



# City of Grand Prairie Fire Department Fire Code Regulations

## Fire Department Connection (FDC) Requirements

According to NFPA 13 *Standard for the Installation of Sprinkler Systems*, Section 8.17.2.4.6, “Fire department connections shall be...at a location approved by the authority having jurisdiction.”

Section 912.2 of the 2015 *International Fire Code (IFC)*, adopted by the City of Grand Prairie states, “The location of fire department connections shall be approved by the fire chief.”

Based on best practices, loss history, and fire suppression operational doctrine, the Grand Prairie Fire Department (GPFD) requires that the FDC be remote from the building for nearly all commercial buildings, known as a “yard FDC”. This requirement is excepted for systems designed according to NFPA 13R and 13D standards.

If at all possible, the FDC shall be located outside of the “collapse zone”, generally defined as a distance from the building equal to one and one-half (1½) times the height. It is recognized and acknowledged that this may not be possible due to property boundaries.

The following requirements must be adhered to:

1. The FDC must be easily accessible from either a fire lane or public street, collectively referred to in the codes as a “fire apparatus access road” and face the access road unless otherwise approved. (2015 IFC 912.2.1)
2. The FDC must be within 100 feet of a fire hydrant attached to a water line capable of supplying the system demand. (Amendment to IFC 912.2.3)
3. The FDC and hydrant must be located on the same side of the street to avoid having to block the street with hose. (2015 IFC 912.2)
4. The FDC shall be protected from vehicular traffic, by being set back from a curb, with bollards, or by other approved means. (2015 IFC 312, 912.4.3)
5. A clear working space of 36 inches or more horizontally and 78 inches vertically shall be maintained. (2015 IFC 912.4.2)

FDC’s must be configured in the following manner:

1. Vertical piping painted red
2. Address and/or suite numbers corresponding to the building served stenciled in a contrasting color vertically on the pipe.
3. Marked with permanent signage indicating the required pump pressure *if it exceeds 150 psi*.



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4. Multiple FDC's that supply different systems in a single building must be identified according to system that they supply
5. 5-inch Storz fitting with a latch on the outside ring
6. Hose connection Storz fitting mounted with a 30-degree down bend. This fitting must be appropriately listed. Be aware that there have been reports of poorly-manufactured cast fittings instead of the customary machined. These will almost never be listed. Hose with fittings must be able to be attached and latched.

**Exceptions:**

1. NFPA 13R residential systems, (2½-inch single or Siamese fitting is permitted)
2. 13D systems.

A Knox® locking cap is encouraged to secure the FDC and connection fitting. In the event of repeated tampering or vandalism, this may be required. No type of security cap, other than Knox® brand, is permitted. (2015 IFC 912.4.1)