3.2. Dry Riser Systems

3.2.1. The requirements for Dry Riser System Material, design, installation shall be as per Table 9.4. and the General Requirements of Table 9.3.

Table 9.4: Dry Riser System Requirements

ITEMS	REQUIREMENTS
1. DEFINITION	i. Dry riser systems are normally dry without a permanent fire pump or water connection to it and depend on the Civil Defence fire truck to pump water into the system. Dry riser system comprises of one or multiple vertical riser pipes or horizontal runs of piping that are terminated to the two way breeching inlets located at ground level and connected to the 65mm diameter landing (Fire Department) valve outlets coupled or uncoupled with 65mm diameter, 30 m long, Civil Defence approved hose with multipurpose hose nozzle that are placed inside a cabinet for the use of Civil Defence Department personnel or other trained fire fighting personnel.
2. COMPONENTS	i. Pipes, fittings, landing valve, hose cabinet, hose , nozzle, breeching inlet and signs.
3. PIPE SIZES	i. The minimum pipe size for serving a single 65 mm diameter hose valve shall be not less than 65 mm in diameter and the pipe line serving two or more hose valves shall be not less than 100 mm diameter. ii. Minimum wall thickness shall be as per schedule 40.
4. FITTINGS	i. Fittings shall comply to Table 9.3.7.
5. LANDING VALVE	i. Landing Valves shall be Class I, 65 mm, instantaneous connection outlet, approved and listed by Civil Defence as per tests mentioned in Section 6. of this chapter. ii. The installation of the landing valve shall be such that it is easily accessible and operable. iii. The landing valve shall be installed at a height of not less than 900 mm and not more than 1200 mm from the finished floor level.
6. FLOW AND PRESSURE	i. Landing valves, piping, fittings, breeching inlet and connections shall designed to withstand 250 gpm at 6.9 bar. ii. If the residual pressure exceeds 7 bar at the fire hose connection, an approved pressure reducing valve shall be introduced to restrict the pressure to 7 bar.
7. HOSE	i. Hose shall be 65 mm, 30 m long, approved and listed by Civil Defence as per material test standards mentioned in Section 6. of this chapter.
8. HOSE CABINET	i. The hose Cabinet shall comply to Table 9.3.14.
9. NOZZLE	i. The nozzle shall comply to Table 9.3.17.
10. SIGNAGE	i. The hose Cabinet shall have signage both in Arabic and English, clearly identifying the class and type of the hose connection as “Dry Riser System”
11. LOCATION	i. The hose Cabinet location shall comply to Table 9.3.14.
12. BREECHING INLET	i. The dry riser stand pipe system shall be terminated to a 2-way breeching inlet connection having 100 mm diameter flanged outlet with 2 no's of 65 mm diameter instantaneous male coupling inlets