

Fairfield Fire Department Fire Prevention Division

1200 Kentucky Street, Fairfield, CA 94533 Phone (707) 428.7375

STANDPIPES and HOSE SYSTEMS STD# 08-24 Effective Date: 01/01/2024

SCOPE

This standard is for the design, installation, and maintenance of standpipes installed on commercial properties within the jurisdiction of the Fairfield Fire Department, and is pursuant to the 2022 California Fire Code, Local Ordinance and the 2022 edition of NFPA 14 & 13.

<u>PLANS</u>

All plans submitted for permit shall include all items indicated in 2019 NFPA 14 Section 8.1.2 and the Fairfield Fire Prevention Bureau Standard 20-24. Plans shall include but not limited to the following:

- 1. A site plan, drawn to scale, indicating such details as:
 - a. The size and location of all water supplies.
 - b. Size, location and piping arrangement of fire department connections.
 - c. Footprint of foundation, or floor plan.
- 2. A floor plan drawn to scale, with dimensions
 - a. Floor plan with corridors, horizontal exits, stairwells and standpipe valve locations.
 - b. A piping plan with pipe size, hangers and bracing information.
 - c. Standpipe riser details,
 - d. Floor plan indicating the location of partitions and full height walls.
 - e. Full height cross section or schematic diagram, including structural member information if required for clarity.
 - f. Ceiling/roof heights and slopes not shown in the full height cross section.
 - g. Identify roof access locations and standpipes serving the roof.



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3. Where standpipe system piping is sized by hydraulic calculation, a complete set of calculations shall be submitted with the plans.

SPECIFICATIONS

- 1. The standpipes systems for Class I service, each standpipe shall be sized for a minimum flow of 500GPM.
- The minimum size of riser(s) for combined systems shall be 6 inches and the riser(s) shall be hydraulically calculated.

LOCATIONS OF HOSE CONNECTIONS

- 1. Hose connections and hose stations shall be unobstructed and shall be located not less than 30 inches or more than 42 inches above the floor.
- **2.** Standpipe Systems shall be provided with a $2\frac{1}{2}$ " hose connection in the following locations:
 - a. At each primary landing of every floor level and in every required exit stairway
 - b. On each side of the wall adjacent to exit openings of horizontal exits.
 - c. At the highest landing of all stairways with stairway access to a roof, and on the roof where stairways access the roof See NFPA 14 for exceptions).
 - d. Where the most remote portion of an un-sprinklered floor or story exceeds 150 feet of travel distance from a required exit or the most remote portion of a sprinklered floor or story exceeds 200 feet of travel distance from a required exit, additional hose connections shall be provided, in locations required by the fire code offical.
- 3. Hose connections shall be on the street side of buildings and shall be located and arranged so hose lines can be readily and conveniently attached to the inlets without interference from any nearby objects including buildings, fences, posts, or other fire department connections.



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- **a.** A connection through which the fire department can pump water into the standpipe system shall be provided. Hose connections shall be designated by a sign having raised letters at least one inch in size cast on a plate or fitting reading "STANDPIPE"
- **b.** There shall be no shutoff valve in the fire department connection.
- **c.** Hose connections shall be approved type and shall be equipped with standard caps, properly secured, and arranged for easy removal by the fire department.
- **4.** All new systems including yard piping shall be tested hydrostatically at 200psi pressure for two hours.
- **5.** A standpipe system, either temporary or permanent in nature, shall be provided in accordance with this standard.
- **6.** Multi-story buildings that have interior areas that any more than 100 feet travel distance from the nearest point accessible to fire apparatus shall be equipped with one or more approved Class I standpipe system.
- **7.** If a building is equipped with automatic sprinklers, the system may be a combined system.