



## First Revision No. 13-NFPA 13E-2024 [ Section No. 2.2 ]

### 2.2 NFPA Publications.

National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471.

NFPA 13. *Standard for the Installation of Sprinkler Systems*, 2025 edition.

NFPA 14. *Standard for the Installation of Standpipe and Hose Systems*, 2024 edition.

NFPA 25, *Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems*, ~~2020~~ 2023 edition.

NFPA 241, *Standard for Safeguarding Construction, Alteration, and Demolition Operations*, ~~2019~~ 2022 edition.

### Submitter Information Verification

**Committee:** FIY-AAA

**Submittal Date:** Tue Feb 13 14:26:53 EST 2024

### Committee Statement

**Committee Statement:** The technical committee recognizes the newer editions of NFPA standards

**Response Message:** FR-13-NFPA 13E-2024



## First Revision No. 14-NFPA 13E-2024 [ Section No. 2.4 ]

### 2.4 References for Extracts in Recommendations Sections.

NFPA 13, *Standard for the Installation of Sprinkler Systems*, ~~2019~~ 2022 edition.

NFPA 14, *Standard for the Installation of Standpipe and Hose Systems*, ~~2019~~ 2024 edition.

NFPA 24, *Standard for the Installation of Private Fire Service Mains and Their Appurtenances*, ~~2019~~ 2022 edition.

NFPA 25, *Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems*, 2023 edition.

### Submitter Information Verification

**Committee:** FIY-AAA

**Submittal Date:** Tue Feb 13 14:29:09 EST 2024

### Committee Statement

**Committee Statement:** The technical committee recognizes the newer editions of NFPA standards.

**Response Message:** FR-14-NFPA 13E-2024



## First Revision No. 9-NFPA 13E-2024 [ New Section after 3.3.2 ]

### 3.3.3\* 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.3.3.3 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 22, or a private service fire main 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]

### 3.3.3.1\* 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.3.3.3.1 Emergency Impairment.

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

### 3.3.3.2 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]

## Submitter Information Verification

**Committee:** FIY-AAA

**Submission Date:** Tue Feb 13 13:24:18 EST 2024

## Committee Statement

**Committee Statement:** The technical committee identified a definition extracted from NFPA 25 could be beneficial for the document user.

**Response** FR-9-NFPA 13E-2024

**Message:**

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



## First Revision No. 12-NFPA 13E-2024 [ Section No. 3.3.3 ]

### 3.3.4 Pressure-Regulating Device.

A device designed for the purpose of reducing, regulating, controlling, or restricting water pressure. [~~24,2019~~ 2022 ]

#### 3.3.4.1 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]

#### 3.3.4.2 Pressure-Restricting Device.

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

## Supplemental Information

<u>File Name</u>	<u>Description</u>	<u>Approved</u>
13E_FR-12_Pressure-Regulating_Device_def.docx		

## Submitter Information Verification

**Committee:** FIY-AAA

**Submittal Date:** Tue Feb 13 14:21:22 EST 2024

## Committee Statement

**Committee 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.

**Response Message:** FR-12-NFPA 13E-2024

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

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



## First Revision No. 1-NFPA 13E-2024 [ Section No. 4.2.3.4 ]

### 4.2.3.4\* Pressure-Regulating Devices Used in Automatic Standpipe Systems.

Fire department personnel should be thoroughly familiar with the design and function of the various types of pressure-regulating devices used in automatic standpipe systems in their jurisdictions.

#### 4.2.3.4.1

Standpipe hose connections equipped with pressure-regulating devices, both pressure-reducing (PRV) and pressure-restricting (PRD), should be flow tested every five years and meet the requirements of NFPA 25.

#### 4.2.3.4.2

PRDs found in existing standpipe systems should be evaluated for performance and considered for replacement with standard hose valves when not exceeding the maximum allowable pressure of 175 psi (12.1 bar).

#### 4.2.3.4.3

PRVs are provided to prevent firefighter injuries by preventing pressures in excess of 175 psi (12.1 bar). Indirect acting PRVs should have a means for testing and may have a standard hose valve installed as a test connection. This hose valve should not be used as it is not intended for firefighter operations and could cause injury.

## Submitter Information Verification

**Committee:** FIY-AAA

**Submittal Date:** Tue Feb 13 10:40:18 EST 2024

## Committee Statement

**Committee 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.

**Response Message:** FR-1-NFPA 13E-2024

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

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

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

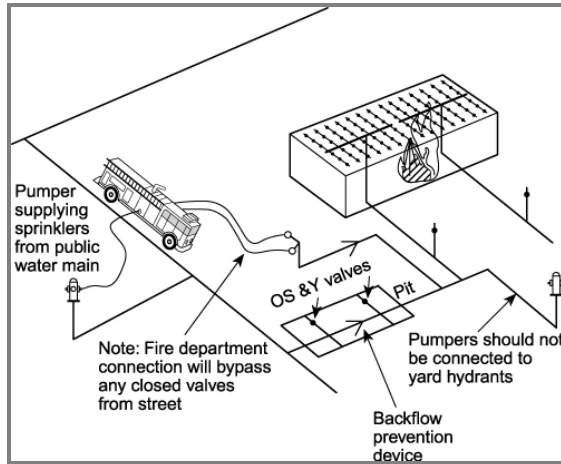


**First Revision No. 3-NFPA 13E-2024 [ Section No. 5.1.4 ]**

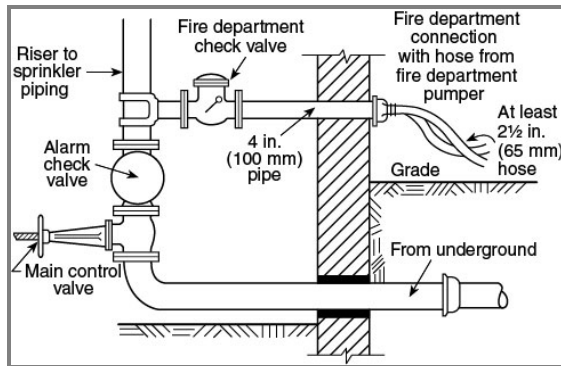
**5.1.4\***

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 to a pressure of 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).] 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 established water supplies and only require supplementation.

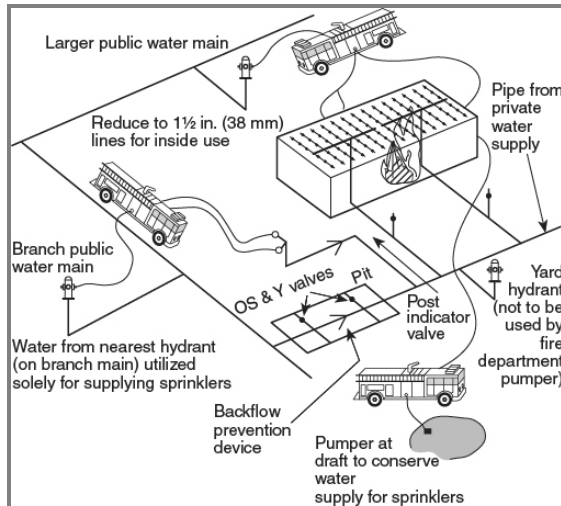
**Figure 5.1.4(a) Public Water Supply to the Sprinkler System.**



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



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





**5.1.4.1**

When supplementing fire sprinkler systems, consideration should be given to the system water supply demand. Certain fire sprinkler systems may require significantly higher demands at the fire department connection (FDC). These systems and their demands need to be included in the pre-planning process.

**Submitter Information Verification**

**Committee:** FIY-AAA

**Submittal Date:** Tue Feb 13 11:03:48 EST 2024

**Committee Statement**

**Committee 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.

**Response Message:** FR-3-NFPA 13E-2024

[Public Input No. 13-NFPA 13E-2023 \[Section No. 5.1.4\]](#)

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



## First Revision No. 4-NFPA 13E-2024 [ New Section after 6.2.4.1 ]

### **6.2.4.1.1**

Supply line(s) should be connected to the FDC and should be supplemented according to fire conditions. The supply line should be pumped to a pressure of 150 psi (10.3 bar) plus any adjustments for elevation, unless the system is posted for a different pressure.

### **6.2.4.1.2**

When using manual standpipes, the standpipes should be fully supplied from the FDC prior to engaging in fire operations in any area considered to be immediately dangerous to life or health (IDLH).

### **6.2.4.1.3**

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 standpipe combined system relies solely on the fire department to supply pressure and flow from the FDC and should be fully supplied prior to any fire attack.

## Submitter Information Verification

**Committee:** FIY-AAA

**Submittal Date:** Tue Feb 13 12:13:04 EST 2024

## Committee Statement

**Committee 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 supplying 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.

**Response Message:** FR-4-NFPA 13E-2024

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

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

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



## First Revision No. 6-NFPA 13E-2024 [ New Section after 6.3.1 ]

### **6.3.1.1**

Supply line(s) should be connected to the FDC to provide an initial minimum flow of 500 gpm (1892 L/min) to the fire floor for operations to supplement or eventually supply the system if the building fire pump(s) fail, with additional adjustments made for pressure and flow for fire conditions.

### **Submitter Information Verification**

**Committee:** FIY-AAA

**Submittal Date:** Tue Feb 13 12:38:31 EST 2024

### **Committee Statement**

**Committee 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.

**Response Message:** FR-6-NFPA 13E-2024

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



## First Revision No. 8-NFPA 13E-2024 [ Section No. 6.3.2 ]

### 6.3.2

Fire suppression operations can be limited to the pressure and flow design of the standpipe. Fire departments should limit interior fire suppression operations to be within the pressure and flow parameters specific to each automatic standpipe system. 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. -

#### 6.3.2.1

In high-rise buildings, fire department pump capabilities should be considered in fire department operation plans.

#### 6.3.2.2

Some buildings may require one specific fire department pump to provide total system demand from a single FDC. In these cases, the building should be equipped with two FDCs, both sized for the system.

#### 6.3.2.3\*

When supplying standpipe, equipped with pressure-regulating valves from a FDC, full system demand should be provided to allow proper valve setting range.

#### A.6.3.2.3

Standpipe pressure-regulating valves are set for specific inlet and outlet pressure ranges based on full system demand. Providing less than the hydraulically calculated pressure required to provide full system demand from the FDC would compromise the design pressure range.

## Submitter Information Verification

**Committee:** FIY-AAA

**Submittal Date:** Tue Feb 13 12:58:02 EST 2024

## Committee Statement

**Committee 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.

**Response Message:** FR-8-NFPA 13E-2024

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

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

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



## First Revision No. 5-NFPA 13E-2024 [ 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. ~~Sprinkler and standpipe systems should be evaluated~~ 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.

## Supplemental Information

<u>File Name</u>	<u>Description</u>	<u>Approved</u>
13E_FR-5_10.1.docx		

## Submitter Information Verification

**Committee:** FIY-AAA

**Submittal Date:** Tue Feb 13 12:25:55 EST 2024

## Committee Statement

**Committee 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.

**Response Message:** FR-5-NFPA 13E-2024

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



## First Revision No. 10-NFPA 13E-2024 [ Section No. C.1.1 ]

### C.1.1 NFPA Publications.

National Fire Protection Association, 1 Batterymarch Park, Quincy, MA 02169-7471.

NFPA 13, *Standard for the Installation of Sprinkler Systems*, 2019 2025 edition.

NFPA 14, *Standard for the Installation of Standpipe and Hose Systems*, 2019 2024 edition.

NFPA 20, *Standard for the Installation of Stationary Pumps for Fire Protection*, 2019 2025 edition.

NFPA 22, *Standard for Water Tanks for Private Fire Protection*, 2023 edition.

NFPA 24, *Standard for the Installation of Private Fire Service Mains and Their Appurtenances*, 2025 edition.

NFPA 901, *Standard Classifications for Incident Reporting and Fire Protection Data*, 2016 2021 edition.

NFPA 909, *Code for the Protection of Cultural Resource Properties — Museums, Libraries, and Places of Worship*, 2017 2021 edition.

NFPA 1142, *Standard on Water Supplies for Suburban and Rural Fire Fighting*, 2017 2025 edition.

## Submitter Information Verification

**Committee:** FIY-AAA

**Submittal Date:** Tue Feb 13 13:48:10 EST 2024

## Committee Statement

**Committee Statement:** The technical committee identified new NFPA standards referenced in Annex A and newer editions of other standards being issued.

**Response Message:** FR-10-NFPA 13E-2024



## First Revision No. 11-NFPA 13E-2024 [ Section No. C.3 ]

### C.3 References for Extracts in Informational Sections.

NFPA 13, *Standard for the Installation of Sprinkler Systems*, ~~2019~~ 2022 edition.

NFPA 25, *Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems*, ~~2020~~ 2023 edition.

### Submitter Information Verification

**Committee:** FIY-AAA

**Submittal Date:** Tue Feb 13 14:18:42 EST 2024

### Committee Statement

**Committee Statement:** The technical committee identify newer NFPA editions issued.

**Response Message:** FR-11-NFPA 13E-2024