

PROPOSED AMENDMENTS TO THE 2024 INTERNATIONAL BUILDING CODE (IBC)

Note: <u>Underlined</u> text indicates additions and <u>Strikethrough</u> text indicates deletions in the 2024 International Building Code.

Proposal No. 1

Amendment to International Building Code (IBC)

Recommended Amendment:

The following publications are hereby adopted by reference as if set out at length in this Code, three copies of which shall be filed in the office of the City Clerk and kept available for public use and inspection:

Appendix C – Group U – Agricultural Buildings

Appendix E - Supplementary Accessibility Requirements

<u>Appendix I – Patio Covers</u>

Appendix J – Grading

Justification:

All four IBC appendix sections were previously adopted under the 2018 amendment and continue to provide essential guidance for regulating key areas not fully addressed in the main body of the code. These appendices offer specific provisions for agricultural buildings, supplementary accessibility requirements, patio covers (Arizona Rooms), and grading. Their continued adoption ensures clarity, safety, and consistency in permitting and construction practices within these specialized areas.



Amendment to International Building Code (IBC) Section 101.1

Original Code Text:

101.1 Title. These regulations shall be known as the *Building Code* of [NAME OF JURISDICTION], hereinafter referred to as "this code."

Recommended Amendment:

101.1 Title. These regulations shall be known as the *Building Code* of [NAME OF JURISDICTION] *Mesa Building Code*, hereinafter referred to as "this code."

Justification:

Identifies Mesa as the jurisdiction.



Amendment to International Building Code (IBC) Section 101.1 – New Subsection 101.1.1

Original Code Text:
None. New section.
Recommended Amendment:
101.1.1 International Code References. Within the technical codes and the referenced codes and standards therein, specific references to the following International Codes shall be deemed and interpreted to mean the specific City of Mesa Codes as listed herein:
1. International Building Code (IBC) is redefined as Mesa Building Code (MBC)
2. <u>International Fire Code (IFC) is redefined as Mesa Fire Code (MFC)</u>
3. International Residential Code (IRC) is redefined as Mesa Residential Code (MRC)
4. International Mechanical Code (IMC) is redefined as Mesa Mechanical Code (MMC)
5. International Fuel Gas Code (IFGC) is redefined as Mesa Fuel Gas Code (MFGC)
6. <u>International Existing Building Code (IEBC) is redefined as Mesa Existing Building Code (MEBC)</u>
7. International Plumbing Code (IPC) is redefined as Mesa Plumbing Code (MPC)
8. <u>International Swimming Pool and Spa Code (ISPSC) is redefined as Mesa Swimming Pool and Spa Code (MSPSC)</u>
9. <u>International Energy Conservation Code (IECC) is redefined as Mesa Energy Conservation Code (MECC).</u>
Justification:
Clarification. No impact.
Adopted under 2018 Amendments: Yes □ No ☒



Amendment to International Building Code (IBC) Sections 101.4 through 116.5

Recommended Amendment:

Sections 101.4 through 116.5 are deleted in their entirety. Any reference to Sections 101.2 through 116.5 shall comply with Mesa Administration Codes.

Justification:

These sections are deleted because code administration is covered by City Code Title 4 Chapter 1 Mesa Administrative Code.



Amendment to International Building Code (IBC) Section 202

Original Code Text:

EXISTING BUILDING. A building erected prior to the date of adoption of the appropriate code, or one for which a legal building permit has been issued.

EXISTING STRUCTURE. A structure erected prior to the date of adoption of the appropriate code, or one for which a legal building permit has been issued

Recommended Amendment:

EXISTING BUILDING. A building erected prior to the date of adoption of the appropriate code, or one for which a legal building permit Certificate of Occupancy has been issued for at least one year.

EXISTING STRUCTURE. A structure erected prior to the date of adoption of the appropriate code, or one for which a legal structure permit has been closed for at least one year.

Justification:	
Clarifies the definition of existing structures.	
Adopted under 2018 Amendments: Yes ⊠	No 🗆



Amendment to International Building Code (IBC) Section 308.5.4

Original Code Text:

308.5.4 Five or Fewer Persons Receiving Care in a Dwelling Unit. A facility such as the above within a dwelling unit and having five or fewer persons receiving custodial care shall be classified as a Group R-3 occupancy or shall comply with the International Residential Code.

Recommended Amendment:

308.5.4 Five Ten or Fewer Persons Receiving Care in a Dwelling Unit. A facility such as the above within a dwelling unit and having 5 10 or fewer persons receiving custodial care shall be classified as a Group R-3 or R-5 occupancy as applicable. or shall comply with the International Residential Code.

Justification:

Increasing the number of residents in a home setting provides greater flexibility for individuals receiving care.



Amendment to International Building Code (IBC) Section 310.1

Original Code Text:

310.1 Residential Group R. Residential Group R includes, among others, the use of a building or structure, or a portion thereof, for sleeping purposes when not classified as an Institutional Group I or when not regulated by the *International Residential Code* in accordance with Section 101.2 of the *International Building Code*.

Recommended Amendment:

310.1 Residential Group R. Residential Group R includes, among others, the use of a building or structure, or a portion thereof, for sleeping purposes when not classified as an Institutional Group I or when not regulated by the *International Residential Code* in accordance with Section 101.2 of the *International Building Code*.

Justification:	
Clarification. No impact.	55
Adopted under 2018 Amendments: Yes	⊠ No □



Amendment to International Building Code (IBC) Section 310.4

Original Code Text:

310.4 Residential Group R-3. Residential Group R-3 occupancies where the occupants are primarily permanent in nature and not classified as R-1, R-2, R-4, or I, including:

Buildings that do not contain more than 2 dwelling units

Care facilities that provide accommodations for five or fewer persons receiving care

Congregate living facilities (nontransient) with 16 or fewer occupants

Boarding houses (nontransient)

Convents

Dormitories

Emergency services living quarters

Fraternities and sororities

Monasteries

Congregate living facilities (transient) with 10 or fewer occupants

Boarding houses (transient)

Lodging houses (transient) with five or fewer guest rooms and 10 or fewer occupants

Hotels (nontransient) with five or fewer guest rooms

Motels (nontransient) with five or fewer guest rooms.

Recommended Amendment:

310.4 Residential Group R-3. Residential Group R-3 occupancies where the occupants are primarily permanent in nature and not classified as R-1, R-2, R-4, <u>R-5</u> or I, including:

Buildings that do not contain more than 2 dwelling units

Care facilities that provide accommodations for five or fewer persons receiving care

Congregate living facilities (nontransient) with 16 or fewer occupants

Boarding houses (nontransient)

Convents

Dormitories

Emergency services living quarters

Fraternities and sororities

Monasteries

Congregate living facilities (transient) with 10 or fewer occupants

Boarding houses (transient)

Lodging houses (transient) with five or fewer guest rooms and 10 or fewer occupants

Hotels (nontransient) with five or fewer guest rooms

Motels (nontransient) with five or fewer guest rooms.

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Clarification. No impact.



Amendment to International Building Code (IBC) Section 310.4.1

Original Code Text:

310.4.1 Care Facilities Within a Dwelling. Care facilities for five or fewer persons receiving care that are within a single-family dwelling are permitting to comply with the International Residential Code provided an automatic sprinkler system is installed in accordance with Section 903.3.1.3 of this code or Section P2904 of the *International Residential Code*.

Recommended Amendment:

310.4.1. Care Facilities Within a Dwelling. Care facilities for five or fewer persons incapable of self-preservation receiving care that are within a single-family dwelling are permitting to comply with the International Residential Code provided an automatic sprinkler system is installed and provide fire sprinklers in accordance with Section 903.3.1.3. of this code or Section P2904 of the International Residential Code.

Justification:

Amendment clarifies that small residential care facilities for five or fewer persons incapable of self-preservation, when located within a single-family dwelling, may be designed under the International Residential Code (IRC) provided the dwelling is equipped with a fire sprinkler system in accordance with Section 903.3.1.3 (NFPA 13D). This ensures an appropriate balance between life safety and regulatory flexibility by maintaining residential construction standards while requiring automatic fire protection suitable for the limited occupant load.

The intent is to support community-based care settings that operate in typical residential environments without imposing institutional construction requirements disproportionate to their size or risk. Requiring residential sprinklers preserves a reasonable level of fire and life safety for both occupants and responders, aligns with national model code intent, and promotes consistency in the application of building and fire code provisions for small care facilities.

Ada	pted	under	20	18	Amend	lments:	Y	es]	N	o l	X	
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Amendment to International Building Code (IBC) Section 310.5

Original Code Text:

310.5 Residential Group R-4. Residential Group R-4 occupancies shall include buildings, structures or portions thereof for more than five but not more than 16 persons, excluding staff, who reside on a 24-hour basis in a supervised residential environment and receive custodial care. Building of Group R-4 shall be classified as one of the occupancy conditions indicated below. This group shall include, but not be limited to, the following:

Alcohol and drug centers
Assisted living facilities
Congregate care facilities
Group homes
Halfway houses
Residential board and care facilities
Social rehabilitation facilities

Group R-4 occupancies shall meet the requirements for construction as defined for Group R-3, except as otherwise provided for in this code.

Recommended Amendment:

310.5 Residential Group R-4. Residential Group R-4 occupancies shall include buildings, structures or portions thereof for more than five but not more than 16 persons, excluding staff, who reside on a 24-hour basis in a supervised residential environment and receive custodial care. Building of Group R-4 shall be classified as one of the occupancy conditions indicated below. This group shall include, but not be limited to, the following:

Alcohol and drug centers
Assisted living facilities
Congregate care facilities
Group homes
Halfway houses
Residential board and care facilities
Social rehabilitation facilities

Group R-4 occupancies shall meet the requirements for construction as defined for Group R-3 or R-5, except as otherwise provided for in this code.

Justification:

Complies with Arizona Revised Statutes (A.R.S.) 9-	807 which prohibits	cities from requ	iring fire sprinkler
in one- and two-family dwellings.			

Adopted under 2018 Amendments: Ye	es 🛛	No	
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Amendment to International Building Code (IBC) Section 310 – New Subsection 310.6

Original Code Text:

There is no original code text. This is an added subsection.

Recommended Amendment:

310.6 Residential Group R-5. Residential Group R-5 occupancies where the occupants are primarily permanent as detached one- and two-family dwellings and multiple single-family dwellings (townhouses) and their accessory structures conforming with the Mesa Residential Code. R-5 occupancies may include:

Buildings that do not contain more than two (2) dwelling units

Care facilities that provide accommodations for five or fewer persons receiving care

Congregate living facilities (nontransient) with 16 or fewer occupants

Boarding houses (nontransient)

Convents

Dormitories

Emergency services living quarters

Fraternities and sororities

Monasteries

Congregate living facilities (transient) with 10 or fewer occupants

Boarding houses (transient)

Lodging houses (transient) with five or fewer guest rooms and 10 or fewer occupants

Hotels (nontransient) with five or fewer guest rooms

Motels (nontransient) with five or fewer guest rooms.

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Clarification. No impact.



Amendment to International Building Code (IBC) Section 310.6.1

Original Code Text:

There is no original code text. This is an added subsection.

Recommended Amendment:

310.6.1 Care Facilities Within a Dwelling. Care facilities for five or fewer persons incapable of self-preservation receiving care that are within a single-family dwelling are permitting to comply with the International Residential Code and provide fire sprinklers in accordance with Section 903.3.1.3.

Justification:

Amendment clarifies that small residential care facilities for five or fewer persons incapable of self-preservation, when located within a single-family dwelling, may be designed under the International Residential Code (IRC) provided the dwelling is equipped with a fire sprinkler system in accordance with Section 903.3.1.3 (NFPA 13D). This ensures an appropriate balance between life safety and regulatory flexibility by maintaining residential construction standards while requiring automatic fire protection suitable for the limited occupant load.

The intent is to support community-based care settings that operate in typical residential environments without imposing institutional construction requirements disproportionate to their size or risk. Requiring residential sprinklers preserves a reasonable level of fire and life safety for both occupants and responders, aligns with national model code intent, and promotes consistency in the application of building and fire code provisions for small care facilities.

Adopted under 2018 Amendments:	Yes		No	\boxtimes
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Amendment to International Building Code (IBC) Section 310 – New Subsection 310.7

(IBC) Section 310 – New Subsection 310.7
Original Code Text:
There is no original code text. This is an added subsection.
Recommended Amendment:
310.7 Security Standard.
310.7.1 Requirement. All main or front-entry doors of all dwelling units shall be arranged so that the occupant has a view of the area immediately outside the door without opening the door. Such view may be provided by a door viewer having a field of view of not less than one hundred eighty (180) degrees or
through windows.
Justification:
Added level of security. Allows residents to see guests before opening the entrance door.
This Adopted under 2018 Amendments: Yes No



Amendment to International Building Code (IBC) Section 402.5

Original Code Text:

402.5 Automatic Sprinkler System. Covered and open mall buildings and buildings connected shall be equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1, which shall comply with all of the following:

- 1. The automatic sprinkler system shall be complete and operative throughout occupied space in the mall building prior to occupancy of any of the tenant spaces. Unoccupied tenant spaces shall be similarly protected unless provided with approved alternative protection.
- 2. Sprinkler protection for the mall of a covered mall building shall be independent from that provided for tenant spaces or anchor buildings.
- 3. Sprinkler protection for the tenant spaces of an open mall building shall be independent from that provided for anchor buildings.
- 4. Sprinkler protection shall be provided beneath exterior circulation balconies located adjacent to an open mall.
- 5. Where tenant spaces are supplied by the same system, they shall be independently controlled.

Exception:

An automatic sprinkler system shall not be required in spaces or areas of open parking garages separated from the covered or open mall building in accordance with Section 402.4.2.3 and constructed in accordance with Section 406.5.

Recommended Amendment:

402.5 Automatic Sprinkler System. Covered and open mall buildings and buildings connected shall be equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1, which shall comply with all of the following:

- 1. The automatic sprinkler system shall be complete and operative throughout occupied space in the mall building prior to occupancy of any of the tenant spaces. Unoccupied tenant spaces shall be similarly protected unless provided with approved alternative protection.
- 2. Sprinkler protection for the mall of a covered mall building shall be independent from that provided for tenant spaces or anchor buildings.
- 3. Sprinkler protection for the tenant spaces of an open mall building shall be independent from that provided for anchor buildings.



- 4. Sprinkler protection shall be provided beneath exterior circulation balconies located adjacent to an open mall.
- 5. Where tenant spaces are supplied by the same system, they shall be independently controlled.

Exception:

An automatic sprinkler system shall not be required in spaces or areas of open parking garages separated from the covered or open mall building in accordance with Section 402.4.2.3 and constructed in accordance with Section 406.5.

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Amendment to International Building Code (IBC) Section 404.3

Original Code Text:

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 sprinkled 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.

Recommended Amendment:

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 sprinkled 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.
- 1. 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:

Safety. Fire sprinklers will be required throughout	buildings with atriums.
Adopted under 2018 Amendments: Yes ⊠	No □



Amendment to International Building Code (IBC) Section 410.6

Original Code Text:

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.
- 2. Sprinklers are not required for stages 1,000 square feet (93m²) 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.
- 3. Sprinklers are not required within portable orchestra enclosures on stages.
- 4. Sprinklers are not required under catwalks and galleries where they are permitted to be omitted in accordance with Section 903.3.1.1.

Recommended Amendment:

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 (1,219 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.
- 2. Sprinklers are not required for stages 1,000 square feet (93m²) 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. Sprinklers are not required within portable orchestra enclosures on stages.
- AMILIAN SHRVICES AMILIA 3. Sprinklers are not required under catwalks and galleries where they are permitted to be omitted in accordance with Section 903.3.1.1.

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Amendment to International Building Code (IBC) Section 420.4

Original Code Text:

420.4 Automatic Sprinkler System. Group R occupancies shall be equipped throughout with an automatic sprinkler system in accordance with Section 903.2.8. Group I-1 occupancies shall be equipped throughout with an automatic sprinkler system in accordance with Section 903.2.6. Quick-response or residential automatic sprinklers shall be installed in accordance with Section 903.3.2.

Recommended Amendment:

420.4 Automatic Sprinkler System. Other than where preempted by Arizona State Law, Group I-1 and R occupancies shall be equipped throughout with an automatic sprinkler system in accordance with Section 903.2.8 903.2.1. Group I-1 occupancies shall be equipped throughout with an automatic sprinkler system in accordance with Section 903.2.6. Quick-response or residential automatic sprinklers shall be installed in accordance with Sections 903.3.2. One- and two-family dwells shall be installed in accordance with Sections 903.3.1.3.

Justification:

Complies with Arizona Revised Statutes (A.R.S.) 9-807 which prohibits cities from requiring fire sprinklers in one- and two-family dwellings.



Amendment to International Building Code (IBC) Section 708.3

Original Code Text:

708.3 Fire-resistance Rating. Fire partitions shall have a fire-resistance rating of not less than 1 hour.

Exceptions:

- 1. Corridor walls permitted to have a 1/2-hour fire-resistance rating by Table 1020.2.
- 2. Dwelling unit and sleeping unit separations in buildings of Types IIB, IIIB and VB construction shall have fire-resistance ratings of not less than 1/2 hour in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

Recommended Amendment:

708.3 Fire-resistance Rating. Fire partitions shall have a fire-resistance rating of not less than 1 hour except when required by Section 420.2 in a building that does not have an automatic sprinkler system the fire-resistance rating shall not be less than 2 hours.

Exceptions:

- 1. Corridor walls permitted to have a 1/2-hour fire-resistance rating by Table 1020.2.
- 2. Dwelling unit and sleeping unit separations in buildings of Types IIB, IIIB and VB construction shall have fire-resistance ratings of not less than 1/2 hour in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1.

Justification:

Arizona Revised Statutes 9-807 prohibits cities from requiring fire sprinklers in one- and two-family dwellings. In the absence of fire sprinklers, this amendment increases the fire rating of walls between dwelling units. The intent is to reduce the risk of fire spreading from one dwelling unit to another.

Adopted under	2018 Amendments:	Yes	No	\boxtimes



Amendment to International Building Code (IBC) Section 901.4.7.1

Original Code Text:

901.4.7.1 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.

Recommended Amendment:

901.4.7.1 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, <u>an exterior door shall be provided</u>, the door shall be <u>and</u> permitted to be locked provided that the key is available at all times.

Justification:

Code ensures critical fire protection equipment such as automatic sprinkler system risers, fire pumps, and controllers remain easily accessible for inspection, maintenance, and emergency response. Providing ready access, including an exterior door when these components are housed in dedicated rooms, allows firefighters and maintenance personnel to quickly reach and operate the systems during an emergency or routine checks. Allowing the door to be locked with a key readily available balances security with immediate access, preventing unauthorized entry while ensuring that first responders and authorized personnel can access lifesaving equipment without delay.



Amendment to International Fire Code (IFC) Sections 901.6.1 – New Section 901.6.1.1

	<u>901.6.1.1</u>
Original Code Text:	

There is no original code text. This is an added subsection.

Recommended Amendment:

901.6.1.1 Contractor Qualification. The fire code official shall validate contractor qualification and training at least once every 3 years.

Justification:

To ensure fire protection systems are installed and maintained to meet minimum safety and reliability standards, a fire code official must approve contractors' qualifications at least every three years to ensure ongoing competency and compliance. The City of Phoenix Fire Department enforces a similar standard. This amendment will ensure routine verification of contractor training, maintaining the high-quality fire protection and public safety required. Details on specific enforcement will be provided on the Mesa Fire and Medical Department Fire Prevention website if the amendment is adopted.



Amendment to International Building Code (IBC) Section 903.2 through 903.2.11.1.3

Original Code Text:

The original code text is too lengthy to include in this document. Refer to the 2024 IFC for details.

Recommended Amendment:

Sections 903.2 through 903.2.11.1.3 are deleted in their entirety.

Justification:

Sections related to fire sprinkler requirements under Section 903.2 have been removed because all these provisions were comprehensively modified and updated. This code modification changes were initially implemented in the 2006 edition of the International Fire Code. Removing these sections ensures consistency with the current IFC standards and avoids duplication or confusion in enforcement.



Original Code Text:	
There is no original code text. This is an added	d subsection.
Recommended Amendment:	
903.2 Where Required. Approved automatic sin this Section.	sprinkler systems shall be provided in the locations described
Justification:	
nstallation provisions were comprehensively	under Section 903.2 was updated because all fire sprinkler modified and updated. This code modification was initially national Fire Code. Revisions ensure consistency with the or confusion in enforcement.
Adopted under 2018 Amendments: Yes 🛛	No □
OP MILITIAL SERVICES	



Amendment to International Building Code (IBC) Section 903.2 – New Subsection 903.2.1

Original Code Text:

There is no original code text. This is an added subsection.

Recommended Amendment:

903.2.1 New Buildings or Structures. All areas of new buildings or structures, and other locations required by this Chapter or the Mesa Fire Code, shall be provided with an automatic fire sprinkler system complying with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3 as applicable.

Exceptions:

<u>Unless the use of the facility otherwise requires automatic fire sprinkler protection, fire sprinkler systems shall not be required for the following:</u>

- 1. R-3 and R-5 other than care facilities with persons incapable of self-preservation in accordance Section 203.9.3.1.
- 2. <u>R-4 condition 1.</u>
- 3. Other buildings or structures accessory to and located on the same lot with R-3, R-4, or R-5 occupancies.
- 4. Detached non-residential buildings not exceeding 500 square feet (46.5 m²) in floor area and not closer than 5 feet (1,524 mm) to any building or property line.
- 5. Detached gazebos, ramadas, and canopies not greater than 5,000 square feet (465 m²) in roof area, with no combustible storage, portable heating devices, or cooking beneath, and not closer than 5 feet to any building, property line, or other shade canopy.
- 6. Detached non-combustible or NFPA 701 compliant gazebos, ramadas, and canopies not greater than 5,000 square feet (465 m²) in roof area, with no combustible storage and not closer than 5 feet to any building, property line, or other shade canopies.
- 7. Detached restroom facilities associated with golf courses, parks and similar uses.
- 8. Noncombustible portable storage containers used for storage purposes.
- 9. Exterior covered/enclosed walkways of Type I, II or III construction, with no combustible storage beneath, and with enclosing walls that are at least 50 percent open with fire code official approval.



Justification:

Section 903.2.1 ensures all new buildings and structures are equipped with automatic fire sprinkler systems, significantly enhancing life safety and property protection by enabling rapid fire suppression. This requirement aligns with modern fire safety standards by reducing the risk of fire spread and providing occupants with more time to evacuate safely. By mandating compliance with specific sprinkler system provisions, the code promotes uniformity and clarity in design and installation, supporting effective enforcement and consistent protection across new developments.

The listed exceptions balance safety with practicality by recognizing unique building types and uses where sprinkler systems may not be necessary or feasible without compromising safety. These exemptions account for smaller detached structures, open-air canopies, and one- and two-family dwellings where the risk to life and property is lower or where alternative safety measures exist, while also aligning with State of Arizona statutes. This approach ensures resources are focused on higher-risk areas while maintaining appropriate safeguards tailored to each building's specific use and construction.



Amendment to International Building Code (IBC) Section 903.2 – New Subsection 903.2.2

Original Code Text:

There is no original code text. This is an added subsection.

Recommended Amendment:

903.2.2 Group H-5 Occupancies. An automatic sprinkler system shall be installed throughout buildings containing Group H-5 occupancies. The design of the sprinkler system shall not be less than that required under the *Mesa Building Code* for the occupancy hazard classifications in accordance with Table 903.2.2. Where the design area of the sprinkler system consists of a corridor protected by one row of sprinklers, the maximum number of sprinklers required to be calculated is 13.

TABLE 903.2.2 GROUP H-5 AU	TOMATIC SPR	RINKLER SYSTEM DESIGN CRITERIA
Location		Occupancy Hazard Classification
Fabrication areas		Ordinary Hazard Group 2
Service corridors		Ordinary Hazard Group 2
Storage rooms without dispensing	1	Ordinary Hazard Group 2
Storage rooms with dispensing		Extra Hazard Group 2
Corridors		Ordinary Hazard Group 2

Justification:

Code already exists in 2024 IFC Section 903.2.5.2. Added back to code to ensure Group H-5 occupancies within the specified categories continue to meet the minimum fire sprinkler system design requirements established by the base code. Reinstating this provision clarifies and reinforces the intent to provide adequate fire protection for these high-hazard occupancies, addressing unique risks associated with hazardous materials or processes.

Adopted under	2018 Amendments:	Yes	\boxtimes	No		
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Amendment International Building Code (IBC) Section 903.2 – New Subsection 903.2.3

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There is no original code text. This is an added subsection.

Recommended Amendment:

903.2.3 Change of Occupancy. Where conditions exceed Section 102.3, an existing building or portion thereof undergoing a change of occupancy shall provide an automatic sprinkler system complying with the requirements of this chapter and Mesa Existing Building Code.

Exceptions:

1. Where approved by the fire code official, a change of occupancy shall be permitted without complying with the requirements of this code and the International Mesa Existing Building Code, provided that the new or proposed use or occupancy is less hazardous, based on life and fire risk, than the existing use or occupancy.

Justification:

Existing buildings undergoing a change of occupancy often present increased life or fire risks; therefore, automatic sprinkler systems are required to meet current safety standards and protect occupants and property. An exception allows the fire code official to waive sprinkler upgrades if the new occupancy is less hazardous than the previous use, providing necessary flexibility while maintaining safety. This balanced approach supports effective risk management and encourages practical reuse of existing buildings without compromising fire protection.

Adopted under 2018	Amendments: \	Yes	\boxtimes	No l	
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Amendment to International Building Code (IBC) Section 903.2 – New Subsection 903.2.4

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There is no original code text. This is an added subsection.

Recommended Amendment:

903.2.4 Additions. All additions to existing buildings shall be provided with an automatic fire protection system throughout the existing building and addition compliant with Section 903.3 as applicable.

Exceptions:

- 1. Additions of 1,000 sq. ft. (93 m²) or less to existing buildings without fire sprinklers. The aggregate of multiple additions shall not exceed 1,000 sq. ft. (93 m²).
- 2. Additions to R-3, R-4 Condition 1 and R-5 occupancies, not including care facilities with persons incapable of self-preservation in accordance Section 203.9.3.1.

Justification:

Existing buildings undergoing modifications often present increased life or fire risks; therefore, automatic sprinkler systems are required to meet current safety standards and protect occupants and property. An exception allows buildings with modifications totaling less than 1,000 square feet over the building's lifetime to waive sprinkler upgrades, provided there is no conflict with Section 903.2.3. Additionally, per Mesa Fire Code 903.2.1, fire sprinklers are not required in R-3, R-4, and R-5 occupancies, except for facilities housing persons incapable of self-preservation. This balanced approach supports effective risk management while encouraging practical reuse of existing buildings without compromising fire protection.

Adopted under	2018 Amendments: Yes	\boxtimes	No	



Amendment to International Building Code (IBC) Section 903.3.1.1.1

Original Code Text:

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 any room merely because it is damp, of 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. Fire service access elevator machine rooms and machinery spaces.
- 5. Machine rooms, machinery spaces, control rooms and control spaces associated with occupant evacuation elevators designed in accordance with Section 3008 of the International Building Code.

Recommended Amendment:

903.3.1.1.1 Exempt Locations. With fire code official approval, 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 any room merely because it is damp, of 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 content. 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. Fire service access elevator machine rooms and machinery spaces.
- 5. Machine rooms, machinery spaces, control rooms and control spaces associated with occupant evacuation elevators designed in accordance with Section 3008 of the International Building Code.



Justification:

Exemption modified to grant the fire code official flexibility to determine whether specific facilities meet

Adopted under 2018 Amendments: Yes ⊠	No 🗆
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Amendment to International Building Code (IBC) Section 903.3.1.1 – New Subsection 903.3.1.1.4

Original Code Text:

There is no original code text. This is an added subsection.

Recommended Amendment:

903.3.1.1.4 Minimum Design Requirement. The minimum design requirement for fire sprinkler systems shall be as determined by the Mesa Fire Code or as defined in Section 903.3.1.1.4 whichever is greater.

903.3.3.1.1.4.1 Shell Buildings. The minimum fire sprinkler system design for shell buildings shall be Ordinary Group II as defined in 903.3.1.1.

903.3.3.1.1.4.2 Buildings with Roof Structure over 20 feet (6,096 mm). The minimum design requirements for Group H, F and S-1 buildings with the roof structure over 20 feet (6,096 mm) above the finished floor shall be Extra Hazard Group I as defined in Chapter 32 and Section 903.3.1.1.

Justification:

These amendments establish clear minimum design standards for fire sprinkler systems, ensuring the application of the most protective requirements. Specifying Ordinary Group II design for shell buildings provides a consistent baseline for partially finished structures, enhancing safety during build out and future proofing buildings regardless of current usage. Requiring Extra Hazard Group I design for Group H, F, and S-1 buildings with roof heights over 20 feet addresses the increased fire risks associated with taller spaces and hazardous occupancies, while clarifying precise design requirements that were previously unclear. This approach improves fire protection by tailoring system design to specific building conditions.

Adopted under 2018	Amendments: Yes	\boxtimes	No 🗆
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Amendment to International Building Code (IBC) Section 903.3.1.2.3

Original Code Text:

903.3.1.2.3 Attics. Attic protection shall be provided as follows:

- 1. Attics that are used or intended for living purposes or storage shall be protected by an automatic sprinkler system.
- 2. Where fuel-fired equipment is installed in an unsprinklered attic, not fewer than one quick-response intermediate temperature sprinkler shall be installed above the equipment.
- 3. Where located in a building of Type III, Type IV or Type V construction designed in accordance with Section 510.2 or 510.4 of the International Building Code, attics not required by item 1 to have sprinklers shall comply with one of the following if the roof assembly is located more than 55 feet (16,764 mm) above the lowest level of fire department vehicle access needed to meet the provisions in Section 503:
 - 3.1 Provide automatic sprinkler system protection.
 - 3.2 Construct the attic using noncombustible materials.
 - 3.3 Construct the attic using fire-retardant-treated wood complying with Section 2303.2 of the International Building Code.
 - 3.4 Fill the attic with noncombustible insulation.

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. For the purpose of this measurement, required fire vehicle access roads shall include only those roads that are necessary for compliance with Section 503.

- 1. Group R4, Condition 2 occupancy attics not required by Item 1 to have sprinklers shall comply with one of the following:
 - 4.1 Provide automatic sprinkler system protection.
 - 4.2 Provide a heat detection system throughout the attic that is arranged to activate the building fire alarm system.
 - 4.3 Construct the attic using noncombustible materials.
 - 4.4 Construct the attic using fire-retardant-treated wood complying with Section 2303.2 of the



International Building Code.

4.5 Fill the attic with noncombustible insulation.

Recommended Amendment:

903.3.1.2.3 Attics. Attic protection shall be provided as follows:

- 2. Attics that are used or intended for living purposes or storage shall be protected by an automatic sprinkler system.
- 3. Where fuel-fired equipment is installed in an unsprinklered attic, not fewer than one quick-response intermediate temperature sprinkler shall be installed above the equipment.
- 4. Where located in a building of Type III, Type IV or Type V construction designed in accordance with Section 510.2 or 510.4 of the International Building Code, attics not required by item 1 to have sprinklers shall comply with one of the following if the roof assembly is located more than 55 feet (16,764 mm) above the lowest level of fire department vehicle access needed to meet the provisions in Section 503: Attics not required by Item 1 to have sprinklers shall comply with one of the following:
 - 3.1 Provide automatic sprinkler system protection.
 - 3.2 Construct the attic using noncombustible materials.
 - 3.3 Construct the attic using fire-retardant-treated wood complying with Section 2303.2 of the International Building Code.
 - 3.4 Fill the attic with noncombustible insulation.

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. For the purpose of this measurement, required fire vehicle access roads shall include only those roads that are necessary for compliance with Section 503.

- 5. Group R4, Condition 2 occupancy attics not required by Item 1 to have sprinklers shall comply with one of the following:
 - 4.1 Provide automatic sprinkler system protection.
 - 4.2 Provide a heat detection system throughout the attic that is arranged to activate the building fire alarm system.
 - 4.3 Construct the attic using noncombustible materials.
 - 4.4 Construct the attic using fire-retardant-treated wood complying with Section 2303.2 of the



International Building Code.

4.5 Fill the attic with noncombustible insulation.

Justification:

Section 903.3.1.2.3 is removed because its intent is to require sprinkler protection in attics due to the inherent fire hazards in R-1, R-2, and R-4 condition 2 occupancies. History has shown that once fire reaches an attic, it spreads rapidly throughout the building, significantly decreasing occupant survivability. The code still provides builders with the flexibility to install fire-retardant materials. Removing this provision eliminates conflicting language and supports consistent application of attic sprinkler requirements aligned with occupant risk and fire safety priorities.



Amendment to International Building Code (IBC) Section 903.3.1.2 – New Subsection 903.3.1.2.4

Original Code Text:

There is no original code text. This is an added subsection.

Recommended Amendment:

903.3.1.2.4 Required Fire Protection Systems. For the purpose of inspection, testing, or maintenance of fire protection systems in R-1 and R-2 occupancies, there shall be an exterior door for access to the fire sprinkler riser. The dimensions of the door be a minimum of 30 inches (762 mm) wide and in no case require service personnel to enter a private dwelling or garage to access the riser.

Justification:

Ensures fire protection systems in R-1 and R-2 occupancies remain accessible for inspection, testing, and maintenance without requiring entry into private dwellings or garages. By requiring a dedicated exterior access door with minimum dimensions, the code promotes timely servicing of sprinkler systems, enhances safety, and preserves privacy.



Amendment to International Building Code (IBC) Section 903.3.1.3

Original Code Text:

903.3.1.3 NFPA 13D Sprinkler Systems. Automatic sprinkler systems installed in one- and two-family dwellings; Group R-3, Group R-4, Condition 1; and townhouses shall be permitted to be installed throughout in accordance with NFPA 13D.

Recommended Amendment:

903.3.1.3 NFPA 13D Sprinkler Systems. Automatic sprinkler systems installed in one- and two-family dwellings; Group R-3, R-4, and R-5 Condition 1; and townhouses shall be permitted to be installed throughout in accordance with NFPA 13D.

Justification:

The amendment requiring NFPA 13D sprinkler systems in both R-3 and R-5 occupancies ensures consistency across residential building types. Additionally, it removes the NFPA 13R requirement for R-4 Condition 2 facilities to reduce installation costs while still maintaining an appropriate level of fire protection.



Amendment to International Building Code (IBC) Section 903.3.5

Original Code Text:

903.3.5 Water Supplies. Water supplies for automatic sprinkler systems shall comply with this section and the standards referenced in Section 903.3.1. The potable water supply shall be protected against backflow in accordance with the requirements of this section and the International Plumbing Code. For connections to public waterworks systems, the water supply test used for design of fire protection systems shall be adjusted to account for seasonal and daily pressure fluctuations based on information from the water supply authority and as approved by the fire code official.

Recommended Amendment:

903.3.5 Water Supplies. Water supplies for automatic sprinkler systems shall comply with this section and the standards referenced in Section 903.3.1. The potable water supply shall be protected against backflow as required by in accordance with the requirements of this section and the International Plumbing Code Mesa Standard Details. For connections to public waterworks systems, the water supply test used for design of fire protection systems shall be adjusted to account for seasonal and daily pressure fluctuations based on information from the water supply authority and as approved by the fire code official.

Justification:

Amendment replaces the IPC requirement with a reference to Mesa Standard Details to ensure consistency with local water system design and backflow protection requirements. It also strengthens design reliability by requiring fire sprinkler system water supply tests to account for seasonal and daily pressure fluctuations, based on information from the water authority and approval by the fire code official.

Adopted under 2018 Amendments: Yes 🛛	No	Ш
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Amendment to International Building Code (IBC) Section 903.3.5 – New Subsection 903.3.5.3

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There is no original code text. This is an added subsection.

Recommended Amendment:

903.3.5.3 Detectible Underground Locator Device. Underground nonmetallic water and irrigation system piping larger than 2 inches (50.8 mm) in diameter shall be installed with insulated copper tracer wire or other approved conductor located adjacent to the piping. Access shall be provided to the tracer wire or the tracer wire shall terminate above ground at each end of the nonmetallic piping. The tracer wire size shall not be not less than 12 AWG and the insulation type shall be suitable for direct burial.

Justification:

To prevent damage to nonmetallic water pipes, tracer wire is added to pipes larger than 2 inches to ensure pipes are easily located by metal detectors before permitting excavation projects. Similar requirement implemented in the 2024 IPC and MAG.



Amendment to International Building Code (IBC) Section 903.3.6

Original Code Text:

903.3.6 Hose Threads. Fire hose threads and fittings used in connection with automatic sprinkler systems shall be as prescribed by the fire code official.

Recommended Amendment:

903.3.6 Hose Threads. Fire hose threads and fittings used in connection with automatic sprinkler systems shall be as prescribed by the fire code official National Standard Thread.

Justification:

Requires fire hose threads and fittings for automatic sprinkler systems to be National Standard Thread to ensure compatibility with firefighting equipment. This aligns with regional practices, as the entire Phoenix area uses National Standard Thread, promoting operational efficiency and interoperability during emergency response.



Amendment to International Building Code (IBC) Section 903.3.7.1

Original Code Text:

There is no original code text. This is an added subsection.

Recommended Amendment:

903.3.7.1 Fire Department Connection Sizing. The size of the fire department connection and piping is dependent on the automatic sprinkler design flow. The maximum design flow for a 2-½ inch Siamese connection is 500 GPM (1892.71 LPM). For design flows greater than 500 GPM (1892.71 LPM) not including hose stream demands, install a single 2-½ inch (63.5 mm) Siamese connection and 5-inch (127 mm) Storz connection.

Justification:

Amendment establishes fire department connection (FDC) sizing based on the sprinkler system design flow, ensuring adequate water supply during firefighting operations. By defining the capacity limits of a $2\frac{1}{2}$ -inch Siamese connection and requiring an additional 5-inch Storz connection for flows exceeding 500 GPM, the provision supports effective system performance, aligns with firefighting capabilities, and ensures compatibility with regional equipment standards.



Amendment to International Building Code

(IBC) Section 903.3 – New Subsection 903.3.10	<u>.</u>
Original Code Text:	
There is no original code text. This is an added subsection.	Riv
Recommended Amendment:	
903.3.10 Safety Factor. All fire sprinkler designs shall have a 10 percent (pressure) safety margin.
Justification:	
Amendment requires a 10 percent pressure safety margin for all fire sprireliability under real-world conditions. The added safety factor accounts for supply and minor calculation discrepancies, enhancing overall system confidence during a fire event.	or potential fluctuations in water



Amendment to International Ruilding Code

(IBC) Section 903.3.11
Original Code Text:
There is no original code text. This is an added subsection.
Recommended Amendment:
903.3.11 Remodel. Fire sprinkler design drawings shall not be required for tenant improvements, other than Group H, high-pile, or rack storage, when 15 or less sprinklers are relocated or added where approved by the fire code official.
Justification:
Streamlines the submittal process for tenant improvement projects by eliminating the requirement for fire sprinkler drawings when 15 or fewer sprinklers are added or relocated, except in higher risk occupancies like Group H, high pile, or rack storage. It reduces the administrative burden for low impact remodels while maintaining safety through fire code official approval.
Adopted under 2018 Amendments: Yes 🗵 No 🗆



Amendment to International Building Code

(IBC) Section 903.3 – New Subsection
903.3.12
Original Code Text:
There is no original code text. This is an added subsection.
Recommended Amendment:
903.3.12 Freeze Protection. Exterior sprinkler piping with a minimum of 2 inches (50.8 mm) may be used
in lieu of freeze protection required by Section 903.3.1.1.
Justification:
Allows the use of minimum 2-inch exterior sprinkler piping as an alternative to traditional freeze protection methods, offering a practical solution in climates with limited freezing conditions. It provides design flexibility while still maintaining system integrity and compliance with performance expectations under Section 903.3.1.1
Adopted under 2018 Amendments: Yes ⊠ No □



Amendment to International Building Code (IBC) Section 903.4.1

Original Code Text:

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 sprinkler systems shall be electrically supervised by a listed fire alarm control unit.

Exceptions:

- 1. Automatic sprinkler systems protecting one- and two-family dwellings.
- 2. Limited area sprinkler systems in accordance with Section 903.3.8, provided that backflow prevention device test valves located in limited area sprinkler system supplying 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 ire 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 values in roadway boxes.

Recommended Amendment:

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 sprinkler systems shall be electrically supervised by a listed fire alarm control unit.

Exceptions:

1. Automatic sprinkler systems protecting one- and two-family dwellings, <u>other than R-3 with</u> incapable of self-preservation and R-4 Condition 1.



- 2. Limited area sprinkler systems in accordance with Section 903.3.8, provided that backflow prevention device test valves located in limited area sprinkler system supplying 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. Backflow prevention devices, serving limited area sprinkler system supply piping shall be locked in the open position.
- 3. Remotely located backflow prevention devices, including test valves, shall be locked in the open position where approved by the fire code official.
- 4. 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. Groups R-1 and R-2 occupancies containing 15 or less dwelling or sleeping units and not exceeding an aggregate area of 12,000 square feet.
- 5. Jockey pump control valves that are sealed or locked in the open position.
- 6. Control valves to commercial kitchen hoods, paint spray booths or dip tanks that are sealed or locked in the open position.
- 7. Valves controlling the fuel supply to ire pump engines that are sealed or locked in the open position.
- 6. Trim valves to pressure switches in dry, preaction and deluge sprinkler systems that are sealed or locked in the open position.
- 7. Underground key or hub gate values in roadway boxes.

Justification:

Amendments clarify electronic supervision requirements for valves, pumps, tanks, water levels, and other critical components in automatic sprinkler systems, ensuring reliable monitoring through listed fire alarm control units. The specified exceptions provide practical flexibility for smaller or less complex systems, residential occupancies, and certain backflow prevention devices, balancing safety with operational feasibility and reducing unnecessary burdens where constant supervision is not critical.

Adopted under 2018 Amendments: Yes	\boxtimes	No 🗆
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Amendment to International Building Code (IBC) Section 903.4.1 – New Subsection 903.4.1.1

	<u>903.4.1.1</u>	
Original Code Text:		

There is no original code text. This is an added subsection.

Recommended Amendment:

903.4.1.1 Backflow Preventors. In occupancies required to be equipped with a fire alarm system, the backflow preventer valves shall be electrically supervised by a tamper switch installed in accordance with NFPA 72 and separately annunciated.

Justification:

Requires backflow preventer valves in occupancies with fire alarm systems to be electrically supervised and separately annunciated, enhancing early detection of tampering or valve status changes. This measure improves system reliability and supports prompt response to potential water supply issues critical to fire protection.



Amendment to International Building Code (IBC) Sections 905.5 and 905.6

Original Code Text:

905.5 Location of Class II standpipe hose connections. Class II standpipe hose connections shall be located so that all portions of the building are within 30 feet (9,144 mm) of a nozzle attached to 100 feet (30,480 mm) of hose. Class II standpipe hose connections shall be located where they will have ready access.

Recommended Amendment:

905.5 Location of Class II standpipe hose connections. Where required by the *fire code official*, Class II standpipe hose connections shall be located so that all portions of the building are within 30 feet (9,144 mm) of a nozzle attached to 100 feet (30,480 mm) of hose. Class II standpipe hose connections shall be located where they will have ready access.

Original Code Text:

905.6 Location of Class III standpipe hose connections. Class III standpipe systems shall have hose connections located as required for Class I standpipes in Section 905.4 and shall have Class II hose connections as required in Section 905.5.

Recommended Amendment:

905.6 Location of Class III standpipe hose connections. Class III standpipe systems shall have hose connections located as required for Class I standpipes in Section 905.4. Where required by the fire code official, shall have Class II hose connections as required in Section 905.5.

Justification:

Class II standpipe systems, intended for use by building occupants, offer limited operational value to fire service personnel and may pose significant life safety risks by encouraging untrained individuals to engage in firefighting activities. These systems are not compatible with standard fire service equipment and can delay evacuation efforts during an emergency. As outlined in IBC and IFC Section 905, the fire code official must evaluate the necessity of Class II standpipes on a case-by-case basis, considering whether their inclusion truly enhances fire protection or introduces additional hazards

Adopted under 2018 Amendments:	Y es	Ш	No	X
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Amendment to International Building Code (IBC) Section 912.3

Original Code Text:

912.3 Fire Hose Threads. Fire hose threads used in connection with standpipe systems shall be approved and shall be compatible with fire department hose threads.

Recommended Amendment:

912.3 Fire Hose Threads. Fire hose threads used in connection with standpipe systems shall be approved and shall be compatible with fire department hose threads National Standard Thread (NST).

Justification:

Requires fire hose threads and fittings for automatic sprinkler systems to be National Standard Thread to ensure compatibility with firefighting equipment. This aligns with regional practices, as the entire Phoenix area uses National Standard Thread, promoting operational efficiency and interoperability during emergency response



Amendment to International Building Code (IBC) Section 912.6

Original Code Text:

912.6 Backflow Protection. The potable water supply to automatic sprinkler and standpipe systems shall be protected against backflow as required by the International Plumbing Code.

Recommended Amendment:

912.6 Backflow Protection. The potable water supply to automatic sprinkler and standpipe systems shall be protected against backflow as required by the <u>International Plumbing Code Mesa Standard Details</u>.

Justification:

Amendment stipulates backflow protection for potable water supplies to automatic sprinkler and standpipe systems per Mesa Standard Details, which consistently require double valve backflow preventers. This ensures robust prevention of contamination to the public water system while maintaining effective fire protection.



Justification:

Amendment to International Building Code (IBC) Section 1020.2.1

Original Code Text:

1020.2.1 Hoistway Protection. Elevator hoistway doors in elevators hoistway enclosures required to be fire-resistance rated shall be protected in accordance with Section 716. Elevator hoistway doors shall also be protected in accordance with Section 3006.2.

Recommended Amendment:

1020.2.1 Hoistway Protection. Elevator hoistway doors in elevators hoistway enclosures required to be fire-resistance rated shall be protected in accordance with Section 716. Elevator hoistway doors shall also be protected in accordance with Section 3006.2 3006.3.

Aligns code section reference.		4
Adopted under 2018 Amendments: Yes □	No	\boxtimes



Amendment to International Building Code (IBC) Section 1101.1

Original Code Text:

1101.1 Scope. The provisions of this chapter shall control the design and construction of facilities for accessibility for individuals with disabilities.

Recommended Amendment:

1101.1 Scope. The provisions of this chapter <u>and Arizona Revised statutes</u>, <u>ARS sections 41-1492 through 41-1492.12</u> shall control the design and construction of facilities for accessibility for individuals with disabilities.

Exceptions:

Justification:

- 1. This Chapter shall not apply to private clubs or establishments exempted from coverage under Title II of the Civil Rights Act of 1964 (42 United States Code Section 2000[a][e]).
- 2. This Chapter shall not apply to religious functional areas of religious facilities owned, operated, and maintained by religious organizations or entities controlled by religious organizations, including altar areas, baptismal fonts and areas, choir lofts, etc., but not including main assembly areas such as naves and sanctuaries.

Alignment with Arizona Revised Statutes.	
Adonted under 2018 Amendments: Yes	№ П



Amendment to International Building Code (IBC) Section 1101 – New Subsection 1101.2

(IBC) Section 1101 – New Subsection 1101.2	
Original Code Text:	
There is no original code text. This is an added subsection.	
Recommended Amendment:	

1101.2 Public Accommodations. Where the requirements of this Chapter or the ICC/ANSI A117.1 are at variance from the requirements set forth in Title 41, Chapter 9, Article 8, Arizona Revised Statutes and its implementing rules, the State Statute and implementing rules shall govern.

Justification:	
Alignment with Arizona Revised Statutes.	
Adopted under 2018 Amendments: Yes ⊠	No 🗆
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Amendment to International Building Code (IBC) Section 1101 – New Subsection 1101.3

Original Code Text:

There is no original code text. This is an added subsection.

Recommended Amendment:

1101.3 Provisions for Children. Facilities and areas of facilities intended primarily for occupancy by children aged 3 through 12 shall be permitted to be designed and constructed as an equivalent facilitation in accordance with ADA guidelines for accessible design for children as promulgated in the Federal Register, Vol. 63, No. 8, Tuesday, January 13, 1998. Such equivalent facilitation shall be permitted without requiring approval of a modification.

Justification:

Alignment with federal guidelines.



<u>Amendment to International Building Code</u> (IBC) Section 1101 – New Subsection 1101.4

Original Code Text:		

There is no original code text. This is an added subsection.

Recommended Amendment:

1101.4 Copy of Laws and Standards. A copy of all laws, rules, guidelines, and standards cited by this Chapter shall be available in the office of the City Clerk in order to allow persons an adequate opportunity to be informed of the applicable requirements.

Justification:

Increases availability of the codes to the public.



Amendment to International Building Code (IBC) Section 1102.1

Original Code Text:

1102.1 Design. Buildings and facilities shall be designed and constructed to be accessible in accordance with this code and ICC A117.1.

Recommended Amendment:

1102.1 Design. Buildings and facilities shall be designed and constructed to be accessible in accordance with this code and ICC A117.1 and in accordance with provisions State of Arizona Attorney General Administrative Rules R10-3-401 through R-10-3-404 (2010 ADA Standards for Accessible Design, referred to as "2010 Standards", adopted by the U.S. Department of Justice), whichever standard provides the greatest degree of accessibility.

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Alignment with Arizona Revised Statutes.



Amendment to International Building Code (IBC) Section 1103.2.5

Original Code Text:

1103.2.5 Construction Sites. Structures, sites and equipment directly associated with the actual processes of construction including, but not limited to, scaffolding, bridging, materials hoists, materials storage or construction trailers are not required to comply with this chapter.

Recommended Amendment:

1103.2.5 Construction Sites. Structures, sites and equipment directly associated with the actual processes of construction including, but not limited to, scaffolding, bridging, materials hoists, materials storage or construction trailers are not required to comply with this chapter. The public portions of temporary sales offices/trailers are required to be accessible. There shall be accessible parking and an accessible route from the accessible parking aisle to the sales office/trailer and throughout the public portion of the sales office/trailer, including the design center. Accessible toilet rooms shall be provided according to this code.

Justification:	
Provides accessibility at temporary sales offices.	45
Adopted under 2018 Amendments: Yes 🛛	No □



Amendment to International Building Code (IBC) Section 1609.3

Original Code Text:

1609.3 Basic Design Wind Speed. The basic design wind speed, V, in mph, for the determination of the wind loads shall be determined by Figures 1609.3(1) through 1609.3(4)

The basic design wind speed, V, for use in the design of Risk Category I buildings and structures shall be obtained from Figures 1609.3(1).

The basic design wind speed, V, for use in the design of Risk Category II building and structures shall be obtained from Figures 1609.3(2).

The basic design wind speed, V, for use in the design of Risk Category III buildings and structures shall be obtained from Figures 1609.3(3).

The basic design wind speed, V, for use in the design of Risk Category V buildings and structures shall be obtained from Figures 1609.3(4).

Basic wind speeds for Hawaii, the US Virgin Islands and Puerto Rico shall be determined by using the ASCE Wind Design Geodatabase. The ASCE Wind Design Geodatabase is available at http://asce7hazardtool.online, or an approved equivalent.

The basic wind speed, V, for the special wind regions indicated near mountainous terrain and near gorges shall be in accordance with local jurisdiction requirements. The basic design wind speeds, V, determined by the local jurisdiction shall be in accordance with Chapter 26 of ASCE 7.

In nonhurricane-prone regions, when the basic wind speed, V, is estimated from regional climatic data, the basic wind speed, V, shall be determined in accordance with Chapter 26 of ASCE 7.

Recommended Amendment:

1609.3 Basic Design Wind Speed. The basic design wind speed, V, in mph, for the determination of the wind loads shall be determined by Figures 1609.3(1) through (8) or by using the following wind speeds: Risk Category - 100 mph; Risk Category II - 105 mph; Risk Category III - 110 mph; Risk Category IV - 115 mph.

The basic design wind speed, V, for use in the design of Risk Category I buildings and structures shall be obtained from Figures 1609.3(4) and 1609.3(1) or 100 mph.

The basic design wind speed, V, for use in the design of Risk Category II buildings and structures shall be obtained from Figures 1609.3(1) and 1609.3(2) or 105 mph.

The basic design wind speed, V, for use in the design of Risk Category III building and structures shall be obtained from Figures 1609.3(2) and 1609.3(3) or 110 mph.



The basic design wind speed, V, for use in the design of Risk Category IV buildings and structures shall be obtained from Figures 1609.3(3) and 1609.3(4) or 115 mph.

Basic wind speeds for Hawaii, the US Virgin Islands and Puerto Rico shall be determined by using the ASCE Wind Design Geodatabase. The ASCE Wind Design Geodatabase is available at http://asce7hazardtool.online, or an approved equivalent.

The basic wind speed, V, for the special wind regions indicated near mountainous terrain and near gorges shall be in accordance with local jurisdiction requirements. The basic design wind speeds, V, determined by the local jurisdiction shall be in accordance with Chapter 26 of ASCE 7.

In nonhurricane prone regions, when the basic wind speed, V, is estimated from regional climatic data, the basic wind speed, V, shall be determined in accordance with Chapter 26 of ASCE 7.

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Provides consistency with valid	ey-wide recog	gnized wind	speeds.
Adonted under 2018 Amenda	nents: Yes	⊠ No	ь П



Amendment to International Building Code (IBC) Section 1704.6.1; New Sections 1704.6.2 through 1704.6.4

Original Code Text:

1704.6.1 Structural Observations for Structures. Structural observations shall be provided for those structures where one or more of the following conditions exist:

- 1. The structure is classified as Risk Category III or IV.
- 2. The structure is a high-rise building.
- 3. The structure is assigned to Seismic Design Category E, and is greater than two stories above grade plane.
- 4. Such observation is required by the registered design professional responsible for the structural design.
- 5. Such observation is specifically required by the building official.

Recommended Amendment:

1704.6.1 Structural Observations for Structures. Structural observations shall be provided for those structures where one or more of the following conditions exist:

- 1. The structure is classified as Risk Category III or IV.
- 2. The structure is a high-rise building.
- 3. The structure is assigned to Seismic Design Category E, and is greater than two stories above grade plane.
- 4. Such observation is required by the registered design professional responsible for the structural design.
- 5. Such observation is specifically required by the building official.
- 6. The structure contains elevated post-tensioned concrete floors or roofs
- 7. The building height is greater than 75 feet (22,860 mm).
- 8. The structure is greater than three stories above grade plane.

1704.6.2 Statement of Observations. Where observations are required, the construction documents shall show a statement of observations. This statement shall identify the frequency and extent of observations.



The frequency and extent shall be acceptable to the building official based on the complexity and scope of work on the permit.

<u>1704.6.3 Procedures.</u> The registered design professional responsible for structural observation shall personally visit the site prior to completion of the Certificate of Compliance and periodically during the course of construction requiring structural observation as set forth in the inspection and observation program for each project.

The registered design professional responsible for performing structural observation shall complete a signed written report after each site visit. A copy of each report shall be kept on the job site for review by an inspector at all times until the inspector has issued final approval. Any and all deviations from the approved plans or specifications shall be immediately reported to the contractor for correction and then, if uncorrected, shall be reported to the registered design professional in responsible charge and to the building official.

In addition to individual reports, the registered design professional responsible for structural observation shall file with the building official a written monthly progress report indicating the dates of each site visit, the observations performed, any deviations noted from approved plans and specifications and any resulting instructions or change orders issued to the contractor.

1704.6.4 Certificate of Compliance. Upon completion of the portions of the work requiring structural observation, a Certificate of Compliance shall be issued to the building official under the seal and signature of the registered design professional responsible for such observation. A Certificate of Occupancy will not be issued until the building official receives all required observation reports and the Certificate of Compliance.

The Certificate of Compliance for structural observation shall read as follows:

"I certify to the best of my knowledge the structural requirements of the Mesa Building Code and approved plans and specifications have been complied with insofar as the portion of the work requiring structural observation is concerned, except for those deviations that have been previously reported. A guarantee that the contractor has constructed the building in full accord with the plans and specifications is neither intended nor implied."

Justification:

Extends the requirement for structural observations to buildings over 75 feet, elevated post-tensioned concrete floors and roofs, and structures more than three stories. These items are complex enough to justify an on-site engineer. The amendment also provides clarification on the procedures for structural observations.

Adopted	under	2018	Amendments:	Yes	\boxtimes	No	



Amendment to International Building Code (IBC) Section 1704 – New Subsections 1704.7 through 1704.7.3

Original Code Text:

There is no original code text. This is an added subsection.

Recommended Amendment:

1704.7 Electrical Observations. The owner shall employ the registered design professional responsible for the electrical design, or another registered design professional who is familiar with the electrical design and is acceptable to the building official to perform visual observation of complex electrical equipment and systems for general conformance to the approved plans and specifications, including but not limited to, placement and interconnection of equipment. Electrical observation shall be performed at significant stages of the construction and when the installation is complete and ready to be inspected. Electrical Observations are in addition to the inspections required by Section 110 and the special inspections required by Section 1705.21, and shall be provided when one of the following conditions exist:

- 1. <u>Installation or alteration of that portion of health care facility electrical systems which falls within the scope of Article 517 of the National Electrical Code, including such systems installed in facilities where outpatient surgical procedures are performed.</u>
- 2. Installations or alteration of electrical systems over 600v.
- 3. <u>Installation or alteration of electrical systems within locations classified as hazardous by provisions of the National Electrical Code, except for gasoline dispensing installations and systems located within storage garages, repair garages or lubritoriums.</u>
- 4. When such observation is required by the registered design professional responsible for the electrical design.
- 5. When such observation is specifically required by the building official.

1704.7.1 Statement of Observations. Where observations are required, the construction documents shall show a statement of observations. This statement shall identify the frequency and extent of observations. The frequency and extent shall be acceptable to the building official based on the complexity and scope of work on the permit.



1704.7.2 Procedures. The registered design professional responsible for electrical observation shall personally visit the site prior to completion of the Certificate of Compliance and periodically during the course of construction requiring electrical observation as set forth in the inspection and observation program for each project.

The registered design professional responsible for performing electrical observation shall complete a signed written report after each site visit. A copy of each report shall be kept on the job site for review by an inspector at all times until the inspector has issued final approval. Any and all deviations from the approved plans or specifications shall be immediately reported to the contractor for correction and then, if uncorrected, shall be reported to the registered design professional in responsible charge and to the building official.

In addition to individual reports, the registered design professional responsible for electrical observation shall file with the building official a written monthly progress report indicating the dates of each site visit, the observations performed, any deviations noted from approved plans and specifications and any resulting instructions or change orders issued to the contractor.

1704.7.3 Certificate of Compliance. Upon completion of the portions of the work requiring electrical observation, a Certificate of Compliance shall be issued to the building official under the seal and signature of the registered design professional responsible for such observation. A Certificate of Occupancy will not be issued until the building official receives all required observation reports and the Certificates of Compliance.

The Certificate of Compliance for electrical observation shall read as follows:

"I certify to the best of my knowledge the electrical requirements of the Mesa Building Code and approved plans and specifications have been complied with insofar as the portion of the work requiring electrical observation is concerned, except for those deviations that have been previously reported. A guarantee that the contractor has constructed the building in full accord with the plans and specifications is neither intended nor implied."

Justification:

Extends the requirement for electrical observations to hospitals, high-voltage systems, hazardous locations, when required by the design professional, or when required by the building official. These items are complex enough to justify an on-site engineer. The amendment also provides clarification on the procedures for structural observations.

Adopted under 2018 Amendments: Yes □	No	\boxtimes
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Amendment to International Building Code (IBC) Section 1705 – New Subsection 1705.21

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There is no original code text. This is an added subsection.

Recommended Amendment:

<u>1705.21 Plumbing Special Inspections.</u> The types of equipment or installations noted below shall be tested or inspected by a special inspector.

- 1. Medical Gas and Vacuum Systems.
- 2. <u>Special cases Work which, in the opinion of the building official, involves unusual hazards or conditions.</u>

Exception:

1. The building official may waive the requirement for special inspection if the construction is of a minor nature.

Justification:

Extends the requirement for plumbing special inspections (third-party) to medical gas systems and work involving unusual hazards when required by the building official. These items are complex enough to justify a third-party inspection.



Amendment to International Building Code (IBC) Section 1803.5 – New Subsection 1803.5.13

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There is no original code text. This is an added subsection.

Recommended Amendment:

1803.5.13 Post-tensioned Slabs on Ground. A geotechnical investigation is required for the design of all post-tensioned slabs on ground. The investigation report shall include all soil parameters as outlined in PTI DC-10.5. Information required on the drawings include, but is not limited to, slab type, soil parameters, bearing value and depth, coefficient of subgrade friction, soil subgrade modulus, e_m and y_m for expansive soils and all special inspection requirements.

Justification:

Structural post-tensioned slabs on ground are complicated to design structurally and can only be designed correctly with soil information from the specific construction site.



Amendment to International Building Code (IBC) Section 1907.1 – New Subsection 1907.1.1

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There is no original code text. This is an added subsection.

Recommended Amendment:

1907.1.1 Post-tensioned Slabs on Ground. All post-tensioned slabs on ground shall be permanently stamped, marked or otherwise identified in a conspicuous location indicating the slab is a post-tensioned slab. Conspicuous locations include, but are not limited to, entrance porches, slabs at garage doors or patio slabs.

Justification:

Buildings often go through transformations during the history of the structure. To avoid compromising the tension requirements in post-tensioned slabs, adding a rigid identification stamp to the slab notifies future occupants and contractors that compromising the integrity of the concrete may have structural ramifications on the facility.



Amendment to International Building Code (IBC) Section 2111 – New Subsection 2111.15

<u>2111.15</u>	
Original Code Text:	
There is no original code text. This is an added subsection.	
Recommended Amendment:	
2111.15 Fireplace Restrictions. Refer to the Mesa Mechanical Code, Section 932 frestrictions on masonry and factory-built fireplaces.	or additional
Justification:	
Alignment with mechanical code.	
Adopted under 2018 Amendments: Yes ⊠ No □	
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Amendment to International Building Code (IBC) Table 2902.1

Original Code Text:

Table 2902.1 Footnote E reads as follows:

For businesses and mercantile classifications with an occupant load of 15 or fewer, a service sink shall not be required.

Recommended Amendment:

Table 2902.1 Footnote E is amended to read as follows:

For businesses and mercantile classifications with an occupant load of 15-100 or fewer, a service sink shall not be required.

Justification:

Beneficial for small businesses. Increases the threshold for providing service sinks in offices and retail stores from 15 to 100 occupants.



Amendment to International Building Code (IBC) Section 2902.2

Original Code Text:

2902.2 Separate Facilities. Where plumbing fixtures are required, separate facilities shall be provided for each sex.

Exceptions:

- 1. Separate toilet facilities shall not be required for dwelling units and sleeping units.
- 2. Separate toilet facilities shall not be required in structures or tenant spaces with a total *occupant load*, including both employees and customers, of 15 or fewer.
- 3. Separate toilet facilities shall not be required in mercantile occupancies in which the maximum occupant load is 100 or fewer.
- 4. Separate toilet facilities shall not be required in business occupancies in which the maximum occupant load is 25 or fewer.
- 5. Separate toilet facilities shall not be designated by sex where the single-user toilet rooms are provided in accordance with Section 2902.1.2.
- 6. Separate toilet facilities shall not be required where rooms having both water closets and lavatory fixtures are designed for use by all persons regardless of sex and privacy is provided for water closets in accordance with Section 405.3.4 of the International Plumbing Code and for urinals in accordance with Section 405.3.5 of the International Plumbing Code.

Recommended Amendment:

2902.2 Separate Facilities. Where plumbing fixtures are required, separate facilities shall be provided for each sex.

Exceptions:

- 1. Separate toilet facilities shall not be required for dwelling units and sleeping units.
- 2. Separate toilet facilities shall not be required in structures or tenant spaces with a total *occupant load*, including both employees and customers, of 15 25 or fewer.
- 3. Separate toilet facilities shall not be required in mercantile occupancies in which the maximum occupant load is 100 or fewer.
- 4. Separate toilet facilities shall not be required in business occupancies in which the maximum occupant load is 25 or fewer.



- 5. Separate toilet facilities shall not be designated by sex where the single-user toilet rooms are provided in accordance with Section 2902.1.2.
- 6. Separate toilet facilities shall not be required where rooms having both water closets and lavatory fixtures are designed for use by all persons regardless of sex and privacy is provided for water closets in accordance with Section 405.3.4 of the International Plumbing Code and for urinals in accordance with Section 405.3.5 of the International Plumbing Code.

Justification:

Beneficial for small businesses. Incre	ases the threshold for prov	viding separate toilet faciliti	es from 15 to 25
occupants.			



Amendment to International Building Code (IBC) Section 2902.6
Original Code Text:
2902.6 Small Occupancies. Drinking fountains shall not be required for an occupant load of 15 or fewer.
Recommended Amendment:
2902.6 Small Occupancies. Drinking fountains shall not be required for an occupant load of 15 50 or fewer.
Justification:
Beneficial for small businesses. Increases the threshold for providing drinking fountains from 15 to 50 occupants.
Adopted under 2018 Amendments: Yes ⊠ No □
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Amendment to International Building Code (IBC) Section 3005.2

Original Code Text:

3005.2 Temperature Control. Elevator machine rooms, machinery spaces that contain the driving machine, and control rooms or spaces that contain the operation or motion controller for elevator operation shall be provided with an independent ventilation or air-conditioning system to protect against the overheating of the electrical equipment. The system shall be capable of maintaining temperatures within the range established for the elevator equipment.

Recommended Amendment:

3005.2 Temperature Control. Elevator machine rooms, machinery spaces that contain the driving machine, and control rooms or spaces that contain the operation or motion controller for elevator operation shall be provided with an independent ventilation or air-conditioning system to protect against the overheating of the electrical equipment. The system shall be capable of maintaining temperatures within the range established for the elevator equipment not greater than 90 degrees to ensure safe and normal operation of the elevator.

Justification:

Elevator manufacturers require certain temperature ranges to maintain elevator equipment reliability. Based on elevated heat indexes for the Metro Area, installing a climate-controlled air condition unit ensures elevator equipment sustains required operating temperatures and minimizes equipment failure due to excessive temperatures.

Adopted under 2018	Amondments Vos		No D	7
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Amendment to International Building Code (IBC) Section 3006.2

Original Code Text:

3006.2 Elevator Hoistway Door Protection Required. Elevator hoistway doors shall be protected in accordance with Section 3006.3 where an elevator hoistway connects more than three stories, is required to be enclosed within a shaft enclosure in accordance with Section 712.1.1 and any of the following conditions apply:

- 1. The building is not protected throughout with an automatic sprinkler system in accordance with Section 903.1.1 or 903.1.2.
- 2. The building contains a Group I-1, Condition 2 occupancy.
- 3. The building contains a Group I-2 occupancy.
- 4. The building contains a Group I-3 occupancy.
- 5. The building is a high rise and the elevator hoistway is more than 75 feet (22,860 mm) in height. The height of the hoistway shall be measured from the lowest floor to the highest floor of the floors served by the hoistway.
- 6. The elevator hoistway door is located in the wall of a corridor required to be fire-resistance rated in accordance with Section 1020.1.

Exceptions:

- 1. Protection of elevator hoistway doors is not required where the elevator serves only open parking garages in accordance with Section 406.5.
- 2. Protection of elevator hoistway doors is not required at the levels of exit discharge, provided that the levels of exit discharge is equipped with an automatic sprinkler system in accordance with Section 903.1.1.
- 3. Protection of elevator hoistway doors is not required on levels where the elevator hoistway doors open to the exterior.

Recommended Amendment:

3006.2 Elevator Hoistway Door Protection Required. Elevator hoistway doors shall be protected in accordance with Section 3006.3 where an elevator hoistway connects more than three stories, is required to be enclosed within a shaft enclosure in accordance with Section 712.1.1 and any of the following conditions apply:

1. The building is not protected throughout with an automatic sprinkler system in accordance with Section 903.1.1 or 903.1.2.



- 2. The building contains a Group I-1, Condition 2 occupancy.
- 3. The building contains a Group I-2 occupancy.
- 4. The building contains a Group I-3 occupancy.
- 5. The building is a high rise and the elevator hoistway is more than 75 feet (22,860 mm) in height. The height of the hoistway shall be measured from the lowest floor to the highest floor of the floors served by the hoistway.
- 6. The elevator hoistway door is located in the wall of a corridor required to be fire resistance rated in accordance with Section 1020.1.

Exceptions:

- 1. Protection of elevator hoistway doors is not required where the elevator serves only open parking garages in accordance with Section 406.5.
- 2. Protection of elevator hoistway doors is not required at the levels of exit discharge, provided that the levels of exit discharge is equipped with an automatic sprinkler system in accordance with Section 903.1.1.
- 3. Protection of elevator hoistway doors is not required on levels where the elevator hoistway doors open to the exterior.

Justification:

Removes conflicting information regarding fir	e resistant rating corridors in elevator hoistways.
Adopted under 2018 Amendments: Yes □	No 🛮



Amendment to International Building Code (IBC) Section 3006.2.1

Original Code Text:

3006.2.1 Rated Corridors. Where corridors are required to be fire-resistance rated in accordance with Section 1020.2, elevator hoistway openings shall be protected in accordance with Section 3006.3.

Recommended Amendment:

3006.2.1 3006.3 Rated Corridors. Where corridors are required to be fire-resistance rated in accordance with Section 1020.2, elevator hoistway openings that open into such corridors shall be protected in accordance with Section 3006.3 3006.4.

Justification:

Numbering sequence change and provides	clarity	where t	his code	section	applies.	No impact.
Adopted under 2018 Amendments: Yes		No				



Amendment to International Building Code (IBC) Section 3006.3

Original Code Text:

3006.3 Elevator Hoistway Door Protection. Where Section 3006.2 requires protection of the elevator hoistway doors, the protection shall be provided by one of the following:

- 1. An enclosed elevator lobby shall be provided at each floor to separate the elevator hoistway doors from each floor with *fire partitions* in accordance with Section 708. In addition, doors protecting openings in the fire partitions shall comply with Section 716.2.2.1. Penetrations of the fire partitions by ducts and air transfer openings shall be protected as required for corridors in accordance with Section 717.5.4.1.
- 2. An enclosed elevator lobby shall be provided at each floor to separate the elevator hoistway doors from each floor by smoke partitions in accordance with Section 710. In addition, doors protecting openings in the smoke partitions shall comply with Sections 710.5.2.2, 710.5.2.3 and 716.2.6.1. Penetrations of the smoke partitions by ducts and air transfer openings shall be protected as required for corridors in accordance with Section 717.5.4.1.
- 3. Additional doors or other devices shall be provided at each elevator hoistway door in accordance with Section 3002.6. Such doors or other devices shall comply with the smoke and draft control door assembly requirements in Section 716.2.2.1.1 when tested in accordance with UL 1784 without an artificial bottom seal.
- 4. The elevator hoistway shall be pressurized in accordance with Section 909.21.
- 5. A smoke-protective curtain assembly for hoistways shall be provided at each elevator hoistway door opening in accordance with Section 3002.6. Such curtain assemblies shall comply with the smoke and draft control requirements in Section 716.2.2.1.1 when tested in accordance with UL 1784 without an artificial bottom seal. Such curtain assemblies shall be equipped with a control unit listed to UL 864. Such curtain assemblies shall comply with Section 2.11.6.3 of ASME A17.1/CSA B44. Installation and maintenance shall be in accordance with NFPA 105.

Recommended Amendment:

3006.3 <u>3006.4</u> Elevator Hoistway Door Protection. Where Section 3006.2 requires protection of the elevator hoistway doors, the protection shall be provided by one of the following:

1. An enclosed elevator lobby shall be provided at each floor to separate the elevator hoistway doors from each floor with *fire partitions* in accordance with Section 708. In addition, doors protecting openings in the fire partitions shall comply with Section 716.2.2.1. Penetrations of the fire partitions by ducts and air transfer openings shall be protected as required for corridors in accordance with Section 717.5.4.1.



- 2. An enclosed elevator lobby shall be provided at each floor to separate the elevator hoistway doors from each floor by smoke partitions in accordance with Section 710. In addition, doors protecting openings in the smoke partitions shall comply with Sections 710.5.2.2, 710.5.2.3 and 716.2.6.1. Penetrations of the smoke partitions by ducts and air transfer openings shall be protected as required for corridors in accordance with Section 717.5.4.1.
- 3. Additional doors or other devices shall be provided at each elevator hoistway door in accordance with Section 3002.6. Such doors or other devices shall comply with the smoke and draft control door assembly requirements in Section 716.2.2.1.1 when tested in accordance with UL 1784 without an artificial bottom seal.
- 4. The elevator hoistway shall be pressurized in accordance with Section 909.21.
- 5. A smoke-protective curtain assembly for hoistways shall be provided at each elevator hoistway door opening in accordance with Section 3002.6. Such curtain assemblies shall comply with the smoke and draft control requirements in Section 716.2.2.1.1 when tested in accordance with UL 1784 without an artificial bottom seal. Such curtain assemblies shall be equipped with a control unit listed to UL 864. Such curtain assemblies shall comply with Section 2.11.6.3 of ASME A17.1/CSA B44. Installation and maintenance shall be in accordance with NFPA 105.

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Numbering sequence change. No impact.			
Adopted under 2018 Amendments: Yes		No	\boxtimes



Amendment to International Building Code (IBC) Section 3006.4

Original Code Text:

3006.4 Means of Egress. Elevator lobbies shall be provided with not less than one means of egress complying with Chapter 10 and other provisions in this code. Egress through an enclosed elevator lobby shall be permitted in accordance with Item 1 of Section 1016.2. Electrically locked exit access doors providing egress from elevator lobbies shall be permitted in accordance with Section 1010.2.14.

Recommended Amendment:

3006.4 3006.5 Means of Egress. Elevator lobbies shall be provided with not less than one means of egress complying with Chapter 10 and other provisions in this code. Egress through an enclosed elevator lobby shall be permitted in accordance with Item 1 of Section 1016.2. Electrically locked exit access doors providing egress from elevator lobbies shall be permitted in accordance with Section 1010.2.14.

Justification:	A
Numbering sequence change. No impact.	c P
Adopted under 2018 Amendments: Yes	No 🛮



	national Building Code ction 3201.1
Original Code Text:	
3201.1 Scope. The provisions of this chapter shall right-of-way.	govern the encroachments of structures into the public
Recommended Amendment:	
3201.1 Scope. The provisions of this chapter the shall govern the encroachments of structures into the	City of Mesa Code, Title 9, Public Ways and Property ne public right-of-way.
Justification:	
Mesa public right-of-way and property encroachme	ent requirements are governed by City Code Title 9.
Adopted under 2018 Amendments: Yes ⊠	No 🗆
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Amendment to International Building Code (IBC) Section 3201.2 through 3202.4

Recommended Amendment:

Sections 3201.2 through 3202.4 are deleted in their entirety.

Justification:

Deleted section on encroachments into the public right-of-way. Mesa public right-of-way and property encroachment requirements are governed by City Code Title 9.



Amendment to International Building Code (IBC) Chapter 35 – Referenced Standards

Original Code Text:

- NFPA 11 21 Low Medium- and High-Expansion Foam
- NFPA 13 22 Installation of Sprinkler Systems
- NFPA 13D 22 Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes
- NFPA 13R 22 Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height
- NFPA 14 22 Installation of Standpipe, Private Hydrants and Hose Systems
- NFPA 20 22 Installation of Stationary Pumps for Fire Protection
- NFPA 72 22 National Fire Alarm Code
- NFPA 110 22 Emergency and Standby Power Systems
- NFPA 111 22 Standard on Storage Electrical Energy Emergency and Standby Power Systems
- NFPA 211 22 Chimneys, Fireplaces, Vents and Solid Fuel-Burning Appliances

Recommended Amendment:

- NFPA 11 21 24 Low Medium- and High-Expansion Foam
- NFPA 13 22-25 Installation of Sprinkler Systems
- NFPA 13D 22 25 Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes
- NFPA 13R 22 25 Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height
- NFPA $14 \frac{22}{24}$ Installation of Standpipe, Private Hydrants and Hose Systems
- NFPA $20 \frac{22}{25}$ Installation of Stationary Pumps for Fire Protection
- NFPA 72 22 25 National Fire Alarm Code
- NFPA $110 \frac{22}{25}$ Emergency and Standby Power Systems
- NFPA 111 22 25 Standard on Storage Electrical Energy Emergency and Standby Power Systems
- NFPA 211 22 24 Chimneys, Fireplaces, Vents and Solid Fuel-Burning Appliances

Justification:

Updated to the most current NFPA standards. The updated standards recognize more current technologies and construction methods.

Ado	pted	under	2018	Amendments:	Yes	\boxtimes	No	· L	L
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