

INFORMATION REQUIRED TO CALCULATE WATER SERVICE SIZE

1. Demand of building in gallons per minute. WSFU's _____ = (GPM) _____
2. Difference in elevation from main or external pressure tank to building control valve. (feet) _____
3. Size of the water meter. (When applicable) 5/8" __, 3/4" __, 1" __, 1-1/2" __, 2" __, 3" __, 4" __, 6" __
4. Developed length from main or external pressure tank to building control valve. (feet) _____
5. Low pressure at main in street or external pressure tank. (psig) _____

CALCULATE WATER SERVICE PRESSURE LOSS

6. Low pressure at main in street or external pressure tank. (value of # 5 above) _____
7. Water service diameter is _____. Material is _____. Pressure loss per 100 ft = _____ psi. X _____ (decimal equivalent of service length, i.e.; 65ft = .65) _____
(Subtract line 7. from line 6.) **subtotal** _____
8. Determine pressure **gain or loss** due to elevation, (multiply the value of # 2 above by .434) value of "8" _____
9. Available pressure after the bldg. control valve. (Subtract or add line 8. Enter in "B".) **subtotal** _____

CALCULATE THE PRESSURE AVAILABLE FOR UNIFORM LOSS (VALUE OF "A")

- B. Available pressure after the bldg. control valve. (from "9" above) Value of "B" _____
- C. Pressure loss of water meter (when meter is required or installed) Value of "C" _____
(Subtract line C. from line B.) **subtotal** _____
- D. Pressure at controlling fixture. Value of "D" _____
(Controlling fixture is _____)
(Subtract the value of D.) **subtotal** _____
- E. Difference in elevation between the building control valve and the controlling fixture in feet _____ X .434 psi/ft. Value of "E" _____
(Subtract the value of E.) **subtotal** _____
- F. Pressure loss due to water treatment devices, instantaneous water heaters and backflow preventers which serve the controlling fixture. Value of "F" _____
(Pressure loss due to _____)
(Subtract the value of F.) **subtotal** _____
- G. Developed length from building control valve to controlling fixture in feet _____ X 1.5 Value of "G" _____
(Divide by the value of G.) **subtotal** _____
(Water distribution piping material is _____)
Multiply by _____ 100
- A. Pressure available for uniform loss "A" = _____