



**SOUTHERN NEVADA PROPOSED AMENDMENTS
TO THE
2024 INTERNATIONAL BUILDING CODE
FIRE AND LIFE SAFETY COMMITTEE**

International Building Code - Fire & Life Safety Code Committee
Revised January 27, 2024

PREFACE

This document was developed by the Southern Nevada Building Officials' (SNBO) *International Building Code - Fire & Life Safety Code Committee* and presents amendments to the 2024 *International Building Code (IBC)* as published by the *International Code Council (ICC)*.

Participation in the 2024 *International Building Code - Fire & Life Safety Code Committee* was open to all interested parties. However, voting on amendments proposals was limited to one vote each for seven Southern Nevada municipalities (Clark County, Henderson, Las Vegas, North Las Vegas, Boulder City, Pahrump, and Mesquite), the Clark County School District, and three industry representatives. All committee proceedings were conducted in accordance with Robert's Rules of Order.

The recommended amendments contained herein are not code unless adopted and codified by governmental jurisdictions. These amendments are not intended to prevent the use of any material or method of construction not specifically prescribed herein, provided any alternates have been approved and their use authorized by the Building Official. This document may be copied and used in whole or in part without permission or approval from the organizations listed on the cover page.

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SOUTHERN NEVADA CODE AMENDMENT FORM – 2024

AMENDMENT NO.: FLS24-57.02

COMMITTEE: 2024 IBC Fire Life Safety

CODE SECTION: 202, 1030.2

PROPONENT: Stephen DiGiovanni

PROPOSAL: To clarify the requirement for providing a main exit for buildings or portions thereof of assembly occupancy with occupant load over 300, the proposal is to define the term “main exit”, and to make modification so Section 1030.2 Assembly main exit.

ADD A NEW DEFINITION AS FOLLOWS INTO SECTION 202:

MAIN EXIT. Exit required at main entrance of assembly building, room or space with occupant load exceeding 300, where essentially all non-employees enter in the same approximate location for entry to the assembly use, such as where payment/ticketing is required for entry, or where seating is accompanied by host/staff, or where entry access is monitored by staff, or where the predominance of public entry is through a main entrance by building design.

REVISE AS FOLLOWS:

1030.2 Assembly main exit. *A building, room or space used for assembly purposes that has an occupant load greater than 300 shall be and is provided with a main exit. The that main exit shall be of sufficient capacity to accommodate not less than one-half of the occupant load, but such capacity shall be not less than the total required capacity of all means of egress leading to the exit. Where the building is classified as a Group A occupancy, the main exit shall front on not less than one street or an unoccupied space of not less than 10 ft (3.048 m) in width that adjoins a street or public way. In a building, room or space used for assembly purposes where there is not a well-defined main exit or where multiple main exits are provided, exits shall be permitted to be distributed around the perimeter of the building provided that the total capacity of egress is not less than 100 percent of the required capacity.*

JUSTIFICATION: The language addressing main exits has changed over many code editions, spanning the legacy codes, International codes, and NFPA codes. There were times where the code language included the term “entrance”, this is found in legacy UBC codes from 1927 to 1943 editions, and is the language in use today in NFPA 101 (2024) Section 12.2.3.6 “Main Entrance/Exit”. The UBC shortened the term to “Main Exit” starting in the 1946 edition, and NFPA 101 also used the term “Main Exit” in several past editions.

Also, whereas the legacy codes, editions of the I-codes through 2009, and currently in NFPA 101, all had a specific statement that clearly required the main exit to be provided, starting in 2012 the language has changed such that a “where provided” type

of trigger can be interpreted. In researching the code changes proposed for 2012 <https://www.iccsafe.org/wp-content/uploads/IBC-E1.pdf> the only proposals addressing the language of Section 1028.2 (1030.2 in 2024 IBC) are E140 (page IBC-E176) and E141 (page IBC E181); it is clear from the language we have today, that E140 was the approved proposal. The mark-ups for 1028.2, as well as the justification, are provided below. The proposal is a multi-section change, with the intent of providing consistency in the use of terms throughout the code. Importantly, the justification does not indicate at all the intent to change the technical criteria for providing a main exit.

In the commentary language of both the 2009 IBC (before the code change) and the currently adopted 2018 IBC (at Section 1029.2), the intent of the provision is made clear, with the following similar language (quoted in part from 2018, slight wording changes from 2009 version):

“Studies have indicated that in any emergency, occupants will tend to egress via the same path of travel used to enter the room and building. Therefore, a main entrance to a building or space must also be designed as the main exit to accommodate this behavior, even if the required exit capacity might be more easily accommodated elsewhere. The main entrance (and exit) must be sized to accommodate at least 50 percent of the total occupant load of the structure and must front on a large, open space, such as a street or lobby, for rapid dispersal of the occupancy outside the building or space”.

Seeing as the commentary language has been touched (see blue-ish words...) between the 2009 and 2024 commentary editions (i.e. not ignored or overlooked), with the changes clarifying that the main exit provision applies also to “spaces”, it follows that the main intent of the main exit requirement was not intended to change with the code change proposal. Unfortunately, the execution of the code change has had an unintended consequence, and today design professionals are questioning whether the main exit is required to be at the main entrance, and even questioning whether a main exit is even required.

It is useful to look at the Main Entrance/Exit provisions promulgated by NFPA 101, at least for comparative purposes and to reinforce our interpretations, although not for justification purposes, as no technical changes are proposed here. NFPA 101 does provide clarity in the code language, already mentioned is the terminology combining the “entrance” to the “exit”, and also a more direct requirement that such Main Entrance/Exit is required to be provided. In addition, it is interesting to see how the NFPA 101 section has evolved in technical criteria. Whereas the Main Exit sizing has been 50% of OL since at least the 1927 UBC legacy code, NFPA 101 now has provisions that require the Main Entrance/Exit to be sized to accommodate 2/3 of the total occupant load, for certain specific occupancies, such as nightclubs. This change was a result of the Station Nightclub fire in 2003. <https://www.nfpa.org/news-blogs-and-articles/blogs/2022/09/16/a-closer-look-at-some-assembly-occupancy-requirements> . Where it's evident that NFPA is addressing life loss incidents by requiring more aggressive sizing of the main exit, this proposal is attempting to ensure that local interpretation does not move in the opposite direction.

In summary, the proposal seeks to define the “main exit” term. In defining the term, the tie to the main entrance location is made in the proposed definition language. In

addition, the section 1030.2 is proposed to be revised, to clearly make the provision of the main exit a requirement (similar to language used in 2009 edition). The intent is to clarify the intent of the code, that a main exit is required to coincide with the main entrance, and that the main exit is required to be provided in the egress design for assembly use with occupant load exceeding 300 persons. This is needed as our community has a unique use of assembly spaces, many having changing designs and uses, i.e. pool decks that turn into concert venues, circulation spaces that turn into temporary event locations, etc, and it is important to ensure consistent application of codes to address all versions of assembly uses that may arise.

Note, this change does not intend to restrict proper use of distributed exiting for those facilities that have multiple entrances, and thus no defined main entrance. For instance, Allegiant Stadium is a (predominately) ticketed facility that employs multiple entrance locations, occurring at both the ticketing/security perimeter, and at the building perimeter. I also can not think of any casino that does not also have multiple points of entry on the building perimeter (although interior nightclubs/theaters/etc. may in-fact require a main exit design). Facilities such as these clearly have distributed entrances, and thus are permitted to utilize the distributed exiting provisions allowed in the code, and the intent of this proposal is to not change those allowances whatsoever.

Excerpt Egress Committee Proposals for 2012 I-Codes, Change E-140-09/10:

1028.2 (IFC [B] 1028.2) Assembly main exit. ~~Group A~~ A building, room or space used for assembly purposes occupancies and assembly occupancies accessory to Group E occupancies that have has an occupant load of greater than 300 ~~shall be and~~ provided with a main exit. ~~The~~ the main exit shall be of sufficient width to accommodate not less than one-half of the occupant load, but such width shall not be less than the total required width of all means of egress leading to the exit. Where the building is classified as a Group A occupancy, the main exit shall front on at least one street or an unoccupied space of not less than 10 feet (3048 mm) in width that adjoins a street or public way. In a building, room or space used for assembly purposes where there is no well-defined main exit or where multiple main exits are provided, exits shall be permitted to be distributed around the perimeter of the building provided that the total width of egress is not less than 100 percent of the required width.

Exception: ~~In assembly occupancies where there is no well defined main exit or where multiple main exits are provided, exits shall be permitted to be distributed around the perimeter of the building provided that the total width of egress is not less than 100 percent of the required width.~~

1028.3 (IFC [B] 1028.3) Assembly other exits. In addition to having access to a main exit, each level in ~~Group A a~~ building used for assembly purposes occupancies or assembly occupancies accessory to Group E occupancies having

1108.2.9.1 Dining surfaces. (No change to text)

Reason: Throughout the building code there are three distinct use of the term assembly; assembly occupancy, assembly and assembly seating. Primarily, the portions relating to assembly occupancy establish the fire resistance associated with that Use Group. Assembly relates to a room or space where people assemble with the building code addressing life safety and accessibility requirements associated. Assembly seating relates to either seating at tables or row seating, which have unique accessibility and life safety requirements that differ from other assembly areas. This proposal clarifies the requirements associated with assembly and assembly seating from an assembly occupancy. For example, Table 1108.2.2.1 requires a wheelchair space where there are 4 fixed seats in assembly seating, an assembly occupancy requires at least 50 occupants.

The intent of this proposal is for consistency throughout the IBC. The purpose is to separate the Group A occupancy classifications used for height and area requirements, sprinklers, etc., from provisions for assembly areas where the use of the space determines the requirements (i.e., means of egress and accessibility). Sections 1028 and 1108.2 are for spaces used for assembly purposes, not just Group A buildings, therefore the text that references these provisions and included in those provisions should reflect that where appropriate.

The provisions for occupant load, seating, aisles and aisle accessways, and accessibility are associated with the use of the space (items found in Chapter 10 and 11), not the group assigned for height and area limitations, therefore, the limitation in Exception 4 to just Chapter 11 is inappropriate. This proposal also relocated Section 1017.4 that covers aisle access ways in assembly spaces with tables to Section 1028 since aisles for all assembly, including tables, are covered in Sections 1028.9 through 1028.9.6. The assistive listening and performance areas are not always associated with fixed seating. Lawn seating does not contain any fixed seating, therefore, the base paragraph should be revised to reflect the sections appropriately. Section 1028.15 is not needed since it repeats what is required in Section 1004.7.

Cost Impact: The proposal will not increase the cost of construction.





Public Hearing:	Committee:	AS	AM	D
	Assembly:	ASF	AMF	DF

ICCFILENAME:Roether-G1-303.1

E141-09/10

Excerpt NFPA 101 (2024) Section 12.2.3.6:

NFPA 101: Life Safety Code, 2024 Edition - Chapter 12
New Assembly Occupancies

 [Bookmark](#)  [Citation](#)  [Print](#)  [Email](#)

12.2.3.5 Reserved.

12.2.3.6 Main Entrance/Exit.

12.2.3.6.1

Every assembly occupancy shall be provided with a main entrance/exit.

12.2.3.6.2

The main entrance/exit width shall be as follows:

- (1) The main entrance/exit shall be of a width that accommodates two-thirds of the total occupant load in the following assembly occupancies:
 - (a) Dance halls
 - (b) Discotheques
 - (c) Nightclubs
 - (d) Assembly occupancies with festival seating
- (2) In assembly occupancies, other than those listed in 12.2.3.6.2(1), the main entrance/exit shall be of a width that accommodates one-half of the total occupant load.

12.2.3.6.3

The main entrance/exit shall be at the level of exit discharge or shall connect to a stairway or ramp leading to a street.

12.2.3.6.4

Access to the main entrance/exit shall be as follows:

- (1) Each level of the assembly occupancy shall have access to the main entrance/exit, and such access shall have the capacity to accommodate two-thirds of the occupant load of such levels in the following assembly occupancies:
 - (a) Dance halls
 - (b) Discotheques
 - (c) Nightclubs
 - (d) Assembly occupancies with festival seating
- (2) In assembly occupancies, other than those listed in 12.2.3.6.4(1), each level of the assembly occupancy shall have access to the main entrance/exit, and such access shall have the capacity to accommodate one-half of the occupant load of such levels.

12.2.3.6.5

Where the main entrance/exit from an assembly occupancy is through a lobby or foyer, the aggregate capacity of all exits from the lobby or foyer shall be permitted to provide the required capacity of the main entrance/exit, regardless of whether all such exits serve as entrances to the building.

12.2.3.6.6 *

In assembly occupancies where there is no well-defined main entrance/exit, exits shall be permitted to be distributed around the perimeter of the building, provided that the total exit width furnishes not less than 100 percent of the width needed to accommodate the permitted occupant load.

12.2.3.7 Other Exits.

Each level of an assembly occupancy shall have access to the main entrance/exit and shall be provided with additional exits of a width to accommodate not less than one-half of the total occupant load served by that level.

12.2.3.7.1

Additional exits shall discharge in accordance with 12.2.7.

12.2.3.7.2

Additional exits shall be located as far apart as practicable and as far from the main entrance/exit as practicable.

12.2.3.7.3

Additional exits shall be accessible from a cross aisle or a side aisle.

12.2.3.7.4

In assembly occupancies where there is no well-defined main entrance/exit, exits shall be permitted to be distributed around the perimeter of the building, provided that the total exit width furnishes not less than 100 percent of the width required to accommodate the permitted occupant load.

12.2.3.8 Minimum Corridor Width.

SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

A		B		C		D		E		F	<input checked="" type="checkbox"/>	G		H		I		J	
----------	--	----------	--	----------	--	----------	--	----------	--	----------	-------------------------------------	----------	--	----------	--	----------	--	----------	--

*A: address local topographic conditions B: address local geologic conditions C: address local climatic conditions
D: to address special uses/occupancies E: to correlate provisions of a national code with other national codes or State Law
F: clarify the intent of the codes G: address unique designs/systems not anticipated in base codes
H: provide for consistency in regional interpretation/application I: address errata issues J: address fire response capabilities*

COST IMPACT: The change is intended to clarify the code intent, but does not require any additional egress width be provided, so there are no costs in terms of building construction. Where different interpretations have been permitted, the “cost” of the change is limited to restricting design of the main entrance, potentially requiring egress capacity to be provided at the entrance location rather than distributed to other locations, and any aesthetically driven “costs” related to the doors designs, i.e. having to buy more “fancy” doors because of being provided at the main entrance.

COMMITTEE ACTION:

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
Y	Y		Y		Y	Y	Y	Y	Y	

RESULT: X Approved Failed Withdrawn Tabled Other

403.4.7

SOUTHERN NEVADA CODE AMENDMENT FORM – 2024

AMENDMENT NO.: FLS24 – 26.02

COMMITTEE: 2024 IBC Fire and Life Safety

CODE SECTION: Section 403.4.7

PROPONENT: Jake R. Hill

PROPOSAL: Removing the allowance of fixed glazing that can be cleared by firefighters. Provide guidance for smoke removal supply “make-up” air methods.

REVISE AS FOLLOWS:

403.4.7 Smoke removal. To facilitate smoke removal in post-salvage and overhaul operations, buildings and structures shall be equipped with natural or mechanical ventilation for removal of products of combustion in accordance with one of the following:

1. Easily identifiable, manually operable windows or panels shall be distributed around the perimeter of each floor at not more than 50-foot (15,420 mm) intervals. The area of operable windows or panels shall be not less than 40 square feet (3.7 m²) per 50 linear feet (15 240 mm) of perimeter.

Exceptions:

1. In Group R-1 occupancies, each dwelling unit, sleeping units or suite having an exterior wall shall be permitted to be provided with 2 square feet (0.19 m²) of venting area specified in item 1.
 2. ~~Windows shall be permitted to be fixed provided that glazing can be cleared by firefighters.~~
 2. Manually operable windows or panels are not required in Group R-1 and R-2 residential units provided the residential units comply with the passive requirements of Section 909 and all corridors between the residential units and the exit enclosures serving the residential units comply with Section 403.4.7, Item 3.
2. Mechanical air-handling equipment providing one exhaust air change every 15-minutes for the area involved. Return and exhaust air shall be moved directly to the outside without recirculation to other portions of the building. Mechanical makeup fresh air shall be provided through one or more of the following methods:
 1. Mechanical supply air through an approved HVAC system linked directly to the exterior.
 2. Utilization of stair pressurization fans, capable of providing the required makeup air per zone. If implemented, verbiage shall be provided on the

fire smoke removal panel to indicate which doors are required to be opened to provide the mechanical makeup air manually.

3. A dedicated fresh air supply for smoke removal.
 4. A method approved by the *authority having jurisdiction*.
3. A smoke control system that provides a minimum of one exhaust air change every 15 minutes is provided for the area involved upon manual activation of the smoke removal feature at the smoke control graphics panel. The volume of air shall be calculated based upon the volume of the space between the floor and the floor or roof structure above. The exhaust air quantity shall be as measured at the exhaust fan. Mechanical makeup fresh air shall be provided through one or more of the following methods:
1. Mechanical supply air through an approved HVAC system linked directly to the exterior.
 2. Utilization of stair pressurization fans, capable of providing the required makeup air per zone. If implemented, verbiage shall be provided on the fire smoke removal panel to indicate which doors are required to be opened to provide the mechanical makeup air manually.
 3. A dedicated fresh air supply for smoke removal.
 4. A method approved by the *authority having jurisdiction*.
4. Any other *approved* design that will produce equivalent results.

JUSTIFICATION:

Mechanical makeup air is somewhat addressed but does not currently specify the requirements on how to effectively, and safely, provide it for smoke removal systems.

For 2.b. & 3.b.

The purpose of providing pressurized enclosures is to protect building occupants and to provide a higher level of protection in exit enclosures. As this system is intended to be utilized AFTER a fire event, as a “mop-up” system, when there is no longer smoke/heat generation occurring, the stair shaft pressurization is not as high of a concern.

This amendment will permit the use of stair fans to be utilized AFTER the fire event for “mop-up” systems. During a “mop-up” event the hazards are far lower due to the smoke and heat generation having concluded. These stair fans providing air into the stair shaft will still be providing a net positive pressure into the stair shaft. Additionally, with the net negative pressure being generated by the exhaust fans for the given area of the fire event, this pressure differential across the stair opening will help to maintain a safe environment in the stair.

This method has already been approved on projects locally and this amendment is purely seeking to document this as an approved method within our locally adopted codes and standards.

For 2.d. & 3.d.

Lastly, code official approval will allow for other methods that are not currently anticipated, but will require approval.

“Knock out panels” are intended to allow emergency responders to manually purge smoke from a building. Although this arrangement has some validity, there are a few associated fallacies.

- This arrangement requires emergency responders to be able to determine which panels are designed/intended to be cleared, which is not always intuitive.
- Panels to be removed must be on the leeward side of the building. If panels on the windward side are removed, smoke can easily be forced into other portions of the building not initially affected.
- Portable fans can only move smoke a limited distance before the smoke dissipates into the building.
- When fixed glazing is cleared by firefighters falling panels or shards of glass can create a hazard to individuals below and will need to be cleaned up.
- Panels of glass are known to have random fall patterns and do not necessarily fall straight down.
- The distance from the building is unknown as the falling glass will be in various sizes that are susceptible to wind conditions.
- Breakable glass panels are not a practical solution as high wind resistant and bulletproof glass may be used.
- Section 403.4.7 of the Southern Nevada amendments require purge systems exceeding base code.

Based on the preceding, mechanical purge (smoke removal) is preferred to remove smoke after completion or fire suppression activities and reliance on breakaway glass for smoke removal should be discouraged in fire department operations.

Previous Southern Nevada amendment exceptions for 403.4.7 (Exceptions 1-3):
As a committee we determined these are no longer required as these exceptions are redundant due to the adoption of the IEBC and these exceptions are ONLY in regard to alterations and additions.

SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

A	B	C	D	X	E	F	G	X	H	X	I	J	X
---	---	---	---	---	---	---	---	---	---	---	---	---	---

*A: address local topographic conditions B: address local geologic conditions C: address local climatic conditions
D: to address special uses/occupancies E: to correlate provisions of a national code with other national codes or State Law
F: clarify the intent of the codes G: address unique designs/systems not anticipated in base codes
H: provide for consistency in regional interpretation/application I: address errata issues J: address fire response capabilities*

COST IMPACT: The cost of construction will not be increased when designed with mechanical smoke exhaust.

COMMITTEE ACTION:

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
Y	Y	Y	Y	Y	Y	Y	Y	Y		

RESULT: Approved Failed Withdrawn Tabled Other

403.4.7.1

SOUTHERN NEVADA CODE AMENDMENT FORM – 2024

AMENDMENT NO.: FLS24-88.02

COMMITTEE: 2024 IBC Fire and Life Safety

CODE SECTION: Section 403.4.7.1

PROPOSER: Jake Hill – PCNA Group

PROPOSAL: *Add new Sections 403.4.7.1 through 403.4.7.3*

REVISE AS FOLLOWS:

403.4.7.1 Design requirements. Smoke removal systems shall be capable of manual activation and shall be designed in accordance with Sections 403.4.7.1.1 and 403.4.7.1.2.

403.4.7.1.1 Fans. Fans shall be selected for stable performance based on normal temperature. Calculations and manufacturer’s fan curves shall be part of the documentation procedures. Fans shall be supported and restrained by noncombustible devices in accordance with the requirements of Chapter 16.

403.4.7.1.2 Status indicators and controls. Status indicators and controls for the smoke removal system shall be provided on a graphic control panel in the *fire command center*. The graphic control panel shall be designed in accordance with the *International Fire Code* and shall provide status of smoke removal fans and controls for the smoke removal systems. The control panel for the smoke removal system shall be permitted to operate through the building HVAC management system or the fire alarm system. The control panel for the smoke removal system shall not be required to be listed as smoke control equipment.

403.4.7.2 Control diagrams. The *construction documents* shall provide sufficient information and detail to adequately describe the elements of the design necessary for the proper implementation of the smoke removal systems. The construction documents shall include smoke removal system control diagrams that show all devices in the system and identify their location and function. The smoke removal system drawings shall be permitted to be combined with smoke control system drawings, where applicable. Approved copies of the smoke removal system control diagrams shall be maintained current and kept on file with the Authority Having Jurisdiction and in the *fire command center* in an *approved format and manner*.

403.4.7.3 Special inspections for smoke removal. Smoke removal systems shall be tested by a *special inspector*.

Exception: *Special inspections* shall not be required where smoke removal is achieved by natural ventilation in accordance with Section 403.4.7, Item 1.

403.4.7.3.1 Scope of testing. *Special inspections* shall be conducted prior to occupancy and after sufficient completion for the purposes of exhaust/supply air change rate measurements and control verification.

403.4.7.3.2 Qualifications. *Special inspection agencies* for smoke removal shall have expertise in fire protection engineering, mechanical engineering, and certification as air balancers.

403.4.7.3.3 Reports. A complete report of testing shall be prepared by the *special inspector* or *special inspection agency*. The report shall include identification of all devices by manufacturer, nameplate data, design values, measured values and identification tag or *mark*. The report shall be reviewed by the responsible *registered design professional* and, when satisfied that the design intent has been achieved, the responsible *registered design professional* shall seal, sign and date the report with a statement as follows:

“I have reviewed this report and by personal knowledge and on-site observation certify that the smoke removal system is in substantial compliance with the design intent, and to the best of my understanding complies with the requirements of the code.”

403.4.7.3.3.1 Report filing. A copy of the final report shall be filed with the Authority Having Jurisdiction and an identical copy shall be maintained in the *fire command center*.

JUSTIFICATION:

As a committee we have determined that many of the previously amended design requirements for Smoke Removal Systems far exceed the requirements in the base code. These previous provisions were based on the section 909 provisions for smoke control (i.e. a life safety system). The code commentary clarifies that the Smoke Removal system is NOT a life safety system and is therefore NOT subject to the requirements of a life safety system. This amendment now only seeks to provide guidance on what is required for smoke removal systems akin to the base 2024 IBC.

Section 403.4.7 requires that high-rise buildings of any occupancy be provided with natural or mechanical ventilation for smoke removal during post-fire salvage and overhaul operations. However, although Section 403.4.7 provides minimum performance criteria for the smoke removal systems when the mechanical ventilation option is used (e.g., 4 air changes per hour), it does not provide any specific design and testing requirements for the mechanical smoke removal systems. Therefore, the purpose of this proposal is to add sub-sections to Section 403.4.7 to include specific design and testing requirements for smoke removal systems. Each of the proposed sub-sections to Section 403.4.7 is described below.

403.4.7.1: This new section is proposed to identify specific design requirements for smoke

removal systems. This section is necessary because the new base code language in Section 403.4.7 provides no guidance on these aspects of the design. Without the proposed design requirements, the design of the smoke removal systems would be subject to the local AHJ's interpretation, which could result in widely varying smoke removal system designs throughout the different jurisdictions in Southern Nevada. The design requirements listed in the subsections of Section 403.4.7.1 are based on requirements derived from Section 909, but modified to be specific for smoke removal (not smoke control) during the development of the Southern Nevada amendments to the 2009 & 2012 IBC. In 2009, the SNBO Smoke Control Sub-Committee felt that stating these requirements explicitly in sub-sections to Section 403.4.7 was preferable to simply referencing specific code sections in Section 909 in order to avoid confusion between smoke removal systems and smoke control systems. Each of the proposed design requirements is addressed individually below:

Section 403.4.7.1.2: This provision requires that status indicators and controls for smoke removal systems be provided as required for all HVAC equipment per IBC Section 911.1.5, Feature No. 5 (i.e., on a graphic control panel in the fire command center). This section requires that the graphic control panel design comply with the *International Fire Code* (IFC). In lieu of providing detailed requirements on the graphic control panel design in Section 403.4.7.1, the reference to the IFC allows each jurisdiction to develop their own guidelines for graphic control panel requirements if no consensus agreement is reached between the Southern Nevada jurisdictions regarding amendments to IFC Section 909.16. At a minimum, Section 403.4.7.1.4 only requires status for the smoke removal fans and controls for the smoke removal systems. The specific reference to smoke removal fans only was done deliberately, as the intent of this section is not to require monitoring of all dampers used in the smoke removal system. Also, this section specifically states that the control panel for the smoke removal systems is not required to be listed as smoke control equipment. The intent of this section is to allow the smoke removal panel to operate through the building's HVAC management (BMS) system or fire alarm system.

403.4.7.2: This new section requires control diagrams for the smoke removal system to be prepared as part of the construction documents for a building. At a minimum, the control diagrams must show all devices (fans, dampers, risers) in the system and identify their location and function. This section further requires that approved copies of the control diagrams be kept on file with the building official and/or fire code official, and in the fire command center. These requirements are generally consistent with the IBC Section 909.15 requirements for control diagrams for smoke control systems. This section also clarifies that it is permissible to incorporate the smoke removal system control diagrams with the smoke control drawings (SCDs) when SCDs are also required for a project.

403.4.7.3: This new section provides criteria for special inspections of smoke removal systems. Special inspections are critical in order to have an accurate assessment of the smoke removal system performance prior to AHJ final inspections. An Exception to Section 403.4.7.3 was included to clarify that special inspections are not required when natural ventilation in accordance with Item 1 of Section 403.4.7 is used to satisfy the smoke removal requirement (i.e., special inspections are not required for operable windows or breakable panels). These requirements are generally consistent with the IBC Section 909.18.8 requirements for special inspections for smoke control systems.

SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

A		B		C		D		E		F		G	X	H	X	I		J	
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*A: address local topographic conditions B: address local geologic conditions C: address local climatic conditions
D: to address special uses/occupancies E: to correlate provisions of a national code with other national codes or State Law
F: clarify the intent of the codes G: address unique designs/systems not anticipated in base codes
H: provide for consistency in regional interpretation/application I: address errata issues J: address fire response capabilities*

COST IMPACT:

The proposed amendments to Section 403.4.7 will not increase the cost of construction. Since the base code language for smoke removal systems does not provide specific design requirements, it is likely that the Southern Nevada jurisdictions would interpret Section 403.4.7 to require the features that have been proposed in this amendment.

COMMITTEE ACTION:

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
	Y	Y		Y	Y			Y	Y	Y

RESULT: X Approved Failed Withdrawn Tabled Other

SOUTHERN NEVADA CODE AMENDMENT FORM – 2024

AMENDMENT NO.: FLS24-28.01

COMMITTEE: 2024 IBC General Committee

CODE SECTION: Section 404.3

PROPONENT: Jake R. Hill

PROPOSAL: *Amend Section 404.3 to read as follows, deleting Exception Nos. 1 and 2.*

REVISE AS FOLLOWS:

[F] 404.3 Automatic sprinkler protection. *An approved automatic sprinkler system shall be installed throughout the entire building.*

Exceptions:

- ~~1. That area of a building adjacent to or above the atrium need not be sprinklered provided that portion of the building is separated from the atrium portion by not less than 2-hour fire barriers constructed in accordance with Section 707 or horizontal assemblies constructed in accordance with Section 711, or both.~~
- ~~2. Where the ceiling of the atrium is more than 55 feet (16 764 mm) above the floor, sprinkler protection at the ceiling of the atrium is not required.~~

JUSTIFICATION:

Fire sprinkler systems should be required throughout buildings. Areas adjacent to the atrium may be the contributor to the smoke that is rising in the atrium. It is essential to limit the smoke being introduced into the atrium. Although the fire barrier allows for protection, the most effective protection from fire and fire products is a fire sprinkler system. With Exception No. 2, there is substantial evidence that fire sprinkler systems, in the correct configuration, are effective at heights exceeding 55 feet. Where the configuration of a building prohibits traditional fire sprinklers, other systems can be employed to provide suppression for any fire within the atrium.

NFPA 13 (2010), Section 8.1.1(1) requires sprinklers throughout the premises. Under certain conditions, NFPA 13 permits the omission of sprinklers in specific areas and spaces within a building (see Section 8.15 “Special Situations”). However, NFPA 13 does not permit the omission of sprinklers at the ceiling of an atrium when the atrium ceiling is more than 55 feet above the floor. If the building is required to be sprinklered throughout, and NFPA 13 does not permit the omission of sprinkler at the atrium ceiling, then Exception No. 2 should be deleted for consistency.

For special circumstances where sprinkler ineffectiveness can be sufficiently demonstrated, the designers can still propose the omission of sprinklers at the ceiling of a tall (> 55 feet) atrium under the Alternate Method process. However, by deleting Exception No. 2, the designers will be required to address each atrium on a case-by-case basis, which is not unreasonable.

This amendment satisfies the SNBO Criteria for Code Amendments because it is required for code correlation (with NFPA 13, as referenced by the 2012 IFC).

SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

A		B		C		D	X	E		F		G		H	X	I		J	
----------	--	----------	--	----------	--	----------	----------	----------	--	----------	--	----------	--	----------	----------	----------	--	----------	--

*A: address local topographic conditions B: address local geologic conditions C: address local climatic conditions
D: to address special uses/occupancies E: to correlate provisions of a national code with other national codes or State Law
F: clarify the intent of the codes G: address unique designs/systems not anticipated in base codes
H: provide for consistency in regional interpretation/application I: address errata issues J: address fire response capabilities*

COST IMPACT: This amendment may increase the cost of construction, but that is debatable since NFPA 13 would likely override the exceptions and require sprinkler protection anyway.

COMMITTEE ACTION:

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
Y	y	y	y	y	y	y	y	y	y	y

RESULT: **X** Approved ___ Failed ___ Withdrawn ___ Tabled ___ Other

SOUTHERN NEVADA CODE AMENDMENT FORM – 2024

AMENDMENT NO.: FLS24-30.01

COMMITTEE: 2024 IBC Fire Life Safety Committee

CODE SECTION: Section 410.6

PROPONENT: Jake R. Hill

PROPOSAL: *Amend Section 410.6 to read as follows, deleting Exception No. 1.*

REVISE AS FOLLOWS:

[F] 410.6 Automatic sprinkler system. *Stages shall be equipped with an automatic sprinkler system in accordance with Section 903.3.1.1. Sprinklers shall be installed under the roof and gridiron and under all catwalks and galleries over the stage. Sprinklers shall be installed in dressing rooms, performer lounges, shops and storerooms accessory to such stages.*

Exceptions:

- ~~1. Sprinklers are not required under stage areas less than 4 feet (1219 mm) in clear height that are utilized exclusively for storage of tables and chairs, provided that the concealed space is separated from the adjacent spaces by Type X gypsum board not less than 5/8-inch (15.9 mm) in thickness.~~
1. ~~2.~~ Sprinklers are not required for stages 1,000 square feet (93 m²) or less in area and 50 feet (15 240 mm) or less in height where curtains, scenery or other combustible hangings are not retractable vertically. Combustible hangings shall be limited to a single main curtain, borders, legs and a single backdrop.
2. ~~3.~~ Sprinklers are not required within portable orchestra enclosures on stages.
3. ~~4.~~ Sprinklers are not required under catwalks and galleries where they are permitted to be omitted in accordance with Section 903.3.1.1.

JUSTIFICATION:

Exception No. 1 to Section 410.6 is not necessary and would result in partially sprinklered buildings, which is not consistent with the high level of protection that Southern Nevada has traditionally prescribed for buildings or portions of buildings containing stages, which typically have large corresponding occupant loads. Further, NFPA 13, as currently adopted and enforced in Southern Nevada, does not permit the omission of sprinklers identified in Exception No. 1. Please note that it is the General Committee's understanding that the Fire Code Committee intends to delete Exception No. 1 to Section 914.6.1 of the 2024 *International Fire Code* (IFC), which is identical to IBC Section 410.6.

This amendment is required for code correlation (NFPA 13 and the anticipated Southern Nevada amendments to the 2024 IFC) and to provide for consistency in regional interpretation and application of the codes.

SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

A		B		C		D		E		F		G		H	X	I		J	
----------	--	----------	--	----------	--	----------	--	----------	--	----------	--	----------	--	----------	----------	----------	--	----------	--

*A: address local topographic conditions B: address local geologic conditions C: address local climatic conditions
D: to address special uses/occupancies E: to correlate provisions of a national code with other national codes or State Law
F: clarify the intent of the codes G: address unique designs/systems not anticipated in base codes
H: provide for consistency in regional interpretation/application I: address errata issues J: address fire response capabilities*

COST IMPACT:

Deletion of Exception No. 1 will increase the cost of construction compared to the base IBC, but in reality it will not increase the cost of construction because the exception is in direct conflict with NFPA 13. Further, this sprinkler exception has consistently been deleted in the Southern Nevada amendments to the 2000 through 2012 editions of the IBC.

COMMITTEE ACTION:

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

RESULT: X Approved ___ Failed ___ Withdrawn ___ Tabled ___ Other

412.3.6

SOUTHERN NEVADA CODE AMENDMENT FORM – 2024

AMENDMENT NO.: FLS24-31.01

COMMITTEE: 2024 IBC General Committee

CODE SECTION: Section 412.3.6

PROPONENT: Jake R. Hill

PROPOSAL: Amend Section 412.3.6 by deleting the Exception.

REVISE AS FOLLOWS:

[F] 412.3.6 Fire suppression. Aircraft hangars shall be provided with a fire suppression system designed in accordance with NFPA 409, based on the classification for the hangar given in Table 412.3.6.

Exception: Where a fixed base operator has separate repair facilities on site, Group II hangars operated by a fixed base operator used for storage of transient aircraft only shall have a fire suppression system, but the system is exempt from foam requirements.

JUSTIFICATION:

The purpose of this amendment is to require hangars to be protected in accordance with NFPA 409, without exception. The Exception to IBC Section 412.3.6 would require policing of the hangar, which is not practical for the jurisdictions in Southern Nevada. Further, the Exception to IBC Section 412.3.6 does not comply with the adopted NFPA 409 code, which does not allow an exemption from the foam requirements like that specifically allowed in the Exception.

This amendment satisfies the SNBO Criteria for Code Amendment because it is required code correlation (IBC to IFC & NFPA 409) and it provides for consistency in regional interpretation and application of the codes.

SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

Table with 14 columns labeled A through J. Column A is empty, B is empty, C is empty, D is empty, E has an X, F is empty, G is empty, H has an X, I is empty, J is empty.

A: address local topographic conditions B: address local geologic conditions C: address local climatic conditions
D: to address special uses/occupancies E: to correlate provisions of a national code with other national codes or State Law
F: clarify the intent of the codes G: address unique designs/systems not anticipated in base codes
H: provide for consistency in regional interpretation/application I: address errata issues J: address fire response capabilities

COST IMPACT:

None, foam already required per NFPA 409.

COMMITTEE ACTION:

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	

RESULT: Approved Failed Withdrawn Tabled Other

SOUTHERN NEVADA CODE AMENDMENT FORM – 2024

AMENDMENT NO.: FLS24-005.01

COMMITTEE: 2024 IBC Fire and Life Safety Committee

CODE SECTION: 712.1.15, 711.4, 711.5

PROPONENT: Allen Burris

PROPOSAL: To replace the skylight provision with a code section that covers all openings and penetrations in roofs

REVISE AS FOLLOWS:
Delete Section 712.1.15

712.1.15 Skylights.

~~Skylights and other penetrations through a fire-resistance-rated roof deck or slab are permitted to be unprotected, provided that the structural integrity of the fire-resistance-rated roof assembly is maintained. Unprotected skylights shall not be permitted in roof assemblies required to be fire-resistance rated in accordance with Section 705.9.6. The supporting construction shall be protected to afford the required fire-resistance rating of the horizontal assembly supported.~~

Add Sections 711.4 / 711.5 Roof Openings / Penetrations.

711.4 Roof Openings and Skylights. Skylights and other roof openings in a fire-resistance-rated roof deck or slab are permitted to be unprotected, provided that the structural integrity of the fire-resistance-rated roof assembly is maintained. Roof openings and skylights in occupied roofs or roof assemblies required to be fire-resistance rated in accordance with Section 705.9.6 and shall comply with the opening protectives of Section 712. The supporting construction shall be protected to afford the required fire-resistance rating of the horizontal assembly supported.

711.5 Roof Penetrations. Penetrations through a fire-resistance-rated roof deck or slab are permitted to be unprotected, provided that the structural integrity of the fire-resistance-rated roof assembly is maintained. Through penetrations and joints in occupied roofs or roof assemblies required to be fire-resistance rated in accordance with Section 705.9.5 shall comply with Section 712.

JUSTIFICATION: The code does not address unprotected openings within a fire-resistance-rated roof assembly. Historically the skylight section has been used to permit unprotected openings within a fire-resistance rated roof deck or slab as the IBC Code Commentary states:

“fire-resistance-rated roof construction is not intended to create a barrier in order to contain the fire within the building, except for Exception 1 of Section 705.8.6 and the exception to Section 706.6.1.”

This code change will still apply to skylights but will now address broader roof penetrations and openings. Relocating IBC 712.1.15 to Section 711 aligns with the code's organization, such as how fire and smoke barriers address openings and penetrations within their respective sections. Furthermore, IBC 712.1.15 differs from the type of vertical openings addressed in Section 712 such as shafts, atriums, or two-story vertical openings.

Separating and renaming the skylight section into a roof penetration and roof opening section will clearly indicate the intent/application of the code. Furthermore, this will make the provisions more general and not limit the application to skylights.

SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

A		B		C		D		E		F	X	G	X	H	X	I		J	
----------	--	----------	--	----------	--	----------	--	----------	--	----------	---	----------	---	----------	---	----------	--	----------	--

*A: address local topographic conditions B: address local geologic conditions C: address local climatic conditions
D: to address special uses/occupancies E: to correlate provisions of a national code with other national codes or State Law
F: clarify the intent of the codes G: address unique designs/systems not anticipated in base codes
H: provide for consistency in regional interpretation/application I: address errata issues J: address fire response capabilities*

COST IMPACT: The code change proposal is a clarification of the intent of the code and is not anticipated to increase or decrease the cost of construction.

COMMITTEE ACTION:

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
	Y	Y		Y	Y			Y	Y	Y

RESULT: X Approved ___ Failed ___ Withdrawn ___ Tabled ___ Other

SOUTHERN NEVADA CODE AMENDMENT FORM – 2024

AMENDMENT NO.: FLS24-37.01

COMMITTEE: IBC Fire and Life Safety

CODE SECTION: Sections 712.1.3 - 712.1.3.3

PROPONENT: Thomas Stewart

PROPOSAL: *Revise Sections 712.1.3 - 712.1.3.3*

REVISE AS FOLLOWS:

712.1.3 Escalator openings. Where a building is equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1, vertical openings for escalators shall be permitted ~~where protected~~ in accordance with Section 712.1.3.1, ~~or 712.1.3.2, or 712.1.3.3~~

712.1.3.1 Opening size. (No change).

712.1.3.2 Automatic shutters. (No change).

712.1.3.3 Two-story openings. In other than Group I-2 or I-3 occupancies, vertical openings between two stories may contain an escalator. Such interconnected stories shall be separated from vertical openings and air transfer openings serving other floors by construction conforming to required shaft enclosures.

JUSTIFICATION:

The intent of this amendment is to utilize the same provisions that are found in Sections 712.1.12 and 1019.3 (Exception No. 1) for exit access stairways for two-story openings. Exit access stairways that connect two stories are not required to be provided with further passive or active fire protection features. Escalators through vertical openings provide no further of a hazard than exit access stairways to the occupants of a building. The intent of IBC Section 712.1.3.1 is to utilize draft curtains and closely spaced sprinklers is to provide a means of vertical opening protection. Group I-2 and I-3 occupancies are excluded to correlate with other sections of the Code.

COST IMPACT:

None.

COMMITTEE ACTION:

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	

RESULT: Approved Failed Withdrawn Tabled Other

SOUTHERN NEVADA SNBO CODE AMENDMENT FORM – 2024

AMENDMENT NO.: FLS24-004.02

COMMITTEE: IBC – Fire and Life Safety

CODE SECTION: 714.5.2

PROPONENT: Allen Burris

PROPOSAL: To include provisions to address the typical apartment ceiling top plate interface where the top plate penetrates the rated ceiling membrane. This proposal also clarifies the size of top plates required.

REVISE AS FOLLOWS: 714.5.2 Membrane penetrations. Penetrations of membranes that are part of a *horizontal assembly* shall comply with Section 714.5.1.1 or 714.5.1.2. Where floor/ceiling assemblies are required to have a *fire-resistance rating*, recessed fixtures shall be installed such that the required *fire resistance* will not be reduced.

Exceptions:

1. *Membrane penetrations* by steel, ferrous or copper conduits, pipes, tubes or vents, or concrete or *masonry* items where the *annular space* is protected either in accordance with Section 714.5.1 or to prevent the free passage of flame and the products of combustion. The aggregate area of the openings through the membrane shall not exceed 100 square inches (64 500 mm²) in any 100 square feet (9.3 m²) of ceiling area in assemblies tested without penetrations.
2. Ceiling *membrane penetrations* of maximum 2-hour *horizontal assemblies* by steel electrical boxes that do not exceed 16 square inches (10 323 mm²) in area, provided that the aggregate area of such penetrations does not exceed 100 square inches (44 500 mm²) in any 100 square feet (9.29 m²) of ceiling area, and the *annular space* between the ceiling membrane and the box does not exceed 1/8 inch (3.2 mm).
3. *Membrane penetrations* by electrical boxes of any size or type, that have been *listed* as part of an opening protective material system for use in *horizontal assemblies* and are installed in accordance with the instructions included in the listing.
4. *Membrane penetrations* by *listed* electrical boxes of any material, provided that such boxes have been tested for use in fire-resistance-rated assemblies and are installed in accordance with the instructions included in the listing. The *annular space* between the ceiling membrane and the box shall not exceed 1/8 inch (3.2 mm) unless *listed* otherwise.

5. The *annular space* created by the penetration of a fire sprinkler, provided that it is covered by a metal escutcheon plate.

6. Noncombustible items that are cast into concrete building elements and that do not penetrate both top and bottom surfaces of the element.

7. The ceiling membrane of a maximum 2-hour fire-resistance-rated *horizontal assembly* is permitted to be interrupted with the double 2x wood top plate of a wall assembly that is sheathed with *Type X gypsum wallboard*, provided that all penetrating items through the double top plates are protected in accordance with Section 714.5.1.1 or 714.5.1.2 and the ceiling membrane is tight to the top plates.

8. The ceiling membrane of a maximum 1-hour fire-resistance-rated horizontal assembly is permitted to be interrupted with a single 2x wood top plate or a combination of a single 2x wood top plate and a single 1x wood top plate of a wall assembly that is sheathed with Type X gypsum wallboard, provided that all penetrating items through the top plate are protected in accordance with Section 714.5.1.1 or 714.5.1.2 and the ceiling membrane is tight to the top plates.

89. Ceiling *membrane penetrations* by *listed* luminaires (light fixtures) or by luminaires protected with *listed* materials, which have been tested for use in fire-resistance-rated assemblies and are installed in accordance with the instructions included in the listing.

JUSTIFICATION:

The current code language merely requires a “double wood top plate”. As currently written, the top plate could consist of two ½” plywood strips or two 4x8s with no regard to the ability of the material to resist fire. The fact that a clarification statement needed to be added to the code commentary for this item is a clear indication this section needs to be revised. It is important to clarify exactly what the minimum is to achieve the continuity of the membrane rating at the penetration. This code change would allow for a single 2x top plate or a combination of a single 2x top plate with a 1x top plate as a minimum to add clarification to the section.

An additional reason for this change is to allow for current construction methods. Standard construction methods in wood construction require a gap to be placed between the bottom of the floor joists or truss and the top of a non-bearing partition. This allows for deflection of the truss without adverse loading from interference of a non-bearing partition. The standard method for creating this gap is to use a single 2x top plate with a 1x top plate to create a double top plate. Bearing walls and exterior walls are already required to use a double 2x top plate per IBC section 2308.9.3.2 and therefore are not generally affected by this code clarification.

Compliant nailing of the gypsum board can be maintained with a single 2x top plate. In a 1-hour assembly with a single layer of drywall, a single 2x top plate is sufficient to achieve drywall nailing. The standard 2x is 1 ½” thick. If you remove 5/8” for drywall, you are left with 7/8” of plate width for nailing. The required edge distance of a fastener in gypsum board is 3/8” per IBC Section 2508.6.3 allowing an edge distance of ½” on the plate. A standard joint at a stud in a fire rated wall would require 3/8” edge distance for each gypsum sheet leaving only 3/8” edge distance on each side of the stud. This shows that the proposed top plate configuration allows more nailing width than is required in the fire rated assembly.

In a 2-layer assembly, compliant nailing can be achieved with a 2x top plate with a 1x top plate. A 2x, which is 1 1/2", and a 1x, which is 3/4", will achieve a total top plate thickness of 2 1/4". If one subtracts 1 1/4" for 2 layers of 5/8" gypsum board from 2 1/4", there is 1" remaining. This will allow for 3/8" edge distance on the gypsum sheet as well as 5/8" edge distance on the top plate. This is also in excess of the minimums required for fire rated assemblies.

The 2x with a 1x plate application will also work with resilient channel (RC) and a single layer of gypsum board. The RC is 1/2" plus the 5/8" gypsum board for a total of 1 1/8" leaving 3/4" of edge distance on the top plate after subtracting the 3/8" drywall edge distance. This would even allow for a full 3/4" RC without degrading the fire rating of the assembly.

The order of nailing can also be modified to provide even more edge distance. If the wall sheathing is nailed first, the installer could take full advantage of the entire top plate thickness for edge distance. The ceiling membrane could then be butted tightly to the wall sheathing to achieve the rating. This configuration is demonstrated in U.L. listed assembly system number F-C-2387.

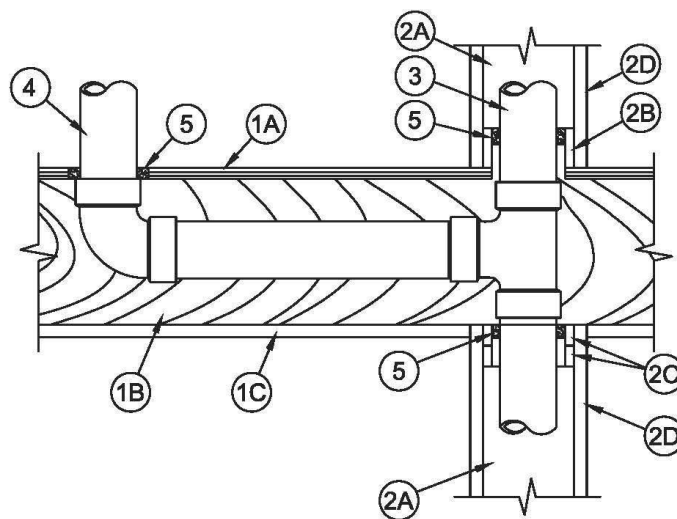
The single wood top plate exceeds the fire resistance of a single layer of 5/8" gypsum board. IBC table 722.6.2(1) assigns a 40-minute rating to 5/8" type x gypsum wall board on wood frame. Table 16.2.1A of the ANSI/AWC National Design Specification for Wood Construction (NDS), as referenced in IBC Section 722.1, assigns a 1-hour char rating to 1 1/2" of sawn lumber. Utilizing a single 2x wood top plate as a membrane penetration in a 1-hour application does not reduce the fire resistance rating of the assembly.

Testing has been performed on this condition and there are currently listed assemblies available. One listing is Specified Technologies Inc. system number F-C-2014 which allows for a single 2x4 or 2x6 top plate. Another listing is 3M system number F-C-2387 which also allows for a single 2x4 or 2x6 top plate. Both of these listings are approved by Underwriters Laboratories to maintain the fire rating of the floor ceiling assembly. It is inappropriate to eliminate options from the code that have been proven by testing to meet the fire-resistant requirements.

This proposed change does not limit the design of the building. The design professionals are still free to use a double top plate including 2x and 3x in any situation they deem necessary. This merely allows flexibility for the designer to use different methods while still achieving the required fire ratings.

System No. F-C-2387

March 20, 2009
F Rating – 1 Hr
T Rating – 0 Hr

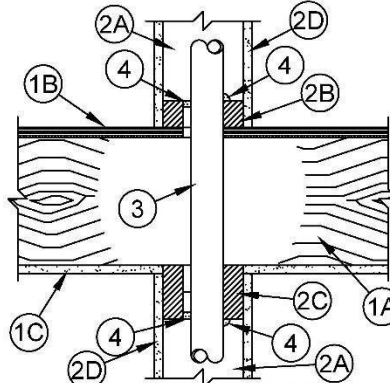


1. **Floor Assembly** – The 1 hr fire rated wood truss or combination wood and steel truss Floor-Ceiling assembly shall be constructed of the materials and in the manner described in the individual L500 Series Design in the UL Fire Resistance Directory, as summarized below:
 - A. **Flooring System** – Lumber or plywood subfloor with finish floor of lumber, plywood or **Floor Topping Mixture*** as specified in the individual Floor-Ceiling Design. Diam of opening shall be 1/2 in. to 1 in. (13 to 25 mm) larger than the outside diam of nonmetallic pipe (Items 3 and 4).
 - B. **Joists** – Nom 10 in. (254 mm) deep (or deeper) lumber, steel or combination lumber and steel joists, trusses or **Structural Wood Members*** with bridging as required and ends firestopped.
 - C. **Gypsum Board*** – Nom 4 ft (1.2 m) wide by 5/8 in. (16 mm) thick, attached as described in the individual Floor-Ceiling Design.
2. **Chase Wall** – The through penetrant (Item No. 3) shall be routed through a single, double or staggered wood studs/gypsum board chase wall and shall include the following construction features:
 - A. **Studs** – Nom 2 by 4 in. (51 by 102 mm) or 2 by 6 in. (51 by 152 mm) lumber studs.
 - B. **Sole Plate** – Nom 2 by 4 in. (51 by 102 mm) or 2 by 6 in. (51 by 152 mm) lumber plates. Diam of opening or length of notch-out in sole plate to be 1/2 in. to 1 in. (13 to 25 mm) larger than outside diam of pipe.
 - C. **Top Plate** – The single or double top plate shall consist of one or two nom 2 by 4 in. (51 by 102 mm) or 2 by 6 in. (51 by 152 mm) lumber plates. Diam of opening or length of notch-out in top plate to be 1/2 in. to 1 in. (13 to 25 mm) larger than outside diam of pipe.
 - D. **Gypsum Board** – Min 1/2 in. thick rated or nonrated gypsum board.
3. **Through Penetrant** – One nonmetallic pipe to be installed within the firestop system. Pipe to be rigidly supported on both sides of floor-ceiling assembly. The annular space between pipe and periphery of opening shall be min 0 in. (point contact) to max 1/2 in. (0 to max 13 mm). The following types and sizes of nonmetallic pipes may be used:
 - A. **Polyvinyl Chloride (PVC) Pipe** – Nom 3 in. (76 mm) diam (or smaller) Schedule 40 solid core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping system.
 - B. **Cellular Core Polyvinyl Chloride (ccPVC) Pipe** – Nom 3 in. (76 mm) diam (or smaller) Schedule 40 cellular core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping system.
 - C. **Acrylonitrile Butadiene Styrene (ABS) Pipe** – Nom 3 in. (76 mm) diam (or smaller) Schedule 40 solid core ABS pipe for use in closed (process or supply) or vented (drain, waste or vent) piping system.
 - D. **Cellular Core Acrylonitrile Butadiene Styrene (ccABS) Pipe** – Nom 3 in. (76 mm) diam (or smaller) Schedule 40 cellular core ABS pipe for use in closed (process or supply) or vented (drain, waste or vent) piping system.
 - E. **Chlorinated Polyvinyl Chloride (CPVC) Pipe** – Nom 3 in. (76 mm) diam (or smaller) SDR13.5 CPVC pipe for use in closed (process or supply) piping systems.
4. **Branch Piping** – (Optional) – One nonmetallic pipe to be connected to through penetrant (Item 3) and installed within opening in subfloor. The annular space between pipe and periphery of opening shall be min 0 in. (point contact) to max 1/2 in. (13 mm). The following types and sizes of nonmetallic pipes may be used:
 - A. **Polyvinyl Chloride (PVC) Pipe** – Nom 3 in. (76 mm) diam (or smaller) Schedule 40 solid core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping system.

Through Penetrations
Non-Metallic Pipes
2000 Series
Wood Frame Floor/Ceiling
FC

System No. F-C-2014

F Rating - 1 Hr
T Ratings - 0 and 1 Hr (See Item 3)



1. **Floor Assembly** - The 1 hr fire rated wood truss or combination wood and steel truss Floor-Ceiling assembly shall be constructed of the materials and in the manner described in the individual L500 Series Design in the UL Fire Resistance Directory, as summarized below:
 - A. **Joists** - Nom 10 in. (254 mm) deep (or deeper) lumber, steel or combination lumber and steel joists, trusses or **Structural Wood Members*** with bridging as required and with ends firestopped.
 - B. **Flooring System** - Lumber or plywood subfloor with finish floor of lumber, plywood or **Floor Topping Mixture*** as specified in the individual Floor-Ceiling Design. Diam of opening in flooring shall be 3/16 to 5/8 in. (5 to 16 mm) larger than the outside diam of nonmetallic pipe or conduit (Item 3).
 - C. **Gypsum Board*** - Thickness, type, number of layers and fasteners shall be as specified in the individual Floor-Ceiling Design. Diam of opening shall be 3/16 to 5/8 in. (5 to 16 mm) larger than the outside diam of nonmetallic pipe or conduit (Item 3).
2. **Chase Wall** - (Optional) - The through penetrants (Item 3) may be routed through a single, double or staggered wood stud/gypsum board chase wall and shall include the following construction features:
 - A. **Studs** - Nom 2 by 4 in. (51 by 102 mm), 2 by 6 in. (51 by 152 mm), 2 by 8 in. (51 by 203 mm) or double nom 2 by 4 in. (51 by 102 mm) lumber studs.
 - B. **Sole Plate** - Nom 2 by 4 in. (51 by 102 mm) or 2 by 6 in. (51 by 152 mm) lumber plates or double nom 2 by 4 in. (51 by 102 mm) lumber plates tightly butted together. Diam of opening shall be 3/16 to 5/8 in. (5 to 16 mm) larger than the outside diam of nonmetallic pipe or conduit (Item 3).
 - C. **Top Plate** - The single or double top plate shall consist of one or two nom 2 by 4 in. (51 by 102 mm) or 2 by 6 in. (51 by 152 mm) lumber plates or one or two sets of nom 2 by 4 in. (51 by 102 mm) lumber plates tightly butted together. Diam of opening shall be 3/16 to 5/8 in. (5 to 16 mm) larger than the outside diam of nonmetallic pipe or conduit (Item 3).
 - D. **Gypsum Board*** - Min 1/2 in. thick rated or non-rated gypsum board.
3. **Through Penetrant** - One nonmetallic pipe or conduit to be installed concentrically or eccentrically within the firestop system. Annular space between pipe or conduit and edge of opening to be min 0 in. (point contact) to max 1/2 in. (0 to 13 mm). Pipe to be rigidly supported on both sides of floor-ceiling assembly. The following types and sizes of nonmetallic pipes may be used:
 - A. **Polyvinyl Chloride (PVC) Pipe** - Nom 2 in. (51 mm) diam (or smaller) Schedule 40 solid or cellular core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.
 - B. **Chlorinated Polyvinyl Chloride (CPVC) Pipe** - Nom 2 in. (51 mm) diam (or smaller) SDR13.5 CPVC pipe for use in closed (process or supply) piping systems.

Note: When the annular space is min 1/2 in. T Rating is 1 hr, otherwise the T Rating is 0 Hr.
4. **Fill, Void or Cavity Materials* - Caulk** - Min 1/2 in. (13 mm) thickness of fill material applied within the annulus, flush with top surface of sole plate or subfloor. Min 1/2 in. (13 mm) thickness of fill material applied within the annulus, flush with bottom surface of top plate or gypsum board. At the point contact location or when the annulus between the through penetrant and sole plate or subfloor or top plate or gypsum board is 1/8 in. (3 mm) or less, min 1/2 in. (13 mm) diam bead of fill material applied at the through penetrant/sole plate interface or penetrant/top plate or gypsum board interface.

SPECIFIED TECHNOLOGIES INC - Type WF300 Caulk

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.



Specified Technologies Inc. 210 Evans Way Somerville, NJ 08876

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Created or Revised: June 05, 2015

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F-C-2014
PAGE 1 OF 1

System No. F-C-2387 continued

- B. **Cellular Core Polyvinyl Chloride (ccPVC) Pipe** – Nom 3 in. (76 mm) diam (or smaller) Schedule 40 cellular core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping system.
- C. **Acrylonitrile Butadiene Styrene (ABS) Pipe** – Nom 3 in. (76 mm) diam (or smaller) Schedule 40 solid core ABS pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systems.
- D. **Cellular Core Acrylonitrile Butadiene Styrene (ccABS) Pipe** – Nom 3 in. (76 mm) diam (or smaller) Schedule 40 cellular core ABS pipe for use in closed (process or supply) or vented (drain, waste or vent) piping system.
5. **Fill, Void or Cavity Materials* – Caulk or Sealant** – Min 3/4 in. (19 mm) thickness of caulk applied within annular space around perimeter of through penetrant (Item 3), flush with top surface of floor or sole plate and flush with bottom surface of lower top plate. Min 3/4 in. (19 mm) thickness of caulk applied within annular space around perimeter of branch piping (Item 4), flush with top surface of floor. Min 1/2 in. (13 mm) diam bead applied at the pipe/floor interface.

3M COMPANY

3M FIRE PROTECTION PRODUCTS – CP 25WB+ caulk, IC 15WB+ caulk or FB-3000 WT sealant
(Note: CP 25WB+ not suitable for use with CPVC pipes.)

*Bearing the UL Classification Mark

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SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

A		B		C		D		E		F	x	G	x	H	x	I		J	
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*A: address local topographic conditions B: address local geologic conditions C: address local climatic conditions
D: to address special uses/occupancies E: to correlate provisions of a national code with other national codes or State Law
F: clarify the intent of the codes G: address unique designs/systems not anticipated in base codes
H: provide for consistency in regional interpretation/application I: address errata issues J: address fire response capabilities*

COST IMPACT: The code change proposal is not anticipated to increase or decrease the cost of construction This code change proposal is to clarify the intent of the original code change that brought this exception into the code.

COMMITTEE ACTION:

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
	Y	Y		Y	Y			Y	Y	Y

RESULT: X Approved Failed Withdrawn Tabled Other

716.2.6.1

SOUTHERN NEVADA SNBO CODE AMENDMENT FORM – 2024

AMENDMENT NO.: FLS24-082.02

COMMITTEE: IBC – Fire and Life Safety

CODE SECTION: 716.2.6.1

PROPONENT: Allen Burris

PROPOSAL: This is a partial carry-over from 2021. Revise door closers in fire walls to be automatic instead of self-closing to reduce the number of door stops used to prop fire doors open.

REVISE AS FOLLOWS:

716.2.6.1 Door closing.

Fire doors in fire walls shall be latching and self- or automatic-closing in accordance with this section. *Fire doors in other than fire walls shall be latching and self- or automatic-closing in accordance with this section.*

Exceptions:

1. *Fire doors* located in common walls separating dwelling *units* or *sleeping units* in Group R-1 shall be permitted without automatic- or *self-closing* devices.
2. The elevator car doors and the associated elevator hoistway doors at the floor level designated for recall in accordance with Section 3003.2 shall be permitted to remain open during Phase I emergency recall operation.
3. Fire doors required solely for compliance with ICC 500 shall not be required to be *self-closing* or automatic-closing.

JUSTIFICATION:

The proposed amendment to Section 716.2.6.1 is intended to provide greater assurance that the integrity of fire walls will be maintained during normal operations. Fire walls are given tremendous credit in the IBC, as they can be used to define separate buildings. The rationale for affording such credit to fire walls is based on the IBC requirement that fire walls must have sufficient structural stability under fire conditions to allow collapse of construction on either side without collapse of the wall. During the development of the Southern Nevada amendments to the 2006 IBC, the local fire departments indicated that they had routinely found self-closing doors in fire walls blocked open, which effectively negates the protection afforded by the fire wall. The proposed amendment would prohibit the use of self-closing fire doors in fire walls. By requiring all fire doors in fire walls to be automatic-closing, there is no need for the users to block (or wedge) open the fire doors because they can be magnetically held-open as needed and released upon smoke detector or fire alarm activation. By doing all that is possible to maintain the integrity of the firewall, the intent of the IBC firewall provisions are upheld.

SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

A		B		C		D	X	E		F		G	X	H	X	I		J	
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A: address local topographic conditions B: address local geologic conditions C: address local climatic conditions
D: to address special uses/occupancies E: to correlate provisions of a national code with other national codes or State Law
F: clarify the intent of the codes G: address unique designs/systems not anticipated in base codes
H: provide for consistency in regional interpretation/application I: address errata issues J: address fire response capabilities

COST IMPACT: Any cost impact will be minimal as the automatic closers on doors in firewalls may increase costs, however, not requiring closers on dwelling/sleeping unit connector doors will be a cost savings.

COMMITTEE ACTION:

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3

RESULT: Approved Failed Withdrawn Tabled Other

***The committee minutes record that this item was approved. No votes were recorded on the form. The chair of the steering committee discussed this with the chair and secretary of the technical committee and the secretary provided the minutes that showed that this item did pass the vote and was approved by the technical committee.**

717.5.2

SOUTHERN NEVADA SNBO CODE AMENDMENT FORM – 2024

AMENDMENT NO.: FLS24-001.01

COMMITTEE: IBC – Fire and Life Safety

CODE SECTION: 717.5.2

PROPONENT: Allen Burris

PROPOSAL: To provide provisions for separation of ducts on either side of a fire rated wall so the openings cannot act as a transfer duct for passage of flames.

REVISE AS FOLLOWS:

717.5.2 Fire barriers. Ducts and air transfer openings of *fire barriers* shall be protected with *listed fire dampers* installed in accordance with their listing. Ducts and air transfer openings shall not penetrate enclosures for *interior exit stairways* and *ramps* and *exit passageways*, except as permitted by Sections 1023.5 and 1024.6, respectively.

Exceptions: *Fire dampers* are not required at penetrations of *fire barriers* where any of the following apply:

1. Penetrations are tested in accordance with ASTM E119 or UL 263 as part of the fire-resistance-rated assembly.
2. Ducts are used as part of an *approved* smoke control system in accordance with Section 909 and where the use of a *fire damper* would interfere with the operation of a smoke control system.
3. Such walls are penetrated by fully ducted HVAC systems, have a required *fire-resistance rating* of 1 hour or less, are in areas of other than Group H and are in buildings equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 or 903.3.1.2. For the purposes of this exception, a fully ducted HVAC system shall be a duct system for conveying supply, return or exhaust air as part of the structure's HVAC system. Such a duct system shall be constructed of sheet steel not less than No. 26 gage thickness and shall be continuous from the air-handling appliance or equipment to the air outlet and inlet terminals. The duct shall not have openings within 6 feet (1.8288 m) of the fire-resistant-rated assembly.

Nonmetal flexible air connectors shall be permitted in the following locations:

- 3.1. At the duct connection to the air handling unit or equipment located within the mechanical room in accordance with Section 603.9 of the *International Mechanical Code*.
- 3.2. From an overhead metal duct to a ceiling diffuser within the same room in accordance with Section 603.6.2 of the *International Mechanical Code* where the connection point to the metal duct is not within 6 feet (1.8288 m) of the fire rated assembly.

JUSTIFICATION:

The code language as currently written would allow for a duct to have openings on either side of a fire-resistant wall with no limitations. If duct openings were directly adjacent the wall on both sides of the assembly, fire could potentially use this path to ignite materials on the opposite side of the assembly negating its ability to resist the passage of fire. Requiring a minimum separation of duct terminals would limit the ability of fire to use the terminal openings to transfer from one side of the fire-resistant wall to the other.

The 6'-0" dimension from the fire rated assembly was chosen based on the test standards for fire rated duct. ASTM E2816 and AC179 test standards both prohibit openings within 6'-0" of the fire rated assembly. As the tests are performed with this opening restriction, it would require additional testing or engineering to allow an opening closer to the fire rated wall without requiring a fire damper.

SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

A		B		C		D		E		F	x	G	x	H	x	I		J	
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*A: address local topographic conditions B: address local geologic conditions C: address local climatic conditions
D: to address special uses/occupancies E: to correlate provisions of a national code with other national codes or State Law
F: clarify the intent of the codes G: address unique designs/systems not anticipated in base codes
H: provide for consistency in regional interpretation/application I: address errata issues J: address fire response capabilities*

COST IMPACT:

The code change proposal is a clarification and will only impact the location of the terminals. The materials and labor to perform the installation should not be affected therefore no cost impact is anticipate

COMMITTEE ACTION:

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
Y	Y	Y		Y	Y	Y		Y	Y	

RESULT: X Approved Failed Withdrawn Tabled Other

717.5.4

SOUTHERN NEVADA SNBO CODE AMENDMENT FORM – 2024

AMENDMENT NO.: FLS24-003.03

COMMITTEE: IBC – Fire and Life Safety

CODE SECTION: 717.5.4

PROPONENT: Allen Burris

PROPOSAL: To clarify the intent of the code that a flexible duct connector should not require a fire damper to be added to a rated wall that could otherwise not require a fire damper and require separation of ducts on either side of a fire rated wall so the openings cannot act as a transfer duct for passage of flames.

REVISE AS FOLLOWS:

717.5.4 Fire partitions. Ducts and air transfer openings that penetrate *fire partitions* shall be protected with *listed fire dampers* installed in accordance with their listing.

Exceptions: In occupancies other than Group H, *fire dampers* are not required where any of the following apply:

1. *Corridor* walls in buildings equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 or 903.3.1.2 and the duct is protected as a *through penetration* in accordance with Section 714.
2. Tenant partitions in *covered and open mall buildings* where the walls are not required by provisions elsewhere in the code to extend to the underside of the floor or roof sheathing, slab or deck above.
3. The duct system is constructed of *approved* materials in accordance with the *Uniform Mechanical Code* and the duct penetrating the wall complies with all of the following requirements:
 - 3.1. The duct shall not exceed 100 square inches (0.06 m²).
 - 3.2. The duct shall be constructed of steel not less than 0.0217 inch (0.55 mm) in thickness.
 - 3.3. The duct shall not have openings that communicate the *corridor* with adjacent spaces or rooms.
 - 3.4. The duct shall be installed above a ceiling.
 - 3.5. The duct shall not terminate at a wall register in the fire-resistance-rated wall.
 - 3.6. A minimum 12-inch-long (305 mm) by 0.060-inch-thick (1.52 mm) steel sleeve shall be centered in each duct opening. The sleeve shall be secured to both sides of the wall and all four sides of the sleeve with minimum 1¹/₂-inch by 1¹/₂-inch by 0.060-inch (38 mm by 38 mm by 1.52 mm) steel retaining angles. The retaining angles shall be secured to the sleeve and the wall with No. 10 (M5) screws. The *annular space* between the steel sleeve and the wall opening shall be filled with mineral wool batting on all sides.
4. Such walls are penetrated by ducted HVAC systems, have a required *fire-resistance rating* of 1 hour or less and are in buildings equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 or 903.3.1.2.

For the purposes of this exception, a ducted HVAC system shall be a duct system for conveying supply, return or exhaust air as part of the structure's HVAC system. Such a duct system shall be constructed of sheet steel not less than No. 26 gage thickness and shall be continuous from the air-handling appliance or equipment to the air outlet and inlet terminals. The duct shall not have openings within 6'-0" of the fire-resistant-rated assembly. Nonmetal flexible air connectors shall be permitted in the following locations:

4.1. At the duct connection to the air handling unit or equipment located within the mechanical room in accordance with Section 603.9 of the *Uniform Mechanical Code*.

4.2. From an overhead metal duct to a ceiling diffuser within the same room in accordance with Section 603.4 of the *Uniform Mechanical Code* where the connection point to the metal duct is not within 6'-0" of the fire rated assembly.

JUSTIFICATION:

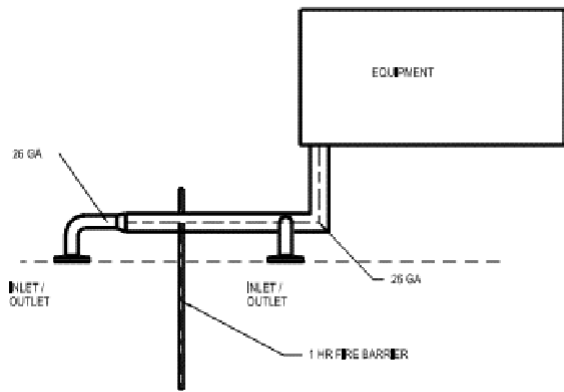
The code language as currently written would allow for a duct to have openings on either side of a fire-resistant wall with no limitations. If duct openings were directly adjacent to the wall on both sides of the assembly, fire could potentially use this path to ignite materials on the opposite side of the assembly, negating its ability to resist the passage of fire. Requiring a minimum separation of duct terminals would limit the ability of fire to use the terminal openings to transfer from one side of the fire-resistant wall to the other.

The inclusion of the non-metal flexible air connectors is to accurately reflect the typical installation. As currently written, the code allows for duct terminals on the metal duct without having to require *fire dampers*. The addition of a flexible duct connector to go from the metal duct to the ceiling terminal would require the use of a *fire damper* at the *fire partition*. Addition of a flexible duct connector in this case does not add to the fire risk of the assembly and should not require additional protection. This language is consistent with the language for *fire barriers* in Section 717.5.2 exception 3 that was adopted to the 2021 IBC under item FS67-18.

The attached exhibits show what is currently allowed per the code. As shown in the first exhibit, there is no limit in the location of the openings in the duct for terminals where no fire damper is required. The second exhibit shows that adding the flexible connector, no matter how far from the fire-resistant wall it is, would require a damper to be added.

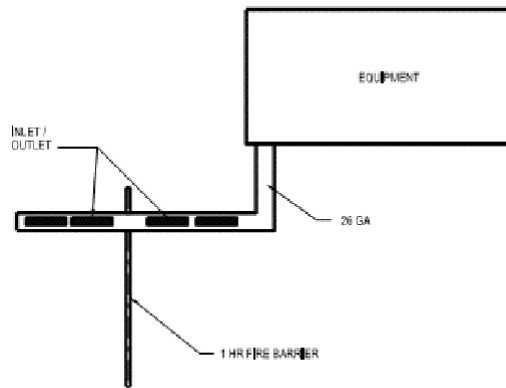
The risk starts at the opening in the metal duct. The location that the flexible duct connects to the metal duct is the critical dimension. The 6'-0" dimension from the fire rated assembly was chosen based on the test standards for fire rated duct. ASTM E2816 and AC179 test standards both prohibit openings within 6'-0" of the fire rated assembly. As the tests are performed with this opening restriction, it would require additional testing or engineering to allow an opening closer to the fire rated wall without requiring a fire damper.

FULLY SPRINKLERED BUILDING
FULLY DUCTED HVAC

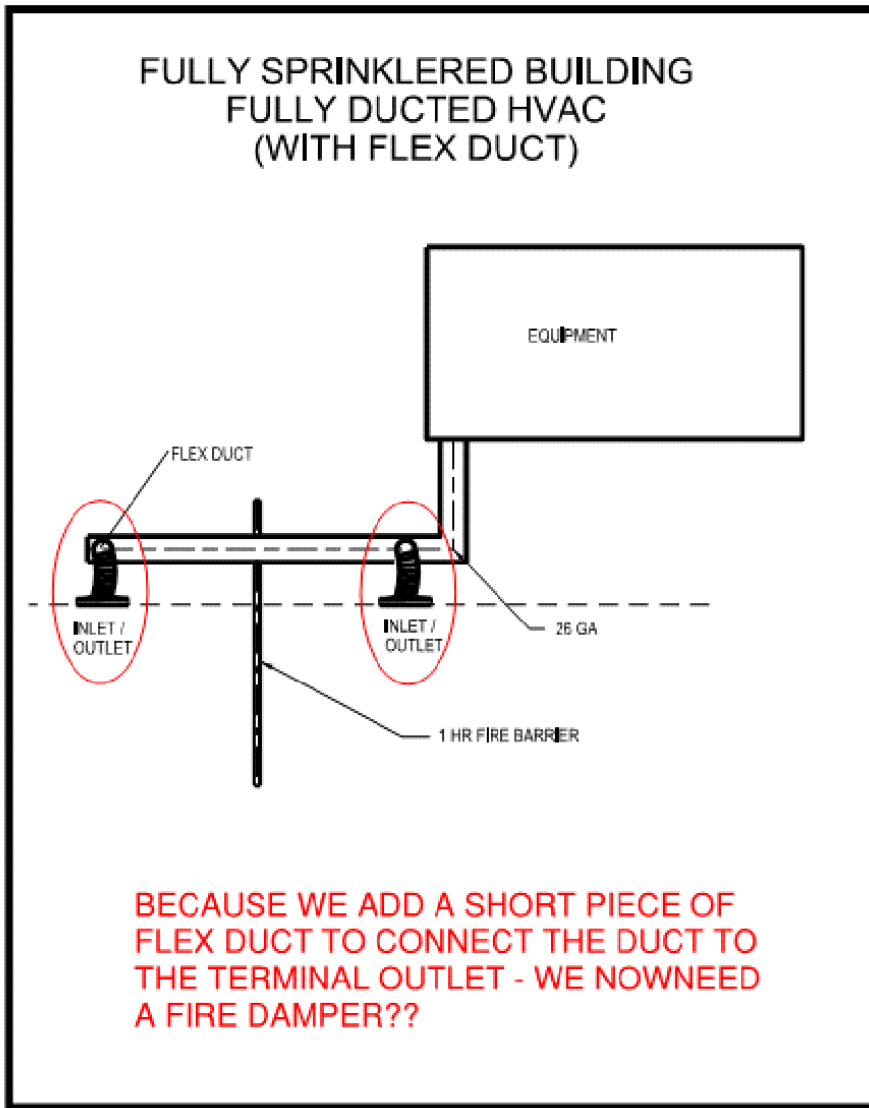


NO FIRE DAMPER REQUIRED

FULLY SPRINKLERED BUILDING
FULLY DUCTED HVAC



NO FIRE DAMPER REQUIRED



SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

A		B		C		D		E		F	X	G	X	H	X	I		J	
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*A: address local topographic conditions
address local climatic conditions*

B: address local geologic conditions

C:

*D: to address special uses/occupancies
with other national codes or State Law*

E: to correlate provisions of a national code

*F: clarify the intent of the codes
anticipated in base codes*

G: address unique designs/systems not

H: provide for consistency in regional interpretation/application

I: address errata

J: address fire response capabilities

COST IMPACT:

The code change proposal will decrease the construction cost by approximately \$1200 per wall penetration. This cost savings would come from eliminating the cost to use a

hard duct as the final connection and eliminating the fire damper. There is also a decrease in labor required. The average labor for a flexible duct connector is 15 minutes. The average to fabricate a 90 degree elbow and install a solid connector is approximately 2 hours. The cost of the fire damper could be \$5,000 or more if it needs to be tied into the smoke control system.

COMMITTEE ACTION:

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
	Y	Y		Y	Y			Y	Y	Y

RESULT: Approved Failed Withdrawn Tabled Other

SOUTHERN NEVADA CODE AMENDMENT FORM – 2024

AMENDMENT NO.: FLS24-38.01

COMMITTEE: IBC Fire and Life Safety

CODE SECTION: 718.5

PROPONENT: Thomas Stewart

PROPOSAL:

REVISE AS FOLLOWS:

Amend Section 718.5 to read as follows:

718.5 Combustible materials in concealed spaces in Type I or II construction.
Combustible materials shall not be permitted in concealed spaces of buildings of Type I or II construction.

Exceptions:

1. Combustible materials in accordance with Section 603.
2. Combustible materials exposed within plenums complying with Section 602 of the *International Mechanical Code*.
3. Class A interior finish materials classified in accordance with Section 803 where the concealed space is protected with fire sprinklers as required by the Fire Code when fire sprinklers are required in the building by another section in this code.
4. Combustible piping within partitions or shaft enclosures installed in accordance with the provisions of this code.
5. Combustible piping within concealed ceiling spaces installed in accordance with the *International Mechanical Code* and the *International Plumbing Code*.
6. Combustible insulation and covering on pipe and tubing, installed in concealed spaces other than plenums, complying with Section 720.7.

JUSTIFICATION:

Exception 3 is proposed to be modified to address two separate concerns. The base-code exception allows Class A interior finish to be exposed in concealed spaces. The primary concern is that concealed spaces in a sprinklered building are frequently required to be sprinkler protected in accordance with the Fire Code, and as required by amended Section 803.11.2. Local fire codes have been modified to severely restrict the combustibility of finishes creating combustible concealed spaces. By coordinating the requirement for sprinkler protection with the Fire Code, designers will be more apt to select appropriate materials that are compliant with both building and fire codes. In addition, there are concerns about plastics. The exception is modified such that plastics simply classified as a Class A interior finish would not be allowed to

be exposed in concealed spaces. Please note that the amendment to exception 3 does not preclude the use of plastic pipe used for building services, as those uses of plastic are maintained in the other exceptions.

SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

A		B		C		D		E		F		G		H		I		J	
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*A: address local topographic conditions B: address local geologic conditions C: address local climatic conditions
D: to address special uses/occupancies E: to correlate provisions of a national code with other national codes or State Law
F: clarify the intent of the codes G: address unique designs/systems not anticipated in base codes
H: provide for consistency in regional interpretation/application I: address errata issues J: address fire response capabilities*

COST IMPACT: None

COMMITTEE ACTION:

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
Y	Y	Y		Y	Y	Y		Y	Y	

RESULT: X Approved ___ Failed ___ Withdrawn ___ Tabled ___ Other

SOUTHERN NEVADA CODE AMENDMENT FORM – 2024

AMENDMENT NO.: FLS24-015.01

COMMITTEE: 2024 IBC Fire and Life Safety Committee

CODE SECTION: 803.10.1

PROPONENT: Michal Turczyk / Allyn Vaughn

PROPOSAL: Revise the requirements for *Site-Fabricated Stretch Systems* to eliminate combustible core and frames for non-combustible buildings:

REVISE AS FOLLOWS: Add a new Section 803.10.1 to read as follows:

803.10 Site-fabricated stretch systems. Where used as interior wall or interior ceiling finish materials, *site-fabricated stretch systems* containing all three components described in the definition in Chapter 2 shall be tested in the manner intended for use, and shall comply with the requirements of Section 803.1.1 or with the requirements of Class A in accordance with Section 803.1.2. If the materials are tested in accordance with ASTM E84 or UL 723, specimen preparation and mounting shall be in accordance with ASTM E2573.

803.10.1 Ceilings. Where used as a dropped ceiling, the following shall apply:

1. In Types I and II construction, frames shall be of non-combustible materials.
2. Where automatic sprinkler protection in accordance with Section 903.3.1.1 or 903.3.1.2 is required beneath the panel, core materials shall be of non-combustible materials.

JUSTIFICATION: The use of site fabricated stretch systems needs to be regulated when used as ceilings in order to ensure the function and operation of the automatic sprinkler system. When panels are of such size as to require sprinkler protection beneath the panel and thus require the panel to be used as a heat collection source, core materials and frames need to be of non-combustible materials in order to allow the sprinklers to operate. As currently written, the core material could be of any material, such as cotton, and not withstand the heat necessary to allow sprinklers to operate. The requirement for non-combustible frames is to specifically correlate these systems to the requirements of 2024 IBC Section 803.15.2 which otherwise may not be enforceable since these systems have their own section.

SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

A		B		C		D		E		F	✓	G	✓	H	✓	I		J	
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*A: address local topographic conditions B: address local geologic conditions C: address local climatic conditions
D: to address special uses/occupancies E: to correlate provisions of a national code with other national codes or State Law*

F: clarify the intent of the codes G: address unique designs/systems not anticipated in base codes
H: provide for consistency in regional interpretation/application I: address errata issues J: address fire response capabilities

COST IMPACT: None. This is a clarification.

COMMITTEE ACTION:

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	

RESULT: Approved Failed Withdrawn Tabled Other

SOUTHERN NEVADA CODE AMENDMENT FORM – 2024

AMENDMENT NO.: FLS24-16.02

COMMITTEE: 2024 IBC Fire and Life Safety

CODE SECTION: 803.15.2

PROPONENT: Michal Turczyk

PROPOSAL: *Clarify protection of combustible voids.*

REVISE AS FOLLOWS: *revise Section 803.15.2 to read as follows:*

803.15.2 Set-out construction. Where walls and ceilings are required to be of fire-resistance-rated or noncombustible construction and walls are set out or ceilings are dropped distances greater than specified in Section 803.15.1, Class A finish noncombustible materials, in accordance with Section 703.3 ~~803.1.1 or 803.1.2~~, shall be used.

Exceptions:

1. Where *interior finish* materials are protected on both sides by an *automatic sprinkler system* in accordance with Section 903.3.1.1 ~~or 903.3.1.2~~.
2. Where *interior finish* materials are attached to noncombustible backing or furring strips installed as specified in Section 803.15.1.1.
3. Where the combustible void is filled with a noncombustible material. Where concealed spaces constructed from combustible materials are filled with non-combustible insulation, or Class A mineral fiber insulation.

The remainder of the section remains unchanged.

JUSTIFICATION:

NFPA 13R does not include guidance for protecting combustible voids, therefore deleting 903.3.1.2 clarifies this requirement and is consistent with other FLS Committee Amendments.

Class A mineral fiber insulation was included in Exception 3 to reflect common use of fiberglass and similar insulation materials used to fill voids. It should be noted that mineral fiber insulation is an approved material for fire blocking as outlined in Section 718.2.1 of the code.

The term “combustible void” is not referenced or defined in the base code. A defined, codified term for areas of this type should be utilized to prevent confusion and to allow existing base code requirements to be directly applied.

SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

A	B	C	D	E	F	<input checked="" type="checkbox"/>	G	H	<input checked="" type="checkbox"/>	I	J
----------	----------	----------	----------	----------	----------	-------------------------------------	----------	----------	-------------------------------------	----------	----------

*A: address local topographic conditions B: address local geologic conditions C: address local climatic conditions
D: to address special uses/occupancies E: to correlate provisions of a national code with other national codes or State Law
F: clarify the intent of the codes G: address unique designs/systems not anticipated in base codes
H: provide for consistency in regional interpretation/application I: address errata issues J: address fire response capabilities*

COST IMPACT: Low to none. Cost is associated with use of commercial NFPA 13 system as opposed to residential NFPA 13R.

COMMITTEE ACTION:

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
	Y	Y		Y	Y			Y	Y	Y

RESULT: x Approved Failed Withdrawn Tabled Other

SOUTHERN NEVADA CODE AMENDMENT FORM – 2024

AMENDMENT NO.: FLS24-014.01

COMMITTEE: 2024 IBC General Committee

CODE SECTION: 806.1

PROPONENT: Michal Turczyk / Doug Evans

PROPOSAL: Revise IBC Section 806.1 to clarify language of section applies to noncombustible decorative vegetation.

REVISE AS FOLLOWS:

[F] 806.1 General.

4. The permissible amount of ~~decorative vegetation and~~ noncombustible decorative materials shall not be limited.

JUSTIFICATION: An unlimited amount of combustible decorative vegetation was not allowed by the 2012 IBC. Although there were some revisions to the 2015 IBC that included the term “decorative vegetation”, they did not allow unlimited quantities. Neither of the code change monographs to either the 2012 or 2015 or 2018 IBC appear to have included proposed revisions allowing unlimited combustible decorative vegetation. With the amount of decorative materials and decorative vegetation incorporated into the major facilities in Southern Nevada, the proposed revision clarifying that unlimited quantities of decorative vegetation must also be noncombustible is prudent.

SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

A		B		C		D		E		F	✓	G	✓	H	✓	I		J	
----------	--	----------	--	----------	--	----------	--	----------	--	----------	---	----------	---	----------	---	----------	--	----------	--

*A: address local topographic conditions B: address local geologic conditions C: address local climatic conditions
D: to address special uses/occupancies E: to correlate provisions of a national code with other national codes or State Law
F: clarify the intent of the codes G: address unique designs/systems not anticipated in base codes
H: provide for consistency in regional interpretation/application I: address errata issues J: address fire response capabilities*

COST IMPACT: None unless incorrectly interpreted.

COMMITTEE ACTION:

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	

RESULT: Approved Failed Withdrawn Tabled Other

SOUTHERN NEVADA CODE AMENDMENT FORM – 2024AMENDMENT NO.: FLS24-58.01COMMITTEE: 2024 Fire and Life SafetyCODE SECTION: 902PROPONENT: Thomas Stewart

PROPOSAL: To revise Section 902 to correlate with Fire Code amendments.

REVISE AS FOLLOWS:**902.1 Pump and riser room size.**

Where provided, fire pump rooms and *automatic sprinkler system* riser rooms shall be designed with adequate space (see NFPA 20 for fire pump clearances and NFPA 70 for working space clearances) for all equipment necessary for the installation, as defined by the manufacturer, with sufficient working ~~room~~ space around the stationary equipment. Clearances around equipment to elements of permanent construction, including other installed equipment and appliances, shall be sufficient to allow inspection, service, repair or replacement without removing such elements of permanent construction or disabling the function of a required *fire-resistance-rated* assembly. Fire pump and *automatic sprinkler system* riser rooms shall be provided with exterior access doors and unobstructed passageways large enough to allow removal of the largest piece of equipment with a minimum width of 36 inches (914 mm) and a minimum height of 80 inches (2032 mm).

1. Fire sprinkler riser rooms shall have a minimum area of 16 square feet (1.49 m²), with a minimum dimension of 4 feet for the first sprinkler riser plus an additional 9 square feet for each additional riser contained, unless otherwise approved by the fire code official.

Exception:

For high-rise, terminal, and covered mall buildings, secondary fire risers may be contained in automatic sprinkler system riser rooms that are located in dedicated rooms as approved by the fire code official in areas without direct access from the exterior.

902.1.1 Access.

Automatic sprinkler system risers, fire pumps and controllers shall be provided with *ready access*. Where located in a fire pump room or *automatic sprinkler system* riser room, the door shall be permitted to be locked provided that the key is available at all times.

902.1.2 Marking on access doors.

Access doors for *automatic sprinkler system* riser rooms and fire pump rooms shall be labeled with an approved weatherproof sign. Signage shall state: "Fire Sprinkler Riser Room" and "Fire Pump Room" or "Fire Pump House". The lettering shall be in contrasting color to the background. Letters shall have a minimum height of 2 inches (51 mm) with a minimum stroke of $\frac{3}{8}$ inch (10 mm).

902.1.3 Environment.

Automatic sprinkler system riser rooms and fire pump rooms shall be maintained at a temperature of not less than 40°F (4°C) and a maximum temperature of 100° F (37.8°C). Heating and cooling units shall be permanently installed.

Exceptions:

1. Where the fire sprinkler riser room or fire pump room does not contain a Fire Alarm/Monitoring Panel or spare sprinklers heads, or when these devices are rated for higher ambient temperatures the room shall not be required to be conditioned for maximum temperature.
2. Heating and/or conditioning is not required if calculations are prepared and sealed by a design professional, on a case-by case address specific basis, proving that the temperature within the riser room does not fall below 40° F (4°C) or rise above 100° F (37.8°C). To maintain 40° F (4°C), the temperature analysis must use a starting temperature of 50° F (10°C) and use an outside temperature of 0° F (-17.8°C) for a period of 8 hours. To maintain 100° F (37.8°C), the temperature analysis must use a starting temperature of 90° F (32.2°C) and use an outside temperature of 120° F (48.9°C) for a period of 8 hours.
3. Where the fire sprinkler riser room or fire pump room contains equipment that has a higher manufacturer's temperature rating acceptable to the fire code official.

902.1.4 Lighting.

Permanently installed artificial illumination shall be provided in the *automatic sprinkler system* riser rooms and fire pump rooms. Lighting shall be provided with emergency power. Emergency power shall be capable of maintaining lighting level for a minimum of 2 hours.

902.1.5 Protection.

Fire pump rooms and *automatic sprinkler system* riser rooms shall be separated from the rest of the building by 1-hour fire partitions.

902.1.6 Automatic sprinkler system riser rooms.

A dedicated automatic sprinkler system riser room shall be required for each fire sprinkler system riser.

Exceptions:

1. Where approved by the fire code official, where systems are controlled by wall-mounted Post Indicator Valves (PIV), and where exterior access is provided to the monitoring panel that is located in a conditioned room, an automatic sprinkler system riser room is not required.
2. When approved, where a single system serves the building and the system is controlled by a PIV, a riser room is not required.
3. In multi-story facilities, floor control risers are permitted to be located on each floor level in an exit stair enclosure.
4. Systems designed in accordance with Section 903.3.1.3 (NFPA 13D) do not require an automatic sprinkler system riser room.
5. Systems designed in accordance with Section 903.3.1.2 (NFPA 13R) shall have an automatic sprinkler system riser room/closet that is large enough to facilitate access to all the necessary fire sprinkler and fire alarm valves and devices. This area shall be accessible from the outside with either a door or an access panel large enough to allow for testing and maintenance of system. The area shall also comply with section 901.4.7.3.
6. Fire pump rooms complying with Section 901.4.7.
7. When approved rooms containing auxiliary control valves.

902.1.7 Contents. The primary automatic sprinkler system riser room shall contain the fire riser into the building. The fire riser shall contain at a minimum, a flow switch, a check valve, and a control valve, main drain, & pressure gauges.

Exception:

Where there is a single system in the building and an exterior Post Indicator Valve (PIV) is provided, then the control valve is not required in the automatic sprinkler system riser room.

JUSTIFICATION:

The purpose of these amendments is to provide the minimum requirements for fire pump and fire sprinkler riser room construction. This is necessary to facilitate maintenance and fire operations of this equipment during emergencies.

Previous code amendments had separated fire pump and fire sprinkler riser rooms this proposed amendment is intended to add to base code language of 901.4.7 and avoid duplication of items.

The codes and standards have extensive requirements for their maintenance. However, maintenance can be difficult to perform if adequate space is not provided to allow personnel access for the removal of large, cumbersome, or heavy components such as pump casings, control valves, or alarm check valves.

Sections 901.4.7 and its subsections establish new requirements to ensure rooms housing fire protection system risers or fire pumps and their components have adequate space to facilitate their maintenance. When a room is required these sections require that it be adequately sized to allow for maintenance. The basis for the room specified is founded on experience and clearances specified by the equipment manufacturers to ensure adequate space is available for its installation or removal. The design must provide enough area so that walls, finish materials, or doors are not required to be removed during maintenance activities. The provision also prescribes that the size of the door serving a riser or pump room is of a size to accommodate

the removal of the largest piece of equipment. Because the design of fire protection systems generally commences during the period that building construction drawings and specifications are being reviewed by the jurisdiction, it will be especially important for building designers to establish dialogue with the fire protection system contractor early in the design process to provide the necessary space and openings needed for equipment maintenance.

Section 901.4.7.3 modification is needed to address the local conditions of excessive temperatures in the summer months and having sprinkler heads and equipment located in those areas that are not listed for those temperatures.

Section 901.4.7.4 modification is added to comply with the requirements from NFPA 20 section 4.14.5 and local requirements to ensure there is lighting available in riser rooms in the event of power outage in an emergency.

Sections 901.4.7.6 & 6.1 are added to give design specifics for fire sprinkler riser rooms. Requiring a dedicated riser room ensures there would not be other equipment installed that would hinder access to the system controls for maintenance and fire personnel.

SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

A		B		C	X	D		E		F		G		H	X	I		J	X
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*A: address local topographic conditions B: address local geologic conditions C: address local climatic conditions
D: to address special uses/occupancies E: to correlate provisions of a national code with other national codes or State Law
F: clarify the intent of the codes G: address unique designs/systems not anticipated in base codes
H: provide for consistency in regional interpretation/application I: address errata issues J: address fire response capabilities*

COST IMPACT: There will be some cost impacts to these rooms to correlate with the requirements of this section.

COMMITTEE ACTION:

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
	Y	Y	Y	Y	Y		Y		Y	Y

RESULT: X Approved Failed Withdrawn Tabled Other

SOUTHERN NEVADA CODE AMENDMENT FORM – 2024

AMENDMENT NO.: FLS24-59.02

COMMITTEE: 2024 IBC Fire and Life Safety

CODE SECTION: Section 903.1.1

PROPONENT: Allen Burris

PROPOSAL: Delete Section 903.1.1

REVISE AS FOLLOWS:

[F] ~~903.1.1 Alternative protection. Alternative automatic fire-extinguishing systems complying with Section 904 shall be permitted in lieu of automatic sprinkler protection where recognized by the applicable standard and approved by the fire code official.~~

JUSTIFICATION:

The purpose of this section is to require that a building be fully sprinklered. Where there is concern about sensitivity of equipment, past practice has been to have a gas suppression system, and a double-interlock fire sprinkler system as a back-up. There are certain specific places where sprinkler protection is not desired, but those are detailed in Section 903.3.1.1.1. The general exception provided by this section is not appropriate, and therefore needs to be deleted. Amendment required to ensure that buildings are fully sprinklered. Alternative systems can always be proposed using the option provided by Section 104.12.3.:

SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

A		B		C		D		E		F		G		H	X	I		J	X
----------	--	----------	--	----------	--	----------	--	----------	--	----------	--	----------	--	----------	---	----------	--	----------	---

*A: address local topographic conditions B: address local geologic conditions C: address local climatic conditions
D: to address special uses/occupancies E: to correlate provisions of a national code with other national codes or State Law
F: clarify the intent of the codes G: address unique designs/systems not anticipated in base codes
H: provide for consistency in regional interpretation/application I: address errata issues J: address fire response capabilities*

COST IMPACT: There will be some cost impact due to the requirement for sprinklers. However, this amendment aligns the requirements previously found here in Southern Nevada. So this will not have a significant cost impact over what has been in place for the last several code cycles.

COMMITTEE ACTION:

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
	Y	Y		Y	Y			Y	Y	Y

RESULT: Approved Failed Withdrawn Tabled Other

SOUTHERN NEVADA CODE AMENDMENT FORM – 2024AMENDMENT NO.: FLS24 – 61.01COMMITTEE: 2024 IBC Fire and Life SafetyCODE SECTION: Section 903.2PROPONENT: Thomas Stewart

PROPOSAL: Revise Section 903.2

REVISE AS FOLLOWS:

[F] 903.2 Where required. Approved automatic sprinkler systems in new buildings and structures shall be provided throughout all buildings and structures, regardless of occupancy type and including buildings and structures in accordance with the International Residential Code, which meet one of the following requirements, and additionally in the locations described in Sections 903.2.1 through 903.2.12:

1. For buildings constructed in accordance with the International Building Code, approved automatic sprinklers system are required where the building area is 5,000 ft² (464 m²) or greater.
2. For all any buildings, not otherwise requiring fire sprinklers, where the available fire flow does not meet the fire flow requirements of the International Fire Code, approved automatic sprinkler systems shall be provided as required by the fire code official.
3. For any buildings, not otherwise requiring fire sprinklers, where the available fire flow does not meet the fire flow requirements of this code, approved automatic sprinkler systems shall be provided as required by the fire code official.
4. For any buildings, not otherwise requiring fire sprinklers, where they do not meet the fire access requirements in Section 503 approved automatic sprinkler systems shall be provided as required by the fire code official.

~~**Exception:** Spaces or areas in telecommunications buildings used exclusively for telecommunications equipment, associated electrical power distribution equipment, batteries not required to have an automatic sprinkler system by section 1207 of the International Fire Code for energy storage systems and standby engines, provided that those spaces or areas are equipped throughout with an automatic smoke detection system in accordance with Section 907.2 and are separated from the remainder of the building by not less than 1-hour fire barriers constructed in accordance with Section 707 or not less than 2-hour horizontal assemblies constructed in accordance with Section 711, or both.~~

Exceptions:

1. Automatic sprinklers shall not be required in buildings or structures used exclusively for agricultural, livestock, or equestrian activities, with or without

spectators, where structures may cover the use, including the spectator area, provided the use is not enclosed with any walls along any portion of the perimeter of the structures, except for rooms containing code-required building service components, and provided that the minimum clear height along the entire perimeter of the structure is 7 ft 6 in (2.286 m).

2. Buildings, structures, or service equipment and installations directly used in utility generation or distribution which are installed on properly recorded easements belonging to water, gas, power, telephone, or other utility companies that are preemptively regulated by the Nevada Public Service Committee, a State of Nevada charter, or other public franchise. This exception does not apply to non-exempted buildings or structures containing occupiable spaces such as offices, meeting rooms, service counters, public restrooms, or other normally occupied spaces.
3. Playground shade structures, fuel dispensing canopies, and carports open to a minimum clear height of 10 feet on all sides around the entire perimeter, with non-combustible structural support and frame, with either non-combustible material, or fabric complying with NFPA 701 providing shade, located a minimum of 10 ft (3.048 m) from the nearest building, property line or shade structure, and less than 10,000 ft² (929.0304 m²) in projected area, do not require fire sprinklers.
4. For new construction expanding existing unsprinklered Group R-3 buildings or one- and two-family dwellings built in accordance with the International Residential Code, sprinklers are not required to be retrofitted into the building where the building is provided with fire flow in accordance with Appendix B of the International Fire Code and the newly added living space does not exceed 5,000 ft² (464 m²).

If any fire area in a building or structure is provided with fire sprinklers, whether required or not, all fire areas in the building or structure shall be provided with fire sprinklers:

Exceptions:

1. Where a building is subdivided into separate buildings, each having a total building area of less than 5,000 sq ft (464 m²), by fire walls with no openings constructed in accordance with this code.
2. Special hazard areas that required sprinklers for certain uses, such as medical gas rooms, may be fire sprinklered without requiring additional fire sprinklers throughout the building, when approved by the fire code official.

JUSTIFICATION:

This proposal continues the fire sprinkler requirements for all buildings at 5,000 sf. The charging paragraph has been rewritten to clarify how the 5,000 sf trigger applies to IBC buildings. The IBC trigger is based on the building area. In order to be very clear with design professionals about the impact of fire flow on fire sprinklers requirements, a second sprinkler trigger is added to address lack of fire flow.

The exception for telecommunications rooms is again proposed to be deleted. Due to local deletion of sprinkler exemption code requirements from the IFC and NFPA 13, the telecommunications room would be an outlier in terms of what rooms do and do not receive fire sprinkler protection. Deletion of this exception provides greater consistency in application of fire sprinkler requirements throughout all of the applicable codes.

The proposed exceptions 2-5 are currently used in Clark County. The exception for equestrian facilities was adopted following a state NRS adoption and a request by a former commissioner to revise requirements applicable to those occupancies. The exception for utilities

is carried over to provide consistency in review of certain unmanned facilities for utilities in Nevada. The canopy structure exception was adopted within Clark County to provide more lenient treatment for larger playground and motor fuel dispensing canopy structures. The exception regarding expansion of single-family homes is provided to avoid having to track additions in residential homes and provides a more lenient treatment to residential customers. The paragraph regarding the continuation of fire sprinklers throughout a building is carried over. Previous amendments to this section required the wall rating to be 4-hours. This amendment allows the IBC to specify the rating of the fire wall. The exception for a fire wall without openings has been used in the valley since the days of the UFC adoptions and provides a substantial alternate means of protection for any facility wishing to partially fire sprinkler a building. The deletion of openings ensures that no single user will be able to mix sprinkler and non-sprinklered building areas by blocking any openings. The exception for medical gas rooms and any other similar uses recognizes that the requirements for one or two sprinkler heads for a single specific hazard should not in itself be used as a means to trigger full sprinkler protection throughout the buildings.

Local fire agencies response is directly impacted by this amendment. Having fire sprinklers in all buildings greater than 5,000 square feet enables responders to focus on saving lives and suppression as the fire sprinklers are normally able to control the fire until the responders arrive. Property loss is lower in sprinklered buildings. Amendments required to clarify the requirements for fire sprinkler systems in buildings based on past practices and local fire response capabilities.

The item below was removed to correlate with current base code requirements.

- ~~1. Open parking garages with no other occupancy above the open parking garage structure and with fire apparatus lanes immediately adjacent to two open sides of the garage equaling a minimum of 40% of the garage perimeter are not required to be protected with automatic sprinklers.~~

SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

A		B		C		D		E		F		G		H	X	I		J	X
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*A: address local topographic conditions B: address local geologic conditions C: address local climatic conditions
D: to address special uses/occupancies E: to correlate provisions of a national code with other national codes or State Law
F: clarify the intent of the codes G: address unique designs/systems not anticipated in base codes
H: provide for consistency in regional interpretation/application I: address errata issues J: address fire response capabilities*

COST IMPACT: There will be some cost impact due to the requirement for sprinklers. However, this amendment aligns the requirements previously found here in Southern Nevada. So, this will not have a significant cost impact over what has been in place for the last several code cycles.

COMMITTEE ACTION:

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
	Y	Y	Y	Y	Y		Y	Y	Y	

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RESULT: X Approved Failed Withdrawn Tabled Other

SOUTHERN NEVADA CODE AMENDMENT FORM – 2024

AMENDMENT NO.: FLS24-89.01

COMMITTEE: 2024 IBC Fire and Life Safety

CODE SECTION: 2024 IBC 903.2.9

PROPONENT: Prince Carlos, City of Henderson

PROPOSAL: Add a new threshold for self-storage (mini-storage) facilities to be sprinklered.

REVISE AS FOLLOWS:

[F] 903.2.9. Group S-1. *An automatic sprinkler system shall be provided throughout all buildings containing a Group S-1 occupancy where one of the following conditions exists:*

1. A Group S-1 *fire area* exceeds 12,000 square feet (1115 m²).
2. A Group S-1 *fire area* is located more than three stories above *grade plane*.
3. The combined area of all Group S-1 *fire areas* on all floors, including any *mezzanines*, exceeds 24,000 square feet (2230 m²).
4. A Group S-1 *fire area* used for the storage of *commercial motor vehicles* where the *fire area* exceeds 5,000 square feet (464 m²).
5. A Group S-1 *fire area* used for the storage of lithium-ion or lithium metal powered vehicles where the *fire area* exceeds 500 square feet (46.4 m²).
6. Group S-1 *fire area* used for self-service storage facility where the *fire area* is 2,500 square feet (279 m²) or greater.

JUSTIFICATION: This amendment is intended to provide consistency for regional application of codes. The purpose of this amendment is to establish the trigger for installation of sprinklers in self-storage (commonly referred to as mini storage) facilities. The reason to require the lower trigger is due difficulty of enforcement by fire inspectors in self-storage facilities. Further, enforcement is challenging in self-storage facilities. As such, these facilities are seen as having potentially higher hazards than other occupancies, and therefore require a higher degree of protection. The IBC General Committee proposed a threshold for item #6 as zero (0) square feet which is consistent with the current Clark County Fire Department's CCFD IFC adoption. Clark County Fire requires buildings of any square footage required by the IFC to be sprinklered such as self-storage facilities (mini storage). This proposal does not match the CCFD adoption but limits unsprinklered facilities to fire areas less than 2,500 sq.ft. This lower threshold was in previous editions of the Southern Nevada Fire code amendments for these occupancies.

SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:
(optional)

A <input type="checkbox"/>	B <input type="checkbox"/>	C <input type="checkbox"/>	D <input checked="" type="checkbox"/>	E <input type="checkbox"/>	F <input type="checkbox"/>	G <input type="checkbox"/>	H <input checked="" type="checkbox"/>	I <input type="checkbox"/>	J <input type="checkbox"/>
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COST IMPACT: This amendment will have an increased cost to developers/contractors building some mini-storage structures due to the addition of a fire sprinkler system. All occupancies greater than 4,999 sq.ft. are required to be sprinklered due to other requirements.

COMMITTEE ACTION:

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

RESULT: : X Approved Failed Withdrawn Tabled Other

903.2.11.5

SOUTHERN NEVADA CODE AMENDMENT FORM – 2024

AMENDMENT NO.: FLS24-62.01

COMMITTEE: 2024 IBC Fire and Life Safety

CODE SECTION: Section 903.2.11.5

PROPONENT: Thomas Stewart

PROPOSAL: Revise Section 903.2.11.5

REVISE AS FOLLOWS:

[F] 903.2.11.5 Commercial cooking operations. An automatic sprinkler system shall be installed in a commercial kitchen exhaust hood and duct systems where an automatic sprinkler system is used to comply with Section 904, and for the entire length of duct when the duct length exceeds 75 feet.

JUSTIFICATION:

The purpose of this amendment is to correlate the IFC with the requirements of NFPA 13. NFPA 13 requires sprinkler protection throughout the duct when the duct length exceeds 75 feet. This is due to the limitation of testing at UL, where the test apparatus is a 75 ft long duct. Due to the way that kitchens are built in this jurisdiction, there often are instances where duct lengths go for hundreds of feet. It is necessary to require additional protection for these longer ducts, as there is no evidence that the UL-approved systems can handle duct lengths in excess of 75 feet. Amendment required to clarify the intent of the code and to address unique designs or systems not anticipated in the code with regard to commercial cooking duct systems.

SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

A	B	C	D	E	F	G	X	H	I	J
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*A: address local topographic conditions B: address local geologic conditions C: address local climatic conditions
D: to address special uses/occupancies E: to correlate provisions of a national code with other national codes or State Law
F: clarify the intent of the codes G: address unique designs/systems not anticipated in base codes
H: provide for consistency in regional interpretation/application I: address errata issues J: address fire response capabilities*

COST IMPACT: No additional cost over that seen in local interpretation of codes.

COMMITTEE ACTION:

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
	Y	Y	Y	Y	Y		Y	Y		

RESULT: X Approved ____ Failed ____ Withdrawn ____ Tabled ____ Other

SOUTHERN NEVADA CODE AMENDMENT FORM – 2024

AMENDMENT NO.: FLS24-63.01

COMMITTEE: 2024 IBC Fire and Life Safety

CODE SECTION: Section 903.2.3

PROPONENT: Thomas Stewart

PROPOSAL: Revise Section 903.2.3

REVISE AS FOLLOWS:

[F] 903.2.3 Group E. *An automatic sprinkler system shall be provided for Group E occupancies where one of the following conditions exists: as follows:*

1. Throughout all Group E fire areas greater than ~~12,000~~ 5,000 square feet (~~1115464~~464m²) in area.
2. The Group E fire area is located on a floor other than a level of exit discharge serving such occupancies.

Exception: In buildings where every classroom has not fewer than one exterior exit door at ground level, an automatic sprinkler system is not required in any area below the lowest level of exit discharge serving that area

3. The Group E Fire area has an occupant load of 300 or more.
4. Daycare facilities where there is occupancy from 12:00 AM - 6:00 AM and care for 7 or more children.

JUSTIFICATION:

Section 903.2 changed the threshold to 5,000 square feet for all occupancy types. Based on an area of 5,000 square feet the occupant load for daycare using an occupant load factor of 35 SF Net is 143 and for classrooms using an occupant load factor of 20 SF Net is 250. Both calculated occupant loads are well below the 300 occupant load limit; however, the committee decided to leave condition 3 in the amendment. The new condition 4 is needed to correlate with State law NAC 477.568. Amendment required to address requirements for fire sprinklers in E occupancies and to correlate the provisions of a given national model code with the prevailing State law.

SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

A	B	C	D	E	X	F	G	H	I	J	X
---	---	---	---	---	---	---	---	---	---	---	---

*A: address local topographic conditions B: address local geologic conditions C: address local climatic conditions
D: to address special uses/occupancies E: to correlate provisions of a national code with other national codes or State Law
F: clarify the intent of the codes G: address unique designs/systems not anticipated in base codes
H: provide for consistency in regional interpretation/application I: address errata issues J: address fire response capabilities*

COST IMPACT: None as this is a requirement from State law as well as alignment with local code requirements in places for several code cycles.

COMMITTEE ACTION:

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
	Y	Y	Y	Y	Y		Y	Y	Y	

RESULT: Approved Failed Withdrawn Tabled Other

SOUTHERN NEVADA CODE AMENDMENT FORM – 2024

AMENDMENT NO.: FLS24-60.01

COMMITTEE: 2024 IBC Fire and Life Safety

CODE SECTION: Section 903.3.1.1.1

PROPONENT: Thomas Stewart

PROPOSAL: Revise Section 903.3.1.1.1

REVISE AS FOLLOWS:

[F] 903.3.1.1.1 Exempt locations. Automatic sprinklers shall not be required in the following rooms or areas where such rooms or areas are protected with an approved automatic fire detection system in accordance with Section 907.2 that will respond to visible or invisible particles of combustion. Sprinklers shall not be omitted from a room merely because it is damp, or fire-resistance-rated construction, or contains electrical equipment.

1. A room or space where sprinklers constitute a serious life or fire hazard because of the nature of the contents, where *approved by the fire code official*.
- ~~2. Generator and transformer rooms separated from the remainder of the building by walls and floor/ceiling or roof/ceiling assemblies having a fire-resistance rating of not less than 2 hours~~
- ~~3. Rooms or areas that are of noncombustible construction with wholly noncombustible contents.~~
4. 2. Fire service access elevator machine rooms and machinery spaces.
5. 3. Machine rooms, machinery spaces, control rooms and control spaces associated with occupant evacuation elevators designed in accordance with Section 3008.

JUSTIFICATION:

The purpose of this amendment is to eliminate sprinkler exemptions for generator/transformer rooms and for noncombustible rooms with noncombustible contents. Generator and transformer rooms warrant sprinkler protection due to fuel and electrical hazards. The noncombustible rooms warrant sprinklers because control of contents is impossible and can change to be combustible over time. The remaining exemptions are based strictly on the application of water causing a hazardous condition for emergency responders.

SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

A	B	C	D	E	F	G	H	X	I	J	X
---	---	---	---	---	---	---	---	---	---	---	---

*A: address local topographic conditions B: address local geologic conditions C: address local climatic conditions
D: to address special uses/occupancies E: to correlate provisions of a national code with other national codes or State Law
F: clarify the intent of the codes G: address unique designs/systems not anticipated in base codes
H: provide for consistency in regional interpretation/application I: address errata issues J: address fire response capabilities*

COST IMPACT: There will be some cost impact due to the requirement for sprinklers. However, this amendment aligns the requirements previously found here in Southern Nevada. So this will not have a significant cost impact over what has been in place for the last several code cycles.

COMMITTEE ACTION:

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
	Y	Y	Y	Y	Y		Y		Y	Y

RESULT: X Approved ___ Failed ___ Withdrawn ___ Tabled ___ Other

903.3.1.2

SOUTHERN NEVADA CODE AMENDMENT FORM – 2024

AMENDMENT NO.: FLS24 – 86.01

COMMITTEE: 2024 IBC Fire Life Safety Committee

CODE SECTION: Section 903.3.1.2

PROPONENT: Thomas Stewart

PROPOSAL: Revise Section 903.3.1.2

REVISE AS FOLLOWS:

[F] 903.3.1.2 NFPA 13R sprinkler systems.

Automatic sprinkler systems in Group R occupancies shall be permitted to be installed throughout in accordance with NFPA 13R where the Group R occupancy meets all of the following conditions:

1. ~~Four~~ Two stories or fewer above grade plane.
2. For other than Group R-2 occupancies, the floor level of the highest story is 30 feet (9144 mm) or less above the lowest level of fire department vehicle access.

For Group R-2 occupancies, the roof assembly is less than 45 feet (13 716 mm) above the lowest level of fire department vehicle access. The height of the roof assembly shall be determined by measuring the distance from the lowest required fire vehicle access road surface adjacent to the building to the eave of the highest pitched roof, the intersection of the highest roof to the exterior wall, or the top of the highest parapet, whichever yields the greatest distance.

3. The floor level of the lowest story is 30 feet (9144 mm) or less below the lowest level of fire department vehicle access.

The number of stories of Group R occupancies constructed in accordance with Sections 510.2 and 510.4. shall be measured from grade plane.

JUSTIFICATION:

The purpose of this amendment is to change the scope of NFPA 13R from 4 stories to 2 stories. This aligns with regional fire response for these types of structures.

JUSTIFICATION:

The purpose of this amendment is to change the scope of NFPA 13R from 4 stories to 2 stories. This is in line with current practices. For more than 20 years state and local laws and ordinances restricted NFPA 13R to one- and two-story residential occupancies. Further, this amendment addresses a growing concern across the nation about how to properly protect wood frame

residential buildings. Recent fire incidents have forced a rethinking of the protection provided by the code. By forcing the use of NFPA 13 systems in those buildings, a higher level of protection is brought to one of the more sensitive occupancies dealt with in the code.

NFPA 13R is not a property protection standard. NFPA 13 is a property protection standard. The use of NFPA 13R increases the community's risk to fire loss due to: lower water density allowances; loss of protection to combustible spaces; loss of protection to combustible attics and greater loss due to shorter egress times, particularly in housing used by elderly. Continuing this amendment will not create a decrease in local fire response capabilities. If this amendment is not continued local fire agencies will need to add more staff and apparatus to enable a quicker response and to maintain current levels of safety.

SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

Amendment required to limit the height of buildings in which NFPA 13R fire sprinkler systems may be installed, so as to maintain current levels of protection and to not overtax local fire response capabilities.

A	B	C	D	E	F	G	H	I	J	X
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*A: address local topographic conditions B: address local geologic conditions C: address local climatic conditions
D: to address special uses/occupancies E: to correlate provisions of a national code with other national codes or State Law
F: clarify the intent of the codes G: address unique designs/systems not anticipated in base codes
H: provide for consistency in regional interpretation/application I: address errata issues J: address fire response capabilities*

COST IMPACT: There will be some cost impact to those properties building three and four story multi-unit dwellings.

COMMITTEE ACTION: *(leave blank - to be assigned by Committee Chair)*

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	

RESULT: X Approved Failed Withdrawn Tabled Other

SOUTHERN NEVADA CODE AMENDMENT FORM – 2024

AMENDMENT NO.: FLS24-64.01

COMMITTEE: 2024 IBC Fire and Life Safety

CODE SECTION: Section 903.4.1

PROPONENT: Thomas Stewart

PROPOSAL: Revise sprinkler system supervision and alarm requirements.

REVISE AS FOLLOWS:

[F] 903.4 Sprinkler system supervision and alarms. *Automatic sprinkler system* supervision and alarms shall comply with Sections 903.4.1 through 903.4.3. Unless otherwise approved, systems meeting the requirements of this section shall not be used for any other purpose.

[F] 903.4.1 Electronic supervision. Valves controlling the water supply for *automatic sprinkler systems*, pumps, tanks, water levels and temperatures, critical air pressures and waterflow switches on all *automatic sprinkler systems* shall be electrically supervised in accordance with NFPA 72 by a *listed* fire alarm control unit.

Exceptions:

1. *Automatic sprinkler systems* protecting one- and two-family *dwelling*s.
2. Limited area sprinkler systems in accordance with Section 903.3.8, provided that the backflow prevention device test valves located in limited area sprinkler system supply piping shall be locked in the open position unless supplying an occupancy required to be equipped with a *fire alarm system*, in which case the backflow preventer valves shall be electrically supervised by a tamper switch installed in accordance with NFPA 72 and separately annunciated.
3. *Automatic sprinkler systems* installed in accordance with NFPA 13R where a common supply main is used to supply both domestic water and the *automatic sprinkler system*, and a separate shutoff valve for the *automatic sprinkler system* is not provided.
4. Jockey pump control valves that are sealed or locked in the open position.
5. Control valves to ~~commercial kitchen hoods~~, paint spray booths or dip tanks that are sealed or locked in the open position.
6. Valves controlling the fuel supply to fire pump engines that are sealed or locked in the open position.
7. Trim valves to pressure switches in dry, preaction and *deluge sprinkler systems* that are sealed or locked in the open position.
8. Underground key or hub gate valves in roadway boxes.
9. Backflow prevention devices located at the municipal water supply connection are not required to be electrically supervised when either locked in the open position, located within an underground vault, or located within an approved insulated enclosure.

JUSTIFICATION:

The purpose of this amendment is to maintain current levels of protection for commercial kitchen hoods due to the extent and size of the fire sprinkler systems that protect those systems in this valley. Amendment required to clarify the intent of the code as it pertains to kitchen hood systems.

SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

A	B	C	D	E	F	G	H	X	I	J
---	---	---	---	---	---	---	---	---	---	---

*A: address local topographic conditions B: address local geologic conditions C: address local climatic conditions
 D: to address special uses/occupancies E: to correlate provisions of a national code with other national codes or State Law
 F: clarify the intent of the codes G: address unique designs/systems not anticipated in base codes
 H: provide for consistency in regional interpretation/application I: address errata issues J: address fire response capabilities*

COST IMPACT: There will be some cost impact due to the need to monitor kitchen hood suppression system valves.

COMMITTEE ACTION:

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
	Y	Y	Y	Y	Y		Y	Y	Y	

RESULT: X Approved Failed Withdrawn Tabled Other

SOUTHERN NEVADA CODE AMENDMENT FORM – 2024

AMENDMENT NO.: FLS24-65.01

COMMITTEE: 2024 IBC Fire and Life Safety

CODE SECTION: Section 903.4.2

PROPONENT: Thomas Stewart

PROPOSAL: Revise Section 903.4.2

REVISE AS FOLLOWS:

[F] 903.4.2 Monitoring. ~~Alarm, supervisory and trouble signals shall be distinctly different and shall be automatically transmitted to an *approved* supervision station or, where *approved* by the *fire code official*, shall sound an audible signal at a constantly attended location. Systems providing electronic supervision required by Section 903.4.1 shall be monitored by an *approved* supervising station in accordance with NFPA 72 and as *approved* by the *fire code official*.~~

Exception: Monitoring by a supervising station is not permitted unless specifically *approved* by the *fire code official* for:

1. *Automatic sprinkler systems* protecting one- and two-family *dwelling*s.
2. *Monitoring systems* utilizing point-by-point monitoring.

In occupancies provided with a supervised sprinkler system, the following three distinctly different signals shall be transmitted to an *approved* supervising station:

1. *Waterflow Alarm*
2. *Supervisory*
3. *System Trouble*

For new and existing facilities, the supervising station shall only retransmit Waterflow Alarm signals to the Fire Department.

903.4.2.1 Transmission of signals. Transmission of signals to a supervising station shall be in accordance with NFPA 72.

903.4.2.2 MIY monitoring. Direct transmission of signals associated with monitor it yourself (MIY) transmitters to a public safety answering point (PSAP) shall not be permitted unless *approved* by the *fire code official*.

903.4.2.3 Termination of monitoring service. Prior to termination of monitoring service, notice shall be provided in accordance with Section 110.3.

903.4.3 Alarms. ~~An *Approved* audible and visual sprinkler waterflow alarm devices, located on the exterior of the building in an *approved* location,~~ shall be connected to each *automatic sprinkler system*. Exterior sprinkler waterflow alarm devices shall be provided on the exterior of the building above the wall-mounted Fire Department Connection. One interior sprinkler waterflow alarm device shall be provided near the main entrance or in a normally occupied

location. In multiple-tenant facilities, one interior sprinkler waterflow alarm device shall be provided near the main entrance or in a normally occupied location for each tenant space. Such sprinkler waterflow alarm devices shall be activated by waterflow equivalent to the flow of a single sprinkler of the smallest orifice size installed in the system. Where exterior sprinkler waterflow alarm devices are provided above wall-mounted Fire Department Connections, the exterior device shall activate only upon waterflow from systems hydraulically connected to the associated Fire Department Connection. Where a waterflow switch is required by Section 903.4.1 to be electrically supervised, such sprinkler waterflow alarm devices shall be powered by a fire alarm control unit or, where provided, a fire alarm system. Where a fire alarm system is provided, exterior sprinkler waterflow alarm devices shall be powered by a fire alarm control unit and actuation of the automatic sprinkler system shall actuate the building fire alarm system.

Exception: *Automatic sprinkler systems protecting one- and two-family dwellings.*

JUSTIFICATION:

The purpose of this amendment is to address when backflow preventer valves need to be supervised. Since the vast majority of backflow preventers in this jurisdiction actually occur in the public side of the system, this code does not apply to those valves. In many jurisdictions across the country, backflow preventers interior to the building are common. Rarely, interior backflow preventers occur in this jurisdiction. This amendment clarifies that the code applies only to those rare instances, and not to the vast majority of installations within this jurisdiction

The first deletion is to eliminate the requirement that private underground key box valves must be monitored. With this change, all underground valves are exempt from monitoring. The second change addresses the valves associated with the backflow prevention device required by the water purveyor. Further, the added code section discusses additional monitoring requirements for monitored fire sprinkler systems, including how signals are to be handled. This impacts how local fire agencies respond to these signals. Amendment required to clarify the intent of the code and to address local fire response requirements as it pertains to monitoring systems.

SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

A	B	C	D	E	F	G	H	X	I	J	X
---	---	---	---	---	---	---	---	---	---	---	---

A: address local topographic conditions B: address local geologic conditions C: address local climatic conditions
D: to address special uses/occupancies E: to correlate provisions of a national code with other national codes or State Law
F: clarify the intent of the codes G: address unique designs/systems not anticipated in base codes
H: provide for consistency in regional interpretation/application I: address errata issues J: address fire response capabilities

COST IMPACT: There will be some cost savings due to not having to monitor backflow preventer valves associated with the public utility. The need to monitor multi-story facilities as amended does add some cost but is needed to aid local response.

COMMITTEE ACTION:

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
	Y	Y	Y	Y	Y		Y		Y	N

RESULT: Approved Failed Withdrawn Tabled Other

SOUTHERN NEVADA CODE AMENDMENT FORM – 2024

AMENDMENT NO.: FLS24-44.01

COMMITTEE: 2024 IBC Fire Life Safety

CODE SECTION: Section 904.2

PROPONENT: Thomas Stewart

PROPOSAL: Revise Section 904.2

REVISE AS FOLLOWS:

[F] 904.2 Where permitted. Automatic fire-extinguishing systems installed as an alternative to the required automatic sprinkler systems of Section 903 shall be approved by the fire code official.

JUSTIFICATION: The purpose of this amendment is to correlate with the deletion of IFC 903.1.1. This deletion further emphasizes that use of alternate extinguishing systems in lieu of fire sprinkler protection is not permitted.

SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

A		B		C		D		E	<input checked="" type="checkbox"/>	F		G		H	<input checked="" type="checkbox"/>	I		J
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*A: address local topographic conditions B: address local geologic conditions C: address local climatic conditions
D: to address special uses/occupancies E: to correlate provisions of a national code with other national codes or State Law
F: clarify the intent of the codes G: address unique designs/systems not anticipated in base codes
H: provide for consistency in regional interpretation/application I: address errata issues J: address fire response capabilities*

COST IMPACT: There will be some cost impact due to the requirement for sprinklers. However, this amendment aligns the requirements previously found here in Southern Nevada. So, this will not have a significant cost impact over what has been in place for the last several code cycles.

COMMITTEE ACTION:

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
Y	Y	Y	A		Y		A	N	Y	N

RESULT: X Approved Failed Withdrawn Tabled Other

SOUTHERN NEVADA CODE AMENDMENT FORM – 2024

AMENDMENT NO.: FLS24-45.01

COMMITTEE: 2024 IBC Fire and Life Safety

CODE SECTION: 905.3.1

PROPONENT: Thomas Stewart

PROPOSAL: Revise Section 905.3.1 as follows:

REVISE AS FOLLOWS:

[F] 905.3.1 Height. Approved Class I ~~III~~ standpipe systems shall be installed throughout buildings where any of the following conditions exist:

1. Four or more stories are above or below grade plane
2. The floor level of the highest story is located more than 30 feet (9144 mm) above the lowest level of the fire department vehicle access.
3. The floor level of the lowest story is located more than 30 feet (9144 mm) below the highest level of the fire department vehicle access.

Exceptions:

- ~~1. Class I standpipes are allowed in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2~~
 - ~~2. Class I standpipes are allowed in Group B and E occupancies.~~
 - ~~3. Class I standpipes are allowed in parking garages.~~
 - ~~4. Class I standpipes are allowed in basements equipped throughout with an automatic sprinkler system.~~
 - ~~5. Class I standpipes are allowed in buildings where occupant use hose lines will not be utilized by trained personnel or the fire department~~
 - ~~6. In determining the lowest level of fire department vehicle access, it shall not be required to consider either of the following:
 - ~~6.1. Recessed loading docks for four vehicles or less.~~
 - ~~6.2. Conditions where topography makes access from the fire department vehicle to the *building* impractical or impossible.~~~~
1. In determining the lowest level of fire department vehicle access, it shall not be required to consider:
 - 1.1 Recessed loading docks for four vehicles or less, and
 - 1.2 Conditions where topography makes access from the fire department vehicle to the *building* impractical or impossible.

JUSTIFICATION:

The required system class is changed from Class III to Class I because Class II standpipes (1.5 inch outlets with hose) are not used by any FD in Southern Nevada for firefighter safety reasons. The use of manual standpipes at the height listed in exception 2 is not allowed. By changing this section, the designer is bound to the NFPA 14 standard, which requires that a standpipe system be automatic when the building is of a height defined by a high-rise. Exception #7 is retained but rewritten as a requirement instead of an exception

SNBO Justification: Amendment required to address local fire response capabilities as it pertains to standpipe systems.

SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

A	B	C	D	E	F	G	H	X	I	J	X
---	---	---	---	---	---	---	---	---	---	---	---

A: address local topographic conditions B: address local geologic conditions C: address local climatic conditions
 D: to address special uses/occupancies E: to correlate provisions of a national code with other national codes or State Law
 F: clarify the intent of the codes G: address unique designs/systems not anticipated in base codes
 H: provide for consistency in regional interpretation/application I: address errata issues J: address fire response capabilities

COST IMPACT: Some cost impact but has been the practice in Southern Nevada for some time.

COMMITTEE ACTION:

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
Y	Y	Y	Y		Y		Y	Y	Y	

RESULT: X Approved Failed Withdrawn Tabled Other

905.3.3

SOUTHERN NEVADA CODE AMENDMENT FORM – 2024

AMENDMENT NO.: FLS24-46.01

COMMITTEE: 2024 IBC Fire and Life Safety

CODE SECTION: 905.3.3

PROPONENT: Thomas Stewart

PROPOSAL: Revise Section 905.3.3 as follows:

REVISE AS FOLLOWS:

[F] 905.3.3 Covered and open mall buildings. Covered mall and open buildings shall be equipped throughout with a standpipe system where required by Section 905.3.1. Mall buildings not required to be equipped with a standpipe system by Section 905.3.1 shall be equipped with Class I hose connections connected to the automatic sprinkler system sized to deliver water at 250 gallons per minute (946.4 L/min) at the most hydraulically remote hose connection while concurrently supplying the automatic sprinkler system demand. The standpipe system shall be designed not to exceed a 50 pounds per square inch (psi) (345 kPa) residual pressure loss with a flow of 250 gallons per minute (946.4 L/min) from the fire department connection to the hydraulically most remote hose connection. Hose connections shall be provided at each of the following locations:

1. Within the mall at the entrance to each exit passageway or corridor.
2. At each floor-level landing within interior exit stairways opening directly on the mall.
3. At exterior public entrances to the mall of a covered mall building.
4. At public entrances at the perimeter line of an open mall building.
5. At other locations as necessary so that the distance to reach all portions of a tenant space does not exceed 100 feet (30 480 mm) of hose and 30-foot (9144 mm) of stream ~~200 feet (60 960 mm)~~ from a hose connection. The length of hose shall be measured along normal walking routes, and the stream shall not be expected to penetrate walls or windows.

JUSTIFICATION:

The amendment to item 5 is to address spacing of hose connections. This amendment takes into account hose length available in high-rise packs. This amendment correlates operational tactics and equipment used by valley fire departments. Typical hose packs include 100 feet of hose, and due to nozzle physics water is intended to spray a maximum of 30 feet.

SNBO Justification: Amendment required to address local fire response capabilities as it pertains to standpipe outlet requirements in covered and open mall buildings.

SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

A	B	C	D	E	F	G	H	I	J	X
----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------

*A: address local topographic conditions B: address local geologic conditions C: address local climatic conditions
 D: to address special uses/occupancies E: to correlate provisions of a national code with other national codes or State Law
 F: clarify the intent of the codes G: address unique designs/systems not anticipated in base codes
 H: provide for consistency in regional interpretation/application I: address errata issues J: address fire response capabilities*

COST IMPACT: Some cost impact but has been the practice in Southern Nevada for some time.

COMMITTEE ACTION:

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
Y	Y	Y	Y		Y		Y	Y	Y	

RESULT: X Approved Failed Withdrawn Tabled Other

SOUTHERN NEVADA CODE AMENDMENT FORM – 2024

AMENDMENT NO.: FLS24-47.01

COMMITTEE: 2024 IBC Fire and Life Safety

CODE SECTION: 905.3.8

PROPONENT: Thomas Stewart

PROPOSAL: Add Section 905.3.8 as follows:

REVISE AS FOLLOWS:

[F] 905.3.8 Building area. When required by the fire code official, buildings in excess of 10,000 square feet (929 m²) in area per level shall be equipped with a Class I standpipe system where any portion of the building’s interior area is more than 200 feet (60,960 mm) measured vertically and horizontally from the nearest point of fire department apparatus access.

JUSTIFICATION: This amendment will allow operations staff to have sufficient standpipe coverage in a large facility that otherwise may not have to provide a standpipe system. The typical operational pre-connect length is 200 feet; therefore, travel distances in excess of 200 feet warrant the requirement for standpipe outlets at entry points into the building and at additional locations such that the entire building can be covered with 100 feet of hose and 30 feet of stream.

SNBO Justification: Amendment required to address local fire response capabilities and limitations on their standard operating procedures as it pertains to large buildings in excess of 10,000 square feet which would not otherwise require a standpipe system.

SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

A	B	C	D	E	F	G	H	I	J	X
----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------

*A: address local topographic conditions B: address local geologic conditions C: address local climatic conditions
D: to address special uses/occupancies E: to correlate provisions of a national code with other national codes or State Law
F: clarify the intent of the codes G: address unique designs/systems not anticipated in base codes
H: provide for consistency in regional interpretation/application I: address errata issues J: address fire response capabilities*

COST IMPACT: There will be a cost impact to some facilities, however this has been a local practice for some time.

COMMITTEE ACTION:

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
Y	Y	Y	Y		Y		Y	Y	Y	

RESULT: Approved Failed Withdrawn Tabled Other

SOUTHERN NEVADA CODE AMENDMENT FORM – 2024

AMENDMENT NO.: FLS24-48.01

COMMITTEE: 2024 Fire and Life Safety

CODE SECTION: 905.4

PROPONENT: Thomas Stewart

PROPOSAL: Revise Section 905.4 as follows:

REVISE AS FOLLOWS:

[F] 905.4 Location of Class I standpipe hose connections. Class I standpipe hose connection shall be provided in all of the following locations:

1. In every required interior exit stairway or *exterior exit stairway*, a hose connection shall be provided for each story above and below grade plane. Hose connections shall be located at the main floor landing unless otherwise approved by the fire code official.

Exception: A single hose connection shall be permitted to be installed in the open corridor or open breezeway between open stairs that are not greater than 75 feet (22 860 mm) apart.

2. On each side of the wall adjacent to the exit opening of a horizontal exit
Exception: Where floor areas adjacent to a horizontal exit are reachable from an interior exit stairway or *exterior exit stairway* hose connection by a 30-foot (9144 mm) hose stream from a nozzle attached to 100 feet (30 480 mm) of hose, a hose connection shall not be required at the horizontal exit.
3. In every exit passageway, at the entrance from the exit passageway to other areas of a building.
Exception: Where floor areas adjacent to an exit passageway are reachable from an interior exit stairway or *exterior exit stairway* hose connection by a 30-foot (9144 mm) hose stream from a nozzle attached to 100 feet (30 480 mm) of hose, a hose connection shall not be required at the entrance from the exit passageway to other areas of the building.
4. In covered mall buildings, adjacent to each exterior public entrance to the mall and adjacent to each entrance from an exit passageway or exit corridor to the mall. In open mall buildings, adjacent to each public entrance to the mall at the perimeter line and adjacent to each entrance from an exit passageway or exit corridor to the mall.

5. Where the roof has a slope less than four units vertical in 12 units horizontal (33.3-percent slope), a hose connection shall be located to serve the roof or at the highest landing of an interior exit stairway with access to the roof provided in accordance with Section 1011.12.

6. Throughout the entire building so that all portions of each floor level are provided with hose valve coverage utilizing 100 feet (30 480 mm) of hose and 30-foot (9144 mm) stream from any hose connection located on that floor or intermediate landing. The length of hose shall be measured along normal walking routes, and the stream shall not be expected to penetrate walls or windows. ~~Where the most remote portion of a nonsprinklered floor or story is more than 150 feet (45 720 mm) from a hose connection or the most remote portion of a sprinklered floor or story is more than 200 feet (60 960 mm) from a hose connection, the fire code official is authorized to require that additional hose connections be provided in approved locations.~~

JUSTIFICATION: The amendment to item 6 is to address spacing of hose connections. This amendment takes into account hose length available in high-rise packs. This amendment correlates operational tactics and equipment used by valley fire departments. Typical hose packs include 100 feet of hose, and due to nozzle physics water is intended to spray 30 feet. SNBO Justification: Amendment required to address local fire response capabilities as it pertains to standpipe outlet requirements.

SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

A	B	C	D	E	F	G	H	I	J	X
---	---	---	---	---	---	---	---	---	---	---

*A: address local topographic conditions B: address local geologic conditions C: address local climatic conditions
D: to address special uses/occupancies E: to correlate provisions of a national code with other national codes or State Law
F: clarify the intent of the codes G: address unique designs/systems not anticipated in base codes
H: provide for consistency in regional interpretation/application I: address errata issues J: address fire response capabilities*

COST IMPACT: There will be some cost impact but this has been the local practice for some time.

COMMITTEE ACTION:

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
Y	Y	Y	Y		Y		Y	Y	Y	

RESULT: X Approved Failed Withdrawn Tabled Other

SOUTHERN NEVADA CODE AMENDMENT FORM – 2024

AMENDMENT NO.: FLS24-49.01

COMMITTEE: 2024 Fire and Life Safety

CODE SECTION: 905.4.1

PROPONENT: Thomas Stewart

PROPOSAL: Revise Section 905.4.1 as follows:

REVISE AS FOLLOWS:

[F] 905.4.1 Protection. Risers and laterals of Class I standpipe systems not located within an interior exit stairway or pressurized enclosure shall be protected by a degree of fire resistance equal to that required for vertical enclosures in the building in which they are located.

Exception: In buildings constructed of Type I or Type II construction in accordance with the Building Code or in buildings equipped throughout with an approved automatic sprinkler system, standpipe laterals and vertical risers that are not located within an interior exit stairway are not required to be enclosed within fire-resistance-rated construction.

JUSTIFICATION:

The intent of this amendment is to clarify what piping must be protected. The base language may be read to require protection for the feed mains of standpipe systems. This would include standpipe mains in parking garages and the risers for intermediate standpipes that may occur to serve corridors between stairs to meet the local standpipe coverage requirements. It is difficult to enclose and rate the piping running through the parking garage, and it is difficult to address how to rate the fire hose cabinets that occur with intermediate standpipes. The feeling is that for sprinklered buildings, protection of lateral piping is not necessary. Vertical risers are also not required to be protected by this amendment. These exceptions apply when the building is built of noncombustible construction or when fire sprinkler protection is provided. It is noted that there is no requirement for piping protection set forth in NFPA 13. Without this amendment hose cabinet protection / outlets would also require protection.

SNBO Justification: Amendment required to clarify the intent of the code as it pertains to the protection of standpipe piping in noncombustible and fire sprinklered buildings.

SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

A	B	C	D	E	F	X	G	H	X	I	J
---	---	---	---	---	---	---	---	---	---	---	---

A: address local topographic conditions B: address local geologic conditions C: address local climatic conditions
D: to address special uses/occupancies E: to correlate provisions of a national code with other national codes or State Law
F: clarify the intent of the codes G: address unique designs/systems not anticipated in base codes
H: provide for consistency in regional interpretation/application I: address errata issues J: address fire response capabilities

COST IMPACT: There will be some impact for those buildings of Type III and Type V construction.

COMMITTEE ACTION:

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
Y	Y	Y	Y		Y		Y	Y	Y	

RESULT: X Approved ___ Failed ___ Withdrawn ___ Tabled ___ Other

SOUTHERN NEVADA CODE AMENDMENT FORM – 2024

AMENDMENT NO.: FLS24-50.01

COMMITTEE: 2024 Fire and Life Safety

CODE SECTION: 905.9

PROPONENT: Thomas Stewart

PROPOSAL: Revise supervision requirements of standpipe valves.

REVISE AS FOLLOWS:

[F] 905.9 Valve Supervision. Valves controlling water supplies shall be electrically supervised in the open position ~~in accordance with so that a change in the normal position of the valve will generate a supervisory signal at the supervising station required by Sections 903.4.1 & 903.4.2.~~ Where a *fire alarm system* is provided, a signal shall be transmitted to the control unit.

Exceptions:

1. Valves to underground key or hub valves in roadway boxes do not require supervision.
- ~~2. Valves locked in the normal position and inspected as provided in this code in buildings not equipped with a *fire alarm system*.~~

[F] 905.9.1 In buildings not provided with an *automatic sprinkler system* or a *fire alarm system*, valves controlling water supplies shall be supervised in accordance with Section 905.9 where an *automatic sprinkler system* or a *fire alarm system* is provided in an adjacent building on the same lot.

[F] 905.9.1.1 Where Sections 905.9 and 905.9.1 do not require electronic supervision of valves, valves shall be locked in the normal position and inspected as provided in this code.

JUSTIFICATION:

Section 905.9 is updated to match the language of Section 903.4.1 and references were updated to include both electrical supervision of 903.4.1 & monitoring of 903.4.2. Exception #2 is removed to require all standpipe valves to be electrically supervised when the building is provided with either a sprinkler or fire alarm system. This change is consistent with other amendments requiring supervision of all valves controlling water supplies, see amendments to IFC 903.4.1, NFPA 13 16.9.3.3.1, NFPA 14 9.6.8.1.

Section 905.9.1 is added to address situations where a building may have a standpipe system but no sprinkler or fire alarm system, smaller open parking garages for example. Where an adjacent building is provided with a sprinkler or fire alarm system, that adjacent building's supervising station system will be required to supervise the standpipe valves. The term "adjacent" is intended to mean buildings that are abutting or close to each other which may or may not require wiring between the buildings to be run underground. This section does not

require adjacent buildings on different parcels or lots to be interconnected. Where a standalone building or a building sufficiently far from an adjacent building on the lot is provided with a standpipe system and not provided with a sprinkler or fire alarm system, this section does not force the installation of a monitoring system specifically for the standpipe valves. The intent of this section is to supervise as many valves as practical. Although the code intends for unsupervised valves to be locked open and inspected as such, this method presents the possibility of first responders spending time looking for a closed valve between hose valve(s) and the FDC.

Section 905.9.1.1 is added to specify that where the building or an adjacent building that is sufficiently close has a sprinkler or fire alarm system present, standpipe valves shall be locked open.

SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

A	B	C	D	E	F	<input checked="" type="checkbox"/>	G	H	I	J
----------	----------	----------	----------	----------	----------	-------------------------------------	----------	----------	----------	----------

*A: address local topographic conditions B: address local geologic conditions C: address local climatic conditions
D: to address special uses/occupancies E: to correlate provisions of a national code with other national codes or State Law
F: clarify the intent of the codes G: address unique designs/systems not anticipated in base codes
H: provide for consistency in regional interpretation/application I: address errata issues J: address fire response capabilities*

COST IMPACT: There will be some cost impact but this has been a practice for several years.

COMMITTEE ACTION:

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
Y	Y	Y	Y		Y		Y	Y	Y	

RESULT: X Approved Failed Withdrawn Tabled Other

SOUTHERN NEVADA CODE AMENDMENT FORM – 2024

AMENDMENT NO.: FLS24-51.01

COMMITTEE: 2024 Fire and Life Safety

CODE SECTION: Section 906

PROPONENT: Thomas Stewart

PROPOSAL: To delete Section 906 from the IBC and have these items regulated by the International Fire Code.

REVISE AS FOLLOWS: Revise Section 906 as follows:

**SECTION 906
PORTABLE FIRE EXTINGUISHERS**

[F] 906.1 General ~~Where required.~~

Portable fire extinguishers are regulated by the *International Fire Code.* ~~shall be installed in all of the following locations:~~

[The remainder of section 906.1 is deleted].

[Sections 906.2 through 906.10 are deleted].

JUSTIFICATION:

This proposal is to have fire extinguisher requirements regulated by the Fire Code. This aids in code correlation, by limiting the number of amendments that need to be adopted into the IBC.

This amendment is intended for code correlation between the Building Code and Fire Code and provides consistency in regional interpretation and application of the codes.

SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

A	B	C	D	E	X	F	G	H	I	J
---	---	---	---	---	---	---	---	---	---	---

*A: address local topographic conditions B: address local geologic conditions C: address local climatic conditions
D: to address special uses/occupancies E: to correlate provisions of a national code with other national codes or State Law
F: clarify the intent of the codes G: address unique designs/systems not anticipated in base codes
H: provide for consistency in regional interpretation/application I: address errata issues J: address fire response capabilities*

COST IMPACT: None

COMMITTEE ACTION:

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
Y	Y	Y	Y		Y		Y	Y	Y	

RESULT: Approved Failed Withdrawn Tabled Other

907.1.4

SOUTHERN NEVADA CODE AMENDMENT FORM – 2024

AMENDMENT NO.: FLS24-83.01

COMMITTEE: 2024 IBC General Committee

CODE SECTION: Section 907.1.4

PROPOSER: Michal Turczyk

PROPOSAL: To add code section to require signage at location/s of fire alarm panels.

REVISE AS FOLLOWS:

[F] 907.1.4 Signage. A “FIRE ALARM CONTROL PANEL”, “FACP”, or “FIRE ALARM CONTROL UNIT”, “FACU” sign shall be provided in minimum 2” letters with a minimum ½” stroke. The color of the letters shall be contrasting with respect to the background. The sign shall be provided on the door leading to the fire alarm control panel(s), unless otherwise approved by the fire code official.

JUSTIFICATION: The addition of a signage requirement assists first responders in being able to locate the fire alarm control panel(s).

SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

A	B	C	D	E	F	G	H	X	I	J	X
---	---	---	---	---	---	---	---	---	---	---	---

*A: address local topographic conditions B: address local geologic conditions C: address local climatic conditions
D: to address special uses/occupancies E: to correlate provisions of a national code with other national codes or State Law
F: clarify the intent of the codes G: address unique designs/systems not anticipated in base codes
H: provide for consistency in regional interpretation/application I: address errata issues J: address fire response capabilities*

COST IMPACT: Minimal cost associated with making a sign.

COMMITTEE ACTION: *(leave blank - to be assigned by Committee Chair)*

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
Y	Y		Y		Y	Y	Y	Y		

RESULT: X Approved ___ Failed ___ Withdrawn ___ Tabled ___ Other

SOUTHERN NEVADA CODE AMENDMENT FORM – 2024

AMENDMENT NO.: FLS24-52.01

COMMITTEE: 2024 IBC FLS Committee

CODE SECTION: Section 907.2

PROPOSER: Michal Turczyk

PROPOSAL: Clarify extent of fire alarm system.

REVISE AS FOLLOWS: Revise Section 907.2 to read as follows:

[F] 907.2 Where required-new buildings and structures. *An approved fire alarm system installed in accordance with the provisions of this code and NFPA 72 shall be provided in new buildings and structures in accordance with Sections 907.2.1 through 907.2.23 and provide occupant notification in accordance with Section 907.5, unless other requirements are provided by another section of this code.*

In separated mixed-use occupancy buildings the fire alarm/detection system shall be limited to the fire area that requires the system. In non-separated mixed-use occupancy buildings containing an occupancy with a fire alarm/detection system the system is required to be extended throughout the building or fire area.

A fire alarm system shall be installed throughout all buildings three or more stories in height.

Exception: Group R-3 occupancies and single-family dwellings built under the IRC.

Not fewer than one *manual fire alarm box* shall be provided in an *approved* location to initiate a *fire alarm signal* for *fire alarm systems* employing *automatic fire detectors* or *waterflow detection devices*. Where other sections of this code allow elimination of fire alarm boxes to sprinklers, a single fire alarm box shall be installed.

Exceptions:

4. ~~The manual fire alarm box is not required~~ shall not be installed for fire alarm systems dedicated to elevator recall control and supervisory service; and fire sprinkler monitoring systems.
2. ~~The manual fire alarm box is not required for Group R-2 occupancies unless required by the fire code official to provide a means for fire watch personnel to initiate an alarm during a sprinkler system impairment event. Where provided, the manual fire alarm box shall not be located in an area that is accessible to the public.~~

JUSTIFICATION: The *International Fire Code* commentary and building code commentary indicate that the requirements of Section 907.2 do not specifically state that the systems must be installed and maintained throughout buildings, only in the fire area that contains the occupancies. The amendment adds clarity by identifying the extent of the area receiving the fire alarm/detection system as the “fire area”. Fire area is the aggregate floor area enclosed and bounded by fire walls, fire barriers, exterior walls or horizontal assemblies of a building. Buildings that have more than one occupancy and do not contain more than one fire area are identified as non-separated mixed-use buildings. A non-separated mixed-use building that contains one fire area that requires a fire alarm/detection system is required to have the system extended throughout the building in accordance with the International Building Code. The three story fire alarm requirement is added for correlation with the State Fire Marshal requirement (NRS 477.130).

The change to exception 1 is an accepted practice in Southern Nevada. Local fire officials do not want pull stations installed for dedicated function fire alarm systems such as elevator recall systems and sprinkler monitoring systems. Not only is the pull station unnecessary for these types of systems, it also may cause confusion with someone thinking that a code-compliant fire alarm system is installed when there really is none. The reason to delete exception 2 is to coordinate with a previously approved IFC amendment to Section 907.2.9.1., which requires at least one manual fire alarm box to be installed at an approved location.

SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

A	B	C	D	E	X	F	X	G	H	X	I	J
---	---	---	---	---	---	---	---	---	---	---	---	---

A: address local topographic conditions B: address local geologic conditions C: address local climatic conditions
D: to address special uses/occupancies E: to correlate provisions of a national code with other national codes or State Law
F: clarify the intent of the codes G: address unique designs/systems not anticipated in base codes
H: provide for consistency in regional interpretation/application I: address errata issues J: address fire response capabilities

COST IMPACT: There should not be significant cost impacts as this has been a practice for several years.

COMMITTEE ACTION:

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
Y	Y	Y	Y		Y		Y	Y	Y	

RESULT: X Approved Failed Withdrawn Tabled Other

SOUTHERN NEVADA CODE AMENDMENT FORM – 2024

AMENDMENT NO.: FLS24-53.01

COMMITTEE: 2024 IBC Fire Life Safety Committee

CODE SECTION: Section 907.2.7.1.1

PROPONENT: Michal Turczyk

PROPOSAL: Delete Section 907.2.7.1.1

REVISE AS FOLLOWS:

~~**[F] 907.2.7.1.1 Occupant notification.** During times that the building is occupied, the initiation of a signal from a manual fire alarm box or from a water flow switch shall not be required to activate the alarm notification appliances when an alarm signal is activated at a constantly attended location from which evacuation instructions shall be initiated over an emergency voice/alarm communication system installed in accordance with Section 907.5.2.2.~~

JUSTIFICATION:

This section doesn't take into account the notification of hearing-impaired people that may be in mercantile occupancies. The committee also felt that such a delay in notification is unjustifiable, subject to human error, staffing considerations, staff training and maintenance of instructions near the method of signal initiation.

SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

A	B	C	D	E	F	G	H	X	I	J
---	---	---	---	---	---	---	---	---	---	---

*A: address local topographic conditions B: address local geologic conditions C: address local climatic conditions
D: to address special uses/occupancies E: to correlate provisions of a national code with other national codes or State Law
F: clarify the intent of the codes G: address unique designs/systems not anticipated in base codes
H: provide for consistency in regional interpretation/application I: address errata issues J: address fire response capabilities*

COST IMPACT: Minimal cost associated with labor fees of programming the FA system.

COMMITTEE ACTION:

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
Y	Y	Y	Y		Y		Y	Y	Y	

RESULT: Approved Failed Withdrawn Tabled Other

SOUTHERN NEVADA CODE AMENDMENT FORM – 2024

AMENDMENT NO.: FLS24-54.01

COMMITTEE: 2024 IBC Fire Life Safety Committee

CODE SECTION: Section 907.2.8.2

PROPONENT: Michal Turczyk

PROPOSAL: Revise Section 907.2.8.2

REVISE AS FOLLOWS:

[F] 907.2.8.2 Automatic smoke detection system. An automatic smoke detection system that activates the occupant notification system in accordance with Section 907.5 shall be installed throughout all interior *corridors* serving *sleeping units*. For the purposes of this section, interior means a conditioned space.

Exception: An automatic smoke detection system is not required in buildings that do not have interior *corridors* serving *sleeping units* and where each *sleeping unit* has a *means of egress* doors opening directly to an *exit* or to an exterior *exit access* that leads directly to an *exit*.

JUSTIFICATION:

The change is to add the definition of “interior”. There is debate that goes on about the use of smoke detectors in non-conditioned spaces. This language is added to clarify that smoke detector protection is not required in interior corridors that are not conditioned.

SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

A	B	C	D	E	F	G	H	X	I	J
----------	----------	----------	----------	----------	----------	----------	----------	----------	----------	----------

A: address local topographic conditions B: address local geologic conditions C: address local climatic conditions
D: to address special uses/occupancies E: to correlate provisions of a national code with other national codes or State Law
F: clarify the intent of the codes G: address unique designs/systems not anticipated in base codes
H: provide for consistency in regional interpretation/application I: address errata issues J: address fire response capabilities

COST IMPACT: None. Clarification only.

COMMITTEE ACTION:

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
Y	Y	Y	Y		Y		Y	Y	Y	

RESULT: Approved Failed Withdrawn Tabled Other

SOUTHERN NEVADA CODE AMENDMENT FORM – 2024

AMENDMENT NO.: FLS24-56.01

COMMITTEE: 2024 IBC Fire Life Safety Committee

CODE SECTION: Section 907.2.9.1

PROPONENT: Michal Turczyk

PROPOSAL: Revise Section 907.2.9.1

REVISE AS FOLLOWS:

[F] 907.2.9.1 Manual fire alarm system. A manual fire alarm system that activates the occupant notification system in accordance with Section 907.5 shall be installed in Group R-2 occupancies where any of the following conditions apply:

1. Any *dwelling unit* or *sleeping unit* is located three or more stories above the lowest *level of exit discharge*;
2. Any *dwelling unit* or *sleeping unit* is located more than one story below the highest *level of exit discharge* of *exits* serving the *dwelling unit* or *sleeping unit*; or
3. The building contains ~~more than 16~~ 15 or more *dwelling units* or *sleeping units*.

Exceptions:

1. A fire alarm system is not required in buildings not more than two stories in height where all dwelling units or sleeping units and contiguous attic and crawl spaces are separated from each other and public or common areas by at least 1-hour fire partitions and each dwelling unit or sleeping unit has an exit directly to a public way, exit court or yard.
2. Manual fire alarm boxes are not required where the building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2 and the occupant notification appliances will automatically activate throughout the notification zones upon a sprinkler water flow.
 - 2.1 At least one manual fire alarm box shall be installed at an approved location.
3. A fire alarm system is not required in buildings that do not have interior corridors serving dwelling units and are protected by an approved automatic sprinkler system installed in accordance with Section 903.3.1.1 or 903.3.1.2, provided that dwelling units either have a means or egress door opening directly to an exterior exit access that leads directly to exits or are served by open-ended corridors designed in accordance with Section 1027.6, Exception 3.

JUSTIFICATION: The reason to add the requirement for installing at least one pull station is because NFPA 72 requires at least one to be installed for buildings with sprinkler systems and because the other residential occupancies that require fire alarm systems and have sprinklers installed require at least one pull station per the IFC.

The revision from “more than 16 units” to “15 or more units” is to coordinate with Nevada State Fire Marshal requirement NRS 477.130.

SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

A		B		C		D		E	<input checked="" type="checkbox"/>	F		G		H		I		J
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*A: address local topographic conditions B: address local geologic conditions C: address local climatic conditions
 D: to address special uses/occupancies E: to correlate provisions of a national code with other national codes or State Law
 F: clarify the intent of the codes G: address unique designs/systems not anticipated in base codes
 H: provide for consistency in regional interpretation/application I: address errata issues J: address fire response capabilities*

COST IMPACT: None. Intended to correlate to NFPA 72 and Nevada State law.

COMMITTEE ACTION:

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
Y	Y	Y	Y		Y		Y	Y	Y	

RESULT: X Approved Failed Withdrawn Tabled Other

SOUTHERN NEVADA CODE AMENDMENT FORM – 2024

AMENDMENT NO.: FLS24-66.01

COMMITTEE: 2024 IBC Fire Life Safety

CODE SECTION: Section 907.2.9.1.1

PROPONENT: Thomas Stewart

PROPOSAL: Add section 907.2.9.1.1

ADD AS FOLLOWS:

[F] 907.2.9.1.1 Automatic smoke detection system. When a fire alarm system is required, an automatic smoke detection system that activates the occupant notification system in accordance with Section 907.5 shall be installed throughout all interior corridors serving dwelling units. For the purposes of this section, interior means a conditioned space.

Exception: An automatic smoke detection system is not required in buildings that do not have interior corridors serving dwelling units and where each dwelling unit has a means of egress doors opening directly to an exit or to an exterior exit access that leads directly to an exit.

JUSTIFICATION: This is a requirement for R-1 occupancies, so it should also be applied to R-2 occupancies, which are similar in nature. It's very important to provide early alerting to occupants who may be sleeping at the time of the fire. It is important to provide equal protection in R-2 occupancies due to local uses of R-2 buildings. Many such buildings are designed for non-transient use but are used in a transient manner.

The change is to add the definition of "interior". There is debate that goes on about the use of smoke detectors in unconditioned spaces. This language is added to clarify that smoke detector protection is not required in interior corridors that are not conditioned.

SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

A	B	C	D	E	F	G	H	X	I	J
---	---	---	---	---	---	---	---	---	---	---

*A: address local topographic conditions B: address local geologic conditions C: address local climatic conditions
D: to address special uses/occupancies E: to correlate provisions of a national code with other national codes or State Law
F: clarify the intent of the codes G: address unique designs/systems not anticipated in base codes
H: provide for consistency in regional interpretation/application I: address errata issues J: address fire response capabilities*

COST IMPACT: here will be some cost impact but this amendment addresses the need to have smoke detectors in R-2 units since most are transient in Southern Nevada.

COMMITTEE ACTION:

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
	Y	Y	Y	Y	Y		Y	Y		

RESULT: X Approved Failed Withdrawn Tabled Other

SOUTHERN NEVADA CODE AMENDMENT FORM – 2024

AMENDMENT NO.: FLS24-68.01

COMMITTEE: 2024 IBC Fire and Life Safety

CODE SECTION: Section 907.2.13

PROPONENT: Thomas Stewart

PROPOSAL: Revise Section 907.2.13

REVISE AS FOLLOWS:

[F] 907.2.13 High-rise buildings. *High-rise buildings* shall be provided with an *automatic smoke detection* system in accordance with Section 907.2.13.1, a fire department communication system in accordance with Section 907.2.13.2 and an emergency voice/alarm communication system in accordance with Section 907.5.2.2.

Exceptions:

1. Airport traffic control towers in accordance with Sections 412 and 907.2.22.
2. *Open parking garages* in accordance with Section 406.5.
- ~~3. *Buildings with an occupancy in Group A-5 in accordance with Section 303.1.*~~
- 4.3. Low-hazard special occupancies in accordance with Section 503.1.1.
- ~~5. *Buildings with an occupancy in Group H-1, H-2 or H-3 in accordance with Section 415.*~~
- ~~6. In Group I-1 and I-2 occupancies, the alarm shall sound at a constantly attended location and general occupant notification shall be broadcast by the emergency voice/alarm communication system.~~

JUSTIFICATION: This amendment clarifies what buildings are exempted from high-rise building requirements for fire alarm systems and is consistent with the application of this list of exceptions that has been followed for more than a decade.

SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

A	B	C	D	E	F	G	H	X	I	J
---	---	---	---	---	---	---	---	---	---	---

*A: address local topographic conditions B: address local geologic conditions C: address local climatic conditions
D: to address special uses/occupancies E: to correlate provisions of a national code with other national codes or State Law
F: clarify the intent of the codes G: address unique designs/systems not anticipated in base codes
H: provide for consistency in regional interpretation/application I: address errata issues J: address fire response capabilities*

COST IMPACT: There will be some cost impacts but this is a practice in Southern Nevada for several code cycles.

COMMITTEE ACTION:

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
	Y	Y	Y	Y	Y		Y		Y	Y

RESULT: X Approved Failed Withdrawn Tabled Other

SOUTHERN NEVADA CODE AMENDMENT FORM – 2024

AMENDMENT NO.: FLS24-69.01

COMMITTEE: 2024 IBC Fire and Life Safety

CODE SECTION: Section 907.2.13.1.3

PROPONENT: Thomas Stewart

PROPOSAL: Add Section 907.2.13.1.3

ADD AS FOLLOWS:

[F] 907.2.13.1.3 System smoke detection with sounder bases. In a new structure classified as a high-rise building with residential occupancies, in lieu of installing stand-alone smoke alarms, system-type analog addressable smoke detectors with sounder-bases shall be installed in all locations required by Section 907.2.11. Activation of said devices shall send a supervisory alarm signal to the building fire alarm control panel. The smoke detector sounder shall only sound within the individual dwelling unit, suite of rooms, or similar area and shall not actuate the building fire alarm system, unless otherwise permitted by the fire code official.

JUSTIFICATION: This has been an adopted amendment for three code cycles for some of the local jurisdictions. Stand- alone smoke alarm devices rely on either the person in the room of fire origin or someone hearing the device and calling for staff response. This delay in time will increase risk of injury or death to the tenant and substantial damage to the space as this time delay may allow the fire to grow to a level that sprinkler activation(s) has occurred. The activation of a system type smoke detector will allow timely, accurate notification to responding staff and staff won't have to rely on any outside interaction to start response. Even if sprinkler activation has occurred, these devices could also minimize water damage during a fire event that activates the fire sprinkler system since the exact location of the fire would immediately be known

With the current arrangement of installing standalone smoke alarms, there is no way of determining that the device has been removed since the stand alone device is not supervised. If these devices were installed, staff would be alerted immediately that a device has been removed.

Another benefit is that these devices would be powered by both normal and emergency power, thereby increasing reliability of these detectors.

Another advantage is in the maintenance and testing of these devices. These devices will produce a trouble when they're dirty, increasing both the reliability and functionality of the detectors. A log will also be produced within the fire alarm control unit and will print out when the detectors have been tested, thereby producing a documented test of the detectors.

The word "new" is added to clarify that this requirement does not apply to remodels of existing buildings, but rather to new construction or to total replacements of fire alarm systems.

SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

A	B	C	D	E	F	G	H	I	J
----------	----------	----------	----------	----------	----------	----------	----------	----------	----------

*A: address local topographic conditions B: address local geologic conditions C: address local climatic conditions
D: to address special uses/occupancies E: to correlate provisions of a national code with other national codes or State Law
F: clarify the intent of the codes G: address unique designs/systems not anticipated in base codes
H: provide for consistency in regional interpretation/application I: address errata issues J: address fire response capabilities*

COST IMPACT: There will be some cost impact but this has been a Fire Code requirement for the last two code cycles.

COMMITTEE ACTION:

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
	Y	Y	Y	Y	Y		Y		A	N

RESULT: X Approved Failed Withdrawn Tabled Other

SOUTHERN NEVADA CODE AMENDMENT FORM – 2024

AMENDMENT NO.: FLS24-70.01

COMMITTEE: 2024 IBC Fire and Life Safety

CODE SECTION: Section 907.2.13.2

PROPONENT: Thomas Stewart

PROPOSAL: Revise Section 907.2.13.2

REVISE AS FOLLOWS:

[F] 907.2.13.2 Fire department communication system. Where a wired communication system is provided in addition to approved in lieu of an emergency responder radio coverage system in accordance with Section 510 of the International Fire Code, the wired fire department communication system shall be designed and installed in accordance with NFPA 72 using warden stations and shall operate between a fire command center complying with Section 508, elevators, elevator lobbies, emergency and standby power rooms, fire pump rooms, areas of refuge and inside interior exit stairways and other locations as required by the fire code official. The fire department communication device shall be provided at each floor level within the interior exit stairway.

JUSTIFICATION: This amendment is made so it is clear that a wired system cannot be used in lieu of a radio system. Since responding personnel will expect radio systems, any wired systems shall require warden stations. Warden stations address incompatibility of different phone jacks with the different fire alarm manufacturers. Few things impact fire response more than the inability to communicate effectively. This amendment addresses fire communications and the type of hardware implemented to augment communications.

SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

Table with 12 columns labeled A through J. Column I and J contain an 'X'.

- A: address local topographic conditions B: address local geologic conditions C: address local climatic conditions
D: to address special uses/occupancies E: to correlate provisions of a national code with other national codes or State Law
F: clarify the intent of the codes G: address unique designs/systems not anticipated in base codes
H: provide for consistency in regional interpretation/application I: address errata issues J: address fire response capabilities

COST IMPACT: There will be some cost impacts but not significant since most buildings will have radio systems.

COMMITTEE ACTION:

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
	Y	Y	Y	Y	Y		Y	Y	Y	

RESULT: Approved Failed Withdrawn Tabled Other

SOUTHERN NEVADA CODE AMENDMENT FORM – 2024

AMENDMENT NO.: FLS24-71.01

COMMITTEE: 2024 IBC Fire and Life Safety

CODE SECTION: Section 907.2.13.3

PROPONENT: Thomas Stewart

PROPOSAL: Revise Section 907.2.13.3

REVISE AS FOLLOWS:

[F] 907.2.13.3 Multi-channel voice evacuation. ~~In buildings with an occupied floor more than 120 feet (36 576 mm) above the lowest level of fire department vehicle access, voice evacuation systems for high-rise buildings shall be multiple-channel systems.~~ Voice evacuation systems for high-rise buildings shall be multi-channel systems.

JUSTIFICATION:

High rise fire operations evacuates only the floor of alarm, the floor above the alarm, and the floor below the alarm. Multi-channel systems allow alert tones to be broadcast into other evacuation zones by fire operations personnel. A fire alarm system that has multiple channels allows one area of the building to receive an evacuation message, while other areas of the building can be given other instructions.

SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

A	B	C	D	E	F	G	H	X	I	J	X
---	---	---	---	---	---	---	---	---	---	---	---

- A: address local topographic conditions* *B: address local geologic conditions* *C: address local climatic conditions*
- D: to address special uses/occupancies* *E: to correlate provisions of a national code with other national codes or State Law*
- F: clarify the intent of the codes* *G: address unique designs/systems not anticipated in base codes*
- H: provide for consistency in regional interpretation/application* *I: address errata issues* *J: address fire response capabilities*

COST IMPACT: There will be some cost impact, but this has been a practice locally for several years.

COMMITTEE ACTION:

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
	Y	Y	Y	Y	Y		Y	Y	A	

RESULT: Approved Failed Withdrawn Tabled Other

SOUTHERN NEVADA CODE AMENDMENT FORM – 2024

AMENDMENT NO.: FLS24-72.01

COMMITTEE: 2024 IBC Fire and Life Safety

CODE SECTION: Section 907.2.24

PROPONENT: Thomas Stewart

PROPOSAL: Add Section 907.2.24

REVISE AS FOLLOWS:

[F] 907.2.24 Child-care smoke detectors. System smoke detectors shall be installed within sleeping and napping areas of day cares.

Exception: Single-station smoke alarms may be permitted in facilities not otherwise required to be provided with a fire alarm system.

JUSTIFICATION: The NRS/NAC has requirements (477.566) for child-care facilities that included a requirement for smoke detection in sleeping/napping areas. These detectors provide a quicker response to caregivers to facilitate safe egress of children.

SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

A		B		C		D		E	X	F		G		H		I		J
----------	--	----------	--	----------	--	----------	--	----------	----------	----------	--	----------	--	----------	--	----------	--	----------

*A: address local topographic conditions B: address local geologic conditions C: address local climatic conditions
D: to address special uses/occupancies E: to correlate provisions of a national code with other national codes or State Law
F: clarify the intent of the codes G: address unique designs/systems not anticipated in base codes
H: provide for consistency in regional interpretation/application I: address errata issues J: address fire response capabilities*

COST IMPACT: None. Intended to correlate to State law.

COMMITTEE ACTION:

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
	Y	Y	Y	Y	Y		Y	Y	Y	

RESULT: Approved Failed Withdrawn Tabled Other

SOUTHERN NEVADA CODE AMENDMENT FORM – 2024

AMENDMENT NO.: FLS24-73.01

COMMITTEE: 2024 IBC Fire and Life Safety

CODE SECTION: 907.5.2.1.1

PROPONENT: Thomas Stewart

PROPOSAL: Section 907.5.2.1.1

REVISE AS FOLLOWS:

[F] 907.5.2.1.1 Average sound pressure. The audible alarm notification appliances shall provide a sound pressure level of 15 decibels (15 dBA) above the average ambient sound level or 5 dBA above the maximum sound level having a duration of at least 60 seconds, whichever is greater, in every occupiable space within the building. The minimum sound pressure levels shall be: 90 dBA in mechanical equipment rooms; and 80 dBA in other occupancies. Audible notification appliances shall be installed in each occupiable space.

Exceptions:

1. Laundry rooms, walk-in closets, storage rooms and walk-in coolers/freezers equal to or less than 100 square feet (9.29 m²) in floor area. Sound pressure levels shall be measured during system acceptance testing to verify the calculated space achieves a minimum of 80 dBA.
2. In lieu of showing an audible notification appliance within a specific occupiable space on the plans, calculations may be provided showing that the alarm signals from the adjacent audible appliances will achieve a minimum of 80 decibels inside and throughout that space, where doors or other barriers between the space and the adjacent audibility device(s) are closed. Sound pressure levels shall be measured during system acceptance testing to verify the calculated space achieves a minimum of 80 dBA.
3. In sleeping areas required to be protected with low-frequency alarms, the 80 dBA minimum sound pressure provision is not required where a listed fire alarm device is not available to simultaneously achieve both the low-frequency signal and the 80 dBA minimum sound pressure.

JUSTIFICATION:

This amendment correlates with NFPA 72 amendment, manufacturers products and state fire marshal regulations. The justification for this section is that the 80 decibel requirement has been an accepted standard throughout the State of Nevada for many years, and simplifies audibility testing. The state requirement is found in the fire marshal regulations. The reason to have audibility devices installed in each occupied space is because of the decibel drops that occur

once a door is closed if no device is installed within a space. Real world testing indicates that when doors are closed and there is no audible device installed within a space, then achieving the minimum of 80 decibels is often not possible. This issue typically comes up at the very end of the job, when a facility is attempting to get a C of O. Requiring an audible device within each space should help eliminate these last minute issues, and also ensure compliance with the minimum audibility requirements.

The first exception provides relief for small areas that are not normally occupied and are not occupied on a continuous basis over an extended period of time. The second exception provides a means of relief during plan review that allows verification upon performance testing during the acceptance inspection. The third exception provides relief for low frequency alarms as these appliances are not currently manufactured with the capability to produce the required 80 dB sound pressure.

Note: The 2018 IBC defines occupiable space as follows:

[BG] OCCUPIABLE SPACE. A room or enclosed space designed for human occupancy in which individuals congregate for amusement, educational or similar purposes or in which occupants are engaged at labor, and which is equipped with means of egress and light and ventilation facilities meeting the requirements of this code.

SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

Amendment required to correlate the provisions of a given national model code with other national model codes or prevailing State law as it pertains to required minimum sound pressure levels.

A	B	C	D	E	X	F	G	H	I	J
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*A: address local topographic conditions B: address local geologic conditions C: address local climatic conditions
D: to address special uses/occupancies E: to correlate provisions of a national code with other national codes or State Law
F: clarify the intent of the codes G: address unique designs/systems not anticipated in base codes
H: provide for consistency in regional interpretation/application I: address errata issues J: address fire response capabilities*

COST IMPACT: None as this is to correlate to State law.

COMMITTEE ACTION:

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
	Y	Y	Y	Y	Y		Y	Y	Y	

RESULT: X Approved Failed Withdrawn Tabled Other

SOUTHERN NEVADA CODE AMENDMENT FORM – 2024

AMENDMENT NO.: FLS24-74.01

COMMITTEE: 2024 IBC Fire and Life Safety

CODE SECTION: Section 907.5.2.3.1

PROPONENT: Thomas Stewart

PROPOSAL: Revise Section 907.5.2.3.1

REVISE AS FOLLOWS:

[F] 907.5.2.3.1 Public use and common use areas. Visible alarm notification appliances shall be provided in public use areas and common areas.

Exceptions:

1. Electrical and mechanical rooms that are not normally occupied or less than 400 square feet.
2. Janitor closets.
3. Storage rooms less than 400 square feet.
4. Exit enclosures.
5. Individual work areas or offices and private toilets serving individual work areas or offices.
6. Individual inmate sleeping areas and patient sleeping rooms.
7. Where *employee work areas* have audible alarm coverage, the notification appliance circuits serving the *employee work areas* shall be initially designed with not less than 20-percent spare capacity to account for the potential of adding visible notification appliances in the future to accommodate hearing-impaired employee(s).

JUSTIFICATION: This is similar to an existing IFC amendment. This amendment is to clarify where strobes are not required to be installed. These exceptions are also given in the State Fire Marshal requirements NAC 477.283.

SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

A	B	C	D	E	X F	G	H	I	J
---	---	---	---	---	-----	---	---	---	---

*A: address local topographic conditions B: address local geologic conditions C: address local climatic conditions
D: to address special uses/occupancies E: to correlate provisions of a national code with other national codes or State Law
F: clarify the intent of the codes G: address unique designs/systems not anticipated in base codes
H: provide for consistency in regional interpretation/application I: address errata issues J: address fire response capabilities*

COST IMPACT: None as this intended to correlate with State law.

COMMITTEE ACTION:

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
	Y	Y	Y	Y	Y		Y	Y	Y	

RESULT: Approved Failed Withdrawn Tabled Other

SOUTHERN NEVADA CODE AMENDMENT FORM – 2024

AMENDMENT NO.: FLS24-75.01

COMMITTEE: 2024 IBC Fire and Life Safety

CODE SECTION: Section 907.6.4.1

PROPONENT: Thomas Stewart

PROPOSAL: Revise Section 907.6.4.1

REVISE AS FOLLOWS:

[F] 907.6.4.1 ~~Zoning indicator panel.~~ Alarm Annunciator and Fire Alarm Control

Unit. ~~A zoning indicator panel and the associated controls shall be provided in an approved location. The visual zone indication shall lock in until the system is reset and shall not be canceled by the operation of an audible alarm silencing switch.~~ Alarm annunciators and fire alarm control units shall comply with all of the following:

1. If a building has a main entrance/foyer and has more than one story, a read-only remote annunciator shall be provided inside the building at the main entrance/foyer.

Exceptions:

1. High-rise buildings provided with a fire command center.
2. Alternate location as approved by the fire code official.

2. If a building has a fire riser room with an exterior door, the fire alarm control unit shall be provided within the fire riser room.

Exceptions:

1. High-rise buildings provided with a fire command center.
2. Alternate location as approved by the fire code official.

3. The location of an operated initiating device shall be displayed by alphanumeric display at the annunciator.

4. The alphanumeric display shall state the device type, the floor level (if applicable), the device address and a descriptive location for the operated device(s).

5. The visible annunciation of the location of operated initiating devices shall not be canceled by the means used to deactivate alarm notification appliances.

JUSTIFICATION:

This amendment updates the code language used for the annunciation of fire alarm signals. It clarifies the need for accessibility by emergency responders. It further states that the fire alarm control unit shall be installed within the fire riser room, and that annunciation is required at the front entrances to multi-story buildings.

SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

A	B	C	D	E	F	G	H	X	I	J	X

*A: address local topographic conditions B: address local geologic conditions C: address local climatic conditions
D: to address special uses/occupancies E: to correlate provisions of a national code with other national codes or State Law
F: clarify the intent of the codes G: address unique designs/systems not anticipated in base codes
H: provide for consistency in regional interpretation/application I: address errata issues J: address fire response capabilities*

COST IMPACT: There will be some cost impact due to a requirements for a remote annunciator, but correlates with regional practice.

COMMITTEE ACTION:

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
	Y	Y	Y	Y	Y		Y	Y	Y	

RESULT: X Approved ___ Failed ___ Withdrawn ___ Tabled ___ Other

SOUTHERN NEVADA CODE AMENDMENT FORM – 2024

AMENDMENT NO.: FLS24-76.01

COMMITTEE: 2024 Fire and Life Safety

CODE SECTION: Section 907.6.6

PROPOSER: Thomas Stewart

PROPOSAL: Revise Section 907.6.6

REVISE AS FOLLOWS:

[F] 907.6.6 Monitoring. Fire alarm systems required by this chapter or by the *International Fire Code* shall be monitored by an *approved* supervising station in accordance with NFPA 72 and as approved by the fire code official. Home care facilities that are licensed by the State of Nevada are also required to be monitored per this section. Proprietary Supervising Station Systems (also called self-monitoring systems), when allowed by the fire code official, shall be in accordance with the IFC and NFPA 72 as approved by the fire code official.

Exception: Monitoring by a supervising station is not permitted unless specifically approved by the fire code official ~~is not required~~ for:

1. Single- and multiple station smoke alarms required by Section 907.2.11.
2. ~~Smoke detectors in Group I-3 occupancies.~~
- ~~3.2. Automatic sprinkler systems in one- and two-family dwellings.~~
3. Monitoring systems utilizing point-by-point monitoring.

In occupancies provided with a fire alarm system, the following four distinctly different alarm signals shall be transmitted to an approved supervising station:

1. Water Flow Alarm, if provided with a fire sprinkler system.
2. Fire Alarm.
3. System Trouble.
4. Supervisory, when applicable.

For new and existing facilities, the supervising station shall only retransmit Water Flow Alarm signals to the Fire Department.

EXCEPTION: The supervising station shall also retransmit fire alarm signals for government buildings, (all facilities owned, leased and/or operated by any City,

County, State, or Federal government agency) schools (including daycares, preschools, public and private schools etc.) and hospitals (including nursing homes, convalescent homes, adult care facilities, group homes, extended care facilities, etc.).

JUSTIFICATION:

Monitoring and the retransmission of signals to a supervising station impact fire department response and safety. Fire agencies have strict policies regulating monitoring. This amendment provides clear direction to supervising stations regarding signals to be monitored and the retransmission of the signals received. Self-monitoring is permitted by Southern Nevada jurisdictions to reduce the number of false alarms. The reason to not allow the items listed as exceptions to be able to provide monitoring is in order to greatly reduce the number of false alarms that would be sent to the monitoring facilities. This amendment eliminates the transmission of nuisance alarm signals to the local fire agencies. Verified fire alarm signals will receive a fire response per local agency policies.

SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

A	B	C	D	E	F	G	H	X	I	J
---	---	---	---	---	---	---	---	---	---	---

*A: address local topographic conditions B: address local geologic conditions C: address local climatic conditions
D: to address special uses/occupancies E: to correlate provisions of a national code with other national codes or State Law
F: clarify the intent of the codes G: address unique designs/systems not anticipated in base codes
H: provide for consistency in regional interpretation/application I: address errata issues J: address fire response capabilities*

COST IMPACT: None, provides clarification.

COMMITTEE ACTION:

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
	Y	Y	Y	Y	Y		Y	Y	Y	

RESULT: X Approved Failed Withdrawn Tabled Other

SOUTHERN NEVADA CODE AMENDMENT FORM – 2024

AMENDMENT NO.: FLS24-18.01

COMMITTEE: 2024 IBC Fire and Life Safety

CODE SECTION: Section 909.5.3

PROPONENT: Doug Evans

PROPOSAL: To allow normally closed doors in smoke barriers used to form smoke control system zone boundaries to be self-closing.

REVISE AS FOLLOWS:

Amend Section 909.5.2 to read as follows:

[F] 909.5.3 Opening protection. Openings in *smoke barriers* shall be protected by automatic-closing devices actuated by the required controls for the mechanical smoke control system. Door openings shall be protected by *fire door assemblies* complying with Section 716.

Exceptions:

1. *Unchanged.*
2. *Unchanged.*
3. *Unchanged.*
4. *Unchanged.*
5. *Unchanged.*
6. *Unchanged.*
7. Door openings in *smoke barriers* shall be permitted to be protected by *self-closing* fire doors in the following locations:
 - 7.1 Guest rooms.
 - 7.2 Individual dwelling units.
 - 7.3 Mechanical rooms.
 - 7.4 Elevator machine rooms.
 - 7.5 Electrical rooms used exclusively for that purpose.
 - 7.6 Doors typically maintained in a closed position as approved by the *Building Official*.

JUSTIFICATION:

This amendment provides a reasonable approach to reduce the complexity and associated costs where self-closing doors have been observed to typically remain closed. Incorporating this

recognized allowance into the SN consensus amendments will also provide consistency in regional interpretation and application of the codes.

Section 909.5.3 requires all doors in a smoke barrier that is incorporated into a smoke control system design to be automatic-closing. Section 3.3.7 of NFPA 80 (2016 edition) defines an “automatic-closing door” as “A door that normally is open but that closes when the automatic-closing device is activated.” Further, IBC Section 716.2.6.6 requires automatic-closing doors installed in smoke barriers to be automatic-closing by the actuation of smoke detectors installed in accordance with Section 907.3 (i.e. smoke detectors connected to the fire alarm system). Therefore, the IBC requires every door in any smoke barrier to have an associated smoke detector that is connected to the fire alarm system.

For buildings with a substantial number of smoke barriers and door openings in those smoke barriers, such as buildings that incorporate smoke control systems, the IBC requirement for all such door openings to be protected with automatic-closing fire doors results in a significant impact on the fire alarm system, not to mention a significant cost increase for the project. Since many of the existing high-rise buildings in Southern Nevada have smoke control systems, this requirement will impact renovations. The proposed amendment would allow a significant number of normally closed doors in smoke barriers to be self-closing, which will reduce the cost impact associated with maintaining and providing smoke control systems.

The proposed amendment is consistent with the previous Southern Nevada amendments to Section 909.5.3 of the IBC, and this allowance has proven to be a reasonable accommodation to owners and designers without negatively impacting life safety.

SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

A		B		C		D		E		F		G	X	H	X	I		J	
----------	--	----------	--	----------	--	----------	--	----------	--	----------	--	----------	---	----------	---	----------	--	----------	--

*A: address local topographic conditions B: address local geologic conditions C: address local climatic conditions
D: to address special uses/occupancies E: to correlate provisions of a national code with other national codes or State Law
F: clarify the intent of the codes G: address unique designs/systems not anticipated in base codes
H: provide for consistency in regional interpretation/application I: address errata issues J: address fire response capabilities*

COST IMPACT: The cost of construction will be decreased as a result of this amendment.

COMMITTEE ACTION:

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
y	y	y	y	y	y	y	y	y	y	y

RESULT: x Approved Failed Withdrawn Tabled Other

SOUTHERN NEVADA CODE AMENDMENT FORM – 2024

AMENDMENT NO.: FLS24-19.02

COMMITTEE: 2024 IBC Fire and Life Safety

CODE SECTION: Section 909.16

PROPONENT: Doug Evans

PROPOSAL: To allow the Fire Department having jurisdiction the decision as to the design and functionality of smoke control panels.

REVISE AS FOLLOWS: Replace entire Section 909.16 and its subsections as follows:

[F] 909.16 Fire-fighter’s smoke control panel. The fire-fighter’s smoke control panels are regulated by the *International Fire Code*.

JUSTIFICATION:

This amendment is intended to address code correlation and to address the uniqueness of this valley with respect to past experience with smoke control systems. Currently, the fire-fighter’s panels in this are regulated by the fire departments. Each local fire department uses different methodologies for the design of smoke control panels within their jurisdiction. None resemble the base IBC language. As such, it is easier to refer to the fire code, and allow each fire department to establish their own regulations for the design and functionality of smoke control panels.

SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

A		B		C		D		E		F		G	X	H	X	I		J	X
---	--	---	--	---	--	---	--	---	--	---	--	---	---	---	---	---	--	---	---

*A: address local topographic conditions B: address local geologic conditions C: address local climatic conditions
D: to address special uses/occupancies E: to correlate provisions of a national code with other national codes or State Law
F: clarify the intent of the codes G: address unique designs/systems not anticipated in base codes
H: provide for consistency in regional interpretation/application I: address errata issues J: address fire response capabilities*

COST IMPACT: None

COMMITTEE ACTION:

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
y	y	y	y	y	y	y	y	y	y	

RESULT: Approved Failed Withdrawn Tabled Other

SOUTHERN NEVADA CODE AMENDMENT FORM – 2024

AMENDMENT NO.: FLS24-41.01

COMMITTEE: IBC Fire and Life Safety

CODE SECTION: 909.18.8.3

PROPONENT: Thomas Stewart

PROPOSAL: To require the smoke control system engineer of record observe the actual installation to help ensure the smoke control system is in accordance with their design.

REVISE AS FOLLOWS:

[F] 909.18.8.3 Reports. A complete report of testing shall be prepared by the *approved* agency. The report shall include identification of all devices by manufacturer, nameplate data, design values, measured values and identification tag or *mark*. The report shall be reviewed by the responsible *registered design professional* and, when satisfied that the design intent has been achieved, the responsible *registered design professional* shall seal, sign and date the report with a statement as follows:

“I have reviewed this report and by personal knowledge and on-site observation certify that the applicable smoke control system(s) are in substantial compliance with the design intent, and to the best of my understanding complies with requirements of the code.”

909.18.8.3.1 Report filing. A copy of the final report shall be filed with the fire responsible code official and an identical copy shall be maintained in an *approved* location at the building.

JUSTIFICATION: This provision has been brought forward from previous amendments to provide for regional interpretation and application of the codes.

This provision is used as an enforcement tool to require the responsible registered design professional perform site visit(s) to the jobsite to confirm the applicable system(s) have been installed in accordance with their approved design. Without this provision in the code, designers may not be as likely to perform site visits, which may result in the incorrect installation and implementation of the intended approved system design.

In order to correlate with varying regional practices, specifying the fire official has been deleted to allow either the building code or fire code official jurisdiction over smoke control systems.

SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

A		B		C		D		E		F		G		H	X	I		J	
---	--	---	--	---	--	---	--	---	--	---	--	---	--	---	---	---	--	---	--

COST IMPACT: Possibly will increase costs over base code practice, but, as a continuation of standard practices within the region, there is no increase in costs to such systems locally.

COMMITTEE ACTION:

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
Y	Y		Y		Y	Y	Y	Y	Y	

RESULT: Approved Failed Withdrawn Tabled Other

SOUTHERN NEVADA CODE AMENDMENT FORM – 2024

AMENDMENT NO.: FLS24 – 77.01

COMMITTEE: 2024 IBC Fire and Life Safety

CODE SECTION: Section 911.2

PROPONENT: Thomas Stewart

PROPOSAL: Add section 911.2

ADD AS FOLLOWS:

[F] 911.2 Secondary Response Point. A Secondary Response Point (SRP) shall be provided in accordance with this section.

911.2.1 Where required. When required by the fire code official, an SRP shall be provided in buildings/facilities that are required to be served by a Fire Command Center.

911.2.2 Components required. The SRP shall have the following components:

1. A fire alarm LCD annunciator that provides a means to scroll through the list of devices that are activated and to acknowledge each alarm. The fire alarm annunciator shall not have the capability of silencing or resetting the building fire alarm system.
2. A microphone capable of providing all-call voice messaging over all notification appliance circuits of the alarm communication system.
3. A pull station capable of evacuating the entire building.
4. An elevator panel that allows the manual transfer of standby power to each elevator cab for all elevators located within the building.

Exception: Where an elevator panel allowing manual transfer of standby power for all elevators is provided at the Fire Command Center, an elevator panel is not required at the SRP.

911.2.3 Location. The SRP shall be located as follows, subject to the approval of the fire code official:

1. The SRP shall be located on the floor designated for primary elevator recall.
2. The exterior entrance leading to the SRP shall be adjacent to the fire department vehicle access lane.
3. The SRP shall be located in an area inaccessible to the public.
4. The SRP shall be located within a travel distance of 200 feet from the building entry.
5. The entrance to the SRP shall be separated from the Fire Command Center a minimum distance equal to 25% of the building perimeter, or a minimum of 250 feet, as measured along the building perimeter.

JUSTIFICATION: Due to the size of special projects that require the installation of a Fire Command Center, it may be counterproductive to take the time to access the Fire Command Center, as access directly to the main building entrance may be more available. This amendment enhances local fire response capabilities in these unique uses and occupancies.

SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

A		B		C		D		E		F		G	X	H	X	I		J	
---	--	---	--	---	--	---	--	---	--	---	--	---	---	---	---	---	--	---	--

*A: address local topographic conditions B: address local geologic conditions C: address local climatic conditions
D: to address special uses/occupancies E: to correlate provisions of a national code with other national codes or State Law
F: clarify the intent of the codes G: address unique designs/systems not anticipated in base codes
H: provide for consistency in regional interpretation/application I: address errata issues J: address fire response capabilities*

COST IMPACT: There will be some cost impacts but due to the large size of buildings in Southern Nevada affected by this amendment it will reduce response time. This requirement has also been in place for several code cycles.

COMMITTEE ACTION:

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
	Y	Y	Y	Y	Y		Y	Y	Y	

RESULT: X Approved Failed Withdrawn Tabled Other

SOUTHERN NEVADA CODE AMENDMENT FORM -2024

AMENDMENT NO.: FLS24-42.01

COMMITTEE: IBC Fire and Life Safety

CODE SECTION: Section 913.1.1

PROPONENT: Thomas Stewart

PROPOSAL: Revise Section 913.1.1

REVISE AS FOLLOWS:

[F] 913.1.1 Redundant pumps in high-rise structures. Where pumps are used in structures with an occupied floor or occupied roof located greater than 250 feet (76 m) above the lowest level of fire department vehicle access, a redundant fire pump shall be provided for each required fire pump.

JUSTIFICATION:

The purpose of this amendment is to require redundant fire pumps for tall buildings. The purpose of this is to ensure reliability in the building. The fire pump is vital in high-rise buildings, so providing a redundant pump is important in order to ensure that the fire pump capacity is maintained.

SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

Amendments required to address special uses and occupancies.

A	B	C	D	E	X	F	G	X	H	H	I	J
---	---	---	---	---	---	---	---	---	---	---	---	---

COST IMPACT: There is a cost impact due to this amendment however, the requirement for redundant pumps has been a standing practice for several code cycles and has been in the Fire Codes. This is intended to correlate to with SNFC.

COMMITTEE ACTION:

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
Y	Y		Y		Y	Y	Y	Y		

RESULT: X Approved ___ Failed ___ Withdrawn ___ Tabled ___ Other

SOUTHERN NEVADA CODE AMENDMENT FORM – 2024

AMENDMENT NO.: FLS24-82.01

COMMITTEE: 2024 IBC Fire and Life Safety

CODE SECTION: 913.1.2

PROPONENT: Jake Hill – PCNA Group

PROPOSAL: Add Section 913.1.2 to require redundant pumps in multiple buildings.

ADD AS FOLLOWS:

[F] 913.1.2 Redundant pumps in multiple buildings.

Where a fire pump is used for booster pressure supply to multiple buildings, a redundant fire pump shall be provided for each required fire pump.

Exception: Where a single building is constructed above a podium building in accordance with Section 510.2, a redundant fire pump configuration is not required.

JUSTIFICATION:

The purpose of this amendment is to require redundant fire pumps when multiple buildings are serviced by one fire pump system. The purpose is to ensure reliability for buildings not intimately involved with a fire scenario. Where required, the fire pump is vital for protection of buildings, so providing a redundant pump is important in order to ensure that the fire pump capacity is maintained. If a single pump is used and fails during a fire, although only one building is damaged from the fire, all of the buildings would lose protection due to the failed fire pump. Providing a redundant pump helps to avoid this situation.

This amendment will result in cost savings for the property owner. Rather than require one fire pump per building, the intent of this amendment is to allow a property owner to save money by the consolidation of pumping into a common facility for multiple buildings on the same property. This consolidated pump site would then be serviced by at least one redundant pump; this has been the typical approach for several decades. However, to comply with the base code, a fire pump per building can be required and will result in higher costs to the property owner.

A common example would be an industrial park with multiple warehouses requiring fire pumps for ESFR sprinkler systems. A developer could effectively produce the water supply necessary from a single pump, with a redundant pump, instead of having a dedicated fire pump for each building. It should be noted that a single fire pump would be permitted to serve multiple structures on the same parcel constructed as a single building as allowed based on a construction type/height/area calculation.

Moreover, this amendment allows for one pump out of service for maintenance with the back-up pump providing the required flow and pressure. The lead time for replacement parts may cause a fire pump to be out of service for an extended duration. Having the back-up pump also avoids having a fire apparatus standby and / or protected lack of coverage eliminating the need of

costly fire watches, operational cessation, prohibitions on hot works and other mitigation measures due to lack of fire protection.

The previous amendment to this code section calls for only structures; this has caused confusion in the interpretation on many projects, specifically where buildings are connected by fire walls and/or multiple buildings exist on a single site. This amendment seeks to rectify this by standardizing the interpretation and clarifying that where multiple buildings are concerned, redundant fire pumps are required.

Utilizing the classification of, “buildings,” will cause confusion among projects where Section 510.2 is implemented. This new exception aims to clarify that where a building configuration consists of exactly one building constructed over another, in accordance with Section 510.2, the use of a single pump will be permitted as this configuration is currently deemed acceptable by all local jurisdictions.

SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

A		B		C		D		E		F	x	G	x	H	x	I		J	
----------	--	----------	--	----------	--	----------	--	----------	--	----------	---	----------	---	----------	---	----------	--	----------	--

*A: address local topographic conditions B: address local geologic conditions C: address local climatic conditions
D: to address special uses/occupancies E: to correlate provisions of a national code with other national codes or State Law
F: clarify the intent of the codes G: address unique designs/systems not anticipated in base codes
H: provide for consistency in regional interpretation/application I: address errata issues J: address fire response capabilities*

COST IMPACT: For multiple buildings/ structures on the same property, the property owner will have to the option to consolidate pumping to a common facility. This will provide cost savings to the property owner overall. Where these common facilities exist, a redundant pump can be provided for the pumping facility, rather than requiring redundant pumps for each building/ structure. Conversely, should the base code be utilized, the cost of projects will increase where redundant pumps are provided for each building/structure independently.

COMMITTEE ACTION: *(leave blank - to be assigned by Committee Chair)*

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
	Y	Y	Y	Y	Y		Y	Y	Y	

RESULT: X Approved Failed Withdrawn Tabled Other

913.1.3

SOUTHERN NEVADA CODE AMENDMENT FORM – 2024

AMENDMENT NO.: FLS24-55.01

COMMITTEE: 2024 IBC Fire Life Safety Committee

CODE SECTION: 913.1.3

PROPONENT: Jake Hill

PROPOSAL: Add New Section 913.1.3 to specify power requirements for redundant pump configurations.

ADD AS FOLLOWS:

[F] 913.1.3: Where redundant pumps are required, electric driven fire pump drivers will be provided with emergency power.

Exception: Where an alternatively powered redundant pump is utilized, i.e. electric primary and diesel, or other non-electric, secondary pump driver is provided, emergency power is not required for electric, primary, fire pump driver.

JUSTIFICATION: Adding this section to the local amendments provides the requirement for a generator or alternatively fueled pump to be provided for redundant pump configurations in all jurisdictions. The intent of this section is to require where two (2) electric fire pumps are utilized for redundancy; it covers a scenario where power is lost to the site which would render the building without sprinklers until the fire department arrives on scene. As this is entirely opposite of what the valley would like to have happened, the code in some jurisdictions currently allows the use of two (2) electric fire pumps without emergency power.

The exception is to provide an alternative, where a generator may not be wanted/needed for the remainder of the site, to provide a “reliable” redundant fire pump configuration by having independently “fueled”/powered pumps. For instance, if a project were to utilize an electric fire pump as a primary, a diesel backup pump would actually be more reliable as it would not require the use of a generator to run.

It is unlikely that both municipal power AND the emergency generator will fail at the same time, although not impossible. However, it is far less likely that two (2) independent sources (electric and diesel) will fail at the same time as there are fewer components that can fail.

Lastly, this will standardize the configurations of fire pumps on complex sites/projects throughout the Las Vegas Valley.

SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

A		B		C		D		E		F		G	X	H	X	I		J	X
----------	--	----------	--	----------	--	----------	--	----------	--	----------	--	----------	---	----------	---	----------	--	----------	---

*A: address local topographic conditions B: address local geologic conditions C: address local climatic conditions
D: to address special uses/occupancies E: to correlate provisions of a national code with other national codes or State Law
F: clarify the intent of the codes G: address unique designs/systems not anticipated in base codes
H: provide for consistency in regional interpretation/application I: address errata issues J: address fire response capabilities*

COST IMPACT: This will decrease the overall cost for redundant pump configurations by providing an option to alleviate ATS's and emergency generators for fire pumps.

COMMITTEE ACTION:

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
Y	Y	Y	Y		Y		Y	Y	Y	

RESULT: X Approved Failed Withdrawn Tabled Other

913.2.3

SOUTHERN NEVADA CODE AMENDMENT FORM – 2024

AMENDMENT NO.: FLS24 – 85.01 (leave blank - to be assigned by Committee Chair)

COMMITTEE: 2024 IBC Fire Life Safety Committee

CODE SECTION: Section 913.2.3

PROPONENT: Michal Turczyk

PROPOSAL: Add Section 913.2.3

ADD AS FOLLOWS:

[F] 913.2.3 Drains. Floor drains having a minimum diameter of 3 inches shall be provided in the fire pump room.

JUSTIFICATION:

The purpose of this amendment is to ensure that a drain is provided in the fire pump room, and to set a minimum drain size to handle spurious accumulation of water.

SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

A		B		C		D		E	<input checked="" type="checkbox"/>	F	<input checked="" type="checkbox"/>	G		H	<input checked="" type="checkbox"/>	I		J
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*A: address local topographic conditions B: address local geologic conditions C: address local climatic conditions
D: to address special uses/occupancies E: to correlate provisions of a national code with other national codes or State Law
F: clarify the intent of the codes G: address unique designs/systems not anticipated in base codes
H: provide for consistency in regional interpretation/application I: address errata issues J: address fire response capabilities*

COST IMPACT: No cost impact as this is intended to correlate with NFPA 20 requirements.

COMMITTEE ACTION:

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	

RESULT: X Approved ___ Failed ___ Withdrawn ___ Tabled ___ Other

1016.2

SOUTHERN NEVADA SNBO CODE AMENDMENT FORM – 2024

AMENDMENT NO.: FLS24-79.01

COMMITTEE: IBC – Fire and Life Safety

CODE SECTION: 1016.2

PROPONENT: Allen Burris

PROPOSAL: To clarify the intent of the code that egress should not be through a more hazardous occupancy

REVISE AS FOLLOWS:

SECTION 1016 – Exit Access

1016.2 Egress through intervening spaces.

Egress through intervening spaces shall comply with this section.

1. *Exit access* through an enclosed elevator lobby is permitted. Where access to two or more exits or *exit access doorways* is required in Section 1006.2.1, access to not less than one of the required *exits* shall be provided without travel through the enclosed elevator lobbies required by Section 3006. Where the path of *exit access* travel passes through an enclosed elevator lobby, the level of protection required for the enclosed elevator lobby is not required to be extended to the *exit* unless *direct access* to an *exit* is required by other sections of this code.
2. In other than Group H occupancies, egress from a room or space is allowed to pass through adjoining or intervening rooms or areas provided that such adjoining rooms or areas and the area served are accessory to one or the other, are the same or lesser hazard occupancy group, and provide a discernible path of egress travel to an exit.
3. In Group H occupancies, egress from a room or space is allowed to pass through adjoining or intervening rooms or areas provided that such adjoining rooms or areas are the same or lesser hazard occupancy group and provide a discernible path of egress travel to an exit.
4. An *exit access* shall not pass through a room that can be locked to prevent egress.
Exception: An electrically locked exit access door providing egress from an elevator lobby shall be permitted in accordance with Section 1010.2.14.
5. *Means of egress* from *dwelling units* or sleeping areas shall not lead through other sleeping areas, toilet rooms or bathrooms.
6. Egress shall not pass through kitchens, storage rooms, closets or spaces used for similar purposes.

Exceptions:

1. 1 Means of egress are not prohibited through a kitchen area serving adjoining rooms constituting part of the same *dwelling unit* or *sleeping unit*.
2. Means of egress are not prohibited through stockrooms in Group M occupancies where all of the following are met:
 - 2.1. The stock is of the same hazard classification as that found in the main retail area.
 - 2.2. Not more than 50 percent of the *exit access* is through the stockroom.
 - 2.3. The stockroom is not subject to locking from the egress side.
 - 2.4. There is a demarcated, minimum 44-inch-wide (1118 mm) *aisle* defined by full- or partial-height fixed walls or similar construction that will maintain the required width and lead directly from the retail area to the exit without obstructions.

JUSTIFICATION:

The previous code was rewritten and presented as a cleanup to remove an exception to an exception. In the transition, the language prohibiting egress through a higher hazard occupancy was removed. This was during COVID when there was little participation in the hearing process and there was no testimony in opposition nor was the removal of the language regarding hazard level mentioned. This would allow a low hazard office space to egress through a warehouse or a factory occupancy where hazard is higher.

SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

A		B		C		D		E		F	X	G	X	H	X	I		J	
----------	--	----------	--	----------	--	----------	--	----------	--	----------	----------	----------	----------	----------	----------	----------	--	----------	--

A: address local topographic conditions B: address local geologic conditions C: address local climatic conditions
D: to address special uses/occupancies E: to correlate provisions of a national code with other national codes or State Law
F: clarify the intent of the codes G: address unique designs/systems not anticipated in base codes
H: provide for consistency in regional interpretation/application I: address errata issues J: address fire response capabilities

COST IMPACT: None

The code change proposal is a clarification of the intent of the code and is not anticipated to increase or decrease cost.

COMMITTEE ACTION:

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
	Y	Y	Y	Y	Y		Y	Y	Y	

RESULT: X Approved ___ Failed ___ Withdrawn ___ Tabled ___ Other

SOUTHERN NEVADA CODE AMENDMENT FORM – 2024

AMENDMENT NO.: FLS24-23.01

COMMITTEE: 2024 IBC Fire & Life Safety Committee

CODE SECTION: 1023.4

PROPONENT: Christy Theisen, Goodhead Consulting Engineers

PROPOSAL: Add an exception for buffer vestibule.

REVISE AS FOLLOWS:

1023.4 Openings. *Interior exit stairway and ramp* opening protectives shall be in accordance with the requirements of Section 716.

Openings in *interior exit stairways* and *ramps* other than unprotected exterior openings shall be limited to those required for *exit access* to the enclosure from normally occupied spaces and for egress from the enclosure.

Elevators shall not open into *interior exit stairways* and *ramps*.

Exception:

Interior exit stairways are permitted to be provided with a buffer vestibule between the floor and the *interior exit stairway* for areas considered normally as non-occupied spaces. The buffer vestibule is required to be constructed in accordance with Section 909.20 and provided with automatic-closing opening protection in accordance with Section 716. The buffer vestibule is in addition to any vestibules required by Section 909.20. Smoke detection shall be provided within the buffer vestibule. Where a building fire alarm system is provided, the buffer vestibule smoke detector(s) shall be connected to the building fire alarm system.

JUSTIFICATION:

This form of an amendment has been applied in Southern Nevada since the 2012 IBC. Exit enclosures are intended to provide a high level of safety to occupants exiting from a building or portion of a building. The Code intends that these enclosures be protected in a manner so as not to impact this level of safety. As such, occupants are considered safe from surrounding areas of the building once they have reached an exit. Exit enclosures have a higher level of fire-resistance separation than most adjacent building spaces and openings are limited to those required for exiting. Section 1023.4 limits the types of openings to “those necessary for exit access to the enclosure from normally occupied spaces and for egress from the enclosure.” This limitation is intended to prevent normally non-occupied spaces from having openings directly onto the enclosure where a fire could develop undetected and thus impact the exit

enclosure. If a fire occurred within a non-occupied space and was allowed to open directly onto an exit enclosure, opening of the door under the fire condition could impact the integrity of the exit. By providing a second vestibule (“buffer vestibule”), as herein proposed, protection of the integrity of the exit enclosure is provided.

In Southern Nevada, many of the large-scale projects are provided with entire floor levels or areas dedicated to mechanical and electrical equipment. These areas are required by Code to be provided with a means of egress but are not permitted to open directly onto an exit enclosure. To allow the use of a vestibule as a protected entry point into the smokeproof enclosure / exit enclosure would simplify the design and review process for facilities in Southern Nevada. This amendment would also allow a more uniform interpretation and accepted design practice.

SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

A		B		C		D		E		F		G	X	H	X	I		J	
----------	--	----------	--	----------	--	----------	--	----------	--	----------	--	----------	---	----------	---	----------	--	----------	--

*A: address local topographic conditions B: address local geologic conditions C: address local climatic conditions
D: to address special uses/occupancies E: to correlate provisions of a national code with other national codes or State Law
F: clarify the intent of the codes G: address unique designs/systems not anticipated in base codes
H: provide for consistency in regional interpretation/application I: address errata issues J: address fire response capabilities*

COST IMPACT:

This proposal may increase the cost of construction. However, this proposal provides a means for designers to continue with the current design practice of providing entire mechanical levels that are normally unoccupied without requiring special approval through the alternate materials and methods process. In the end, the cost of construction may actually be unaffected since the additional construction required by the option presented in this proposal would likely be required by the building official as part of any alternate materials and methods request. As such, this proposal may actually reduce the overall costs by reducing design costs.

COMMITTEE ACTION:

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
y	y	y	y	y	y	y	y	y	y	y

RESULT: x Approved Failed Withdrawn Tabled Other

SOUTHERN NEVADA CODE AMENDMENT FORM – 2024

AMENDMENT NO.: FLS24-007.02

COMMITTEE: 2024 IBC Fire and Life Safety

CODE SECTION: 1027.2

PROPONENT: Allen Burris

PROPOSAL: To make the open stair height limits based on the height which vertigo causes exiting issues rather than base it on arbitrary factors.

REVISE AS FOLLOWS:

1027.2 Use in a means of egress. Exterior exit stairways shall not be used as an element of a required means of egress for Group I-2 occupancies. For occupancies in other than Group I-2, exterior exit stairways and ramps shall not be used as an element of a required means of egress where the highest walking surface of the exterior exit stairway exceeds 65-feet above the lowest finished grade below the stairway.
~~for buildings exceeding six stories above grade plane or that are high-rise buildings.~~

JUSTIFICATION: This change will clarify the intent of Section 1027.2 as identified in the Code Commentary:

“Exterior exit stairways or ramps are not allowed to be required exits in buildings that exceed six stories in height because of the hazard of using such a stairway or ramp in poor weather. Some persons may not be willing to use such a stairway due to vertigo. When confronted with a view from a great height, vertigo sufferers can become confused, disoriented, and dizzy. They could injure themselves, become disoriented, or refuse to move (freeze). In a fire situation, they could become an obstruction in the path of travel, possibly causing panic and injuries to other users of the exit.”

In a study, “Height intolerance between physiological mechanisms and psychological distress (*Acta Otorhinolaryngol Ital.* 2019 Aug)” it was determined that vertigo began to cause instability in susceptible people at a height of 20 meters. This equates to approximately 65 feet. Since the intent of the code, as demonstrated in the commentary, was to limit height due to vertigo, 65 feet is a more appropriate dimension than relying on the high-rise height of 75’. This code change was heard by ICC CAH1 in 2024 as item E103-24 and was approved unanimously 14-0.

The proposed change more effectively captures this intent by:

1. Measuring the maximum height by unit distance rather than by number of stories, which can vary in height by building.
2. Eliminating the reference to high-rise buildings, which similarly does not necessarily reflect the height of the stairway and resultant risk of vertigo.

3. Removing the ambiguity of the “or” statement in the last sentence – as currently written, an exterior exit stairway in a 6-story high-rise building could be interpreted as permitted or not permitted.
4. Specifically addressing the height of the stairway in question rather than the entire building – as currently written, a small exterior exit stairway serving just two stories in a large high-rise building could be interpreted as not permitted, even though this is not the intent of the code.

SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

A		B		C		D		E		F	X	G	X	H	X	I		J	
----------	--	----------	--	----------	--	----------	--	----------	--	----------	---	----------	---	----------	---	----------	--	----------	--

*A: address local topographic conditions B: address local geologic conditions C: address local climatic conditions
D: to address special uses/occupancies E: to correlate provisions of a national code with other national codes or State Law
F: clarify the intent of the codes G: address unique designs/systems not anticipated in base codes
H: provide for consistency in regional interpretation/application I: address errata issues J: address fire response capabilities*

COST IMPACT: The code change proposal is a clarification of the intent of the code and is not anticipated to increase or decrease the cost of construction.

COMMITTEE ACTION:

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
	Y	Y		Y	Y			Y	Y	Y

RESULT: X Approved ___ Failed ___ Withdrawn ___ Tabled ___ Other

SOUTHERN NEVADA CODE AMENDMENT FORM – 2024

AMENDMENT NO.: FLS24-011.02

COMMITTEE: 2024 IBC Fire and Life Safety

CODE SECTION: 1027.5

PROPONENT: Allen Burris

PROPOSAL: Revise the terms for location of exit stairways and ramps to eliminate conflicts with other sections.

REVISE AS FOLLOWS:

1027.5 Location.

Exterior exit stairways and ramps shall be separated by have a minimum ~~fire separation distance~~ of 10 feet (3048 mm) measured at right angles from the exterior edge of the stairway or ramps, including landings, to:

1. *Adjacent lot lines or to the centerline of a street, alley or public way.*
2. *Other portions of the building and other buildings on the same lot.*
3. *~~Other buildings on the same lot unless the adjacent building exterior walls and openings are protected in accordance with Section 705 based on fire separation distance.~~*

For the purposes of this section, other portions of the building shall be treated as separate *buildings*.

Exception Exceptions:

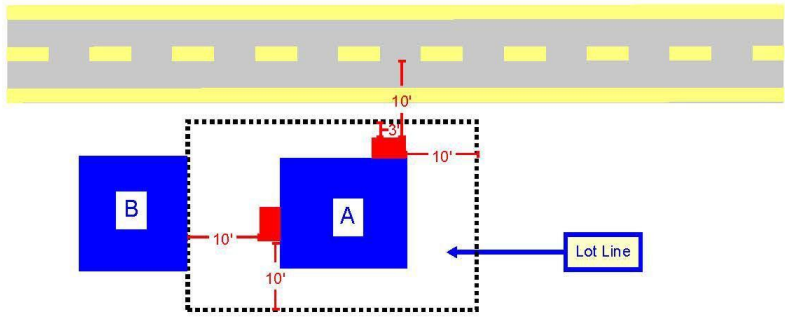
1. *Exterior exit stairways and ramps serving individual dwelling units of Group R-3 shall be separated by have a minimum ~~fire separation distance~~ of 5 feet (1525 mm).*
2. *Where the adjacent building exterior walls and openings are protected in accordance with Section 705 based on fire separation distance.*

JUSTIFICATION: This code change is not intended to change the application of IBC 1027.5. This proposal is intended to clarify how IBC 1027.5 is measured and to remove the contradictions between the minimum distance per IBC 1027.5 and fire separation distance. The term "fire separation distance" has a specific definition and application within the IBC and is not the correct term to use for IBC 1027.5. Fire separation distance is measured at right angles from the building face to the closest interior lot line, the centerline of a street, an alley or public way, or to an imaginary line between two buildings on the lot. IBC 1027.5 specifies that exterior exit stairways and ramps shall be separated from adjacent lot lines, other portions of the building, and other buildings on the same lot unless the adjacent building exterior walls and openings are protected in accordance with Section 705 based on fire separation distance. Removing the term "fire separation distance" will remove the contradiction between the definition of fire separation distance and the minimum distance required per IBC 1027.5.

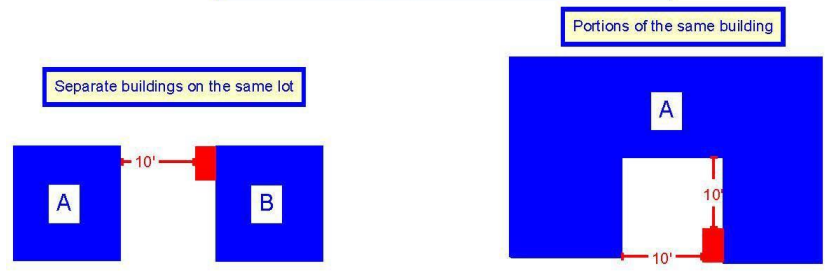
Item 1 was clarified to permit the minimum separation distance to be measured to the centerline of the street, alley, or public way. Exterior exit stairways should not be limited based on the lot line where facing a street. The IBC Code Commentary specifies that the reason a minimum 10 ft separation distance is required to an adjacent lot line is in case a future building is built right on an adjacent lot. Where the lot line faces a street, alley, or public way, the hazard of a building being built right on the adjacent property line is omitted, therefore, the separation distance should be measured to the centerline of the street, alley, or public way similar to how fire separation distance is measured.

Items 2 and 3 were revised to clarify the difference between the separation distance of IBC 1027.5 and fire separation distance. The separation distance of IBC 1027.5 specifically does not reference an imaginary lot line for separate buildings on the same lot. Item 3 addresses separate buildings on the same lot and states that the distance shall be measured perpendicular from the exterior exit stairway to the adjacent building and not an imaginary lot line. A total distance of 10 ft. between buildings is an adequate distance to maintain a safe non-rated egress path. This is further supported by the requirements of egress courts which require a minimum 10 ft. width to have non-rated egress court walls. This was simplified to indicate the minimum 10 ft separation shall be measured to other portions of the building and buildings on the same lot. An exception was added to clarify that where separate buildings on the same lot are protected in accordance with IBC 705 based on fire separation distance the minimum 10 ft separation distance is not required.

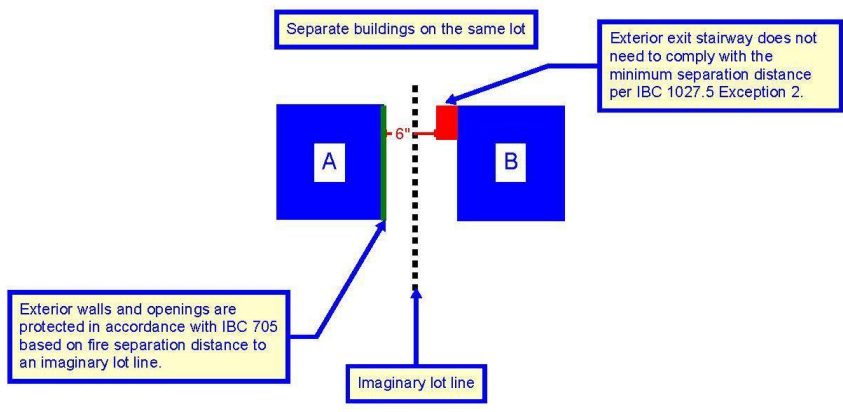
Condition 1: Adjacent lot lines or to the centerline of a street, an alley or public way.



Condition 2: Other portions of the building and other buildings on the same lot.



Exception 2: Where the adjacent building exterior walls and openings are protected in accordance with Section 705 based on fire separation distance.



The definition of “fire separation distance” is defined in the code and the change to the base code is to clarify the separation requirement for exterior exit stairways and ramps. This was clarified in the group a hearing and is E105 attempted to keep the term fire separation distance in and was rejected. The code committee voted to approve E106 of the 2027 IBC which is the same verbiage as written in the amendment. This makes it so that apartment stairs must have the 10-foot separation distance and is explained in the justification. Please see the diagrams above. This will also be base code in the 2027 IBC.

SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

A		B		C		D		E		F	X	G		H		I		J	
----------	--	----------	--	----------	--	----------	--	----------	--	----------	----------	----------	--	----------	--	----------	--	----------	--

*A: address local topographic conditions B: address local geologic conditions C: address local climatic conditions
D: to address special uses/occupancies E: to correlate provisions of a national code with other national codes or State Law
F: clarify the intent of the codes G: address unique designs/systems not anticipated in base codes
H: provide for consistency in regional interpretation/application I: address errata issues J: address fire response capabilities*

COST IMPACT: The change proposal is editorial in nature or a clarification and has no cost impact on the cost of construction.

COMMITTEE ACTION: *Approve with request to add illustration to amendment*

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y

RESULT: X Approved Failed Withdrawn Tabled Other

1030.6.2.3

SOUTHERN NEVADA CODE AMENDMENT FORM – 2024

AMENDMENT NO.: FLS24-81.01

COMMITTEE: 2024 IBC Fire & Life Safety Committee

CODE SECTION: 1030.6.2.3

PROPONENT: Christy Theisen, Goodhead Consulting Engineers

PROPOSAL: Delete sprinkler exceptions #1 and 2

REVISE AS FOLLOWS:

1030.6.2.3 Automatic sprinklers. Enclosed areas with walls and ceilings in buildings or structures containing *smoke-protected assembly seating* shall be protected with an *approved automatic sprinkler system* in accordance with Section 903.3.1.1.

Exceptions:

- ~~1. The floor area used for contests, performances or entertainment provided the roof construction is more than 50 feet (15 240 mm) above the floor level and the use is restricted to low fire hazard uses.~~
- ~~2. Press boxes and storage facilities less than 1,000 square feet (93 m²) in area.~~

JUSTIFICATION:

This form of an amendment has been applied in Southern Nevada since the 2012 IBC.

Exception Nos. 1 and 2 to Section 1030.6.2.3 are not necessary and would result in partially sprinklered buildings, which is not consistent with the high level of protection that Southern Nevada has traditionally prescribed for buildings or portions of buildings containing large assembly uses.

Technical justification for the omission of sprinklers allowed by Exception No. 1 should be provided under an performance-based / alternative methods justification. Today, there are sprinklers listed for ceiling heights of 100 feet.

NFPA 13 (2016), Section 8.1.1(1) requires sprinklers throughout the premises. Under certain conditions, NFPA 13 permits the omission of sprinklers in certain areas and spaces within a building (see Section 8.15 “Special Situations”). However, NFPA 13 does not permit the

omission of sprinklers above a floor area used for contests, performances or entertainment just because the roof construction is more than 55 feet above the floor, nor does NFPA 13 permit the omission of sprinklers in press boxes and storage facilities less than 1,000 square feet in area. If the building is required to be sprinklered throughout, and NFPA 13 does not permit the omission of sprinkler in the locations listed in Exception Nos. 1 and 2, then Exception Nos. 1 and 2 should be deleted for code/standard consistency.

For special circumstances where sprinkler ineffectiveness can be sufficiently demonstrated, the designers can still propose the omission of sprinklers at the ceiling of a tall (> 50 feet) assembly seating space under the Alternate Method and/or Performance-Based Design process. However, by deleting Exception No. 1, the designers will be required to address each project on a case-by-case basis, which is not unreasonable. Entirely removing automatic sprinkler protection from any room should be carefully considered prior to having a blanket allowance such as is provided in Exceptions #1 & 2

SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

A		B		C		D		E	X	F		G		H	X	I		J	
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*A: address local topographic conditions B: address local geologic conditions C: address local climatic conditions
D: to address special uses/occupancies E: to correlate provisions of a national code with other national codes or State Law
F: clarify the intent of the codes G: address unique designs/systems not anticipated in base codes
H: provide for consistency in regional interpretation/application I: address errata issues J: address fire response capabilities*

COST IMPACT:

The proposed amendment will not increase the cost of construction because NFPA 13 would still require sprinkler protection of the areas addressed in Exception Nos. 1 and 2.

COMMITTEE ACTION:

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
	Y	Y	Y	Y	Y		Y	Y	Y	

RESULT: X Approved ___Failed ___Withdrawn ___Tabled ___Other

1030.6.3.1

SOUTHERN NEVADA CODE AMENDMENT FORM – 2024

AMENDMENT NO.: FLS24-80.01

COMMITTEE: 2024 IBC Fire & Life Safety Committee

CODE SECTION: 1030.6.3.1

PROPONENT: Christy Theisen, Goodhead Consulting Engineers

PROPOSAL: Delete sprinkler exceptions #1 and 2

REVISE AS FOLLOWS:

1030.6.3.1 Automatic sprinklers. Enclosed areas with walls and ceilings in buildings or structures containing *open-air assembly seating* shall be protected with an *approved automatic sprinkler system* in accordance with Section 903.3.1.1.

Exceptions:

- ~~1. The floor area used for contests, performances or entertainment provided the roof construction is more than 50 feet (15 240 mm) above the floor level and the use is restricted to low fire hazard uses.~~
- ~~2. Press boxes and storage facilities less than 1,000 square feet (93 m²) in area.~~
3. Open-air assembly seating *facilities* where seating and the means of egress in the seating area are essentially open to the outside.

JUSTIFICATION:

This form of an amendment has been applied in Southern Nevada since the 2012 IBC, when the smoke-protection and open-air seating requirements were combined. The 2021 IBC made separate code sections for these two configurations.

Exception Nos. 1 and 2 to Section 1030.6.2.3 are not necessary and would result in partially sprinklered buildings, which is not consistent with the high level of protection that Southern Nevada has traditionally prescribed for buildings or portions of buildings containing large assembly uses.

Technical justification for the omission of sprinklers allowed by Exception No. 1 should be provided under a performance-based / alternative methods justification. Today, there are sprinklers listed for ceiling heights of 100 feet.

NFPA 13 (2016), Section 8.1.1(1) requires sprinklers throughout the premises. Under certain conditions, NFPA 13 permits the omission of sprinklers in certain areas and spaces within a building (see Section 8.15 “Special Situations”). However, NFPA 13 does not permit the omission of sprinklers above a floor area used for contests, performances or entertainment just because the roof construction is more than 55 feet above the floor, nor does NFPA 13 permit the omission of sprinklers in press boxes and storage facilities less than 1,000 square feet in area. If the building is required to be sprinklered throughout, and NFPA 13 does not permit the omission of sprinkler in the locations listed in Exception Nos. 1 and 2, then Exception Nos. 1 and 2 should be deleted for code/standard consistency.

For special circumstances where sprinkler ineffectiveness can be sufficiently demonstrated, the designers can still propose the omission of sprinklers at the ceiling of a tall (> 50 feet) assembly seating space under the Alternate Method and/or Performance-Based Design process. However, by deleting Exception No. 1, the designers will be required to address each project on a case-by-case basis, which is not unreasonable. Entirely removing automatic sprinkler protection from any room should be carefully considered prior to having a blanket allowance such as is provided in Exceptions #1 & 2

SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

A		B		C		D		E		F		G		H	X	I		J	
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*A: address local topographic conditions B: address local geologic conditions C: address local climatic conditions
D: to address special uses/occupancies E: to correlate provisions of a national code with other national codes or State Law
F: clarify the intent of the codes G: address unique designs/systems not anticipated in base codes
H: provide for consistency in regional interpretation/application I: address errata issues J: address fire response capabilities*

COST IMPACT:

The proposed amendment will not increase the cost of construction because NFPA 13 would still require sprinkler protection of the areas addressed in Exception Nos. 1 and 2.

COMMITTEE ACTION:

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
	Y	Y	Y	Y	Y		Y	Y	Y	

RESULT: X Approved Failed Withdrawn Tabled Other

SOUTHERN NEVADA CODE AMENDMENT FORM – 2024

AMENDMENT NO.: FLS24-25.01

COMMITTEE: 2024 IBC Fire and Life Safety

CODE SECTION: Sections 2606.7.4 and 2606.7.5

PROPOSER: Doug Evans

PROPOSAL: Provide increased restrictions on plastics installed in ceiling configurations.

REVISE AS FOLLOWS: *Revise Section 2606.7.4 and Section 2606.7.5 to read as follows:*

2606.7.4 Automatic sprinkler system. In buildings that are equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1, plastic *light-diffusing systems* shall be protected both above and below unless the sprinkler system has been specifically approved for installation only above the *light-diffusing system*, or the *light-diffusing system* is *listed and labeled* in accordance with UL 723S. Areas of *light-diffusing systems* that are protected in accordance with this section shall ~~not~~ be limited to a maximum panel area of 100 square feet with a maximum dimension of 15 feet. Adjacent panels shall be separated by at least 8 feet vertical and 4 feet horizontal.

2606.7.5 Electrical luminaires. Light-transmitting plastic panels and light-diffuser panels that are installed in *approved* electrical luminaires shall comply with the requirements of Chapter 8 unless the light-transmitting plastic panels conform to the requirements of Section 2606.7.2. The area of approved light-transmitting plastic materials that are used in required *exits* or *corridors* shall not exceed the limitations listed in Sections 2606.7.3 and 2606.7.4 as applicable ~~30 percent of the aggregate area of the ceiling in which such panels are installed, unless the building is equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1.~~

JUSTIFICATION:

This amendment is intended to correlate with the previous SNBC amendments based on special use and occupancy. During previous adoption cycles, the committee felt it was appropriate to restrict the size of panels due to impact on sprinkler operation. We are not aware these additional restrictions have created a hardship for designers or owners.

Due to the heavily themed environments in the Las Vegas Valley, this issue is expected to apply to the local resorts more than most other jurisdictions throughout the US. Over the past several years designers have been proposing more and more plastics in the major facilities. Light transmitting plastic ceilings have been a subject of debate for several years. Over the past few years, light transmitting plastic walls have become popular. These arrangements have typically

been addressed under the requirements of Chapter 8. Recently, more designers are becoming aware of the allowances offered by 2606.7.4.

Section 2606.7.4 is more liberal than Chapter 8, which requires E 84 testing rather than D 635. It also allows unlimited combustible voids as both walls and ceilings. Although E 84 isn't appropriate for testing plastics, it's an 88 kW ignition source rather than a 0.5 kW Bunsen burner and the more heat energy imposed on the target, the more apt it is to ignite and propagate.

2606.7.5 allows substantial quantities of light-transmitting plastics to be used in exits and corridors. Revising these allowances is necessary so that the amount of light-transmitting plastics in protected exit paths does not exceed the limitations specified for less protected spaces.

An additional concern for ceiling applications is the potential for adverse interaction with sprinklers. If a fire originates between four sprinklers, when the heat plume impinges on the plastic material, there is no assurance that sprinklers in the plane of the ceiling will activate prior to the plastic melting. If the plastic degrades from the heat, the heat will enter the void above the ceiling and the sprinklers protecting the void will activate. Sprinklers above the ceiling will then pre-wet the ceiling and the sprinkler piping penetrating the ceiling. This situation may allow the fire to spread on the floor below.

This is a local issue. To allow such installations exceeds the intent of Chapter 8 and Chapter 26 which could readily create an unsafe condition.

SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

A		B		C		D		E		F		G	X	H	X	I		J	
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*A: address local topographic conditions B: address local geologic conditions C: address local climatic conditions
D: to address special uses/occupancies E: to correlate provisions of a national code with other national codes or State Law
F: clarify the intent of the codes G: address unique designs/systems not anticipated in base codes
H: provide for consistency in regional interpretation/application I: address errata issues J: address fire response capabilities*

COST IMPACT:

Adherence to these limitations can be expected to increase the cost of construction beyond that allowed by base code, but is as regulated locally since initial adoption of the 2000 IBC.

COMMITTEE ACTION:

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
	Y	y	y	y	y		y		y	y

RESULT: Approved Failed Withdrawn Tabled Other

SOUTHERN NEVADA CODE AMENDMENT FORM – 2024

AMENDMENT NO.: FLS24 – 84.01

COMMITTEE: 2024 IBC Fire Life Safety Committee

CODE SECTION: IBC Section 2611

PROPONENT: Kevin Murphy

PROPOSAL:

Maintain previous amendments for interior signs and new similar amendment for interior LED Displays.

REVISE AS FOLLOWS: Revise Section 2611 to read as follows:

2611.1 General. Light-transmitting plastic interior signs shall be limited as specified in Sections 2606 and 2611.2 through 2611.4. LED panel displays shall comply with Section 2611.5.

Exception: Light transmitting plastic interior wall signs in covered and open mall buildings shall comply with Section 402.6.4.

2611.2 Maximum area. The aggregate area of all light-transmitting plastics in each individual sign shall not exceed 24 square feet (2.23 m²).

~~Exception: *In buildings* equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1, the aggregate area of light-transmitting plastics shall not exceed 100 square feet (9.29 m²), provided that all plastics are Class CC1 in accordance with Section 2606.4.~~

Exceptions:

1. Signs are permitted to exceed an aggregate area of 24 square feet of light transmitting plastics, provided the light-transmitting plastic meets all the following:
 - a. does not exceed 100 square feet,
 - b. is a minimum CC1 material,
 - c. is installed in a building fully protected by automatic sprinklers in accordance with Section 903.3.1.1, and is installed in a sign that is listed and labeled in accordance with nationally recognized standards.
2. Signs exceeding the 100 square foot limitation of Exception 1 are permitted provided the sign meets all the following:

- a. the height does not exceed 10 feet,
- b. the length does not exceed 60 feet,
- c. the area does not exceed 500 square feet,
- d. the light-transmitting plastic is a minimum CC1 material,
- e. is listed and labeled in accordance with nationally recognized standards,
- f. the space in which the sign is installed is protected with an automatic sprinkler system of at least Ordinary Hazard Group 2, and
- g. a Fire Protection Report is provided to substantiate the preceding requirements are met.

2611.3 Separation. Signs exceeding the aggregate area of Section 2611.2 shall be separated from each other by not less than 4 feet (1219mm) horizontally and 8 feet (2438 mm) vertically.

2611.4 Encasement. Backs of wall-mounted signs and non-illuminated portions of all signs regulated by this section shall be fully encased in metal.

2611.5 LED Display Panels. Signs or displays utilizing LED display panels shall comply with this section of the code.

1. Panels used for LED displays shall be listed appliances.
2. Panel displays up to 1,000 square feet in aggregate area shall be located in a space protected by an automatic sprinkler system of the same design density as the area they are serving.
3. For panel displays exceeding 1,000 square feet, a Fire Protection Report shall be provided to substantiate the level of protection for the space and LED display.

JUSTIFICATION:

The sign amendments have been provided since the 2012 amendment cycle. The LED displays were added to the local amendments in the 2018 cycle. The section is to be modified to allow for local interpretation of the code regarding installations not anticipated by the base code. Additional language is provided to clarify requirements regarding LED panel displays; revisions to section 2611.5 are based on experience of the installation of panels over the previous 6 years as well as a lack of notable fire events nationally. The amendment has been modified from previous versions of LED display panels to allow for designer/project flexibility while not requiring the alternate process.

SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

A	B	C	D	E	F	G	X	H	X	I	J
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A: address local topographic conditions B: address local geologic conditions C: address local climatic conditions
D: to address special uses/occupancies E: to correlate provisions of a national code with other national codes or State Law
F: clarify the intent of the codes G: address unique designs/systems not anticipated in base codes
H: provide for consistency in regional interpretation/application I: address errata issues J: address fire response capabilities

COST IMPACT:

Will reduce cost as LED panel displays will no longer have to comply with interior light transmitting plastic sign requirements. Some costs will increase for plastic signs or the use will be limited. Cost impact may occur with modifications to a standard sprinkler system for the space. Strict interpretation of the code would not allow for these installations.

COMMITTEE ACTION:

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
	Y	Y	Y	Y	Y		Y	Y	Y	

RESULT: X Approved ___ Failed ___ Withdrawn ___ Tabled ___ Other

Appendix H

SOUTHERN NEVADA CODE AMENDMENT FORM – 2024

AMENDMENT NO.: FLS24 – 78.01

COMMITTEE: 2024 IBC Fire and Life Safety

CODE SECTION: Appendix H

PROPONENT: Thomas Stewart

PROPOSAL: Adopt Appendix H

REVISE AS FOLLOWS:

Section H107.1.3 Area Limitation. Add an exception to Section H107.1.3 as follows:

Exception: The area of plastics may be unlimited on a structurally independent sign provided the exterior walls of adjacent buildings are constructed in accordance with Table 602 and located:

1. A minimum of 10 feet from Type I building(s); and
2. A minimum of 10 feet, measured horizontally, from a building's main entrance.

The separation distance from the sign and an adjacent building shall be a consideration for the rating of the building's exterior walls. For the purposes of this exception, the fire resistance rating of the sign may be taken as 0 hours at any separation distance.

JUSTIFICATION: This amendment is required based on the extent of the unique designs encountered in Southern Nevada. Additionally, over the past several years, exterior facades of the major resorts in Southern Nevada are increasingly incorporating substantial signage. Without specific regulations, these signs may be constructed of virtually any materials compromising the type of construction required for the base building. The 1997 Eldorado Casino fire in Reno and the 2006 Venetian fire in Las Vegas are two known losses that have occurred warranting these requirements. Adoption of Appendix H provides recognized limitations on the extent of combustible signage used on the exterior of these structures.

Appendix H was adopted locally for the first time under the 2006 IBC. The FLS Committee is not aware that these requirements have created any undue hardship on industry or our respective jurisdictions. By adopting this appendix, the application of the codes concerning exterior signs will be more consistent.

Due to the unique usage of large signs in the Las Vegas valley, an exception is proposed for allowing large display signs without compromising fire/life safety.

SNBO CRITERIA: Check all applicable SNBO Criteria that apply to amendment proposal:

A	B	C	D	E	F	G	<input checked="" type="checkbox"/>	H	<input checked="" type="checkbox"/>	I	J
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*A: address local topographic conditions B: address local geologic conditions C: address local climatic conditions
D: to address special uses/occupancies E: to correlate provisions of a national code with other national codes or State Law
F: clarify the intent of the codes G: address unique designs/systems not anticipated in base codes
H: provide for consistency in regional interpretation/application I: address errata issues J: address fire response capabilities*

COST IMPACT: None.

COMMITTEE ACTION:

Boulder City	Clark County	Henderson	Las Vegas	Mesquite	Pahrump	North Las Vegas	CC School District	Industry		
								1	2	3
	Y	Y	Y	Y	Y		Y	Y	Y	

RESULT: X Approved Failed Withdrawn Tabled Other