



STANDPIPES - SUPPLEMENTAL DESIGN REQUIREMENTS

Effective Date: July 1, 2012

Every building, under construction, to be 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.

1.0 CONSTRUCTION STANDPIPE

- 1.1 Every building 30 feet and over above fire apparatus access for occupied floor 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 and inspection 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 2007 Edition of NFPA 14, "Standard for the Installation of Standpipes and Hose Systems", and 2010 California Fire Code, the San Jose Municipal Code, Chapter 17.12.1050 as modified by Ordinance 28839 and this handout.
- 3.2 This document is subject to revisions. For general information and to verify that you have the most current document, please call 408-535-7750, and request the current version date.
- 3.3 Installations and materials shall comply with NFPA 13 as adopted herein.
- 3.4 Standpipe systems shall be "manual-wet" as defined in Section 5.2.5 of NFPA 14 and labeled as "Primed Dry Standpipe" for SJFD emergency response operations.

NOTE: *Combination standpipes shall not be installed. Only a manual wet-standpipe system may be utilized. Each hose outlet shall be provided with a gauge similar as shown in 2007 NFPA 14, Figure 7.11.*



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- 3.5 The primed dry standpipe water supply shall be from the automatic fire sprinkler system. The connection shall be made before any 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 3/8" orifice and check valve. (No drill in clapper)

NOTE: *The Location shall be approved during Plan Check by San Jose Fire Department shall be depicted on the riser key plan(s). As general guidelines, the FDC should be located a minimum of 40 feet away from the building (where possible) and within 100 feet of a fire hydrant. High rise buildings shall have the requirements reviewed on a case by case basis. The hydrant should be located so that hoses can be laid directly to the fire department connection without crossing a road or driveway. The FDC shall be located near a main access point for the building.*

EXCEPTION: *The FDC may be located within 40 feet of the building, for cause, upon approval of the SJFD. If the SJFD allows the closer location of the FDC, it shall be located at the exterior of the building where no frangible or glazing materials are located above or within 5 feet on either side of the FDC.*

- 3.6 Standpipe sizing shall be in accordance with Table 7.8.2.1 or shall be hydraulically calculated per Sections 7.10.1.2 and 7.10.2.2 of NFPA 14.

NOTE: *Available pressure at supply fire apparatus shall be 150 psi.*

- 3.7 Locations of standpipe hose connections:

3.7.1 Hose connections shall be located in accordance with Section 7.3 of NFPA 14. The SJFD requires all standpipe hose connections to be at the intermediate landings of exit stairways as indicated by the standard. (on the side of stairs going up to next level).

3.7.2 Maximum coverage per outlet shall be 130 feet on path of travel.

3.7.3 Hose connections at the main floor per Section 7.3.2.1 of NFPA 14 shall only be considered by a variance and are not generally approved.

3.7.4 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 or less is consider accessible). Where roof lines do not provided continuous access to all accessible areas, individual standpipes to each area are required with suitable means for access.

NOTE: *Stairs leading to a roof hatch may not be an approved roof access and, if required as indicated by item 3.6.4 of this handout, the roof outlet shall be on the roof, not the uppermost intermediate landing.*

- 3.8 Each hose outlet location shall be provided with a gauge similar as shown in 2007 NFPA 14, Figure 7.11.
- 3.9 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 6.3.2 of NFPA 14. These Isolation valves shall be shown on the riser key plan(s).
- 3.10 Hose, hose racks, nozzles, and labels (as indicated in Sections 4.6.2, 4.6.3, 4.6.4, and 4.6.5 respectively) are not required in buildings equipped with approved fire sprinkler systems.
- 3.11 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. All isolation valves shall be monitored.
- 3.12 Fire Sprinkler and Standpipe Fire Department Connections (FDC) serving the same building shall be located directly adjacent to each other.
- 3.13 Buildings in excess of 200 feet long and or having frontage on multiple streets shall have multiple FDCs. The Locations shall be approved during Plan Check by San Jose Fire Department shall be depicted on the riser key plan(s).