Public Input No. 3-NFPA 13E-2023 [New Section after 3.3.2.3]

3.3.X* Impairment.

A condition where a fire protection system or unit or portion thereof is out of order, and the condition can result in the fire protection system or unit not functioning in a fire event. [25, 2023]

A.3.3.X Impairment.

The use of the phrase fire protection system or unit is a broad reference to those terms used in titles of Chapters 5 through 12. Some fire protection features are referred to as systems in the installation standards (e.g., sprinkler, standpipe, water spray, foam-water, and water mist), or are referred to as units (e.g., fire pumps), and others use neither term (e.g., private service fire mains and water tanks). For the purpose of this standard, the term unit refers to a fire pump and its connections required by NFPA 20, or a water storage tank and its connections required by NFPA 24. The use of the term unit in the definitions of impairment, deficiency, critical deficiency, and noncritical deficiency is not referring to an individual component such as a sprinkler, valve, fitting, switch, piece of pipe, and so forth.

Temporarily shutting down a system as part of performing the routine inspection, testing, and maintenance on that system while under constant attendance by qualified personnel, and where the system can be restored to service quickly, should not be considered an impairment. Good judgment should be considered for the hazards presented. [25,2023]

3.3.X.1* Emergency Impairment.

A condition where a water-based fire protection system or portion thereof is out of order due to an unplanned occurrence, or the impairment is found while performing inspection testing or maintenance activities. [25, 2023]

A.3.3.X.1 Emergency Impairment.

<u>Examples of emergency impairments might include a ruptured pipe, an operated sprinkler, or an interruption of the water supply to the system.</u> [**25** , 2023]

3.3.X.2 Preplanned Impairment.

A condition where a water-based fire protection system or a portion thereof is out of service due to work planned in advance, such as revisions to the water supply or sprinkler system piping. [25, 2023]

Statement of Problem and Substantiation for Public Input

Impairments are referenced in this document and it would be appropriate to extract the definitions from NFPA 25 for context within this document.

Submitter Information Verification

Submitter Full Name: Kevin Hall

Organization: American Fire Sprinkler Association **Affiliation:** American Fire Sprinkler Association

Street Address:

City: State: Zip:

Submittal Date: Tue Feb 14 14:15:22 EST 2023

Committee: FIY-AAA

Committee Statement

Resolution: FR-9-NFPA 13E-2024

Statement: The technical committee identified a definition extracted form NFPA 25 could be

beneficial for the document user.

Public Input No. 6-NFPA 13E-2023 [New Section after 3.3.3]

TITLE OF NEW CONTENT

3.3.3.1 Pressure-Reducing Valve. A valve designed for the purpose of reducing the downstream water pressure under both flowing (residual) and nonflowing (static) conditions. [14, 2024] .

Statement of Problem and Substantiation for Public Input

Substantiation: The current edition of NFPA 13E currently defines the umbrella term pressure-regulating devices but does not address the more specific terms used in NFPA 14 of Pressure-restricting devices and pressure-reducing valves. This extract is needed for better clarification of the difference between regulating, reducing valves and restricting devices.

Related Public Inputs for This Document

Related Input

Relationship

Public Input No. 7-NFPA 13E-2023 [New Section after 3.3.3] Public Input No. 7-NFPA 13E-2023 [New Section after 3.3.3]

Submitter Information Verification

Submitter Full Name: Terin Hopkins

Organization: National Fire Sprinkler Associ

Street Address:

City: State: Zip:

Submittal Date: Thu Aug 31 11:04:08 EDT 2023

Committee: FIY-AAA

Committee Statement

Resolution: FR-12-NFPA 13E-2024

Statement: The technical committee recognizes that the current edition of NFPA 13E currently

defines the umbrella term pressure-regulating devices but does not address the more specific terms used in NFPA 14 of Pressure-restricting devices and pressure-reducing valves. This extract is needed for better clarification of the difference between regulating,

reducing valves and restricting devices.

NFPA

Public Input No. 7-NFPA 13E-2023 [New Section after 3.3.3]

TITLE OF NEW CONTENT

3.3.3.2 Pressure-Restricting Device. A valve or device designed for the purpose of reducing the downstream water pressure under flowing (residual) conditions only. [14, 2024]

Statement of Problem and Substantiation for Public Input

Substantiation: The current edition of NFPA 13E currently defines the umbrella term pressure-regulating devices but does not address the more specific terms used in NFPA 14 of Pressure-restricting devices and pressure-reducing valves. This extract is needed for better clarification of the difference between regulating, reducing valves and restricting devices. Relates to PC 6

Related Public Inputs for This Document

Related Input

Relationship

Public Input No. 6-NFPA 13E-2023 [New Section after 3.3.3] Public Input No. 6-NFPA 13E-2023 [New Section after 3.3.3]

Submitter Information Verification

Submitter Full Name: Terin Hopkins

Organization: National Fire Sprinkler Associ

Street Address:

City: State: Zip:

Submittal Date: Thu Aug 31 11:06:57 EDT 2023

Committee: FIY-AAA

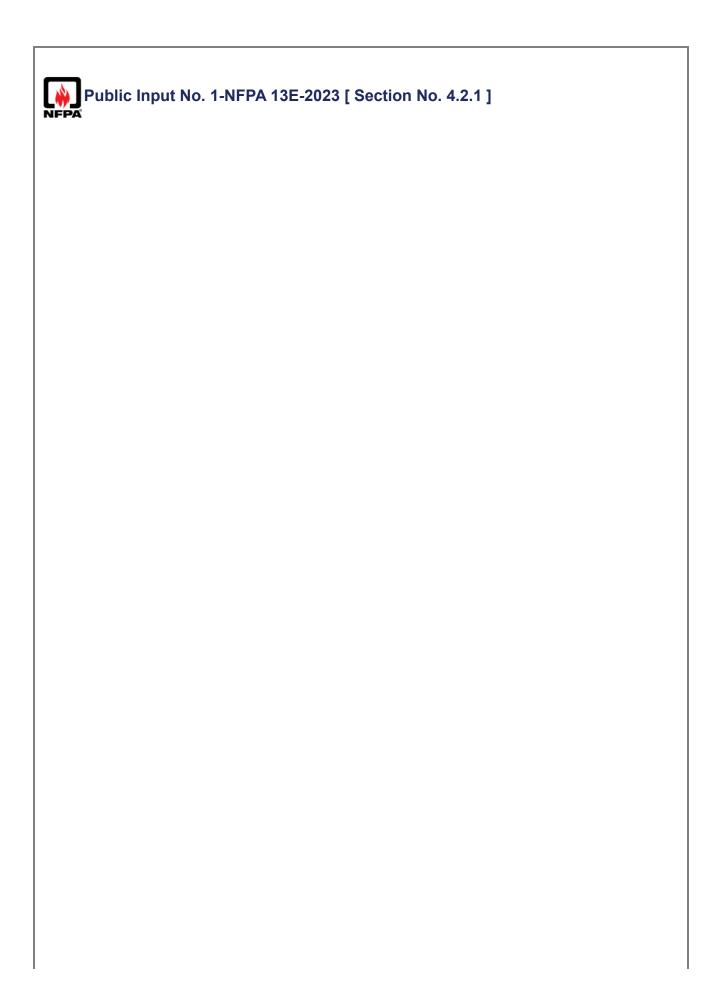
Committee Statement

Resolution: FR-12-NFPA 13E-2024

Statement: The technical committee recognizes that the current edition of NFPA 13E currently

defines the umbrella term pressure-regulating devices but does not address the more specific terms used in NFPA 14 of Pressure-restricting devices and pressure-reducing valves. This extract is needed for better clarification of the difference between regulating,

reducing valves and restricting devices.

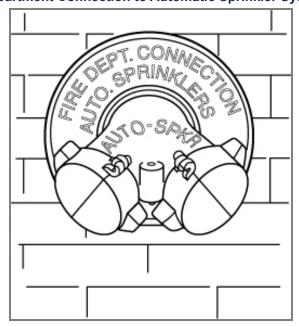


4.2.1

Fire personnel should thoroughly understand the following about properties protected by automatic sprinklers and standpipe systems:

- (1) The construction, contents, and layout of the buildings, the nature of the occupancies protected by automatic sprinklers or standpipes, the extent of this protection, and the type of fire protection systems.
- (2) The water supply to the fire protection systems, including the source and type of supply, the flow and pressure normally available, and the anticipated duration of the available supply.
- (3) * The location of all sprinkler or standpipe control valves, the area controlled by each valve, and the consequence of shutting off each valve.
- (4) The location of fire department connections to fire protection systems, the specific area each connection serves, and the water supply, hose, and pumper layout that will be used to feed the fire department connections. (See Figure 4.2.1.)
- (5) The location of water supplies for handlines that can be used without jeopardizing the water supply to the operating sprinklers.
- (6) An alternative means for supplying water to the system in case of damage to the fire department connection. Provide an alternate means for a water supply to any system with a damaged (FDC) fire department connection & carry a portable missing swivel adapter on all fire apparatus for urgent replacement of missing or stolen brass (input) swivels from the FDC.
- (7) The location of spare or replacement sprinklers.
- (8) The location of water flow indicators and annunciator panels associated with the fire protection systems.
- (9) Keyholder information for contact in case of emergency. Arrangements should be made with the property owners for entering the building as quickly as possible following activation of sprinkler systems when the building is unattended in order to avoid using forcible entry equipment and the resulting damage.
- (10) The company assigned responsibility for charging the fire department connection.
- (11) Fire department personnel should periodically verify that fire department connection inlet caps or plugs and inlet swivel(s) are operational and free from debris.
- (12) Standpipe hose threads should be checked for compatibility with fire department threads.

Figure 4.2.1 Fire Department Connection to Automatic Sprinkler Systems.



Additional Proposed Changes

<u>File Name</u> <u>Description</u> <u>Approved</u>

.1682352573666 revisions suggested for 13-E

.1682352629165

.1689611941817 Suggested for 13-E 14.2 #6 MJC

Statement of Problem and Substantiation for Public Input

NFPA 13-E 4.2 line #6 as written, implies that a "damaged" (FDC) connection is the ONLY problem that firefighters will encounter that will require an alternate means/solution for a water supply. The current recommendation has not clearly identified the problems that are more epidemic NOW. Most circumstances that cause significant "damage" to an FDC are caused by an explosion, a terrorist or a vehicle crashed into the structure. Damaged FDC's are usually noticed quickly and repaired immediately. On the other hand, the "Elephant in the room" is Brass Theft, missing swivels, and neglected system maintenance. FDC's with stolen brass fittings may not be noticed for weeks, months or years unfortunately.

Thank you.

Submitter Information Verification

Submitter Full Name: Mike Cornelius

Organization: Cornelius Enterprises

Affiliation: None

Street Address:

City: State: Zip:

Submittal Date: Fri Feb 10 10:59:27 EST 2023

Committee: FIY-AAA

Committee Statement

Resolution: The technical committee recognizes that the section only recommends what fire

departments must know about the system and should not recommend specific actions or

products to take, to work around the system.



Public Input No. 10-NFPA 13E-2023 [New Section after 4.2.3.4]

TITLE OF NEW CONTENT

4.2.3.4.3 Pressure-reducing valve (PRV) test connections should be properly identified, and caution should be used to prevent accidental fire department use.

Statement of Problem and Substantiation for Public Input

Substantiation: Pressure-reducing valves are provided to prevent firefighter injuries by reducing pressures in excess of 175psi. Indirect pressure-reducing valve must have a means for testing and may have a standard hose valve installed as a test connection. This hose valve is not intended for firefighter operations and could cause harm. They should be properly identified during pre-planning and caution should be used to prevent accidental use.

Submitter Information Verification

Submitter Full Name: Terin Hopkins

Organization: National Fire Sprinkler Associ

Street Address:

City: State: Zip:

Submittal Date: Thu Aug 31 11:13:33 EDT 2023

Committee: FIY-AAA

Committee Statement

Resolution: FR-1-NFPA 13E-2024

Statement: The technical committee identified that standpipe hose connections equipped with

pressure-regulating devices, both pressure-reducing (PRV) and pressure-restricting (PRD) are flow tested every five years and meet the requirements of NFPA 25. Pressure-regulating devices are no longer allowed in standpipe design but were used in the early pre-1993 standpipe design to restrict flowing water to a maximum of 100psi. The current edition of NFPA 1 and NFPA 14 now authorize the authority having jurisdiction (AHJ) to replace a PRD with a standard hose connection where system pressures do not exceed 175psi, allowing departments to take advantage of the post 1993 allowable maximum pressures of 175psi. Pressure-reducing valves are provided to prevent firefighter injuries by preventing pressures in excess of 175psi. Indirect acting pressure-reducing valves must have a means for testing and may have a standard hose valve installed as a test connection. This hose valve is not intended for firefighter operations and could cause

injury.



Public Input No. 8-NFPA 13E-2023 [New Section after 4.2.3.4]

TITLE OF NEW CONTENT

<u>4.2.3.4.1</u> Verification should be made that all pressure-regulating devices, both pressure-reducing valves (PRV) and pressure-restricting devices (PRD) flow every five years and meet the requirements of NFPA 25.

Statement of Problem and Substantiation for Public Input

Substantiation: Standpipe hose connection equipped with pressure-regulating devices, both pressure-reducing valves (PRV) and pressure-restricting devices (PRD) are required to be flow tested every five years by NFPA 25 and should be verified in the pre-planning of a building and its systems. Hose connections are vital to fire department operations and should be verified to be fully operational and capable of flowing the required design.

Related Public Inputs for This Document

Related Input

Relationship

Public Input No. 9-NFPA 13E-2023 [New Section after 4.2.3.4] Public Input No. 9-NFPA 13E-2023 [New Section after 4.2.3.4]

Submitter Information Verification

Submitter Full Name: Terin Hopkins

Organization: National Fire Sprinkler Associ

Street Address:

City: State: Zip:

Submittal Date: Thu Aug 31 11:09:43 EDT 2023

Committee: FIY-AAA

Committee Statement

Resolution: FR-1-NFPA 13E-2024

Statement: The technical committee identified that standpipe hose connections equipped with

pressure-regulating devices, both pressure-reducing (PRV) and pressure-restricting (PRD) are flow tested every five years and meet the requirements of NFPA 25. Pressure-regulating devices are no longer allowed in standpipe design but were used in the early pre-1993 standpipe design to restrict flowing water to a maximum of 100psi. The current edition of NFPA 1 and NFPA 14 now authorize the authority having jurisdiction (AHJ) to replace a PRD with a standard hose connection where system pressures do not exceed 175psi, allowing departments to take advantage of the post 1993 allowable maximum pressures of 175psi. Pressure-reducing valves are provided to prevent firefighter injuries by preventing pressures in excess of 175psi. Indirect acting pressure-reducing valves must have a means for testing and may have a standard hose valve installed as a test connection. This hose valve is not intended for firefighter operations and could cause

injury.

Public Input No. 9-NFPA 13E-2023 [New Section after 4.2.3.4]

TITLE OF NEW CONTENT

4.2.3.4.2 <u>Pressure-Restricting Devices</u> found in older standpipe system design should be evaluated for performance and considered for replacement with standard hose valves when not exceeding the maximum allowable pressure of 175psi.

Statement of Problem and Substantiation for Public Input

Substantiation: Pressure-Restricting Devices are no longer allowed in standpipe design but were used in early pre-1993 standpipe design to restrict flowing water to a maximum of 100psi. The current edition of NFPA 1 and NFPA 14 now authorize the authority having jurisdiction (AHJ) to replace a PRD with a standard hose connection where system pressures do not exceed 175psi, allowing department to take advantage of the post-1993 allowable maximum pressures of 175psi.

Related Public Inputs for This Document

Related Input

Relationship

Public Input No. 8-NFPA 13E-2023 [New Section after 4.2.3.4] Public Input No. 8-NFPA 13E-2023 [New Section after 4.2.3.4]

Submitter Information Verification

Submitter Full Name: Terin Hopkins

Organization: National Fire Sprinkler Associ

Street Address:

City: State: Zip:

Submittal Date: Thu Aug 31 11:11:15 EDT 2023

Committee: FIY-AAA

Committee Statement

Resolution: FR-1-NFPA 13E-2024

Statement: The technical committee identified that standpipe hose connections equipped with

pressure-regulating devices, both pressure-reducing (PRV) and pressure-restricting (PRD) are flow tested every five years and meet the requirements of NFPA 25. Pressure-regulating devices are no longer allowed in standpipe design but were used in the early pre-1993 standpipe design to restrict flowing water to a maximum of 100psi. The current edition of NFPA 1 and NFPA 14 now authorize the authority having jurisdiction (AHJ) to replace a PRD with a standard hose connection where system pressures do not exceed 175psi, allowing departments to take advantage of the post 1993 allowable maximum pressures of 175psi. Pressure-reducing valves are provided to prevent firefighter injuries by preventing pressures in excess of 175psi. Indirect acting pressure-reducing valves must have a means for testing and may have a standard hose valve installed as a test connection. This hose valve is not intended for firefighter operations and could cause

injury.

Public Input No. 14-NFPA 13E-2023 [New Section after 5.1.4]

TITLE OF NEW CONTENT

5.1.4.1 When supplementing sprinkler systems, consideration should be given to the system type and water supply demand. Control mode density area (CMDA), Control Mode Specific Application (CMSA) and Early Suppression Fast Response sprinklers (ESFR) with higher flows may require significantly higher demands at the fire department connection.

Statement of Problem and Substantiation for Public Input

Substantiation: Higher hazard buildings are often equipped with very large fire sprinkler systems capable of flowing large quantities of water. These systems may require a greater volume of water to supplement the system in large fires. Considerations for water supplies and providing volume at the fire department connection need to be pre-planned and considered. This should include the use of multiple water sources, both private and public.

Submitter Information Verification

Submitter Full Name: Terin Hopkins

Organization: National Fire Sprinkler Associ

Street Address:

City: State: Zip:

Submittal Date: Thu Aug 31 11:23:21 EDT 2023

Committee: FIY-AAA

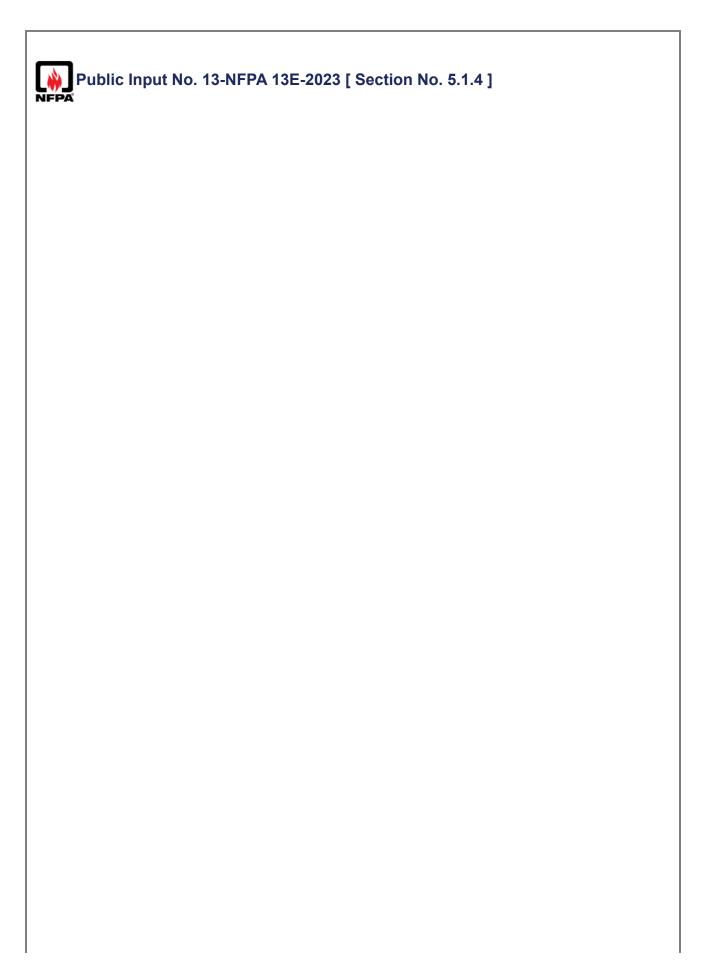
Committee Statement

Resolution: FR-3-NFPA 13E-2024

Statement: NFPA 13 requires fire department connections on sprinkler systems to be able to provide

supplemental water supply for automatic fire sprinklers. Automatic fire sprinkler systems have automatic water supplies and only require supplementation. The committee also recognizes that higher hazard buildings are often equipped with very large fire sprinkler systems capable of flowing large quantities of water. These systems may require a

greater volume of water to supplement the system in large fires.



5.1.4*

5.1.4 * When arriving at a property protected by an automatic sprinkler system, fire companies should take prompt action to supply supplement the system. [See Figure 5.1.4(a) and Figure 5.1.4(b).] A minimum of one sprinkler supply line should be connected to the fire department connection and should be supplemented according to fire conditions. The supply line should be pumped and the line charged charge and maintained to a pressure of 450 psi 150 psi (10.3 bar) unless the system is posted for a different pressure. Additional hose lines should be stretched to the fire area as directed by the incident commander in charge. [See Figure 5.1.4(c).]

Figure 5.1.4(a) Public Water Supply to the Sprinkler System.

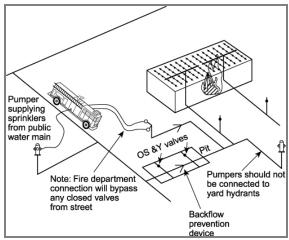


Figure 5.1.4(b) Water Supply to the Fire Department Connection.

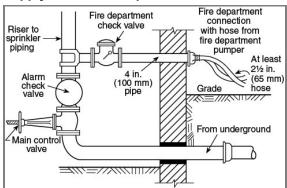
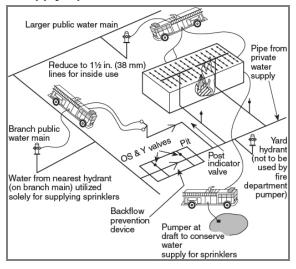


Figure 5.1.4(c) Pumper Supply Options That Should Be Considered.



Statement of Problem and Substantiation for Public Input

Substantiation: NFPA 13 requires fire department connection on sprinkler systems to be able to provide supplemental water supply for automatic fire sprinklers. Fire sprinkler systems have automatic water supplies and only require supplementation. The pressure should be maintained to provide a supplement water supply as more sprinklers activate beyond the design area, exceeding the automatic water supply.

Submitter Information Verification

Submitter Full Name: Terin Hopkins

Organization: National Fire Sprinkler Associ

Street Address:

City: State: Zip:

Submittal Date: Thu Aug 31 11:19:48 EDT 2023

Committee: FIY-AAA

Committee Statement

Resolution: FR-3-NFPA 13E-2024

Statement: NFPA 13 requires fire department connections on sprinkler systems to be able to provide

supplemental water supply for automatic fire sprinklers. Automatic fire sprinkler systems have automatic water supplies and only require supplementation. The committee also recognizes that higher hazard buildings are often equipped with very large fire sprinkler systems capable of flowing large quantities of water. These systems may require a

greater volume of water to supplement the system in large fires.

Public Input No. 17-NFPA 13E-2023 [New Section after 6.2.4.1]

TITLE OF NEW CONTENT

6.2.4.2 A minimum of two standpipe supply lines should be connected to the fire department connection and should be supplemented according to fire conditions. The supply line should be pumped to a pressure of 150 psi, +/- 5psi per floor for elevation, unless the system is posted for a different pressure.

Statement of Problem and Substantiation for Public Input

Substantiation: NFPA 13E provides recommendation for minimum pump pressure at a sprinkler fire department connection (FDC) but does not provide any guidance on supplementing and supplying automatic standpipe systems. 150psi is considered the minimum with pressure above having to be noted with signage. The minimum should include the commonly used +/- 5psi for each floor of a building.

Related Public Inputs for This Document

Related Input

Relationship

Public Input No. 18-NFPA 13E-2023 [New Section after 6.3.1]

Submitter Information Verification

Submitter Full Name: Terin Hopkins

Organization: National Fire Sprinkler Associ

Street Address:

City: State: Zip:

Submittal Date: Thu Aug 31 11:36:29 EDT 2023

Committee: FIY-AAA

Committee Statement

Resolution: FR-4-NFPA 13E-2024

Statement: The technical committee recognizes that NFPA 13E provides recommendations for

minimum pump pressure at a fire sprinkler, fire department connections (FDC) but does not provide any guidance on supplementing and suppling automatic standpipe systems. Additionally, firefighters should not enter any area identified as immediately dangerous to life or health (IDLH) without a fully charged hose line. A manual system relies on the fire department to supply pressure and flow from the fire department connection (FDC) and therefore should be fully supplied prior to any fire attack. Manual standpipes that are part of a combined system are not designed with a water supply. The water in the system provides an automatic fire sprinkler design and will not support the manual wet standpipe system. A manual wet standpipes combined system relies solely on the fire department to supply pressure and flow from the fire department connection (FDC) and should be fully

supplied prior to any fire attack.

Public Input No. 21-NFPA 13E-2023 [New Section after 6.2.4.1]

TITLE OF NEW CONTENT

6.2.4.3 Manual standpipes should be fully supplied from the fire department connection (FDC) as firefighters entering the building and prior to engaging in fire operations in any area considered to be immediately dangerous to life or health (IDLH).

Statement of Problem and Substantiation for Public Input

Substantiation: Firefighters should not enter any area identified as immediately dangerous to life or health (IDLH) without a fully charged hose line. A manual system relying on the fire department to supply pressure and flow from the fire department connection and should be fully supplied prior to any fire attack being indicated. Consideration should allow firefighters to drop dry hose lines in protected areas of a building, like require protected stairways, but no fire attack should begin until the fire department connection (FDC) is fully supplied.

Related Public Inputs for This Document

Related Input

Relationship

Public Input No. 22-NFPA 13E-2023 [New Section after 6.2.4.1]
Public Input No. 22-NFPA 13E-2023 [New Section after 6.2.4.1]

Submitter Information Verification

Submitter Full Name: Terin Hopkins

Organization: National Fire Sprinkler Associ

Street Address:

City: State: Zip:

Submittal Date: Thu Aug 31 12:06:21 EDT 2023

Committee: FIY-AAA

Committee Statement

Resolution: FR-4-NFPA 13E-2024

Statement: The technical committee recognizes that NFPA 13E provides recommendations for

minimum pump pressure at a fire sprinkler, fire department connections (FDC) but does not provide any guidance on supplementing and suppling automatic standpipe systems. Additionally, firefighters should not enter any area identified as immediately dangerous to life or health (IDLH) without a fully charged hose line. A manual system relies on the fire department to supply pressure and flow from the fire department connection (FDC) and therefore should be fully supplied prior to any fire attack. Manual standpipes that are part of a combined system are not designed with a water supply. The water in the system provides an automatic fire sprinkler design and will not support the manual wet standpipe system. A manual wet standpipes combined system relies solely on the fire department to supply pressure and flow from the fire department connection (FDC) and should be fully

Public Input No. 22-NFPA 13E-2023 [New Section after 6.2.4.1]

TITLE OF NEW CONTENT

<u>6.2.4.4 Combined systems automatically provide the fire sprinkler demand, but the manual wet standpipe system demand must be supplied by the fire department prior to flowing water from any of the hose connections.</u>

Statement of Problem and Substantiation for Public Input

Substantiation: Manual standpipes that are a part of the combined system are not designed with a water supply. The water supply in the system provides the automatic fire sprinkler system design and will not support the manual wet standpipe system. A manual wet standpipe combined system relies solely on the fire department to supply pressure and flow from the fire department connection and should be fully supplied prior to any fire attack being indicated. Consideration should allow firefighters to drop dry hose lines in protected areas of a building, like require protected stairways, but no fire attack should begin until the fire department connection (FDC) is fully supplied.

Related Public Inputs for This Document

Related Input

Relationship

Public Input No. 21-NFPA 13E-2023 [New Section after 6.2.4.1]
Public Input No. 21-NFPA 13E-2023 [New Section after 6.2.4.1]

Submitter Information Verification

Submitter Full Name: Terin Hopkins

Organization: National Fire Sprinkler Associ

Street Address:

City: State: Zip:

Submittal Date: Thu Aug 31 12:11:40 EDT 2023

Committee: FIY-AAA

Committee Statement

Resolution: FR-4-NFPA 13E-2024

Statement: The technical committee recognizes that NFPA 13E provides recommendations for

minimum pump pressure at a fire sprinkler, fire department connections (FDC) but does not provide any guidance on supplementing and suppling automatic standpipe systems. Additionally, firefighters should not enter any area identified as immediately dangerous to life or health (IDLH) without a fully charged hose line. A manual system relies on the fire department to supply pressure and flow from the fire department connection (FDC) and therefore should be fully supplied prior to any fire attack. Manual standpipes that are part of a combined system are not designed with a water supply. The water in the system provides an automatic fire sprinkler design and will not support the manual wet standpipe system. A manual wet standpipes combined system relies solely on the fire department to

supply pressure and flow from the fire department connection (FDC) and should be fully supplied prior to any fire attack.



Public Input No. 18-NFPA 13E-2023 [New Section after 6.3.1]

TITLE OF NEW CONTENT

6.3.2 A minimum of two standpipe supply lines should be connected to the fire department connection and should be supplemented according to fire conditions. The supply line should be pumped to a pressure of 150 psi, +/- 5psi per floor for elevation, unless the system is posted for a different pressure.

Statement of Problem and Substantiation for Public Input

Substantiation: NFPA 13E provides recommendation for minimum pump pressure at a sprinkler fire department connection (FDC) but does not provide any guidance on supplementing and supplying automatic standpipe systems. 150psi is considered the minimum with pressure above having to be noted with signage. The minimum should include the commonly used +/- 5psi for each floor of a building.

Related Public Inputs for This Document

Related Input

Relationship

Public Input No. 17-NFPA 13E-2023 [New Section after 6.2.4.1]

Submitter Information Verification

Submitter Full Name: Terin Hopkins

Organization: National Fire Sprinkler Associ

Street Address:

City: State: Zip:

Submittal Date: Thu Aug 31 12:00:50 EDT 2023

Committee: FIY-AAA

Committee Statement

Resolution: FR-6-NFPA 13E-2024

Statement: The technical committee identified that NFPA 13E provides recommendations for

minimum pump pressure at a fire sprinkler, fire department connection (FDC) but does not provide any guidance on supplementing and supplying automatic standpipe systems.



Public Input No. 19-NFPA 13E-2023 [New Section after 6.3.2]

TITLE OF NEW CONTENT

6.3.4 Fire personnel should be aware of department pump capabilities and how to determine the limitation. Buildings "above the level of fire department pump capabilities" are required to have complete automatic standpipe redundancy.

Statement of Problem and Substantiation for Public Input

Substantiation: The 2024 edition of NFPA 14 will require fully automatic redundancy when buildings are "above the level of fire department pump capabilities". Fire departments will need to better understand their pumping limits and to determine capabilities.

Submitter Information Verification

Submitter Full Name: Terin Hopkins

Organization: National Fire Sprinkler Associ

Street Address:

City: State: Zip:

Submittal Date: Thu Aug 31 12:02:44 EDT 2023

Committee: FIY-AAA

Committee Statement

Resolution: FR-8-NFPA 13E-2024

Statement: The technical committee recognizes that the 2024 edition of NFPA 14 requires fully

automatic redundancy when building are "above the level of fire department pump capabilities." Fire departments will need to better understand their pumping limitations in determining capabilities. The technical committee also identified that in high-rise buildings, fire department pump capabilities need to be considered in fire department operation plans. Some buildings may require one specific fire department pump to provide total system demand from a single fire department connection (FDC). In these cases, the building should be equipped with two FDC's, both sized for system demand. This correlates with the annex material in the 2024 edition of NFPA 14. additionally, it is necessary to pump pressure regulating hose valves, supplied from the fire department connection (FDC), at system demand so that each hose connection operates correctly.

Public Input No. 20-NFPA 13E-2023 [New Section after 6.3.2]

TITLE OF NEW CONTENT

<u>6.3.5 Operational plans for supplementing or supplying high-rise buildings should be developed along with considerations for apparatus capabilities. This should include clear expectations on relay, dual or tandem pumping.</u>

Statement of Problem and Substantiation for Public Input

Substantiation: High-rise, very tall and above the level of above the level of fire department pump capabilities need to be considered in fire department operational plans. Clear expectations of apparatus capabilities should be pre planned and include and the abilities of relay, dual or tandem pump capabilities.

Submitter Information Verification

Submitter Full Name: Terin Hopkins

Organization: National Fire Sprinkler Associ

Street Address:

City: State: Zip:

Submittal Date: Thu Aug 31 12:04:00 EDT 2023

Committee: FIY-AAA

Committee Statement

Resolution: FR-8-NFPA 13E-2024

Statement: The technical committee recognizes that the 2024 edition of NFPA 14 requires fully

automatic redundancy when building are "above the level of fire department pump capabilities." Fire departments will need to better understand their pumping limitations in determining capabilities. The technical committee also identified that in high-rise buildings, fire department pump capabilities need to be considered in fire department operation plans. Some buildings may require one specific fire department pump to provide total system demand from a single fire department connection (FDC). In these cases, the building should be equipped with two FDC's, both sized for system demand. This correlates with the annex material in the 2024 edition of NFPA 14. additionally, it is necessary to pump pressure regulating hose valves, supplied from the fire department connection (FDC), at system demand so that each hose connection operates correctly.



Public Input No. 23-NFPA 13E-2023 [New Section after 6.3.2]

TITLE OF NEW CONTENT

<u>6.3.6 High-rise buildings are required to have two separate fire department connections with the sum of all inlets equal to system demand. Fire Departments should consider their apparatus pump capabilities and determine the needed intake at any single FDC.</u>

Statement of Problem and Substantiation for Public Input

Substantiation: Two connections on a high-rise building particularly in buildings reaching above the abilities of fire department pump capabilities may be difficult to supply from two different FDC, where the sum of the connections equal system demand. Many departments have a mix of fire engine pump capabilities and will not be able to pump two separate FDC's where the total sum of inlets is provided on multiple FDC's. Some buildings may require one specific fire department pump to provide total system demand from a single fire department connection. In these cases, the building should be equipped with two FDC both sized for system demand.

Submitter Information Verification

Submitter Full Name: Terin Hopkins

Organization: National Fire Sprinkler Associ

Street Address:

City: State: Zip:

Submittal Date: Thu Aug 31 12:14:41 EDT 2023

Committee: FIY-AAA

Committee Statement

Resolution: FR-8-NFPA 13E-2024

Statement: The technical committee recognizes that the 2024 edition of NFPA 14 requires fully

automatic redundancy when building are "above the level of fire department pump capabilities." Fire departments will need to better understand their pumping limitations in determining capabilities. The technical committee also identified that in high-rise buildings, fire department pump capabilities need to be considered in fire department operation plans. Some buildings may require one specific fire department pump to provide total system demand from a single fire department connection (FDC). In these cases, the building should be equipped with two FDC's, both sized for system demand. This correlates with the annex material in the 2024 edition of NFPA 14. additionally, it is necessary to pump pressure regulating hose valves, supplied from the fire department connection (FDC), at system demand so that each hose connection operates correctly.

Public Input No. 2-NFPA 13E-2023 [Section No. 10.1]

10.1 Inspection, Testing, and Maintenance for Sprinkler and Standpipe Systems.

Sprinkler and standpipe systems should be evaluated in accordance with NFPA 25 10.1.1

The building owner or their authorized agent should evaluate sprinkler and standpipe systems in accordance with NFPA 25.

10.1.2

Compliance with NFPA 25 should be verified by the appropriate enforcement agency in accordance with the locally adopted fire code .

Statement of Problem and Substantiation for Public Input

This section should be modified to clarify the intent of NFPA 25. NFPA 25 is an owner's document and it is the owner's responsibility to maintain their water-based fire protections systems. Within the scope of NFPA 13E, the local fire department should verify compliance with NFPA 25. The fire department should work with the local fire code official to review the documents produced from routine ITM activities including any deficiencies.

Submitter Information Verification

Submitter Full Name: Kevin Hall

Organization: American Fire Sprinkler Association **Affiliation:** American Fire Sprinkler Association

Street Address:

City: State: Zip:

Submittal Date: Tue Feb 14 13:55:51 EST 2023

Committee: FIY-AAA

Committee Statement

Resolution: FR-5-NFPA 13E-2024

Statement: The technical committee identified that the fire department should work with the authority

having jurisdiction (AHJ) to review the documents produced from routine inspection,

testing and maintenance activities.