



TECHNICAL POLICY

13 – 31 Fire Department Connection Size and Number of Outlets

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FDC's are to be capable of providing the highest system demand at the design pressure. The number of FDC inlets and pipe sizing are to meet the greater of the requirements of NFPA 13 & 14 or the following. The highest system demand does not include outside hose demand.

1. Number of inlets required:

- a. Highest system demand: 0 – 1,000 gpm = 2 – 2 ½" inlets.
- b. Highest system demand: greater than 1,000 gpm = 1 – 2 ½" inlet for each 500 gpm or fraction thereof of system demand.

(Note: 1 – 4" Storz connection may be substituted for 3 – 2 ½" inlets.)

2. Pipe sizing: The pipe and fittings between the FDC and the connection to the system are to be sized based on the following:

- a. Highest system demand: 0 – 1,000 gpm:
 - i) The total equivalent length of pipe and fittings is not greater than 100 feet = 4" piping is acceptable (smaller pipe may be installed where acceptable in NFPA #13).
 - ii) The total equivalent length of pipe and fittings is greater than 100 equivalent feet: The pipe size is to be determined by hydraulic calculations. The calculations are to be based on a maximum of 150 psi residual pressure at the FDC.
- b. Highest system demand: greater than 1,000 gpm:
 - i) The size of the pipe and fittings is to be based on hydraulic calculations.
 - ii) The calculations are to be based on a maximum of 150 psi residual pressure at the FDC.