Table 9.3: General Requirements of Water based Fire Protection Systems

ITEMS	REQUIREMENTS
11. VALVE SUPERVISION	i. Valves on connections to water supplies, sectional control and isolation valves, and other valves in supply pipes to sprinklers and other fixed water-based fire suppression systems shall be supervised by one of the following methods: a. Central station, proprietary, or remote station signalling service b. Local signalling service that will cause the sounding of an audible signal at a constantly attended point c. Valves locked in the correct position d. Valves located within fenced enclosures under the control of the owner, sealed in the open position, and inspected weekly as part of an approved procedure
12. PRESSURE GAUGE	i. Pressure gauges with a control valve (gauge cock) having drain arrangement shall be installed on the upstream and downstream side of alarm check valves to read supply and system pressures. ii. Pressure gauges shall be installed on top of each sprinkler riser and in each zone control valve assembly. iii. The pressure gauges shall be rated for the system working pressure and water temperature service and approved by the Civil Defence department as per **Section 6. of this chapter.** iv. The maximum reading of the scale shall be 150% of the maximum system pressure and each scale shall have divisions not exceeding 0.2bar. v. All the pressure gauges shall be filled with glycerin liquid to prevent damage of their needles due to the system water pressure surge.
13. BREECHING INLET	i. A breeching inlet shall be provided for the building active systems. ii. A separate dedicated breeching inlet, located within 18 m of fire truck parking, shall be provided directly to fire water tank to refill directly by the Civil Defence fire trucks. A signage “FIRE WATER TANK DIRECT REFILLING” shall be provided for such a breeching inlet. iii. See **Chapter 2, Section 2.10.2.** for signage. Signage shall clearly distinguish the set feeding the building active systems and the one feeding directly fire water tank. iv. A breeching inlet shall be instantaneous male coupling inlets, located at the Fire Access level for Civil Defence. Civil Defence breeching inlets shall be located in an easily accessible and visible location, especially at the front side of the buildings, within 18 meters from the Civil Defence vehicle approach road. v. There shall be no shutoff valve in the fire department connection. vi. Fire department connections shall be located not less than 457 mm nor more than 1219 mm above the finished ground level. vii. Breeching inlets shall be equipped with caps to protect the system from the entry of dust and debris.
14. HOSE CABINET	i. Hose cabinet shall be of a size sufficient to accommodate the corresponding piping, landing valve, hose, nozzle and extinguishers. ii. Within the cabinet, installation shall be such that there is 25.4 mm space between any part of the cabinet and landing valve handle, either in closed position or open position. iii. Where a fire resistance rated construction is penetrated by a hose cabinet, especially at fire resistance rated corridors, such fire-resistance rating of the wall construction shall be maintained by a fire-resistance rated cabinet and installation.