2024 South Carolina Building Codes Modifications Index

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Introduction to 2024 Building Codes Modifications Index

On August 26, 2025, the South Carolina Building Codes Council (the "Council") adopted the latest editions of the mandatory codes and select appendices with modifications, as referenced in S.C. Code Ann. §6-9-50 (1976, as amended), to be enforced by all municipalities and counties in South Carolina. More specifically, the Council modified and adopted the building codes listed below for use in the State of South Carolina:

2024 Edition of the International Building Code[1]
2024 Edition of the International Residential Code[2]
2024 Edition of the International Fire Code[3]
2024 Edition of the International Plumbing Code[4]
2024 Edition of the International Mechanical Code[5]
2024 Edition of the International Fuel Gas Code[6]
2023 Edition of the National Electrical Code

The Council established the implementation date for local jurisdictions as **January 1, 2027**.

The Modifications Index lists all modifications that apply to the mandatory building codes listed above, as well as any appendices adopted by the Council. The modifications are arranged by the affected code section numbers in ascending order. Modifications continued from a prior building code cycle were renumbered to coincide with the 2024 building code cycle numbering, and are distinguished by a note and reference to their prior modification numbers. Strikethrough indicates the language deleted by a modification and an underline indicates language added.

The latest edition of the permissive codes referenced in S.C. Code Ann. § 6-9-60 (1976, as amended) may be adopted by municipalities and counties via ordinance, and this local adoption by ordinance must take place before enforcement can begin. The permissive codes are the latest editions of the International Property Maintenance Code, International Existing Building Code, International Performance Code, and International Swimming Pool and Spa Code.

Adoption of the mandatory codes and permissive codes does not include the chapters, sections or provisions addressing administrative policies or procedures. Administrative policies and procedures are the sole responsibility of each local jurisdiction. If the governing body of a local jurisdiction desires to use the administrative provisions in one or more of the adopted codes, it must first adopt the chapters or sections by ordinance. In lieu of adopting the administrative provisions contained in the adopted codes, the governing body of a local jurisdiction may develop specific administrative policies and procedures for the operation of its Building Inspection Department by ordinance.

The latest edition of ICC/ANSI A117.1, Accessible and Usable Buildings and Facilities, is adopted by statute (S.C. Code Ann. § 10-5-210 *et seq*.), and is mandatory for use in all municipalities and counties within the State.

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[1] As modified, known as the 2024 South Carolina Building Code
[2] As modified, known as the 2024 South Carolina Residential Code
[3] As modified, known as the 2024 South Carolina Fire Code
[4] As modified, known as the 2024 South Carolina Plumbing Code
[5] As modified, known as the 2024 South Carolina Mechanical Code
[6] As modified, known as the 2024 South Carolina Fuel Gas Code

The South Carolina Legislature has enacted the Energy Standard Act (S.C. Code Ann. § 6-10-10 *et seq*.), and pursuant to the Energy Standard Act, the 2009 edition of the International Energy Conservation Code has been statutorily adopted as the energy standard and is mandatory for use in all jurisdictions within the State.

Additional information about the building codes adoption process can be found on the South Carolina Building Codes Council's website.

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IMC 2024 03	1109.2.5 Refrigerant pipe shafts	New from Johnson and Associates
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IMC 2024 02	Chapter 15 Referenced Standards	New from Daikin Comfort
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Applicable Code: 2024 International Building Code

Modification Index Number: IBC 2024 01

Code Section: [A] 101.4.7 Existing Buildings

Proponent: American Concrete Institute (ACI)

Previous Code Cycles	Previous Modification Number	Previous Code Section
IBC 2021	IBC 2021 01	[A] 101.4.7

Reason: To establish minimum requirements for the evaluation, design, construction, repair and rehabilitation of concrete structural elements in existing buildings.

Modification:

[A] 101.4.7 Existing buildings. The provisions of the International Existing Building Code shall apply to matters governing the repair, alternation, change of occupancy, addition to and relocation of existing buildings.

101.4.7.1 Structural concrete. In addition, assessment, repairs, and restoration of structural concrete in accordance with ACI 562 shall be permitted.

Exception:

ACI 562 shall not be used for the evaluation or design of repairs or rehabilitation of elements of seismic force-resisting system that result in strength, stiffness, or ductility of those elements different from the pre-damage condition.

(Add new referenced standard to Chapter 35 as follows)

ACI American Concrete Institute
38800 Country Club Drive
Farmington Hills, MI 48331
Standard reference number Title Referenced in code section number
562-19 Code Requirements for Assessment, Repair, and Rehabilitation of Existing Concrete Structures 101.4.7.1

Applicable Code: 2024 International Building Code

Modification Index Number: IBC 2024 02

Code Section: 202 Definitions

Vapor Retarder, Ground Contact (new definition)
Primitive Camp Structure (new definition)

Proponent: Building Officials Association of South Carolina (BOASC)

Previous Code Cycles	Previous Modification Number	Previous Code Section
IBC 2021	IBC 2021 02	202
IBC 2018	IBC 2018 01	202

Reason: To provide clear definitions and uniform interpretation of the phrases.

Modification:

202 Definitions:

Vapor Retarder, Ground Contact: Ground contact vapor retarder class shall be defined using the requirements of ASTM E1745, Class A, B, or C-Standard specification for water vapor retarders used in contact with soil or granular fill under concrete slabs.

Primitive Camp Structure: Shall include any structure permanent or temporary in nature, used for outdoor camping (transient), open on at least one side with no fully enclosed habitable spaces, less than 400 square feet under roof, and not classified as a residential occupancy due to lack of electrical, plumbing, mechanical and sprinkler systems.

Applicable Code: 2024 International Building Code

Modification Index Number: IBC 2024 03

Code Section: 303.4 Assembly Group A-3

Proponent: Building Officials Association of South Carolina (BOASC)

Previous Code Cycles	Previous Modification Number	Previous Code Section
IBC 2021	IBC 2021 04	303.4
IBC 2018	IBC 2018 02	303.4

Reason: Add to the listing of A-3 occupancies the following use: Structures, without a commercial kitchen, used in agritourism activity as defined by S.C. Code Ann. 46-53-10(1).

Modification:

303.4 Assembly Group A-3. Group A-3 occupancy includes assembly uses intended for worship, recreation or amusement and other assembly uses not classified elsewhere in Group A including, but not limited to:

Amusement arcades
Art galleries
Bowling alleys
Community halls
Courtrooms
Dance halls (not including food or drink consumption)
Exhibition halls
Funeral parlors
Greenhouses for the conservation and exhibition of plants that provide public access
Gymnasiums (without spectator seating)
Indoor *swimming pools* (without spectator seating)
Indoor tennis courts (without spectator seating)
Lecture halls
Libraries
Museums
Places of religious worship
Pool and billiard parlors
Structures, without a commercial kitchen, used in agritourism activity as defined by S.C. Code Ann. 46-53-10(1)
Waiting areas in transportation terminals

Applicable Code: 2024 International Building Code

Modification Index Number: IBC 2024 04

Code Section: 312.1 General

Proponent: Building Officials Association of South Carolina (BOASC)

Previous Code Cycles	Previous Modification Number	Previous Code Section
IBC 2021	IBC 2021 05	312.1
IBC 2018	IBC 2018 03	312.1

Reason: "Structures primarily used or associated with outdoor camping activities" include, but are not limited to, shelters, tree stands, sheds, rustic cabins, campfire shelters, shelters, tents, tepees, or other indigenous huts used only for campers or program participants, or used in conjunction with outdoor camping activities such as hiking, fishing, hunting, or nature appreciation, regardless of material used for construction. These structures are not to include utilities such as mechanical, electrical or plumbing. Requiring that at least one side of the building be open will provide ventilation for any outside hearing source or propane lighting that may be used within the structure, and provide a clear path of egress travel to the outside. Limiting the size to 400 square feet will require larger buildings to be classified as a residential structure. Not allowing electrical, plumbing or mechanical systems will maintain the integrity of a primitive structure.

Modification:

312.1 General. Buildings and structures of an accessory character and miscellaneous structures not classified in any specific occupancy shall be constructed, equipped and maintained to conform to the requirements of this code commensurate with the fire and life hazard incidental to their occupancy. Group U shall include, but not be limited to, the following:
Agricultural buildings
Aircraft hangars, accessory to a one- or two-family residence (see Section 412.4)
Barns
Carports
Communication equipment structures with a *gross floor area* of less than 1,500 square feet (139 m2)
Fences more than 7 feet (2134 mm) in height
Grain silos, accessory to a residential occupancy
Livestock shelters
Primitive Camp Structures
Private garages
Retaining walls
Sheds
Stables
Tanks
Towers

Applicable Code: 2024 International Building Code

Modification Index Number: IBC 2024 05

Code Section: 706.1 General

Proponent: Building Officials Association of South Carolina (BOASC)

Previous Code Cycles	Previous Modification Number	Previous Code Section
IBC 2021	IBC 2021 07	706.1
IBC 2018	IBC 2018 05	706.1

Reason: Unusually restrictive—in an attempt to clarify this section for the purpose of uniform enforcement, the ICC created a huge error which takes away the designers' options to leave an existing, nonconforming building alone when separated by a fire wall. The intent was to show that the fire protection systems, utilities, access, and egress could be one system when a fire wall is utilized, and do not have to be separate systems due to the fire wall creating different buildings. This requirement would unjustly and significantly drive up the cost of construction as it relates to additions to existing buildings.

Modification:

706.1 General. *Fire walls* shall be constructed in accordance with Sections 706.2 through 706.11. Each portion of a building separated by one or more firewalls may be considered a separate building. The extent and location of such fire walls shall provide a complete separation. Where a fire wall separates occupancies that are required to be separated by a fire barrier wall, the most restrictive requirements of each separation shall apply.

Applicable Code: 2024 International Building Code

Modification Index Number: IBC 2024 06

Code Section: 1010.2.13 Controlled egress doors in Group I-1, I-2 and I-4 (Adult Day Care Occupancy only)

Proponent: Midlands Fire Marshal Association

Previous Code Cycles	Previous Modification Number	Previous Code Section
IBC 2021	IBC 2021 10	1010.2.14

Reason: To prevent nuisance alarms and reduce elopement issues when serving clients with Dementia or Alzheimer's, or similar health care issues.

Modification:

1010.2.13 Controlled egress doors in Groups I-1, I-2, and I-4 (Adult Day Care Occupancy only).
Controlled egress electrical locking systems where egress is controlled by authorized personnel shall be permitted on doors in the means of egress in Group I-1, I-2, and I-4 (Adult Day Care occupancy only) occupancies where the clinical needs of *persons* receiving care require their containment. Controlled egress doors shall be permitted in such occupancies where the *building* is equipped throughout with an *automatic sprinkler system* in accordance with Section 903.3.1.1 or an *approved automatic smoke detection system* installed in accordance with Section 907, provided that the doors are installed and operate in accordance with all of the following:

1. The door's electric locks shall unlock on actuation of the *automatic sprinkler system* or *automatic smoke detection system* allowing immediate free egress.
2. The door's electric locks shall unlock on loss of power to the electrical locking system or to the electric lock mechanism allowing immediate free egress.
3. The electric locking system shall be installed to have the capability of unlocking the electric locks by a switch located at the *fire command center*, a nursing station or other *approved* location. The switch shall directly break power to the electric lock.
4. A *building* occupant shall not be required to pass through more than one door equipped with a controlled egress locking system before entering an *exit*.
5. The procedures for unlocking the doors shall be described and *approved* as part of the emergency planning and preparedness required by Chapter 4 of the ~~*International*~~ *South Carolina Fire Code*.
6. All clinical staff shall have the keys, codes or other means necessary to operate the controlled egress electrical locking systems.
7. Emergency lighting shall be provided at the door.
8. The electromechanical or electromagnetic locking device shall be *listed* in accordance with either UL 294 or UL 1034.

Exceptions:

1. Items 1 through 4 shall not apply to doors to areas occupied by *persons* who, because of clinical needs, require restraint or containment as part of the function of a psychiatric or cognitive treatment area.
2. Items 1 through 4 shall not apply to doors to areas where a *listed* egress control system is utilized to reduce the risk of child abduction from nursery and obstetric areas of a Group I-2 *hospital*.

Applicable Code: 2024 International Building Code

Modification Index Number: IBC 2024 07

Code Section: 1016.2 Egress through intervening spaces

Proponent: Building Officials Association of South Carolina (BOASC)

Previous Code Cycles	Previous Modification Number	Previous Code Section
IBC 2021	IBC 2021 11	1016.2
IBC 2018	IBC 2018 10	1016.2

Reason: This is a longstanding modification that was updated in 2018 based on changes in the 2018 IBC. The modification provides additional egress options by adding the exceptions below.

Modification:

1016.2 Egress through intervening spaces. Egress through intervening spaces shall comply with this section.

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

(Page 2 of IBC 2024 07 - Section 1016.2)

6. Egress shall not pass through kitchens, storage rooms, closets or spaces used for similar purposes.
Exceptions:
1. *Means of egress* are not prohibited through a kitchen area serving adjoining rooms constituting part of the same *dwelling unit* or *sleeping unit*.
2. *Means of egress* are not prohibited through stockrooms in Group M occupancies where all of the following are met:
2.1. The stock is of the same hazard classification as that found in the main retail area.
2.2. Not more than 50 percent of the *exit access* is through the stockroom.
2.3. The stockroom is not subject to locking from the egress side.
2.4. There is a demarcated, minimum 44-inch-wide (1118 mm) aisle defined by ~~full or partial height fixed walls~~ a wall not less than 42 inches (1067 mm) high or similar construction that will maintain the required width and lead directly from the retail area to the exit without obstructions.

Applicable Code: 2024 International Building Code

Modification Index Number: IBC 2024 08

Code Section: 1803.2 Investigations required

Proponent: Building Officials Association of South Carolina (BOASC)

Previous Code Cycles	Previous Modification Number	Previous Code Section
IBC 2021	IBC 2021 14	1803.2
IBC 2018	IBC 2018 11	1803.2

Reason: The IBC requires a geotechnical investigation for all projects regardless of size. The only exception which allows the building official to waive the requirements puts unnecessary liability on the building official to determine if adequate information can be gathered from adjacent sites. In areas that must account for seismic activity, the conditions may vary in as few as 100 yards. For large commercial projects, the soil conditions may have a drastic effect on the design of the structure; however, for smaller projects the soil condition has significantly less bearing on its design. It is often determined on small projects that the soil conditions do not have an effect on the design of the structure. See ASCE 7-20-3-1, Exception. Each of the equations results in a period of vibration of less than 0.5 seconds and exceeds the size of a typical one-story structure.

Modification:

1803.2 Investigations required. Geotechnical investigations shall be conducted in accordance with Sections 1803.3 through 1803.5.

Exceptions:

1. The *building official* shall be permitted to waive the requirement for a geotechnical investigation where satisfactory data from adjacent areas is available that demonstrates an investigation is not necessary for any of the conditions in Sections 1803.5.1 through 1803.5.6 and Sections 1803.5.10 and 1803.5.11.
2. For single story buildings not more than 5,000 sq ft and not more than 30ft in height, a site specification investigation report is not required if the seismic design category is determined by the design professional in accordance with Chapter 20 of ASCE 7.

Applicable Code: 2024 International Building Code

Modification Index Number: IBC 2024 09

Code Section: 1907.4 Vapor retarder

Proponent: Structural Engineers Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
IBC 2021	IBC 2021 16	1907.1
IBC 2018	IBC 2018 12	1907.1

Reason: To bring the IBC into compliance with the American Concrete Institute's standards.

Modification:

1907.4 Vapor retarder. A ~~6-mil (0.006 inch; 0.15 mm)~~ 10-mil (0.010 inch) polyethylene ground contact vapor retarder with joints lapped not less than 6 inches (152 mm) shall be placed between the base course or subgrade and the concrete floor slab, or other *approved* equivalent methods or materials shall be used to retard vapor transmission through the floor slab.

Exception: A vapor retarder is not required:

1. For detached *structures* accessory to occupancies in Group R-3, such as garages, utility *buildings* or other unheated *facilities*.
2. For unheated storage rooms having an area of less than 70 square feet (6.5 m2) and carports attached to occupancies in Group R-3.
3. For *buildings* of other occupancies where migration of moisture through the slab from below will not be detrimental to the intended occupancy of the *building*.
4. For driveways, walks, patios and other flatwork that will not be enclosed at a later date.
5. Where *approved* based on local site conditions.

Applicable Code: 2024 International Building Code

Modification Index Number: IBC 2024 10

Code Section: 2303.2.3 Other means during manufacture

Proponent: Building Officials Association of South Carolina (BOASC)

Previous Code Cycles	Previous Modification Number	Previous Code Section
IBC 2021	IBC 2021 17	2303.2.2
IBC 2018	IBC 2018 13	2303.2.2

Reason: The language in the 2018 code would prevent the use of methods for the treatment of fire-retardant treated wood that have been in use since at least 2009. We're not aware of any issues with products that have been tested in accordance with code requirements.

Modification:

[BF] 2303.2.3 Other means during manufacture. For wood products impregnated with chemicals by other means during manufacture, the treatment shall be an integral part of the manufacturing process of the wood product. The treatment shall provide permanent protection to all surfaces of the wood product. ~~The use of paints, coating, stains or other surface treatments is not an *approved* method of protection as required in this section.~~

Applicable Code: 2024 International Building Code

Modification Index Number: IBC 2024 11

Code Section: [P] 2902.1.1 Fixture calculations

Emergency Code Modification

Previous Code Cycles	Previous Modification Number	Previous Code Section
IBC 2021	IBC 2021 19	[P] 2902.1.1

Reason: Gender-neutral gang-type bathrooms pose a serious threat to the health and safety of all by increasing the incident of sexual violence against women and children, as well as increasing the incident of wrongful accusations of assault, voyeurism, and the like. Gender-neutral gang-type bathrooms also undermine and reduce the "safe spaces" for victims of human trafficking, as well as discriminating against women and children by disproportionately decreasing the available number of bathroom spaces for women and children, while men will have access to both water closet compartments and urinal spaces. In addition, the common use sink space discriminates against women and children by disproportionately decreasing the area available for women to address personal needs, such as menstrual or other medical care, nursing and baby changing activities.

Modification:

[P] 2902.1.1 Fixture calculations. To determine the *occupant load* of each sex, the total *occupant load* shall be divided in half. To determine the required number of fixtures, the fixture ratio or ratios for each fixture type shall be applied to the *occupant load* of each sex in accordance with **Table 2902.1**. Fractional numbers resulting from applying the fixture ratios of **Table 2902.1** shall be rounded up to the next whole number. For calculations involving multiple occupancies, such fractional numbers for each occupancy shall first be summed and then rounded up to the next whole number.

Exceptions:

1. The total *occupant load* shall not be required to be divided in half where *approved* statistical data indicates a distribution of the sexes of other than 50 percent of each sex.

~~2. Where multiple user *facilities* are designed to serve all genders, the minimum fixture count shall be calculated 100 percent, based on total *occupant load*. In such multiple user user *facilities*, each fixture type shall be in accordance with ICC A117.1~~

Applicable Code: 2024 International Building Code

Modification Index Number: IBC 2024 12

Code Section: [P] 2902.2 Separate facilities

Emergency Code Modification

Previous Code Cycles	Previous Modification Number	Previous Code Section
IBC 2021	IBC 2021 20	[P] 2902.2

Reason: Exception 6 is not necessary, as Exceptions 1-5 provide sufficient guidance and latitude for business, schools, churches and other similar large-capacity spaces, to provide gender-neutral spaces with adequate privacy protections.

Modification:

[P] 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 required to be designated by sex where 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*.~~

Applicable Code: 2024 International Building Code

Modification Index Number: IBC 2024 13

Code Section: Appendix H Signs

Proponent: Structural Engineers Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
IBC 2021	IBC 2021 18	Appendix H
IBC 2018	IBC 2018 14	Appendix H
IBC 2015	IBC 2015 07	Appendix H
IBC 2012	IBC 2012 05	Appendix H

Reason: To provide minimum requirements for signs for the protection of people and property.

Modification:

Appendix H Signs

The provisions in Appendix H are adopted for use statewide.

Appendix H gathers in one place the various standards that regulate the construction and protection of outdoor signs. Wherever possible, the appendix provides standards in performance language, thus allowing the widest possible application.

Applicable Code: **2024 International Residential Code**

Modification Index Number: **IRC 2024 01**

Code Section: **R202 Definitions: Accepted Engineering Practice**

Proponent: Coastal Code Enforcement Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
IRC 2021	IRC 2021 01	R202
IRC 2018	IRC 2018 01	R202
IRC 2015	IRC 2015 01	R202
IRC 2012	IRC 2012 01	R202

Reason: To provide a clear definition and uniform interpretation of the phrase.

Modification:

A definition of "Accepted Engineering Practice" was added:

Accepted Engineering Practice. The performance design of structures and/or structural elements that vary from prescriptive design methods of this code. Such design shall be made with accepted design standards by a South Carolina licensed Architect or Engineer as permitted by existing state law.

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 02

Code Section: R202 Definitions: Crawl Space

Proponent: Home Builders Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
IRC 2021	IRC 2021 02	R202

Reason: To provide additional clarification.

Modification:

R202 Definitions

[RB] CRAWL SPACE. An underfloor space that is not a *basement*. Spaces under decks and porches that do not contain mechanical equipment and are separated by a foundation wall are not to be considered crawlspaces.

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 03

Code Section: R202 Definitions: Sleeping Loft
R.310.3 Location
R314.1 General
Section R315 Sleeping Lofts
R319.1 Emergency escape and rescue opening required

Proponent: Home Builders Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
N/A		

Reason: The section is overly restrictive, hard to apply and duplicates existing safety rules.

Modification:

R202 Definitions
~~**[RB] SLEEPING LOFT.** A space designated for sleeping on an intermediate level or levels between the floor and ceiling of a *story*, open on one or more sides to the room in which the space is located, and in accordance with **Section R315**.~~

(delete section without substitution)

R310.3 Location. Smoke alarms shall be installed in the following locations:

1. In each sleeping room.
2. Outside each separate sleeping area in the immediate vicinity of the bedrooms.
3. On each additional *story* of the ***dwelling unit,*** including *basements* and *habitable attics* and not including *crawl spaces* and uninhabitable *attics*. In *dwelling units* with split levels and without an intervening door between the adjacent levels, a smoke alarm installed on the upper level shall suffice for the adjacent lower level provided that the lower level is less than one full *story* below the upper level.
4. Not less than 3 feet (914 mm) horizontally from the door or opening of a bathroom that contains a bathtub or shower unless this would prevent placement of a smoke alarm required by this section.
5. In the hallway and in the room open to the hallway in *dwelling units* where the *ceiling height* of a room open to a hallway serving bedrooms exceeds that of the hallway by 24 inches (610 mm) or more.
6. ~~Within the room to which a *sleeping loft* is open, in the immediate vicinity of the *sleeping loft* .~~

(*page 2 of **IRC 2024 03** - R202, R310.1, etc.*)

R314.1 General. *Mezzanines* shall comply with **Sections R314.2** through **R314.5**.
~~**Exception:** *Sleeping lofts* in *dwelling units* and *sleeping units* shall be permitted to comply with **Section R315,** subject to the limitations in **Section R315.2.**~~

~~**SECTION R315**~~

~~**SLEEPING LOFTS**~~

(Delete section without substitution)

R319.1 Emergency escape and rescue opening required. *Basements, habitable attics,* ~~the room to which a sleeping loft is open,~~ and every sleeping room shall have not less than one operable *emergency escape and rescue opening*. Where *basements* contain one or more sleeping rooms, an *emergency escape and rescue opening* shall be required in each sleeping room. *Emergency escape and rescue openings* shall open directly into a *public way*, or to a *yard* or *court* that opens to a *public way*.
Exceptions:

1. Basements used only to house mechanical *equipment* not exceeding a total floor area of 200 square feet (18.58 m2).
2. Storm shelters constructed in accordance with **ICC 500**.
3. Where the dwelling *unit* or *townhouse unit* is equipped with an automatic sprinkler system installed in accordance with **Section P2904**, sleeping rooms in *basements* shall not be required to have *emergency escape and rescue openings* provided that the *basement* has one of the following:
   3.1. One means of egress complying with **Section R318** and one *emergency escape and rescue opening*.
   3.2. Two means of egress complying with **Section R318**.
4. A *yard* shall not be required to open directly into a *public way* where the *yard* opens to an unobstructed path from the *yard* to the *public way*. Such path shall have a width of not less than 36 inches (914 mm).

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 04

Code Section: R301.2.1 Wind design criteria

Proponent: Home Builders Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
IRC 2021	IRC 2021 04	

Reason: Provides added consistency and ease.

Modification:

R301.2.1 Wind design criteria. *Buildings* and portions thereof shall be constructed in accordance with the ~~wind provisions of this code using the ultimate design wind speed in **Table R301.2** as determined from **Figure R301.2(2)**~~ American Society of Civil Engineers (ASCE) Hazard Tool. The local building official may delineate the wind design category within their jurisdiction, as long as, it does not surpass those provided on the American Society of Civil Engineers (ASCE) Hazard Tool website. The structural provisions of this code for wind loads are not permitted where wind design is required as specified in **Section R301.2.1.1**. Where different construction methods and structural materials are used for various portions of a *building*, the applicable requirements of this section for each portion shall apply. Where not otherwise specified, the wind loads listed in **Table R301.2.1(1)** adjusted for height and exposure using **Table R301.2.1(2)** shall be used to determine design load performance requirements for wall coverings, curtain walls, *roof coverings*, exterior windows, *skylights*, garage doors and exterior doors. Asphalt shingles shall be designed for wind speeds in accordance with **Section R905.2.4**. *Metal roof shingles* shall be designed for wind speeds in accordance with **Section R905.4.4**. A continuous load path shall be provided to transmit the applicable uplift forces in **Section R802.11** from the *roof assembly* to the foundation. Where ultimate design wind speeds in **Figure R301.2(2)** are less than the lowest wind speed indicated in the prescriptive provisions of this code, the lowest wind speed indicated in the prescriptive provisions of this code shall be used.

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 05

Code Section: R301.2.2 Seismic provisions

Proponent: Home Builders Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
N/A		

Reason: The structural requirements add cost without significant safety benefit in low-to-moderate seismic rick areas.

Modification:

(removes "C" from #1 below)

R301.2.2 Seismic provisions. Buildings within the scope of this code as defined in **Section R101.2** shall be constructed in accordance with the requirements of this section and other seismic requirements of this code. The seismic provisions of this code shall apply as follows:

1. *Townhouses* and *buildings* as permitted by the exceptions to **Section R101.2** containing three or more *dwelling units* in *Seismic Design Categories* ~~C~~, D0, D 1 and D2.
2. Detached one- and two-family *dwellings* and *buildings* as permitted by the exceptions to **Section R101.2** containing less than three *dwelling units* in *Seismic Design Categories* D0, D 1 and D2. Buildings in Seismic Design Category E shall be designed to resist seismic loads in accordance with the *International Building Code*, except where the *seismic design categories* are reclassified to lower seismic design categories in accordance with **Section R301.2.2.1**. Components of *buildings* not required to be designed to resist seismic loads shall be constructed in accordance with the provisions of this code.

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 06

Code Section: R301.2.2.1 Determination of seismic design category

Proponent: Home Builders Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
IRC 2021	IRC 2021 04	

Reason: Provides added consistency and ease.

Modification:

R301.2.2.1 Determination of seismic design category. *Buildings* shall be assigned a *seismic design category* in accordance with the American Society of Civil Engineers (ASCE) Hazard Tool. ~~**Figures R301.2.2.1(1)** through **R301.2.2.1(7)**, except as otherwise required by **Section R401.4**.~~ The local building official may delineate the seismic design category within the jurisdiction, as long as, it does not surpass those provided on the American Society of Civil Engineers (ASCE) Hazard Tool website.

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 07

Code Section: R302.1 Exterior Walls (adds exception #6)

Proponent: Coastal Code Enforcement Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
IRC 2021	IRC 2021 06	R302.1
IRC 2018	IRC 2018 04	R302.1
IRC 2015	IRC 2015 01	R302.1
IRC 2012	IRC 2012 02	R302.1

Reason: To provide a clear definition and uniform interpretation of the phrase

Modification:

R302.1 Exterior walls. Construction, projections, openings and penetrations of exterior walls of *dwellings, townhouses* and *accessory* buildings shall comply with Table R302.1(1) based on *fire separation distance*; or *dwellings* and *townhouses* equipped throughout with an *automatic sprinkler system* installed in accordance with Section P2904 shall comply with Table R302.1(2) based on *fire separation distance*.

For the purposes of determining *fire separation distance*, *dwellings* and *townhouses* on the same lot shall be assumed to have an imaginary line between them. Where a new *dwelling* or *townhouse* is to be erected on the same lot as an existing *dwelling* or *townhouse*, the location of the assumed imaginary line with relation to the existing *dwelling* or *townhouse* shall be such that the existing *dwelling* or *townhouse* meets requirements of this section.

Where a *lot line* exists between adjacent *townhouse units*, *fire separation distance* of exterior walls shall be measured to the *lot line*. Where a *lot line* does not exist between adjacent *townhouse* units, an imaginary line shall be assumed between the adjacent *townhouse units* and *fire separation distance* of exterior walls shall be measured to the imaginary line. *Fire separation distance* and requirements of **Section R302.1** shall not apply to walls separating *townhouse units* that are required by **Section R302.2**.

Exceptions:

1. Walls, projections, openings or penetrations in walls perpendicular to the line used to determine the *fire separation distance*.
2. Walls of *individual dwelling units* and their *accessory* buildings located on the same lot.
3. Detached tool sheds and storage sheds, playhouses and similar structures exempted from *permits* are not required to provide wall protection based on location on the lot. Projections beyond the exterior wall shall not extend over the *lot line*.

(*page 2 of* ***IRC 2024 07****- R302.1*)

4. Detached garages accessory to a *dwelling unit* located within 2 feet (610 mm) of a *lot line* are permitted to have roof eave projections not exceeding 4 inches (102 mm).
5. Foundation vents installed in compliance with this code are permitted.
6. *Fire separation distance*.

   a. The minimum *fire separation distance* for improvement constructed on a lot shown on: [i] a recorded bonded or final subdivision plat, or [ii] a sketch plan, site plan, plan of phased development or preliminary plat approved by the local governing authority, which was recorded or *approved* prior to the implementation of 2012 International Residential Code and which shows or describes lesser setbacks than the *fire separation distances* provided in Table R302.1(1), shall be equal to the lesser setbacks, but in no event less than 3 feet (914 mm).

   b. The minimum *fire separation distance* for improvements constructed on a lot where the local governing authority has, prior to the implementation of 2012 International Residential Code: [i] accepted exactions or issued conditions, [ii] granted a special exception, [iii] entered into a development agreement, [iv] *approved* a variance, [v] *approved* a planned development district, or [vi] otherwise *approved* a specific development plan which contemplated or provided for setbacks less than the *fire separation distances* provided in Table R302.1(1), shall be equal to the lesser setback, but in no event less than 3 feet (914 mm).

Applicable Code: **2024 International Residential Code**

Modification Index Number: **IRC 2024 08**

Code Section: **R302.1 Exterior Walls (adds exception #7)**

Proponent: Building Official's Association of South Carolina (BOASC)

Previous Code Cycles	Previous Modification Number	Previous Code Section
IRC 2021	IRC 2021 06	R302.1

Reason: To account for eave projections on townhomes.

Modification:

(Modification adds below exception to prior modification **IRC 2024 07** for **Section R302.1 Exterior walls**)

Exceptions:

7. Aesthetic roof and siding projections may extend beyond the common wall of a *townhouse unit* over an adjoining unit's property line as long as the construction of the projection does not damage the integrity of the fire-rated assembly, the projection is completely supported by the common wall, the projection is protected by a 1-hour construction or fire retardant-treated wood, and the projection is limited to 18 inches (457 mm). These projections shall not contain any plumbing, electrical or mechanical installations. An easement may be required by the jurisdiction to ensure future access to this projection for repair and maintenance.

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 09

Code Section: R302.2.7 Meter Location (new section)

Proponent: Home Builders Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
N/A		

Reason: Provides design and installation flexibility. Aligns with utility company practices and NEC requirements. Maintains fire-resistance integrity of common walls. Clarifies enforcement for local building officials and reduces conflicts during plan review.

Modification:

R.302.2.7 Meter Location. Installation of multiple electrical meters on the exterior wall of townhomes is permitted, provided the installation does not breach the fire-resistance-rated wall assembly.

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 10

Code Section: R302.4.1 Through penetrations

Proponent: Building Official's Association of South Carolina (BOASC)

Previous Code Cycles	Previous Modification Number	Previous Code Section
IRC 2021	IRC 2021 09	R302.4.1

Reason: The common walls between townhouses are essentially property lines between adjacent owners, and utilities or services of any kind should not pass through a property line.

Modification:

R302.4.1 Through penetrations. Through penetrations of fire-resistance-rated wall or floor assemblies shall comply with **Section R302.4.1.1** or **R302.4.1.2**. No penetrations shall pass completely through the fire-rated assembly separating townhouse units.

Exceptions:

1. Where the penetrating items are steel, ferrous or copper pipes, tubes or conduits, the annular space shall be protected as follows:
   1.1. In concrete or masonry wall or floor assemblies, concrete, grout or mortar shall be permitted where installed to the full thickness of the wall or floor assembly or the thickness required to maintain the fire-resistance rating, provided that both of the following are complied with:
   1.1.1. The nominal diameter of the penetrating item is not more than 6 inches (152 mm).
   1.1.2. The area of the opening through the wall does not exceed 144 square inches (92 900 mm^2).
   1.2. The material used to fill the annular space shall prevent the passage of flame and hot gases sufficient to ignite cotton waste where subjected to **ASTM E119** or **UL 263** time temperature fire conditions under a positive pressure differential of not less than 0.01 inch of water (3 Pa) at the location of the penetration for the time period equivalent to the fire-resistance rating of the construction penetrated.
2. The annular space created by the penetration of water-filled fire sprinkler piping, provided that the annular space is filled using a material complying with Item 1.2 of Exception 1.

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 11

Code Section: R302.5.1 Opening protection

Proponent: Home Builders Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
IRC 2021	IRC 2021 10	R302.5.1
IRC 2018	IRC 2018 05	R302.5.1
IRC 2015	IRC 2015 05	R302.5.1

Reason: Lack of supporting documentation proving that self-closing devices contribute to fire or carbon monoxide safety.

Modification:

R302.5.1 Opening protection. Openings from a private garage directly into a room used for sleeping purposes shall not be permitted. Other openings between the garage and *dwelling unit* shall be equipped with solid wood doors not less than 1 3/8 inches (35 mm) in thickness, solid or honeycomb-core steel doors not less than 1 3/8 inches (35 mm) thick, or 20-minute fire-rated doors. ~~Doors shall be self-latching and equipped with a self-closing or automatic-closing device.~~

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 12

Code Section: R302.13 Fire protection of floors

Proponent: Home Builders Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
IRC 2021	IRC 2021 11	R302.13
IRC 2018	IRC 2018 06	R302.13
IRC 2015	IRC 2015 06	R302.13

Reason: Requirements are unwarranted and unnecessary.

Modification:

R302.13 Fire protection of floors. Floor assemblies that are not required elsewhere in this code to be fire-resistance rated, shall be provided with a 1/2-inch (12.7 mm) gypsum wallboard membrane, 5/8-inch (16 mm) *wood structural panel* membrane, or equivalent on the underside of the floor framing member. Penetrations or openings for ducts, vents, electrical outlets, lighting, devices, luminaires, wires, speakers, drainage, piping and similar openings or penetrations shall be permitted.

Exceptions:

1. Floor assemblies located directly over a space protected by an automatic sprinkler system in accordance with **Section P2904, NFPA 13D**, or other *approved* equivalent sprinkler system.
2. ~~Floor assemblies located directly over a *crawl space* not intended for storage or for the installation of fuel-fired or electric-powered heating *appliances*~~. Floor assemblies located directly over a *crawl space*.
3. Portions of floor assemblies shall be permitted to be unprotected where complying with the following:
   3.1. The aggregate area of the unprotected portions does not exceed 80 square feet (7.4 m^2) per story.
   3.2. Fireblocking in accordance with **Section R302.11.1** is installed along the perimeter of the unprotected portion to separate the unprotected portion from the remainder of the floor assembly.
4. Wood floor assemblies using dimension lumber or *structural composite lumber* equal to or greater than 2-inch by 10-inch (50.8 mm by 254 mm) nominal dimension, or other *approved* floor assemblies demonstrating equivalent fire performance.
5. Wood floor assemblies less than 600 square feet (55.7m^2) within detached *accessory structures* with no *habitable space* above them.

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 13

Code Section: 304.1.1 Field treatment

Proponent: Structural Engineers Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
IRC 2021	IRC 2021 22	R317.1.1
IRC 2018	IRC 2018 14	R317.1.1
IRC 2015	IRC 2015 13	R317.1.1
IRC 2012	IRC 2012 12	R317.1.1

Reason: To add the preservative-treated wood product manufacturer's field treatment recommendations as a method of compliance.

Modification:

R304.1.1 Field treatment. Field-cut ends, notches and drilled holes of preservative-treated wood shall be treated in the field in accordance with **AWPA M4** or in accordance with the preservative-treated wood product manufacturer's recommendations.

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 14

Code Section: R305.1 Subterranean termite control methods

Proponent: Home Builders Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
IRC 2021	IRC 2021 23	318.1
IRC 2018	IRC 2018 15	318.1

Reason: Provides clarification that additional treatment methods are permissible if it adheres to Section 27-1085 of the Rules and Regulations for the Enforcement of the South Carolina Pesticide Control Act and enforced by the Clemson University Department of Pesticide Regulations.

Modification:

R305.1 Subterranean termite control methods. In areas subject to damage from termites as indicated by **Table R301.2**, protection shall be by one, or a combination, of the following methods:

1. Chemical termiticide treatment in accordance with **Section R305.2**.
2. Termite-baiting system installed and maintained in accordance with the *label*.
3. Pressure-preservative-treated wood in accordance with the provisions of **Section R304.1**.
4. Naturally durable termite-resistant wood.
5. Physical barriers in accordance with **Section R305.3** and used in locations as specified in **Section R304.1**.
6. Cold-formed steel framing in accordance with **Sections R505.2.1** and **R603.2.1**.
7. Treatments may be conducted as outlined in **Section 27-1085** of the Rules and Regulations for the Enforcement of the South Carolina Pesticide Control Act and enforced by the Clemson University Department of Pesticide Regulation.

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 15

Code Section: R305.4 Foam Plastic Protection

Proponent: Home Builders Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
IRC 2021	IRC 2021 24	R318.4
IRC 2018	IRC 2018 16	R318.4

Reason: Provided language establishes a best management practice in order to inspect for termites and other wood-destroying organisms. The exception should be deleted due to a lack of rigorous experimental investigation and robust data to indicate a foam insulation product can be treated or produced in a way to make the product 100% effective against subterranean termite damage or an effective barrier to prevent termites a route into a structure.

Modification:

R305.4 Foam plastic protection. In areas where the probability of termite infestation is "very heavy" as indicated in **Figure R305.4**, extruded and expanded polystyrene, polyisocyanurate and other foam plastics shall not be installed on the exterior face or under interior or exterior foundation walls or slab foundations located below *grade*. The clearance between foam plastics installed above *grade* and exposed earth shall be not less than 6 inches (152 mm). For crawl space applications, foam plastic shall be installed so as to provide a termite inspection gap of no less than 6 inches (152 mm) along the top of the foundation wall and foundation sill plate.

Exceptions:

1. Buildings where the structural members of walls, floors, ceilings and roofs are entirely of *noncombustible materials* or pressure-preservative-treated wood.

~~2. Where in addition to the requirements of **Section R318.1**, an *approved* method of protecting the foam plastic and structure from subterranean termite damage is used.~~

~~3.~~2. On the interior side of basement *walls*.

Applicable Code: **2024 International Residential Code**

Modification Index Number: **IRC 2024 16**

Code Section: **R305.5 Termite inspection strip**

Proponent: Home Builders Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
IRC 2021	IRC 2021 25	R318.5

Reason: Provides added consistency and ease for inspections

Modification:

R305.5 Termite inspection strip. Where foam plastic is applied in accordance with **Section R318.4**, a continuous 6-inch (152 mm) strip centered along the sill plate shall be left open for termite activity inspection.

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 17

Code Section: R309 Automatic Sprinkler Systems

Proponent: Home Builders Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
IRC 2021	IRC 2021 18	R313
IRC 2018	IRC 2018 12	R313
IRC 2015	IRC 2015 12	R313
IRC 2012	IRC 2012 10	R313.1
IRC 2012	IRC 2012 11	R313.2

Reason: Unusually restrictive

Modification:

SECTION R309
AUTOMATIC FIRE SPRINKLER SYSTEMS

R309.1 Townhouse automatic fire sprinkler systems. An automatic residential fire sprinkler system shall not be required to be installed in *townhouses* when constructed in accordance with **Section R302.2**.

Exception: An automatic residential fire sprinkler system shall not be required where *additions* or *alterations* are made to existing *townhouses* that do not have an automatic residential fire sprinkler system installed.

R309.1.1 Design and installation. Automatic residential fire sprinkler systems for *townhouses* when installed shall be designed and installed in accordance with **Section P2904** or **NFPA 13D**.

R309.2 One- and two-family dwellings automatic sprinkler systems. An automatic residential fire sprinkler system ~~shall be installed~~ shall not be required to be installed in one- and two-family *dwellings*.

~~**Exception:** An automatic sprinkler system shall not be required for additions or alterations to existing buildings that are not already provided with a sprinkler system~~.

R309.2.1 Design and installation. Automatic residential fire sprinkler systems when installed shall be designed and installed in accordance with **Section P2904** or **NFPA 13D**.

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 18

Code Section: R316.3 Story above grade plane

Proponent(s): Home Builders Association of South Carolina (2021) and Building Officials Association of South Carolina (2024)

Previous Code Cycles	Previous Modification Number	Previous Code Section
IRC 2021	IRC 2021 29	R326.3

Reason: The deletions bring the definition of the habitable attic in line with the 2018 IRC.

Modification:

R316.3 Story above grade plane. A *habitable attic* shall be considered a *story above grade plane*.

Exceptions: A *habitable attic* shall not be considered to be a *story above grade plane* provided that the *habitable attic* meets all the following:

1. The aggregate area of the *habitable attic* is ~~either of the following~~:
   - ~~1.1.~~ Not greater than ~~one-third~~ <u>one-half</u> of the floor area of the *story* below.
   - ~~1.2. Not greater than one-half of the floor area of the *story* below where the *habitable attic* is located within a *dwelling unit* equipped with an automatic fire sprinkler system in accordance with **Section P2904**.~~
2. The occupiable space is enclosed by the *roof assembly* above, knee walls, if applicable, on the sides and the floor- ceiling assembly below.
3. The floor of the *habitable attic* does not extend beyond the exterior walls of the *story* below.
4. ~~Where a *habitable attic* is located above a third *story*, an automatic sprinkler system in accordance with **Section P2904** shall be installed in the *habitable attic* and remaining portion of the *townhouse unit* or *dwelling unit* or units located beneath the *habitable attic*.~~

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 19

Code Section: R318.3.1 Floor elevations at the required egress doors

Proponent: Home Builders Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
N/A		

Reason: Replacing "threshold" with "primary floor level" provides clarity for enforcement and design. "Threshold" can vary by product, while "primary floor level" offers a consistent, measurable reference.

Modification:

R318.3.1 Floor elevations at the required egress doors. Landings or finished floors at the required egress door shall be not more than 1 1/2 inches (38 mm) lower than the top of the ~~threshold~~ primary floor level.

Exception: The landing or floor on the exterior side shall be not more than 7 3/4 inches (196 mm) below the top of the threshold provided that the door does not swing over the landing or floor.

Where exterior landings or floors serving the required egress door are not at grade, they shall be provided with access to grade by means of a ramp in accordance with **Section R318.8** or a stairway in accordance with **Section R318.7**.

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 20

Code Section: R318.7.5.1 Risers

Proponent: Structural Engineers Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
IRC 2021	IRC 2021 15	R311.7.5.1
IRC 2018	IRC 2018 09	R311.7.5.1
IRC 2015	IRC 2015 09	R311.7.5.1
IRC 2012	IRC 2012 07	R311.7.5.1

Reason: To establish a maximum height for masonry risers

Modification:

R318.7.5.1 Risers. The maximum *riser* height shall be ~~not more than~~ 7 3/4 inches (196 mm). The maximum riser height for masonry stairs shall be 8 inches (203 mm). The *riser* height shall be measured vertically between leading edges of the adjacent treads. The greatest *riser* height within any flight of stairs shall not exceed the smallest by more than 3/8 inch (9.5 mm). *Risers* shall be vertical or sloped from the underside of the *nosing* of the tread above at an angle not more than 30 degrees (0.51 rad) from the vertical. At open *risers*, openings located more than 30 inches (762 mm), as measured vertically, to the floor or *grade* below shall not permit the passage of a 4- inch-diameter (102 mm) sphere.

Exceptions:

1. The opening between adjacent treads is not limited on *spiral stairways*.
2. The *riser* height of *spiral stairways* shall be in accordance with **Section 318.7.11.1**.
3. The opening between adjacent treads is not limited on stairs with a total rise of 30 inches (762 mm) or less.

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 21

Code Section: R321.1.1 Where required

Proponent: Home Builders Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
IRC 2021	IRC 2021 16	R312.1.1
IRC 2018	IRC 2018 10	R312.1.1
IRC 2015	IRC 2015 10	R312.1.1
IRC 2012	IRC 2012 08	R312.1.1

Reason: No technical justification to substantiate a 36-inch measurement away from the leading edge of the walking surface or tread to determine when a guard should be required.

Modification:

R321.1.1 Where required. ~~*Guards* shall be provided for those portions of open-sided walking surfaces, including floors, stairs, *ramps* and landings that are located more than 30 inches (762 mm) measured vertically to the floor or *grade* below at any point within 36 inches (914 mm) horizontally to the edge of the open side. Insect screening shall not be considered as a *guard*~~.

Guards shall be located along open-sided walking surfaces of all decks, porches, balconies, floors, *stairs, ramps* and landings that are located more than 30 inches (762 mm) measured vertically to the floor or *grade* below; and at any point where a downward slope exceeds 3V:12H within 36 inches (914 mm) horizontally to the edge of the open side. Insect screening shall not be considered as a *guard*.

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 22

Code Section: R321.2 Window fall protection

Proponent: Home Builders Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
IRC 2021	IRC 2021 17	R312.2
IRC 2018	IRC 2018 11	R312.2
IRC 2015	IRC 2015 11	R312.2
IRC 2012	IRC 2012 09	R312.2

Reason: Unusually restrictive

Modification:

(Delete without substitution)

~~**R321.2 Window fall protection.** Window fall protection shall be provided in accordance with **Sections R321.2.1** and **R321.2.2**.~~

~~**R321.2.1 Window opening height.** In dwelling units, where the bottom of the clear opening of an operable window opening is located less than 24 inches (610 mm) above the finished floor and greater than 72 inches (1829 mm) above the finished grade or other surface below on the exterior of the building, the operable window shall comply with one of the following:~~

~~1. Operable window openings will not allow a 4 inch diameter (102 mm) sphere to pass through where the openings are in their largest opened position.~~

~~2. Operable windows are provided with window opening control devices or fall prevention devices that comply with ASTM F2090.~~

~~**R321.2.2 Emergency escape and rescue openings.** Where an operable window serves as an emergency escape and rescue opening, a window opening control device or fall prevention device, after operation to release the control device or fall prevention device allowing the window to fully open, shall not reduce the net clear opening area of the window unit to less than the area required by Sections R319.2.1 and R319.2.2.~~

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 23

Code Section: R325.3 Mechanical ventilation

Proponent: Coastal Code Enforcement Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
IRC 2021	IRC 2021 12	R303.4
IRC 2018	IRC 2018 07	R303.4
IRC 2015	IRC 2015 07	R303.4
IRC 2012	IRC 2012 05	R303.4

Reason: The blower door test is not required with the current State Energy Standard (2009 International Energy Conservation Code) and is not applicable.

Modification:

(Delete without substitution)

~~**R303.4 Mechanical ventilation.** Buildings and *dwelling units* complying with **Section 1102.5.1** shall be provided with mechanical ventilation in accordance with **Section M1505**, or with other *approved* means of ventilation~~.

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 24

Code Section: Figure R327.1 Minimum Fixture Clearances

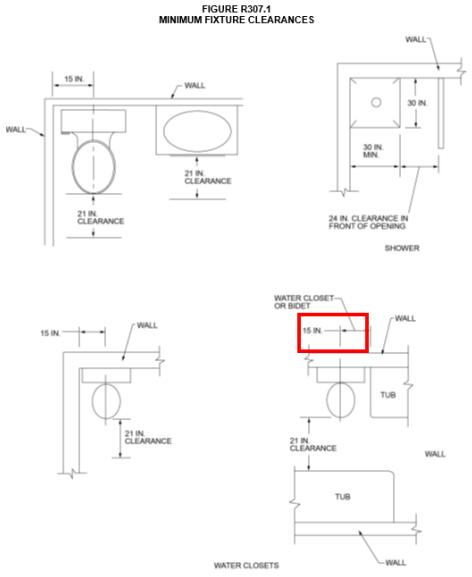
Proponent: Home Builders Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
IRC 2021	IRC 2021 13	R307.1
IRC 2018	IRC 2018 08	R307.1
IRC 2015	IRC 2015 08	R307.1
IRC 2012	IRC 2012 06	R307.2
IRC 2006	IRC 2006 09	R307.2
IRC 2003	IRC 2003 05	R307.2

Reason: No valid reason exists to justify a minimum clearance of 15 inches

Modification:

Change the minimum dimension for the side clearance between bathtubs and water closets or bidets from 15 inches to 12 inches.



Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 25

Code Section: R404.1.9.2 Masonry piers supporting floor girders

Proponent: Home Builders Association of South Carolina and Structural Engineers Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
IRC 2021	IRC 2021 31	R404.1.9.2
IRC 2018	IRC 2018 20	R404.1.9.2
IRC 2015	IRC 2015 16	R404.1.9.2
IRC 2012	IRC 2012 13	R404.1.9.2

Reason: Unusually restrictive

Modification:

R404.1.9.2 Masonry piers supporting floor girders. Masonry piers supporting wood girders sized in accordance with **Tables R602.7(1)** and **R602.7(2)** shall be permitted in accordance with this section. Piers supporting girders for interior bearing walls shall ~~have a minimum nominal dimension of 12 inches (305 mm) and a maximum height of 10 feet (3048 mm)~~ be filled solidly with grout or type M or S mortar and shall have a minimum nominal dimension of 8 inches (203 mm) and a maximum height not exceeding 10 times the nominal thickness from top of footing to bottom of sill plate or girder. ~~Piers supporting girders for exterior bearing walls shall have a minimum nominal dimension of 12 inches (305 mm) and a maximum height of 4 feet (1220 mm) from top of footing to bottom of sill plate or girder.~~ Piers supporting beams and girders for exterior bearing walls shall be filled solidly with grout or type M or S mortar; shall contain a minimum of one #4 (13 mm) dowel mid-depth; and shall have a minimum nominal dimension of 8 inches (203 mm) and a maximum height of 4 times the nominal thickness from top of footing to bottom of sill plate or girder unless it can be shown by accepted engineering practice that there is sufficient foundation wall along the foundation line to resist the imposed lateral loads, in which case the maximum height shall not exceed 10 times the nominal thickness. Girders and sill plates shall be anchored to the pier or footing in accordance with **Section R403.1.6** or **Figure R404.1.5.3**. Floor girder bearing shall be in accordance with **Section R502.6**.

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 26

Code Section: R408.3 Unvented Crawl Space

Proponent: Structural Engineers Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
IRC 2021	IRC 2021 32	R408.3
IRC 2018	IRC 2018 21	R408.3

Reason: ASTM E1745 is the industry standard for plastic vapor retarders used under concrete slabs or in contact with soil. It is also the main standards for evaluating plastic films that will be used in this application. Three performance classes are outlined A, B and C (with Class A being the strongest). Performance levels are the same for each class, less than 0.1 perms. Tensile strength and puncture resistance change with each class. ASTM E1745 refers to ASTM E154 "Standard Test Methods for Water Vapor Retarders Used in Contact with Earth Under Concrete Slabs, On Walls or as Ground Cover", which describes test methods for testing the performance of a plastic film after it is subjected to certain elements. These standards outline the methodology whereby plastic vapor retarders are tested. Simply having a low perm rating is not enough when it comes to real-life conditions. Vapor retarders/barriers must also be tough enough to endure the rigors of construction, since this will determine their true long-term ability to protect against water vapor intrusion.

Modification:

R408.3 Unvented crawl space. For unvented under-floor spaces, the following items shall be provided:

1. Exposed earth shall be covered with a continuous ~~Class I~~ vapor retarder meeting ASTM E1745 Class A. Joints of the vapor retarder shall overlap by 6 inches (152 mm) and shall be sealed or taped. The edges of the vapor retarder shall extend not less than 6 inches (152 mm) up the stem wall and shall be attached and sealed to the stem wall or insulation.
2. One of the following shall be provided for the under-floor space:
    - 2.1. Continuously operated mechanical exhaust ventilation at a rate equal to 1 cubic foot per minute (0.47 L/s) for each 50 square feet (4.7m^2) of *crawl space* floor area, including an air pathway to the common area (such as a duct or transfer grille), and perimeter walls insulated in accordance with Section N1102.2.11.1.
    - 2.2. *Conditioned air* supply sized to deliver at a rate equal to 1 cubic foot per minute (0.47 L/s) for each 50 square feet (4.7 m^2) of under-floor area, including a return air pathway to the common area (such as a duct or transfer grille), and perimeter walls insulated in accordance with Section N1102.2.11.1.
    - 2.3. Plenum in existing structures complying with **Section M1601.5**, if under-floor space is used as a plenum.
    - 2.4. Dehumidification sized in accordance with manufacturer's specifications.

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 27

Code Section: R408.3 Unvented Crawl Space

Proponent: Home Builders Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
IRC 2021	IRC 2021 33	R408.3
IRC 2018	IRC 2018 21	R408.3

Reason: Provides added clarity and consistency of codes between regulation and statute.

Modification:

R408.3 Unvented crawl space. For unvented under-floor spaces, the following items shall be provided:

1. Exposed earth shall be covered with a continuous vapor retarder meeting ASTM E1745 Class A. Joints of the vapor retarder shall overlap by 6 inches (152 mm) and shall be sealed or taped. The edges of the vapor retarder shall extend not less than 6 inches (152 mm) up the stem wall and shall be attached and sealed to the stem wall or insulation.
2. One of the following shall be provided for the under-floor space:
   - 2.1. Continuously operated mechanical exhaust ventilation at a rate equal to 1 cubic foot per minute (0.47 L/s) for each 50 square feet (4.7m^2) of *crawl space* floor area, including an air pathway to the common area (such as a duct or transfer grille), and perimeter walls insulated in accordance with ~~Section N1102.2.11.1~~ the South Carolina Energy Standard Act.
   - 2.2. *Conditioned air* supply sized to deliver at a rate equal to 1 cubic foot per minute (0.47 L/s) for each 50 square feet (4.7 m^2) of under-floor area, including a return air pathway to the common area (such as a duct or transfer grille), and perimeter walls insulated in accordance with ~~Section N1102.2.11.1~~ the South Carolina Energy Standard Act.
   - 2.3. Plenum in existing structures complying with **Section M1601.5**, if under-floor space is used as a plenum.
   - 2.4. Dehumidification sized in accordance with manufacturer's specifications.

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 28

Code Section: R408.4 Access

Proponent: Home Builders Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
IRC 2021	IRC 2021 34	R408.4
IRC 2018	IRC 2018 22	R408.4
IRC 2015	IRC 2015 17	R408.4

Reason: To allow access openings under a doorway

Modification:

R408.4 Access. Access shall be provided to all under-floor spaces. Access openings through the floor shall be not smaller than 18 inches by 24 inches (457 mm by 610 mm). Openings through a perimeter wall shall be not less than 16 inches by 24 inches (407 mm by 610 mm). Where any portion of the through-wall access is below *grade*, an areaway not less than 16 inches by 24 inches (407 mm by 610 mm) shall be provided. The bottom of the areaway shall be below the threshold of the access opening. ~~Through wall access openings shall not be located under a door to the residence~~. See Section M1305.1.3 for access requirements where mechanical *equipment* is located under floors.

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 29

Code Section: R408.8 Under floor vapor retarder

Proponent: Home Builders Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
IRC 2021	IRC 2021 35	R408.4

Reason: Application is not practical.

Modification:

(Section deleted without substitution)

~~**R408.8 Under-floor vapor retarder.** In Climate Zones 1A, 2A and 3A below the warm-humid line, a continuous Class I or II vapor retarder shall be provided on the exposed face of air-permeable insulation installed between the floor joists and exposed to the grade in the under-floor space. The vapor retarder shall have a maximum water vapor permeance of 1.5 perms when tested in accordance with Procedure B of ASTM E96.~~

~~**Exception:** The vapor retarder shall not be required in unvented *crawl spaces* constructed in accordance with Section R408.3.~~

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 30

Code Section: R502.12.4 Truss design drawings

Proponent: Home Builders Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
IRC 2021	IRC 2021 36	R502.11.4
IRC 2018	IRC 2018 23	R502.11.4
IRC 2015	IRC 2015 18	R502.11.4
IRC 2012	IRC 2012 14	R502.11.4
IRC 2006	IRC 2006 21	R502.11.4
IRC 2003	IRC 2003 17	R502.11.4

Reason: The section was modified to allow the approval of truss design drawings by local building officials to occur at the time of the framing inspection, rather than at an undefined time prior to installation.

Modification:

R502.12.4 Truss design drawings. *Truss design drawings*, prepared in compliance with **Section R502.12.1**, shall be submitted to the *building official* ~~and *approved* prior to installation~~ at the time of their inspection. *Truss design drawings* shall be provided with the shipment of trusses delivered to the job site. *Truss design drawings* shall include, at a minimum, the information specified as follows:
(No changes to items 1-12)

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 31

Code Section: R506.3.3 Vapor retarder

Proponent: Structural Engineers' Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
IRC 2021	IRC 2021 37	R506.2.3
IRC 2018	IRC 2018 24	R506.2.3
IRC 2015	IRC 2015 19	R506.2.3

Reason: It is a fairly common practice for garages to be transformed into conditioned space at which time having a vapor retarder becomes necessary, or to be converted to storage space (over 70 sq. ft.) at which time a vapor barrier is required.

Modification:

R506.3.3 Vapor retarder. A minimum 6 mil (0.006 inch; 152 µm) polyethylene or *approved* vapor retarder with joints lapped not less than 6 inches (152 mm) shall be placed between the concrete floor slab and the base course or the prepared subgrade where a base course does not exist.

Exception: The vapor retarder is not required for the following:

1. ~~Garages~~, utility *buildings* and other unheated *accessory structures*.
2. For unheated storage rooms having an area of less than 70 square feet (6.5 m2) and carports.
3. Driveways, walks, patios and other flatwork not likely to be enclosed and heated at a later date.
4. Where *approved* by the *building official*, based on local site conditions.

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 32

Code Section: R606.7 Piers

Proponent: Structural Engineers' Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
IRC 2021	IRC 2021 38	R606.7
IRC 2018	IRC 2018 25	R606.7
IRC 2015	IRC 2015 20	R606.7

Reason: To allow the use of only type M or S mortar to comply with ACI 530 which disallows the use of type N mortar in foundation walls.

Modification:

R606.7 Piers. The unsupported height of masonry piers shall not exceed 10 times their least dimension. Where structural clay tile or hollow *concrete masonry units* are used for isolated piers to support beams and girders, the cellular spaces shall be filled solidly with grout or Type M or S mortar, except that unfilled hollow piers shall be permitted to be used if their unsupported height is not more than four times their least dimension. Where *hollow masonry units* are solidly filled with grout or Type M or S ~~or N~~ mortar, the allowable compressive stress shall be permitted to be increased as provided in **Table R606.9**.

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 33

Code Section: R802.10.1 Truss design drawings

Proponent: Home Builders Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
IRC 2021	IRC 2021 39	R802.10.1
IRC 2018	IRC 2018 26	R802.10.1
IRC 2015	IRC 2015 21	R802.10.1

Reason: The section was modified to allow the approval of truss design drawings by local building officials to occur at the time of the framing inspection, rather than at an undefined time prior to installation.

Modification:

R802.10.1 Truss design drawings. *Truss design drawings*, prepared in conformance to **Section R802.10.1**, shall be provided to the *building official* ~~and *approved* prior to installation~~ at the time of their inspection. *Truss design drawings* shall be provided with the shipment of trusses delivered to the job site. *Truss design drawings* shall include, at a minimum, the following information:

(No changes to items 1-12)

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 34

Code Section: Table R905.1.1(2) Underlayment application

Proponent: Home Builders Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
N/A		

Reason: Current high-wind underlayment requirements are prescriptive and may not reflect the performance capabilities of modern materials. Removing this section allows evaluation based on the actual performance rating of underpayments as secondary moisture barriers, rather than mandating specific installation methods. This encourages innovation, simplifies compliance, and ensures the focus remains on tested results, not rigid procedures.

Modification:

****In Table R905.1.1(2) for asphalt shingles, the last column for "Areas Where Wind Design is Required in Accordance with Figure R.301.2.1.1" is changed to match the requirements in the column for "Areas Where Wind Design is Not Required in Accordance with Figure R. 301.2.1.1.*

TABLE R905.1.1(2)
UNDERLAYMENT APPLICATION
Roof Covering: Asphalt Shingles
SECTION: R905.2
AREAS WHERE WIND DESIGN IS REQUIRED IN ACCORDANCE WITH FIGURE R301.2.1.1:

Underlayment shall be one of the following:

~~1. Two layers of mechanically fastened underlayment applied in the following manner: Apply a strip of underlayment that is half the width of a full sheet parallel to and starting at the eaves, fastened sufficiently to hold in place. Starting at the eave, apply full-width sheets of underlayment, overlapping successive sheets half the width of a full sheet plus 2 inches. Distortions in the underlayment shall not interfere with the ability of the shingles to seal. End laps shall be 4 inches and shall be offset by 6 feet.~~
~~2. A minimum 4-inch-wide strip of self-adhering polymer modified bitumen underlayment complying with **ASTM D1970**, installed in accordance with the manufacturer's installation instructions for the deck material, shall be applied over all joints in the roof decking. An approved underlayment complying with **Table R905.1.1(1)** for the applicable roof covering shall be applied over the entire roof over the 4-inch- wide membrane strips.~~

(*page 2 of **2024 IRC 34** - Table R905.1.1(2)*)

~~3. A single layer of self-adhering polymer modified bitumen underlayment complying with **ASTM D1970**, installed in accordance with the underlayment and roof covering manufacturer's installation instructions for the deck material, roof ventilation configuration and climate exposure of the roof covering.~~

1. For roof slopes from 2 units vertical in 12 units horizontal (2:12), up to 4 units vertical in 12 units horizontal (4:12), underlayment shall be two layers applied in the following manner: apply a strip of underlayment that is half the width of a full sheet parallel to and starting at the eaves, fastened sufficiently to hold in place. Starting at the eave, apply full-width sheets of underlayment, overlapping successive sheets half the width of a full sheet plus 2 inches. Distortions in the underlayment shall not interfere with the ability of the shingles to seal. End laps shall be 4 inches and shall offset by 6 feet.
2. For roof slopes of 4 units vertical in 12 units horizontal (4:12) or greater underlayment shall be one layer applied in the following manner: underlayment shall be applied shingle fashion, parallel to and starting from the eave and lapped 2 inches. Distortions in the underlayment shall not interfere with the ability of the shingles to seal. End laps shall be 4 inches and shall be offset by 6 feet.
3. A single layer of self-adhering polymer modified bitumen underlayment complying with **ASTM D1970**, installed in accordance with the underlayment and roof covering manufacturer's installation instructions for the deck material, roof ventilation configuration and climate exposure of the roof covering.

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 35

Code Section: R905.2.8.5 Drip Edge

Proponent: Home Builders Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
IRC 2021	IRC 2021 40	R905.2.8.5
IRC 2018	IRC 2018 27	R905.2.8.5
IRC 2015	IRC 2015 22	R905.2.8.5

Reason: Impractical—this process is very time intensive and is difficult to produce and enforce any conformity. It is counterproductive and is trying to solve a non-issue. Jurisdictions have had to insert a stand-alone inspection for this one phase of construction in many cases.

Modification:

R905.2.8.5 Drip edge. ~~A drip edge shall be provided at eaves and rake edges of shingle roofs. Adjacent segments of drip~~ edge ~~shall be overlapped not less than 2 inches (51 mm). Drip edges shall extend not less than 1/4 inch (6.4 mm) below the~~ roof sheathing ~~and extend up back onto the *roof deck* not less than 2 inches (51 mm). Drip edges shall be mechanically~~ fastened ~~to the *roof deck* at not more than 12 inches (305 mm) o.c. with fasteners as specified in **Section R905.2.5**. *Underlayment* shall be installed over the drip edge along eaves and under the drip edge along rake edges.~~ A drip edge shall be provided at eaves and rake edges of asphalt shingle roofs where required by the manufacturer.

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 36

Code Section: Chapter 11 [RE] Energy Efficiency

Proponent: Home Builders Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
IRC 2021	IRC 2021 41	Chapter 11
IRC 2018	IRC 2018 28	Chapter 11
IRC 2015	IRC 2015 22	Chapter 11
IRC 2012	IRC 2012 16	Chapter 11
IRC 2006	IRC 2006 27	Chapter 11
IRC 2003	IRC 2003 21	Chapter 11

Reason: The State of South Carolina has specific energy standards in statutory form (Re: Title 6, Chapter 9, Building Codes and Title 6, Chapter 10, Building Energy Efficiency Standard Act.). To eliminate any possible conflicts concerning the insulation requirements for single and two family residential buildings between the International Residential Code and state law, Chapter 11 was deleted.

Modification:

(Chapter deleted without substitution).

~~**CHAPTER 11 [RE]**~~
~~**ENERGY EFFICIENCY**~~

*The State of South Carolina has specific energy standards in statutory form (Re: Title 6, Chapter 9, Building Codes and Title 6, Chapter 10, Building Energy Efficiency Standard Act). To eliminate any possible conflicts concerning the insulation requirements for single and two family residential buildings between the International Residential Code and state law, Chapter 11 was deleted.**

**All references to Chapter 11 in the Referenced Standards chapter and Index must also removed.*

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 37

Code Section: M1411.9.1 Auxiliary and secondary drain systems

Proponent: Home Builders Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
N/A		

Reason: The language is removed because it creates confusion. It applies to a drain pan without a drain line, yet it still requires a fitting intended for a drain line.

Modification:

M1411.9.1 Auxiliary and secondary drain systems. In addition to the requirements of **Section M1411.9**, a secondary drain or auxiliary drain pan shall be required for each cooling or evaporator coil where damage to any building components will occur as a result of overflow from the *equipment* drain pan or stoppage in the condensate drain piping. Such piping shall maintain a minimum horizontal slope in the direction of discharge of not less than 1/8 unit vertical in 12 units horizontal (1-percent slope). Drain piping shall be not less than 3/4-inch (19 mm) nominal pipe size. One of the following methods shall be used:

1. An auxiliary drain pan with a separate drain shall be installed under the coils on which condensation will occur. The auxiliary pan drain shall discharge to a conspicuous point of disposal to alert occupants in the event of a stoppage of the primary drain. The pan shall have a minimum depth of 1.5 inches (38 mm), shall be not less than 3 inches (76 mm) larger than the unit or the coil dimensions in width and length and shall be constructed of corrosion-resistant material. Galvanized sheet steel pans shall have a minimum thickness of not less than 0.0236-inch (0.6010 mm) (No. 24 Gage). Nonmetallic pans shall have a minimum thickness of not less than 0.0625 inch (1.6 mm).
2. A separate overflow drain line shall be connected to the drain pan installed with the *equipment*. This overflow drain shall discharge to a conspicuous point of disposal to alert occupants in the event of a stoppage of the primary drain. The overflow drain line shall connect to the drain pan at a higher level than the primary drain connection.
3. An auxiliary drain pan without a separate drain line shall be installed under the coils on which condensation will occur. This pan shall be equipped with a water level detection device conforming to **UL 508** that will shut off the *equipment* served prior to overflow of the pan. ~~The pan shall be equipped with a fitting to allow for drainage~~. The auxiliary drain pan shall be constructed in accordance with Item 1 of this section.
4. A water-level detection device conforming to **UL 508** shall be installed that will shut off the *equipment* served in the event that the primary drain is blocked. The device shall be installed in the primary drain line, the overflow drain line or the *equipment* -supplied drain pan, located at a point higher than the primary drain line connection and below the overflow rim of such pan.

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 38

Code Section: M1411.12 Insulation of refrigerant piping

Proponent: Home Builders Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
IRC 2021	IRC 2021 42	M1411.6
IRC 2018	IRC 2018 29	M1411.6
IRC 2015	IRC 2015 24	M1411.6
IRC 2012	IRC 2012 18	M1411.6
IRC 2006	IRC 2006 28	M1411.5
IRC 2003	IRC 2003 22	M1411.4

Reason: Section M1411.4 requires insulation of refrigerant lines to R 4. Further research is needed to determine if this insulating product is commercially available. To qualify for R 4 additional insulation may be required, which could limit the spaces in which refrigerant lines could be installed.

Modification:

M1411.12 Insulation of refrigerant piping. Piping and fittings for refrigerant vapor (suction) lines shall be insulated with insulation having a thermal resistivity of ~~not less than R-3~~ at least R 2.5 hr. ft 2 F/Btu and having external surface permeance not exceeding 0.05 perm [2.87 ng/(s × m^2 × Pa)] when tested in accordance with **ASTM E96**.

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 39

Code Section: M1411.15 Locking access port caps

Proponent: Home Builders Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
IRC 2021	IRC 2021 43	M1411.9
IRC 2018	IRC 2018 30	M1411.8
IRC 2015	IRC 2015 25	M1411.6
IRC 2012	IRC 2012 18	M1411.6

Reason: The section appears to solve a non-issue at an added cost to the consumer.

Modification:

(Section deleted without substitution)

~~**M1411.15 Locking access port caps.** Refrigerant circuit access ports located outdoors shall be fitted with locking type tamper resistant caps or shall be otherwise secured to prevent unauthorized access.~~

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 40

Code Section: M1502.3 Duct termination

Proponent: Home Builders Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
IRC 2021	IRC 2021 44	M1502.3
IRC 2018	IRC 2018 31	M1502.3
IRC 2015	IRC 2015 26	M1502.3
IRC 2012	IRC 2012 19	M1502.3
IRC 2006	IRC 2006 29	M1502.2

Reason: The three feet dimension is arbitrary and restrictive; the dimension is not a requirement of the dryer manufacturers.

Modification:

M1502.3 Duct termination. Exhaust ducts shall terminate on the outside of the building. Exhaust duct terminations shall be in accordance with the dryer manufacturer's installation instructions. ~~If the manufacturer's instructions do not specify a termination location, the exhaust duct shall terminate not less than 3 feet (914 mm) in any direction from openings into buildings, including openings in ventilated soffits.~~ Exhaust duct terminations shall be equipped with a backdraft damper. Screens shall not be installed at the duct termination.

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 41

Code Section: M1502.4.2 Duct Installation

Proponent: Home Builders Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
IRC 2021	IRC 2021 45	M1502.4.2
IRC 2018	IRC 2018 32	M1502.4.2

Reason: Due to the amount of dryer fires in the US every year, 15,000 according to the US Consumer Product Safety Division, the requirement for adding three screws per joint to the exhaust vent of clothes dryers is overly restrictive, impractical, and a threat to life safety. The amount of dryer fires in the US has not been proven to be due to failure of the joints on vents, but has been proven to be due to an accumulation of lint. Adding protrusions to any length into the dryer exhaust will not decrease the probability of more accumulation. However, securing, scaling and supporting each side of the joint of a no-vertical-exhaust will prevent the separation of joints.

Modification:

M1502.4.2 Duct installation. Exhaust ducts shall be supported at intervals not to exceed 8 feet (2438 mm) and within 16 inches (406 mm) of each side of a joint that is not installed in a vertical orientation, ~~12 feet (3658 mm) and shall be~~ secured in place, making rigid contact with the duct at not less than 4 equally spaced points or two-thirds contact if strap is used. All brackets or strapping must be noncombustible. The insert end of the duct shall extend into the adjoining duct or fitting in the direction of airflow. The overlap shall comply with **Section M1601.4.2.** Ducts shall not be joined with screws or similar devices that protrude into the inside of the duct. Exhaust ducts ~~joints~~ shall be sealed in accordance with **Section M1601.4.1**. ~~and shall be mechanically fastened. Ducts shall not be joined with screws or similar fasteners that protrude more than 1/8 inch (3.2 mm) into the inside of the duct~~. Where dryer exhaust ducts are enclosed in wall or ceiling cavities, such cavities shall allow the installation of the duct without deformation. The duct work may be ovalized as long as it terminates in an *approved* duct box. Minor imperfections located on the duct, in areas other than along the seam, do not constitute a violation.

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 42

Code Section: M1502.4.6 Duct length

Proponent: Home Builders Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
IRC 2021	IRC 2021 46	M1502.4.6
IRC 2018	IRC 2018 33	M1502.4.5
IRC 2015	IRC 2015 27	M1502.4.4
IRC 2012	IRC 2012 20	M1502.4.4
IRC 2006	IRC 2006 30	M1502.6

Reason: To coincide with the maximum duct length specified by most clothes dryer manufacturers.

Modification:

M1502.4.6 Duct length. ~~The maximum allowable exhaust duct length shall be determined by one of the methods specified~~ ~~in~~ **~~Sections M1502.4.6.1~~** ~~through~~ **~~M1502.4.6.3.~~** The maximum length of a clothes dryer exhaust duct shall not exceed 35 feet (10668 mm) from the dryer location to the wall or roof termination.

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 43

Code Section: M1503.6 Makeup air

Proponent: Home Builders Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
IRC 2021	IRC 2021 47	M1503.6
IRC 2018	IRC 2018 34	M1503.6
IRC 2015	IRC 2015 28	M1503.4

Reason: Makeup air is not required for installations less than 400 cfm.

Modification:

M1503.6 Makeup air required. ~~Where one or more gas, liquid or solid fuel burning *appliance* that is neither direct-vent nor uses a mechanical draft venting system is located within a dwelling unit's air barrier, each exhaust system capable of exhausting in excess of 400 cubic feet per minute (0.19 m^3/s) shall be mechanically or passively provided with makeup air at a rate approximately equal to the exhaust air rate. Such makeup air systems shall be equipped with not fewer than one outdoor air duct and damper complying with **Section M1503.6.2**.~~

~~**Exception:** Makeup air is not required for exhaust systems installed for the exclusive purpose of space cooling and intended to be operated only when windows or other air inlets are open~~.

Exhaust hood systems capable of exhausting more than 400 cubic feet per minute (0.1 9 m^3 /s) shall be mechanically or naturally provided with makeup air at a rate approximately equal to the exhaust air rate more than 400 cubic feet (0.19 m^3/s) per minute. Such makeup air systems shall be equipped with not less than one outdoor air duct and damper. Each damper shall be a gravity damper or an electrically operated damper that automatically opens when the exhaust system operates. Dampers shall be accessible for inspection, service, repair and replacement without removing permanent construction or any other ducts not connected to the damper being inspected, serviced, repaired or replaced.

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 44

Code Section: M1504.3 Exhaust Openings

Proponent: Home Builders Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
IRC 2021	IRC 2021 48	M1504.3
IRC 2018	IRC 2018 35	M1504.3

Reason: Locating air exhaust openings (typically from bath exhaust fans) 3 or more feet (914 mm) away from an operable window or door is impractical in the design of residential structures. This also brings the exhaust air opening requirement in line with dryer vent duct termination in M1502.3.

Modification:

M1504.3 Exhaust openings. Air exhaust openings shall terminate as follows:

1. Not less than 3 feet (914 mm) from property lines.
2. Not less than 3 feet (914 mm) from gravity air intake openings, operable windows and doors except where the exhaust opening is located not less than 1 foot (305 mm) above the gravity air intake opening, operable windows and doors.
3. Not less than 10 feet (3048 mm) from mechanical air intake openings except where either of the following apply:
   3.1 The exhaust opening is located not less than 3 feet (914 mm) above the air intake opening.
   3.2 The exhaust opening is part of a factory-built intake/exhaust combination termination fitting installed in accordance with the fan manufacturer's instructions, and the exhaust air is drawn from a living space.
4. In accordance with **Section R303.5.2** and **R303.6**.

Exception: Bathrooms, water closets and shower spaces.

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 45

Code Section: M1601.4.1 Joints, Seams and Connections

Proponent: Home Builders Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
IRC 2021	IRC 2021 49	M1601.4.1
IRC 2018	IRC 2018 36	M1601.4.1
IRC 2015	IRC 2015 29	M1601.4.1

Reason: The requirement to seal longitudinal duct joints and seams for commercial applications with static pressure of 2 inches water column and greater. However, this should not apply to residential applicants which operate at a much lower pressure, closer to 0.2 inches water column. One argument to seal all seams and joints is so the duct system functions efficiently. However, whether the longitudinal joints and seams are sealed or not on a low-pressure system has very little effect on system efficiency. To a much greater degree, system efficiency is affected by factors outside of the installer's influence. For example, the duct system can be perfectly balanced at the time of the inspection, but the occupants set furniture in front of registers, change the settings on the registers open and close doors, etc. Sealing the longitudinal joints and seams will not make a noticeable difference in either the efficiency or the energy saved, making the added time and cost unnecessary.

Modification:

M1601.4.1 Joints, seams and connections. Longitudinal and transverse joints, seams and connections in metallic and nonmetallic ducts shall be constructed as specified in **SMACNA *HVAC Duct Construction Standards --Metal and Flexible*** **and NAIMA *Fibrous Glass Duct Construction Standards***. Joints, longitudinal and transverse seams, and connections in ductwork shall be securely fastened and sealed with welds, gaskets, mastics (adhesives), mastic-plus-embedded-fabric systems, liquid sealants or tapes. Tapes and mastics used to seal fibrous glass ductwork shall be *listed* and *labeled* in accordance with **UL 181A** and shall be marked "181A-P" for pressure-sensitive tape, "181 A-M" for mastic or "181 A-H" for heat-sensitive tape.

Tapes and mastics used to seal metallic and flexible air ducts and flexible air connectors shall comply with **UL 181B** and shall be marked "181 B-FX" for pressure-sensitive tape or "181 BM" for mastic. Duct connections to flanges of air distribution system *equipment* shall be sealed and mechanically fastened. Mechanical fasteners for use with flexible nonmetallic air ducts shall comply with **UL 181B** and shall be marked 181B-C. Crimp joints for round metallic ducts shall have a contact lap of not less than 1 inch (25 mm) and shall be mechanically fastened by means of not less than three sheet-metal screws or rivets equally spaced around the joint.

(*page 2 of **IRC 2024 45** - M1601.4.1*)

Closure systems used to seal all ductwork shall be installed in accordance with the manufacturers' instructions.

Exceptions:

1. Spray polyurethane foam shall be permitted to be applied without additional joint seals.
2. Where a duct connection is made that is partially without access, three screws or rivets shall be equally spaced on the exposed portion of the joint so as to prevent a hinge effect.
3. For ducts having a static pressure classification of less than 2 inches of water column (500 Pa), additional closure systems shall not be required for continuously welded joints and seams and locking-type joints and seams. ~~This exception shall not apply to snap-lock and button-lock type joints and seams that are located outside of *conditioned spaces*~~.

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 46

Code Section: G2415.17.1 (404.17.1) Limitations

Proponent: Omega Flex, Inc.

Previous Code Cycles	Previous Modification Number	Previous Code Section
N/A		

Reason: Composite tubing (both pex-al-pex and pe-al-pe) is being sold in the United States for use in fuel gas systems. The pex-al-pex material was evaluated by the NFPA 54 National Fuel Gas code committee which did not approve it for fuel gas applications because the product lacks equivalency to proscribed piping systems. It is, nonetheless, being presented to AHJs who are being asked to approve it for use as an alternative material for use within buildings in the United States. Even though the evaluation services report lists this section of the code limiting the material to outdoors below ground, several AHJs have approved it for installation above grade within the building where it poses a potential hazard in the event of a building fire. A characteristic it shares with plastic gas piping and the reason for this section.

Modification:

G2415.17.1 (404.17.1) Limitations. Plastic pipe and plastic composite piping including pex-al-pex and pe-al-pe (where listed and approved) shall be installed outdoors underground only. Plastic pipe shall not be used within or under any *building* or slab or be operated at pressures greater than 100 psig (689 kPa) for natural gas or 30 psig (207 kPa) for *LP-gas*.

Exceptions:

1. Plastic pipe shall be permitted to terminate above ground outside of *buildings* where installed in premanufactured *anodeless risers* or service head adapter risers that are installed in accordance with the manufacturer's instructions.
2. Plastic pipe shall be permitted to terminate with a wall head adapter within *buildings* where the plastic pipe is inserted in a *piping* material for *fuel gas* use in *buildings*.
3. Plastic pipe shall be permitted under outdoor patio, walkway and driveway slabs provided that the burial depth complies with **Section G2415.12**.

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 47

Code Section: G2418.2 Design and installation

Proponent: Home Builders Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
IRC 2021	IRC 2021 50	G2418.2
IRC 2018	IRC 2018 37	G2418.2
IRC 2015	IRC 2015 30	G2418.2
IRC 2012	IRC 2012 21	G2418.2

Reason: To allow other support materials that have been used successfully for years.

Modification:

G2418.2 (407.2) Design and installation. *Piping* shall be supported with ~~metal~~ pipe hooks, ~~metal~~ pipe straps, ~~metal~~ bands, ~~metal~~ brackets, ~~metal~~ hangers or building structural components suitable for the size of *piping*, of adequate strength and quality, and located at intervals so as to prevent or damp out excessive vibration. *Piping* shall be anchored to prevent undue strains on connected *appliances* and shall not be supported by other *piping*. Pipe hangers and supports shall conform to the requirements of **MSS SP-58** and shall be spaced in accordance with **Section G2424**. Supports, hangers and anchors shall be installed so as not to interfere with the free expansion and contraction of the *piping* between anchors. The components of the supporting *equipment* shall be designed and installed so that they will not be disengaged by movement of the supported *piping*.

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 48

Code Section: P2503.6 Shower liner test

Proponent: Home Builders Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
IRC 2021	IRC 2021 51	P2503.6
IRC 2018	IRC 2018 38	P2503.6
IRC 2015	IRC 2015 31	P2503.6
IRC 2012	IRC 2012 22	P2503.6

Reason: To allow a simple test performed under typical conditions

Modification:

P2503.6 Shower liner test. Where shower floors and receptors are made watertight by the application of materials required by **Section P2709.2**, the completed liner installation shall be tested. ~~The pipe from the shower drain shall be plugged watertight for~~ ~~the test. The floor and receptor area shall be filled with potable~~ ~~water to a depth of not less than 2 inches (51 mm) measured at~~ ~~the threshold. Where a threshold of not less than 2 inches (51~~ ~~mm) in height does not exist, a temporary threshold shall be~~ ~~constructed to retain the test water in the lined floor or receptor~~ ~~area to a level not less than 2 inches (51 mm) in depth measured~~ ~~at the threshold. The water shall be retained~~ The shower liner shall be tested to the lesser of the depth of threshold or 2 inches (51 mm) and shall be operated at normal pressure for a test period of not less than 15 minutes and there shall not be evidence of leakage.

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 49

Code Section: P2503.6 Shower liner test

Proponent: Home Builders Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
N/A		

Reason: Allows scheduling flexibility and avoids delays by letting builders choose the test stage, without reducing safety or performance. Ensures compliance without disrupting construction flow.

Modification:

(Adds to modified language from IRC 2024 48)

P2503.6 Shower liner test. Where shower floors and receptors are made watertight by the application of materials required by **Section P2709.2**, the completed liner installation shall be tested. The shower liner shall be tested to the lesser of the depth of threshold or 2 inches (51 mm) and shall be operated at normal pressure for a test period of not less than 15 minutes and there shall not be evidence of leakage. The shower liner test shall be performed at the rough plumbing or at the final plumbing inspection at the discretion of the builder.

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 50

Code Section: P2603.2.1 Protection against physical damage

Proponent: Home Builders Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
IRC 2021	IRC 2021 53	P2603.2.1

Reason: Clarification

Modification:

P2603.2.1 Protection against physical damage. In concealed locations, where piping, other than cast-iron or galvanized steel, is installed through holes or notches in studs, joists, rafters or similar members less than 1 1/4 inches (31.8 mm) from the nearest edge of the member, the pipe shall be protected by steel shield plates. Such plates shall cover the area of the pipe where the member is notched or bored, and shall extend not less than 2 inches (51 mm) above sole plates and below top plates. Steel shield plates shall not be secured with nails or screws, unless required by the manufacturer.

P2603.2.1.1. Shield Plates. Shield plates shall be of steel material having a thickness of not less than 0.0575 inch (1.463 mm) (No. 16 gage).

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 51

Code Section: P2603.5 Freezing

Proponent: Home Builders Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
IRC 2021	IRC 2021 54	P2603.5
IRC 2018	IRC 2018 39	P2603.5
IRC 2015	IRC 2015 32	P2603.5

Reason: Unusually restrictive

Modification:

P2603.5 Freezing. In localities having a winter design temperature of 32°F (0°C) or lower as shown in **Table R301.2** of this code, a water~~, soil or waste~~ pipe shall not be installed outside of a building, in exterior walls, in *attics* or crawl spaces, or in any other place subjected to freezing temperature unless adequate provision is made to protect it from freezing by insulation or heat or both. Water service pipe shall be installed not less than 12 inches (305 mm) deep and not less than 6 inches (152 mm) below the frost line.

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 52

Code Section: P2603.5 Freezing

Proponent: Home Builders Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
IRC 2021	IRC 2021 55	P2603.5

Reason: Unusually restrictive

Modification:

(Adds to modified language from IRC 2024 51)

P2603.5 Freezing. In localities having a winter design temperature of 32°F (0°C) or lower as shown in Table R301.2 of this code, a water pipe shall not be installed outside of a building, in exterior walls, in *attics* or crawl spaces, or in any other place subjected to freezing temperature unless adequate provision is made to protect it from freezing by insulation or heat or both. Water service pipe shall be installed not less than 12 inches (305 mm) deep and not less than 6 inches (152 mm) below the frost line.

Exception: Water pipes that are installed on the warm in winter side of the building envelope, i.e., above the insulation line in a floor system or below the insulation line in an attic, do not need additional pipe insulation.

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 53

Code Section: P2705.1 General

Proponent: Home Builders Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
IRC 2021	IRC 2021 56	P2705.1

Reason: It has been decided that sealing a toilet/bidet to the floor would prevent witness to possible seal leaks that may go undetected.

Modification:

P2705.1 General. The installation of fixtures shall conform to the following:

1. Floor-outlet or floor-mounted fixtures shall be secured to the drainage connection and to the floor, where so designed, by screws, bolts, washers, nuts and similar fasteners of copper, copper alloy or other corrosion-resistant material.
2. Wall-hung fixtures shall be rigidly supported so that strain is not transmitted to the plumbing system.
3. Where fixtures come in contact with walls and floors, the contact area shall be watertight.
   Exception: Water closets and/or bidets shall not be required to be caulked to flooring surface.
4. Plumbing fixtures shall be usable.
5. Water closets, lavatories and bidets. A water closet, lavatory or bidet shall not be set closer than 15 inches (381 mm) from its center to any side wall, partition or vanity or closer than ~~30 inches (762 mm)~~ 27 inches center-to-center between adjacent fixtures. There shall be a clearance of not less than 21 inches (533 mm) in front of a water closet, lavatory or bidet to any wall, fixture or door.
6. The location of piping, fixtures or equipment shall not interfere with the operation of windows or doors.
7. In flood hazard areas as established by **Table R301.2**, plumbing fixtures shall be located or installed in accordance with **Section R306.1.6**.
8. Integral fixture-fitting mounting surfaces on manufactured plumbing fixtures or plumbing fixtures constructed on site, shall meet the design requirements of **ASME A112.19.2/CSA B45.1** or **ASME A112.19.3/CSA B45.4**.

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 54

Code Section: P2705.1 General

Proponent: Home Builders Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
N/A		

Reason: The added exception allows greater design flexibility in tight spaces by permitting toilets and bidets to be placed 12" from a shower or tub edge—areas where obstruction and access issues are minimal. This helps optimize bathroom layouts in smaller homes without compromising functionality or safety. Removing the lavatory from the spacing requirement in this context avoids unnecessary restrictions. Lavatories are often placed adjacent to tubs or showers without access or usability issues, and the standard clearance in front still ensures user comfort and code compliance.

Modification:

(Adds to modified language from IRC 2024 53)

P2705.1 General. The installation of fixtures shall conform to the following:

1. Floor-outlet or floor-mounted fixtures shall be secured to the drainage connection and to the floor, where so designed, by screws, bolts, washers, nuts and similar fasteners of copper, copper alloy or other corrosion-resistant material.
2. Wall-hung fixtures shall be rigidly supported so that strain is not transmitted to the plumbing system.
3. Where fixtures come in contact with walls and floors, the contact area shall be watertight.
   Exception: Water closets and/or bidets shall not be required to be caulked to flooring surface.
4. Plumbing fixtures shall be usable.
5. Water closets, lavatories and bidets. A water closet, lavatory or bidet shall not be set closer than 15 inches (381 mm) from its center to any side wall, partition or vanity or closer than <u>27 inches</u> center-to-center between adjacent fixtures. There shall be a clearance of not less than 21 inches (533 mm) in front of a water closet, lavatory or bidet to any wall, fixture or door.
   <u>Exception: toilets and bidets may have spaced 12” from its center to the edge of a shower or tub.</u>
6. The location of piping, fixtures or equipment shall not interfere with the operation of windows or doors.
7. In flood hazard areas as established by **Table R301.2**, plumbing fixtures shall be located or installed in accordance with **Section R306.1.6**.
8. Integral fixture-fitting mounting surfaces on manufactured plumbing fixtures or plumbing fixtures constructed on site, shall meet the design requirements of **ASME A112.19.2/CSA B45.1** or **ASME A112.19.3/CSA B45.4**.

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 55

Code Section: P2708.4 Shower control valves

Proponent: Home Builders Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
IRC 2021	IRC 2021 57	P2708.4

Reason: Unenforceable and ambiguous

Modification:

P2708.4 Shower control valves. Individual shower and tub/shower combination valves shall be balanced-pressure, thermostatic or combination balanced-pressure/thermostatic valves that conform to the requirements of **ASSE 1016/ASME 112.1016/CSA B125.16** or **ASME A112.18.1/CSA B125.1**. ~~Shower control valves shall be rated for the flow rate of the installed shower head. Such valves shall be installed at the point of use.~~ Shower and tub/shower combination valves required by this section shall be equipped with a means to limit the maximum setting of the valve to 120°F (49°C), which shall be field adjusted in accordance with the manufacturer's instructions to provide water at a temperature not to exceed 120ºF (49°C). In-line thermostatic valves shall not be utilized for compliance with this section.

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 56

Code Section: P2713.3 Bathtub and whirlpool bathtub valves

Proponent: Home Builders Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
IRC 2021	IRC 2021 58	P2713.3

Reason: New language is unenforceable and ambiguous. Reverts language back to 2018 IRC.

Modification:

P2713.3 Bathtub and whirlpool bathtub valves. ~~Bathtubs and whirlpool bathtub valves shall have or be supplied by a water-temperature-limiting device that conforms to **ASSE 1070/ASME A112.1070/CSA B125.70**, except where such valves are combination tub/shower valves in accordance with **Section P2708.4**. The water-temperature-limiting device required by this section shall be equipped with a means to limit the maximum setting of the device to 120ºF (49ºC), and, where adjustable, shall be field adjusted in accordance with the manufacturer's instructions to provide hot water at a temperature not to exceed 120ºF (49ºC). Access shall be provided to water-temperature-limiting devices that conform to **ASSE 1070/ASME A112.1070/CSA B125.70**.~~

> ~~**Exception:** Access is not required for nonadjustable water-temperature-limiting devices that conform to **ASSE 1070/ASME A112.1070/CSA B125.70** and are integral with a fixture fitting, provided that the fixture fitting itself can be accessed for replacement.~~

Hot water supplied to bathtubs and whirlpool bathtubs shall be limited to a temperature of not greater than 120ºF (49ºC) by a water-temperature limiting device that conforms to **ASSE 1070/ASME A112.1070/CSA B125.70** or **CSA B125.3**, except where such protection is otherwise provided by a combination tub/shower valve in accordance with **Section P2708.4**.

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 57

Code Section: P2903.10.3 Fixture valves and access

Proponent: Home Builders Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
N/A		

Reason: Through-wall faucets often have limited access and are typically connected to a common supply with an interior shutoff valve. Requiring individual shutoff valves at each through-wall fixture is impractical and may require invasive wall modifications. Adding this exception aligns with standard installation practices and maintains accessibility without unnecessary disruption or cost.

Modification:

P2903.10.3 Fixture valves and access. Shutoff valves shall be required on each fixture supply pipe to each plumbing *appliance* and to each plumbing fixture other than through wall faucets bathtubs and showers. Valves serving individual plumbing fixtures, *plumbing appliances,* risers and branches shall be accessible.

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 58

Code Section: P2903.11 Hose bibb

Proponent: Home Builders Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
IRC 2021	IRC 2021 60	P2903.10
IRC 2018	IRC 2018 40	P2903.10
IRC 2015	IRC 2015 33	P2903.10

Reason: Unusually restrictive

Modification:

(Section deleted without substitution)

~~**P2903.11 Hose bibb.** Hose bibbs subject to freezing, including the "frostproof" type, shall be equipped with an accessible stop and waste type valve inside the building so that they can be controlled and drained during cold periods~~.

~~**Exception:** Frostproof hose bibbs installed such that the stem extends through the building insulation into an open heated or *semiconditioned space* need not be separately valved (see **Figure P2903.11**~~).

(Figure also deleted with section)

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 59

Code Section: P2904.2.4.2.1 Additional requirements for pendent sprinklers

Proponent: South Carolina Master Plumbers Association

Previous Code Cycles	Previous Modification Number	Previous Code Section
IRC 2021	IRC 2021 62	P2904.2.4.2.1

Reason: To reconcile SC IRC P2904.2.4.2.1 to agree with NFPA 13D 8.2.5.1.4 that is considered to be equal to SC IRC P2904. NFPA 13D-2016, 8.2.5.1.4: Where area of the fan blades encompass more than 50% of the area of the plan view, the sprinkler shall be installed in accordance with 8.2.5.3. Cost analysis for this modification: the cost of the residential sprinkler protection in the affected fan areas are reduced by as much as 50% with no reduction in the effectiveness of the fire sprinkler performance.

Modification:

P2904.2.4.2.1 Additional requirements for pendent sprinklers. Pendent sprinklers within 3 feet (915 mm) of the center of a ceiling fan, surface mounted ceiling luminaire or similar object shall be considered to be obstructed, and additional sprinklers shall be installed.

Exception: Pendent sprinklers within 3 feet (915 mm) of the center of a ceiling fan shall not be considered to be obstructed if the total area of the fan blades does not exceed more than 50 percent of the plan area view.

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 60

Code Section: E3601.7.3 Metering centers

Proponent: Home Builders Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
N/A		

Reason: Remove the word separate when referencing meter centers with two to six disconnecting means. Requiring separate compartments for disconnecting means when these means of disconnect are grouped together limits types of metering allowed in residential dwellings supplied by 400amp services as well as types of meter centers allowed to be installed on residential single family town home construction. In these situations, requiring separate compartments significantly increases cost of new home construction.

Modification:

E3601.7.3 Metering centers. A service with two to six disconnecting means in ~~separate~~ compartments of a metering center or a metering center with a main service disconnecting means shall be permitted. [230.71 (B), 230.72 (A)]

Exception: Disconnecting means installed as part of *listed* equipment and used solely for the following shall not be considered a service disconnecting means:

1. Power monitoring equipment.
2. Surge-protective device(s).
3. Power-operable service disconnecting means. [230.71 (A)]

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 61

Code Section: E3606.5 Surge protection

Proponent: Home Builders Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
IRC 2021	IRC 2021 66	E3606.5

Reason: Delete the entire section as the requirement does not cover low voltage systems, and cannot provide complete coverage from surges outside of the incoming service line. This language would also foster an unreasonable and unenforceable implied warranty. The additional costs do not justify any potential benefits.

Modification:

(Section is deleted without substitution)

~~**E3606.5 Surge protection.** All services supplying one- and two-family dwelling units shall be provided with a surge protective device (SPD) installed in accordance with Sections E3606.5.1 through E3606.5.3.~~

~~**E3606.5.1 Location.** The SPD shall be an integral part of the service equipment or shall be located immediately adjacent thereto.~~

~~**Exception:** The SPD shall not be required to be located in the service equipment if located at each next-level distribution equipment downstream toward the load.~~

~~**E3606.5.2 Type.** The SPD shall be a Type 1 or Type 2 SPD.~~

~~**E3606.5.3 Replacement.** Where service equipment is replaced, all of the requirements of this section shall apply. [230.67]~~

~~**E3606.5.4 Ratings.** SPDs shall have a nominal discharge current rating (In) of not less than 10 kA. [230.67]~~

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 62

Code Section(s):

E3702.2 Branch-circuit ampere rating

E3702.3 Ten-ampere branch circuits

Proponent: Home Builders Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
N/A		

Reason: 10amp branch circuits for limited branch circuit loads will lead to post inspection code violations. Homeowners who are not aware that they have a 10amp branch circuit supplying power to a lighting load may add outlets to that branch circuit and therefore violate code. While adding the ability to use 10amp over current protection on branch circuits for a limited basis, minimum size AWG circuit conductors from Table E3702.15 (1) and E3702.15(2) is equal to 15 amp over current protection, therefore leading to additional opportunists for confusion and code violation.

Modification:

E3702.2 Branch-circuit ampere rating. Branch circuits shall be rated in accordance with the maximum allowable ampere rating or setting of the overcurrent protection device. The rating for other than individual branch circuits shall be ~~10,~~ 15, 20, 30, 40 and 50 amperes. Where conductors of higher ampacity are used, the ampere rating or setting of the specified over-current device shall determine the circuit rating. (210.18)

~~**E3702.3 Ten-ampere branch circuits.** A 10-ampere branch circuit shall comply with the following:~~

~~1. A 10-ampere branch circuit shall be permitted to supply one or more of the following: lighting outlets, *dwelling unit* exhaust fans on bathroom or laundry room lighting circuits, and a gas fireplace unit supplied by an individual branch circuit.~~

~~2. A 10-ampere branch circuit shall not supply receptacle outlets, fixed appliances except as permitted for individual branch circuits, garage door openers and laundry equipment. [210.23(A)(1) and (2)]~~

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 63

Code Section: E3802.4 In unfinished basements

Proponent: Home Builders Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
IRC 2021	IRC 2021 67	E3802.4
IRC 2018	IRC 2018 42	E3802.4
IRC 2015	IRC 2015 35	E3802.4

Reason: Unusually restrictive

Modification:

E3802.4 In unfinished basements ~~and crawl spaces~~. Where Type NM or SE cable is run at angles with joists in unfinished basement~~s and crawl space~~s, cable assemblies containing two or more conductors of sizes 6 AWG and larger and assemblies containing three or more conductors of sizes 8 AWG and larger shall not require additional protection where attached directly to the bottom of the joists. Smaller cables shall be run either through bored holes in joists or on running boards. Type NM or SE cable installed on the wall of an unfinished basement shall be permitted to be installed in a *listed* conduit or tubing or shall be protected in accordance with **Table E3802.1**. Conduit or tubing shall be provided with a bushing or adapter that provides protection from abrasion at the point where the cable enters and exits the raceway. The sheath of the Type NM or SE cable shall extend through the conduit or tubing and into the outlet, device or junction box not less than 1/4 inch (6.4 mm). The cable shall be secured within 12 inches (305 mm) of the point where the cable enters the conduit or tubing. Metal conduit, tubing, and metal outlet boxes shall be connected to an equipment grounding conductor complying with **Section E3908.14**. [334.15(C)]

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 64

Code Section(s):

E3901.4.2 Island and peninsular countertops and work surfaces

E3901.4.3 Receptacle outlet location

Proponent: Home Builders Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
N/A		

Reason: The original requirement mandating provisions for a future receptacle outlet—when one is not otherwise required—is unnecessary and impractical. By adopting the updated NEC-based language that clearly defines when and where receptacle outlets must be installed on islands and peninsulas, we ensure adequate access to power based on actual layout and usage, rather than speculative future needs. This approach provides code clarity, improves design flexibility, and removes an ambiguous and unenforceable obligation, while still maintaining electrical safety and functionality.

Modification:

~~**E3901.4.2 Island and peninsular countertops and work surfaces .** Receptacle outlets, if installed to serve an island or peninsular countertop or work surface, shall be installed in accordance with Section E3901.4.3. If a receptacle outlet is not provided to serve an island or peninsular countertop or work surface, provisions shall be provided at the island or peninsula for future addition of a receptacle outlet to serve the island or peninsular countertop or work surface.~~

E3901.4.2 Island and peninsular countertops and work spaces. Receptacle outlets shall be installed in accordance with the following: [210.52(C)(2)]

1. At least one receptacle outlet shall be provided for the first 6 feet (1829 mm) of length, or fraction thereof, of the countertop or work surface. A minimum of two receptacle outlets shall be provided for any island over 6 feet (1829 mm) long.
2. At least one receptacle outlet shall be located within 2 feet (600 mm) of the outer end of a peninsular countertop or work surface. Additional receptacle outlets shall be permitted to be located as determined by the installer, designer or building owner. The location of the receptacle outlets shall be in accordance with **Section E3901.4.3**. [210.52(C)(2)(b)]

(*page 2 of **IRC 2024 64** - E3901.4.2 & E3901.4.3*)

~~**E3901.4.3 Receptacle outlet location.** Receptacle outlets rendered not readily accessible by appliances fastened in place, appliance garages, sinks, or rangetops as covered in the exception to Section E3901.4.1, or appliances occupying assigned spaces shall not be considered as these required outlets. Required receptacle outlets shall be located in one or more of the following:~~
~~1. On or above, but not more than 20 inches (508 mm) above, the countertop or work surface.~~
~~2. In a countertop using receptacle outlet assemblies listed for the use in countertops.~~
~~3. In a work surface using receptacle outlet assemblies listed for use in work surfaces or listed for use in countertops. [210.52(C)(3)]~~

E3901.4.3 Receptacle outlet location. Receptacle outlets rendered not readily accessible by appliances fastened in place, appliance garages, sinks, or rangetops as covered in the exception to Section E3901.4.1, or appliances occupying assigned spaces shall not be considered as these required outlets. Required receptacle outlets shall be located in one or more of the following:

1. On or above, but not more than 20 inches (508 mm) above, the countertop or work surface.
2. Receptacle outlet assemblies listed for the use in countertops or work surfaces shall be permitted to be installed in countertops or work surfaces.
3. Not more than 12 inches (305 mm) below the countertop or work surface. Receptacles installed below a countertop or work surface shall not be located where the countertop or work surface extends more than 6 inches (152 mm) beyond its support base. [210.52(C)(3)]

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 65

Code Section: E3902 Ground-fault and Arc-fault Circuit Interrupted Protection

Proponent: Home Builders Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
IRC 2021	IRC 2021 70	E3902

Reason: The amendment removes the requirements for AFCI devices for residential dwelling units, including one- and two-family homes. Reasoning includes cost savings, citing that families who cannot qualify to purchase homes due to the increased costs from mandatory code requirements, such as AFCIs, will have to live in housing that is less safe, because that housing was built to less stringent code requirements. The total cost to homebuyers to install AFCIs is over $430,000,000 per year—24 times the cost of damage per year, and it is clear that requiring AFCIs in new construction will not prevent all damage. This is due to the fact that AFCIs cannot prevent all fires and, more importantly, that electrical fires occur overwhelmingly in older houses. From 1980 to 2015, there has been a significant drop in the number of reported fires, injuries and fatalities in the US. Both the number of fires and fatalities have dropped by approximately 50%, even as the population increased. The decline was sharpest during the 1980s, before AFCIs were introduced. This further supports the importance of encouraging homeowners to move up to newer homes without the added burden of increased regulation.

Modification:

Entire section E3902.1 - E3902.22 modified to remove “through 250 volt” from text.

SECTION E3902

GROUND-FAULT AND ARC-FAULT CIRCUIT-INTERRUPTER PROTECTION

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 66

Code Section: E3902.5 Basement receptacles

Proponent: Home Builders Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
IRC 2021	IRC 2021 71	E3902.5

Reason: A finished basement is not noted as a wet areas and their addition is not needed or required.

Modification:

(Adds to modified language from IRC 2024 65)

E3902.5 Basement receptacles. 125-volt receptacles installed in basements and supplied by single-phase branch circuits rated 150 volts or less to ground shall have ground-fault circuit-interrupter protection for personnel. [210.8(A)(5)]

Exceptions:

1. Receptacles in walk-out basements are excluded from this requirement.

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 67

Code Section: E3902.12 Specific appliance outlets

Proponent: Home Builders Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
N/A		

Reason: Removing additional ground fault protection for specific outlets as this requirement is redundant for most of these specific branch circuits, while also creating opportunity for nuisance tripping on additional branch circuits not previously covered. Removing the requirements for GFI protection from the above code section, aligns GFI protection with modifications from 2021 South Carolina IRC.

Modification:

E3902.12 Specific appliance outlets Ground-fault circuit-interrupter protection shall be provided for the branch circuit or outlets supplying the following appliances rated 150 volts or less to ground and 60 amperes or less, single- or three-phase:

1. Drinking water coolers and bottle fill stations.
2. High-pressure spray washing machines.
~~3. Sump pumps.~~
4. Dishwashers.
~~5. Electric ranges.~~
~~6. Wall-mounted ovens.~~
~~7. Counter-mounted cooking units.~~
8. Clothes dryers.
~~9. Microwave ovens. [210.8(D)]~~

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 68

Code Section: E.3902.14 Outdoor Outlets

Proponent: Home Builders Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
NEC 2020*	NEC 2020 04	210.8(F)

*This was previously tied to a 2020 NEC modification that was amended with the 2024 code adoption process to also include the IRC.

Reason: It has not been determined if all A/C condenser units will operate on a GFCI-protected circuit as sufficient testing has not been conducted. In addition, branch circuit extensions or modifications would require the addition of GFCI protection for old condenser units, and it is not known whether the existing equipment is compatible with GFCI.

Modification:

E3902.14 Outdoor outlets. All outdoor outlets, including outlets installed in the following locations, and supplied by single-phase branch circuits rated 150 volts or less to ground, 50 amperes or less, shall be provided with GFCI protection:

1. Garages that have floors located at or below grade level.
2. Accessory buildings.
3. Boathouses.

Exceptions:

1. GFCI protection shall not be required on lighting outlets other than those covered in Section 210.8(F) of NFPA 70.
2. GFCI protection shall not be required for receptacles that are not readily accessible and are supplied by a branch circuit dedicated to electric snow-melting, deicing, or pipeline and vessel heating equipment where such equipment is protected as required by NFPA 70.
3. GFCI protection shall not be required for listed HVAC equipment. ~~This exception shall expire September 1, 2026. [210.8(F)]~~

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 69

Code Section: E3902.21 Arc-fault circuit interrupter protection.

Proponent: Home Builders Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
IRC 2021	IRC 2021 71	E3902.17
IRC 2018	IRC 2018 44	E3902.16

Reason: No accurate SC-specific data substantiates a need for AFCI. Data collected over a 12-year period (2002-2023) shows that there was an estimated average of 0.6 civilian deaths per year in fires caused by electrical arcing in one- and two-family homes, and an estimated total of five civilian injuries. An average of 19 fires were caused annually by electrical arcing, and the average annual total damage from fires caused by electrical arcing in both property and contents adjust to 2013 dollars was $438,349. The costs association with AFCI don't even take into account the added expense of nuisance trips. Due to these and other findings, 29 states have either removed or made amendments to AFCI and GFCI provisions. Mandating costly incremental increases in safety will not only protect those who can afford them, and will often decrease safety for those who cannot.

Modification:

E3902.21 Arc-fault circuit interrupter protection. In areas other than kitchen and laundry areas, ~~B~~branch circuits that supply 120-volt, single-phase, 10-, 15- and 20- ampere outlets installed in ~~kitche~~ns, family rooms, dining rooms, living rooms, parlors, libraries, dens, bedrooms, *sunrooms*, recreations rooms, closets, hallways~~, laundry areas~~ and similar rooms or areas shall be protected by any of the following: [210.12(A)]

(language in items 1 - 6 unchanged by modification)

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 70

Code Section: E4002.11 Bathtub and shower space

Proponent: Home Builders Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
N/A		

Reason: Replacing the 3' dimension measured horizontally from the edge of the bathtub or shower to 27" measured horizontally matches the plumbing modification for plumbing code P2705.1 General. This modification aligns electrical and plumbing requirements for the dimensions between adjacent fixtures.

Modification:

E4002.11 Bathtub and shower space.
Receptacles shall not be installed inside of the tub or shower within a zone measured ~~3 feet (914 mm)~~ 27 inches horizontally from the outside edge of the bathtub or shower stall, including the space outside the bathtub or shower stall space below the zone. The zone also includes the space measured vertically from the floor to 8 feet (2438 mm) above the top of the bathtub rim or shower stall threshold. The identified zone is all-encompassing and shall include the space directly over the bathtub or shower stall and the space below this zone, but not space separated by a floor, wall, ceiling, room door, window, or fixed barrier. [406.9(C)]

Exceptions:

1. Receptacles installed in accordance with **Section E4209.4** shall be permitted. [406.9(C) Exception No. 1]
2. In bathrooms with less than the required zone, the receptacle(s) required by **Section E3901.6** shall be permitted to be installed opposite the bathtub rim or shower stall threshold on the farthest wall in the room. [406.9(C) Exception No. 2]
3. Weight-supporting ceiling receptacles (WSCR) shall be permitted to be installed for listed luminaires that employ a weight-supporting attachment fitting (WSAF) in damp locations complying with **Section E4003.11**. [406.9(C) Exception No. 3]
4. A single receptacle shall be permitted for an electronic toilet or personal hygiene device such as an electronic bidet seat. The receptacle shall be readily accessible and not located in the space between the toilet and the bathtub or shower. [406.9(C) Exception No. 4]

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 71

Code Section: E4002.14 Tamper-resistant receptacles

Proponent: Home Builders Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
IRC 2021	IRC 2021 75	E4002.14

Reason: This amendment retains the provisions of the 2017 NEC. It was added in the 2008 NEC and is not based on sound technical information which adequately substantiates that it will result in protecting small children from burns or injury. Concerns were raised over the comprehensiveness of the studies used to substantiate this amendment, as well as how the elderly community would be able to use the tamper-resistant receptacles due to the amount of force required to be applied to insert the plugs.

Modification:

E4002.14 Tamper-resistant receptacles. In areas specified in **Section E3901.1**, 15- and 20-ampere, 125- ~~and 250-~~volt nonlocking-type receptacles shall be *listed* tamper-resistant receptacles. [406.12]

Exception: Receptacles in the following locations shall not be required to be tamper resistant:

1. Receptacles located more than 5.5 feet (1676 mm) above the floor.
2. Receptacles that are part of a luminaire or appliance.
3. A single receptacle that is not readily accessible that supplies a single appliance or a duplex receptacle that is not readily accessible and supplies two appliances where such receptacles are located in spaces occupied by or designated for the appliances served and, under conditions of normal use, the appliances are not easily moved from one place to another. The appliances shall be cord-and-plug-connected to such receptacles in accordance with Section E3909.4. [406.12 Exception]

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 72

Code Section: Chapter 44 Referenced Standards

Proponent: Air-Conditioning, Heating and Refrigeration Institute

Previous Code Cycles	Previous Modification Number	Previous Code Section
IRC 2021	IRC 2021 76	Chapter 44

Reason: The 2022 standards from the original modification request in 2021 are now referenced throughout. However, the below sections were not added to the IRC reference standards.

Modification:

UL/CSA 60335-2-40—2022: Household and Similar Electrical Appliances—Safety—Part 2-40: Particular Requirements for Electrical Heat Pumps, Air-Conditioners and Dehumidifiers
M1402.1, M1403.1, M1412.1, M1413.1, and M2006.1

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 73

Code Section: Chapter 44 Referenced Standards

Proponent: Daikin Comfort Technologies Manufacturing, Inc.

Previous Code Cycles	Previous Modification Number	Previous Code Section
N/A		

Reason: This is tied to modification IMC 2024 02:
Errors exist in Table 1103.1 of the 2024 IMC, which came from the 2022 edition of ASHRAE 34. These errors have been corrected in the 2024 edition of ASHRAE 34, but are not reflected in Table 1103.1 of the 2024 IMC. The changes have been approved for the 2027 IMC using ASHRAE 34-2024 as the referenced standard in Chapter 15, and those change are reflected in ICA – TSG-000001 – Toto – ASHRAE – 2024 IMC. This proposal is to correct those incorrect values within the Table in accordance with ASHRAE 34-2024.

Modification:

ASHRAE 34—~~2022~~ 2024: Designation Classification of Refrigerants
M1411.1

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 74

Code Section: Appendix BF Patio Covers

Proponent: Structural Engineers Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
IRC 2021	IRC 2021 77	Appendix AH
IRC 2018	IRC 2018 45	Appendix H
IRC 2015	IRC 2015 36	Appendix H
IRC 2012	IRC 2012 25	Appendix H

Reason: To provide minimum requirements for patio covers for the protection of people and property.

Modification:

Appendix BF, Patio Covers, is adopted for use statewide.

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 75

Code Section: Appendix BO Existing Buildings and Structures

Proponent: Structural Engineers Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
IRC 2021	IRC 2021 78	Appendix AJ
IRC 2018	IRC 2018 46	Appendix J
IRC 2015	IRC 2015 37	Appendix J

Reason: To provide guidance for renovating, modifying or updating residential structures in applying the IRC and to help with uniform enforcement of the IRC on renovation projects across the state.

Modification:

Appendix BO is adopted for use statewide.

Applicable Code: 2024 International Residential Code

Modification Index Number: IRC 2024 76

Code Section: Appendix BB Tiny Houses

Proponent: Building Officials Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
IRC 2021	IRC 2021 79	Appendix AQ
IRC 2018	IRC 2018 47	Appendix Q

Reason: Jurisdictions will have more options and flexibility to approve small home construction.

Modification:

Appendix BB is adopted for use statewide.

Applicable Code: **2024 International Fire Code**

Modification Index Number: **IFC 2024 01**

Code Section: **202 General Definitions – Primitive camp structure**

Proponent: Building Officials Association of South Carolina (BOASC)

Previous Code Cycles	Previous Modification Number	Previous Code Section
IFC 2021	IFC 2021 02	202
IFC 2018	IFC 2018 02	202

Reason: "Structures primarily used or associated with outdoor camping activities" include, but are not limited to, shelters, tree stands, sheds, rustic cabins, campfire shelters, shelters, tents, tepees, or other indigenous huts used only for campers or program participants, or used in conjunction with outdoor camping activities such as hiking, fishing, hunting, or nature appreciation, regardless of material used for construction. These structures are not to include utilities such as mechanical, electrical or plumbing.

Modification:

R02 General Definitions

Primitive Camp Structure. Shall include any structure permanent or temporary in nature, used for outdoor camping (transient), open on at least one side with no fully enclosed habitable spaces, less than 400 square feet under roof, and not classified as a residential occupancy due to lack of electrical, plumbing, mechanical, and sprinkler systems.

Applicable Code: 2024 International Fire Code

Modification Index Number: IFC 2024 02

Code Section: 202 General Definitions – Recreational fire

Proponent: South Carolina Fire Marshals Association

Previous Code Cycles	Previous Modification Number	Previous Code Section
IFC 2021	IFC 2021 04	202
IFC 2018	IFC 2018 01	202
IFC 2015	IFC 2015 01	202
IFC 2012	IFC 2012 01	202

Reason: The definition of sky lanterns is being proposed to be added to the IFC. The Office of the State Fire Marshal is regularly asked for clarification regarding these devices and how they are being addressed in the IFC. The language in the code for "recreational fire" could be interpreted to exclude sky lanterns. These devices are a serious threat to property and are a life safety hazard. Their use presents a fire hazard caused by their release with no means of control. A sky lantern can achieve great height and distance from its launch area. The final destination is undetermined and these sky lanterns have been known to cause uncontrolled fires.

Modification:

R02 General Definitions

Recreational Fire. An outdoor fire burning materials other than rubbish where the fuel being burned is not contained in an incinerator, outdoor fireplace, portable outdoor fireplace, barbeque grill or barbeque pit and has a total fuel area of 3 feet (914 mm) or less in diameter and 2 feet (610 mm) or less in height for pleasure, religious, ceremonial to include sky lanterns, cooking, warmth or similar purposes.

Applicable Code: 2024 International Fire Code

Modification Index Number: IFC 2024 03

Code Section: [BG] 203.2.8 Assembly Group A-3

Proponent: Building Officials Association of South Carolina (BOASC)

Previous Code Cycles	Previous Modification Number	Previous Code Section
IRC 2021	IRC 2021 03	202
IFC 2018	IFC 2018 03	202

Reason: Add to the listing of A-3 occupancies the following use: Structures, without a commercial kitchen, used in agritourism activity as defined by S.C. Code Ann. 46-53-10(1).

Modification:

203.2.8 Assembly Group A-3. Group A-3 occupancy includes assembly uses intended for worship, recreation or amusement and other assembly uses not classified elsewhere in Group A including, but not limited to:

Amusement arcades
Art galleries
Bowling alleys
Community halls
Courtrooms
Dance halls (not including food or drink consumption)
Exhibition halls
Funeral parlors
Greenhouses for the conservation and exhibition of plants that provide public access
Gymnasiums (without spectator seating)
Indoor *swimming pools* (without spectator seating)
Indoor tennis courts (without spectator seating)
Lecture halls
Libraries
Museums
Places of religious worship
Pool and billiard parlors
Structures, without a commercial kitchen, used in agritourism activity as defined by S.C. Code Ann. 46-53-10(1)
Waiting areas in transportation terminals

Applicable Code: 2024 International Fire Code

Modification Index Number: IFC 2024 04

Code Section: 315.3.3 Equipment rooms

Proponent: Midlands Fire Marshal Association

Previous Code Cycles	Previous Modification Number	Previous Code Section
IFC 2021	IFC 2021 05	315.3.3

Reason: This would permit the authority having jurisdiction to have the owner/occupant label the rooms as “No storage allowed.”

Modification:

315.3.3 Equipment rooms. Combustible material shall not be stored in boiler rooms, mechanical rooms, elevator machine rooms, electrical equipment rooms or in *fire command centers* as specified in Section 508.1.5. Rooms shall be labeled with approved signage "No storage allowed".

Applicable Code: 2024 International Fire Code

Modification Index Number: IFC 2024 05

Code Section: 503.1.2 Additional access

Proponent: Home Builders Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
IFC 2021	IFC 2021 08	503.1.2

Reason: To add an exception that permits fire apparatus access roads to be a driveway, pathway, or other approved surface that creates a fire lane not accessible to motor vehicles.

Modification:

503.1.2 Additional access. The *fire code official* is authorized to require more than one fire apparatus access road based on the potential for impairment of a single road by vehicle congestion, condition of terrain, climatic conditions or other factors that could limit access.

Exception: Where two fire apparatus access roads are required by **Section 503.1.2**, the additional fire apparatus access road is permitted to be a driveway, pathway, court or other approved *fire lane* not accessible to public motor vehicles, where designed by a registered design professional to meet the loading requirements and minimum specifications of **Section 503**, and the surface provides all-weather driving capabilities. Marking or signs shall be provided in accordance with **Section 503.3** and **Section D103.6**.

Applicable Code: 2024 International Fire Code

Modification Index Number: IFC 2024 06

Code Section: 503.2.1 Dimensions

Proponent: Home Builders Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
IFC 2021	IFC 2021 10	503.2.1
IFC 2018	IFC 2018 05	503.2.1
IFC 2015	IFC 2015 04	503.2.1
IFC 2012	IFC 2012 04	503.2.1

Reason: To retain the current means by which fire apparatus access and road dimensions are measured.

Modification:

503.2.1 Dimensions. Fire apparatus access roads shall have an unobstructed width of not less than 20 feet (6096 mm) ~~exclusive of shoulders~~, except for approved security gates in accordance with **Section 503.6** and an unobstructed vertical clearance of not less than 13 feet 6 inches (4115 mm).

Applicable Code: 2024 International Fire Code

Modification Index Number: IFC 2024 07

Code Section: 507.1 Required water supply

Proponent: Charleston Fire Department

Previous Code Cycles	Previous Modification Number	Previous Code Section
IFC 2021	IFC 2021 11	507.1
IFC 2018	IFC 2018 06	507.1

Reason: This modification attempts to provide clarity. Previous modifications to this section caused confusion regarding the specific application. The information regarding the location and spacing of fire hydrants is now addressed in IFC Section 507.5.1.

Modification:

507.1 Required water supply. An approved water supply capable of supplying the required fire flow for fire protection shall be provided to premises on which facilities, buildings or portions of buildings are hereafter constructed or moved into or within the jurisdiction to meet the necessary fire flow as determined by the fire code official. Where public water supply is inadequate or not available, an approved alternative water source meeting the fire flow requirements shall be provided. Fire flow performance tests shall be witnessed by the fire code official or representative prior to final approval.

Exception: One- and two-family dwellings, including attached or detached accessory structures.

Applicable Code: 2024 International Fire Code

Modification Index Number: IFC 2024 08

Code Section: 507.5.1 Where required

Proponent: Charleston Fire Department

Previous Code Cycles	Previous Modification Number	Previous Code Section
IFC 2021	IFC 2021 12	507.5.1
IFC 2018	IFC 2018 07	507.5.1

Reason: A previous modification for hydrant spacing merged multiple sections of the code and caused confusion between IFC 507.1 and 507.5.1. This modification attempts to remove some of the confusion, return to the numbering in the base code, and place the modifications within the appropriate sections while providing clear direction.

Modification:

507.5.1 Where required. Where a portion of the facility or building hereafter constructed or moved into or within the jurisdiction is more than ~~400 feet (122 m)~~ 500 feet (152m) from a hydrant on a fire apparatus access road, as measured by an approved route around the exterior of the facility or building, on-site fire hydrants and mains shall be provided where required by the fire code official.

Location. The location and number of hydrants shall be designated by the fire official, but in no case shall the distance between installed fire hydrants exceed 1000 feet (305 m). Fire hydrants shall be located within 500 feet (152 m) of all fire fighter access points when measured along the normal routes of fire department vehicle access which conforms to the requirements of Section 503. No point of the exterior of a building shall be located more than 500 feet (152 m) from a hydrant accessible to fire department vehicles as provided in Section 503.

Exceptions:

1. For Group R-3 and Group U occupancies, the distance requirement shall be 600 feet (183 m).
2. For buildings equipped throughout with an approved automatic sprinkler system installed in accordance with **Section 903.3.1.1** or **903.3.1.2**, the distance requirement shall be 600 feet (183 m).

Applicable Code: 2024 International Fire Code

Modification Index Number: IFC 2024 09

Code Section: 507.5.1.1 Hydrant for standpipe systems

Proponent: Midlands Fire Marshal Association

Previous Code Cycles	Previous Modification Number	Previous Code Section
IFC 2021	IFC 2021 13	507.5.1.1

Reason: Adds fire sprinkler systems to this section.

Modification:

507.5.1.1 Hydrant for standpipe systems. Buildings equipped with a standpipe or fire sprinkler system installed in accordance with **Section 903 or 905** shall have a fire hydrant within 100 feet (30 480 mm) of the fire department connections.

Exception: The distance shall be permitted to exceed 100 feet (30 480 mm) where *approved* by the *fire code official*.

Applicable Code: 2024 International Fire Code

Modification Index Number: IFC 2024 10

Code Section: 507.5.4 Obstruction

Proponent: Midlands Fire Marshal Association

Previous Code Cycles	Previous Modification Number	Previous Code Section
IFC 2021	IFC 2021 14	507.5.4

Reason: This is already a state traffic violation. Adding mirrored language to this section allows fire code officials to enforce this violation as well. State traffic law states, SC Title 56-5—3530: Stopping, standing or parking prohibited in specific places; exceptions.

Modification:

507.5.4 Obstruction. Unobstructed access to fire hydrants shall be maintained at all times. The fire department shall not be deterred or hindered from gaining immediate access to fire protection equipment or fire hydrants. No parking shall be allowed within 15 feet (4572 mm) of a fire hydrant.

Applicable Code: 2024 International Fire Code

Modification Index Number: IFC 2024 11

Code Section: 606.3.3.2 Grease accumulation

Proponent: Midlands Fire Marshal Association

Previous Code Cycles	Previous Modification Number	Previous Code Section
N/A		

Reason: This request intends to provide a direct reference to NFPA 96 for all operational and maintenance requirements for commercial cooking systems. This proposal will made code enforcement by fire code officials more consistent between the IFC and NFPA standards, as all requirements would be sourced from the same document. NFPA 96 is currently a nationally recognized and referenced fire safety standard with limited including in the IFC, and is not directly referenced for the specific purpose of operations and maintenance. The code requirements for new construction and installation of commercial cooking systems would still be in accordance with the South Carolina Building Code and the South Carolina Mechanical Code, as is current practice. Based on the "scoping" of Section 606.3, there would be no conflict between new construction installation requirements.

Modification:

606.3.3.2 Grease accumulation. If during the inspection it is found that hoods, grease-removal devices, fans, ducts or other appurtenances have an accumulation of grease, such components shall be cleaned in accordance with **ANSI/IKECA C10** and **NFPA 96**. The cleanings shall be completed by a properly trained and qualified company or person(s) acceptable to the authority having jurisdiction. The individual or company performing the inspections and cleaning shall indicate their certifications to the authority having jurisdiction upon request.

Applicable Code: 2024 International Fire Code

Modification Index Number: IFC 2024 12

Code Section: 607.1 General

Proponent: Midlands Fire Marshal Association

Previous Code Cycles	Previous Modification Number	Previous Code Section
IFC 2021	IFC 2021 16	607.1

Reason: The intention is for the types of tanks referenced in this code section to have the contents identified as outlined in Sections 5003.5, 5003.5.1 and NFPA 30.

Modification:

607.1 General. Storage of cooking oil (grease) in commercial cooking operations utilizing above-ground tanks with a capacity greater than 60 gal (227 L) installed within a building shall comply with **Sections 607.2** through **607.7** and **NFPA 30**. For purposes of this section, cooking oil shall be classified as a Class IIIB liquid unless otherwise determined by testing. These tanks shall have the contents identified as outlined in **Section 5703.5.**

Applicable Code: 2024 International Fire Code

Modification Index Number: IFC 2024 13

Code Section: 901.6.3 Records

Proponent: Charleston Fire Department

Previous Code Cycles	Previous Modification Number	Previous Code Section
IFC 2021	IFC 2021 19	901.6.3
IFC 2018	IFC 2018 08	901.6.3

Reason: Fire protection system reports are a critical component of maintaining a life safety system to protect the public and first responders. Receiving, reviewing, and following up on deficient reports is an important element of a comprehensive risk reduction strategy for any community. The current reporting method in the referenced code requires the serving vendor to leave a report with a responsible party on site. These reports are often lost, misplaced, and never followed through to completion. By providing a path for the information to flow to the jurisdiction, as required, we provide the local officials with a way to monitor the operational conditions of these systems and improve the safety of our local communities.

Modification:

901.6.3 Records. Records of all system inspections, tests and maintenance shall be maintained in accordance with **Section 110.3**. Copies of the inspection records shall be sent to the local jurisdiction by the servicing vendor as prescribed by the *fire code official*.

Applicable Code: 2024 International Fire Code

Modification Index Number: IFC 2024 14

Code Section: 904.14 Commercial cooking systems

Proponent: Midlands Fire Marshal Association

Previous Code Cycles	Previous Modification Number	Previous Code Section
N/A		

Reason: This request intends to provide a direct reference to NFPA 96 for all operational and maintenance requirements for commercial cooking systems. This proposal will made code enforcement by fire code officials more consistent between the IFC and NFPA standards, as all requirements would be sourced from the same document. NFPA 96 is currently a nationally recognized and referenced fire safety standard with limited including in the IFC, and is not directly referenced for the specific purpose of operations and maintenance. The code requirements for new construction and installation of commercial cooking systems would still be in accordance with the South Carolina Building Code and the South Carolina Mechanical Code, as is current practice. Based on the "scoping" of Section 606.3, there would be no conflict between new construction installation requirements.

Modification:

904.14 Commercial cooking systems. The *automatic fire-extinguishing system* for commercial cooking systems shall be of a type recognized for protection of commercial cooking equipment and exhaust systems of the type and arrangement protected. Preengineered automatic dry- and wet-chemical extinguishing systems shall be tested in accordance with **UL 300** and *listed* and *labeled* for the intended application. Other types of *automatic fire-extinguishing systems* shall be *listed* and *labeled* for specific use as protection for commercial cooking operations. The system shall be installed and maintained in accordance with this code, **NFPA 96**, its listing and the manufacturer's installation instructions. *Automatic fire-extinguishing systems* of the following types shall be installed and maintained in accordance with the referenced standard indicated, as follows:

1. Carbon dioxide extinguishing systems, **NFPA 12**.
2. *Automatic sprinkler systems*, **NFPA 13**.
3. Automatic water mist systems, **NFPA 750**.
4. Foam-water sprinkler system or foam-water spray systems, **NFPA 11**.
5. Dry-chemical extinguishing systems, **NFPA 17**.
6. Wet-chemical extinguishing systems, **NFPA 17A**.

Exception: Factory-built commercial cooking recirculating systems that are tested in accordance with **UL 710B** and *listed*, *labeled* and installed in accordance with Section 304.1 of the *International Mechanical Code*.

Applicable Code: 2024 International Fire Code

Modification Index Number: IFC 2024 15

Code Section: 907.6.5 Access

Proponent: Midlands Fire Marshal Association

Previous Code Cycles	Previous Modification Number	Previous Code Section
IFC 2021	IFC 2021 22	907.6.5

Reason: The IFC does not address the issue of fire alarm notification devices being visible at all times.

Modification:

907.6.5 Access. Access shall be provided to each fire alarm device and notification appliance for periodic inspection, maintenance and testing. Fire alarm notification devices shall be unobstructed and visible at all times.

Applicable Code: 2024 International Fire Code

Modification Index Number: IFC 2024 16

Code Section: [BE] 1010.2.13 Controlled egress doors in I-1, I-2 and I-4 (Adult Day Care Occupancy Only)

Proponent(s): Midlands Fire Marshal Association

Previous Code Cycles	Previous Modification Number	Previous Code Section
IFC 2021	IFC 2021 24	1010.2.14

Reason: To prevent nuisance alarms and reduce elopement issues when serving clients with Dementia or Alzheimer's, or similar health care issues.

Modification:

[BE] 1010.2.13 Controlled egress doors in Groups I-1, I-2, and I-4 (Adult Day Care Occupancy only). Controlled egress electrical locking systems where egress is controlled by authorized personnel shall be permitted on doors in the means of egress in Group I-1, ~~or~~ I-2, and I-4 (Adult Day Care occupancy only) occupancies where the clinical needs of *persons* receiving care require their containment. Controlled egress doors shall be permitted in such occupancies where the *building* is equipped throughout with an *automatic sprinkler system* in accordance with **Section 903.3.1.1** or an *approved automatic smoke detection system* installed in accordance with **Section 907**, provided that the doors are installed and operate in accordance with all of the following:

1. The door's electric locks shall unlock on actuation of the *automatic sprinkler system* or *automatic smoke detection system* allowing immediate free egress.
2. The door's electric locks shall unlock on loss of power to the electrical locking system or to the electric lock mechanism allowing immediate free egress.
3. The electric locking system shall be installed to have the capability of unlocking the electric locks by a switch located at the *fire command center*, a nursing station or other *approved* location. The switch shall directly break power to the electric lock.
4. A *building* occupant shall not be required to pass through more than one door equipped with a controlled egress locking system before entering an *exit*.
5. The procedures for unlocking the doors shall be described and *approved* as part of the emergency planning and preparedness required by **Chapter 4**.
6. All clinical staff shall have the keys, codes or other means necessary to operate the controlled egress electrical locking systems.
7. Emergency lighting shall be provided at the door.
8. The electromechanical or electromagnetic locking device shall be *listed* in accordance with either **UL 294** or **UL 1034**.

Exceptions:

1. Items 1 through 4 shall not apply to doors to areas occupied by *persons* who, because of clinical needs, require restraint or containment as part of the function of a psychiatric or cognitive treatment area.
2. Items 1 through 4 shall not apply to doors to areas where a *listed* egress control system is utilized to reduce the risk of child abduction from nursery and obstetric areas of a Group I-2 *hospital*.

Applicable Code: 2024 International Fire Code

Modification Index Number: IFC 2024 17

Code Section: 1016.2 Egress through intervening spaces

Proponent: Charleston Fire Department

Previous Code Cycles	Previous Modification Number	Previous Code Section
IFC 2021	IFC 2021 25	1016.2
IFC 2018	IFC 2018 11	1016.2

Reason: This modification request from the 2018 cycle intended to reverse a modification continued since 2001, on the basis that updates in the base language of the IFC had been made, and the modification was no longer needed. The request was approved as revised by the Council for the 2018 codes, and the section was reverted to the base language with the addition of an exception under number 5, and a change to Exception 2.4. This is the proposed continuation of the revised modification from 2018, and changes to the base language from the 2021 to the 2024 IFC are noted in red.

Modification:

1016.2 Egress through intervening spaces. Egress through intervening spaces shall comply with this section.

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

(Page 2 of **IFC 2024 17** - Section 1016.2)

6. Egress shall not pass through kitchens, storage rooms, closets or spaces used for similar purposes.
   Exceptions:
   1. *Means of egress* are not prohibited through a kitchen area serving adjoining rooms constituting part of the same *dwelling unit* or *sleeping unit*.
   2. *Means of egress* are not prohibited through stockrooms in Group M occupancies where all of the following are met:
      2.1. The stock is of the same hazard classification as that found in the main retail area.
      2.2. Not more than 50 percent of the *exit access* is through the stockroom.
      2.3. The stockroom is not subject to locking from the egress side.
      2.4. There is a demarcated, minimum 44-inch-wide (1118 mm) aisle defined by ~~full or partial height fixed wall~~s a wall not less than 42 inches (1067 mm) high or similar construction that will maintain the required width and lead directly from the retail area to the exit without obstructions.

Applicable Code: 2024 International Fire Code

Modification Index Number: IFC 2024 18

Code Section: 1032.11 Maintenance of the listed occupancy load signage

Proponent: Midlands Fire Marshal Association

Previous Code Cycles	Previous Modification Number	Previous Code Section
N/A		

Reason: This request proposes to add a new section for the maintenance for existing buildings, and by adding it, this provides AHJs the authority to ensure that the occupancy posting is maintained. This also aligns with the language from Section 1004.9 of the IFC and IBC, which addresses new construction.

Modification:

1032.11 Maintenance of the listed occupancy load signage. Design occupancy load maintenance: the designed occupancy load calculations shall be adhered to and posted per requirements outlined in **Section 1004.1** through **1004.9**. Any changes to the occupancy load shall be designed and submitted to the building department for review and approval.

Applicable Code: 2024 International Fire Code

Modification Index Number: IFC 2024 19

Code Section: 2303.2 Emergency disconnect switches

Proponent: Midlands Fire Marshal Association

Previous Code Cycles	Previous Modification Number	Previous Code Section
N/A		

Reason: Emergency fuel shutoff switches can be up to 100 feet away from the fuel pump they serve. Providing lettering size will ensure signs are observed during an emergency.

Modification:

2303.2 Emergency disconnect switches. An *approved* emergency disconnect switch shall be provided at an *approved* location to stop the transfer of fuel to the fuel dispensers in the event of a fuel spill or other emergency. The emergency disconnect switch for exterior fuel dispensers shall be provided with *ready access* and shall be located within 100 feet (30 480 mm) of, but not less than 20 feet (6096 mm) from, the fuel dispensers. For interior fuel-dispensing operations, the emergency disconnect switch shall be provided with *ready access* and be installed at an *approved* location. Such devices shall be distinctly *labeled* as: "EMERGENCY FUEL SHUTOFF." Signs shall be provided in *approved* locations. The sign shall be durable with lettering not less than 2 inches in size. Letter widths, strokes and spacing shall be in proportion to their height. The sign shall be red in color with white lettering, or a white sign with red lettering. The sign shall state EMERGENCY FUEL SHUTOFF.

Applicable Code: 2024 International Fire Code

Modification Index Number: IFC 2024 20

Code Section: 2303.2.2 Testing

Proponent: Midlands Fire Marshal Association

Previous Code Cycles	Previous Modification Number	Previous Code Section
IFC 2021	IFC 2021 31	2303.2.2
IFC 2018	IFC 2018 31	2303.2.2

Reason: To ensure that emergency shutoff switches operate properly during an emergency.

Modification:

(adds new code section)

2303.2.2 Testing. Emergency disconnect switches shall be tested annually by the responsible party to ensure proper operation; records of testing shall be maintained on site for inspection. For any switches determined to be faulty, the fuel pumps they serve shall be taken out of service until the emergency shutoff switch is placed back into service.

Applicable Code: 2024 International Fire Code

Modification Index Number: IFC 2024 21

Code Section: 2304.3.6 Communications

Proponent: Midlands Fire Marshal Association

Previous Code Cycles	Previous Modification Number	Previous Code Section
N/A		

Reason: Payphones are no longer available, and other means are having to replace these as the emergency communication device.

Modification:

2304.3.6 Communications. A telephone not requiring a coin to operate or other *approved*, clearly identified means to notify the fire department shall be provided on the site in a location *approved* by the *fire code official*. This means of communication shall be maintained and tested annually. Test records shall be maintained and submitted to the *fire code official*.

Applicable Code: 2024 International Fire Code

Modification Index Number: IFC 2024 22

Code Section: 2305.5 Fire extinguishers

Proponent: Midlands Fire Marshal Association

Previous Code Cycles	Previous Modification Number	Previous Code Section
IFC 2021	IFC 2021 33	2305.5
IFC 2018	IFC 2018 33	2305.5

Reason: Section 906.3(2) requirements for primary class B hazards states the minimum travel distance for a primary class B fire is 50 feet. Currently, 2305.5 would allow an additional 25 feet of travel distance to the maximum travel distance allowed in Section 906.

Modification:

2305.5 Fire extinguishers. *Approved* portable fire extinguishers complying with **Section 906** with a minimum rating of 2-A:20-B:C shall be provided and located such that an extinguisher is not more than ~~75 feet (22 860 mm)~~ 50 feet (15 240 mm) from pumps, dispensers or storage tank fill-pipe openings.

Applicable Code: 2024 International Fire Code

Modification Index Number: IFC 2024 23

Code Section: 2307.4 Location of dispensing operations and equipment

Proponent: Southeast Propane Alliance (SEPA)

Previous Code Cycles	Previous Modification Number	Previous Code Section
IFC 2021	IFC 2021 34	2307.4
IFC 2018	IFC 2018 12	2307.4
IFC 2015	IFC 2015 09	2307.4
IFC 2012	IFC 2012 09	2307.4

Reason: These changes are proposed to bring IFC Chapter 23 and NFPA 58 in harmony, with respect to distance between point of transfer and exposures. The propane industry has used NFPA 58 as its standard for over 40 years in South Carolina. The modifications made are in harmony with NFPA 58 Table 6.5.3.

Modification:

2307.4 Location of dispensing operations and equipment. The point of transfer for LP-gas dispensing operations shall be separated from buildings and other exposures in accordance with **NFPA 58 Table 6.7.2.1** and IFC **Section 2306.7**. ~~the following:~~

1. ~~Not less than 25 feet (7620 mm) from buildings where the exterior wall is not part of a fire-resistance-rated assembly having a rating of 1 hour or greater.~~
2. ~~Not less than 25 feet (7620 mm) from combustible overhangs on buildings, measured from a vertical line dropped from the face of the overhang at a point nearest the point of transfer.~~
3. ~~Not less than 25 feet (7620 mm) from the lot line of property that can be built on.~~
4. ~~Not less than 25 feet (7620 mm) from the centerline of the nearest mainline railroad track.~~
5. ~~Not less than 10 feet (3048 mm) from public streets, highways, thoroughfares, sidewalks and driveways.~~
6. ~~Not less than 10 feet (3048 mm) from buildings where the exterior wall is part of a fire-resistance-rated assembly having a rating of 1 hour or greater.~~

Exception: The point of transfer for LP-gas dispensing operations need not be separated from canopies that are constructed in accordance with the South Carolina Building Code and that provide weather protection for the dispensing equipment.

LP-Gas containers shall be located in accordance with **Chapter 61**. LP-gas storage and dispensing equipment shall be located outdoors and in accordance with **Section 2306.7**.

Applicable Code: 2024 International Fire Code

Modification Index Number: IFC 2024 24

Code Section: 2307.7 Public fueling of motor vehicles

Proponent: Southeast Propane Alliance (SEPA)

Previous Code Cycles	Previous Modification Number	Previous Code Section
IFC 2021	IFC 2021 35	2307.7
IFC 2018	IFC 2018 13	2307.7
IFC 2015	IFC 2015 11	2307.7
IFC 2012	IFC 2012 11	2307.6

Reason: To allow portable propane cylinders to be refilled at self-service refueling stations.

Modification:

2307.7 Public fueling of motor vehicles. ~~Self-service LP-gas dispensing systems, including key, code and card lock dispensing systems, shall be limited to the filling of permanently mounted containers providing fuel to the LP-gas powered vehicle.~~

The requirements for self-service LP-gas dispensing systems shall be in accordance with the following:

1. The arrangement and operation of the transfer of product into a vehicle shall be in accordance with this section and **Chapter 61**.
2. The system shall be provided with an emergency shutoff switch located within 100 feet (30 480 mm) of, but not less than 20 feet (6096 mm) from, dispensers.
3. The owner of the LP-gas motor fuel-dispensing facility or the owner's designee shall provide for the safe operation of the system and the training of users.
4. The dispenser and hose-end valve shall release not more than 1/8 fluid ounce (4 cc) of liquid to the atmosphere upon breaking the connection with the fill valve on the vehicle.
5. Portable fire extinguishers shall be provided in accordance with **Section 2305.5**.
6. Warning signs shall be provided in accordance with **Section 2305.6**.
7. The area around the dispenser shall be maintained in accordance with **Section 2305.7**.

Applicable Code: 2024 International Fire Code

Modification Index Number: IFC 2024 25

Code Section: 4106.6 Clearance requirements

Proponent: Midlands Fire Marshal Association

Previous Code Cycles	Previous Modification Number	Previous Code Section
IFC 2021	IFC 2021 07	319.11

Reason: To add a new section of code that establishes allowable distances between food trucks and similar structures.

Modification:

(adds new code section)

4106.6 Clearance Requirements. Mobile cooking operations shall be separated from buildings, structures, canopies, tents, combustible materials, vehicles, and other cooking operations by a minimum of 10 feet

Applicable Code: 2024 International Fire Code

Modification Index Number: IFC 2024 26

Code Section: 6101.1 Scope

Proponent: South Carolina Fire Marshals Association

Previous Code Cycles	Previous Modification Number	Previous Code Section
IFC 2021	IFC 2021 38	6101.1
IFC 2018	IFC 2018 14	6101.1
IFC 2015	IFC 2015 12	6101.1
IFC 2012	IFC 2012 12	6101.1

Reason: NFPA uses the word annex, not appendix.

Modification:

6101.1 Scope. Storage, handling and transportation of liquefied petroleum gas (LP-gas) and the installation of LP-gas equipment pertinent to systems for such uses shall comply with this chapter and **NFPA 58**. Properties of LP-gases shall be determined in accordance with ~~Appendix~~ Annex B of **NFPA 58**.

Applicable Code: 2024 International Fire Code

Modification Index Number: IFC 2024 27

Code Section: 6104.2 Maximum capacity within established limits

Proponent: Southeast Propane Alliance (SEPA)

Previous Code Cycles	Previous Modification Number	Previous Code Section
N/A		

Reason: The purpose of this request is to harmonize the language between the IFC and NFPA 58. There was a change in the definition of a "bulk plant" from 2000 gallons to 4000 gallons.

Modification:

6104.2 Maximum capacity within established limits. For the protection of heavily populated or congested areas, storage of liquified petroleum gas shall not exceed an aggregate capacity in any one installation of ~~2,000 gallons~~ ~~(7570 L)~~ 4,000 gallons (15140 L) within the limits established by law as set forth in the fire code adoption ordinance or other regulation adopted by the jurisdiction.

Exception: In particular installations, this capacity limit shall be determined by the *fire code official*, after consideration of special features such as topographical conditions, nature of occupancy, and proximity to buildings, capacity of proposed LP-gas containers, degree of fire protection to be provided and capabilities of the local fire department.

Applicable Code: 2024 International Fire Code

Modification Index Number: IFC 2024 28

Code Section: 6106.1 Attendants

Proponent: South Carolina Fire Marshals Association

Previous Code Cycles	Previous Modification Number	Previous Code Section
IFC 2021	IFC 2021 41	6106.1
IFC 2018	IFC 2018 17	6106.1
IFC 2015	IFC 2015 16	6106.1
IFC 2012	IFC 2012 16	6106.1

Reason: NFPA 58 Section 4.4 requires documented training every three years.

Modification:

6106.1 Attendants. Dispensing of LP-gas shall be performed by a qualified attendant that meets the requirements of this section and **NFPA 58 Section 4.4**.

Applicable Code: 2024 International Fire Code

Modification Index Number: IFC 2024 29

Code Section: 6107.3 Clearance to combustibles

Proponent: Southeast Propane Alliance (SEPA)

Previous Code Cycles	Previous Modification Number	Previous Code Section
N/A		

Reason: The proposed language is the same as in NFPA 58. This requirement and its associated annex material were revised in the NFPA 58 – 2014. A reference to "weeds or long dry grass" was removed because the heat load associated with such live vegetation is unlikely to be great enough to impact the container. The intent was to prohibit the purposeful storage of combustibles and to prevent the incidental accumulation of comestibles, such as yard debris, within 10 feet (3 m) of the container.

Modification:

6107.3 Clearance to combustibles. ~~Weeds, grass, brush, trash and other combustible materials shall be kept not less than 10 feet (3048 mm) from LP-gas tanks or containers.~~ Combustible materials shall not accumulate or be stored within 10 ft (3 m) of a container.

Applicable Code: 2024 International Fire Code

Modification Index Number: IFC 2024 30

Code Section: 6107.4 Protecting containers from vehicles

Proponent: South Carolina Fire Marshals Association

Previous Code Cycles	Previous Modification Number	Previous Code Section
IFC 2021	IFC 2021 42	6107.4
IFC 2018	IFC 2018 18	6107.4
IFC 2015	IFC 2015 18	6107.4
IFC 2012	IFC 2012 18	6107.4

Reason: To allow the AHJ the ability to accept an alternate method of compliance through a variance.

Modification:

6107.4 Protecting containers from vehicles. Where exposed to vehicular damage due to proximity to alleys, driveways or parking areas, LP-gas containers, regulators and piping shall be protected in accordance with **NFPA 58**.

> **Exception:** An alternative method may be used that meets the intent of this section with the approval of the authority having jurisdiction (AHJ).

Applicable Code: 2024 International Fire Code

Modification Index Number: IFC 2024 31

Code Section: 6109.13 Protection of containers

Proponent: South Carolina Fire Marshal Association

Previous Code Cycles	Previous Modification Number	Previous Code Section
IFC 2021	IFC 2021 43	6109.13
IFC 2018	IFC 2018 20	6109.13
IFC 2015	IFC 2015 22	6109.13
IFC 2012	IFC 2012 22	6109.13

Reason: To provide an alternate method of compliance.

Modification:

6109.13 Protection of containers. LP-gas containers shall be stored within a suitable enclosure or otherwise protected against tampering. Vehicle impact protection shall be provided as required by ~~**Section 6107.4.**~~ the *fire code official* in accordance with **Section 312** or **NFPA Section 58 8.4.2.2**.

Exception: Vehicle impact protection shall not be required for protection of LP-gas containers where the containers are kept in lockable, ventilated cabinets of metal construction.

Applicable Code: 2024 International Fire Code

Modification Index Number: IFC 2024 32

Code Section: 6110.1 Removed from service

Proponent: Southeast Propane Alliance (SEPA)

Previous Code Cycles	Previous Modification Number	Previous Code Section
N/A		

Reason: To harmonize the language between the IFC and NFPA 58.

Modification:

6110.1 Removed from service. LP-gas containers ~~whose use has been discontinued~~ at customers' locations that are not connected for service shall comply with ~~all of~~ the following:

1. ~~Be disconnected from appliance piping.~~ Containers shall be located in a manner that will minimize exposure to physical damage.
2. ~~Have LP-gas container outlets, except relief valves, closed or plugged.~~ Containers shall be oriented so that the pressure relief valve remains in communication with the vapor space.
3. ~~Be positioned with the relief valve in direct communication with the LP-gas container vapor space.~~ Containers shall not be located on roofs of buildings.
4. Valve outlets on ASME containers shall be plugged or capped.
5. Where screw-on-type caps or collars are utilized on ASME containers, they shall be in place whenever this type of container is stored regardless of the fill level of the container.
6. The location of ASME containers shall comply with the "Aboveground Containers" column and the "Between Containers" column of **NFPA 58 Table 6.4.1.1** with respect to important buildings and lines of adjoining property that can be built upon.
7. Where the provisions of item 6 are impractical, alternative storage locations for containers shall be approved by the authority having jurisdiction.

Applicable Code: 2024 International Fire Code

Modification Index Number: IFC 2024 33

Code Section: 6111.2.1 Near residential, educational and institutional occupancies and other high-risk areas

Proponent: South Carolina Fire Marshals Association

Previous Code Cycles	Previous Modification Number	Previous Code Section
IFC 2021	IFC 2021 45	6111.2.1
IFC 2018	IFC 2018 22	6111.2.1
IFC 2015	IFC 2015 24	6111.2.1
IFC 2012	IFC 2012 24	6111.2.1

Reason: To allow the fire code official to authorize a reduction of the 500-foot requirement.

Modification:

6111.2.1 Near residential, educational and institutional occupancies and other high-risk areas. LP-gas tank vehicles shall not be left unattended at any time on residential streets or within 500 feet (152 m) of a residential area, apartment or hotel complex, educational facility, hospital or care facility. Tank vehicles shall not be left unattended at any other place that would, in the opinion of the *fire code official*, pose an extreme life hazard.

Separation distance requirements may be reduced to not less than 50 feet as *approved* by the *fire code official*, based upon a completed fire safety analysis and consideration of special features such as topographical conditions, capacity of the LP-gas vehicle and the capabilities of the local fire department. The Office of the State Fire Marshal will provide an *approved* fire safety analysis to be utilized for this specific requirement.

Applicable Code: 2024 International Fire Code

Modification Index Number: IFC 2024 34

Code Section: 6111.2.1 Near residential, educational and institutional occupancies and other high-risk areas

Proponent: Southeast Propane Alliance (SEPA)

Previous Code Cycles	Previous Modification Number	Previous Code Section
N/A		

Reason: The proposed language, taken from NFPA 58, will allow for parking of propane delivery vehicles 50 feet from places of assembly in certain circumstances without a FSA. This still gives the AHJ the authority to require an FSA in other circumstances.

Modification:

(Adds to modified language from IFC 2024 32)

6111.2.1 Near residential, educational and institutional occupancies and other high-risk areas. LP-gas tank vehicles shall not be left unattended at any time on residential streets or within 500 feet (152 m) of a residential area, apartment or hotel complex, educational facility, hospital or care facility. Tank vehicles shall not be left unattended at any other place that would, in the opinion of the *fire code official*, pose an extreme life hazard.

Where vehicles carrying portable containers or cargo tank vehicles of 3500 gal (13 m^3) water capacity or less are parked on streets adjacent to the driver's residence in uncongested residential areas, the parking locations shall be at least 50 ft (15 m) from a building used for assembly, institutional, or multiple residential occupancy.

Separation distance requirements may be reduced to not less than 50 feet as *approved* by the *fire code official*, based upon a completed fire safety analysis and consideration of special features such as topographical conditions, capacity of the LP-gas vehicle and the capabilities of the local fire department. The Office of the State Fire Marshal will provide an *approved* fire safety analysis to be utilized for this specific requirement.

Applicable Code: 2024 International Plumbing Code

Modification Index Number: IPC 2024 01

Code Section: 202 General Definitions – Drinking Fountain

Proponent: Carolinas AGC Inc.

Previous Code Cycles	Previous Modification Number	Previous Code Section
IPC 2021	IPC 2021 01	202

Reason: Defines modern plumbing fixtures for sanitary drinking water access to the public. The IPC recognized bottle-filling stations as an integrated function of drinking fountains.

Modification:

202 General Definitions

DRINKING FOUNTAIN. A plumbing fixture that is connected to the potable water distribution system and the drainage system. The fixture allows the user to obtain a drink directly from a stream of flowing water without the use of any accessories. Such fixtures can be separate from or integral to a bottle-filling station.

Applicable Code: 2024 International Plumbing Code

Modification Index Number: IPC 2024 02

Code Section: 202 General Definitions – Bottle-filling Station (new definition)

Proponent: Carolinas AGC, Inc.

Previous Code Cycles	Previous Modification Number	Previous Code Section
IPC 2021	IPC 2021 02	202

Reason: Filling stations allow for transportable water, encourage water consumption, and are more sanitary than drinking fountains. They have been included in the IPC because they are more hygienic, save up to 50% of wastewater generated as compared to drinking fountains, and reflect market trends.

Modification:

202 General Definitions

BOTTLE-FILLING STATION. A type of water dispenser that is connected to the potable water distribution system and the drainage system. The fixture is designed and intended for automatically or manually filling personal use drinking water bottles or containers not less than 10 inches (254 mm) in height and is in compliance with the Americans with Disabilities Act (42 U.S.C. § 12101 et seq.). Such fixtures can be separate from or integral to a drinking fountain and can incorporate a water filter and a cooling system for chilling the drinking water.

Applicable Code: 2024 International Plumbing Code

Modification Index Number: IPC 2024 03

Code Section: 202 General Definitions – Water Cooler

Proponent: Carolinas AGC, Inc.

Previous Code Cycles	Previous Modification Number	Previous Code Section
IPC 2021	IPC 2021 03	202

Reason: Defines modern plumbing fixtures for sanitary drinking water access to the public. The IPC recognized bottle-filling stations as an integrated function of drinking fountains.

Modification:

202 General Definitions

WATER COOLER. A drinking fountain or bottle-filling station that incorporates a means of reducing the temperature of the water supplied to it from the potable water distribution system.

Applicable Code: 2024 International Plumbing Code

Modification Index Number: IPC 2024 04

Code Section: 202 General Definitions – Water Dispenser

Proponent: Carolinas AGC, Inc.

Previous Code Cycles	Previous Modification Number	Previous Code Section
IPC 2021	IPC 2021 04	202

Reason: Defines modern plumbing fixtures for sanitary drinking water access to the public. The IPC recognized bottle-filling stations as an integrated function of drinking fountains.

Modification:

202 General Definitions

WATER DISPENSER. A plumbing fixture that is automatic or manually controlled by the user for the purpose of dispensing potable drinking water into a receptacle such as a cup, glass or bottle. Such fixture is connected to the potable water distribution system of the premises. This definition includes a free-standing apparatus for the same purpose that is not connected to the potable water distribution system and that is supplied with potable water from a container, bottle or reservoir.

Applicable Code: 2024 International Plumbing Code

Modification Index Number: IPC 2024 05

Code Section: Table 403.1 Minimum Number of Required Plumbing Fixtures

Proponent: Carolinas AGC, Inc.

Previous Code Cycles	Previous Modification Number	Previous Code Section
IPC 2021	IPC 2021 05	Table 403.1

Reason: The CDC now encourages staff and students to bring their own water to minimize use and touching of water fountains. This necessitates updates to the plumbing code in educational settings to allow for easy access to drinking water throughout the day for hydration needs. One study found that drinking fountains and manual pencil sharpener handles had more germs than any other surfaces in the classroom. Adequate water intake can positively impact children's cognitive performance, particularly short-term memory. Drinking water can also improve children's visual attention and fine motor skills.

Modification:

Add column to table titled BOTTLE FILLING STATION.

Row 3 Educational, under Bottle Filling Station column, add: 1 per 200 with placement of 1 on each floor (or wing, or other building section) and 1 in school food service areas

Table 403.1

Minimum Number of Required Plumbing Fixtures[a] (See Sections 403.1.1 and 403.2)

No.	Classification	Description	Water Closets (Urinals: See Section 424.2)		Lava tories		Bathtubs/ Showers	Drinking Fountain (See Section 410)	Other	Bottle Filling Station
			M	F	M	F				
3	Educational	Educational Facilities	1 per 50		1 per 50		–	1 per 100	1 service sink	1 per 200 with placement of 1 on each floor (or wing or other building section) and 1 in school food service areas.

Applicable Code: 2024 International Plumbing Code

Modification Index Number: IPC 2024 06

Code Section: 403.1.1 Fixture calculations

Previous Code Cycles	Previous Modification Number	Previous Code Section
IPC 2021*	IPC 2021 07	403.1.1

**2021 Emergency Code Modification*

Reason: Gender-neutral gang-type bathrooms pose a serious threat to the health and safety of all by increasing the incident of sexual violence against women and children, as well as increasing the incident of wrongful accusations of assault, voyeurism, and the like. Gender-neutral gang-type bathrooms also undermine and reduce the "safe spaces" for victims of human trafficking, as well as discriminating against women and children by disproportionately decreasing the available number of bathroom spaces for women and children, while men will have access to both water closet compartments and urinal spaces. In addition, the common use sink space discriminates against women and children by disproportionately decreasing the area available for women to address personal needs, such as menstrual or other medical care, nursing and baby changing activities.

Modification:

403.1.1 Fixture calculations. To determine the occupant load of each sex, the total occupant load shall be divided in half. To determine the required number of fixtures, the fixture ratio or ratios for each fixture type shall be applied to the occupant load of each sex in accordance with **Table 403.1**. Fractional numbers resulting from applying the fixture ratios of **Table 403.1** shall be rounded up to the next whole number. For calculations involving multiple *occupancies*, such fractional numbers for each *occupancy* shall first be summed and then rounded up to the next whole number.

Exceptions:

1. The total occupant load shall not be required to be divided in half where *approved* statistical data indicate a distribution of the sexes of other than 50 percent of each sex.
2. ~~Where multiple user facilities are designed to serve all genders, the minimum fixture count shall be calculated 100 percent, based on total occupant load. In such multiple-user facilities, each fixture type shall be in accordance with **ICC A117.1.**~~

Applicable Code: 2024 International Plumbing Code

Modification Index Number: IPC 2024 07

Code Section: 403.2 Separate facilities

Emergency Code Modification

Previous Code Cycles	Previous Modification Number	Previous Code Section
IPC 2021*	IPC 2021 08	403.2

**2021 Emergency Code Modification*

Reason: Exception 6 is not necessary, as Exceptions 1-5 provide sufficient guidance and latitude for business, schools, churches and other similar large-capacity spaces, to provide gender-neutral spaces with adequate privacy protections.

Modification:

403.2 Separate facilities. Where plumbing fixtures are required, separate toilet 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 required to be designated by sex where single-user toilet rooms are provided in accordance with **Section 403.1.2**.
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** and for urinals in accordance with **Section 405.3.5**.~~

Applicable Code: 2024 International Plumbing Code

Modification Index Number: IPC 2024 08

Code Section: 410.4 Substitution

Proponent: Carolinas AGC, Inc.

Previous Code Cycles	Previous Modification Number	Previous Code Section
IPC 2021	IPC 2021 04	202

Reason: The CDC now encourages staff and students to bring their own water to minimize use and touching of water fountains. Bottle filling stations increase access to clean, safe drinking water. This necessitates updates to the plumbing code in educational settings to allow for easy access to drinking water throughout the day for hydration needs. Modification specifies bottle filling station must be substituted or incorporated into at least 50% of required drinking fountains in educational settings.

Modification:

410.4 Substitution. Where restaurants provide drinking water in a container free of charge, drinking fountains shall not be required in those restaurants. In other *occupancies* where three or more drinking fountains are required, *water dispensers* shall be permitted to be substituted for not more than 50 percent of the required number of drinking fountains. In educational settings, 50 percent of the required number of drinking fountains must incorporate a bottle-filling station.

Applicable Code: 2024 International Mechanical Code

Modification Index Number: IMC 2024 01

Code Section: 504.9.2 Duct installation

Proponent: Building Officials Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
IMC 2021	IMC 2021 01	504.9.2
IMC 2018	IMC 2018 01	504.8.2

Reason: This section is unnecessary as the manufacturer recommendations may differ from this section and should take precedence.

Modification:

504.9.2 Duct installation. Exhaust ducts shall be supported at intervals not to exceed 8 feet and within 16 inches of each side of a joint that is not installed in a vertical orientation, ~~4-foot (1219 mm) intervals and~~ secured in place, making rigid contact with the duct at not less than 4 equally spaced points or 2/3rds contact if strap is used. All brackets and strapping must be noncombustible. The insert end of the duct shall extend into the adjoining duct or fitting in the direction of airflow. ~~Ducts shall not be joined with screws or similar fasteners that protrude more than 1/8 inch (3.2 mm) into the inside of the duct.~~ The overlap shall comply with **Section 603.4.2**. Ducts shall not be joined with screws or similar devices that protrude into the inside of the duct. Exhaust ducts shall be sealed in accordance with **Section 603.9**.

Where dryer exhaust ducts are enclosed in wall or ceiling cavities, such cavities shall allow the installation of the duct without deformation. The duct work may be ovalized as long as it terminates in an approved duct box. Minor imperfections located on the duct, in areas other than along the seam, do not constitute a violation of this section.

Applicable Code: 2024 International Mechanical Code

Modification Index Number: IMC 2024 02

Code Section(s):

Table 1103.1 Refrigerant Classification, Amount and OEL

Chapter 15 Reference Standards

Proponent: Daikin Comfort Technologies Manufacturing, Inc.

Previous Code Cycles	Previous Modification Number	Previous Code Section
N/A		

Reason: Errors exist in Table 1103.1 of the 2024 IMC, which came from the 2022 edition of ASHRAE 34. These errors have been corrected in the 2024 edition of ASHRAE 34, but are not reflected in Table 1103.1 of the 2024 IMC. The changes have been approved for the 2027 IMC using ASHRAE 34-2024 as the referenced standard in Chapter 15, and those change are reflected in ICA – TSG-000001 – Toto – ASHRAE – 2024 IMC. This proposal is to correct those incorrect values within the Table in accordance with ASHRAE 34-2024.

Modification:

Table 1103.1 Refrigerant Classification, Amount and OEL

See ICA-TSG-000001 – Toto – ASHRAE – 2024 IMC (5th page) for list of refrigerants that need critical date updated for several A2L refrigerants.

TABLE 1103.1-REFRIGERANT CLASSIFICATION, AMOUNT AND OEL-continued

CHEMICAL REFRIGERANT	FORMULAS	CHEMICAL NAME OF BLENDS	REFRIGERANT SAFETY GROUP CLASSIFICATION	AMOUNT OF REFRIGERANT PER OCCUPIED SPACE						OEL
				RCL			LFL			
				Lb/MCf	ppm	g/m³	Lb/MCf	ppm	g/m³	ppm
R-444A	zeotrope	R-32/152a/1234ze(E) (12.0/5.0/83.0)	A2L	~~5.1~~5.0	21,000	~~81~~80	19.9	82,000	~~324.8~~319.4	850
R-444B	zeotrope	R-32/152a/1234ze(E) (41.5/10.0/48.5)	A2L	4.3	23,000	~~69~~70	17.3	93,000	~~277.3~~278.1	930
R-445A	zeotrope	R-744/134a/1234ze (E) (6.0/9.0/85.0)	A2L	~~4.2~~5.4	16,000	~~67~~87	~~2.7~~21.6	63,000	347.4	930
R-446A	zeotrope	R-32/1234ze(E)/600 (68.0/29.0/3.0)	A2L	~~2.5~~3.7	~~16,000~~23,000	~~39~~59	~~13.5~~14.8	~~62,000~~93,000	~~217.4~~237.7	960
R-447A	zeotrope	R-32/125/1234ze(E) (68.0/3.5/28.5)	A2L	~~2.6~~5.2	~~16,000~~32,000	~~42~~83	~~18.9~~20.6	~~65,000~~128,000	~~303.5~~331.4	960
R-447B	zeotrope	R-32/125/1234ze(E) (68.0/8.0/24.0)	A2L	~~2.6~~4.8	~~16,000~~30,000	~~42~~78	~~20.6~~19.5	121,000	312.7	970
R-451A	zeotrope	R-1234yf/134a (89.8/10.2)	A2L	~~5.0~~5.3	18,000	81	~~20.3~~21.3	~~70,000~~74,000	~~326.6~~341	530
R-451B	zeotrope	R-1234yf/134a (88.8/11.2)	A2L	5.0	18,000	81	~~20.3~~21.3	~~70,000~~74,000	~~326.6~~341.6	530
R-454A	zeotrope	R-32/1234yf (35.0/65.0)	A2L	~~3.2~~4.4	~~16,000~~21,000	~~52~~70	~~18.3~~17.5	~~63,000~~84,000	~~293.9~~281.4	690
R-454B	zeotrope	R-32/1234yf (68.9/31.1)	A2L	~~3.1~~4.6	~~19,000~~29,000	~~49~~74	~~22.0~~18.5	~~77,000~~115,000	~~352.6~~296.8	850
R-454C	zeotrope	R-32/1234yf (21.5/78.5)	A2L	~~4.4~~4.6	19,000	~~74~~73	~~18.0~~18.2	~~62,000~~77,000	~~289.5~~291.7	620
R-455A	zeotrope	R-744/32/1234yf (3.0/21.5/75.5)	A2L	~~4.9~~6.8	~~22,000~~30,000	~~79~~108	26.9	118,000	432.1	650

(portions of table not shown remain unchanged)

*(Page 2 of **IMC 2024 02** – Reference Standards)*

Chapter 15 Reference Standards:

ASHRAE

15—202~~2~~4: Safety Standard for Refrigeration Systems
1101.6, 1105.8, 1108.1

34—202~~2~~4: Designation and Safety Classification of Refrigerants
202, 1102.2.1, 1103.1

Applicable Code: 2024 International Mechanical Code

Modification Index Number: IMC 2024 03

Code Section: 1109.2.5 Refrigerant pipe shafts

Proponents: Johnson & Associates Consulting Services

Previous Code Cycles	Previous Modification Number	Previous Code Section
N/A		

Reason: To align the language in the 2024 IMC with ASHRAE 15 and 34. ICC code change M74-24 makes the same changes proposed here, and is on the consent agenda for the 2027 IMC. According to the original proponent of the ICC request, the limit in Exception 2 to only A1 refrigerants was put into the 2021 and 2024 editions of the IMC in error.

Modification:

1109.2.5 Refrigerant pipe shafts. Refrigerant piping that penetrates two or more floor/ceiling assemblies shall be enclosed in a fire-resistance-rated shaft enclosure. The fire-resistance-rated shaft enclosure shall comply with Section 713 of the ~~*International*~~ *South Carolina Building Code*.

Exceptions:

1. *Refrigeration* systems using R-718 refrigerant (water).
2. Piping in a direct refrigeration system ~~using Group A1 refrigerant~~ where the refrigerant quantity does not exceed the limits of **Table 1103.1** for the smallest occupied space through which the piping passes.
3. Piping located on the exterior of the *building* where vented to the outdoors.

Applicable Code: 2024 International Mechanical Code

Modification Index Number: IMC 2024 04

Code Section: 1109.3.2 Shaft ventilation

Proponent: Daikin Comfort Technologies Manufacturing, Inc.

Previous Code Cycles	Previous Modification Number	Previous Code Section
N/A		

Reason: The proposed language is taken from code change M62-24, which passed the ICC's IMC hearing committee by a vote of 13-1, and which received no public comments. It is now on the consent agenda for the 2027 IMC, and is consistent with the provision addressing shaft ventilation in Section 8.5.2.2 of AHSRAE 15.2-2022, and Addendum a to ASHRAE 15-2024. There is almost no chance of refrigerant piping without connections leaking refrigerant into the shaft where it located, and therefore almost no chance of a need for ventilating the shaft, particularly since this allowance is limited to piping serving a single unit, meaning a limited quantity of A2L refrigerant. Given the limited hazard, it is unwarranted to require the expense of ventilating shafts with low volume, continuous A2L refrigerant piping.

Modification:

1109.3.2 Shaft ventilation. Required ~~R~~refrigerant pipe shafts with systems using Group A2L or B2L refrigerant shall be naturally or mechanically ventilated. Refrigerant pipe shafts with one or more systems using any Group A2, A3, B2 or B3 refrigerant shall be continuously mechanically ventilated and shall include a refrigerant detector. The shaft ventilation exhaust outlet shall comply with **Section 501.3.1**. Naturally ventilated shafts shall have a pipe, duct or conduit not less than 4 inches (102 mm) in diameter that connects to the lowest point of the shaft and extends to the outdoors. The pipe, duct or conduit shall be level or pitched downward to the outdoors. Mechanically ventilated shafts shall have a minimum airflow velocity in accordance with **Table 1109.3.2**. The mechanical ventilation shall be continuously operated or activated by a refrigerant detector. Systems utilizing a refrigerant detector shall activate the mechanical ventilation at a maximum refrigerant concentration of 25 percent of the lower flammable limit of the refrigerant. The detector, or a sampling tube that draws air to the detector, shall be located in an area where refrigerant from a leak will concentrate. The shaft shall not be required to be ventilated for double-wall refrigerant pipe where the interstitial space of the double-wall pipe is vented to the outdoors. For refrigeration systems used in residential occupancies serving on a single dwelling unit or sleeping unit, shaft ventilation shall not be required where the pipe or tube is continuous without fittings in the shaft.

Applicable Code: 2024 International Fuel Gas Code

Modification Index Number: IFGC 2024 01

Code Section: 401.9 Identification

Proponent: Southeast Propane Alliance (SEPA)

Previous Code Cycles	Previous Modification Number	Previous Code Section
IFGC 2021	IFGC 2021 01	401.9
IFGC 2018	IFGC 2018 01	401.9
IFGC 2015	IFGC 2015 01	401.9
IFGC 2012	IFGC 2012 01	401.9

Reason: The section does nothing to protect health, safety or welfare. Some products are not capable of being marked.

Modification:

(Section deleted without substitution)

~~**401.9 Identification.** Each length of pipe and tubing and each pipe fitting, utilized in a fuel gas system, shall bear the identification of the manufacturer.~~

~~**Exceptions:**~~

~~1. Steel pipe sections that are 2 feet (610 mm) and less in length and are cut from longer sections of pipe.~~

~~2. Steel pipe fittings 2 inches and less in size.~~

~~3. Where identification is provided on the product packaging or crating.~~

~~4. Where other *approved* documentation is provided.~~

Applicable Code: 2024 International Fuel Gas Code

Modification Index Number: IFGC 2024 02

Code Section: 401.10 Third-party testing and certification

Proponent: Southeast Propane Alliance (SEPA)

Previous Code Cycles	Previous Modification Number	Previous Code Section
IFGC 2021	IFGC 2021 02	401.10
IFGC 2018	IFGC 2018 02	401.10
IFGC 2015	IFGC 2015 02	401.10
IFGC 2012	IFGC 2012 02	401.10

Reason: The requirement offers little or no protection of health, safety or welfare to the public.

Modification:

401.10 ~~**Piping materials standards.** Piping, tubing and fittings shall be manufactured to the applicable referenced standards, specifications and performance criteria listed in **Section 403** and shall be identified in accordance with **Section 401.9.**~~

Third-party testing and certification. All piping, tubing and fittings shall comply with the applicable referenced standards, specifications and performance criteria of this code, including **Section 403** of the South Carolina Fuel Gas Code and corresponding sections.

Applicable Code: 2024 International Fuel Gas Code

Modification Index Number: IFGC 2024 03

Code Section: 404.17.1 Limitations

Proponent: Omega Flex, Inc.

Previous Code Cycles	Previous Modification Number	Previous Code Section
N/A		

Reason: Composite tubing (both pex-al-pex and pe-al-pe) is being sold in the United States for use in fuel gas systems. The pex-al-pex material was evaluated by the NFPA 54 National Fuel Gas code committee which did not approve it for fuel gas applications because the product lacks equivalency to proscribed piping systems. It is, nonetheless, being presented to AHJs who are being asked to approve it for use as an alternative material for use within buildings in the United States. Even though the evaluation services report lists this section of the code limiting the material to outdoors below ground, several AHJs have approved it for installation above grade within the building where it poses a potential hazard in the event of a building fire. A characteristic it shares with plastic gas piping and the reason for this section.

Modification:

404.17.1 Limitations. Plastic pipe and plastic composite piping including pex-al-pex and pe-al-pe (where listed and *approved*) shall be installed outdoors underground only. Plastic pipe shall not be used within or under any *building* or slab or be operated at pressures greater than 100 psig (689 kPa) for natural gas or 30 psig (207 kPa) for *LP-gas*.

Exceptions:

1. Plastic pipe shall be permitted to terminate above ground outside of *buildings* where installed in premanufactured *anodeless risers* or service head adapter risers that are installed in accordance with the manufacturer's instructions.
2. Plastic pipe shall be permitted to terminate with a wall head adapter within *buildings* where the plastic pipe is inserted in a *piping* material for *fuel gas* use in *buildings*.
3. Plastic pipe shall be permitted under outdoor patio, walkway and driveway slabs provided that the burial depth complies with **Section 404.12**.

Applicable Code: 2024 International Fuel Gas Code

Modification Index Number: IFGC 2024 04

Code Section: [F] 412.4 Listed equipment

Proponent: Southeast Propane Alliance (SEPA)

Previous Code Cycles	Previous Modification Number	Previous Code Section
IFGC 2021	IFGC 2021 03	412.4
IFGC 2018	IFGC 2018 03	412.4
IFGC 2015	IFGC 2015 03	412.4
IFGC 2012	IFGC 2012 03	412.4

Reason: No listed dispenser packages for LP-gas dispensers are available at this time.

Modification:

[F] 412.4 Listed equipment. Hoses, hose connections, vehicle fuel connections, dispensers, *LP-gas* pumps and electrical *equipment* used for *LP-gas* shall comply with the requirements of NFPA 58 ~~be *listed*~~.

Applicable Code: 2024 International Fuel Gas Code

Modification Index Number: IFGC 2024 05

Code Section: [F] 412.6 Location

Proponent: Southeast Propane Alliance (SEPA)

Previous Code Cycles	Previous Modification Number	Previous Code Section
IFGC 2021	IFGC 2021 04	412.6
IFGC 2018	IFGC 2018 04	412.6
IFGC 2015	IFGC 2015 04	412.6
IFGC 2012	IFGC 2012 04	412.6

Reason: To bring the IFGC in harmony with NFPA 58 with respect to distance between the point of transfer and exposures.

Modification:

[F] 412.6 Location. ~~The point of transfer for *LP-gas* dispensing operations shall be separated from buildings and other exposures in accordance with the following:~~

~~1. Not less than 25 feet (7620 mm) from buildings where the exterior wall is not part of a fire-resistance-rated assembly having a rating of 1 hour or greater.~~
~~2. Not less than 25 feet (7620 mm) from combustible overhangs on buildings, measured from a vertical line dropped from the face of the overhang at a point nearest the point of transfer.~~
~~3. Not less than 25 feet (7620 mm) from the lot line of property that can be built upon.~~
~~4. Not less than 25 feet (7620 mm) from the centerline of the nearest mainline railroad track.~~
~~5. Not less than 10 feet (3048 mm) from public streets, highways, thoroughfares, sidewalks and driveways.~~
~~6. Not less than 10 feet (3048 mm) from buildings where the exterior wall is part of a fire-resistance-rated assembly having a rating of 1 hour or greater.~~

In addition to the fuel dispensing requirements of the South Carolina Fire Code, the point of transfer for dispensing operations shall be 25 feet (7620 mm) or more from buildings having combustible exterior wall surfaces, buildings having noncombustible exterior wall surfaces that are not part of a 1-hour fire-resistance-rated assembly or buildings having combustible overhangs, property that could be built on and railroads; at least 10 feet (3048 mm) from public streets or sidewalks and buildings having noncombustible exterior wall surfaces that are part of a fire-resistance-rated assembly having a rating of 1 hour or more; and 5 feet (1524 mm) from driveways.

*(page 2 of **IFGC 2024 05** - [F] 412.6)*

Exceptions:

1. The point of transfer for *LP-gas* dispensing operations need not be separated from canopies ~~that are~~ providing weather protection for the dispensing equipment constructed in accordance with the *International Building Code* ~~and that provide weather protection for the dispensing *equipment*~~. Liquefied petroleum gas containers shall be located in accordance with the International Fire Code.
2. The separation from driveways is not required where the driveway serves the vehicle fuel dispenser.

~~Liquefied petroleum gas containers shall be located in accordance with the *International Fire Code*.~~ Liquefied petroleum gas storage and dispensing *equipment* shall be located outdoors and in accordance with the ~~*International*~~ *South Carolina Fire Code*.

Applicable Code: 2024 International Fuel Gas Code

Modification Index Number: IFGC 2024 06

Code Section: [F] 412.8.3 Vehicle impact protection (new exception)

Proponent: Southeast Propane Alliance (SEPA)

Previous Code Cycles	Previous Modification Number	Previous Code Section
IFGC 2021	IFGC 2021 05	412.8.3
IFGC 2018	IFGC 2018 06	412.8.3
IFGC 2015	IFGC 2015 05	412.8.3
IFGC 2012	IFGC 2012 05	412.7.3

Reason: To allow the AHJ the ability to accept an alternate method of compliance through a variance.

Modification:

[F] 412.8.3 Vehicle impact protection. Where installed within 10 feet (3048 mm) of vehicle traffic, *LP-gas* storage containers, pumps and dispensers shall be protected in accordance with Section 2307.5, Item 2 of the ~~*International*~~ *South Carolina Fire Code*.

Exception: An alternative method may be used that meets the intent of this section with the approval of the authority having jurisdiction (AHJ).

Applicable Code: 2024 International Fuel Gas Code

Modification Index Number: IFGC 2024 07

Code Section: [F] 412.10 Private fueling of motor vehicles

Proponent: Southeast Propane Alliance (SEPA)

Previous Code Cycles	Previous Modification Number	Previous Code Section
IFGC 2021	IFGC 2021 06	412.10
IFGC 2018	IFGC 2018 07	412.10
IFGC 2015	IFGC 2015 06	412.10
IFGC 2012	IFGC 2012 06	412.8

Reason: The requirement would prohibit vehicles with removable containers from being refilled at self-service refueling stations.

Modification:

(new code section)

[F] 412.10 Private fueling of motor vehicles. Self-service LP-gas dispensing systems, including key, code and card lock dispensing systems, shall not be open to the public. In addition to the requirements of the South Carolina Fire Code, self-service LP-gas dispensing systems shall be provided with an emergency shutoff switch located within 100 feet (30 480 mm) of, but not less than 20 feet (6096 mm) from, dispensers, and the owner of the dispensing facility shall ensure the safe operation of the system and the training of users.

Applicable Code: 2024 International Fuel Gas Code

Modification Index Number: IFGC 2024 08

Code Section: 505.1.1 Commercial cooking appliances vented by exhaust hoods

Proponent: Piedmont Natural Gas

Previous Code Cycles	Previous Modification Number	Previous Code Section
IFGC 2021	IFGC 2021 07	505.1.1
IFGC 2018	IFGC 2018 08	505.1.1
IFGC 2015	IFGC 2015 07	505.1.1
IFGC 2012	IFGC 2012 07	505.1.1
IFGC 2006	IFGC 2006 01	505.1.1
IFGC 2003	IFGC 2003 02	505.1.1
IFGC 2000	IFGC 2000 02	505.1.1

Reason: Manually operated commercial cooking appliances are in operation only when kitchen staff is present. An inoperative exhaust system, therefore, is apparent to kitchen personnel.

Modification:

505.1.1 Commercial cooking appliances vented by exhaust hoods. Where commercial cooking appliances are vented by means of the Type I or II kitchen exhaust hood system that serves such appliances, the exhaust system shall be fan powered and the appliances shall be interlocked with the exhaust hood system to prevent appliance operation when the exhaust hood system is not operating. ~~The method of interlock between the exhaust hood system and the appliances equipped with standing pilot burner ignition systems shall not cause such pilots to be extinguished.~~ Where a solenoid valve is installed in the gas piping as part of an interlock system, gas piping shall not be installed to bypass such valve. Dampers shall not be installed in the exhaust system.

Exception: An interlock between the cooking appliance(s) and the exhaust hood system shall not be required <u>for appliances that are of the manually operated type and are factory equipped with standing pilot burner ignition systems.</u> ~~where heat sensors or other approved methods automatically activate the exhaust hood system when cooking operations occur.~~

Applicable Code: 2023 National Electrical Code

Modification Index Number: NEC 2023 01

Code Section: 210.8(A) Dwelling Units

Proponent: Home Builders Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
NEC 2020	NEC 2020 03	210.8(A)

Reason: This change will require receptacles serving 250-volt appliances, such as stoves and clothes dryers, to have GFCI protection when located in bathrooms, crawl spaces, basements, laundry areas, or within 6 feet of sinks, bathtubs or showers. This section previously applied to receptacles up to 125 volts only.

Modification:

210.8(A) Dwelling Units. All 125-volt ~~through 250-volt~~ receptacles installed in the following locations and supplied by single-phase branch circuits rated 150 volts or less to ground shall have ground-fault circuit-interrupter protection for personnel:

(1) Bathrooms
(2) Garages and also accessory buildings that have a floor located at or below grade level not intended as habitable rooms and limited to storage areas, work areas, and areas of similar use
(3) Outdoors
(4) Crawl spaces - at or below grade level
(5) Basements
Exception to (5): Receptacles in walk-out basements are excluded from this requirement.
(6) Kitchens
(7) Areas with sinks and permanent provisions for food preparation, beverage preparation, or cooking
(8) Sinks - where receptacles are installed within 1.8 m (6 ft) from the top inside edge of the bowl of the sink
(9) Boathouses
(10) Bathtubs or shower stalls - where receptacles are installed within 1.8 m (6 ft) of the outside edge of the bathtub or shower stall
(11) Laundry areas
(12) Indoor damp and wet locations

Exception No. 1: Receptacles that are not readily accessible and are supplied by a branch circuit dedicated to electric snow-melting, deicing, or pipeline and vessel heating equipment shall be permitted to be installed in accordance with 426.28 or 427.22, as applicable.

*(page 2 of **NEC 2023 01** - 210.8(A))*

Exception No. 2: A receptacle supplying only a permanently installed premises security system shall be permitted to omit ground-fault circuit-interrupter protection.

Exception No. 3: Listed weight-supporting ceiling receptacles (WSCR) utilized in combination with compatible weight-supporting attachment fittings (WASF) installed for the purpose of supporting a ceiling luminaire or ceiling-suspended fan shall be permitted to omit ground-fault circuit-interrupter protection. If a general-purpose convenience receptacle is integral to the ceiling luminaire or ceiling-suspended fan, GFCI protection shall be provided.

Exception No. 4: Factory-installed receptacles that are not readily accessible and are mounted internally to bathroom exhaust fan assemblies shall not require GFCI protection unless required by the installation instructions or listing.

Informational Note: See 760.41(B) and 760.121(B) for power supply requirements for fire alarm systems.

Applicable Code: 2023 National Electrical Code

Modification Index Number: NEC 2023 02

Code Section: 210.8(F) Outdoor Outlets

Proponent: Home Builders Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
NEC 2020	NEC 2020 04	210.8(F)

Reason: It has not been determined if all A/C condenser units will operate on a GFCI-protected circuit as sufficient testing has not been conducted. In addition, branch circuit extensions or modifications would require the addition of GFCI protection for old condenser units, and it is not known whether the existing equipment is compatible with GFCI. This requirement also applies to hardwired connections for effluent pumps and other types of lift station pumps with outdoor connections.

Modification:

210.8(F) Outdoor Outlets. For dwellings, all outdoor outlets, other than those covered in 210.8(A), Exception No. 1, including outlets installed in the following locations, and supplied by single-phase branch circuits rated 150 volts or less to ground, 50 amperes or less, shall be provided with GFCI protection:

(1) Garages that have floors located at or below grade level
(2) Accessory buildings
(3) Boathouses

If equipment supplied by an outlet covered under the requirements of this section is replaced, the outlet shall be supplied with GFCI protection.

Exception No. 1: GFCI protection shall not be required on lighting outlets other than those covered in 210.8(C).
Exception No. 2: GFCI protection shall not be required for listed HVAC equipment. ~~This exception shall expire September 1, 2026.~~

Applicable Code: 2023 National Electrical Code

Modification Index Number: NEC 2023 03

Code Section: 210.12(B) Dwelling Units

Proponent: Home Builders Association of South Carolina

Previous Code Cycles	Previous Modification Number	Previous Code Section
NEC 2020	NEC 2020 05	210.12(B)

Reason: This change will require receptacles serving 250-volt appliances, such as stoves and clothes dryers, to have GFCI protection when located in bathrooms, crawl spaces, basements, laundry areas or within 6 feet of sinks, bathtubs or showers.

Modification:

210.12(B) Dwelling Units. All 120-volt, single-phase, ~~10-,~~ 15- and 20- ampere branch circuits supplying outlets or devices installed in the following locations shall be protected by any of the means described in 210.12(A)(1) through (A)(6):
~~(1) Kitchens~~
~~(2)~~ (1) Family Rooms
~~(3)~~ (2) Dining Rooms
~~(4)~~ (3) Living Rooms
~~(5)~~ (4) Parlors
~~(6)~~ (5) Libraries
~~(7)~~ (6) Dens
~~(8)~~ (7) Bedrooms
~~(9)~~ (8) Sunrooms
~~(10)~~ (9) Recreation Rooms
~~(11)~~ (10) Closets
~~(12)~~ (11) Hallways
~~(13) Laundry Spaces~~
~~(14)~~ (12) Similar Areas

Exception No. 1: AFCI protection shall not be required for an individual branch circuit supplying a fire alarm system installed in accordance with 760.41(B) or760.121(B). The branch circuit shall be installed in a metal raceway, metal auxiliary gutter, steel-armored cable, or Type MC or Type AC cable meeting the applicable requirements of 250.118, with metal boxes, conduit bodies, and enclosures.

Exception No. 2: AFCI protection shall not be required for the individual branch circuit supplying an outlet for arc welding equipment in a dwelling unit ~~until January 1, 2025~~.

Informational Note No. 1: See *NFPA 72-2022*, *National Fire Alarm and Signaling Code*, 29.9.4(5), for information on secondary power source requirements for smoke alarms installed in dwelling units.

Informational Note No. 2: See 760.41(B) and 760.121(B) for power source requirements for fire alarm systems.