

Water Distribution

Product/Use	Type	Standards/Specifications	Approved Manufacturer	Description/Model	Requirements/Comments
Water Main	Polyvinyl Chloride (PVC) 100 mm to 300 mm	Minimum DR 18 (Class 235) AWWA C900 CSA B137.3 ASTM D3139 NSF/ANSI 61 Certification OPSS.MUNI.441	IPEX	Blue Brute®	Must be blue in colour Supplied with gaskets CIOD
			NAPCO (Royal Pipe)	CIOD PVC Pressure Pipe	
	Polyvinyl Chloride (PVC) 350 mm to 450 mm	Minimum DR 18 (Class 235) AWWA C900 CSA B137.3 ASTM D3139 NSF/ANSI 61 Certification OPSS.MUNI.441	IPEX	Centurion®	Must be blue in colour Supplied with gaskets CIOD *Materials for pipes over 450 mm must be selected in consultation with the Town
			NAPCO (Royal Pipe)	CIOD PVC Pressure Pipe	
	High Density Polyethylene (HDPE)	Minimum DR 11 CSA B137.1 AWWA C906 NSF/ANSI 61 Certification OPSS.MUNI.441	KWH Pipe Ltd		Thermal butt fusion joints *Only to be used in specialized installations with approval by Town
Fittings	Ductile Iron	AWWA C153/ANSI A21.53 AWWA C110/ANSI A21.10 AWWA C104/ANSI A21.4 Minimum Pressure Class 350 OPSS.MUNI.441 NSF/ANSI 61/372 Certification	Tyler Union/Bibby		Epoxy coated Cement lined Mechanical joint retainer ends
			SIGMA Corporation		
			STAR® Pipe Products		
Hydrants		AWWA C502 OPSS.MUNI.441 NSF/ANSI 61/372 Certification	Mueller Canada	Century	Hydrant painted chrome yellow 100mm ULC Stortz pumper connection Two 63.5 mmside ports (CSA thread) 25 mm operating nut - open left Self draining 1.7 m cover minimum Beakaway flange
Hydrant Leads		Minimum DR 18 (Class 235) AWWA C900-16 CSA B137.3 ASTM D3139 OPSS.MUNI.441 NSF/ANSI 61 Certification	IPEX	Blue Brute®	150 mm diameter lead
			NAPCO (Royal Pipe)	CIOD PVC Pressure Pipe	Fully restrained
					No bends permitted
Hydrant Flex Marker			Flextake	C804	1.2 m yellow post with red hydrant graphic on white reflective background at top of post (both sides)
Hydrant Sign					Red hydrant graphic on white reflective background 250 mm x 350 mm Aluminum, engineer grade

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Valves	Resiliant Wedge Gate Valves	AWWA C509 & C515 AWWA C550 ASTM A536 & A126 OPSS.MUNI.441 NSF/ANSI 61/372 Certification	Mueller Canada	A-2361 MJ by MJ	Open left (counter clockwise) Epoxy coated, Ductile Iron Mechanical joint ends Stainless steel hardware
			Clow Canada	A2639 or A2640	
			AVK	Series 45/Series 65	
Tapping Sleeve	Ductile Iron	ASTM D2000 & ASTM A3 AWWA C223 NSF/ANSI 61 & 372 Certification	Robar Industries Ltd	6906	Epoxy Coated
			Smith-Blair	622	Stainless steel hardware
			Mueller	H-304 MJ or flange out let	Mechanical joint outlet
	Polyvinyl Chloride (PVC)	ASTM D2000 AWWA C223 & C213 & 207 NSF/ANSI 61 & 372 Certification	Robar Industries Ltd	A-2361	Stainless steel
			Smith-Blair	663	Stainless steel hardware
					Mechanical Joint Outlet
Tapping Valve	Resiliant Wedge Gate Valves	AWWA C509 & C515 ASTM A536 NSF/ANSI 61 & 372 Certification	Mueller	H-687	Resilient seat tapping valve
			Clow Canada	F-6114	Open left (counter clockwise)
			AVK	Series 45/Series 65	Epoxy coated ductile iron
					Flange X mechanical joint end Stainless steel hardware
Air Release	Combination Air & Vacuum Release Valves	AWWA C512 ASTM A536 NSF/ANSI 61 & 372 Certification	Cla-Val	36 Series	Epoxy coated
			Val-Matic	VM201C or VM202C	Single Body Housing
					Sized to manufacturers specification
Presssure Reducing	Pressure Rreducing Valves	ASTM A536 NSF/ANSI 61 & 372 Certification	Mueller (Singer Valve)	Series 106/206 PR	Flanged ends
			Cla-Val	Model 90-01	To be installed in a chamber
					To be approved by Town
Joint Restraints	For PVC pipe to Mechanical Joint Fitting 100 mm to 400 mm	ASTM F1674 AWWA C900 AWWA C111/A21.11 UNI-B-13-94	STAR® Pipe Products	PVC Stargrip Series 4000	
			Romac Industries Inc	Grip Ring (100 to 300mm only)	
			SIGMA CORPORATION	ONE-LOK Series SLCS	
	For Ductile Iron Pipe to Mechanical Joint Fitting 100 mm to 400 mm	ASTM F1674 AWWA C151/A21.51 AWWA C111/A21.11	Romac Industries Inc	Grip Ring (100 to 300mm only)	
			SIGMA Corporation	ONE-LOK Series SLDE for DI	
	For PVC Pipe Bell and Spiggot Joint	ASTM F1674 & A536 AWWA C900 UNI-B-13-94	SIGMA Corporation	PV-Lok for C900 PVC Pipe	
			STAR® Pipe Products	Pipe restainers series 1100	
	For Ductile Iron Pipe Pipe Bell and Spigot Joint	AWWA C151/A21.51	STAR® Pipe Products	Pipe restainers series 1100C	For connections and repairs to
Couplings	For PVC, Ductile Iron, Cast Iron Pipe	ASTM A536 NSF/ANSI 61 & 372 Certification	Romac Industries Inc	Macro HP (Two Bolt) 4-12" ALPHA (TWO BOLT) 4-12"	Dresser Style Epoxy coated
			Krausz	Hymax Grip Hymax	Stainless steel hardware
	For HDPE Pipe	ASTM A536 NSF/ANSI 61 & 372 Certification	Krausz	Hymax	Dresser Style
			Romac Industries Inc	ALPHA	Epoxy coated
					Stainless steel hardware

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Repair Clamps	For PVC, Ductile Iron, Cast Iron Pipe	NSF/ANSI 61 & 372 Certification UL Certification WQA	Cambridge Brass	Teck 425 Series c/w Tapered Gasket	Stainless steel hardware
			Mueller	500 Series Clamp - Full Seal	
			Robar	5600 Series Repair Clamp (5616 if over 12" 5626)	
Warning Tape	For Non Potable Water Main		Supplied by Seton Canada or approved equal		3.5 mm polyethylene underground warning tape 75mm wide, blue in colour with 50mm black lettering "CAUTION: BURRIED NON-POTABLE WATER LINE BELOW"
Valve Box	For watermain <400 mm	ASTM A48	Bibby-Ste-Croix	VB 2200 Slide Type 1.65 to 2.15	Cast Iron
			STAR® Pipe Products	Cat VB-0003 Item VB666A	130 mm diameter slide type (Cover 185 mm diameter)
			SIGMA CORPORATION	Valve Box	Valve box cover must be stamped "WATER"
Water Service Connections	Crosslinked Polyethylene 25mm to 50mm	SDR 9 AWWA C904 ASTM F876, F877 & F2023 CSA B137.5 NSF/ANSI 14 and 61 Certification	REHAU	MUNICIPEX®	
			IPEX	Blue 904®	
	Copper 25mm to 50mm	ASTM B88 AWWA C800 NSF/ANSI 61 & 372 Certification	Great Lakes Copper Ltd	Seamless copper water tube type "K"	
Service Saddle	For services 25-50mm on PVC and Ductile Iron pipe	NSF/ANSI 61 & 372 Certification	Robar Industries Ltd	Series 2606 product #2626	Stainless Steel
			Cambridge Brass	403 Teck Saddle Series 8403	Double Bolt
Cororation (Main) Stops	25mm to 50mm	AWWA C800 NSF/ANSI 61 & 372 Certification ASTM B62 & B584	Mueller	300 B-25008N	Ball valve
			Cambridge Brass	301NL-A4H4 (25 mm) 301NL-A5H5 (31 mm) 301NL-A6H6 (38 mm) 301NL-A7H7 (50 mm)	AWWA CC Taper Thread Inlet x Compression outlet No Lead
Curb Stops	25mm to 50mm	AWWA C800 NSF 61 & 372 Certification ASTM B62 & B584	Mueller Canada	300 B-25209N	Ball valve
			Cambridge Brass	202NL-H4H4 (25 mm) 202NL-H5H5 (31 mm) 202NL-H6H6 (38 mm) 202NL-H7H7 (50 mm)	Compression joints Non draining No Lead
Service Couplings	25mm to 50mm	AWWA C800 ASTM B62 & B584 NSF/ANSI 61 & 372 Certification	Mueller Canada	H-15403N	Compression joints
			Philmac	UTC -Universal Transition Coupling	Couplings not permitted in new construction between mainstop and curb stop (property line) or services <20m in length
			Cambridge Brass	118NL-H4H4 (25 mm) 118NL-H5H5 (31 mm) 118NL-H6H6 (38 mm) 118NL-H7H7 (50 mm)	
Service Boxes			Mueller Canada	8D1(25mm) 8D2 (31-50mm)	Epoxy coated cast iron
			Clow Canada	D1 (25mm) or D2 (31-50 mm)	Box top must be stamped "WATER"
					Standard pentagon screw type brass plug 13mm Type 304 stainless steel rod (36")with SS cotter pin Minimum depth of burry 1.7 m Adjustable

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Anodes	All metallic pipe, fittings, and appurtenances	ASTM B-418 Type II or ASTM B-843 Type M1 OPSS.MUNI.442			Magnesium or Zinc
Sacrificial Nuts	On all bolts	ASTM B-418 Type II	Maple Agency	Protecto Cap 175P190	
			Duratron	DSN0750	
Insulation	For direct burried water pipes with <1.7m cover		Dow Chemical Co.	Styrafoam Highload 100	Extruded polystyrean Minimum 50mm thick
Tracer Wire	For all non-metalic water main, hydrant laterals and service pipe (direct buried)				#10 Gauge TWU multi-stranded copper White plastic coating Splices made with DryConn waterproof connectors For Horizontal Direction Drilling applications additional requirements apply.
Automatic Flushing Station Meter Pit		NSF/ANSI 61 & 372 Certification AWWA C800 NSF/ANSI 61 & 372 Certification AWWA C800	Kupferle	Eclipse 9800A (25 mm,)	203-CS-18-72-F-B-B-S non freezing
			Kupferle	Eclipse 9800 (50 mm)	
Meter					Meter to be specified in consultation with the Town
Sample Stations			D.R.INNOVATIONS INC	Test Tap	

“All chemicals and materials used in the alteration or operation of the drinking water system that come into contact with water within the system shall meet all applicable standards set by both the American Water Works Association (“AWWA”) and the American National Standards Institute (“ANSI”) safety criteria standards NSF/60, NSF/61 and NSF/372.”