First Revision No. 112-NFPA 1-2021 [Detail]

11.1.4.4

The relocatable power taps shall be directly connected to a permanently installed receptacle, except as permitted by 11.1.4.5.

11.1.4.5*

Where approved by the AHJ, in conference rooms or meeting rooms not more than five relocatable power taps shall be permitted to be connected together for temporary use in support of electronic equipment.

A.11.1.4.5

Conference rooms and meeting rooms do not always provide a sufficient number of wall outlet or floor outlets in proximate locations to facilitate the use of portable computers and similar electronic devices by participants. The intent is for only electronic equipment with a low current draw to be permitted under this exception while the room is in use for meeting purposes.

Submitter Information Verification

Committee: FCC-FUN

Submittal Date: Mon May 10 12:42:05 EDT 2021

Committee Statement

Committee Statement: Conference and meeting rooms frequently do not provide enough wall outlets to facilitate the use of computers and similar devices necessary to participate in conference work or meetings. This proposal provides a reasonable and common application for the need of temporary electrical power in a safe manner when authorized by the AHJ. The number five represents an arbitrary number of power taps based on amperage that is deemed reasonable on the risk.

Response Message: FR-112-NFPA 1-2021

Public Input No. 112-NFPA 1-2021 [New Section after 11.1.4.3]

First Revision No. 125-NFPA 1-2021 [Detail]

[NEW]

A.11.10.2

AHJs are cautioned against requiring two-way radio communications enhancement systems in locations such as telecommunications facility equipment rooms where the operation of two-way radio devices could impair telecommunication services due to interference. Telecommunications facilities are essential elements of the public safety network, providing communities with connectivity to 911 and E911, as well as processing of alarms and other signals. The telephone network has a large, embedded base of legacy electronic equipment that has not been designed or tested for immunity at the power levels and frequencies commonly used in responder radios. As a result, the use of radios in telecommunications equipment rooms can result in a phone service outage. A 2010 joint study of the effects of responder radios on telecommunications equipment was sponsored by several telecommunications carriers and performed by UL. This study confirmed that telecommunications equipment can be functionally impaired and damaged by close proximity radio operation at common frequencies. To help assure reliability of the phone network, it is recommended that responder radios not be utilized in telecommunications equipment areas. Telecommunications equipment rooms are not publicly accessible areas and the number of incidents requiring responder access are low compared to other commercial occupancies. As these facilities are unique occupancies with such an important role, close cooperation between the telecommunications carrier and the AHJ should be encouraged to assure responder activities are not unduly impaired.

Submitter Information Verification

Committee: FCC-FUN

Submittal Date: Tue May 11 09:36:35 EDT 2021

Committee Statement

Committee Statement: As noted in the proposed annex material, prudence is required when considering two-way radio communications enhancement systems in locations such as telecommunications facility equipment rooms where the operation of two-way radio devices could impair telecommunication services due to interference. Telecommunications facilities are essential elements of the public safety network, providing communities with connectivity to 911, E911, as well as processing of alarms and other signals. The telephone network has a large embedded base of legacy electronic equipment that has not been designed or tested for immunity at the power levels and frequencies commonly used in responder radios. As a result, the use of radios in telecommunications equipment rooms can result in a phone service outage. A 2010 joint study of the effects of responder radios on telecommunications equipment was sponsored by AT&T, Verizon and Qwest and performed by UL. This study confirmed that telecommunications equipment can be functionally impaired and damaged by close proximity radio operation at common frequencies. To help assure reliability of the phone network, it is recommended that responder radios not be utilized in telecommunications

equipment areas when this can be avoided. Telecommunications equipment rooms are not publicly accessible areas and the number of incidents requiring responder access are low compared to other commercial occupancies. As these facilities are unique occupancies with such an important role, close cooperation between the owner and the AHJ should be encouraged to assure responder activities are not unduly impaired. Two-way radio communications enhancement systems systems deployed in common areas, stairwells, lobbies and other non-equipment room locations within telecommunications buildings are less of a concern.

Response Message: FR-125-NFPA 1-2021

Public Input No. 123-NFPA 1-2021 [New Section after A.11.10.3.2]

Public Input No. 125-NFPA 1-2021 [Section No. 11.10.2]

First Revision No. 128-NFPA 1-2021 [Detail]

Add new row to Table 1.12.8(a) and place in alphabetical order.

Photovoltaic systems	Installation and placement	11.12.1.2

Supplemental Information

File Name	Description	Approved
FR-128.docx	For staff use	

Submitter Information Verification

Committee: FCC-FUN

Submittal Date: Tue May 11 09:52:19 EDT 2021

Committee Statement

Committee Statement: This is consistent with actions that we have taken on permits for other issues. It is important that the fire official have a say in the design and layout of PV systems on buildings.

This is related to FR-127 which the action taken on PI-13.

Response Message: FR-128-NFPA 1-2021

First Revision No. 70-NFPA 1-2021 [Detail]

See changes to Table 1.12.8(a):

Compressed gases	1. To store, use, or handle compressed gases in excess of the amounts listed in Table ~~1.12.8~~1.13.8(b) 2. When the compressed gases in use or storage exceed the amounts listed in Table ~~1.12.8~~1.13.8(b), a permit is required to install, repair damage to, abandon, remove, place temporarily out of service, close, or substantially modify a compressed gas system 3. For additional permit requirements for compressed gases facility closures, see 63.1.2 4. Insulated liquid carbon dioxide (CO_2) systems in accordance with 63.9.2	63.1.2; 63.9.2

Supplemental Information

File Name	Description	Approved
FR-70.docx	For staff use	

Submitter Information Verification

Committee: FCC-FUN

Submittal Date: Fri Apr 30 09:38:02 EDT 2021

Committee Statement

Committee Statement: This change was made to align with permitting requirements in 63.9.2 to include insulated CO2 system permitting requirements in Table 1.12.8(a). The language in the PI was not consistent with language in 63.9.2 or permitting requirements for CO2 systems in Chapter 63.

Response Message: FR-70-NFPA 1-2021

Public Input No. 32-NFPA 1-2020 [Section No. 1.12.8]

First Revision No. 71-NFPA 1-2021 [Detail]

Add new row to Table 1.12.8(a) in alphabetical order.

In-building emergency responder communications enhancement systems	To install and operate an in-building emergency responder communication enhancement system	11.10.1

Supplemental Information

File Name	Description	Approved
FR-71.docx	For staff use	

Submitter Information Verification

Committee: FCC-FUN

Submittal Date: Fri Apr 30 09:41:12 EDT 2021

Committee Statement

Committee Statement: Section 11.10.1 provides reference to Table 1.12.8(a), but there are currently no requirements for in-building emergency communication systems in Table 1.12.8.(a), this provides reference to these systems to close the cross-reference loop.

Response Message: FR-71-NFPA 1-2021

Public Input No. 4-NFPA 1-2020 [Section No. 1.12.8]

First Revision No. 72-NFPA 1-2021 [Detail]

See changes to Table 1.12.8(a):

Additive manufacturing	To conduct industrial additive manufacturing operations	~~39.1.2~~46.1.2

Supplemental Information

File Name	Description	Approved
FR-72.docx	For staff use	

Submitter Information Verification

Committee: FCC-FUN
Submittal Date: Fri Apr 30 09:44:08 EDT 2021

Committee Statement

Committee Statement: This corrects the cross reference to the correct chapter.
Response Message: FR-72-NFPA 1-2021

Public Input No. 95-NFPA 1-2021 [Section No. 1.12.8]

First Revision No. 56-NFPA 1-2021 [New Section after 1.7.7.5]

1.7.7.6

Building, fire and life safety, fire protection systems and equipment, and other AHJ code-related inspections shall be permitted to be modified or delayed as permitted by the AHJ due to national, regional, or locally declared disasters.

Submitter Information Verification

Committee: FCC-FUN

Submittal Date: Thu Apr 29 11:00:25 EDT 2021

Committee Statement

Committee Statement: The committee modified the original PI to make it mandatory and to clarify that all types of AHJ inspections are included including all fire protection system, fire and life safety systems, and that this is only for AHJ-related inspections. It was also changed to address that not only are inspections permitted to be delayed but modified, which will permit for modifications such as virtual inspections.

International pandemics and natural disasters have openly demonstrated a need for flexibility to accomplish prescriptive inspection services. Building owners do not want to allow outside personnel into their premises. This language empowers the AHJ to implement discretionary changes in prescriptive inspection requirements to ensure the safety of the public and be sensitive to the circumstances causing the deferment or suspension of inspections. Providing this authority within the model code will memorialize this discretionary authority which may provide liability protection to AHJ's and owners where such inspections are not conducted during a disaster.

Response Message: FR-56-NFPA 1-2021

Public Input No. 147-NFPA 1-2021 [New Section after 1.7.7.5]

First Revision No. 58-NFPA 1-2021 [Section No. 1.7.8.3]

1.7.8.3*

Where such hazardous conditions exist, abatement actions by the AHJ shall include the authority to order the immediate disconnection ~~of~~ or reconnection of utilities to a structure or property.

Submitter Information Verification

Committee: FCC-FUN

Submittal Date: Thu Apr 29 11:58:26 EDT 2021

Committee Statement

Committee Statement: It can be necessary for safety for the AHJ to have the ability to reconnect utilities. This will allow the AHJ to permit the reconnection of utilities at their discretion.

Response Message: FR-58-NFPA 1-2021

Public Input No. 34-NFPA 1-2021 [Section No. 1.7.8.3]

First Revision No. 60-NFPA 1-2021 [Section No. 1.7.12]

1.7.12 Plans and Specifications.

1.7.12.1

The AHJ shall have the authority to require plans and specifications to ensure compliance with applicable codes and standards.

1.7.12.2

Plans shall be submitted to the AHJ prior to construction unless otherwise permitted by 1.7.12.4.

1.7.12.3

The construction documents for each phase shall be complete in themselves, so that review and inspection can properly be made. Preliminary plans of the total building shall be submitted with the construction documents, and with sufficient detail, so that proper evaluation can be made. Areas and items not included in the phase to be permitted shall be shown as not included. [**5000:**1.7.6.3.3.3]

1.7.12.4

The AHJ is authorized to exempt detached one- and two-family dwellings and accessory structures from the submittal of plans and permit requirements in 1.7.12.8 .

1.7.12.5

Plans shall be submitted to the AHJ prior to the change of occupancy of any existing building.

1.7.12.6

Plans shall be submitted to the AHJ prior to the alteration of the means of egress or fire protection systems of any existing building.

1.7.12.7

Plans shall be submitted to the AHJ for other conditions as deemed necessary by the AHJ to determine compliance with the applicable codes and standards.

1.7.12.8

The AHJ shall be authorized to require permits for conditions listed in 1.7.12.2, 1.7.12.5, and 1.7.12.6, unless otherwise permitted by 1.7.12.4.

~~**1.7.12.9**~~

~~The AHJ is authorized to exempt detached one- and two-family dwellings and accessory structures from the permit requirement of 1.7.12.8 .~~

1.7.12.9

No construction work shall proceed until the AHJ has reviewed the plans for compliance with the applicable codes and standards and the applicable permits have been issued.

Submitter Information Verification

Committee: FCC-FUN

Submittal Date: Thu Apr 29 12:03:57 EDT 2021

Committee Statement

Committee Statement: Removes redundant language and states it in one requirement.

Response Message: FR-60-NFPA 1-2021

Public Input No. 36-NFPA 1-2021 [Section No. 1.7.12]

First Revision No. 59-NFPA 1-2021 [Section No. 1.7.16.2]

1.7.16.2

~~When~~ Where , in the opinion of the AHJ, an imminent danger exists, the AHJ shall be authorized to order the immediate disconnection ~~of~~ or reconnection of utilities to a structure or property.

Submitter Information Verification

Committee: FCC-FUN

Submittal Date: Thu Apr 29 12:00:35 EDT 2021

Committee Statement

Committee Statement: It can be necessary for safety for the AHJ to have the ability to reconnect utilities. This will allow the AHJ to permit the reconnection of utilities at their discretion.

Response Message: FR-59-NFPA 1-2021

Public Input No. 35-NFPA 1-2021 [Section No. 1.7.16.2]

First Revision No. 61-NFPA 1-2021 [New Section after 1.9.4]

1.10 Pre-incident Planning.

The fire department and the AHJ shall be authorized to conduct pre-incident planning activities in accordance with NFPA 1620 .

Submitter Information Verification

Committee: FCC-FUN

Submittal Date: Thu Apr 29 12:22:33 EDT 2021

Committee Statement

Committee Statement: The original public input was modified to only provide reference to NFPA 1620. Additional review of NFPA 1620 is required to determine if the removed items in this PI are covered within NFPA 1620.

This FR adds reference to NFPA 1620, Standard for Pre-Incident Planning, 2020.

Pre-Incident Planning activities are a key component to effective and safe fire department responses. NFPA 1 does not currently provide any authority to AHJs or the Fire Department to conduct pre-incident planning activities or collect the data required to create pre-incident plans in compliance with NFPA 1620. This PI would ensure that AHJs and Fire Departments have the legal authority to conduct pre-incident plans under the fire code and collect the data necessary per NFPA 1620.

Response Message: FR-61-NFPA 1-2021

Public Input No. 1-NFPA 1-2020 [New Section after 1.9.4]

First Revision No. 63-NFPA 1-2021 [Section No. 1.11.1.1]

1.12.1.1

Documents requested from a property owner ~~for fire protection systems with deficiencies~~ shall be maintained by the AHJ.

Submitter Information Verification

Committee: FCC-FUN

Submittal Date: Thu Apr 29 12:53:29 EDT 2021

Committee Statement

Committee Statement: The AHJ should have a responsibility to retain a record of documentation requested from a property owner, not just documentation pertaining to fire protection systems with deficiencies. The committee expanded the requirement to include all other types of documentation requested by the AHJ. The retention of documents should be in accordance with the AHJ's document retention policy.

FUN recommends that OCP resolve PI-43.

Response Message: FR-63-NFPA 1-2021

Public Input No. 2-NFPA 1-2020 [Section No. 1.11.1.1]

First Revision No. 64-NFPA 1-2021 [Section No. 1.11.4.2]

1.12.4.2

The fire department shall report its incident record data, collected in accordance with 1.12.4, to the recognized ~~state~~ agency responsible for collecting such data.

Submitter Information Verification

Committee: FCC-FUN

Submittal Date: Thu Apr 29 13:34:13 EDT 2021

Committee Statement

Committee Statement: State is a US-specific term. Additionally, there may be other agencies responsible for collecting such data, and the inclusion of "state" is unnecessarily limiting.

Response Message: FR-64-NFPA 1-2021

Public Input No. 37-NFPA 1-2021 [Section No. 1.11.4.2]

First Revision No. 65-NFPA 1-2021 [Section No. 1.17]

1.18* ~~Permit~~ Fees.

The AHJ shall be authorized to establish a schedule of fees.

Submitter Information Verification

Committee: FCC-FUN

Submittal Date: Thu Apr 29 13:38:29 EDT 2021

Committee Statement

Committee Statement: The TC does not wish to relocate these requirements as this would limit the AHJ to collecting fees for only permitting. The revised language will allow the AHJ to collect fees for additional activities which may not relate to permits, this is consistent with the current A.1.17.

Response Message: FR-65-NFPA 1-2021

Public Input No. 40-NFPA 1-2021 [New Section after 1.12.6.14]

Public Input No. 39-NFPA 1-2021 [Section No. 1.17]

First Revision No. 62-NFPA 1-2021 [New Section after 3.3.221]

3.3.221 Pre-Incident Plan.

A document developed by gathering general and detailed data that is used by responding personnel in effectively managing emergencies for the protection of occupants, responding personnel, property, and the environment.

Submitter Information Verification

Committee: FCC-FUN

Submittal Date: Thu Apr 29 12:26:11 EDT 2021

Committee Statement

Committee Statement: The definition is extracted from NFPA 1620 and the term was added in FR-61.

FCC-FUN requests that the FCC-AAC assigns this definition of FCC-FUN.

Response Message: FR-62-NFPA 1-2021

Public Input No. 53-NFPA 1-2021 [New Section after 3.3.221]

First Revision No. 66-NFPA 1-2021 [Section No. 10.2]

10.2 Owner/~~Occupant~~ Operator/Tenant Responsibilities.

10.2.1

The owner, operator, tenant, or ~~occupant~~ authorized representative shall be responsible for compliance with this *Code*.

10.2.2

The owner, operator, tenant, or ~~occupant~~ authorized representative of a building shall notify the AHJ prior to a change of occupancy as specified in 4.5.7 and 10.3.4.

10.2.3

The AHJ shall be permitted to require the owner, operator, tenant, or ~~occupant~~ authorized representative to provide tests or test reports, without expense to the AHJ, as proof of compliance with the intent of this *Code*.

10.2.4

The owner, operator, tenant, or ~~occupant~~ authorized representative of a building that is deemed unsafe by the AHJ shall abate, through corrective action approved by the AHJ, the condition causing the building to be unsafe either by repair, rehabilitation, demolition, or other corrective action approved by the AHJ.

10.2.5

The owner, operator, tenant, or ~~occupant~~ authorized representative , or any person in control of a building or premises shall keep records of all maintenance, inspections, and testing of fire protection systems, fire alarm systems, smoke control systems, emergency evacuation and relocation drills, emergency action plans, emergency power, elevators, and other equipment as required by the AHJ.

10.2.6

All records required to be kept shall be maintained until their useful life has been served, as required by law, or as required by the AHJ.

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

Occupancy Risk Classification	Frequency
High	Annually
Moderate	Biennially
Low	Triennially
Critical infrastructure	Per AHJ

[**1730:**Table 6.7]

10.2.7.2

Where required or permitted by the AHJ, the required fire prevention inspection shall be conducted by an approved party that is qualified in accordance with NFPA 1031.

10.2.7.3

The AHJ shall be permitted to approve alternative qualifications for the approved party specified in 10.2.7.2.

10.2.7.4

The provisions of 10.2.7 shall not apply to detached one- and two-family dwellings or townhomes.

Submitter Information Verification

Committee: FCC-FUN

Submittal Date: Thu Apr 29 15:16:33 EDT 2021

Committee Statement

Committee Statement: The current language adds responsibilities to the occupant, who may or may not have authority to make changes to comply with the Code. The purpose of this section is to outline the responsibilities for parties which have responsibility for compliance with the code and the authority within the building to authorize necessary changes for compliance with the code.

Response Message: FR-66-NFPA 1-2021

First Revision No. 67-NFPA 1-2021 [Section No. 10.8]

10.4 Emergency Action Plans.

10.4.1 Where Required.

Emergency action plans shall be provided for high-rise, health care, ambulatory health care, residential board and care, assembly, day-care centers, special amusement buildings, hotels and dormitories, detention and correctional occupancies, educational, underground and windowless structures, facilities storing or handling materials covered by Chapter 60, or where required by the AHJ.

10.4.2 Plan Requirements.

10.4.2.1*

Emergency action plans shall include the following:

(1) Procedures for reporting of emergencies

(2) Occupant and staff response to emergencies

(3)* Evacuation, relocation and shelter-in-place procedures appropriate to the building, its occupancy, emergencies, and hazards

(4) Appropriateness of the use of elevators

(5) Design and conduct of fire drills

(6) Type and coverage of building fire protection systems

(7) Other items required by the AHJ

[***101***:4.8.2.1]

10.4.2.2

Emergency action plans shall be submitted to the AHJ for review when required by the AHJ.

10.4.2.3*

Emergency action plans shall be reviewed and updated as required by the AHJ. [***101***:4.8.2.3]

Submitter Information Verification

Committee: FCC-FUN

Submittal Date: Thu Apr 29 15:43:22 EDT 2021

Committee Statement

Committee Statement: The committee believes that this section was more appropriate as 10.4 and this move aligns with the submitter's original intent of locating emergency action plans adjacent to similar topics.

Response Message: FR-67-NFPA 1-2021

Public Input No. 46-NFPA 1-2021 [Section No. 10.8]

First Revision No. 68-NFPA 1-2021 [Section No. 10.10.6]

10.10.6 Cooking Equipment.

10.10.6.1

For other than one- and two-family dwellings, ~~no~~ hibachi, grill, or other similar devices ~~used~~ using a solid, gas, or liquid fuel for cooking, heating, or any other purpose shall not be used or kindled on any balcony, under any overhanging portion, or within 10 ft (3 m) of any structure.

10.10.6.2

In residential occupancies, electrically powered hibachi, grills, or other similar devices listed and labeled in accordance with UL 1026, *Standard for Household Electric Cooking and Food Serving Appliances*, operated in accordance with its listing and the manufacturer's instructions shall be permitted to be used on any balcony.

10.10.6.3

For other than one- and two-family dwellings, no hibachi, grill, or other similar devices used for cooking shall be stored on a balcony.

10.10.6.4*

Listed equipment permanently installed in accordance with its listing, applicable codes, and manufacturer's instructions shall be permitted.

Submitter Information Verification

Committee: FCC-FUN

Submittal Date: Thu Apr 29 16:36:09 EDT 2021

Committee Statement

Committee Statement: This proposal will allow the use of electric powered grills on balconies of buildings other than one- and two-family dwellings. The code has prohibited all grills from balconies in these locations, and the ban on solid, gas, or liquid fueled grills is understood. Listed electric grills offer significant fire safety advantages, specifically no fuel storage, the significant electrical safety features that are required to obtain listing to UL 1026, and the specific non- electrical fire safety required for barbecue grills included in the standard.

It is understood that the prohibition of all grills on balconies has created a difficult situation for code enforcers. Apartment dwellers, like residents of single-family homes, like to grill outdoors in warmer weather. Requiring someone to remove a balcony grill creates an adversarial position that is difficult for both the code enforcer and resident. Unfortunately, there is currently no option the code enforcer can offer. This was addressed in a state that adopts NFPA 1 (Florida) by allowing small electric grills on balconies via a state amendment. Another state (New Hampshire) allows grills on balconies of multi-family buildings.

UL 1026 addresses both the electrical safety and fire safety of electric outdoor grills. The specific fire safety provisions are found in sections 19 (over temperature protection), 41.1.5 (grease container temperature limits), 41.2.3.1 (hamburger testing) and 55.2.4 (specific tests for barbecue grills) including 55.2.4.1 (flare up test). These provisions contemplate fire safety on balconies for these listed electric grills.

Some committee members expressed concerns regarding sprinkler protection, size limitations of grills, ventilation, balcony openness, and allowance for use on spaces in 10.10.16.1.

Response Message: FR-68-NFPA 1-2021

Public Input No. 108-NFPA 1-2021 [Section No. 10.10.6]

First Revision No. 104-NFPA 1-2021 [Sections 10.11.1.7, 10.11.1.8]

10.11.1.3

Address numbers shall contrast with their background.

10.11.1.4

Address numbers shall be arabic numerals or alphabet letters.

Submitter Information Verification

Committee: FCC-FUN

Submittal Date: Mon May 10 10:05:36 EDT 2021

Committee Statement

Committee Statement: Moving to after 10.11.1.2 places all the requirements for signs in one place not separated.

Response Message: FR-104-NFPA 1-2021

Public Input No. 47-NFPA 1-2021 [Sections 10.11.1.7, 10.11.1.8]

First Revision No. 105-NFPA 1-2021 [Sections 10.11.3.3, 10.11.3.4]

10.11.3.3* Stairway Tread Marking.

Where new contrasting marking is applied to stairs, such marking shall comply with all of the following:

The marking shall include a continuous strip as a coating on, or as a material integral with, the full width of the leading edge of each tread.

The marking shall include a continuous strip as a coating on, or as a material integral with, the full width of the leading edge of each landing nosing.

The marking strip width, measured horizontally from the leading vertical edge of the nosing, shall be consistent at all nosings.

The marking strip width shall be 1 in. to 2 in. (25 mm to 51 mm).

[***101*** : 7.2.2.5.4.3]

A.10.11.3.3

Where environmental conditions (such as illumination levels and directionality or a complex visual field that draws a person's attention away from stair treads) lead to a hazardous reduction in one's ability to perceive stair treads, they should be made of a material that allows ready discrimination of the number and position of treads. In all cases, the leading edges of all treads should be readily visible during both ascent and descent. A major factor in injury-producing stair accidents, and in the ability to use stairs efficiently in conditions such as egress, is the clarity of the stair treads as separate stepping surfaces.
[***101*** : A.7.2.2.5.4.3]

For stair nosing marking, surface-applied material, such as adhesive-backed tape and magnetic strips, should not be used, as it is not durable under the scuffing from users' feet and, in coming loose, it creates a tripping hazard. While a carefully applied and consistently maintained coating is acceptable, contrasting color or photoluminescent material integral with the nosings is preferable because of its permanence. It is also the intent of 10.11.3.3 to require the contrasting stairway tread marking to be a material integral with the stair tread and not a material integral with a stair nosing product that is installed on the stair tread. See also 7.1.6.4 and 7.2.2.3.6 of NFPA *101* for slip resistance uniformity requirements, as well as prohibition of projections on the treads.
[***101*** : A.7.2.2.5.4.3]

Guidance on the use of photoluminescent marking is provided by ASTM E2030, *Standard Guide for Recommended Uses of Photoluminescent (Phosphorescent) Safety Markings* . Additional marking, for example, at the side boundaries of the stair, should be applied in accordance with the guidance provided therein. [***101*** : A.7.2.2.5.4.3]

10.11.3.4*

Where new contrast marking is provided for stairway handrails, it shall be applied to, or be part of, at least the upper surface of the handrail; have a minimum width of 1½ in. (13 mm); and extend the full length of each handrail. After marking, the handrail shall comply with 7.2.2.4.5 of NFPA *101* . Where handrails or handrail extensions bend or turn corners, the stripe shall be permitted to have a gap of not more than 4 in. (100 mm). [***101*** : 7.2.2.5.4.4]

~~A.10.11.3.4~~

~~Coatings and other applied markings, if used, should be durable for the expected usage, especially at end terminations of the marking and at changes in stair direction where usage is more extensive and hand forces are larger. [***101*** : A.7.2.2.5.4.4]~~

Submitter Information Verification

Committee: FCC-FUN

Submittal Date: Mon May 10 10:09:33 EDT 2021

Committee Statement

Committee Statement: These sections from 101 are when contrasting markings are required, currently no occupancies require and it does not with this section on stairwell markings. It applies to new construction if needed would be picked up by ref to 101 and building code if needed.

Response Message: FR-105-NFPA 1-2021

Public Input No. 48-NFPA 1-2021 [Sections 10.11.3.3, 10.11.3.4]

First Revision No. 110-NFPA 1-2021 [Section No. 11.1.2.2]

11.1.2.2

Unless determined to present an imminent danger, existing electrical wiring, fixtures, appliances, and equipment shall be permitted to be maintained in accordance with the edition of *NFPA 70* in effect at the time of the installation.

11.1.2.2.1*

Where the AHJ determines that there is sufficient evidence that existing electrical wiring, fixtures, appliances, or equipment is potentially unsafe, the AHJ is authorized to require an evaluation of the existing electrical wiring, fixtures, appliances, electrical loads, or equipment, or portion thereof, by a qualified person.

11.1.2.2.2

The qualified person shall provide a report to the AHJ with an assessment of the condition of the electrical wiring, fixtures, appliances, electrical loads, or equipment along with recommendations for any needed repairs to correct the unsafe condition(s).

Submitter Information Verification

Committee: FCC-FUN

Submittal Date: Mon May 10 11:40:28 EDT 2021

Committee Statement

Committee Statement: Electrical loads are an important factor to consider for an AHJ trying to determine if an imminent danger exists or if an existing system is adequate to be used.

Response Message: FR-110-NFPA 1-2021

Public Input No. 50-NFPA 1-2021 [Section No. 11.1.2.2]

First Revision No. 111-NFPA 1-2021 [Section No. 11.1.4]

11.1.4 Relocatable Power Taps.

11.1.4.1

Relocatable power taps shall be listed to UL 1363, *Relocatable Power Taps*, or UL 1363A, *Outline of Investigation for Special Purpose Relocatable Power Taps*, where applicable, except as permitted by 11.1.4.2 or 11.1.4.3 .

11.1.4.2

Relocatable power taps incorporated into furniture shall be listed and labeled in accordance with UL 962A, *Furniture Power Distribution Units* .

11.1.4.3

Relocatable power taps used in health care occupancies shall be listed and labeled in accordance with UL 1363A, *Outline of Investigation for Special Purpose Relocatable Power Taps* , or UL 2930, *Outline of Investigation for Cord and Plug Connected Health Care Facility Outlet Assemblies,* and UL 60601-1, *Medical Electrical Equipment, Part 1: General Requirements for Safety.*

Detail FR-112

11.1.4.4

The relocatable power taps shall be directly connected to a permanently installed receptacle, except as permitted by 11.1.4.5 .

11.1.4.5*

Where approved by the AHJ, in conference rooms or meeting rooms not more than five relocatable power taps shall be permitted to be connected together for temporary use in support of electronic equipment.

11.1.4.6

Relocatable power tap cords shall not extend through walls, ceilings, or floors; under doors or floor coverings; or be subject to environmental or physical damage.

Submitter Information Verification

Committee: FCC-FUN

Submittal Date: Mon May 10 11:47:56 EDT 2021

Committee Statement

Committee Statement: The committee has moved to combine PI-142 & 143 and reorganize this section to make it clear that the new sections are alternatives to the existing requirements.

The addition of UL 962A gives AHJs guidance on the appropriate listing and use of furniture that incorporate relocatable power taps.

The FR is adding reference to UL 962A, Furniture Power Distribution Units, 2018, revised 2020, UL 2930, Outline of Investigation for Cord-and-Plug-Connected Health Care Facility Outlet Assemblies, 2020, and UL 60601-1 Medical Electrical Equipment, Part 1: General Requirements for Safety, 2003.

NOTE: The following is from the scope of UL 962A - FPDU's are for fixed mounting to portable or stationary furnishings as a power supply connection for cord and plug connected electrical utilization equipment in accordance with the National Electrical Code, NFPA 70.

Both UL 2930 and UL 60601-1 are relative to relocatable power taps, particularly those located in medical facilities and should be used and referenced within NFPA 1 for knowledge and inspection reference purposes. Neither of these standards are currently referenced in NFPA 99, but public inputs have been submitted by the PI submitter for NFPA 99 to consider adding these two references.

Response Message: FR-111-NFPA 1-2021

Public Input No. 142-NFPA 1-2021 [Section No. 11.1.4]

Public Input No. 143-NFPA 1-2021 [Section No. 11.1.4]

First Revision No. 126-NFPA 1-2021 [Section No. 11.10]

11.10* In-Building Emergency Responder Communication Enhancement Systems.

11.10.1 Permits.

11.10.1.1

Where required by the AHJ, an installation permit shall comply with Section 1.13.

11.10.1.2

Where required by the AHJ, a renewable permit in accordance with ~~9.6.6.2 of NFPA 1221~~ 18.7.7 of NFPA 1225 shall be issued at the conclusion of successful acceptance testing.

11.10.2* ~~General.~~

In all new and existing buildings, an approved emergency communication enhancement system shall be installed where the minimum radio signal strength ~~for emergency services department communications shall be maintained at a level determined by the AHJ~~ into the building cannot be maintained in accordance with NFPA 1225 .

11.10.3

In-building emergency responder communication enhancement systems shall comply with the design, installation, testing, inspection, and maintenance requirements in ~~Section 9.6 of NFPA 1221~~ NFPA 1225 ~~and 11.10.3.1 through 11.10.11 of this *Code*~~ .

~~**11.10.3.1***~~

~~In-building emergency responder communication enhancement systems capable of operating on frequencies licensed to any public safety agency by the Federal Communications Commission (FCC) or other radio licensing authority shall not be installed without prior coordination and approval of the AHJ.~~

~~**A.11.10.3.1**~~

~~This requirement is indented to ensure that system installer is aware of the requirements in FCC Part 90.219 relating to use of emergency radio frequencies under the regulation of the FCC and the FCC radio frequency license issued to the public safety agency.~~

11.10.4 Listed and Labeled.

In-building emergency responder communication enhancement systems installed within buildings shall be listed and labeled in accordance with UL 2524, *In-building 2-Way Emergency Radio Communication Enhancement Systems*.

~~**11.10.5***~~ ~~Lightning Protection.~~

~~Systems shall have lightning protection that complies with NFPA 780 .[**1221:** 9.6.3]~~

~~**A.11.10.5**~~

~~U.S. Army Technical Manual TM 5-811-3, *Electrical Design: Lightning and Static Electricity Protection* , provides additional guidance. [**1221** :A.9.6.3]~~

~~**11.10.6** Enclosures.~~

All repeater, transmitter, receiver, signal booster components, optical-to-RF and RF-to-optical converters, external filters, batteries, and battery system components shall be contained in a NEMA4- or NEMA4X-type enclosure(s). [**1221** :9.6.11.2]

11.10.6.1

Batteries that require venting shall be stored in NEMA3R-type enclosures.

11.10.7 Oscillation Detection and Control.

Bi-directional amplifiers (BDAs) used in in-building emergency responder communication enhancement systems shall have oscillation detection and control circuitry.

11.10.8* Minimum Signal Strength into the Building.

In addition to the requirements in 9.6.8.1 of NFPA 1221 , the inbound signal strength shall be a minimum of -95 dBm throughout the coverage area and sufficient to provide not less than a delivered audio quality (DAQ) of 3.0 or an equivalent signal-to-interference-plus-noise ratio (SINR) applicable to the technology for either analog or digital signals.

A.11.10.8

The DAQ metric is often used to quantify the quality of audio heard over a radio system. DAQ levels are defined by the following scale: DAQ 1 = Unusable. Speech is present but not understandable. DAQ 2 = Speech is understandable with considerable effort. Requires frequent repartition due to noise or distortion. DAQ 3 = Speech understandable with slight effort. Requires occasional repetition due to noise or distortion. DAQ 3.4 = Speech understandable without repetition. Some noise or distortion present. DAQ 4 = Speech easily understandable. Little noise or distortion. DAQ 5 = Perfect. No distortion or noise discernible.

11.10.9 Mounting of the Donor Antenna(s).

11.10.9.1

To maintain proper alignment with the system designed donor site, donor antennas shall meet one of the following:

Antennas shall be permanently affixed on the building.

Where approved, antennas shall be mounted on a movable sled with a visible sign stating “Movement or repositioning of this antenna is prohibited without approval from the AHJ.”

11.10.9.2

The antenna installation shall also be in accordance with the applicable requirements of the building code for weather protection of the building envelope.

11.10.10 Radio Communication Antenna Density.

11.10.10.1*

In-building emergency responder communication enhancement systems shall be engineered to minimize the near-far effect.

A.11.10.10.1

Near-far problem arises when a passive distributed antenna system (DAS) is not designed correctly and is caused when a transmission from a portable radio that is really close (near) to a DAS antenna and it overpowers the uplink amplifier. When this occurs the near portable radio uses up the available gain of the bi-directional amplifier (BDA) so that another transmission that is happening at the same time on a different frequency from a radio that is further away from a DAS antenna (far radio) would not be amplified as much. The near-far problem can be an issue with an improperly design class A channelized or Class B broadband BDAs.

11.10.10.2

In-building emergency responder communication enhancement system designs shall include sufficient antenna density to address reduced gain conditions.

11.10.11

Where an in-building emergency responder communication enhancement system is required and such system, components, or equipment has a negative impact on the normal operations of the facility at which it is installed, the AHJ shall have the authority to accept an automatically activated responder system.

11.10.12 Acceptance Test Procedure.

Where an in-building emergency responder communication enhancement system is required, the building owner shall have the system tested on completion of installation to verify that two-way coverage on each floor of the building is not less than the coverage specified in 9.6.7.3 or 9.6.7.4 of NFPA 1221 as applicable.

~~**11.10.12.1** Test Procedure.~~

~~The test procedure, as required by 11.10.11 , shall be conducted as follows:~~

~~Each floor of the building shall be divided into a grid of 20 approximately equal test areas.~~

~~The test shall be conducted using a calibrated portable radio of the latest brand and model used by the agency talking through the agency's radio communications system or equipment approved by the AHJ.~~

~~Failure of more than one test area shall result in failure of the test.~~

~~A test location approximately in the center of each test area shall be selected for the test, with the radio enabled to verify two-way communications to and from the outside of the building through the public agency's radio communications system, as follows:~~

~~Once the test location has been selected, that location shall represent the entire test area.~~

~~Failure in the selected test location shall be considered to be a failure of that test area and additional test locations shall not be permitted.~~

~~All signal boosters or amplifiers shall be tested to verify that the gain is the same as it was upon initial installation and acceptance or set to optimize the performance of the system under all operating conditions.~~

~~At the time of installation and at subsequent annual inspections, a spectrum analyzer or other suitable test equipment shall be utilized to ensure spurious oscillations are not being generated by the subject signal booster.~~

~~Systems shall be tested using two portable radios simultaneously conducting subjective voice quality checks, as follows:~~

~~One portable radio shall be positioned not more than 10 ft (3048 mm) from the indoor antenna.~~

~~The second portable radio shall be positioned at a distance that represents the farthest distance from any indoor antenna.~~

~~With both portable radios simultaneously keyed up on different frequencies within the same band, subjective audio testing shall be conducted and comply with DAQ levels as specified in 9.6.8.1 or 9.6.8.2 of NFPA 1221 as applicable.~~

Supplemental Information

File Name	Description	Approved
FR-126.docx	for staff use	

Submitter Information Verification

Committee: FCC-FUN

Submittal Date: Tue May 11 09:41:39 EDT 2021

Committee Statement

Committee Statement:	NFPA 1225 is a new standards which combines emergency services communications. The changes are to correlate the requirements of NFPA 1225 and deleting requirements in NFPA 1 as users should go to NFPA 1225 to find requirements for in-building emergency responder communication enhancement systems.
Response Message:	FR-126-NFPA 1-2021

First Revision No. 127-NFPA 1-2021 [New Section after 11.12.1.1]

11.12.1.2

Permits, where required, shall comply with Section 1.13 .

Submitter Information Verification

Committee: FCC-FUN

Submittal Date: Tue May 11 09:48:18 EDT 2021

Committee Statement

Committee Statement: This is consistent with actions that we have taken on permits for other issues. It is important that the fire official have a say in the design and layout of PV systems on buildings. Also see action on FR-128 adding requirements to Table 1.12.8(a).

Response Message: FR-127-NFPA 1-2021

Public Input No. 13-NFPA 1-2020 [New Section after 11.12.1.1]

First Revision No. 123-NFPA 1-2021 [Section No. 11.12.2.1.6]

11.12.2.1.6 Markings for Building Integrated PV (BIPV) Systems.

11.12.2.1.6.1

BIPV systems installed as the roof covering shall have markings to identify any areas with electrical hazards hidden from view.

11.12.2.1.6.2

Marking shall be both of the following:

(1) Reflective

(2) Visible from grade beneath the eaves or other approved location

11.12.2.1.6.3

The AHJ shall be permitted to reduce or exempt marking requirements for BIPV systems installed as the roof covering when they are ~~listed~~ installed in accordance with 690.12(B)(2) of *NFPA 70*.

Submitter Information Verification

Committee: FCC-FUN

Submittal Date: Mon May 10 15:39:58 EDT 2021

Committee Statement

Committee Statement: The inclusion of the language for visibility of markings provides additional information and guidance for visibility of markings. The words "by the AHJ" were removed from the statement, as this is redundant with the definition of approved.

Proposed wording for ladder placement limits the electrical hazard and only references ladder placements and would not cover other potential electrical hazards not due to ladder placement.

UL 3741 is referenced in NFPA 70, 690.12 (B) (2). Adding this reference would not be consistent with the provisions found within NFPA 70, Article 690 and would create a correlation issue between NFPA 1 and NFPA 70.

Response Message: FR-123-NFPA 1-2021

Public Input No. 169-NFPA 1-2021 [Section No. 11.12.2.1.6]

Public Input No. 146-NFPA 1-2021 [Section No. 11.12.3.1.3]

Public Input No. 145-NFPA 1-2021 [Section No. 11.12.2.1.6.3]

First Revision No. 117-NFPA 1-2021 [Section No. 18.1.1.2]

18.1.1.2

This chapter shall apply to public and privately owned fire hydrant systems and water supplies .

Submitter Information Verification

Committee: FCC-FUN

Submittal Date: Mon May 10 14:23:29 EDT 2021

Committee Statement

Committee Statement: This section deals with more than just fire hydrants it also includes water supplies. This updates the scope of the chapter to the scope of the requirements within the section.

Response Message: FR-117-NFPA 1-2021

Public Input No. 14-NFPA 1-2020 [Section No. 18.1.1.2]

First Revision No. 118-NFPA 1-2021 [Section No. 18.4.2]

~~**18.4.2** Definitions.~~

~~See definitions 3.3.14.4 , Fire Flow Area, and 3.3.128 , Fire Flow.~~

Submitter Information Verification

Committee: FCC-FUN

Submittal Date: Mon May 10 14:36:21 EDT 2021

Committee Statement

Committee Statement: This section is not consistent with the remainder of NFPA 1 and is unnecessary.

Response Message: FR-118-NFPA 1-2021

Public Input No. 61-NFPA 1-2021 [Section No. 18.4.2]

First Revision No. 119-NFPA 1-2021 [Section No. 18.5.5]

18.5.5 Inspection, Testing, and Maintenance.

18.5.5.1

Private water supply systems shall be inspected, tested, and maintained in accordance with NFPA 25.

18.5.5.2

Public water supply systems providing fire flow shall be inspected, tested, and maintained in accordance with ANSI/AWWA G200, *Standard for Distribution Systems Operation and Management*.

Submitter Information Verification

Committee: FCC-FUN

Submittal Date: Mon May 10 14:37:54 EDT 2021

Committee Statement

Committee Statement: Inspection is an important component of ensuring water supplies work. This terminology is consistent with the terminology used in NFPA 25.

Response Message: FR-119-NFPA 1-2021

Public Input No. 62-NFPA 1-2021 [Section No. 18.5.5]

First Revision No. 120-NFPA 1-2021 [Section No. A.4.1.6]

A.4.1.6

Additional information on building security is provided in NFPA 730 ~~and~~ , NFPA 731, and NFPA 3000 .

Submitter Information Verification

Committee: FCC-FUN

Submittal Date: Mon May 10 14:40:02 EDT 2021

Committee Statement

Committee Statement: NFPA 3000 is directly related to security features and incident preplanning for emergency services. NFPA 3000 should be utilized as an additional resource for incorporating an active shooter/hostile event response plan when providing comprehensive security features to a building and its occupants in the event of an incident.

Response Message: FR-120-NFPA 1-2021

Public Input No. 134-NFPA 1-2021 [Section No. A.4.1.6]

First Revision No. 122-NFPA 1-2021 [New Section after D.1]

D.2 Permit.

D.2.1

A permit shall be required for the installation of a firefighter breathing-air replenishment system.

D.2.2

The permit shall comply with Section 1.13 .

Submitter Information Verification

Committee: FCC-FUN
Submittal Date: Mon May 10 15:05:31 EDT 2021

Committee Statement

Committee Statement: A permit should be required for installing a breathing air system.
Response Message: FR-122-NFPA 1-2021

Public Input No. 97-NFPA 1-2021 [New Section after D.1]