# FIRE DEPARTMENT CONNECTION

A fire department connection (FDC) is required for most NFPA 13 and 13R automatic sprinkler systems and standpipe systems. An FDC is not required for automatic sprinkler systems protecting one- and two-family dwellings and townhouses. Fire apparatus can connect supply hoses to the FDC to pump additional water into sprinkler or standpipe systems. The piping arrangement between the FDC and the sprinkler riser depends on the type of automatic sprinkler system. **[Ref. 903.3.7]**

The location of and the fire hose threads installed on an FDC must be approved by the fire code official. The FDC's placement must not obstruct access to the protected building for other responding apparatus. The connection is located on the street side of buildings, and it must be easily recognized from the fire department vehicle access roadway (Figure 9-18). **[Ref. 912.2]**

To ensure that the water supply for the sprinkler or standpipe system is supported by fire apparatus, it is important that the FDC's location be identified. For existing buildings, the IFC authorizes the code official to require the installation of additional signs to help identify the FDC location (Figure 9-19). In many cases, the IFC and IBC only require automatic sprinkler protection for the fire area or a portion of the building. In such cases, a sign is required at the FDC to indicate the portion of the building served. In Group R-2 apartment complexes with multiple buildings, it is common to have a single FDC supplying multiple buildings, because it is more economical to provide separate water supply connections to serve a limited number of buildings. In these cases, the buildings served by the FDC should be identified. **[Ref. 912.2.2, 912.4]**
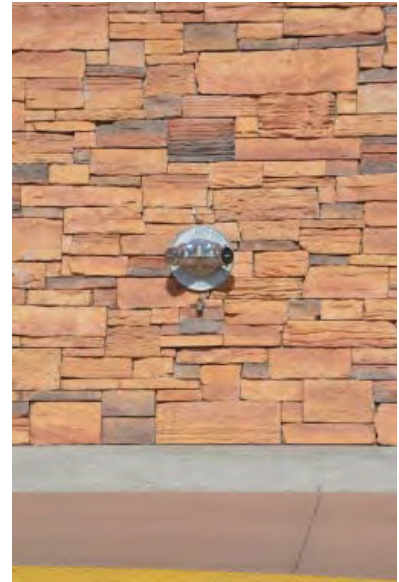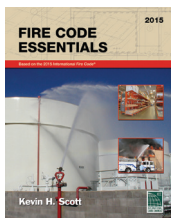


**FIGURE 9-18** Fire department connection for a wet-pipe automatic sprinkler system



**FIGURE 9-19** FDC direction sign



This excerpt is taken from ICC's *Fire Code Essentials: Based on the 2015 International Fire Code®*.

The I-Code Essentials series uses a straightforward, focused approach to explore code requirements with non-code language, allowing readers to gain confidence in their understanding of the material. Each book is an invaluable companion guide to the 2015 IBC, IRC, IFC or IECC for both new and experienced code users.