



Public Comment No. 22-NFPA 14-2014 [New Section after 1.4]

A.1.4

A.1.4 It is the intent of the Committee to recognize that future editions of this standard are a further refinement of this edition and earlier editions. The changes in future editions will reflect the continuing input of the fire protection community in its attempt to meet the purpose stated in this standard. Compliance with a future edition could be considered as providing an equivalent level of system integrity and performance of the system.

Statement of Problem and Substantiation for Public Comment

This language is similar to language in NFPA 101 annex and was added to NFPA 25 during the first draft meeting.

Related Item

Public Input No. 139-NFPA 14-2013 [New Section after 1.4.2]

Submitter Information Verification

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Submittal Date: Wed Nov 12 17:32:02 EST 2014



Public Comment No. 4-NFPA 14-2014 [Section No. 4.1.4]

4.1.4 –

The materials or devices listing instructions shall identify and specify the existing system components, including the fluids conveyed, with which the newly listed materials, devices, or components are compatible.

Statement of Problem and Substantiation for Public Comment

Delete this section. Compatibility is a complex subject that cannot be codified in a single section. The majority of the issues that the industry has encountered in regards to compatibility relate to CPVC. NFPA 13 has added language and the labs are working towards some compatibility protocols. NFPA 14 should wait to add compatibility language once the 13 Committee and the labs have landed in a more defined place.

[Related Item](#)

[Public Input No. 151-NFPA 14-2014 \[New Section after 4.1.3\]](#)

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Submittal Date: Tue Sep 23 10:02:02 EDT 2014



Public Comment No. 5-NFPA 14-2014 [Section No. 6.3.3]

6.3.3

Listed indicating-type valves shall be provided at the standpipe for controlling branch lines where the distance to the remote hose station exceeds ~~20- 40~~ ft (~~6- 12~~ m) measured along the pipe.

Statement of Problem and Substantiation for Public Comment

On horizontal standpipe systems in a mall, the 20'-0" limitation would be too restrictive and this change would require control valves for every hose valve. Granted the 40' number is arbitrary but I believe more realistic.

Related Item

Public Input No. 80-NFPA 14-2013 [Section No. 6.3.3]

Submitter Information Verification

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Submittal Date: Tue Sep 23 10:42:37 EDT 2014



Public Comment No. 7-NFPA 14-2014 [New Section after 6.3.6.1.3]

6.3.6.1.3.1

The location of the T-wrench shall be acceptable to the AHJ.

Renumber 6.3.6.1.3.1 to 6.3.6.1.3.2

Statement of Problem and Substantiation for Public Comment

Moved requirement to separate section

Related Public Comments for This Document

Related Comment

Public Comment No. 6-NFPA 14-2014 [Section No. 6.3.6.1.3 [Excluding any Sub-Sections]]

Relationship

Related Item

Public Input No. 83-NFPA 14-2013 [Section No. 6.3.6.1.3]

Submitter Information Verification

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Submission Date: Tue Sep 23 10:52:54 EDT 2014



Public Comment No. 6-NFPA 14-2014 [Section No. 6.3.6.1.3 [Excluding any Sub-Sections]]

Where a post-indicator valve cannot be used, an underground valve with ~~valve with~~ an approved roadway box, complete with T-wrench and ~~where acceptable to the AHJ, shall~~ wrench shall be permitted.

Statement of Problem and Substantiation for Public Comment

Added a space (editorial) and removed language in regards to the AHJ approval of the wrench location. Another comment will add that language as a subsection

Related Public Comments for This Document

Related Comment

[Public Comment No. 7-NFPA 14-2014 \[New Section after 6.3.6.1.3\]](#)

Related Item

[Public Input No. 83-NFPA 14-2013 \[Section No. 6.3.6.1.3\]](#)

Relationship

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Submission Date: Tue Sep 23 10:48:56 EDT 2014



Public Comment No. 26-NFPA 14-2014 [Section No. 6.4.2]

6.4.2

A listed check valve shall be in the fire department connection piping

6.4.2.1 In areas subject to freezing temperatures, the check valve shall be installed as near as practicable to the point where the fire department connection piping connects to the system main piping.

6.4.2.

4

2 In areas not subject to freezing temperatures, the check valve shall be installed at any location in the fire department connection piping.

6.4.2.3

The requirements of 6.4.2 shall apply to manual dry systems.

Statement of Problem and Substantiation for Public Comment

In areas not subject to freezing temperatures, it is very common for the FDC check valve to be installed above ground at the FDC inlet assembly. This avoids costly underground vaults and greatly facilitates Inspection, testing, and maintenance.

Related Item

First Revision No. 29-NFPA 14-2014 [Section No. 6.4.2]

Submitter Information Verification

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Submission Date: Thu Nov 13 17:13:00 EST 2014



Public Comment No. 27-NFPA 14-2014 [Section No. 6.4.5.2.2.1]

Delete Proposed Section 6.4.5.2.2.1

The sign in 6.4.5.2.2 shall not be required when the system demand pressure is less than 150 psi (10.3 bar).

Statement of Problem and Substantiation for Public Comment

Since signs have a significant probability of getting lost or stolen, it is important for the firefighters to have the sign indicating the pressure required at the FDC for the standpipe system. A FDC without a sign should be indicative of only 2 conditions (1) it is an older system installed prior to the time when NFPA 14 started to require the sign, or (2) the sign is missing. An inspector upon seeing a FDC for a standpipe system without a sign can investigate as to whether or not the sign is required. For those who attempt to draw a similarity with sprinkler systems, please consider that firefighters must operate the standpipe system inside the building on floors well above ground level. The pump operator should NOT be in a position to guess what pressure to use at the FDC and wait for the firefighters to call for more pressure thereby making firefighting a trial and error operation.

Related Item

First Revision No. 32-NFPA 14-2014 [Section No. 6.4.5.2.2]

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Submittal Date: Thu Nov 13 17:29:40 EST 2014



Public Comment No. 2-NFPA 14-2014 [Section No. 7.2.1]

7.2.1

The maximum pressure at any point in the system at any time shall not exceed 350- 400 psi (24- 27.6 bar).

Statement of Problem and Substantiation for Public Comment

Most PRV's for standpipe use are UL/FM listed to 400psi.

Related Item

[Public Input No. 2-NFPA 14-2013 \[Chapter 7\]](#)

Submitter Information Verification

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Public Comment No. 1-NFPA 14-2014 [Section No. 7.2.2.1]

7.2.2.1

Where express mains supply higher standpipe zones, there shall be no hose outlets on any portion of the system where the pressure exceeds 350- 400 psi (24- 27.6 bar).

Statement of Problem and Substantiation for Public Comment

I make this suggestion based on the fact that most PRV valves for fire protection standpipe use are UL/FM listed to 400psi., i.e. Zurn, Elkhart, Potter Roemer, etc.

Related Item

Public Input No. 1-NFPA 14-2013 [New Section after 6.1.1]

Submitter Information Verification

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Submittal Date: Wed Aug 06 09:52:09 EDT 2014



Public Comment No. 23-NFPA 14-2014 [Section No. 7.3.2.2.1 [Excluding any Sub-Sections]]

Hose connections on one side of a horizontal exit shall not be required where another outlet on that side of the horizontal exit can reach the portions of the building on the other side of the horizontal exit within the distances required by [7.3.2.2.1.1](#) or [7.3.2.2.1.2](#) that would have been protected by the outlet that was omitted.

Additional Proposed Changes

<u>File Name</u>	<u>Description</u>	<u>Approved</u>
7.3.2.2.1.docx	Revised 7.3.2.2.1	
A.7.3.2.2.1_2016_Horizontal_Exit.pdf	Annex figure for A.7.3.2.2.1	

Statement of Problem and Substantiation for Public Comment

The attached language is proposed to correlate NFPA 14 with the IBC. As currently written, NFPA 14 is opposite of the building code. A revised annex diagram is part of this change as well.

Related Item

[Public Input No. 104-NFPA 14-2013 \[Section No. 7.3.2\]](#)

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Submittal Date: Thu Nov 13 10:31:45 EST 2014

Terra View would not let me enter this without screwing it up.

7.3.2.2.1*

Where all floor areas are reachable from an exit stairway hose connection on the same side of a horizontal exit within the distances required by [7.3.2.2.1.1](#) or [7.3.2.2.1.2](#) as applicable, the hose connection on the other side of the horizontal exit shall be permitted to be omitted.

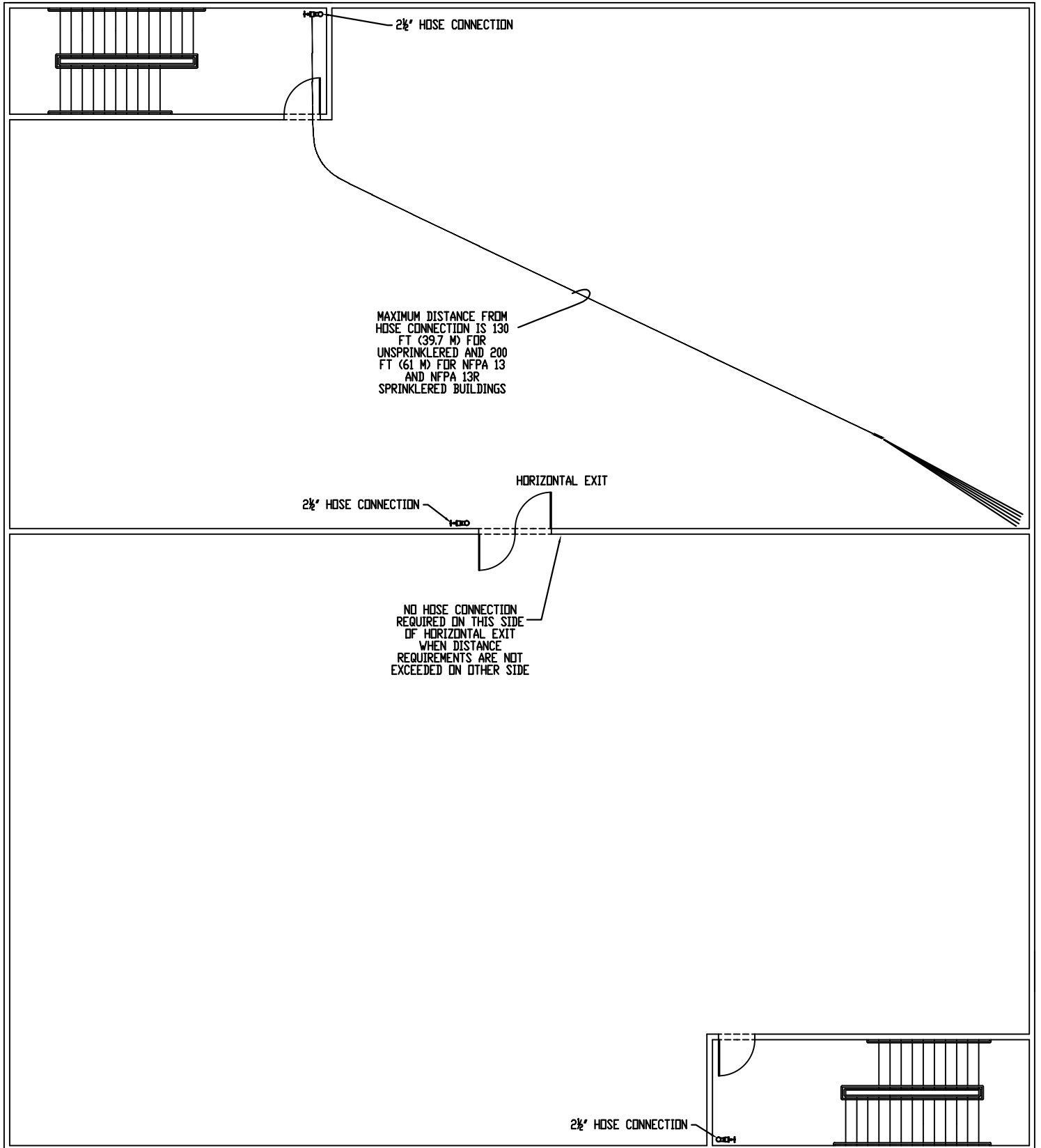


FIGURE A.7.3.2.2.1 Horizontal Exits



Public Comment No. 24-NFPA 14-2014 [Section No. 7.3.2.4]

7.3.2.4

Nonrequired unenclosed stairs connecting only two adjacent floors shall occupied by the same tenant shall not require hose connections.

A.7.3.2.4 This typically occurs in buildings where a tenant occupies 2 floors aand adds a convenience stair that is not a part of the required means of egress. This also occurs in hotel lobbies where the second floor is accessed from the first floor lobby by an unenclosed stair.

Statement of Problem and Substantiation for Public Comment

The proposed change is poorly worded. A non required stair that serves 4 stories also serves 2 stories by default. The intent of the PI was to cover convenience stairs between 2 floors. This typically occurs when the 2 floors are occupied by the same tenant and where these stairs are unenclosed. An enclosed non required stair serving only 2 stories in a 5 story building needs to have a standpipe. The responding fire department does not know whether or not the stair is required. When they enter a stair they expect to find a standpipe. This will result in an excessive delay in establishing firefighting operations. Such delay increases the size of the fire resulting in greater risk to the occupants and to the firefighters as well as an increase in property damage.

Related Item

First Revision No. 118-NFPA 14-2014 [Global Input]

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Submittal Date: Thu Nov 13 11:15:11 EST 2014



Public Comment No. 25-NFPA 14-2014 [Section No. 7.3.2.5]

Delete Proposed Section 7.3.2.5

A single hose connection shall be permitted to be installed in the corridor or breezeway between open stairs that are not greater than 75 ft (23 m) apart.

Statement of Problem and Substantiation for Public Comment

An enclosed corridor can be connected to 2 open stairs. The proposed change does not specify where in the corridor the hose connection is to be located. If it located 10 feet from one stair and the firefighters access the floor using the other stair they will have to travel 65 feet to the hose connection while in all probability passing the apartment that is involved in the fire. The responding firefighters may not even know that there is a hose connection in the corridor/breezeway because they expect the standpipe hose connections to be in the stairways.

Related Item

First Revision No. 119-NFPA 14-2014 [Global Input]

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Submittal Date: Thu Nov 13 11:27:50 EST 2014



Public Comment No. 8-NFPA 14-2014 [New Section after 7.5.1]

7.5.1.1

Standpipes shall be permitted to not be interconnected where acceptable to the AHJ.

Statement of Problem and Substantiation for Public Comment

The Committee statement said that section 7.5.1 gave the AHJ the ability to specify how standpipes are interconnected. The statement is in contrast to the point raised by the Public Input. Many AHJ's are under a Min/Max system so since 7.5.1 states they shall be interconnected, they have no choice. By adding this section, the AHJ can now have the legal ability to allow standpipes to not be interconnected based on their fire fighting SOP's.

Related Item

[Public Input No. 95-NFPA 14-2013 \[New Section after 7.5.1\]](#)

Submitter Information Verification

Submitter Full Name: Peter Schwab

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Submittal Date: Tue Sep 23 12:53:51 EDT 2014



Public Comment No. 9-NFPA 14-2014 [Section No. 7.6.2 [Excluding any Sub-Sections]]

Standpipes that are part of a combined system in a building that is partially sprinklered shall be at least 6 in. (150 mm) in size.

Statement of Problem and Substantiation for Public Comment

This modification is based on the Committee Rejection Statement for PI #96.

Related Item

Public Input No. 96-NFPA 14-2013 [Section No. 7.6.2]

Submitter Information Verification

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Submittal Date: Tue Sep 23 13:00:31 EDT 2014



Public Comment No. 28-NFPA 14-2014 [Section No. 10.1 [Excluding any Sub-Sections]]

The ~~volume~~ water flow rate and pressure of a public water supply shall be determined from waterflow test data or other approved method.
[24:5.1.2]

Statement of Problem and Substantiation for Public Comment

Volume uses units of gallons. The correct reference is water flow rate - gpm

Related Item

First Revision No. 99-NFPA 14-2014 [Section No. 10.1]

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Submittal Date: Thu Nov 13 18:17:31 EST 2014



Public Comment No. 10-NFPA 14-2014 [Section No. 10.1.1]

10.1.1 –

Daily and seasonal flow and pressure fluctuation data shall be provided by the water purveyor, and the fire protection design must account for both high and low variations.

10.1.1.1 –

Where these data are not available, design shall be based on the available water flow data.

Statement of Problem and Substantiation for Public Comment

NFPA 13R and NFPA 24 made modifications to the rules for waterflow tests. NFPA 13 did not make this change. This will be a Correlating Committee Decision. The NFPA 14 committee should try and harmonize with the final outcome from the sprinkler project.

Related Item

[Public Input No. 5-NFPA 14-2013 \[Section No. 10.1\]](#)

Submitter Information Verification

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Submission Date: Tue Sep 23 13:12:46 EDT 2014



Public Comment No. 19-NFPA 14-2014 [Section No. 11.4.1]

11.4.1 * _ _ General.

All new systems, including yard piping and fire department connection piping, shall be tested hydrostatically at not less than 200 psi (13.8 bar) or 50 psi (3.5 bar) in excess of the system working pressure, whichever is greater, and shall maintain that pressure at ± 5 psi (± 0.35 bar) for 2 hours.

Statement of Problem and Substantiation for Public Comment

The +/- 5 psi should apply only to the hydrostatic test of the underground fire main. This is covered in 11.4.3. It is not difficult to maintain the hydrostatic test pressure without leakage for the aboveground piping portion of the standpipe system. If temperature changes result in pressure fluctuations, the test should be conducted during a time when the change in ambient temperature is minimal (i.e., avoid sunrise and sunset). Contractors who have a difficult time maintaining the hydrostatic test pressure need to improve their workmanship practices. NFPA 14 should not be a mechanism to compensate for poor workmanship practices.

Related Item

[First Revision No. 66-NFPA 14-2014 \[Section No. 11.4.1\]](#)

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Submittal Date: Mon Nov 10 14:31:32 EST 2014



Public Comment No. 11-NFPA 14-2014 [New Section after 11.5.1]

11.5.1.1

The test required by 11.5.1 shall be permitted to be waived when acceptable to the AHJ.

Statement of Problem and Substantiation for Public Comment

The practice of flowing the entire system demand at the remote hose locations has been in the standard a long time. While it can prove that water is getting to the roof, is it necessary? The pump(s) are required to be tested. Usually these are in locations that make disposal of the thousands of gallons of water practical. By requiring the test on the roof, that water has to go somewhere. There have been multiple occurrences of a standpipe test discharge causing a roof leader drain to fail and flooding a building out at CO. All standpipes are required to be hydraulically calculated. If plans and calculations are performed and the system is installed to those plans, why are we not trusting the math? Do we require a bucket test for the remote area of a sprinkler system? If the committee cannot bear to lose this test, they should require a permanent drain adjacent to the remote standpipe capable of handling the flow for the acceptance.

Related Item

[Public Input No. 50-NFPA 14-2013 \[New Section after 11.5.1.1\]](#)

Submitter Information Verification

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Submittal Date: Tue Sep 23 13:36:08 EDT 2014



Public Comment No. 20-NFPA 14-2014 [Section No. 11.5.2 [Excluding any Sub-Sections]]

For a manual standpipe, a fire department pumper- ~~or~~ _ portable pump of a capacity to provide ~~required~~ the required flow and pressure- ~~shall~~ _ or other approved means shall be used to verify the system design by pumping into the fire department connection.

Add Annex A.11.5.2

A.11.5.2. It is not always necessary to use a pump to test a standpipe system. See Figure A.11.5.2(a), Figure A.11.5.2(b), and Figure A.11.5.2(c) for examples of possible test methods. When using the method shown in Figure A.11.5.2(c) it is necessary to flow the system demand while observing the pressures at the FDC inlet and the hydraulically remote standpipe hose valve. While the standpipe test may indicate that a greater pressure is required at the FDC inlet than what was indicated in the hydraulic calculations, this is not necessarily a cause for failing the test. This greater pressure, if acceptable to the AHJ based on the ability of the fire apparatus to provide the additional pressure, needs to be incorporated into the standpipe sign required at the FDC by Section 6.4.5.2.2.

Additional Proposed Changes

<u>File Name</u>	<u>Description</u>	<u>Approved</u>
Standpipe_Flow_Test_Methods.pdf	Annex Section A.11.5.2	

Statement of Problem and Substantiation for Public Comment

It is not always necessary to use a pump to test a standpipe system. The proposed Annex material shows 3 test methods, the last of which does not use a pump. Consider where one provides 750 gpm at 75 psi at the FDC inlet resulting in 25 psi available at the hydraulically most remote standpipe outlet. If the standpipe required 100 psi at the hose valve, then adding 75 psi to both the FDC inlet pressure (75 psi) and the remote hose valve pressure (25 psi) means that if the FDC were supplied at 150 psi (75 psi + 75 psi), then 100 psi (25 psi + 75 psi) would be available at the hose valve outlet.

Relying on the hydraulic calculations to demonstrate that the standpipe system will perform as calculated is dangerous. In testing numerous standpipe systems, I have experienced from 5 psi to 20 psi additional pressure over what the hydraulic calculations indicated.

Testing of the standpipe is necessary in order to provide firefighters with the proper flows to fight a fire. The standpipe system represents the last chance at effecting extinguishment of the fire. A standpipe system that fails in a fire can result in firefighter injury or death. NFPA 14 should ensure that the system performs adequately when the system is new. Consider that standpipe training conducted by many fire departments includes how to use the standpipe assuming the supply from the FDC is inoperative. Many fire departments do not trust standpipe systems because they have had many problems.

Related Item

First Revision No. 71-NFPA 14-2014 [New Section after 11.5.2]

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Submittal Date: Mon Nov 10 18:36:03 EST 2014

Standpipe Flow Test Methods
Test with pump through FDC

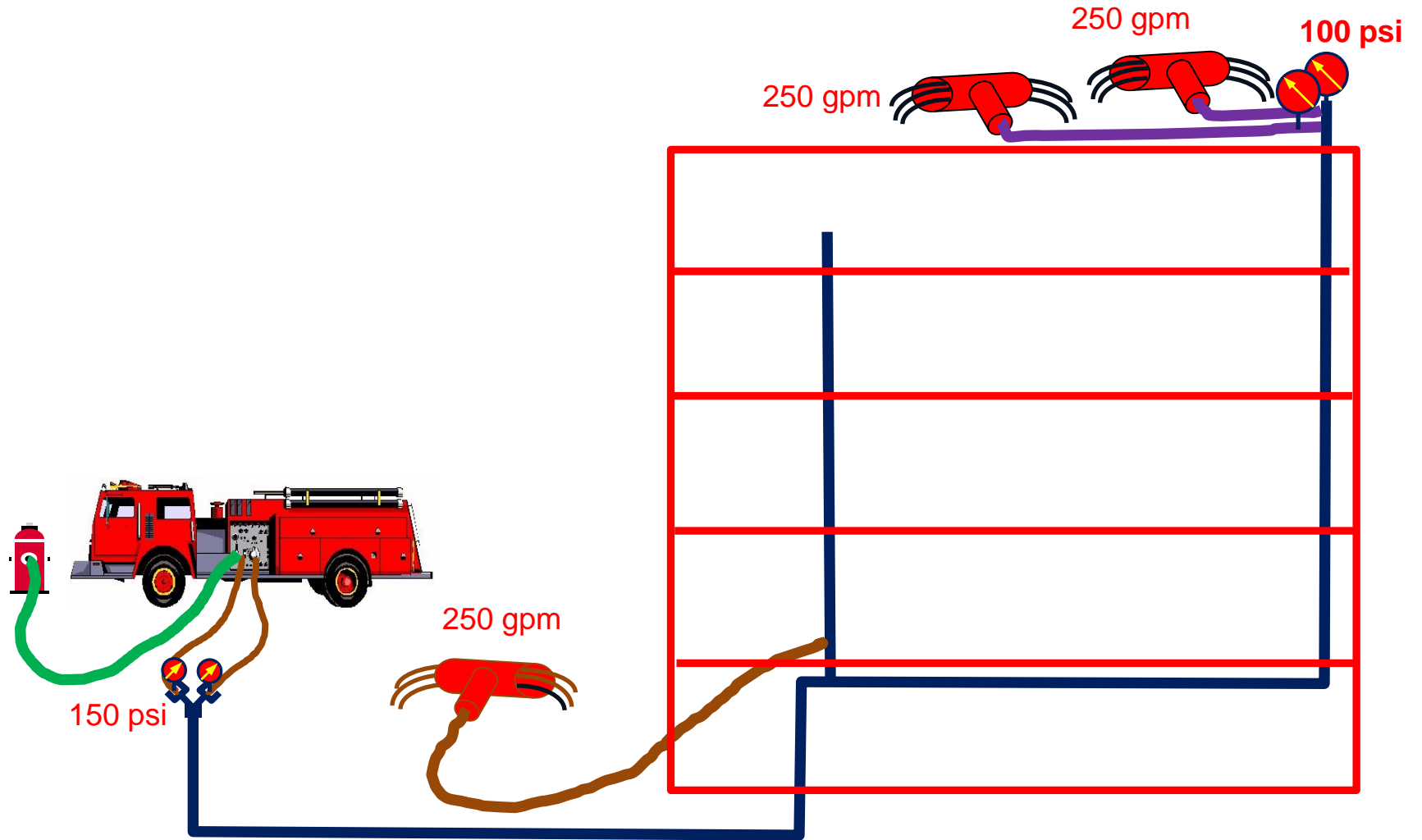


Figure A.11.5.2(a)

Standpipe Flow Test Methods
Test by Re-Circulating Water

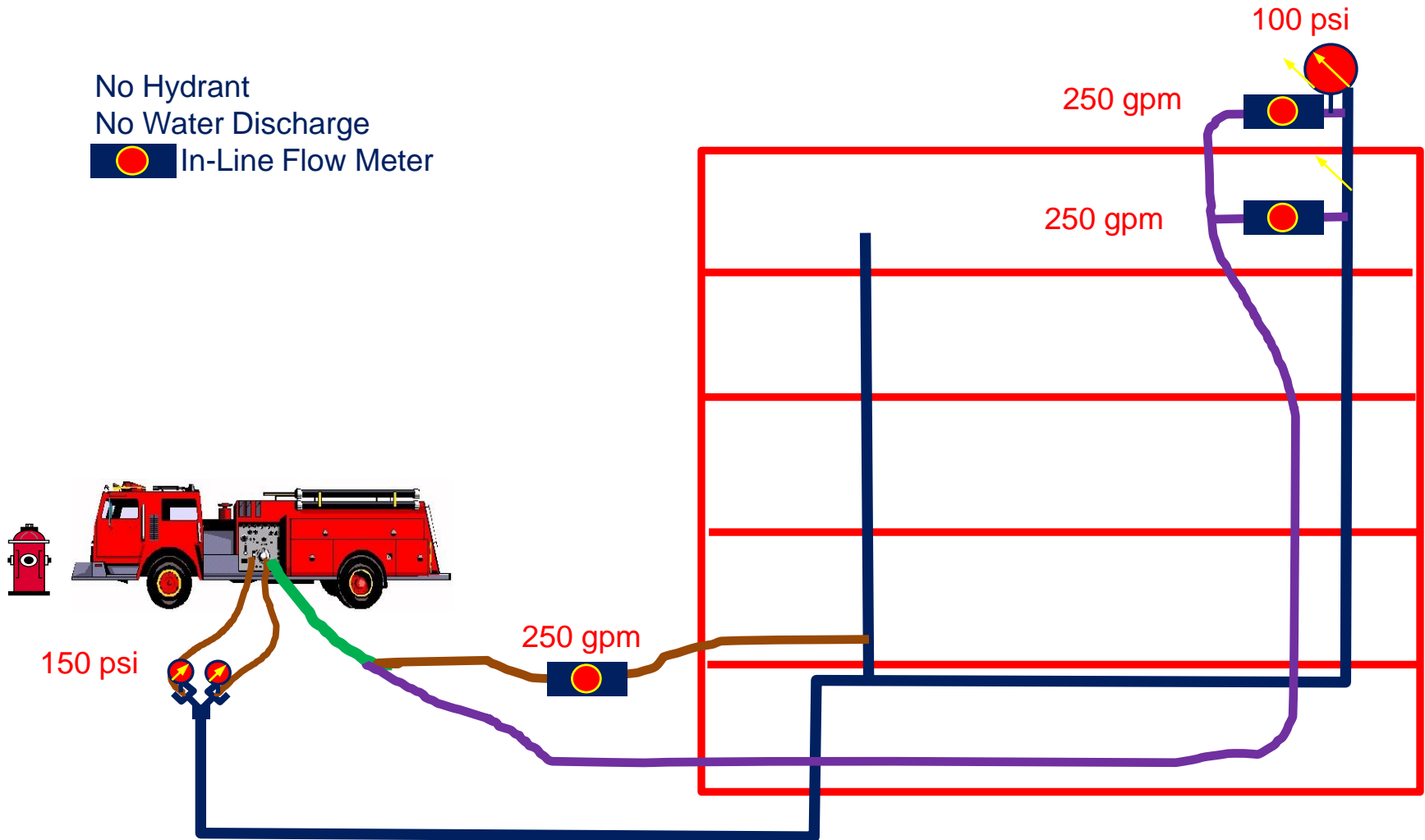


Figure A.11.5.2(b)

Standpipe Flow Test Methods
Test through FDC Without Pump

	FDC	Valve
Test	75	25
ADD	75	75
Total	150	100
Flow	750 gpm	

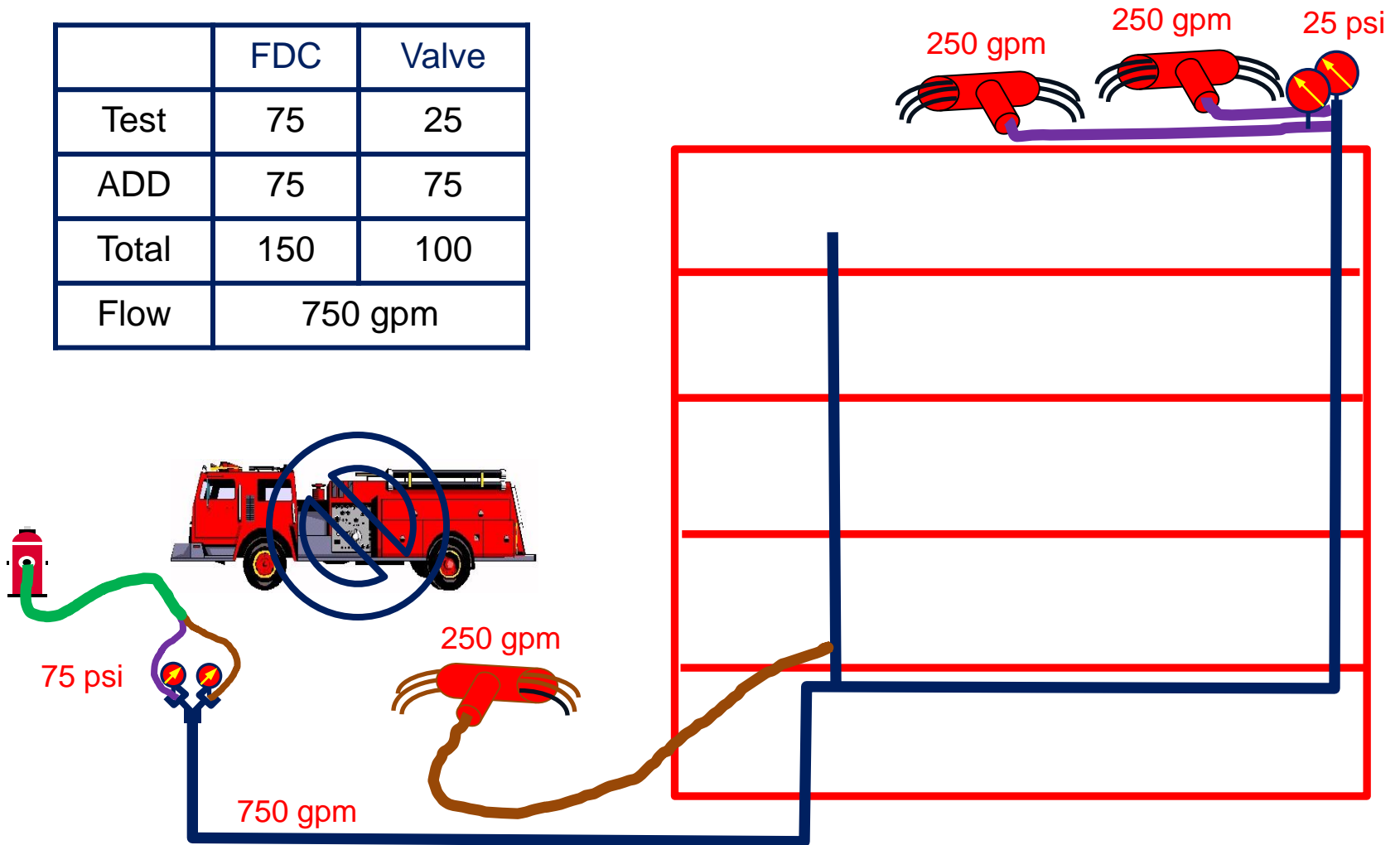


Figure A.11.5.2(c)



Public Comment No. 21-NFPA 14-2014 [Section No. 11.5.2.1]

[Delete Section 11.5.2.1](#)

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Where allowed by the authority having jurisdiction, the test required by [11.5.2](#) shall be permitted to be waived.

Statement of Problem and Substantiation for Public Comment

The substantiation for this section indicated that many fire departments will not conduct the acceptance test due to the liability should something go wrong. Where the fire department will not provide a pump to test the system, the contractor should provided it. The conduct of the test is the contractor's responsibility, not the fire department's. Where a fire department will provide equipment to test the system, there typically is a charge for the service. So it is of no consequence whether the contractor pays the fire department or another company to provide the pump. See my Comment on Section11.5.2 indicating how the test can be conducted without a pump.

Related Item

[First Revision No. 71-NFPA 14-2014 \[New Section after 11.5.2\]](#)

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Public Comment No. 29-NFPA 14-2014 [Section No. 11.8.4]

11.8.4

One set of instruction manuals for all major components of the standpipe system shall be provided to the building owner. The manual shall contain the following:

- (1) An explanation of the operation of the component
- (2) ~~Instructions~~ Manufacturer's instructions for routine maintenance
- (3) ~~Instructions~~ Manufacturer's instructions concerning repairs
- (4) ~~Parts~~ Manufacturer's parts list and identification for serviceable components
- (5) A copy of the current edition of NFPA 25

Statement of Problem and Substantiation for Public Comment

Section 11.9 indicates that the manufacturer's instructions are to be provided. 11.8.3 would allow the contractor to provide handwritten instructions.

Related Item

First Revision No. 74-NFPA 14-2014 [Section No. 11.9]

Submitter Information Verification

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Submittal Date: Thu Nov 13 18:27:41 EST 2014



Public Comment No. 17-NFPA 14-2014 [New Section after A.7.3.2.2]

A.7.3.2.5

A.7.3.2.5 The standard in section 7.3.2.1 requires that a standpipe be provided in each required exit stairwell. One arrangement that may be found in certain residential buildings is to have (2) remotely located exit stairs providing the occupants two distinct means of egress. This section allows a single hose connection to be located anywhere between the exit stairs provided the exit stairs are open and are located within 75 ft (23 m) of each other. (See figure A.7.3.2.5).

Additional Proposed Changes

<u>File Name</u>	<u>Description</u>	<u>Approved</u>
NFPA_14_Single_Hose_Valve_in_Open_Breezeway.pdf	Figure A.7.3.2.5	

Statement of Problem and Substantiation for Public Comment

This section and figure is being submitted on behalf of the Horizontal Exit task group. The task group was assigned the task to create an annex figure for section A.7.3.2.5.

Related Item

First Revision No. 119-NFPA 14-2014 [Global Input]

Submitter Information Verification

Submitter Full Name: Peter Schwab

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Affiliation: Horizontal Exit Task Group

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Submittal Date: Fri Oct 31 08:48:28 EDT 2014

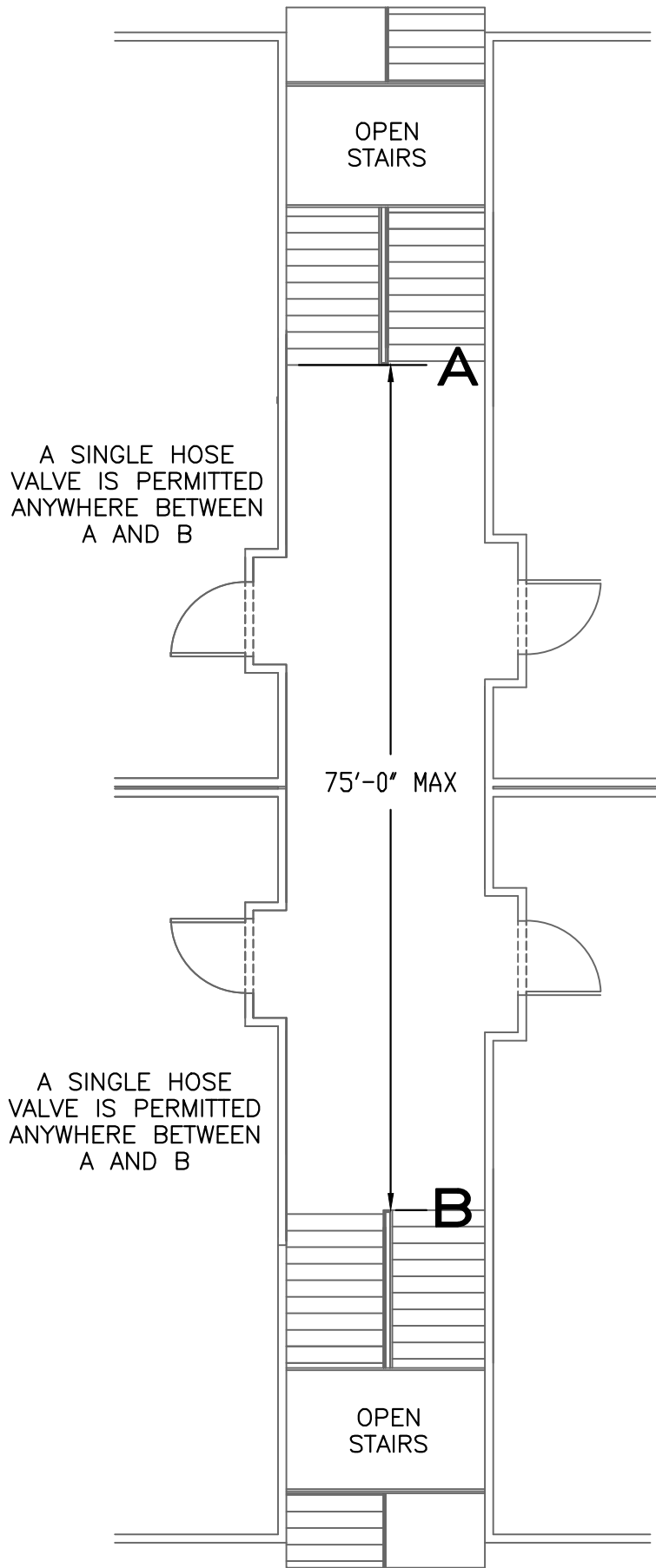


FIGURE A.7.3.2.5 Single Hose Valve in Open Stairs/Corridors/Breezeways



Public Comment No. 12-NFPA 14-2014 [Section No. A.7.10.1.2]

A.7.10.1.2

See Section 14.4 of NFPA 13.

When performing a hydraulic design, the hydraulic characteristics of each water supply need to be known. The procedure for determining the hydraulic characteristics of permanent water supplies, such as pumps, is fairly straightforward and is described in NFPA 20. The procedure for determining the hydraulic characteristics of fire apparatus supplying a standpipe system are similar. Lacking better information about local fire apparatus, a conservative design would accommodate a 1000 gpm (3785 L/min) fire department pumper performing at the level of design specifications set forth in NFPA 1901. NFPA 1901 specifies that fire department pumpers must be able to achieve three pressure/flow combinations. These are 100 percent of rated capacity at 150 psi (1034 kPa) net pump pressure, 70 percent of rated capacity at 200 psi (1379 kPa) net pump pressure, and 50 percent of rated capacity at 250 psi (1724 kPa) net pump pressure. Therefore, a 1000 gpm (3785 L/min) pumper can be expected to deliver no less than 1000 gpm (3785 L/min) at 150 psi (1034 kPa), 700 gpm (2650 L/min) at 200 psi (1379 kPa), and 500 gpm (1893 L/min) at 250 psi (1724 kPa). Residual supply pressure on the suction side of a pump from a municipal or other pressurized water supply can also be added. The 150 psi (1034 kPa) suggested pressure is also found in NFPA 13E. It also states that this is the pressure to be provided unless the sign at the fire department connection states otherwise. It is not the intent of this standard to limit the maximum pumper pressure at the fire department connection inlet for manual or automatic standpipes to 150 psi (1034 kPa).

To perform a hydraulic design, one should determine the minimum required pressure and flow at the hydraulically most remote hose connection and calculate this demand back through system piping to each water supply, accumulating losses for friction and elevation changes and adding flows for additional standpipes and sprinklers at each point where such standpipes or sprinklers connect to the hydraulic design path. When considering fire apparatus as a water supply, flows are calculated from system piping through the fire department connection and back through connecting hoses to the pump. If the pressure available at each supply source exceeds a standpipe system's pressure demand at the designated flow, the design is acceptable. Otherwise, the piping design or the water supply needs to be adjusted.

The intent of the standard is to require that each vertical standpipe serving two or more hose connections be capable of individually flowing 500 gpm (1893 L/min) and 250 gpm (946 L/min) at each of the two hydraulically most demanding connections at the required residual pressure. Given the requirement in [7.10.1.1.3](#) for the hydraulically most remote standpipe to supply this pressure and flow rate and given the minimum standpipe sizes in Section [7.6](#), the ability of standpipes that are not hydraulically most remote to satisfy this requirement is implicit and should not require additional hydraulic calculations.

Statement of Problem and Substantiation for Public Comment

During the first draft, the committee made it clear that even with automatic standpipes, a calculation to the fire department connection is required. Many AHJ's refer to NFPA 13E which is a recommended practice and cite section 4.3.4 and limit the maximum pressure at the FDC inlet to 150 PSI for calculation purposes. This language makes it clear that the 150 psi is not a maximum.

Related Item

[Public Input No. 97-NFPA 14-2013 \[Section No. 7.7.1\]](#)

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