6.28 Fire Hydrants

The aboveground fire hydrant shall be of the breakable pillar type with two nozzles of 2 ½ inches and one nozzle of 4 inches outlet conforming to ADWEA specification.

The underground fire hydrant shall be of screw down type of DN 80 size with screwed 2½ inches round threaded outlet conforming to ADWEA specification. Most of the installed Fire Hydrants in Al Ain are underground type; however the Civil Defence has changed their requirements to use only Pillar type hydrants in water networks. Therefore (unless otherwise specified) only Pillar type shall be specified.

The number and location of external fire hydrants is dependent on site planning, building design and the fire risk associated with the development land use. Hydrants are to be positioned along Civil Defence access routes. Hydrants shall be located at 150 m spacing.
Hydrants should be clearly visible and marked with approved signage .

The details of the fire hydrants shall be as per AADC standard detail drawings.

6.29 Fire Fighting Requirements

The design criteria of fire fighting in water distribution systems in all new developments shall be in accordance to the requirements of the " Water Distribution Code" published by the RSB and the requirements of the Civil Defence.

The Table below summarize the Minimum Fire Fighting Flow requirements stated in the Water Distribution Code (Version 3.0, July 2010).

Table 12: Minimum Fire fighting Flow Requirements (Water Distribution Code)

Characteristic	***Minimum***
Pressure	1.25 bar (12.5 m)
Fire Flow	1800 litre/minute
Network pipe diameter	100 to 150 mm
Fire Duration	120 minutes

Notes : (Abstracted from the WDC)
1- Residual pressure should be measured at the fire hydrants connection with simultaneous design fire flow discharge and Peak Daily Demand (PDD).
2- Supplementary fire flow may be required for high fire risk premises.