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**FPC**  
FLORIDA PLANS &  
CONSTRUCTION  
SEMINAR + EXPO

New Codes and Standards 2023  
For the Design & Construction  
of Health Care Facilities.

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Orlando, Florida

# Key Provisions of the NFPA 1 Fire Code

**Course Number:** AHCA 2023.12

**Credit Designation:** 1 LU/HSW

**AIA CES Provider Number:** E240

*October 2, 2023*



# *Key Provisions of the NFPA 1 Fire Code*

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# Key Provisions of the NFPA 1 Fire Code

Mandatory



Disclaimer

*“Any opinion expressed, therefore, is the personal opinion of the presenter and does not necessarily represent the official position of NFPA or its Technical Committees.”*

# Key Provisions of the NFPA 1 Fire Code

## AIA Learning Objectives

**1**  
OBJECTIVE

Understand how NFPA 1 interfaces with NFPA 101 and the Florida Building Code

**2**  
OBJECTIVE

Understand the core provision of NFPA 1 as they relate to new construction of health care facilities.

**3**  
OBJECTIVE

Understand the core provisions of NFPA 1 as they relate to existing health care facilities.

**4**  
OBJECTIVE

Understand how NFPA 1 and NFPA 101 function as the core documents for the Florida Fire Prevention Code and incorporate referenced standards.



# *Key Provisions of the NFPA 1 Fire Code*

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## **Understand how NFPA one interfaces with NFPA 101, and the Florida building code:**

- Fire/Building Codes Pre- Hurricane Andrew
  - Post 2000 State Fire and Building Codes
  - Florida State Fire Marshal mandated to adopt a statewide Florida Fire Prevention Code with NFPA 1 and 101 as base documents.  
(Florida Building Commission uses ICC as base.)
  - Florida code updates are every three years.
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# Key Provisions of the NFPA 1 Fire Code



**2015**



**2018**



**2021**

# *Key Provisions of the NFPA 1 Fire Code*

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NFPA 1 and NFPA 101 function as the core documents for the Florida fire prevention code, and incorporate reference standards

- New Florida Fire Prevention Code effective 1/1/24.
  - [NFPA 1 and 101, 2018](#) are base documents.
  - Florida specific amendments are posted on-line with SFMO.  
(They are very limited.)
  - Referenced Standards are included.
  - Local Amendments
  - Enforced by Fire Marshal
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# Key Provisions of the NFPA 1 Fire Code

- Florida specific amendments (example)

**18.3.4.3.1 Occupant Notification.** Occupant notification shall be accomplished automatically in accordance with 9.6.3, unless otherwise modified by the following:

- (1) Paragraph 9.6.3.2.3 shall not be permitted to be used.
- F (2)\* The private operating mode, as described in NFPA 72, National Fire Alarm and Signaling Code, In lieu of audible alarm signals, visible alarm indicating appliances shall be permitted to be used in critical patient care areas.
  - F (a) Only the attendants and other personnel required to evacuate occupants from a zone, area, floor, or buildings shall be required to be notified.
  - F (b) Notification of personnel as specified in 18.3.4.3.1 (2)(a) shall include means to readily identify the zone, area, floor, or building in need of evacuation.
- F (3) The provision of 18.3.2.5.3(13)(c) shall be permitted to be used.

F **A.18.3.4.3.1(2)** It is the intent of this provision to permit a visible fire alarm signal instead of an audible signal to reduce interference between the fire alarm and medical equipment monitoring alarms. The intent of this is for the use of the private operating mode in the patient care areas, including patient sleeping areas, of health care facilities and to provide notification of a fire event only to the staff trained to direct emergency response. This may be accomplished by visual or audible alarm signals in areas usually occupied by staff such as the nurse station, utility rooms, medication room, and staff break room.



# *Key Provisions of the NFPA 1 Fire Code*

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## NFPA 1 for new construction of healthcare facilities

- Extracted text
  - Adopts NFPA 99 as a referenced standard (newer edition than CMS and includes all chapters)
  - Fire Department Access
  - Fire Flow and hydrant spacing
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# *Key Provisions of the NFPA 1 Fire Code*

## NFPA 1 for existing Healthcare Facilities (as well as other occupancies)

### 1.3.2.4 Retroactivity of Referenced Standards to Existing Conditions.

Unless otherwise specified by 1.3.2.4.1 through 1.3.2.4.3, the current provisions of the referenced standards shall not apply to facilities, equipment, structures, or installations that existed or were approved for construction or installation prior to the effective date of this Code.

#### 1.3.2.4.1

Where specified by a reference standard for existing occupancies, conditions, or systems, the provisions of the referenced standards shall be retroactive.

#### 1.3.2.4.2

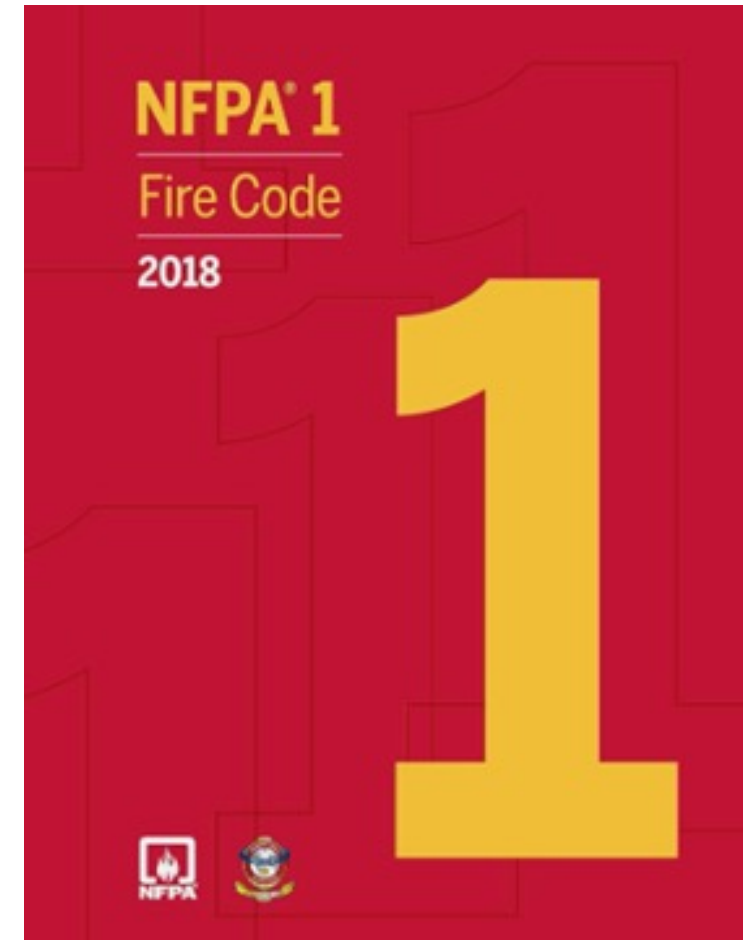
Facilities, equipment, structures, and installations, installed in accordance with a reference standard, shall be maintained in accordance with the edition of the standard in effect at the time of installation.

#### 1.3.2.4.3

In those cases where the AHJ determines that the existing situation constitutes an imminent danger, the AHJ shall be permitted to apply retroactively any portions of the current referenced standards deemed appropriate.

# *Key Provisions of the NFPA 1 Fire Code*

Technical changes (other than those changes to extracted text) to the 2018 edition of NFPA 1, Fire Code,



# *Key Provisions of the NFPA 1 Fire Code*

**New Section 1.4.1.1 provides guidance for the AHJ on compliance with subsequent editions of referenced publications.**

## **1.4.1.1.1 \***

Compliance with subsequent editions of reference publications shall be achieved by complying with the entire subsequent edition of the referenced publication.

## **A.1.4.1.1.1**

The intent of [1.4.1.1](#) and [1.4.1.1.1](#) is that an AHJ should approve the use of subsequent editions of referenced publications only when the entire new edition of the referenced standard is used. This paragraph is not intended to permit the use of “cherry-picking” specific sections of one edition of a referenced standard but to use the entire subsequent edition of the referenced standard.

# Key Provisions of the NFPA 1 Fire Code

**New 1.7.2 adds NFPA 1031 and NFPA 1037 as mandatory professional qualification standards for fire inspectors, plans examiners and fire marshals unless otherwise approved by the AHJ.**

## **1.7.2 \* Minimum Qualifications to Enforce this Code.**

The AHJ shall establish minimum qualifications for all persons assigned the responsibility of enforcing this *Code*.

### **1.7.2.1**

Fire inspectors and plans examiners shall meet the minimum professional qualifications established in [NFPA 1031](#).

### **1.7.2.2**

The AHJ shall be authorized to approve alternative qualifications for personnel conducting fire inspections and plan examination if the AHJ determines the individual possesses the knowledge, skills, and abilities to perform the job performance requirements of the position.

### **1.7.2.3**

Fire marshals shall meet the minimum professional qualifications established in [NFPA 1037](#).

### **1.7.2.4**

The AHJ shall be authorized to approve alternative qualifications for personnel performing the position of fire marshal if the AHJ determines the individual possesses the knowledge, skills, and abilities to perform the job performance requirements of the position.

# Key Provisions of the NFPA 1 Fire Code

## New 10.2.7 establishes minimum fire prevention inspection frequencies for existing occupancies.

### 10.2.7 Minimum Fire Prevention Inspection Frequencies for Existing Occupancies.

#### 10.2.7.1

Fire prevention inspections shall occur on existing premises in accordance with the minimum inspection frequency schedule specified in [Table 10.2.7.1](#)

**Table 10.2.7.1 Minimum Inspection Frequency**

<b>Occupancy Risk Classification</b>	<b>Frequency</b>
High	Annually
Moderate	Biennially
Low	Triennially
Critical infrastructure	Per AHJ

[1730:Table 6.7]

# Key Provisions of the NFPA 1 Fire Code

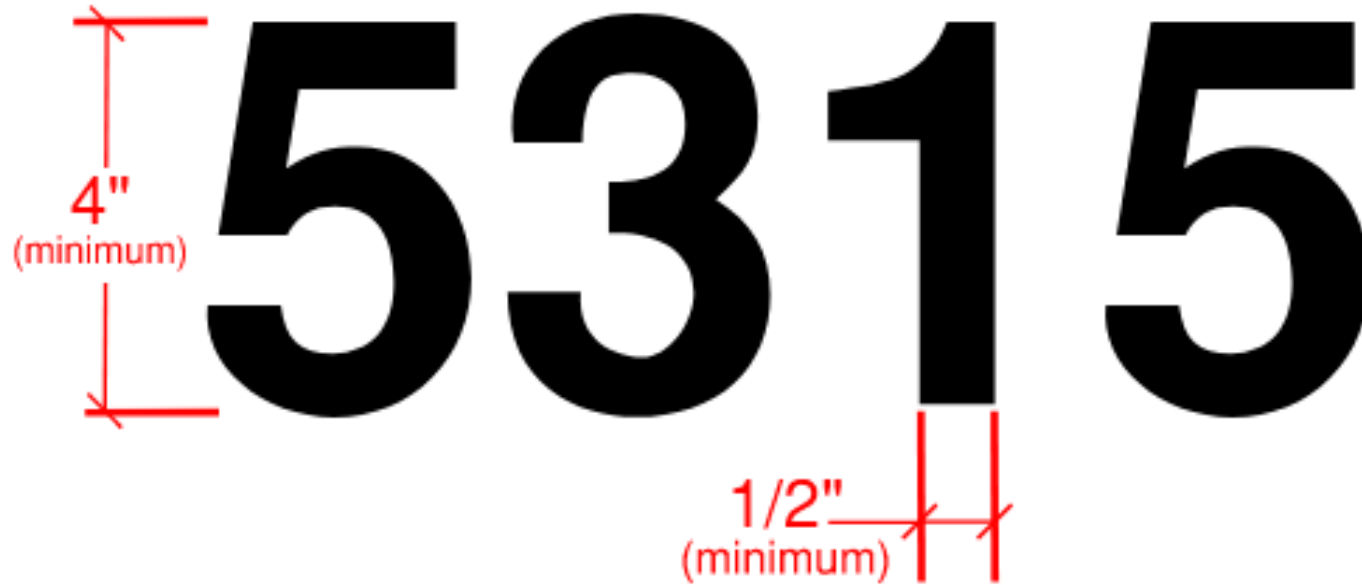
Revisions to 10.11.1 provide additional criteria for premises identification.

- **10.11.1 \***  Premises Identification.
  - **A.10.11.1**
    - *An additional means to identify the locations of new and existing buildings is to co-geolocate each building with U.S. National Grid 108 ft<sup>2</sup> (10 m<sup>2</sup>) coordinates to the primary entrance.*
- **10.11.1.1 \*** 
  - New and existing buildings shall have approved address numbers placed in a position to be plainly legible and visible from the street or road fronting the property.
- **10.11.1.2**
  - Address numbers shall be a minimum of 4 in. (100 mm) high with a minimum stroke width of 1/2 in. (13 mm).

# Key Provisions of the NFPA 1 Fire Code

Revisions to 10.11.1 provide additional criteria for premises identification.

- Address numbers shall be a minimum of 4 in. (100 mm) high with a minimum stroke width of  $\frac{1}{2}$  in. (13 mm).





# Key Provisions of the NFPA 1 Fire Code

## 10.11.1 \* Premises Identification (continued).

### 10.11.1.3 \*

Telecommunications equipment utilized to communicate address data to E911 communication centers shall be programmed and maintained to accurately convey such address information to the E911 communication center.

#### **A.10.11.1.3**

*E911, or Enhanced 911, attempts to automatically associate a location with a call's origin. The location could be a physical address or a geographic reference point. When E911 is in place, the address or geographic reference point is transmitted to the public safety answering point (PSAP). Paragraph 10.11.1.3 ensures that telecommunications equipment that is part of the transmission path is programmed to communicate correct address information to the E911 PSAP. It is not the intent of this provision to require E911 capability of the telecommunications equipment where the PSAP is not capable of receiving such data.*

# *Key Provisions of the NFPA 1 Fire Code*

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## **10.11.1 \* Premises Identification (continued).**

### **10.11.1.4**

The assignment of addresses to buildings shall be in accordance with a method approved by the AHJ.

### **10.11.1.5**

Addresses shall not be changed unless approved by that AHJ.

### **10.11.1.6**

Address numbers for suites within a multiple tenant building or complex shall be individually identified in a manner approved by the AHJ.

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# Key Provisions of the NFPA 1 Fire Code

**Revised 11.1.4.1 to require relocatable power taps to be listed to UL1363 or UL1363A.**

## UL 1363A Medical-Grade Power Strip for Patient-Care Vicinity

The 2012 edition of the NFPA 99 allows the use of two or more power receptacles supplied by a flexible cord that are rack, table, pedestal or cart-mounted as a movable equipment assembly as long as the receptacles are permanently attached to the assembly; ampacity used doesn't exceed 75% of the device; ampacity is in accordance with NFPA 70®, National Electrical Code®; integrity is regularly verified and documented; and means are employed to restrict the addition of devices or nonmedical equipment



# *Key Provisions of the NFPA 1 Fire Code*

CMS requirements include:

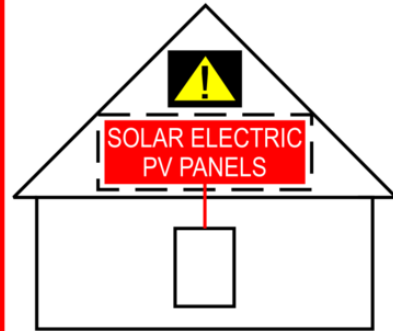
- Patient rooms meet the minimum number of required outlets.
- Power strips in the patient care vicinity meet section 10.2.3.6 of NFPA 99.
- Power strips are not required to be an integral component of manufacturer-tested equipment and may be permanently attached to mounted equipment assemblies by qualified personnel.
- Power strips in the patient care vicinity may not be used for non-patient care electrical equipment.
- Power strips outside the patient care vicinity may be used for both patient care-related electrical equipment and non-patient care-related electrical equipment.
- Power strips providing power to patient care-related electrical equipment must be special-purpose relocatable power taps listed as UL 1363A or UL 60601-1.
- Power strips providing power to non-care-related electrical equipment must be RPTs listed as UL 1363.

# Key Provisions of the NFPA 1 Fire Code

Revised 11.12 on photovoltaic systems to address marking for rapid shutdown, updates for roof access and ground-mounted PV installations.

## SOLAR PV SYSTEM EQUIPPED WITH RAPID SHUTDOWN

TURN RAPID SHUTDOWN SWITCH TO THE "OFF" POSITION TO SHUT DOWN CONDUCTORS OUTSIDE THE ARRAY CONDUCTORS WITHIN THE ARRAY REMAIN ENERGIZED IN SUNLIGHT



Revised again in the 2021 edition with significant changes



# Key Provisions of the NFPA 1 Fire Code

Updates to dimensional criteria for fire department access roads as well a new listing requirement for electric gate operators and systems.



# Key Provisions of the NFPA 1 Fire Code

- New Chapter 38 provides fire safety requirements for marijuana growing, processing and extraction facilities.





# Key Provisions of the NFPA 1 Fire Code

New 50.7 addresses mobile and temporary cooking equipment (food trucks are included in its application).

## **50.7 Mobile and Temporary Cooking Operations.**

### **50.7.1 General.**

#### **50.7.1.1**

Mobile and temporary cooking operations shall comply with [50.7.1](#) and the applicable section for the type of cooking performed.

#### **50.7.1.2**

Where required by the AHJ, permits shall be required for the location, design, construction, and operation of mobile and temporary cooking operations.

#### **50.7.1.3**

Wheel chocks shall be used to prevent mobile and temporary cooking units from moving.





# Key Provisions of the NFPA 1 Fire Code

Complete rewrite of Chapter 52 to reflect new and current technologies for energy storage systems.

## 52.3.1 General.

Energy storage systems having a capacity greater than the quantities listed in [Table 52.3.1](#) shall be in accordance with Section [52.3](#) and where used as a legally required emergency or standby power system, shall also comply with [11.7.3](#).



**Table 52.3.1 Energy Storage System Threshold Quantities**

Type	Capacity <sup>a</sup>
Lithium batteries, all types	20 KWh(18.0 Mega joules)
Sodium batteries, all types	20 KWh (18.0 Mega joules) <sup>c</sup>
Flow batteries <sup>b</sup>	20 KWh (18.0 Mega joules)
Other battery technologies	10 KWh (10.8 Mega joules)
Capacitors	70 KWh (25.2 Mega joules)



# Key Provisions of the NFPA 1 Fire Code

## 52.3.2.3 \* Battery Arrays.

### 52.3.2.3.1

Storage batteries, prepackaged stationary storage battery systems, and pre-engineered stationary storage battery systems shall be segregated into arrays not exceeding 50 KWh (180 Mega joules) each.

### 52.3.2.3.3

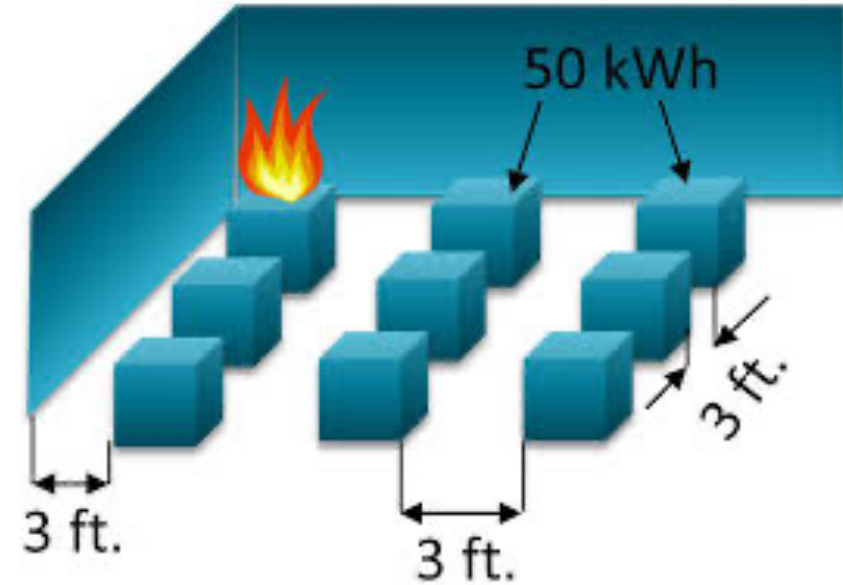
Each array shall be spaced a minimum 3 ft (914 mm) from other arrays and from walls in the storage room or area. The storage arrangements shall comply with the egress provisions in [NFPA 101](#).

### 52.3.2.3.4

Listed pre-engineered stationary storage battery systems and prepackaged stationary storage battery systems shall not exceed 250 KWh (900 Mega joules) each.

### 52.3.2.3.5

The AHJ shall be permitted to approve listed pre-engineered and prepackaged battery arrays with larger capacities or smaller battery array spacing if large-scale fire and fault condition testing conducted or witnessed and reported by an approved testing laboratory is provided showing that a fire involving one array will not propagate to an adjacent array, and be contained within the room for a duration equal to the fire resistance rating of the room separation required by [52.3.2.1.3](#).



# Key Provisions of the NFPA 1 Fire Code

New Annex F on Fire Fighter Breathing-Air Replenishment Systems.





# Key Provisions of the NFPA 1 Fire Code

## 10.15 Portable and Vehicle Mounted Generators

Any generator manufactured after January 1, 2021, other than vehicle-mounted generators, shall be listed and labeled in accordance with the carbon monoxide mitigation requirements in UL 2201, Carbon Monoxide Emission Rate of Portable Generators.

Portable and vehicle-mounted generators shall only be operated or refueled outdoors a minimum of 20 ft (6.1 m) from any building openings, including windows, doors, and air intakes.



# Key Provisions of the NFPA 1 Fire Code

## Chapter 11 - Building Services - Update

### 11.10\* Two-Way Radio Communication Enhancement Systems

- All new and existing buildings, minimum radio signal strength for fire department communications shall be maintained at a level determined by the AHJ
- Where required by the AHJ, two-way radio communication enhancement systems shall comply with NFPA 72.



*Florida Statute 633.202 (18) – Existing high-rise to comply by January 2025*

*NFPA 1221: Standard for the Installation, Maintenance, and Use of Emergency Services Communications Systems, 2019 Edition*

# Key Provisions of the NFPA 1 Fire Code

## Reminder

### Chapter 13 - Fire Protection Systems

13.2.2.6\* The AHJ can allow the removal of occupant-use hose lines where:

- (1) This Code does not require their installation.
- (2) The current building code does not require their installation.
- (3) The AHJ determines that the occupant-use hose line will not be utilized by trained personnel or the fire department.





# Key Provisions of the NFPA 1 Fire Code

## Chapter 13 - Fire Protection Systems

### 13.3.2.12.4 Existing Health Care High-rise sprinkler requirements

Where a jurisdiction adopts the 2015 edition of NFPA and previously adopted the 2009 edition, the required retro-active sprinklering of existing high-rise buildings must be completed within 6 years of the adoption of the this 2015 edition.

(13.3.2.26 Applies to all High-rise buildings)



Requirements are Extracted text from NFPA 101

# *Key Provisions of the NFPA 1 Fire Code*

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## **Chapter 16 - Update**

### **Safeguarding Construction, Alteration, and Demolition Operations (NFPA 241)**

No significant changes - However greater focus

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# ***Key Provisions of the NFPA 1 Fire Code***

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## **Reoccurring Questions/Issues:**

- **How do we deal with conflict between the FFPC and FBC?**
  - **If we disagree with the local fire official, what do we do?**
  - **How does the FFPC apply to the existing site?**
  - **Are there alternatives to prescriptive compliance?**
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# *Key Provisions of the NFPA 1 Fire Code*

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Questions?

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Thank you for your attention!

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