



# CITY OF SAN JOSÉ, CALIFORNIA

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SAN JOSE FIRE DEPARTMENT

## STANDPIPES DESIGN, INSTALLATION, AND PLAN SUBMITTAL REQUIREMENTS

(DATE OF ISSUE – 09/01/99)

### 1.0 CONSTRUCTION STANDPIPE

- 1.1 Every building three stories or more in height shall be provided with not less than one standpipe for use during construction. Such standpipe shall be provided with fire department hose connections at accessible locations adjacent to usable stairs and the standpipe outlets shall be located adjacent to such usable stairs. Such standpipe systems shall be extended as construction progresses to within one floor of the highest point of construction having secured decking or flooring

### 2.0 PERMITS

- 2.1 This handout supplements the San Jose Fire Department's (SJFD) handout "FIRE SPRINKLER SYSTEMS DESIGN, INSTALLATION, AND PLAN SUBMITTAL REQUIREMENTS" (<AS> systems). See <AS> systems for submittal requirements.

**NOTE:** *Plans for standpipes may be submitted as part of the fire sprinkler plans. However, a separate permit application for standpipes shall always be required.*

### 3.0 DESIGN

- 3.1 All standpipes shall be designed and installed in accordance with the 1998 Edition of NFPA 14, "Standard for the Installation of Standpipes and Hose Systems", 1998 California Fire Code, the San Jose Municipal Code, Chapter 17.12 as modified by Ordinance 25838 and this handout.
- 3.2 Installations and materials shall comply with NFPA 13 as adopted herein. NFPA 14 sections 2-2, 2-3, 2-4, 2-5 are deleted.
- 3.3 Standpipe systems shall be "manual-wet" as defined in Section 3-2.5 of NFPA 14.

**EXCEPTION:** *A combined system shall be allowed only if the minimum flow rate required per Section 5-9.1.3 of NFPA 14 is supplied without requiring pressure from the fire department pumper.*

**NOTE:** *Where the static pressure at a hose connection can exceed 100 psi when pressurized by the building's fire suppression water supply, combination standpipes shall not be installed. Only a manual wet-standpipe system may be utilized. Each hose outlet shall be provided with a gauge configured as depicted in 1996 NFPA 13, Figure 4-14.3.4 for system riser drain connections, regardless of the type of standpipe system installed.*

- 3.4 The manual-wet standpipe water supply shall be from the automatic fire sprinkler system. The connection shall be made after the water flow indicator such that the sprinkler system will go into alarm should a hose valve be opened. The connection shall be equipped with a monitored valve and be restricted to a  $\frac{3}{8}$ " or smaller orifice.
  - 3.5 Standpipe sizing shall be in accordance with Table 5-7 or shall be hydraulically calculated per Sections 5-9.1.2 and 5-9.2.2 of NFPA 14.
  - 3.6 Locations of standpipe hose connections:
    - 3.6.1 Hose connections shall be located in accordance with Section 5-3 of NFPA 14. The SJFD requires all standpipe hose connections to be at the intermediate landings of exit stairways as indicated by the standard.
    - 3.6.2 The exception to Section 5-3.2(a) of NFPA 14 shall only be considered by a variance and is not generally approved.
    - 3.6.3 There shall be at least one siamese standpipe hose connection above the roof line when the roof slope is less than four units vertical to twelve units horizontal (33.3% slope).
    - 3.6.4 Additional hose connections shall be provided when required per Section 5-3.2(e) of NFPA 14.
- NOTE:** *Stairs leading to a roof hatch are not an approved roof access and, if required as indicated by item 3.6.3 of this handout, the roof outlet shall be on the roof, not the uppermost intermediate landing.*
- 3.7 In buildings where more than one standpipe is provided, the standpipes shall be interconnected at the bottom. Valves shall be provided to allow isolation of a standpipe without interrupting the supply to other standpipes in accordance with Section 4-2.2 of NFPA 14.
  - 3.8 Hose, hose racks, nozzles, and labels (as indicated in Sections 2-7.2, 2-7.3, 2-7.4, and 2-7.5 respectively) are not required in buildings equipped with approved fire sprinkler systems.
  - 3.9 All main and sectional system control valves, including water supply control valves, shall have a sign indicating the portion of the system that is controlled by the valves.

**4.0**      **DOCUMENT REVISIONS**

- 4.1      This document is subject to revisions. For general information and to be sure that you are reading the most current document, please call (408) 277-4656, and ask for the current version date.