



Tuesday e-Tech Alert July 27, 2004

Be Aware of the NFPA 14–2003 Floor Check Valve Requirement

A little-noticed new requirement for floor check valves in the 2003 edition of NFPA 14 on Standpipes is found in Section 6.2.5.1: “Each connection from a standpipe that is part of a combined system to a sprinkler system shall have an individual control valve and check valve of the same size as the connection.” Appendix figures A.7.10.1.3.1(a) and (b) were redrawn to show the check valves immediately downstream of the floor control valves. Check valves are not required by NFPA 13, and are not shown in Figure A.8.16.4.2(b) of the 2002 edition of the sprinkler standard.

Records show that the NFPA Committee on Standpipes made this change to eliminate the need to “prevent draining of the sprinkler systems when standpipes are impaired for maintenance”. The Standpipe Committee also suggested that the check valves will “prevent unintended activation of sprinkler system flow switches during re-filling operations”. However, the Standpipe Committee did not address several important issues, including the cost of these devices versus the perceived benefit, and the question of whether pressure reducing valves fulfill the requirement. Section 8.15.1.2.3 of NFPA 13 requires a ½-inch diameter pressure relief valve on the downstream side of pressure reducing valves due to the fact that they can act like check valves and trap high downstream pressures.

NFSA has submitted a proposal to return to the wording of the 2000 edition of the standpipe standard, eliminating the requirement for the floor check valves. In the meantime, care should be taken to comply with specifications that reference the 2003 edition of NFPA 14.

Sprinklers Sense Skylight Summer Sun

A summertime reminder. For many years NFPA 13 has required the use of intermediate temperature ratings (175-225 °F) where sprinklers are exposed to sunlight under glass or plastic skylights. Last week a sprinkler opened under a skylight at the Oregon Bach Festival Office at the University of Oregon, with resultant bad publicity and the potential for sprinkler contractor liability. Although the sprinkler discharge damaged paperwork and computers, it could have been worse – two weeks earlier the office was loaded with valuable manuscripts and musical scores.

NFPA 13 Formal Interpretation Broadens Applications of Figure 12.3.5.4.1.4

At the request of NFSA, the NFPA Sprinkler Committees have issued a Formal Interpretation on Figure 12.3.5.4.1.4 of the 2002 edition of NFPA 13. For an unknown

reason, this figure relating to in-rack sprinkler locations for protection of plastics was inserted into the standard with very specific dimensions, such that it shows storage of 3.5 ft wide pallet loads 54 ft high in a 24 ft long rack under a 60 ft ceiling. Formal interpretation 13-02-2 clarifies that the criteria from the figure can also be used with other heights, lengths, and pallet load sizes.

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Next NFSA Technical Tuesday Online Seminar: August 3, 2004

Subject: Proposed Changes to NFPA 13 – 2006 Edition

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