



Public Input No. 36-NFPA 101-2021 [Section No. 3.3.94]

3.3.94 Festival Seating.

See 3.3.250.1.

I am not aware of any publication other than NFPA 101 that still uses the term "festival seating." The industry term has long since changed to "general admission," meaning the absence of a reserved seat in a fixed seating area (such as a restaurant or movie theater, although many movie theaters now let you reserve a specific seat in advance), or the complete absence of seats, as on a nightclub floor. I suggest that the more modern term be used here, in 3.3.250.1, and where the concept is referenced throughout the Code.

Statement of Problem and Substantiation for Public Input

"Festival seating" is an outmoded term that should be replaced by the industry-standard "general admission."

Submitter Information Verification

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Submittal Date: Thu Mar 11 13:30:17 EST 2021
Committee: SAF-AXM

Committee Statement

Resolution: Although the public input has merit, there is concern that the proposed term 'general admission' can include seats, whereas festival seating currently applies to assembly venues or portions thereof without seats. General admission can include fixed or loose seating. The committee encourages the submitter to develop a public comment to address the raised issues that will accommodate both the industry and the current code requirements.



Public Input No. 396-NFPA 101-2021 [Section No. 12.3.5]

12.3.5 Extinguishment Requirements.

12.3.5.1

The following assembly occupancies shall be protected throughout by an approved, supervised automatic sprinkler system in accordance with 9.7.1.1(1) and electrically supervised in accordance with 9.7.2 :

- (1) Dance halls
- (2) Discotheques
- (3) Nightclubs
- (4) Bars
- (5) Restaurants
- (6) Assembly occupancies with festival seating

12.3.5.2

Any building containing one or more assembly occupancies where the aggregate occupant load of the assembly occupancies exceeds 300 shall be protected by an approved, supervised automatic sprinkler system in accordance with Section 9.7 as follows (*see also 12.1.6, 12.2.6, 12.3.2, and 12.3.6*):

- (1) Throughout the story containing the assembly occupancy
- (2) Throughout all stories below the story containing the assembly occupancy
- (3) In the case of an assembly occupancy located below the level of exit discharge, throughout all stories intervening between that story and the level of exit discharge, including the level of exit discharge

12.3.5.3

The requirements of 12.3.5.2 shall not apply to the following:

- (1)* Assembly occupancies consisting of a single multipurpose room of less than 12,000 ft² (1115 m²) that are not used for exhibition or display and are not part of a mixed occupancy
- (2) Gymnasiums, skating rinks, and swimming pools used exclusively for participant sports with no audience facilities for more than 300 persons
- (3)* Locations in stadia and arenas as follows:
 - (4) Over the floor areas used for contest, performance, or entertainment, provided that the roof construction is more than 50 ft (15 m) above the floor level, and use is restricted to low fire hazard uses
 - (5) Over the seating areas, provided that use is restricted to low fire hazard uses
 - (6) Over open-air concourses where an approved engineering analysis substantiates the ineffectiveness of the sprinkler protection due to building height and combustible loading
- (7) Locations in unenclosed stadia and arenas as follows:
 - (8) Press boxes of less than 1000 ft² (93 m²)
 - (9) Storage facilities of less than 1000 ft² (93 m²) if enclosed with not less than 1-hour-fire-resistance-rated construction
 - (10) Enclosed areas underneath grandstands that comply with 12.4.10.5

12.3.5.4

Where another provision of this chapter requires an automatic sprinkler system, the sprinkler system shall be installed in accordance with 9.7.1.1(1) and electrically supervised in accordance with 9.7.2.

12.3.5.5

High-rise buildings shall comply with 12.4.5.

12.3.5.6

Where required by 12.1.6, buildings containing assembly occupancies shall be protected by an approved, supervised automatic sprinkler system in accordance with Section 9.7 throughout the stories specified by Table 12.1.6.

Statement of Problem and Substantiation for Public Input

The SAF-AAC and BLD-AAC formed a task group to review fire sprinkler supervision requirements in NFPA 101 and 5000. The task group recommends occupancy chapters to consider replacing text that points to Section 9.7.1.1 (likewise in NFPA 5000, Section 55.3.1) for supervision, as this can be interpreted the installation standard, i.e. NFPA 13, drives the method of supervision which allows chains and locks on new installations. This is not the intent of NFPA 101 or NFPA 5000 as model codes that allow construction tradeoffs and exceptions based on electrical supervision of valves, waterflow, etc. The task group recommends occupancy TCs to revise text in XX.3.5.1 to be explicit as follows:

- ...protected by an automatic sprinkler system in accordance with Section 9.7.1 and electrically supervised in accordance with 9.7.2.
- ...protected by an automatic sprinkler system in accordance with Section 55.3 and electrically supervised in accordance with 55.3.2.

Submitted on behalf of the SAF-AAC and BLD-AAC task group on sprinkler supervision.

There are no technical changes to 12.3.5.2(3) and (4).

Submitter Information Verification

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Submittal Date: Tue Jun 01 14:14:04 EDT 2021
Committee: SAF-AXM

Committee Statement

Resolution: [FR-6588-NFPA 101-2021](#)

Statement: The revision incorporates the recommendations of the correlating committee task group on sprinkler system supervision via PI-396.



Public Input No. 374-NFPA 101-2021 [Section No. 12.3.5.1]

12.3.5.1

~~The~~ Where the occupant load exceeds 49, the following assembly occupancies shall be protected throughout by an approved, supervised automatic sprinkler system in accordance with 9.7.1.1(1):

- (1) Dance halls
- (2) Discotheques
- (3) Nightclubs
- (4) Bars
- (5) Restaurants
- (6) Assembly occupancies with festival seating
- (7) Assembly occupancies where alcoholic beverages are consumed

Statement of Problem and Substantiation for Public Input

: The nature of assembly occupancies has evolved over time and the protection of those occupancies should evolve as well. New types of assembly spaces are being created and with the creation of those spaces so should the protection evolve. When these are combined with increased occupancy loads of individuals under the influence of alcohol; the opportunity for fire related death and injury increases exponentially.

One of these new occupancies is the use of “wedding barns.” These are barns that are being built or retrofitted to hold wedding ceremonies and receptions. Naturally, these barns have unique fire loads that many occupancies would not normally have present. (I.e., hay bales for seating and decoration, lanterns for lighting and décor, heating equipment for winter months, etc.) As with most wedding events, substantial amounts of alcohol are involved.

Additionally, in A-1 occupancies such as movie theatres and concert halls are evolving to become more of a luxury event. Many movie theatres and concert venues across the nation are now selling alcohol to its patrons or are renting the space to private parties. Also, many other types of occupancies within the assembly category provide alcohol to attendees. Protecting these spaces with sprinkler systems is a need that has been present for some time.

Finally, most authorities having jurisdiction have a resource within their structure to help identify these types of occurrences when occupancies are being changed or the use of the space has been modified. Most jurisdictions require a liquor license to serve alcohol. This aids in the enforcement of this development.

Finally, the trigger between business and assembly spaces. While this trigger is provided in the definition, however, these requirements should also be provided in the charging language of sprinkler protection requirements.

Related Public Inputs for This Document

<u>Related Input</u>	<u>Relationship</u>
Public Input No. 375-NFPA 101-2021 [Section No. 13.3.5.1]	

Submitter Information Verification

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Submittal Date: Tue Jun 01 12:51:19 EDT 2021

Committee: SAF-AXM

Committee Statement

Resolution: The consumption of alcohol is an activity rather than an occupancy. The proposed language is unenforceable. The phrase, "Where the occupant load exceeds 49," is not needed based on the definition of assembly occupancies.



Public Input No. 377-NFPA 101-2021 [Section No. 12.3.5.1]

12.3.5.1

The Where the occupant load exceeds 49, the following assembly occupancies shall be protected throughout by an approved, supervised automatic sprinkler system in accordance with 9.7.1.1(1):

- (1) Dance halls
- (2) Discotheques
- (3) Nightclubs
- (4) Bars
- (5) Restaurants
- (6) Assembly occupancies with festival seating
- (7) Wedding venues

Statement of Problem and Substantiation for Public Input

Assembly occupancy uses evolve and new use spaces are created, and these spaces must be addressed as the model code develop over time. One of these new occupancies is the use of “wedding barns.” These are barns that are being built or retrofitted to hold wedding ceremonies and receptions. Naturally, these barns have unique fire loads that many occupancies would not normally have present. (I.e., hay bales for seating and decoration, lanterns for lighting and décor, heating equipment for winter months, etc.) The NFPA (National Fire Protection Association) conducted a study on structure fires in barns. The study shows that during a four-year period there were 830 structure fires in barns with one civilian death, 10 civilian injuries and around \$28 million in property damage annually. The leading causes for these fires were heating equipment, electrical distribution, and lighting. As with most wedding events, substantial amounts of alcohol are involved. All these factors combined create a hazardous space filled with occupants whose evacuation is slowed due to the impairments created by alcohol consumption.

Finally, the trigger between business and assembly spaces. While this trigger is provided in the definition, however, these requirements should also be provided in the charging language of sprinkler protection requirements.

Related Public Inputs for This Document

<u>Related Input</u>	<u>Relationship</u>
Public Input No. 376-NFPA 101-2021 [Section No. 13.3.5.1]	

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Submittal Date: Tue Jun 01 12:57:53 EDT 2021

Committee: SAF-AXM

Committee Statement

Resolution: The term 'wedding venues', which could include religious facilities, is not defined. Such venues might be used for multiple purposes. No data has been provided to substantiate an increased life safety risk associated with weddings, which is a type of event rather than an occupancy. The phrase, "Where the occupant load exceeds 49," is not needed based on the definition of assembly occupancies.



Public Input No. 414-NFPA 101-2021 [New Section after 12.3.5.6]

12.3.5.7 Portable Fire Extinguishers.

Portable fire extinguishers shall be provided in accordance with Section 9.9.

Statement of Problem and Substantiation for Public Input

Reason: The concept of trading off portable extinguishers in sprinklered buildings has been largely abandoned by fire protection principles. The National Fire Codes of both NFPA 1 and the ICC- IFC require portable fire extinguishers in all occupancy classes including storage which addresses property protection and property loss as well as, the safety of the building occupants.

A portable fire extinguisher is an effective item of fire protection which allows for small fires to be tackled by the occupants of a building and saves 100s of thousands of dollars in property loss.

It is important to appreciate that while different to official assumptions and desire for evacuation, research shows the public's priorities to be rational and appropriate. The public's experience of fire is vastly different to that of the professionals involved in the planning for and responding to fire.

Some key findings from research studies have been identified and the public's-oriented outcomes include, avoidance of embarrassment, inconvenience, damage to the premises or property, concern for others, pets and possessions and lastly personal injury.

The evidence further identifies that the public is willing and will accept minor consequences in their pursuit of achieving personal humanistic priorities and instinct. Concern for people, pets and possessions are strong and established drivers of behavior in the event of a fire. Therefore, this should be no surprise to see it as an influential feature of most individual's response to a fire.

Limiting a fire to the smallest area within a building is a sensible aspiration.

Official policy and attitudes are most singularly directed at avoiding the risk when the public encounters a fire. This is well meaning but the research has shown that this DOES NOT I REPEAT DOES NOT align with the publics' attitude or the ability of the general public.

Thus, it is important to give the public the intelligently designed and placed tools intended for their use and not the necessarily firefighters. NFPA 10 states: 5.1.2 The selection of extinguishers shall be independent of whether the building is equipped with automatic sprinklers, standpipe and hose, or other fixed protection equipment. Other codes, and other occupancy chapters have abandoned this concept in recognition of the fact that portable extinguishers are a valuable, cost-effective layer of fire protection, and are intended for a different purpose than sprinklers. To avoid addressing fires in their earliest stages is counter-intuitive, and studies have shown that people will almost always attempt to extinguish a fire if it's small and they believe they can mitigate the hazard. If a fire extinguisher is not available, people have (and will continue to) use makeshift means to try to extinguish the fire, which is far less safe than using a portable extinguisher that is designed for safe and effective use by novices. (Ref: An Evaluation of the Role of Fire Extinguishers by David Wales)

A significant amount of data has been collected to support the requirement for portable extinguishers, including: WPI/EKU Study: "Ordinary People and the Effective Operation of Fire Extinguishers", which clearly showed that the vast majority of people who have never used an extinguisher can operate one safely and effectively.

2013 NFPA Report: "U.S. Experience with Sprinklers" reports that there were 48,460 reported structure fires annually in buildings equipped with sprinkler systems between 2007-2011, and 40,440 (83

percent) never grew large enough to activate the system. Based on this report alone, it's clear that people are reacting to small fires and extinguishing them prior to sprinkler activation.

A study by Richard Bukowski in 2014, the life cycle cost of portable fire extinguishers was determined to be between one and a half and four cents per foot annually; if coverage could be maximized to that allowable by code, the cost drops to between a half cent and one cent per foot annually. It's unlikely that any other layer of fire protection is so cost-effective.

Submitter Information Verification

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Submittal Date: Tue Jun 01 15:04:12 EDT 2021
Committee: SAF-AXM

Committee Statement

Resolution: [FR-6771-NFPA 101-2021](#)
Statement: The revision incorporates a requirement for portable fire extinguishers, as suggested by PI-414, with the exemptions permitted by NFPA 5000 for consistency.



Public Input No. 113-NFPA 101-2021 [Section No. 12.4.2.5.4.3]

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12.4.2.5.4.3

The life safety building systems document in accordance with 12.4.2.4 shall be permitted to be used, and additionally the life safety building systems reference guide shall include the following, as applicable:

- (1) Occupant capacity of every space/room
- (2) Egress flow diagrams, including assumed flow rates, and capacities of all aisles and hallways, including public and nonpublic areas
- (3) Capacities of all exterior doors and/or choke points in immediate perimeter areas
- (4) Limitations or assumptions for ingress control that could be in place during an emergency egress/evacuation, including control gates, queuing barriers, and turnstiles
- (5) Capacities of immediate perimeter exterior walkways, including assumed flow rates for exterior areas
- (6) Assumed egress paths for normal conditions — transportation modes
- (7) Management-level sequencing charts for alarm and emergency communication systems, the manual, or override options/instructions that include the following:
 - (8) List of codes or alarm signals
 - (9) Location of manual overrides
 - (10) Description of sequence of operations during an alarm, such as exhaust fans operate or doors open
- (11) Principal fire and life safety features/strategies, such as sprinklers, smoke control, fire alarm notifications, PA system, emergency power, and fire department access
- (12) Assumptions when developing occupancy plans for venue floor, open areas, and nonevent spaces, such as the following:
 - (13) Event floor plans/setup diagrams for each typical event/activity
 - (14) Fire sprinkler and smoke protection capabilities
- (15) Severe weather shelter areas, locations, structure considerations (limitations), capacities (occupancy and density factor)
- (16) Command center, which includes the following:
 - (17) Location (formal or informal)
 - (18) Structural integrity considerations
 - (19) Redundant locations and/or capabilities
 - (20) Jurisdictional rights — assumed and/or applied
- (21) Locations and capacities of wheelchair and mobility-impaired seating spaces and seats with movable aisle armrests
- (22) Locations and capacities of areas of refuge and other safe areas
- (23) Rigging or structural load capacities of grids, truss structure, fly lofts, ceilings, floors, ramps, and staging
- (24) List of locations of emergency equipment, such as fire extinguishers, fire hose cabinets, fire hydrants, and AEDs.
- (25) Sequencing of electrical service, such as the following:
 - (26) Emergency generators and charts of all areas illuminated during power outages
 - (27) Multiple electrical feed capabilities

- (28) List of mechanical, movable equipment in the facility
- (29) Potential hazards in the surrounding neighborhood, including train tracks and propane stations
- (30) Assumptions or accommodations considered and used in design

Statement of Problem and Substantiation for Public Input

The NFPA Disability Access Review and Advisory Committee (DARAC) requests an update to the terminology used to describe individuals with disabilities. In general, we suggest using “people first” language to avoid characterizing a person or group of persons entirely by their disability. Also, where possible, we recommend substituting the appropriate technical term when describing building elements that are accessible to individuals with disabilities, rather than describing the element as being “for” such people. For example, we would say “accessible parking” instead of “handicap parking”. The substitute terms we recommend are found to be more acceptable to the disability community and its supporters and, therefore, demonstrate greater respect.

We used following resources to develop our input:

- “Guidelines for Writing About People with Disabilities” ADA National Network at <https://adata.org/factsheet/ADANN-writing>
- “Disability Style Guide” National Center on Disability and Journalism at <https://ncdj.org/style-guide/>
- “Resources for Reporters Writing About Blindness and Vision Loss” American Foundation for the Blind at <https://www.afb.org/news-publications/press-room/reporter-resources-writing-about-blindness-vision-loss>
- “Five Tips for Writing About People with Disabilities” Adaptive Sports Center at <https://www.adaptivesports.org/blog/announcements/five-tips-writing-about-people-disabilities>
- “Fact Sheet: Drug Addiction and Federal Disability Rights Laws” U.S. Department of Health and Hum Services: Office for Civil Rights at <https://www.hhs.gov/sites/default/files/drug-addiction-aand-federal-disability-rights-laws-fact-sheet.pdf>
- “People First Language” District of Columbia Office of Disability Rights at <https://odr.dc.gov/page/people-first-language>

Submitter Information Verification

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Submittal Date: Thu May 06 12:36:18 EDT 2021

Committee: SAF-AXM

Committee Statement

Resolution: [FR-6589-NFPA 101-2021](#)

Statement: The NFPA Disability Access Review and Advisory Committee (DARAC) requests an update to the terminology used to describe individuals with disabilities. In general, we suggest using “people first” language to avoid characterizing a person or group of persons entirely by their disability. Also, where possible, we recommend substituting the appropriate technical term when describing building elements that are accessible to individuals with disabilities, rather than describing the element as being “for” such people.

For example, we would say “accessible parking” instead of “handicap parking”. The substitute terms we recommend are found to be more acceptable to the disability community and its supporters and, therefore, demonstrate greater respect.

We used following resources to develop our input:

- “Guidelines for Writing About People with Disabilities” ADA National Network at <https://adata.org/factsheet/ADANN-writing>
- “Disability Style Guide” National Center on Disability and Journalism at <https://ncdj.org/style-guide/>
- “Resources for Reporters Writing About Blindness and Vision Loss” American Foundation for the Blind at <https://www.afb.org/news-publications/press-room/reporter-resources-writing-about-blindness-vision-loss>
- “Five Tips for Writing About People with Disabilities” Adaptive Sports Center at <https://www.adaptivesports.org/blog/announcements/five-tips-writing-about-people-disabilities>
- “Fact Sheet: Drug Addiction and Federal Disability Rights Laws” U.S. Department of Health and Hum Services: Office for Civil Rights at <https://www.hhs.gov/sites/default/files/drug-addiction-aand-federal-disability-rights-laws-fact-sheet.pdf>
- “People First Language” District of Columbia Office of Disability Rights at <https://odr.dc.gov/page/people-first-language>



Public Input No. 325-NFPA 101-2021 [Section No. 12.4.6]

12.4.6 Alcohol-Based-Hand-Rub Dispensers.

The installation and maintenance of Alcohol-based-hand-rub dispensers and the storage of alcohol-based hand-rub solutions in accordance with 8.7.3.3 shall be permitted.

Statement of Problem and Substantiation for Public Input

Our current health situation with the latest viral outbreak has led to a need to increase the number of alcohol based hand sanitizer dispensers within many different types of occupancies. Although alcohol based hand sanitizer was addressed in this chapter and many other requirements were also located in this chapter, the requirements did not apply to storage of sanitizer when not in use or many other provisions that could be applicable. Providing a pointer to section 8.7.3.3 will provide a direct link to all the requirements needed for safe installation, use, and maintenance of alcohol based hand rub dispensers as well as the storage of any alcohol based hand rub materials not in use.

Currently Robert Upson is also chairing an NFPA 30 task group, and Bruce Johnson is chairing an NFPA 1 task group to address this subject within those standards respectively. So a recommendation should be made to this committee to put forth a committee input and create a task group to review this requirement throughout and ensure correlation with NFPA 1 and NFPA 30 task groups that are already reviewing this.

Related Public Inputs for This Document

<u>Related Input</u>	<u>Relationship</u>
Public Input No. 316-NFPA 101-2021 [Section No. 8.7.3.3]	
Public Input No. 324-NFPA 101-2021 [New Section after 11.4.3.6]	
Public Input No. 326-NFPA 101-2021 [Section No. 13.4.6]	
Public Input No. 327-NFPA 101-2021 [Section No. 14.4.5]	
Public Input No. 329-NFPA 101-2021 [Section No. 15.4.5]	
Public Input No. 330-NFPA 101-2021 [Section No. 16.4.5]	
Public Input No. 332-NFPA 101-2021 [Section No. 16.6.4]	
Public Input No. 333-NFPA 101-2021 [Section No. 17.4.5]	
Public Input No. 334-NFPA 101-2021 [Section No. 17.6.4]	
Public Input No. 336-NFPA 101-2021 [Section No. 18.4.4]	
Public Input No. 337-NFPA 101-2021 [Section No. 19.4.4]	
Public Input No. 339-NFPA 101-2021 [Section No. 20.4.4]	
Public Input No. 340-NFPA 101-2021 [Section No. 21.4.4]	
Public Input No. 342-NFPA 101-2021 [Section No. 22.4.7]	
Public Input No. 344-NFPA 101-2021 [Section No. 23.4.7]	
Public Input No. 347-NFPA 101-2021 [Section No. 26.3.2.1]	
Public Input No. 349-NFPA 101-2021 [Section No. 28.4.2]	
Public Input No. 354-NFPA 101-2021 [Section No. 29.4.2]	
Public Input No. 357-NFPA 101-2021 [Section No. 30.4.3]	
Public Input No. 360-NFPA 101-2021 [Section No. 32.2.4]	
Public Input No. 361-NFPA 101-2021 [Section No. 32.3.4.2]	

[Public Input No. 363-NFPA 101-2021 \[Section No. 33.2.4\]](#)

[Public Input No. 364-NFPA 101-2021 \[Section No. 33.3.4.2\]](#)

[Public Input No. 365-NFPA 101-2021 \[Section No. 36.4.6\]](#)

[Public Input No. 367-NFPA 101-2021 \[Section No. 37.4.6\]](#)

[Public Input No. 368-NFPA 101-2021 \[Section No. 38.4.4\]](#)

[Public Input No. 369-NFPA 101-2021 \[Section No. 39.4.4\]](#)

[Public Input No. 370-NFPA 101-2021 \[Section No. 40.4.3\]](#)

[Public Input No. 371-NFPA 101-2021 \[Section No. 42.4.3\]](#)

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Submittal Date: Tue Jun 01 09:02:12 EDT 2021

Committee: SAF-AXM

Committee Statement

Resolution: The current language is adequate. It is noted that proposed revisions to 8.7.3.3 were not incorporated by the TC on Fire Protection Features.



Public Input No. 146-NFPA 101-2021 [Section No. 12.4.7.10.3]

12.4.7.10.3

Sprinklers shall not be required under stage areas less than 48 in. (1220 mm) in clear height that are used exclusively for chair or table storage and lined on the inside with $\frac{5}{8}$ in. (16 mm) ~~Type- type~~ X gypsum wallboard panels or the approved equivalent.

Statement of Problem and Substantiation for Public Input

The Building Code Technical Committee of the Gypsum Association reviewed references to gypsum products throughout NFPA 101 and identified several instances where incorrect terminology was used. This is one of several Public Inputs being submitted to ensure consistency in the use of gypsum terms throughout all codes, standards, and industry publications.

Related Public Inputs for This Document

<u>Related Input</u>	<u>Relationship</u>
Public Input No. 145-NFPA 101-2021 [Section No. 8.6.11.3]	
Public Input No. 155-NFPA 101-2021 [Section No. 13.3.1]	
Public Input No. 148-NFPA 101-2021 [Section No. 13.4.7.10.3]	
Public Input No. 149-NFPA 101-2021 [Section No. 14.3.4.4.1]	
Public Input No. 150-NFPA 101-2021 [Section No. 14.3.4.4.3]	
Public Input No. 151-NFPA 101-2021 [Section No. A.3.3.182]	
Public Input No. 152-NFPA 101-2021 [Section No. A.7.1.3.2.1(1)]	
Public Input No. 153-NFPA 101-2021 [Section No. A.7.1.3.2.1(3)]	

Submitter Information Verification

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Submittal Date: Fri May 14 10:03:38 EDT 2021
Committee: SAF-AXM

Committee Statement

Resolution: [FR-6590-NFPA 101-2021](#)

Statement: The Building Code Technical Committee of the Gypsum Association reviewed references to gypsum products throughout NFPA 101 and identified several instances where incorrect terminology was used. This is one of several revisions to ensure consistency in the use of gypsum terms throughout all codes, standards, and industry publications.



Public Input No. 301-NFPA 101-2021 [New Section after 12.7.5]

12.7.5.1

Modular rooms and sleep pods installed in indoor locations shall comply with Section 10.6. Where provided in areas covered by an occupant notification system the units shall comply with Section 9.6.3.6.1.

Statement of Problem and Substantiation for Public Input

Modular rooms and sleep pods are becoming increasingly popular, and are showing up in a variety of different occupancies. This proposal provides a means for AHJs to approve these installations and allow the use of these prefabricated structures.

This proposal treats modular rooms and sleep pods, such as those shown in the attached pictures, as products that can be installed in a building, and not as building construction, while not losing applicable code requirements.

The UL 962 listing covers the fabrication and safety of the modular room. UL 962 includes requirements for insulation, finish materials, internal wiring, lighting, ventilation, and other construction features. Markings are to be provided on the listed products to document the Interior finish and foamed plastic ratings, such as the ASTM E84 (UL 723) flame spread and smoke developed indexes. This makes it easy to determine their suitability for use in the specific areas of the building.

Section 10.6.5 allows the AHJ to approve the installation locations, to make sure the means of egress is not compromised and other code requirements are not adversely impacted.

Related Public Inputs for This Document

<u>Related Input</u>	<u>Relationship</u>
<u>Public Input No. 296-NFPA 101-2021 [New Section after 3.3.189]</u>	
<u>Public Input No. 297-NFPA 101-2021 [New Section after 3.3.262]</u>	
<u>Public Input No. 298-NFPA 101-2021 [New Section after 9.6.3.6.1]</u>	
<u>Public Input No. 299-NFPA 101-2021 [Section No. 10.1.3.2]</u>	
<u>Public Input No. 300-NFPA 101-2021 [New Section after 10.5.5]</u>	
<u>Public Input No. 302-NFPA 101-2021 [New Section after 13.7.5]</u>	
<u>Public Input No. 303-NFPA 101-2021 [New Section after 18.7.6]</u>	
<u>Public Input No. 304-NFPA 101-2021 [New Section after 19.7.6]</u>	
<u>Public Input No. 305-NFPA 101-2021 [New Section after 20.7.6]</u>	
<u>Public Input No. 307-NFPA 101-2021 [New Section after 21.7.6]</u>	
<u>Public Input No. 309-NFPA 101-2021 [New Section after 36.4.4.12]</u>	
<u>Public Input No. 310-NFPA 101-2021 [New Section after 37.4.4.12]</u>	
<u>Public Input No. 311-NFPA 101-2021 [New Section after 38.7.7]</u>	
<u>Public Input No. 312-NFPA 101-2021 [New Section after 39.7.7]</u>	
<u>Public Input No. 313-NFPA 101-2021 [New Section after 40.7.3]</u>	

Submitter Information Verification

Submitter Full Name: Kelly Nicoletto

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Submittal Date: Mon May 31 15:49:01 EDT 2021

Committee: SAF-AXM

Committee Statement

Resolution: It is unclear why the proposed language is located under the exposition facility requirements. It is noted that the proposed 9.6.3.6.1 was not incorporated by the TC on Building Service and Fire Protection Equipment.



Public Input No. 11-NFPA 101-2020 [Section No. 12.7.5.4]

~~12.7.5.4 – Vehicles -~~

~~Vehicles on display within an exposition facility shall comply with~~

~~12~~

~~8 .7.~~

~~5.4.1 through 12.7.5.4.5 -~~

~~12.7.5.4.1 –~~

~~All fuel tank openings shall be locked and sealed in an approved manner to prevent the escape of vapors; fuel tanks shall not contain in excess of one-half their capacity or contain in excess of 10 gal (38 L) of fuel, whichever is less.~~

~~12.7.5.4.2 –~~

~~At least one battery cable shall be removed from the batteries used to start the vehicle engine, and the disconnected battery cable shall then be taped.~~

~~12.7.5.4.3 –~~

~~Batteries used to power auxiliary equipment shall be permitted to be kept in service.~~

~~12.7.5.4.4 –~~

~~Fueling or defueling of vehicles shall be prohibited.~~

~~12.7.5.4.5 –~~

~~Vehicles shall not be moved during exhibit hours.~~

~~6.~~

Statement of Problem and Substantiation for Public Input

Proposed moving vehicles to 8.7.6. Currently the requirements to protect vehicles in building are in assemble occupancies. Other occupancies have vehicles on display, e.g. business, and currently their is no way to get to the protection requirements contained in assembly. Consistent with action taken for alcohol hand solutions where general requirement is in core chapter and occupancy chapters can reference if needed.

Related Public Inputs for This Document

<u>Related Input</u>	<u>Relationship</u>
Public Input No. 7-NFPA 101-2020 [New Section after 8.7.5]	
Public Input No. 12-NFPA 101-2020 [Section No. 13.7.5.4]	

Submitter Information Verification

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Submittal Date: Thu Nov 19 08:26:12 EST 2020

Committee: SAF-AXM

Committee Statement

Resolution: The companion proposal to add vehicle requirements to Chapter 8 was not accepted by the TC on Fire Protection Features. Requirements for vehicles in exposition facilities need to be maintained in the assembly occupancy chapters. Nothing prohibits other occupancy chapters from referencing these requirements with any needed occupancy-specific modifications.



Public Input No. 155-NFPA 101-2021 [Section No. 13.3.1]

13.3.1 Protection of Vertical Openings.

Any vertical opening shall be enclosed or protected in accordance with Section 8.6, unless otherwise permitted by one of the following:

- (1) * Stairs or ramps shall be permitted to be unenclosed between balconies or mezzanines and main assembly areas located below, provided that the balcony or mezzanine is open to the main assembly area.
- (2) Exit access stairs from lighting and access catwalks, galleries, and gridirons shall not be required to be enclosed.
- (3) Assembly occupancies protected by an approved, supervised automatic sprinkler system in accordance with Section 9.7 shall be permitted to have unprotected vertical openings between any two adjacent floors, provided that such openings are separated from unprotected vertical openings serving other floors by a barrier complying with 8.6.5.
- (4) Assembly occupancies protected by an approved, supervised automatic sprinkler system in accordance with Section 9.7 shall be permitted to have convenience stair openings in accordance with 8.6.9.2.
- (5) Use of the following alternative materials shall be permitted where assemblies constructed of such materials are in good repair and free of any condition that would diminish their original fire resistance characteristics:
 - (6) Existing wood lath and plaster
 - (7) Existing $\frac{1}{2}$ in. (13 mm) gypsum wallboard
 - (a) panels
 - (b) Existing installations of $\frac{1}{4}$ in. (6.3 mm) thick wired glass that are, or are rendered, inoperative and fixed in the closed position
 - (c) Other existing materials having similar fire resistance capabilities

Statement of Problem and Substantiation for Public Input

The Building Code Technical Committee of the Gypsum Association reviewed references to gypsum products throughout NFPA 101 and identified several instances where incorrect terminology was used. This is one of several Public Inputs being submitted to ensure consistency in the use of gypsum terms throughout all codes, standards, and industry publications.

NOTE - Terra has reformatted this incorrectly. The only change is replacing the word "wallboard" with the word "panels" in (5)(b)

Related Public Inputs for This Document

<u>Related Input</u>	<u>Relationship</u>
Public Input No. 145-NFPA 101-2021 [Section No. 8.6.11.3]	
Public Input No. 146-NFPA 101-2021 [Section No. 12.4.7.10.3]	
Public Input No. 148-NFPA 101-2021 [Section No. 13.4.7.10.3]	

[Public Input No. 149-NFPA 101-2021 \[Section No. 14.3.4.4.1\]](#)

[Public Input No. 150-NFPA 101-2021 \[Section No. 14.3.4.4.3\]](#)

[Public Input No. 151-NFPA 101-2021 \[Section No. A.3.3.182\]](#)

[Public Input No. 152-NFPA 101-2021 \[Section No. A.7.1.3.2.1\(1\)\]](#)

[Public Input No. 153-NFPA 101-2021 \[Section No. A.7.1.3.2.1\(3\)\]](#)

Submitter Information Verification

Submitter Full Name: Timothy Earl

Organization: GBH International

Affiliation: the Gypsum Association

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Submittal Date: Fri May 14 12:24:55 EDT 2021

Committee: SAF-AXM

Committee Statement

Resolution: [FR-6591-NFPA 101-2021](#)

Statement: The Building Code Technical Committee of the Gypsum Association reviewed references to gypsum products throughout NFPA 101 and identified several instances where incorrect terminology was used. This is one of several revisions to ensure consistency in the use of gypsum terms throughout all codes, standards, and industry publications.



Public Input No. 211-NFPA 101-2021 [New Section after 13.3.4.3.7]

13.3.4.4 Carbon Monoxide Detection.

13.3.4.4.1 Existing assembly occupancies shall be provided with carbon monoxide detection and warning equipment in accordance with Section 9.12 in the locations specified as follows:

- (1) On the ceilings of rooms containing permanently installed fuel-burning appliances or fuel-burning fireplaces
- (2) Centrally located within occupiable spaces served by the first supply air register from permanently installed fuel-burning HVAC systems
- (3)* Centrally located within occupiable spaces adjacent to an attached garage

A.13.3.4.4.1(3) The intent is to require CO detectors in occupiable spaces immediately adjacent, vertically or horizontally, to attached garages, regardless of the presence of openings between the garage and the adjacent occupiable spaces. Other occupiable spaces that are not adjacent to the attached garage do not require CO detectors.

13.3.4.4.2 Carbon monoxide detectors as specified in 13.3.4.4.1 shall not be required in the following locations:

- (1) Garages
- (2) Occupiable spaces with attached garages that are open parking structures as defined in 3.3.284.8.4
- (3) Occupiable spaces with attached garages that are mechanically ventilated in accordance with the mechanical code

Statement of Problem and Substantiation for Public Input

The recently published NFPA Fire Protection Research Foundation report “CO Detection and Alarm Requirements: Literature Review” highlights major deficits in current code requirements to adequately protect occupants from high level CO exposure incidents in buildings that house permanently installed CO hazards. The addition of these proposed requirements will prevent deaths and injuries to occupants of existing assembly occupancies by providing a baseline level of protection from high level CO exposure.

Chapter 12, Section 12.3.4.4 mandates the installation of CO detection equipment in new assembly occupancies where there is potential risk for accidental CO poisoning from permanently installed hazards. There is equivalent risk for such exposures in existing assembly occupancies. The risk of CO exposure is likely higher in an existing building due to aging equipment and out-of-date construction.

The lethality of CO is undisputed. The severity of poisoning injury depends not only on the level and duration of CO exposure, but also on the individual. Those most at risk from the effects of CO: infants and children, older people, pregnant women/unborn babies, and those with underlying health conditions. There is no formula that can accurately predict how CO will impact a particular person nor what level or duration of exposure can be tolerated without suffering prolonged harm, irreversible brain damage, or death. For many victims who survive exposure to high levels of CO, the effects do not end with the poisoning incident. They can be severe enough to cause death weeks to months later. High level CO exposure can also result in irreversible effects, including life-altering brain injury.

The lifesaving value of CO detection is undisputed. CO detection has been commercially available for at least 30 years and has proven reliability. There is no substitute for the early detection that these devices provide, alerting to danger before conditions escalate to a level of causing harm.

As a homeowner it is a reasonable expectation to be aware of the hazards of CO and take responsibility to install CO detection to protect yourself. However, as an occupant of a building that is under someone else's charge, there is no way of knowing of equivalent hazards nor whether action has been taken to install safeguards. Combined with no human ability to detect CO, this leaves occupants critically vulnerable during any type of CO exposure incident. Their life safety is entirely at the mercy of circumstances they have no knowledge of and no control over, assuming a risk they had no choice in making. Further, most people likely assume these requirements are already in place for commercial occupancies because they are advised to have CO alarms installed in their homes. This assumption puts them at even greater disadvantage during an exposure incident as they likely assume there will be an environmental alert to a dangerous CO situation that requires evacuation.

It is not safe to occupy any building where there are permanently installed CO hazards without the protection of CO detection. These proposed requirements match the requirements already in place in Chapter 12. Please act to ensure that people are equally protected in existing assembly occupancies. If equivalent detection equipment is deemed too cumbersome or cost prohibitive, please consider alternatives such as battery-powered or plug-in CO alarm options.

Submitter Information Verification

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Submittal Date: Wed May 26 17:55:50 EDT 2021
Committee: SAF-AXM

Committee Statement

Resolution: The proposed revision is too onerous to be required retroactively in all existing assembly occupancies lacking additional substantiating data.



Public Input No. 375-NFPA 101-2021 [Section No. 13.3.5.1]

13.3.5.1

Where the occupant load exceeds 100, the following assembly occupancies shall be protected throughout by an approved, supervised automatic sprinkler system in accordance with 9.7.1.1(1):

- (1) Dance halls
- (2) Discotheques
- (3) Nightclubs
- (4) Assembly occupancies with festival seating
- (5) Assembly occupancies where alcoholic beverages are consumed
- (6) Bars
- (7) Restaurants

Statement of Problem and Substantiation for Public Input

The nature of assembly occupancies has evolved over time and the protection of those occupancies should evolve as well. New types of assembly spaces are being created and with the creation of those spaces so should the protection evolve. When these are combined with increased occupancy loads of individuals under the influence of alcohol; the opportunity for fire related death and injury increases exponentially.

One of these new occupancies is the use of “wedding barns.” These are barns that are being built or retrofitted to hold wedding ceremonies and receptions. Naturally, these barns have unique fire loads that many occupancies would not normally have present. (I.e., hay bales for seating and decoration, lanterns for lighting and décor, heating equipment for winter months, etc.) As with most wedding events, substantial amounts of alcohol are involved.

Additionally, in A-1 occupancies such as movie theatres and concert halls are evolving to become more of a luxury event. Many movie theatres and concert venues across the nation are now selling alcohol to its patrons or are renting the space to private parties. Also, many other types of occupancies within the assembly category provide alcohol to attendees. Protecting these spaces with sprinkler systems is a need that has been present for some time.

Finally, most authorities having jurisdiction have a resource within their structure to help identify these types of occurrences when occupancies are being changed or the use of the space has been modified. Most jurisdictions require a liquor license to serve alcohol. This aids in the enforcement of this development.

Related Public Inputs for This Document

<u>Related Input</u>	<u>Relationship</u>
<u>Public Input No. 374-NFPA 101-2021 [Section No. 12.3.5.1]</u>	

Submitter Information Verification

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Submittal Date: Tue Jun 01 12:53:25 EDT 2021

Committee: SAF-AXM

Committee Statement

Resolution: The proposed item (5) is unenforceable, and insufficient justification has been provided to support the proposed retroactive requirements of items (6) and (7). A task group has been appointed to further evaluate the current requirements of 12.3.5.1 and 13.3.5.1.



Public Input No. 376-NFPA 101-2021 [Section No. 13.3.5.1]

13.3.5.1

Where the occupant load exceeds 100, the following assembly occupancies shall be protected throughout by an approved, supervised automatic sprinkler system in accordance with 9.7.1.1(1):

- (1) Dance halls
- (2) Discotheques
- (3) Nightclubs
- (4) Assembly occupancies with festival seating
- (5) Wedding venues

Statement of Problem and Substantiation for Public Input

Assembly occupancy uses evolve and new use spaces are created, and these spaces must be addressed as the model code develop over time. One of these new occupancies is the use of "wedding barns." These are barns that are being built or retrofitted to hold wedding ceremonies and receptions. Naturally, these barns have unique fire loads that many occupancies would not normally have present. (I.e., hay bales for seating and decoration, lanterns for lighting and décor, heating equipment for winter months, etc.) The NFPA (National Fire Protection Association) conducted a study on structure fires in barns. The study shows that during a four-year period there were 830 structure fires in barns with one civilian death, 10 civilian injuries and around \$28 million in property damage annually. The leading causes for these fires were heating equipment, electrical distribution, and lighting. As with most wedding events, substantial amounts of alcohol are involved. All these factors combined create a hazardous space filled with occupants whose evacuation is slowed due to the impairments created by alcohol consumption.

Related Public Inputs for This Document

<u>Related Input</u>	<u>Relationship</u>
<u>Public Input No. 377-NFPA 101-2021 [Section No. 12.3.5.1]</u>	

Submitter Information Verification

Submitter Full Name: Andrew Bevis
Organization: National Fire Sprinkler Associ
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Submittal Date: Tue Jun 01 12:56:12 EDT 2021
Committee: SAF-AXM

Committee Statement

Resolution: The term 'wedding venues', which could include religious facilities, is not defined. Such

venues might be used for multiple purposes. No data has been provided to substantiate an increased life safety risk associated with weddings, which is a type of event rather than an occupancy. A task group has been appointed to further review the requirements of 12.3.5.1 and 13.3.5.1.



Public Input No. 413-NFPA 101-2021 [New Section after 13.3.5.6]

13.3.5.7 Portable Fire Extinguishers.

Portable fire extinguishers shall be provided in accordance with Section 9.9.

Statement of Problem and Substantiation for Public Input

Reason: The concept of trading off portable extinguishers in sprinklered buildings has been largely abandoned by fire protection principles. The National Fire Codes of both NFPA 1 and the ICC- IFC require portable fire extinguishers in all occupancy classes including storage which addresses property protection and property loss as well as, the safety of the building occupants.

A portable fire extinguisher is an effective item of fire protection which allows for small fires to be tackled by the occupants of a building and saves 100s of thousands of dollars in property loss.

It is important to appreciate that while different to official assumptions and desire for evacuation, research shows the public's priorities to be rational and appropriate. The public's experience of fire is vastly different to that of the professionals involved in the planning for and responding to fire.

Some key findings from research studies have been identified and the public's-oriented outcomes include, avoidance of embarrassment, inconvenience, damage to the premises or property, concern for others, pets and possessions and lastly personal injury.

The evidence further identifies that the public is willing and will accept minor consequences in their pursuit of achieving personal humanistic priorities and instinct. Concern for people, pets and possessions are strong and established drivers of behavior in the event of a fire. Therefore, this should be no surprise to see it as an influential feature of most individual's response to a fire.

Limiting a fire to the smallest area within a building is a sensible aspiration.

Official policy and attitudes are most singularly directed at avoiding the risk when the public encounters a fire. This is well meaning but the research has shown that this DOES NOT I REPEAT DOES NOT align with the publics' attitude or the ability of the general public.

Thus, it is important to give the public the intelligently designed and placed tools intended for their use and not the necessarily firefighters. NFPA 10 states: 5.1.2 The selection of extinguishers shall be independent of whether the building is equipped with automatic sprinklers, standpipe and hose, or other fixed protection equipment. Other codes, and other occupancy chapters have abandoned this concept in recognition of the fact that portable extinguishers are a valuable, cost-effective layer of fire protection, and are intended for a different purpose than sprinklers. To avoid addressing fires in their earliest stages is counter-intuitive, and studies have shown that people will almost always attempt to extinguish a fire if it's small and they believe they can mitigate the hazard. If a fire extinguisher is not available, people have (and will continue to) use makeshift means to try to extinguish the fire, which is far less safe than using a portable extinguisher that is designed for safe and effective use by novices. (Ref: An Evaluation of the Role of Fire Extinguishers by David Wales)

A significant amount of data has been collected to support the requirement for portable extinguishers, including: WPI/EKU Study: "Ordinary People and the Effective Operation of Fire Extinguishers", which clearly showed that the vast majority of people who have never used an extinguisher can operate one safely and effectively.

2013 NFPA Report: "U.S. Experience with Sprinklers" reports that there were 48,460 reported structure fires annually in buildings equipped with sprinkler systems between 2007-2011, and 40,440 (83

percent) never grew large enough to activate the system. Based on this report alone, it's clear that people are reacting to small fires and extinguishing them prior to sprinkler activation.

A study by Richard Bukowski in 2014, the life cycle cost of portable fire extinguishers was determined to be between one and a half and four cents per foot annually; if coverage could be maximized to that allowable by code, the cost drops to between a half cent and one cent per foot annually. It's unlikely that any other layer of fire protection is so cost-effective.

Submitter Information Verification

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Submittal Date: Tue Jun 01 15:02:33 EDT 2021
Committee: SAF-AXM

Committee Statement

Resolution: [FR-6595-NFPA 101-2021](#)
Statement: The revision incorporates the recommendation of PI-413 with the exemptions permitted by NFPA 5000 for consistency.



Public Input No. 114-NFPA 101-2021 [Section No. 13.4.2.5.4.3]

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13.4.2.5.4.3

The life safety building systems document in accordance with 13.4.2.4 shall be permitted to be used, and additionally the life safety building systems reference guide shall include the following, as applicable:

- (1) Occupant capacity of every space/room
- (2) Egress flow diagrams, including assumed flow rates, and capacities of all aisles and hallways, including public and nonpublic areas
- (3) Capacities of all exterior doors and/or choke points in immediate perimeter areas
- (4) Limitations or assumptions for ingress control that could be in place during an emergency egress/evacuation, including control gates, queuing barriers, and turnstiles
- (5) Capacities of immediate perimeter exterior walkways, including assumed flow rates for exterior areas
- (6) Assumed egress paths for normal conditions — transportation modes
- (7) Management level sequencing charts for alarm and emergency communication systems, the manual, or override options/instructions that include the following:
 - (8) List of codes or alarm signals
 - (9) Location of manual overrides
 - (10) Description of sequence of operations during an alarm, such as exhaust fans operate or doors open
- (11) Principal fire and life safety features/strategies, such as sprinklers, smoke control, fire alarm notifications, PA system, emergency power, and fire department access
- (12) Assumptions when developing occupancy plans for venue floor, open areas, and nonevent spaces
 - (13) Event floor plans/setup diagrams for each typical event/activity
 - (14) Fire sprinkler and smoke protection capabilities
- (15) Severe weather shelter areas, locations, structure considerations (limitations), capacities (occupancy and density factor)
- (16) Command center, which includes the following:
 - (17) Location (formal or informal)
 - (18) Structural integrity considerations
 - (19) Redundant locations and/or capabilities
 - (20) Jurisdictional rights — assumed and/or applied
- (21) Locations and capacities of wheelchair and mobility-impaired seating spaces and seats with movable aisle armrests
- (22) Locations and capacities of areas of refuge and other safe areas
- (23) Rigging or structural load capacities of grids, truss structure, fly lofts, ceilings, floors, ramps, and staging.
- (24) List of locations of emergency equipment such as fire extinguishers, fire hose cabinets, fire hydrants, and AEDs.
- (25) Sequencing of electrical service, such as the following:
 - (26) Emergency generators and charts of all areas illuminated during power outages
 - (27) Multiple electrical feed capabilities

- (28) List of mechanical, movable equipment in the facility
- (29) Potential hazards in the surrounding neighborhood, including train tracks and propane stations
- (30) Assumptions or accommodations considered and used in design

Statement of Problem and Substantiation for Public Input

The NFPA Disability Access Review and Advisory Committee (DARAC) requests an update to the terminology used to describe individuals with disabilities. In general, we suggest using “people first” language to avoid characterizing a person or group of persons entirely by their disability. Also, where possible, we recommend substituting the appropriate technical term when describing building elements that are accessible to individuals with disabilities, rather than describing the element as being “for” such people. For example, we would say “accessible parking” instead of “handicap parking”. The substitute terms we recommend are found to be more acceptable to the disability community and its supporters and, therefore, demonstrate greater respect.

We used following resources to develop our input:

- “Guidelines for Writing About People with Disabilities” ADA National Network at <https://adata.org/factsheet/ADANN-writing>
- “Disability Style Guide” National Center on Disability and Journalism at <https://ncdj.org/style-guide/>
- “Resources for Reporters Writing About Blindness and Vision Loss” American Foundation for the Blind at <https://www.afb.org/news-publications/press-room/reporter-resources-writing-about-blindness-vision-loss>
- “Five Tips for Writing About People with Disabilities” Adaptive Sports Center at <https://www.adaptivesports.org/blog/announcements/five-tips-writing-about-people-disabilities>
- “Fact Sheet: Drug Addiction and Federal Disability Rights Laws” U.S. Department of Health and Hum Services: Office for Civil Rights at <https://www.hhs.gov/sites/default/files/drug-addiction-aand-federal-disability-rights-laws-fact-sheet.pdf>
- “People First Language” District of Columbia Office of Disability Rights at <https://odr.dc.gov/page/people-first-language>

Submitter Information Verification

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Submittal Date: Thu May 06 12:40:24 EDT 2021

Committee: SAF-AXM

Committee Statement

Resolution: [FR-6596-NFPA 101-2021](#)

Statement: The NFPA Disability Access Review and Advisory Committee (DARAC) requests an update to the terminology used to describe individuals with disabilities. In general, we suggest using “people first” language to avoid characterizing a person or group of persons entirely by their disability. Also, where possible, we recommend substituting the appropriate technical term when describing building elements that are accessible to individuals with disabilities, rather than describing the element as being “for” such people.

For example, we would say “accessible parking” instead of “handicap parking”. The substitute terms we recommend are found to be more acceptable to the disability community and its supporters and, therefore, demonstrate greater respect.

We used following resources to develop our input:

- “Guidelines for Writing About People with Disabilities” ADA National Network at <https://adata.org/factsheet/ADANN-writing>
- “Disability Style Guide” National Center on Disability and Journalism at <https://ncdj.org/style-guide/>
- “Resources for Reporters Writing About Blindness and Vision Loss” American Foundation for the Blind at <https://www.afb.org/news-publications/press-room/reporter-resources-writing-about-blindness-vision-loss>
- “Five Tips for Writing About People with Disabilities” Adaptive Sports Center at <https://www.adaptivesports.org/blog/announcements/five-tips-writing-about-people-disabilities>
- “Fact Sheet: Drug Addiction and Federal Disability Rights Laws” U.S. Department of Health and Hum Services: Office for Civil Rights at <https://www.hhs.gov/sites/default/files/drug-addiction-aand-federal-disability-rights-laws-fact-sheet.pdf>
- “People First Language” District of Columbia Office of Disability Rights at <https://odr.dc.gov/page/people-first-language>



Public Input No. 326-NFPA 101-2021 [Section No. 13.4.6]

13.4.6 Alcohol-Based-Hand-Rub Dispensers.

~~Alcohol~~ The installation and maintenance of Alcohol -based - hand-rub dispensers in dispensers and the storage of alcohol-based hand rub solutions in accordance with 8.7.3.3 shall be permitted.

Statement of Problem and Substantiation for Public Input

Our current health situation with the latest viral outbreak has led to a need to increase the number of alcohol based hand sanitizer dispensers within many different types of occupancies. Although alcohol based hand sanitizer was addressed in this chapter and many other requirements were also located in this chapter, the requirements did not apply to storage of sanitizer when not in use or many other provisions that could be applicable. Providing a pointer to section 8.7.3.3 will provide a direct link to all the requirements needed for safe installation, use, and maintenance of alcohol based hand rub dispensers as well as the storage of any alcohol based hand rub materials not in use.

Currently Robert Upson is also chairing an NFPA 30 task group, and Bruce Johnson is chairing an NFPA 1 task group to address this subject within those standards respectively. So a recommendation should be made to this committee to put forth a committee input and create a task group to review this requirement throughout and ensure correlation with NFPA 1 and NFPA 30 task groups that are already reviewing this.

Related Public Inputs for This Document

<u>Related Input</u>	<u>Relationship</u>
Public Input No. 316-NFPA 101-2021 [Section No. 8.7.3.3]	
Public Input No. 324-NFPA 101-2021 [New Section after 11.4.3.6]	
Public Input No. 325-NFPA 101-2021 [Section No. 12.4.6]	
Public Input No. 327-NFPA 101-2021 [Section No. 14.4.5]	
Public Input No. 329-NFPA 101-2021 [Section No. 15.4.5]	
Public Input No. 330-NFPA 101-2021 [Section No. 16.4.5]	
Public Input No. 332-NFPA 101-2021 [Section No. 16.6.4]	
Public Input No. 333-NFPA 101-2021 [Section No. 17.4.5]	
Public Input No. 334-NFPA 101-2021 [Section No. 17.6.4]	
Public Input No. 336-NFPA 101-2021 [Section No. 18.4.4]	
Public Input No. 337-NFPA 101-2021 [Section No. 19.4.4]	
Public Input No. 339-NFPA 101-2021 [Section No. 20.4.4]	
Public Input No. 340-NFPA 101-2021 [Section No. 21.4.4]	
Public Input No. 342-NFPA 101-2021 [Section No. 22.4.7]	
Public Input No. 344-NFPA 101-2021 [Section No. 23.4.7]	
Public Input No. 347-NFPA 101-2021 [Section No. 26.3.2.1]	
Public Input No. 349-NFPA 101-2021 [Section No. 28.4.2]	
Public Input No. 354-NFPA 101-2021 [Section No. 29.4.2]	
Public Input No. 357-NFPA 101-2021 [Section No. 30.4.3]	
Public Input No. 360-NFPA 101-2021 [Section No. 32.2.4]	

[Public Input No. 361-NFPA 101-2021 \[Section No. 32.3.4.2\]](#)

[Public Input No. 363-NFPA 101-2021 \[Section No. 33.2.4\]](#)

[Public Input No. 364-NFPA 101-2021 \[Section No. 33.3.4.2\]](#)

[Public Input No. 365-NFPA 101-2021 \[Section No. 36.4.6\]](#)

[Public Input No. 367-NFPA 101-2021 \[Section No. 37.4.6\]](#)

[Public Input No. 368-NFPA 101-2021 \[Section No. 38.4.4\]](#)

[Public Input No. 369-NFPA 101-2021 \[Section No. 39.4.4\]](#)

[Public Input No. 370-NFPA 101-2021 \[Section No. 40.4.3\]](#)

[Public Input No. 371-NFPA 101-2021 \[Section No. 42.4.3\]](#)

Submitter Information Verification

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Committee: SAF-AXM

Committee Statement

Resolution: The current language is adequate. It is noted that proposed revisions to 8.7.3.3 were not incorporated by the TC on Fire Protection Features.



Public Input No. 148-NFPA 101-2021 [Section No. 13.4.7.10.3]

13.4.7.10.3

Sprinklers shall not be required under stage areas less than 48 in. (1220 mm) in clear height that are used exclusively for chair or table storage and lined on the inside with 5/8 in. (16 mm) ~~Type- type~~ X gypsum wallboard panels or the approved equivalent.

Statement of Problem and Substantiation for Public Input

The Building Code Technical Committee of the Gypsum Association reviewed references to gypsum products throughout NFPA 101 and identified several instances where incorrect terminology was used. This is one of several Public Inputs being submitted to ensure consistency in the use of gypsum terms throughout all codes, standards, and industry publications.

Related Public Inputs for This Document

<u>Related Input</u>	<u>Relationship</u>
Public Input No. 145-NFPA 101-2021 [Section No. 8.6.11.3]	
Public Input No. 146-NFPA 101-2021 [Section No. 12.4.7.10.3]	
Public Input No. 155-NFPA 101-2021 [Section No. 13.3.1]	
Public Input No. 149-NFPA 101-2021 [Section No. 14.3.4.4.1]	
Public Input No. 150-NFPA 101-2021 [Section No. 14.3.4.4.3]	
Public Input No. 151-NFPA 101-2021 [Section No. A.3.3.182]	
Public Input No. 152-NFPA 101-2021 [Section No. A.7.1.3.2.1(1)]	
Public Input No. 153-NFPA 101-2021 [Section No. A.7.1.3.2.1(3)]	

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Committee: SAF-AXM

Committee Statement

Resolution: [FR-6597-NFPA 101-2021](#)

Statement: The Building Code Technical Committee of the Gypsum Association reviewed references to gypsum products throughout NFPA 101 and identified several instances where incorrect terminology was used. This is one of several revisions to ensure consistency in the use of gypsum terms throughout all codes, standards, and industry publications.



Public Input No. 302-NFPA 101-2021 [New Section after 13.7.5]

13.7.5 Modular Rooms and Sleep Pods

13.7.5.1

Modular rooms and sleep pods installed in indoor locations shall comply with Section 10.6. Where provided in areas covered by an occupant notification system the units shall comply with Section 9.6.3.6.1.

Statement of Problem and Substantiation for Public Input

Modular rooms and sleep pods are becoming increasingly popular, and are showing up in a variety of different occupancies. This proposal provides a means for AHJs to approve these installations and allow the use of these prefabricated structures.

This proposal treats modular rooms and sleep pods, such as those shown in the attached pictures, as products that can be installed in a building, and not as building construction, while not losing applicable code requirements.

The UL 962 listing covers the fabrication and safety of the modular room. UL 962 includes requirements for insulation, finish materials, internal wiring, lighting, ventilation, and other construction features. Markings are to be provided on the listed products to document the Interior finish and foamed plastic ratings, such as the ASTM E84 (UL 723) flame spread and smoke developed indexes. This makes it easy to determine their suitability for use in the specific areas of the building.

Section 10.6.5 allows the AHJ to approve the installation locations, to make sure the means of egress is not compromised and other code requirements are not adversely impacted.

Related Public Inputs for This Document

<u>Related Input</u>	<u>Relationship</u>
<u>Public Input No. 296-NFPA 101-2021 [New Section after 3.3.189]</u>	
<u>Public Input No. 297-NFPA 101-2021 [New Section after 3.3.262]</u>	
<u>Public Input No. 298-NFPA 101-2021 [New Section after 9.6.3.6.1]</u>	
<u>Public Input No. 299-NFPA 101-2021 [Section No. 10.1.3.2]</u>	
<u>Public Input No. 300-NFPA 101-2021 [New Section after 10.5.5]</u>	
<u>Public Input No. 301-NFPA 101-2021 [New Section after 12.7.5]</u>	
<u>Public Input No. 303-NFPA 101-2021 [New Section after 18.7.6]</u>	
<u>Public Input No. 304-NFPA 101-2021 [New Section after 19.7.6]</u>	
<u>Public Input No. 305-NFPA 101-2021 [New Section after 20.7.6]</u>	
<u>Public Input No. 307-NFPA 101-2021 [New Section after 21.7.6]</u>	
<u>Public Input No. 309-NFPA 101-2021 [New Section after 36.4.4.12]</u>	
<u>Public Input No. 310-NFPA 101-2021 [New Section after 37.4.4.12]</u>	
<u>Public Input No. 311-NFPA 101-2021 [New Section after 38.7.7]</u>	
<u>Public Input No. 312-NFPA 101-2021 [New Section after 39.7.7]</u>	
<u>Public Input No. 313-NFPA 101-2021 [New Section after 40.7.3]</u>	

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Committee: SAF-AXM

Committee Statement

Resolution: It is unclear why the proposed language is located under the exposition facility requirements. It is noted that the proposed 9.6.3.6.1 was not incorporated by the TC on Building Service and Fire Protection Equipment.



Public Input No. 12-NFPA 101-2020 [Section No. 13.7.5.4]

~~13.7.5.4 – Vehicles.~~

~~Vehicles on display within an exposition facility shall~~

~~Vehicles shall comply with~~

~~13~~

~~8 .7.~~

~~5.4.1 through 13.7.5.4.5 .~~

~~13.7.5.4.1 –~~

~~All fuel tank openings shall be locked and sealed in an approved manner to prevent the escape of vapors; fuel tanks shall not contain in excess of one-half their capacity or contain in excess of 10 gal (38 L) of fuel, whichever is less.~~

~~13.7.5.4.2 –~~

~~At least one battery cable shall be removed from the batteries used to start the vehicle engine, and the disconnected battery cable shall then be taped.~~

~~13.7.5.4.3 –~~

~~Batteries used to power auxiliary equipment shall be permitted to be kept in service.~~

~~13.7.5.4.4 –~~

~~Fueling or defueling of vehicles shall be prohibited.~~

~~13.7.5.4.5 –~~

~~Vehicles shall not be moved during exhibit hours.~~

~~6.~~

Statement of Problem and Substantiation for Public Input

Proposed to move to 8.7.6. Currently the requirements to protect vehicles in building are in assemble occupancies. Other occupancies have vehicles on display, e.g. business, and currently their is no way to get to the protection requirements contained in assembly. Consistent with action taken for alcohol hand solutions where general requirement is in core chapter and occupancy chapters can reference if needed.

Related Public Inputs for This Document

<u>Related Input</u>	<u>Relationship</u>
Public Input No. 7-NFPA 101-2020 [New Section after 8.7.5]	
Public Input No. 11-NFPA 101-2020 [Section No. 12.7.5.4]	

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Submittal Date: Thu Nov 19 08:29:15 EST 2020

Committee: SAF-AXM

Committee Statement

Resolution: The companion proposal to add vehicle requirements to Chapter 8 was not accepted by the TC on Fire Protection Features. Requirements for vehicles in exposition facilities need to be maintained in the assembly occupancy chapters. Nothing prohibits other occupancy chapters from referencing these requirements with any needed occupancy-specific modifications.



Public Input No. 397-NFPA 101-2021 [New Section after 13.7.6.1]

Insert (2) ad renumber the existing sections.

(2) This requirement shall not apply to assembly occupancies in which people do not congregate in high densities for social entertainment, including drinking, dancing, food and drink consumption with an occupant load not exceeding 250.

Statement of Problem and Substantiation for Public Input

There are assembly occupancies in University settings that are designed to accommodate the occupancy load, occupants frequently visit these facilities and are familiar with the location of the exits and means of egress that do not require crowd managers. These locations include:

1. Classrooms with an occupant load greater than 50.
2. Lecture Halls with fixed seating
3. Libraries
4. Museums
5. Fitness Centers

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Committee: SAF-AXM

Committee Statement

Resolution: It is unclear what constitutes "high densities" or "social entertainment." Assembly occupancies should continue to be provided with trained crowd managers as currently required. A task group has been appointed to further review this topic for the second draft stage.



Public Input No. 41-NFPA 101-2021 [Section No. A.3.3.250.1]

A.3.3.250.1 Festival Seating.

Festival seating describes situations in assembly occupancies where live entertainment events are held that are expected to result in ~~overcrowding and~~ high audience density ~~that can compromise public safety~~ nearest to the attraction that will require greater attention to crowd management than a reserved seating event . It is not the intent to apply the term *festival seating* to exhibitions; sports events; conventions; and bona fide political, religious, and educational events. Assembly occupancies with 15 ft² (1.4 m²) or more per person should not be considered festival seating.

Statement of Problem and Substantiation for Public Input

"Festival seating," or more accurately general admission events, are not necessarily overcrowded. Rather, overcrowding is a result of inadequate crowd management, for which the Code references a number of valuable resources. The current wording is pejorative, and plays into a stereotype that certain types of events are innately dangerous while others are not. History suggests otherwise. Rather than demonize GA events, which are common regardless of what anyone thinks of them, better to steer readers to current information to help mitigate the reasonably foreseeable risks.

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Committee: SAF-AXM

Committee Statement

Resolution: The phrase "nearest to the attraction" does not relate to festival seating. A task group has been appointed to further review this topic for the second draft.



Public Input No. 38-NFPA 101-2021 [Section No. A.12.4.2.1]

A.12.4.2.1

Life safety evaluations are examples of performance-based approaches to life safety. In this respect, significant guidance in the form and process of life safety evaluations is provided by Chapter 5, keeping in mind the fire safety emphasis in Chapter 5. Performance criteria, scenarios, evaluation, safety factors, documentation, maintenance, and periodic assessment (including a warrant of fitness) all apply to the broader considerations in a life safety evaluation. A life safety evaluation deals not only with fire but also with storms, collapse, crowd behavior, and other related safety considerations for which a checklist is provided in A.12.4.2.3. Chapter 5 provides guidance, based on fire safety requirements, for establishing a documented case showing that products of combustion in all conceivable fire scenarios will not significantly endanger occupants using means of egress in the facility (e.g., due to fire detection, automatic suppression, smoke control, large-volume space, or management procedures). Moreover, means of egress facilities plus facility management capabilities should be adequate to cope with scenarios where certain egress routes are blocked for some reason.

In addition to making realistic assumptions about the capabilities of persons in the facility (e.g., an assembled crowd including many disabled persons or persons unfamiliar with the facility), the life safety evaluation should include a factor of safety of not less than 2.0 in all calculations relating to hazard development time and required egress time (the combination of flow time and other time needed to detect and assess an emergency condition, initiate egress, and move along the egress routes). The factor of safety takes into account the possibility that half of the egress routes might not be used (or be usable) in certain situations.

Regarding crowd behavior, the potential hazards created by larger masses of people and greater crowd densities (which can be problematic during ingress, occupancy, and egress) demand that technology be used by designers, managers, and authorities responsible for buildings to compensate for the relaxed egress capacity provisions of Table 12.4.3.3. In very large buildings for assembly use, the hazard of crowd crushes can exceed that of fire or structural failure. Therefore, the building designers, managers, event planners, security personnel, police authorities, and fire authorities, as well as the building construction authorities, should understand the potential problems and solutions, including coordination of their activities. For crowd behavior, this understanding includes factors of space Design, energy Information, time Management, and information, as well as specific crowd management techniques, such as metering Expectations during Ingress, Circulation, and Egress. Published guidance on these factors and techniques is found in ANSI ES1.9 Crowd Management, the *SFPE Handbook of Fire Protection Engineering*, in Chapter 56, Egress Concepts and Design Approaches; Chapter 58, Human Behavior in Fire; and Chapter 59, Employing the Hydraulic Model in Assessing Emergency Movement; the *SFPE Guide to Human Behavior in Fire*; and the publications referenced therein.

Table 12.2.3.2 and Table 12.4.3.3 are based on a linear relationship between number of seats and nominal flow time, with not less than 200 seconds (3.3 minutes) for 2,000 seats plus 1 second for every additional 50 seats up to 25,000. Beyond 25,000 total seats, the nominal flow time is limited to 660 seconds (11 minutes). Nominal flow time refers to the flow time for the most able group of patrons; some groups less familiar with the premises or less able groups might take longer to pass a point in the egress system. Although three or more digits are noted in the tables, the resulting calculations should be assumed to provide only two significant figures of precision.

Statement of Problem and Substantiation for Public Input

This provision references the four crowd dynamics factors in John Fruin's *Pedestrian Planning and Design*, which was supplanted as authoritative guidance in July 2020 by ANSI ES1.9 Crowd

Management. That document identifies the issues to be considered as the Design, Information, Management, and Expectations related to an event during Ingress, Circulation, and Egress. The proposed edit simply makes this substitution.

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Committee: SAF-AXM

Committee Statement

Resolution: [FR-6598-NFPA 101-2021](#)

Statement: This provision references the four crowd dynamics factors in John Fruin's Pedestrian Planning and Design, which was supplanted as authoritative guidance in July 2020 by ANSI ES1.9 Crowd Management. That document identifies the issues to be considered as the Design, Information, Management, and Expectations related to an event during Ingress, Circulation, and Egress. The revision incorporates this substitution.



Public Input No. 40-NFPA 101-2021 [Section No. A.13.4.2.1]

A.13.4.2.1

Life safety evaluations are examples of performance-based approaches to life safety. In this respect, significant guidance in the form and process of life safety evaluations is provided by Chapter 5, keeping in mind the fire safety emphasis in Chapter 5. Performance criteria, scenarios, evaluation, safety factors, documentation, maintenance, and periodic assessment (including a warrant of fitness) all apply to the broader considerations in a life safety evaluation. A life safety evaluation deals not only with fire but also with storms, collapse, crowd behavior, and other related safety considerations for which a checklist is provided in A.13.4.2.3. Chapter 5 provides guidance, based on fire safety requirements, for establishing a documented case showing that products of combustion in all conceivable fire scenarios will not significantly endanger occupants using means of egress in the facility (e.g., due to fire detection, automatic suppression, smoke control, large-volume space, or management procedures). Moreover, means of egress facilities plus facility management capabilities should be adequate to cope with scenarios where certain egress routes are blocked for some reason.

In addition to making realistic assumptions about the capabilities of persons in the facility (e.g., an assembled crowd including many disabled persons or persons unfamiliar with the facility), the life safety evaluation should include a factor of safety of not less than 2.0 in all calculations relating to hazard development time and required egress time (the combination of flow time and other time needed to detect and assess an emergency condition, initiate egress, and move along the egress routes). This factor of safety takes into account the possibility that half of the egress routes might not be used (or usable) in certain situations.

Regarding crowd behavior, the potential hazards created by larger masses of people and greater crowd densities (which can be problematic during ingress, occupancy, and egress) demand that technology be used by designers, managers, and authorities responsible for buildings to compensate for the relaxed egress capacity provisions of Table 13.4.3.3. In very large buildings for assembly use, the hazard of crowd crushes can exceed that of fire or structural failure. Therefore, the building designers, managers, event planners, security personnel, police authorities, and fire authorities, as well as the building construction authorities, should understand the potential problems and solutions, including coordination of their activities. For crowd behavior, this understanding includes factors of space Design, energy Information, time Management, and information, as well as specific crowd management techniques, such as metering Expectations during Ingress, Circulation, and Egress. Published guidance on these factors and techniques is found in ANSI ES1.9 Crowd Management, the *SFPE Handbook of Fire Protection Engineering*, in Chapter 56, Egress Concepts and Design Approaches, and Chapter 58, Human Behavior in Fire, and Chapter 59, Employing the Hydraulic Model in Assessing Emergency Movement, the *SFPE Guide to Human Behavior in Fire* and the publications referenced therein.

Table 13.2.3.2 and Table 13.4.3.3 are based on a linear relationship between number of seats and nominal flow time, with not less than 200 seconds (3.3 minutes) for 2,000 seats plus 1 second for every additional 50 seats up to 25,000. Beyond 25,000 total seats, the nominal flow time is limited to 660 seconds (11 minutes). Nominal flow time refers to the flow time for the most able group of patrons; some groups less familiar with the premises or less able groups might take longer to pass a point in the egress system. Although three or more digits are noted in the tables, the resulting calculations should be assumed to provide only two significant figures of precision.

Statement of Problem and Substantiation for Public Input

This provision references the four crowd dynamics factors in John Fruin's *Pedestrian Planning and Design*, which was supplanted as authoritative guidance in July 2020 by ANSI ES1.9 Crowd

Management. That document identifies the issues to be considered as the Design, Information, Management, and Expectations related to an event during Ingress, Circulation, and Egress. The proposed edit simply makes this substitution.

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Committee: SAF-AXM

Committee Statement

Resolution: [FR-6599-NFPA 101-2021](#)

Statement: This provision references the four crowd dynamics factors in John Fruin's Pedestrian Planning and Design, which was supplanted as authoritative guidance in July 2020 by ANSI ES1.9 Crowd Management. That document identifies the issues to be considered as the Design, Information, Management, and Expectations related to an event during Ingress, Circulation, and Egress. The revision incorporates this substitution.