

Standpipes

Level 2 Alterations work areas involving exits or corridors shared by multiple tenants and located on a building story more than 50 feet (15.24 m) above or below the lowest level of fire department vehicular access require a standpipe system. Though the class of the standpipe system is not specified by the IEBC, the system intended is a Class III standpipe system. The exception in IBC Section 905.3.1 allowing a Class I standpipe system instead of a Class III system is also allowed by the IEBC, though not specifically stated. The standpipe system must have hose connections from the highest story containing a work area down to the lowest level of fire department access [conversely, for work areas on building stories more than 50 feet (15.24 m) below the lowest level of fire department access (below ground), the standpipe system must have hose connections from the lowest story containing a work area up to the lowest level of fire department access].

[Ref. 803.3]

No fire pump is required as part of the standpipe system, provided the system is capable of delivering via fire department apparatus a minimum of 250 gpm at 65 psi (946 l/min at 448 kPa) at the topmost floor in a completely sprinkler-protected building or a minimum of 500 gpm at 65 psi (1,892 l/min at 448 kPa) in a building without complete sprinkler protection (Figure 9-9). When the standpipe system does not extend to the topmost floor of the building, the standpipe system must still be designed to meet these performance criteria for possible future extension to the topmost floor in order to avoid installation of a fire pump.

[Ref. 803.3, Ex 1]

You Should Know

The standpipe system must be installed in accordance with Section 905 of the IBC, but interconnection of multiple standpipe risers is not required. When standpipe risers are not interconnected, distinct prominent signage for each respective exterior fire department connection (FDC) should be provided indicating the standpipe(s) that are served by that FDC. ●



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FIGURE 9-9 Standpipe system.