

3.3. Hose Reel Systems

- 3.2.1.** The requirements for Hose Reel System material, design, installation shall be as per **Table 9.5.** and the General Requirements of **Table 9.3.**

Table 9.5: Fire Hose Reel System Requirements

ITEMS	REQUIREMENTS
1. DEFINITION	<ul style="list-style-type: none"> i. Fire hose reel systems are Class II systems, pressurized with water having a permanent water supply from fire water pumps and fire water storage tanks. The fire hose reel system comprises of one or multiple vertical riser pipes or horizontal runs of piping that are connected to the 25 mm diameter outlet valve, 30 m long re-in forced rubber lined (RRL) hose with hose nozzle that are placed inside the fire hose cabinet for the use of trained fire fighting personnel or by occupants as first response if it is safe to do so. ii. Fire hose rack systems are class II systems, pressurized with water having permanent water supply from fire water pumps and fire water storage tanks. Fire hose rack system comprises of one or multiple vertical riser pipes or horizontal runs of piping that are connected to the 40 mm diameter outlet valve, 30 m long fire hose, folded vertically and attached over the pins in an approved manner. The system is for the use of trained fire fighting personnel or by occupants as first response if it is safe to do so.
2. COMPONENTS	<ul style="list-style-type: none"> i. Fire Pumps, Controller, Fire Water Tank, Pipes, Fittings, outlet valve, Hose Cabinet, Hose Reel/Hose Rack , Nozzle, Breeching inlet and Signs.
3. FIRE PUMP CAPACITY	<ul style="list-style-type: none"> i. The fire pump set shall consist of 1 Electric driven pump and 1 diesel driven pump complete with controllers. ii. Pump capacities shall comply with Section 4. in accordance with the occupancy type. iii. Pump pressure shall be such that the most remote Hose Reel or Hose Rack pressure shall not be less than 4.5 bar.
4. PIPES	<ul style="list-style-type: none"> i. The minimum pipe size for serving a single fire hose reel shall not be less than 25 mm diameter, and serving single hose rack shall not be less than 40 mm and the pipe line serving two or more hose connections shall not be less than 50 mm in diameter. ii. The minimum wall thickness shall be as per schedule 40. iii. Pipes shall be rated a for working pressure of 4.5 bar at the most remote point of the piping network.
5. FITTINGS	<ul style="list-style-type: none"> i. Fittings shall be rated for working pressure of 4.5 bar at the most remote point of the piping network.
6. VALVE OUTLET	<ul style="list-style-type: none"> i. The Valve outlet shall be 25 mm for the hose Reel System. ii. The valve outlet shall be 40 mm for the hose Rack System.
7. HOSE	<ul style="list-style-type: none"> i. The hose for the hose reel system shall be 25 mm in diameter, 30 m long re-inforced rubber lined (RRL) hose with hose nozzle , wrapped on a rotating drum. ii. The hose for the hose rack system shall be 40 mm in diameter, 30 m long fire hose, folded vertically.