**Purpose:** Provide guidance to building owners, property managers, or architects for designing and installing fire department connections and signs as required by building and fire codes.

**Scope:** All new and existing buildings with fire sprinkler or standpipe systems and exterior Fire Department Connections (FDC).

1.1. General Requirements

1.1.1. FDC installations shall follow NFPA 13, 2015 MSFC and 2015 IBC standards.

1.1.2. FDC's may be either exterior wall mounted or remote of the building mounted 18”- 48” AFF (placement subject to approval by AHJ).

1.1.3. NFPA 13 sprinkler systems and all standpipe system FDC’s shall be 2 ½” (inch) and designed to meet fire flow requirements of the building (see chart below).

1.1.4. All Fire Department Connections must be no more than 50 feet from a fire apparatus access road and no more than 100 feet from an accessible fire hydrant.

1.1.5. All Fire Department Connections must be within 50 feet of the main entrance be fully visible and immediately accessible by fire personnel (placement subject to approval by AHJ).

1.1.6. All new fire department connections shall be provided with locking caps in accordance with 2015 MSFC 912.3.1. Existing facilities with missing caps shall install locking caps. The only acceptable locking cap is the KNOX FDC cap. Caps may be ordered by visiting [http://www.knoxbox.com/store/Knox-FDC-Caps-and-Plugs.cfm](http://www.knoxbox.com/store/Knox-FDC-Caps-and-Plugs.cfm)

1.1.7. All FDC’s shall be protected from impact damage.

1.1.8. An external horn/strobe shall be located 96” AFF directly above fire sprinkler FDC's and signal upon water flow.

1.1.9. An identification sign meeting the following specifications shall be installed at each fire department connection:

1.1.9.1. Sign sizes to fit required lettering height and stroke

1.1.9.2. Sign stock shall be .08 gauge, reflectorized aluminum.

1.1.9.3. All lettering shall be white reflective lettering on red reflective background.

1.1.9.4. "FDC" lettering shall be 3 inches in height with a ½ inch paint stroke

1.1.9.5. System type lettering shall be 1 ½ inches in height with a ¼ inch paint stroke

1.1.9.5.1. System types as follows:

1.1.9.5.2. "Auto Sprinkler" for fire sprinkler system

1.1.9.5.3. "Deluge System" for deluge system

1.1.9.5.4. "Dry Standpipe" for dry standpipe system

1.1.9.5.5. "Wet Standpipe" for wet standpipe system

1.1.9.5.6. "Combination Standpipe" for combination wet standpipe and fire sprinkler system

1.1.9.6. Sign shall be mounted by the following:

1.1.9.6.1. On a sign post with the bottom of the sign a minimum 5 feet from grade, or

1.1.9.6.2. Attached to the structure minimum 5 feet directly above the fire sprinkler connection.
1.2. FDC inlet table:

<table>
<thead>
<tr>
<th>System</th>
<th>FDC inlet(s)</th>
<th>FDC signage</th>
</tr>
</thead>
<tbody>
<tr>
<td>NFPA 13-D</td>
<td>Not required</td>
<td>Not required</td>
</tr>
<tr>
<td>NFPA 13-R</td>
<td>One 2 ½” inlet for each 250 GPM system demand</td>
<td>Required</td>
</tr>
<tr>
<td>NFPA 13</td>
<td>Two 2 ½” inlets minimum plus additional inlet(s) for each 250 gpm above 500 gpm.</td>
<td>Required</td>
</tr>
<tr>
<td>Standpipe (wet, dry, combination)</td>
<td>Two 2 ½” inlets minimum plus additional inlet(s) for each 250 gpm above 500 gpm.</td>
<td>Required</td>
</tr>
</tbody>
</table>

1.3. Examples of Signage (for illustration only):

![FDC Signage Example]