



The following Standpipe System Plans Submittal Checklist is required information for standpipe system permit review. Use of the form does not guarantee that plans will be accepted on the first submittal, but will aid in reducing the number of re-submittals required due to the lack of information or conflicting information being provided. **This checklist should not be considered to be all-inclusive. Additional information may be required. Use of this checklist will not eliminate the requirement for a good knowledge and understanding of NFPA 14.**

For issuance of the standpipe system permit and prior to any installation and inspection request, the following items shall be completed, submitted and/or approved.

- Standpipe System permit application.
- Three (3) sets of shop drawings/plans.
- Payment for permit fees.

**Any material installed or work performed prior to the issuance of a permit will be subject to four times the permit fee and/or required to be removed. A hard copy of the permit and an approved set of plans are required to be maintained on the job site at all times and must be on site prior to any work being performed unless a limited early start request has been granted. Limited early start requests are considered on a case by case basis, are required to be submitted in writing on letter head and are not automatically granted.**

- 5.4.1.1** Class I standpipe systems in buildings not classified as high-rise buildings shall be permitted to be manual, automatic, or semiautomatic.
- 5.4.1.2** Class I standpipe systems in buildings classified as high-rise buildings shall be automatic or semiautomatic.
- 7.3.1 General.** Hose connections and hose stations shall be unobstructed and shall be located not less than 0.9 m (3 ft) or more than 1.5 m (5 ft) above the floor.
- 7.3.2 Class I Systems.** Class I systems shall be provided with 65-mm (2½-in.) hose connections in the following locations:
  - At each intermediate landing between floor levels in every required exit stairway
  - On each side of the wall adjacent to the exit openings of horizontal exits
  - In other than covered mall buildings, in each exit passageway at the entrance from the building areas into the passageway
  - In covered mall buildings, at the entrance to each exit passageway or exit corridor, and at the interior side of public entrances from the exterior to the mall
  - At the highest landing of stairways with stairway access to a roof, and on the roof where stairways do not access the roof.
- 7.4** Number of Standpipes.  
Separate standpipes shall be provided in each required exit stairway.
- 7.5.1** Where two or more standpipes are installed in the same building or section of building, they shall be interconnected.
- 7.6.1** Class I and Class III standpipes shall be at least 100 mm (4 in.) in size.
- 7.8.3.1** Where the residual pressure at a 40-mm (1½-in.) outlet on a hose connection available for trained personnel use exceeds 6.9 bar (100 psi), an approved pressure-regulating device shall be provided to limit the residual pressure at the flow required by Section 7.10 to 6.9 bar (100 psi).
- 7.10.1.1.1** For Class I and Class III systems, the minimum flow rate for the hydraulically most remote standpipe shall be 1893 L/min (500 gpm), and the calculation procedure shall be in accordance with 7.10.1.2.

**Page 2 is required to be completed and signed.**



**7.210.1.2 Hydraulic Calculation Procedure.**

- 7.10.1.2.1** Hydraulic calculations and pipe sizes for each standpipe shall be based on providing 946 L/min (250 gpm) at the two hydraulically most remote hose connections on the standpipe and at the topmost outlet of each of the other standpipes at the minimum residual pressure required by Section 7.8.
- 7.10.1.2.3** Common supply piping shall be calculated and sized to provide the required flow rate for all standpipes connected to such supply piping, with the total not to exceed 4731 L/min (1250 gpm).

**8.1 Plans and Specifications.**

- 8.1.1** Plans accurately showing the details and arrangement of the standpipe system shall be furnished to the authority having jurisdiction prior to the installation of the system.
- 8.1.2** Such plans shall be clear, legible, and drawn to scale.
- 8.1.3** The drawings shall show the location, arrangement, water supply, equipment, and all other details necessary to establish compliance with this standard.
- 8.1.4** The plans shall include specifications covering the character of materials used and shall describe all system components.
- 8.1.5** The plans shall include an elevation diagram.

**8.2 Hydraulic Calculations.**

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

- 9.1.1** Automatic and semiautomatic standpipe systems shall be attached to an approved water supply capable of supplying the system demand.
- 9.1.2** Manual standpipe systems shall have an approved water supply accessible to a fire department pumper.
- 10.1** A waterflow test shall be conducted on the water distribution system to determine the rate of flow and pressures available for system design and for fire-fighting purposes.

**10.2 Procedure.**

- 10.2.1** Tests shall be conducted during a period of expected normal demand.
- 10.2.2** The procedure shall consist of discharging water at a measured rate of flow from the system at a given location and observing the corresponding pressure drop in the mains.
- 10.2.3** Tests for the purpose of system design shall not be conducted more than 9 months prior to the commencement of the system installation.

**I attest that all required and applicable information noted above has been provided for review and approval and understand that inadequate or incorrect content is cause for permit denial.**

\_\_\_\_\_  
Signature of Contractor or Contractor's Representative

\_\_\_\_\_  
Date