

# Rubber Waterstop

Rubber Waterstop has been used extensively on projects throughout the United States and the world. Beginning with projects designed to meet the U.S. Army Corps of Engineers' and the U.S. Bureau of Reclamation's specifications, Rubber Waterstop usage has expanded to all types of concrete structures for the purpose of keeping liquids in or out. SBR Rubber is used primarily for water containment, while Neoprene Rubber is used generally for projects involving sewage, water treatment, and chemical environments. Waterstops are also available in other polymers such as EPDM, Nitrile, Silicone, and Natural Rubber. WARCO BILTRITE maintain Waterstop compounds that meet the U.S. Army Corps of Engineers' CRD-C-513-71 specification and Caltrans 51-2.04 specification. Other compounds can be provided to meet other national and international specifications in accordance with project requirements. Non-specification commercial grade Rubber Waterstop is also available. Please contact us for details.

## Physical Properties Chart of Various Polymers

	ASTM Test Methods	SBR (Styrene Butadien)	Natural Rubber	High Tensile Neoprene*
Tensile Strength PSI (min)	D412	3000	3500	2500
Tensile Strength @ 300% Modulus (PSI min)	D412	1150	1450	1150
Ultimate Elongation, (% min)	D412	450	500	450
Durometer, Shore A (+/- 5)	D2240	65	65	65
Water Absorption, 2 Days at 70C % Weight Change (% max)	D471	5	5	5
Compression Set, 22 hrs. @ 70C % of original deflection (max)	D395 (Method B)	30	30	40
Accelerated Aging, 96 hrs. @70C				
% of Tensile Strength before aging (min)	D573	80	80	80
% of Elongation before aging (min)	D573	80	80	80
Ozone Resistance, 7 Days at 50 PPHM @ 38C, 20 % Elongation	D1149	no cracks	no cracks	no cracks

\*Provides Maximum Resistance to Ozone, Sewage, Oil, and Solvents


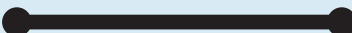


## Strip Waterstop

Finish: Smooth Color: Black

Durometer Hardness Shore A ± 5	Thickness inches	Width inches	Tensile min. psi	Ultimate Elongation min. %	Temperature Range	Estimated Weight Per Foot (1/8" x 36")	Specifications
55 055E0507	1/8 thru 1/2	36, 48	2000	300	-40°F to +220°F	2.56 lb	Caltrans 51-2.04 Waterstops





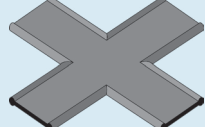

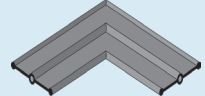
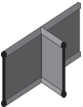
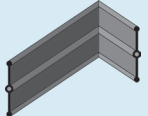
## Waterstop Extruded Profile Chart

The profiles below are normally provided in SBR and Neoprene compounds as required. Waterstop is usually provided in 50 ft. lengths, but can be manufactured in longer and shorter lengths to minimize field splicing. Special profiles and compounds can be provided to meet specific project requirements. **WARCO BILTRITE** Rubber Waterstop is also available in non-spec commercial grade.

Profiles	Normal Size (Width x Thickness x Bulb O.D.)	Polymer	Weight Per 100 Feet
	Dumbbell Type 6" x 3/8" x 3/4" end bulbs 152.4mm x 9.5mm x 19mm end bulbs	Neoprene	160 lb
		SBR	130 lb
	Dumbbell Type 9" x 3/8" x 3/4" end bulbs 228.6mm x 9.5mm x 19mm end bulbs	Neoprene	230 lb
		SBR	190 lb
	Center Bulb Type 6" x 1/4" x 5/8" end bulbs (1 1/8" center bulb) 152.4mm x 6.3mm x 15.9mm end bulbs (28.6mm center bulb)	Neoprene	125 lb
		SBR	105 lb
	Center Bulb Type 9" x 3/8" x 1" end bulbs (1 1/2" center bulb) 228.6mm x 9.5mm x 25.4mm end bulbs (38mm center bulb)	Neoprene	300 lb
		SBR	250 lb

## Waterstop Molded Intersections

Utilize the Molded Waterstop Intersections below in conjunction with WARCO BILTRITE's Extruded Waterstop profiles above to create custom systems that fit a multitude of applications.

TYPE				
			6"	9"
Union 	C 6" DBU	C 9" DBU	C 6" DBCBU	C 9" DBCBU
Flat Cross 	C 6" DBFC	C 9" DBFC	C 6" DBCBFC	C 9" DBCBFC
Flat Tee 	C 6" DBFT	C 9" DBFT	C 6" DBCBFT	C 9" DBCBFT
Flat Ell 	C 6" DBFE	C 9" DBFE	C 6" DBCBFE	C 9" DBCBFE
Vertical Tee 	C 6" DBVT	C 9" DBVT	C 6" DBCBVT	C 9" DBCBVT
Vertical Ell 	C 6" DBVE	C 9" DBVE	C 6" DBCBVE	C 9" DBCBVE

For more information  
please visit us at [warco.com](http://warco.com)

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