

Builder/Owner Name:	Model Number:	Application Number:
Address:	Lot #:	Elevation:

Size and capacity of potable water system pipe shall be designed in accordance with OBC Division B, 7.6.3.1. Where both hot and cold water is supplied to fixtures in **residential buildings** containing **one or two dwelling units**, the water system may be sized using OBC Table 7.6.3.4. forming part of Sentence 7.6.3.4.(5); where the minimum water pressure at the entry to the building is 200 kPa, the total maximum length of the water system is 90 m, and the hydraulic loads for maximum separate demands on water distribution system piping are not less than 100% of the total hydraulic load of the fixture units given. **Complete Part 1 of this form.**

Is the property served by the following (Enter Yes or No):	Municipal Water?	Municipal Sewer?
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Part 1 – Hydraulic Load, Fixture Unit

Calculation Water service pipe type (Pex or Copper)
If existing service, provide type and size

Item	Fixture or Device	Minimum size of Supply Pipe, inches	Private Use Hydraulic Load, fixture units	Quantity	Total Hydraulic Load, fixture units
1	Bathroom group* with 6 LPF flush tank	n/a	3.6		
2	Bathroom group* with greater than 6 LPF flush	n/a	6		
3	Bathtub with or without shower head	1/2	1.4		
4	Bathtub with 3/4 in. spout	3/4	10		
5	Bidet	3/8	2		
6	Clothes washer, 3.5 kg	1/2	1.4		
7	Dishwasher, domestic	3/8	1.4		
8	Hose bibb	1/2	2.5		
9	Hose bibb	3/4	3		
10	Hose bibb, combination hot and cold	1/2	2.5		
11	Lavatory, 8.3 L/min or less	3/8	0.7		
12	Lavatory, greater than 8.3 L/min	3/8	1		
13	Shower head, 9.5 L/min or less per head	1/2	1.4		
14	Shower head, greater than 9.5 L/min per head	1/2	2		
15	Shower, spray, multi-head, fixture unit per head	**	1.4		
16	Sink, bar	3/8	1		
17	Sink, kitchen, domestic, 8.3 L/min or less	3/8	1.4		
18	Sink, kitchen, domestic, greater than 8.3 L/min	3/8	2		
19	Sink, laundry (1 or 2 compartments)	3/8	1.4		
20	Water closet, 6 LPF or less with flush tank	3/8	2.2		
21	Water closet, greater than 6 LPF with flush tank	3/8	3		
22	Other				
Total Fixture Units				=	

* Bathroom group means a group of plumbing fixtures installed in the same room, consisting of one domestic-type lavatory, one water closet and either one 1/2 inch size bathtub, with or without a shower, or one 1/2 inch sized one-headed shower. For additional fixtures in the same room, add the additional fixture to the appropriate fixture count.

** Refer to manufacturer's recommendations.

Person who is responsible for providing information herein (please circle the correct choice):

Designer / Builder / Owner / Plumber

Name:	Date:	BCIN # or License #:	Signature:
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Part 2 - For Office Use Only

Sizing of Water Service Pipe

Size of Water Pipe inches	Water Velocity, metres per second (1)	
	Pex	Copper
	3.0 m/s (2)	2.4 m/s
	10 ft/s	8 ft/s
Hydraulic Load, fixture units		
3/4"	21	13
1"	43	31
1 1/4"	83	57

(1) OBC Table A-7.6.3.4.A is not intended to limit water velocities permitted by OBC Article 7.6.3.5(1).

(2) Velocities specified by National Plumbing Code 2012.

Design of Water Service Pipe

Pipe material, manufacturer:	
Velocity (metres per second)	=
Hydraulic Load (fixture units)	=
Water Service Pipe Diameter (inches)	=

Examiners' signature:	Date:
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