

PART VIII**Appendix N****Format of Completion Certificate (Water Supply Works)****Completion Certificate (Water Supply Works)**

Certified that I/we have completed the plumbing work of water connection No. _____
for the premises as detailed below. This may be inspected and connection given.

Ward No. _____ Road No. _____ House No. _____

Existing water connection No. (if any) _____

Owned by _____

Owner's address : _____

Applicant's name : _____

son of _____

Address : _____

Situated _____ Size of
main _____ on _____ Street _____

Where main is _____ Size of service pipe _____

Size of ferrule _____ No. of taps _____ No. of closets _____

Capacity of Underground Reservoir (where required) _____

No. of other fittings and appliances _____

Road cutting and repairing fee _____

Paid Tk. _____ (Receipt No. _____ dated _____ (receipt enclosed)

Dated _____ Signature of the licensed plumber _____

Name and address of the licensed plumber _____

The Authority's Report/ Certificate :

Certified that the communication and distribution pipes and all water fittings have been laid,
applied and executed in accordance with Chapter 5 of Part 8 of the Bangladesh National Building
Code, and satisfactory arrangements have been made for draining off waste water.

The water supply connection will be made on _____

Date _____

Water Supply Authority _____

PART VIII Appendix O

Sizing of Cold Water Supply and Distribution Piping

The water distribution within the building may be an upfeed or downfeed system. The design principles are the same for both the systems. The principal difference in the calculation procedure is that in the up feed system the difference in elevation between the fixtures and the water supply main exerts the pressure that supplies water into the fixtures, but in the down-feed system the difference in elevation between the fixtures and the roof storage tank provides the pressure to overcome the pipe friction. The following are the recommended pipe sizing procedures:

- O.1 The sketch of the main lines, risers and branches serving different fixtures will have to be drawn.
- O.2 Determine the number and types of fixture that will be required on the basis of the Table 8.6.1 in Chapter 6.
- O.3 The demand weight of different fixture units may be computed in terms of water supply fixture unit (wsfu) in accordance with Table 8.O.1.
- O.4 The peak demand load (or maximum probable flow) in liter per minute may be estimated with the data obtained in Sec O.3 using Figure 8.O.1 or on the basis of the number of occupants according to their occupancy classification specified in Table 8.5.1.
- O.5 The equivalent length of the main lines, risers and branches will be determined. The equivalent length of different fittings may be estimated on the basis of the data presented in the Tables 8.O.2(a), 8.O.2(b) and 8.O.2(c) or from manufacturer's specification. The total equivalent length is the sum of the equivalent lengths of all pipes and fittings.
- O.6 The pressure loss through water meter may be determined on the basis of their operating characteristics as shown in Figure 8.O.6 (Disk type water meter). The data for other types of water meter may be obtained from the manufacturer.
- O.7 The minimum pressure required at different fixtures to produce adequate flow may be estimated on the basis of the type of fixtures or minimum size of supply pipe in accordance with Table 8.5.6.
- O.8 The average pressure drop in kPa per meter of equivalent pipe length may be computed as follows:

$$F_p = (P \pm 9.807 H - f) / L \quad 8.O.1)$$

Where, F_p = Average available pressure loss (kPa) per meter of equivalent length of pipe

P = Pressure (kPa) in the water main or zero for overhead gravity storage tank.

H = Height (m) of the highest fixture above the water main or difference (m) in elevation between storage tank and the fixture under consideration.