 PSI Min.
Hardness Shore A15	ASTM D-2240	78 $\pm$ 3
Low Temperature Brittleness @-35°F	ASTM D-746	Pass
Water Absorption	ASTM D-570	.15% Max.
Tensile Strength After Accelerated Extraction	CRD-C-572	1850 PSI Min.
Elongation After Accelerated Extraction	CRD-C-572	300% Min.
Alkali Resistance		
• Weight change	CRD-C-572	.20% Max.
• Hardness change		2 Pts. Max.
Tear Resistance	ASTM-D624	300 lb/in Min.

## SELECTING A PVC WATERSTOP

When cast-in-place concrete members have joints that will be subject to water seepage or hydrostatic pressure, Vinylex PVC Waterstop should be installed. In all below grade construction and in any surface structure where it is necessary or desirable to contain or exclude moisture or water under pressure, Vinylex Waterstop provides a simple, effective and positive seal.

Vinylex PVC Waterstop is offered in several shape types to accommodate a wide range of applications, including construction, contraction and expansion joints. The Selection Guide offers general references for the most popular shapes.

Most shapes are available in several widths and thicknesses. Generally, width and thickness will dictate how much hydrostatic head pressure the waterstop can withstand and when applicable the size of the centerbulb or tearweb will dictate allowable joint movement.

Vinylex Waterstop & Accessories offers additional shapes for unique requirements, including retrofit applications and several shapes designed by various state transportation departments, including:

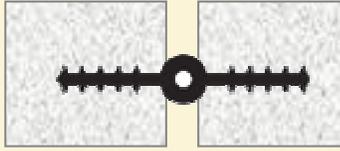
- California
- Massachusetts
- New York
- Texas

Contact

### Vinylex Waterstop & Accessories

for further assistance in selecting a PVC Waterstop.

**800-325-3602**

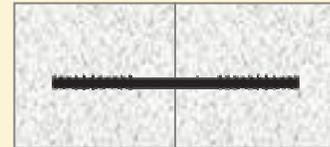


## Ribbed with Center Bulb Shapes

are designed to accommodate movement in expansion joints. Ribbed with Center Bulb is extremely versatile and can be used in both working and non-working joints. The majority of applications can be served by one of the shapes.

RB4316	STD. WT. 0.42 lbs/ft 0.60 Kg/m	HEAD PRESS. 65' 149 KPa
RB6316	STD. WT. 0.73 lbs/ft 1.09 Kg/m	HEAD PRESS. 100' 299 KPa
RB6316A	STD. WT. 0.92 lbs/ft 1.37 Kg/m	HEAD PRESS. 100' 299 KPa
RB638	STD. WT. 1.19 lbs/ft 1.77 Kg/m	HEAD PRESS. 125' 373 KPa
RB638H	STD. WT. 1.60 lbs/ft 2.38 Kg/m	HEAD PRESS. 125' 373 KPa
RB612	STD. WT. 1.66 lbs/ft 2.47 Kg/m	HEAD PRESS. 175' 523 KPa
RB714B	STD. WT. 1.28 lbs/ft 1.90 Kg/m	HEAD PRESS. 100' 299 KPa
RB9316	STD. WT. 1.19 lbs/ft 1.77 Kg/m	HEAD PRESS. 100' 299 KPa
RB938	STD. WT. 1.63 lbs/ft 2.43 Kg/m	HEAD PRESS. 175' 523 KPa
RLB938	STD. WT. 2.65 lbs/ft 3.94 Kg/m	HEAD PRESS. 175' 523 KPa
RB938H	STD. WT. 2.45 lbs/ft 3.65 Kg/m	HEAD PRESS. 175' 523 KPa

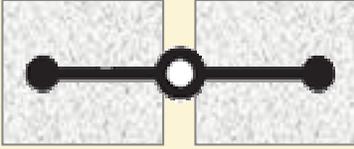
RB912	STD. WT. 2.85 lbs/ft 4.24 Kg/m	HEAD PRESS. 200' 598 KPa
RB1212	STD. WT. 4.38 lbs/ft 6.52 Kg/m	HEAD PRESS. 225' 672 KPa



**Ribbed Shapes** without centerbulbs are suitable for construction or contraction joints where little or no movement will occur.

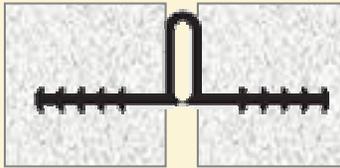
R4316T	STD. WT. 0.43 lbs/ft 0.64 Kg/m	HEAD PRESS. 65' 194 KPa
R6316	STD. WT. 0.84 lbs/ft 1.25 Kg/m	HEAD PRESS. 75' 224 KPa
R638T	STD. WT. 1.39 lbs/ft 2.07 Kg/m	HEAD PRESS. 125' 373 KPa
R638	STD. WT. 1.50 lbs/ft 2.23 Kg/m	HEAD PRESS. 125' 373 KPa
R938T	STD. WT. 2.00 lbs/ft 2.98 Kg/m	HEAD PRESS. 175' 523 KPa
R938	STD. WT. 2.37 lbs/ft 3.53 Kg/m	HEAD PRESS. 175' 523 KPa

**NOTE:** The original waterstops featured a dumbbell design, but ribbed shapes provide a better seal.



**Dumbbell with Center Bulb Shapes** are designed to accommodate movement in expansion joints.

DB614	STD. WT. 1.20 lbs/ft 1.78 Kg/m	HEAD PRESS. 100' 299 KPa
DB938	STD. WT. 3.10 lbs/ft 4.61 Kg/m	HEAD PRESS. 150' 448 KPa
DLB938	STD. WT. 3.70 lbs/ft 5.51 Kg/m	HEAD PRESS. 150' 448 KPa



**Ribbed with Tear Web Shapes**

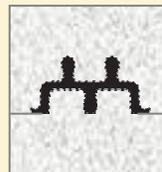
will accommodate differential or significant movement in expansion joints. The Tear Web is uniquely designed to detach at a strategic point, allowing the U-shaped bulb to deform as needed without stressing the waterstop material.

TWB618	STD. WT. 0.78 lbs/ft 1.16 Kg/m	HEAD PRESS. 65' 194 KPa
TWB918	STD. WT. 1.00 lbs/ft 1.49 Kg/m	HEAD PRESS. 100' 299 KPa
TWB938	STD. WT. 3.78 lbs/ft 5.63 Kg/m	HEAD PRESS. 150' 448 KPa



**Dumbbell Shapes** without center bulbs are suitable for construction or contraction joints where little or no movement will occur.

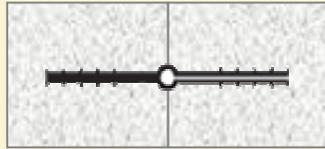
D4316	STD. WT. 0.47 lbs/ft 0.70 Kg/m	HEAD PRESS. 65' 194 KPa
D6316	STD. WT. 0.71 lbs/ft 1.06 Kg/m	HEAD PRESS. 75' 224 KPa
D614	STD. WT. 1.11 lbs/ft 1.65 Kg/m	HEAD PRESS. 100' 299 KPa
D638	STD. WT. 1.51 lbs/ft 2.25 Kg/m	HEAD PRESS. 125' 373 KPa
D938	STD. WT. 2.18 lbs/ft 3.24 Kg/m	HEAD PRESS. 150' 448 KPa
D938LB	STD. WT. 2.55 lbs/ft 3.79 Kg/m	HEAD PRESS. 150' 448 KPa



**Labyrinth Shapes**

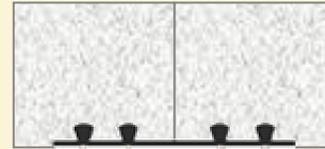
are typically used in vertical joints anticipating little or no movement. Labyrinth does not require split formwork.

KS314	STD. WT. 0.84 lbs/ft 1.25 Kg/m	HEAD PRESS. 25' 75 KPa
KS412	STD. WT. 1.24 lbs/ft 1.85 Kg/m	HEAD PRESS. 50' 149 KPa
KS614	STD. WT. 1.81 lbs/ft 2.69 Kg/m	HEAD PRESS. 50' 149 KPa



**Split Shapes** are designed to eliminate split formwork, but have limited practical applications. Split shapes are for vertical applications where no directional changes or intersections will be required.

<b>RSB4316</b>	STD. WT. 0.50 lbs/ft 0.74 Kg/m	HEAD PRESS. 65' 194 KPa
<b>RSB6316</b>	STD. WT. 0.76 lbs/ft 1.13 Kg/m	HEAD PRESS. 100' 299 KPa
<b>RSB638</b>	STD. WT. 1.54 lbs/ft 2.29 Kg/m	HEAD PRESS. 125' 373 KPa
<b>RSB938</b>	STD. WT. 2.25 lbs/ft 3.35 Kg/m	HEAD PRESS. 150' 448 KPa
<b>DS638</b>	STD. WT. 1.49 lbs/ft 2.22 Kg/m	HEAD PRESS. 125' 373 KPa
<b>DS938</b>	STD. WT. 2.20 lbs/ft 3.27 Kg/m	HEAD PRESS. 150' 448 KPa



**Base Seal Shapes** are highly suited to slabs-on-grade and some below grade wall joints. Base Seal Shapes are easy to install.

<b>BS618D</b>	STD. WT. 0.83 lbs/ft 1.24 Kg/m	HEAD PRESS. 100' 299 KPa
<b>BS718</b>	STD. WT. 0.79 lbs/ft 1.18 Kg/m	HEAD PRESS. 75' 224 KPa
<b>BS718E</b>	STD. WT. 1.21 lbs/ft 1.80 Kg/m	HEAD PRESS. 100' 299 KPa
<b>BS9532</b>	STD. WT. 1.53 lbs/ft 2.28 Kg/m	HEAD PRESS. 100' 299 KPa
<b>BSE9532</b>	STD. WT. 1.85 lbs/ft 2.75 Kg/m	HEAD PRESS. 100' 299 KPa
<b>U912</b>	STD. WT. 4.64 lbs/ft 6.91 Kg/m	

## SPECIAL SHAPES

**RET638** is designed for retro-fit applications where new concrete meets an existing structure. The waterstop is mechanically fastened to the existing structure with batten bars, anchor bolts and an epoxy gel leaving the extended leg to be embedded in new concrete.

**W12** is offered to meet the design requirements of Caltrans for bridge deck joints

**V5316** is offered to meet the design requirements of MASS Highway for 5" waterstops

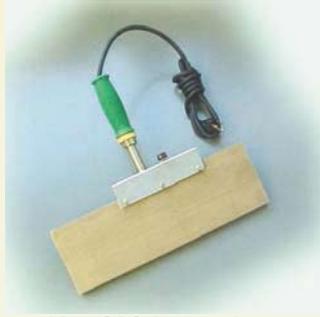
<b>RET638</b>	STD. WT. 2.83 lbs/ft 4.21 Kg/m	SYSTEM WEIGHT
<b>W12</b>	STD. WT. 1.10 lbs/ft 1.63 Kg/m	W1-2 Calif.
<b>V5316</b>	STD. WT. 0.64 lbs/ft 0.95 Kg/m	5" Mass.

# PVC Waterstop Splicing Accessories

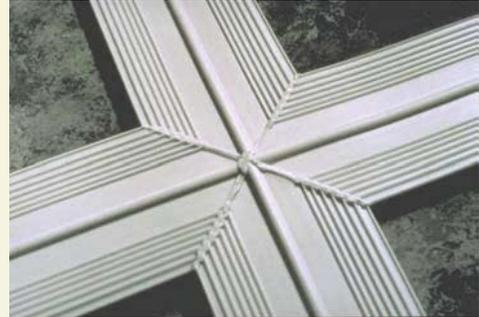
In most applications, installing a PVC waterstop system will include straight splices, directional changes and/or intersections. Vinylex Waterstop & Accessories offers irons and fittings to facilitate a quality installation. Straight splices are accomplished in the field using a thermostatically controlled heating iron, outfitted with a Teflon cover. Small irons are suited to most profiles, however shapes with larger centerbulbs, tearwebs or perpendicular flanges may require a large iron to facilitate proper splicing.



No. 214 Small Iron

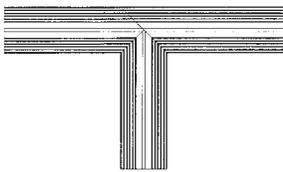


No. 213 Large Iron

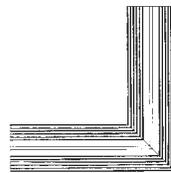


Cross Fabrication

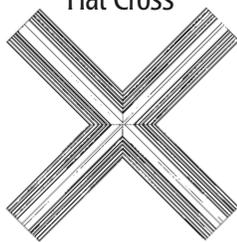
Flat Tee



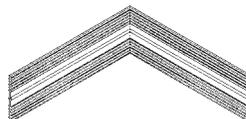
Flat Ell



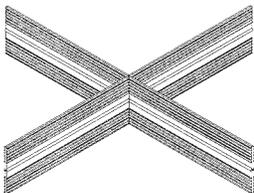
Flat Cross



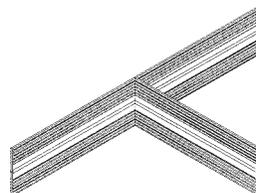
Vertical Ell



Vertical Cross



Vertical Tee



## Prefabricated Fittings

Factory-fabricated fittings are strongly recommended for directional changes and intersections. Vertical and flat ells, tees and crosses are available for the majority of profiles. Factory-fabricated fittings can reduce installation costs significantly and provide quality assurance at locations critical to the functionality of the waterstop system. Consult Vinylex Waterstop & Accessories for more complex transitions or where different sizes or shapes intersect.

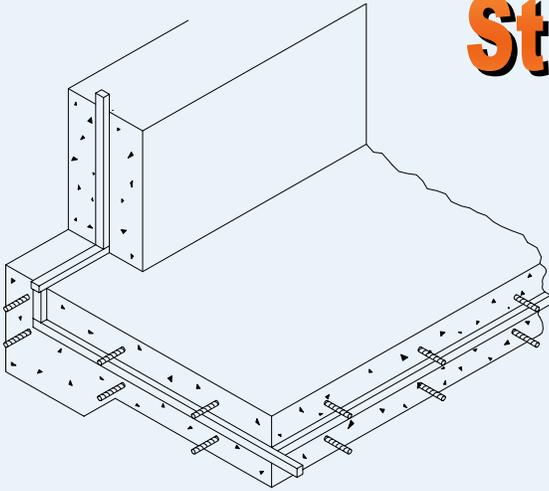
Note: Profiles such as Labyrinth are available in limited configurations. Split waterstops cannot make directional changes in a practical manner and therefore are not suitable for most applications.



## Hog Rings

Proper positioning and anchoring of the waterstop is necessary to prevent deflection during concrete placement. Optional prepunched holes along the outer flange provide points for tethering the waterstop to adjacent reinforcing steel. Hog rings and hog ring pliers are available for performing a comparable method in the field.

# Strip Applied Waterstops



There are applications suited for easy to install, strip-applied waterstops. Typical applications include: culverts, foundations, retaining walls, slabs-on-grade, concrete pipe and pipe penetrations. These products are applied with a primer adhesive to new or existing concrete surfaces prior to a second pour. The second pour encapsulates the waterstop in the construction joint creating a barrier against fluid migration.

These products are not suitable for moving joints.

## BlueSTOP



is formulated to encapsulate hydrophilic materials into a rubber base creating a controlled, moisture-activated sealant. BlueStop has the structural integrity of a rubber-base sealant, conforming well to the underlying substrate and exhibiting self-healing properties when needed. Unlike many of the traditional clay-based products, BlueStop will not expand to a point that the waterstop itself is destroyed. The controlled expansion properties engineered into BlueStop reduce the internal pressures created in cast-in-place applications. BlueStop requires 2" minimum concrete cover.

## UltraSTOP

is a single component, self-sealing mastic waterstop which prevents moisture from penetrating NON-MOVING joints in concrete construction. UltraStop is very similar in appearance to BlueStop, but requires minimum concrete cover and does not exert pressure on the concrete.

**BlueStop and UltraStop are easily installed using a primer adhesive specially formulated for each.**



## DUROSEAL

**DUROSEAL Gaskets** are formulated with water-swelling acrylate-esters. In contact with water, Duroseal Gaskets increase in volume to form an exact seal with the surrounding surfaces, preventing water intrusion through the joint. Duroseal Gaskets are resistant to many chemicals.

**DUROSEAL Paste Type E** is a single component expanding paste with a polyurethane base, suitable for sealing concrete construction joints. On contact with water, cured DUROSEAL Paste Type E swells and seals the construction joint against water penetration. An increase in volume of approximately 250% is produced by storage of water in the paste's molecular structure. Duroseal Paste Type E is supplied in ready to use cartridges.

**Call Vinylex Waterstop & Accessories for more information regarding Strip Applied Waterstops**



**Vinylex Petrostop** products are engineered for secondary containment applications in chemical storage and processing facilities. Petrostop is manufactured using **Thermoplastic Elastomeric Rubber (TPER)** and has excellent resistance to many chemicals. Petrostop products are flexible and can be heat welded in many configurations to form a continuous joint seal.

# PETROSTOP

<i>Ribbed Centerbulb/Tear Web</i>	<i>Retrofit</i>	<i>Petro Cap</i>
<p><b>VRB4316</b></p>	<p><b>KK610</b></p>	<p><b>PTC12</b></p>
<p><b>VRB6316</b></p>	<p><b>KK611</b></p>	<p><b>PTC34</b></p>
<p><b>VRB9316</b></p>	<p><b>Retrofit shapes</b> are for new to existing concrete applications and are sold as a system. The system includes a TPER profile, stainless steel batten bar and anchor bolts. Epoxy gel is available and sold separately.</p>	<p><b>Petro Cap</b> is designed for placement over an expansion board to create a joint seal and waterstop in expansion joint applications.</p>
<p><b>VTWB6316</b></p>		
<p><b>VTWB9316</b></p>		

Please Contact **Vinylex Waterstop & Accessories** for chemical resistance information, installation instructions, specifications and warranty statements for any Vinylex waterstop.

800-325-3602  
St. Louis MO Ontario CA



www.VinylexWaterstop.com  
Franklin MA Greenville SC