



Yuma County Department of Development Services

2351 W. 26th Street, Yuma, AZ 85364

Fire Department Connection (FDC Policy)

1. Purpose:

Identify minimum construction standards and prioritize locations for fire department connections. The connections will provide fire department apparatus-pumpers the ability to connect to a sprinkler systems installed within a structure.

2. Legislative Authority:

2003 International Fire Code (IFC)

3. Definitions:

Fire Department Connection (FDC): Arrangement of piping in which pumping apparatus connects to a building's standpipe and or sprinkler system.

Siamese Connection: An inlet with two or more couplings to which a hose can be attached so that pumping apparatus can provide additional water into the sprinkler system of a building.

Check Valve: A device or means to prevent backflow; see backflow preventer as defined within the adopted plumbing code.

4. Policy:

1. A *check valve* shall be located just below the *FDC Siamese connection*. The *Siamese connection* shall have 2 (two), 2 ½ inch swivels with National Standard Threads (NST) and shall be provided with listed caps or plugs.
2. *FDC's* shall be remote from the building and comply with the following criteria:
 - A. The height of the *Siamese connection* shall be between 30" and 42" to the center of the opening, measured from the finished grade.
 - i.* *FDCs* shall be oriented to the street unless otherwise noted during plan review.
 - ii.* *FDCs* shall be located within 150 feet of an approved hydrant and a minimum of 50 feet from the building served.
 - iii.* Connections to municipal water systems or private water supplies shall meet the requirements of the provider.

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iv. Backflow prevention, check valve, shall be provided and installed in accordance with the water provider, NFPA 13, and the adopted plumbing code.

v. Water use agreements shall be provided to the Fire Code Official upon application for construction permits.

B. As required by NFPA 24, underground piping requires a minimum cover of 30" , however 36" minimum is required if the piping will be located under a driveway or roadway. Forty-two (42") of cover is required for piping located under a railway, unless railway requirements are more restrictive. All measurements are from the top of pipe to the finished grade.

C. Piping through or adjacent to any underground structural element requires a minimum of two inches of clearance around the piping to prevent damage from seismic activity or settling of the foundation.

D. A two-hour, 200 psi hydrostatic test showing no pressure loss is required for acceptance of *FDC* piping. All supply piping, both sprinkler and *FDC*, shall be ductile iron when located within five feet of a building foundation or under the slab of a building. Ductile iron pipe shall be properly protected from corrosion.

Requests to allow the installation of an FDC on a building shall be submitted in writing and justification provided. Requests shall be approved by the Fire Code Official and the Primary Responding Fire Service prior to the installation of the FDC.