

DOMESTIC WATER MAIN SERVICE SIZING

Project: 761 Sylvan Lake Road- Talon Flats
 Building: Mixed Use Residential / Retail/Office
 User: (8) 1 bedroom, (12) 2 bedroom w/ 2 bath, 2278 Office/Retail (3 lavatories)

= User inputs
 = Calculated values
 = Estimated FU or DFU, due to IPC only dictating Drainage or Supply FU's for the given fixture type, not both.

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All fixture unit values and fixture types taken directly from 2015 IPC, chapter 6 and appendix E. Waste data taken from 2015 IPC, chapter 7.

Any fixtures not used in a specific project may be deleted.

Fixture Type	QTY	Total		Cold		Hot		Drainage	
		FU/ea	FU total	FU/ea	FU total	FU/ea	FU total	DFU/ea	DFU total
Bar Sink, Private		1	0.0	0.75	0.00	0.75	0.0	2	0.0
Bathroom Group, Private, Flush Tank	32	3.6	115.2	2.7	86.40	1.5	48.0	5	160.0
Bathroom Group, Private, Flush Valve		8	0.0	6	0.00	3	0.0	5	0.0
Bathtub, Private (w or w/o shower or jet attachments)		1.4	0.0	1	0.00	1	0.0	2	0.0
Bathtub, Public (w or w/o shower or jet attachments)		4	0.0	3	0.00	3	0.0	4	0.0
Bidet, Private		2	0.0	1.5	0.00	1.5	0.0	1	0.0
Clothes Washer (15 lb), Public, Automatic		4	0.0	3	0.00	3	0.0	3	0.0
Clothes Washer (8 lb), Private, Automatic	20	1.4	28.0	1	20.00	1	20.0	2	40.0
Clothes Washer (8 lb), Public, Automatic		3	0.0	2.25	0.00	2.25	0.0	3	0.0
Combination Sink & Tray		3	0.0	2.25	0.00	2.25	0.0	2	0.0
Dental Lavatory		1	0.0	0.75	0.00	0.75	0.0	1	0.0
Dental Unit or Cuspidor		1	0.0	0.75	0.00	0.75	0.0	1	0.0
Dishwashing Machine, Private, Automatic	20	1.4	28.0	-	-	1.4	28.0	2	40.0
Drinking Fountain, Offices, etc.		0.25	0.0	0.25	0.00	-	-	0.5	0.0
Emergency Floor Drain		-	-	-	-	-	-	0	0.0
Floor Drains (RE: 2015 IPC 709.4 for DFU Req'ts)		-	-	-	-	-	-	0	0.0
Floor Sinks (RE: 2015 IPC 709.4 for DFU Req'ts)		-	-	-	-	-	-	0	0.0
Kitchen Sink, Hotel/Restaurant, Faucet		4	0.0	3	0.00	3	0.0	4	0.0
Kitchen Sink, Private, Faucet (w or w/o Disposal and/or DW)	20	1.4	28.0	1	20.00	1	20.0	2	40.0
Laundry Tray (1 to 3 Compartments), Private, Faucet		1.4	0.0	1	0.00	1	0.0	2	0.0
Lavatory, Private, Faucet	3	0.7	2.1	0.5	1.50	0.5	1.5	1	3.0
Lavatory, Public, Faucet		2	0.0	1.5	0.00	1.5	0.0	1	0.0
Service Sink, Offices, etc., Faucet		3	0.0	2.25	0.00	2.25	0.0	2	0.0
Shower Head, Private, Mixing Valve		1.4	0.0	1	0.00	1	0.0	2	0.0
Shower Head, Public, Mixing Valve		4	0.0	3	0.00	3	0.0	2	0.0
Shower, 12.3 < Total Combined Flow Rate < 25.8 GPM		8	0.0	5	0.00	5	0.0	5	0.0
Shower, 25.8 < Total Combined Flow Rate < 55.6 GPM		10	0.0	6	0.00	6	0.0	6	0.0
Shower, 5.7 < Total Combined Flow Rate < 12.3 GPM		6	0.0	4	0.00	4	0.0	3	0.0
Urinal, Nonwater Supplied		-	-	-	-	-	-	0.5	0.0
Urinal, Public, 1" Flush Valve		10	0.0	10	0.00	-	-	4	0.0
Urinal, Public, 3/4" Flush Valve, 1 GPF or Less		5	0.0	5	0.00	-	-	2	0.0
Urinal, Public, Flush Tank		3	0.0	3	0.00	-	-	2	0.0
Wash Sink (Circular or Multiple), Each Set of Faucets		2	0.0	1.5	0.00	1.5	0.0	2	0.0
Water Closet, Private, Flush Tank	3	2.2	6.6	2.2	6.60	-	-	3	9.0
Water Closet, Private, Flushometer Valve		6	0.0	6	0.00	-	-	4	0.0
Water Closet, Public (1.6 GPF), Flush Tank		5	0.0	5	0.00	-	-	4	0.0
Water Closet, Public (1.6 GPF), Flush Valve		10	0.0	10	0.00	-	-	4	0.0
Water Closet, Public (Flushing >1.6 GPF), Flush Tank		5	0.0	5	0.00	-	-	6	0.0
Water Closet, Public (Flushing >1.6 GPF), Flush Valve		10	0.0	10	0.00	-	-	6	0.0
Water Closet, Public or Private, Flushometer Tank		2	0.0	2	0.00	-	-	4	0.0
Water Closet, Public, Flush Tank		5	0.0	5	0.00	-	-	4	0.0
Water Closet, Public, Flushometer Valve		10	0.0	10	0.00	-	-	6	0.0

BUILDING TOTALS: 207.9 134.5 117.5 292.0

Enter primary fixture flush type (type "Tank" or "Valve"):

Tank

	Flow (gpm)	Pipe Size (in)
Total Domestic Water:	67	2
Peak flow cold water:	51	2
Peak flow hot water:	48	2

Building Waste Main: 5

Additional domestic water uses (irrigation, pools, etc.) may affect main sizing and has not been accounted for in these calcs.

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2015 IPC Section 202: Bathroom Group: A group of fixtures consisting of a water closet, lavatory, bathtub or shower, including or excluding a bidet, an emergency floor drain or both. Such fixtures are located together on the same floor level.