| RB3-22       | Egress requirements applicable to accessory structures                                      |
| RB45-22     | splices                                                                                   |
| RB62-22     | R302.3.2 Continuity                                                                       |
|             | “rooms and spaces”. we’ll ask the full BCAC if they want it like that or just “rooms” or just “spaces”? |
|             | Need to go to FCAC                                                                         |
| RB100-22    | steps between garage and dwelling                                                          |
| RB151-22    | mezzanine height and area.                                                                 |
| RB253-22    | R902.1, 2, 3, 4                                                                           |
|             | Waiting for a draft on the 14th meeting                                                     |
| RB314-22 EB34 | Accessory Dwelling units PC on EB34 to include the approved ADU appendix from RB314-22. | Waiting for a reason
Proposed Change as Submitted

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org)

2021 International Residential Code

Add new definition as follows:

ACCESSORY BUILDING. A secondary building detached from, and located on the same lot as a one- or two-family dwelling featuring a roof assembly and more than 50 percent enclosed exterior walls. Examples include garages, storage buildings, workshops, boat houses, treehouses, and similar structures.

Revise as follows:

[RB] ACCESSORY STRUCTURE. A structure that is accessory to and incidental to that of the dwelling(s) and that is located on the same lot and is not an accessory building. Examples of accessory structures are carports, fencing, decks, gazebos, arbors, retaining walls, barbecue pits, detached chimneys, playground equipment, yard art, docks, piers, etc.

[RB] BUILDING. Any one- or two-family dwelling or townhouse, or portion thereof, used or intended to be used for human habitation, for living, sleeping, cooking or eating purposes, or any combination thereof, or any accessory building or accessory structure. For the definition applicable in Chapter 11, see Section N1101.6.

[RB] STRUCTURE. That which is built or constructed.

Revise as follows:

R101.2 Scope. The provisions of this code shall apply to the construction, alteration, movement, enlargement, replacement, repair, equipment, use and occupancy, location, removal and demolition of detached one- and two-family dwellings and townhouses not more than three stories above grade plane in height with a separate means of egress and their accessory buildings and accessory structures not more than three stories above grade plane in height.

Exception: The following shall be permitted to be constructed in accordance with this code where provided with an automatic sprinkler system complying with Section P2904:

1. Live/work units located in townhouses and complying with the requirements of Section 508.5 of the International Building Code.
2. Owner-occupied lodging houses with five or fewer guestrooms.
3. A care facility with five or fewer persons receiving custodial care within a dwelling unit.
4. A care facility with five or fewer persons receiving medical care within a dwelling unit.
5. A care facility for five or fewer persons receiving care that are within a single-family dwelling.

Add new text as follows:

R101.2.1 Accessory buildings. Accessory buildings with any dimension greater than 12 feet (3658 mm) shall meet the provisions of this code.

R101.2.2 Accessory structures. The following accessory structures shall meet the provisions of this code:

1. Decks, see Chapter 3 and Section R507.
2. Gazebos.
3. Retaining walls, see Section R404.4.
4. Detached masonry chimneys located less than 10 feet (3048 m) from other buildings or lot lines.
5. Swimming pools and spas, see Section R327.
6. Detached carports, see Section R309.2

Exception: Portable, lightweight carports not exceeding 400 square feet (37 m²) or 12 feet (3658 mm) mean roof height.

R102.7 Existing structures. The legal occupancy of any structure existing on the date of adoption of this code shall be permitted to continue without change, except as is specifically covered in this code, the International Property Maintenance Code or the International Fire Code, or as is
Additions, alterations or repairs. Additions, alterations or repairs to any structure shall conform to the requirements for a new structure without requiring the existing structure to comply with the requirements of this code, unless otherwise stated. Additions, alterations, repairs and relocations shall not cause an existing structure to become less compliant with the provisions of this code than the existing building or structure was prior to the addition, alteration or repair. An existing building together with its additions shall comply with the height limits of this code. Where the alteration causes the use or occupancy to be changed to one not within the scope of this code, the provisions of the International Existing Building Code shall apply.

Add new text as follows:

R102.7.2 Change of occupancy. Prior to a change of occupancy for a building, structure, accessory building or accessory structure, the owner or the owner’s authorized agent, shall first make application to the building official and obtain the required permits.

Revise as follows:

R311.1 Means of egress. Dwellings, accessory buildings larger than 400 square feet (37 m²), and accessory buildings larger than one-story in height, shall be provided with a means of egress in accordance with this section. The means of egress shall provide a continuous and unobstructed path of vertical and horizontal egress travel from all portions of the structure dwelling to the required egress door without requiring travel through a garage. The required egress door shall open directly into a public way or to a yard or court that opens to a public way.

   Exception: The means of egress in an accessory building that does not include a dwelling unit shall be permitted to be through a garage.

R403.1.4.1 Frost protection. Except where otherwise protected from frost, foundation walls, piers and other permanent supports of buildings and structures shall be protected from frost by one or more of the following methods:

1. Extended below the frost line specified in Table R301.2.
2. Constructed in accordance with Section R403.3.
3. Constructed in accordance with ASCE 32.
4. Erected on solid rock.

Footings shall not bear on frozen soil unless the frozen condition is permanent.

Exceptions:

1. Protection of free-standing accessory buildings or accessory structures with an area of 600 square feet (56 m²) or less, of light-frame construction, with an eave height of 10 feet (3048 mm) or less shall not be required.
2. Protection of free-standing accessory buildings or accessory structures with an area of 400 square feet (37 m²) or less, of other than light-frame construction, with an eave height of 10 feet (3048 mm) or less shall not be required.
3. Decks not supported by a dwelling need not be provided with footings that extend below the frost line.

Reason: The ICC Building Code Action Committee was requested to review the existing code language pertaining to the means of egress criteria applicable to accessory buildings and accessory structures. While accessory buildings and accessory structures are often considered as subordinate, secondary, and incidental to the main building on a lot, design professionals are increasingly tasked with designing oversized garages, barns, workshops, and similar spaces whose size may be comparable to the main dwelling. The proposed language is modeled on amendments adopted and promulgated by the State of North Carolina in their 2018 Residential Code with some refinement / reformatting for clarity.

The additional language to Chapter 1:

- Establishes that any accessory building with a dimension larger than 12 feet (3658 mm) is subject to the same design criteria as a building. Those with smaller dimensions (effectively 144 ft² or less) would not be subject to the IRC, but solely to local zoning ordinances or by-laws.
- Provides guidance for the design of accessory structures.
- Further clarifies that a prospective change of use for any type of building or structure on a lot is subject to review and permitting by the Authority Having Jurisdiction.

The revisions to Chapter 2 definitions:

- Create a distinction between an accessory building and an accessory structure with examples provided for clarity.
- Eliminates the undefined language in the existing definition of an accessory structure regarding what constitutes “incidental” and reframes it as
secondary.

- Makes an editorial addition to the definition of a building for consistency with the other definitions.

The revisions to Chapter 3:

- Clarify that accessory buildings exceeding certain area and height dimensions shall comply with the means of egress requirements expected in a building.
  
  o 400 square feet (37 m²) facilitates a 20'-0" by 20'-0" detached two-car garage without triggering additional means of egress requirements.
  
  o The single-story requirement coincides with concerns regarding the need for Emergency Escape and Rescue Openings (EERO) per R310.1 which apply to basements, habitable attics, and sleeping rooms.

§ Accessory buildings rarely include a basement.

§ Per the Chapter 2 definition, a habitable attic may be finished or unfinished, therefore an accessory building with a fixed stair to an attic / loft area would be required to provide an EERO.

§ If a carriage house or similar accessory building features a dwelling unit or sleeping room, it would require an EERO.

- Acknowledge via an Exception that if an accessory building does not include a dwelling unit, it is reasonable to allow the path of egress travel to go through a garage.

The additional language to Chapter 4:

- Insofar as free-standing accessory structures already have two exceptions pertaining to footing frost protection, the language is adjusted to include both accessory building and accessory structures in recognition of the new / revised definitions.

This proposal is submitted by the ICC Building Code Action Committee (BCAC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2020 and 2021 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as interested parties. Related documents and reports are posted on the BCAC website at https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/building-code-action-committee-bcac/.

Cost Impact: The code change proposal will increase the cost of construction. This proposal will increase the cost of construction associated with the design of larger accessory buildings. In scenarios where a code interpretation may previously have allowed an accessory building to not meet the design criteria of Chapter 3 (including EERO and Means of Egress), henceforth said accessory buildings would be so required.

Public Hearing Results

Committee Action: Disapproved

Committee Reason: The committee disapproved this proposal for several reasons. R101.2.2 - with no pointers in some of the items in the list makes the requirements vague; and the exception is vague and confusing. Is a tiny house exempted by R101.2.1 if the dimensions are less than 12 feet? Is this 12 feet vertical or horizontal? How is this 144 sq.ft. aligned with the allowances for 200 sq.ft. and 400 sq.ft. currently in the code? The definition of accessory structures is what it is not, not what it is. The laundry lists in the definitions is confusing and includes items that not always require permits (i.e. arbors, yard art). The defined term for 'accessory buildings' seems to have missed associations with a townhouse. A change of occupancy is not currently addressed in the IRC, however, this could be addressed based on the final action on RB8-22. (Vote: 10-0)
Individual Consideration Agenda

Public Comment NUGENT-1:

IRC: SECTION 202, R101.2.1, R101.2.2, R102.7, R102.7.1, R105.2, R311.1

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org) requests As Modified by Public Comment

Further modify as follows:

2021 International Residential Code

ACCESSORY BUILDING. A secondary building detached from, accessory to and incidental to that of the dwelling(s) and located on the same lot, as a one- or two-family dwelling featuring. Such building includes a roof assembly and more than 50 percent enclosed enclosure by exterior walls. Examples include garages, storage buildings, workshops, boat houses, treehouses, and similar structures.

[RB] ACCESSORY STRUCTURE. A structure that is accessory to and incidental to that of the dwelling(s) and that is located on the same lot and is not an accessory building. Examples of accessory structures are carports, fencing, decks, gazebos, arbors, retaining walls, barbecue pits, detached chimneys, playground equipment, yard art, docks, piers, etc.

R101.2.1 Accessory buildings. Accessory buildings, including habitable space, with any dimension greater than 12 feet (3658 mm) shall meet the provisions of this code.

R101.2.2 Accessory structures. The following accessory structures shall meet the provisions of this code:

1. Decks, see Chapter 3 and Section R507.
2. Gazebos.
3. Retaining walls, see Section R404.4.
4. Detached masonry chimneys located less than 10 feet (3048 m) from other buildings or lot lines.
5. Swimming pools and spas, see Section R327.
6. Detached carports, see Section R309.2.

[RB] Exception: Portable, lightweight carports not exceeding 400 square feet (37 m²) or 12 feet (3658 mm) mean roof height.

R102.7 Existing structures. The legal occupancy of any building or structure existing on the date of adoption of this code shall be permitted to continue without change, except as is specifically covered in this code, the International Property Maintenance Code or the International Fire Code, or as is deemed necessary by the building official for the general safety and welfare of the occupants and the public.

R102.7.1 Additions, alterations or repairs. Additions, alterations or repairs to any building or structure shall conform to the requirements for a new building or structure without requiring the existing building or structure to comply with the requirements of this code, unless otherwise stated. Additions, alterations, repairs and relocations shall not cause an existing building or structure to become less compliant with the provisions of this code than the existing building or structure was prior to the addition, alteration or repair. An existing building together with its additions shall comply with the height limits of this code. Where the alteration causes the use or occupancy to be changed to one not within the scope of this code, the provisions of the International Existing Building Code shall apply.

R105.2 Work exempt from permit. Exemption from permit requirements of this code shall not be deemed to grant authorization for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction. Permits shall not be required for the following:

Building:

1. Other than storm shelters, one-story detached accessory buildings and accessory structures, provided that the floor area does not exceed 200 square feet (18.58 m²).
2. Fences not over 7 feet (2134 mm) high.
3. Retaining walls that are not over 4 feet (1219 mm) in height measured from the bottom of the footing to the top of the wall, unless supporting a surcharge.
4. Water tanks supported directly upon grade if the capacity does not exceed 5,000 gallons (18 927 L) and the ratio of height to diameter or width does not exceed 2 to 1.
5. Sidewalks and driveways.
6. Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work.
7. Prefabricated swimming pools that are less than 24 inches (610 mm) deep.
8. Swings and other playground equipment.
9. Window awnings supported by an exterior wall that do not project more than 54 inches (1372 mm) from the exterior wall and do not require additional support.
10. Decks not exceeding 200 square feet (18.58 m²) in area, that are not more than 30 inches (762 mm) above grade at any point, are not attached to a dwelling and do not serve the exit door required by Section R311.4.

Electrical:

1. Listed cord-and-plug connected temporary decorative lighting.
2. Reinstallation of attachment plug receptacles but not the outlets therefor.
3. Replacement of branch circuit overcurrent devices of the required capacity in the same location.
4. Electrical wiring, devices, appliances, apparatus or equipment operating at less than 25 volts and not capable of supplying more than 50 watts of energy.
5. Minor repair work, including the replacement of lamps or the connection of approved portable electrical equipment to approved permanently installed receptacles.

Gas:

1. Portable heating, cooking or clothes drying appliances.
2. Replacement of any minor part that does not alter approval of equipment or make such equipment unsafe.
3. Portable-fuel-cell appliances that are not connected to a fixed piping system and are not interconnected to a power grid.

Mechanical:

1. Portable heating appliances.
2. Portable ventilation appliances.
3. Portable cooling units.
4. Steam, hot- or chilled-water piping within any heating or cooling equipment regulated by this code.
5. Replacement of any minor part that does not alter approval of equipment or make such equipment unsafe.
6. Portable evaporative coolers.
7. Self-contained refrigeration systems containing 10 pounds (4.54 kg) or less of refrigerant or that are actuated by motors of 1 horsepower (746 W) or less.
8. Portable-fuel-cell appliances that are not connected to a fixed piping system and are not interconnected to a power grid.

Plumbing:

1. The stopping of leaks in drains, water, soil, waste or vent pipe; provided, however, that if any concealed trap, drainpipe, water, soil, waste or vent pipe becomes defective and it becomes necessary to remove and replace the same with new material, such work shall be considered as new work and a permit shall be obtained and inspection made as provided in this code.
2. The clearing of stoppages or the repairing of leaks in pipes, valves or fixtures, and the removal and reinstallation of water closets, provided such repairs do not involve or require the replacement or rearrangement of valves, pipes or fixtures.

R311.1 Means of egress. Dwellings, accessory buildings larger than 400 square feet (37 m²), and accessory buildings larger than one story in height and accessory building including habitable space shall be provided with a means of egress in accordance with this section. The means of egress shall provide a continuous and unobstructed path of vertical and horizontal egress travel from all portions of the structure-dwelling to the required egress door without requiring travel through a garage. The required egress door shall open directly into a public way or to a yard or court that opens to a public way.

Exception: The means of egress in an accessory building that does not include a dwelling unit shall be permitted to be through a garage.

Commenter’s Reason: The revisions in this public comment addresses some of the committee’s concerns. The language of R101.2.1 was revised to eliminate the dimensional parameters which were seen as a point of contention, in favor of a broader
requirement that accessory buildings with habitable space must be designed in compliance with the Code.

The committee did not like the laundry list in the definitions for accessory building and structure – so the definitions have been revised for consistency and to remove the lists. The committee did not like different sizes and language lists in R101.2.1 and R101.2.2, so those have been deleted in favor of the general requirement of 200 feet in Section R105.2.

Where we disagree with the committee is that ‘change of occupancy’ is not addressed in the IRC. It is a defined term, so Section R102.7.2 is appropriate.

[RB] CHANGE OF OCCUPANCY. A change in the use of a building or portion of a building that involves a change in the application of the requirements of this code.

R102.7.2 Change of occupancy. Prior to a change of occupancy for a building, structure, accessory building or accessory structure, the owner or the owner’s authorized agent, shall first make application to the building official and obtain the required permits.

The code is inconsistent in its use of ‘structure’ or ‘building and structure’ within the text – including in the same section (e.g. 102.7.1). We have addressed that in this proposal.

R311.1 – accessory buildings can include living space, therefore, this should have means of egress. If this space is over on inside a garage, egress would be permitted through the garage.
Proposed Change as Submitted

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org)

2021 International Residential Code

Add new text as follows:

R301.9 Framing Member Splices. Splices in floor, ceiling, or roof framing members shall occur over vertical supports or shall be designed by a registered design professional in accordance with Section R301.1.3. Purlins, purlin braces, and collar ties shall not be considered a vertical support for determining splice locations.

Revise as follows:

R502.3 Allowable joist spans. Spans for floor joists shall be in accordance with Tables R502.3.1(1) and R502.3.1(2). For other grades and species and for other loading conditions, refer to the AWC STJR. Joist splices shall comply with Section R301.9.

R802.4.1 Rafter size. Rafters shall be sized based on the rafter spans in Tables R802.4.1(1) through R802.4.1(8). Rafter spans shall be measured along the horizontal projection of the rafter. For other grades and species and for other loading conditions, refer to the AWC STJR. Joist splices shall comply with Section R301.9.

R802.5 Ceiling joists. Ceiling joists shall be continuous across the structure or securely joined where they meet over interior partitions in accordance with Section R802.5.2.1. Ceiling joists shall be fastened to the top plate in accordance with Table R602.3(1). Rafter splices shall comply with Section R301.9.

Reason: This proposal adds language to address members spliced between bearing walls. The clear spans and loads provided in all IRC tables assume a continuous condition between supports. Although a continuous member can be achieved by splicing two members together, the splice must be properly designed to transfer forces across the spliced connection and avoid a hinge condition. Where splices have not been properly designed, members (especially rafters) have displayed visible out-of-plane deformation. In these situations, the members have required repair or replacement to stop and reverse the deformation process.

This proposal clarifies that framing member splices between bearing walls need to be engineered and references section R301.1.3. Engineered design.

“Where a building of otherwise conventional construction contains structural elements exceeding the limits of Section R301 or otherwise not conforming to this code, these elements shall be designed in accordance with accepted engineering practice. The extent of such design need only demonstrate compliance of nonconventional elements with other applicable provisions and shall be compatible with the performance of the conventional framed system. Engineered design in accordance with the International Building Code is permitted for buildings and structures, and parts thereof, included in the scope of this code.”

This proposal is submitted by the ICC Building Code Action Committee (BCAC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2020 and 2021 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as interested parties. Related documents and reports are posted on the BCAC website at https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/building-code-action-committee-bcac/.

Cost Impact: The code change proposal will not increase or decrease the cost of construction

This proposal is a clarification change only; the intent is to clarify Rafter splices need to be engineered which is what required currently but it is not addressed in the code text.

Public Hearing Results

Committee Action: Disapproved

Committee Reason: The proposal was disapproved because this is already addressed adequately in the wood sections. Splices have to be
Individual Consideration Agenda

Public Comment FURR-1:
IRC: R301.9, R502.3, R802.4.1, R802.5

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org) requests As Modified by Public Comment

Modify as follows:

2021 International Residential Code

R301.9 Framing Member Splices. Splices in floor, ceiling, or roof framing members shall occur over vertical supports or shall be designed by a registered design professional in accordance with Section R301.1.3. Purlins, purlin braces, and collar ties shall not be considered a vertical support for determining splice locations.

R502.3 Allowable joist spans. Spans for floor joists shall be in accordance with Tables R502.3.1(1) and R502.3.1(2). For other grades and species and for other loading conditions, refer to the AWC STJR. Joist splices shall comply with Section R301.9. occur over vertical supports or shall be designed in accordance with R301.1.3.

R802.4.1 Rafter size. Rafters shall be sized based on the rafter spans in Tables R802.4.1(1) through R802.4.1(8). Rafter spans shall be measured along the horizontal projection of the rafter. For other grades and species and for other loading conditions, refer to the AWC STJR. Joist Rafter splices shall comply with Section R301.9. occur over vertical supports or shall be designed in accordance with R301.1.3. Purlins, purlin braces, and collar ties shall not be considered a vertical support for determining splice locations.

R802.5 Ceiling joists. Ceiling joists shall be continuous across the structure or securely joined where they meet over interior partitions in accordance with Section R802.5.2.1. Ceiling joists shall be fastened to the top plate in accordance with Table R602.3(1). Rafter Ceiling joist splices shall comply with Section R301.9. occur over vertical supports or shall be designed in accordance with R301.1.3.

Commenter’s Reason: The Committee raised the concern that adding a generic splice section in Chapter 3 could lead to unintentionally requiring or promoting splices beyond the specific problematic framing conditions. In response, this public comment eliminates the generic splice section and relocates the proposed language into the three specific sections that address floor joists, rafters, and ceiling joists. This relocation of text will limit these specific splice requirements only to the three areas intended to be addressed by this proposal. The allowable framing table spans in the IRC assume members are continuous between their supports. Without that continuity, the table spans and framing sizes are inadequate to support the required loads and result in localized and visible deflections. These deflections cause both cosmetic damage such as cracked gypsum board, and more functional damage such as racked doors that do not close or broken plumbing where it has been run through deflected floor joists. A continuous member can be achieved by using a single solid member or by using a splice that transfers the full member section capacity between pieces. This proposal addresses the spliced condition and typical field splice practices that are frequently inadequate to support the required loads.

The opposing testimony raised a concern that the proposed language could be interpreted to allow bearing walls only to be considered a vertical support. Where a splice occurs over a vertical support, the support provides the necessary restraint against deflection and meets the intent of the prescriptive framing table spans. Vertical supports include any IRC allowable bearing surface or support element, including but not limited to: girders, trusses, bearing walls, etc.

The final concern raised was that splices have not been an issue and this is unnecessary language. Field splices are frequently used to extend framing members that are too short to reach the bearing point (see photograph).

Where a splice occurs between vertical supports, the splice must transfer the full section capacity between pieces for the framing to achieve the expected performance based on the prescriptive framing tables. Specific member splice requirements will depend on the member size, material grade, and environmental exposure (interior, exterior, etc) and must be designed in accordance with accepted engineering practices. As roof pitches become increasingly steep longer rafter spans are required. As modern floor plans increase open spaces, longer ceiling and floor joist spans are required. As a result, field splices are regularly identified as deficient and the cause of framing performance issues or failures.
Proposed Change as Submitted

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org)

2021 International Residential Code

Revise as follows:

R302.3 Two-family dwellings. Dwelling units in two-family dwellings shall be separated from each other by wall and floor assemblies having not less than a 1-hour fire-resistance rating where tested in accordance with ASTM E119, UL 263 or Section 703.2.2 of the International Building Code. Such separation shall be provided regardless of whether a lot line exists between the two dwelling units or not. Fire resistance rated floor/ceiling and wall assemblies shall extend to and be tight against the exterior wall, and wall assemblies shall extend from the foundation to the underside of the roof sheathing.

Exceptions:

1. A fire-resistance rating of 1/2 hour shall be permitted in buildings equipped throughout with an automatic sprinkler system installed in accordance with Section P2904.
2. Wall assemblies need not extend through attic spaces where the ceiling is protected by not less than 5/8-inch (15.9 mm) Type X gypsum board, an attic draft stop constructed as specified in Section R302.12.1 is provided above and along the wall assembly separating the dwellings and the structural framing supporting the ceiling is protected by not less than 1/2-inch (12.7 mm) gypsum board or equivalent.

Add new text as follows:

R302.3.2 Continuity. The fire-resistance-rated floor/ceiling and wall assemblies separating dwelling units shall include extensions through and separating attached enclosed accessory structures. The fire-resistance rated assemblies shall extend to and be tight against the exterior wall, and wall assemblies shall extend from the foundation to the underside of the roof sheathing.

Reason: This proposal aligns the rated assembly requirements for a two-family dwelling in R302.3 with the current requirements for townhouses in R302.2.3. Rated assembly extensions through and separating attached enclosed accessory structures are not currently addressed for two-family dwellings, which allows for the creation of a discontinuity in the rated barrier. Individual dwelling units may be separated in a two-family dwelling by a horizontal floor assembly (stacked duplex) or the more traditional vertical wall assemblies. Where attached enclosed accessory structures project above a horizontal or vertical assembly, careful consideration is required in the planning and construction to extend the assembly through/around the accessory structure in order to maintain the rated assembly continuity. Therefore, this proposal adds a new sub-section, R302.3.2, for Continuity. The new 302.3.2 for Continuity includes the last sentence of R302.3 and the text required for townhouses to the two-family dwelling section since the need to maintain such separation is equally necessary for both building types.

This proposal is submitted by the ICC Building Code Action Committee (BCAC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2020 and 2021 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as interested parties. Related documents and reports are posted on the BCAC website at https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/building-code-action-committee-bcac/.

Cost Impact: The code change proposal will increase the cost of construction. This is a technical change to two-family dwellings, despite the fact that the original intent has always been for the separation assemblies to continue through two-family attached accessory structures. Depending on the layout, this may require a longer wall to separate the units.

Public Hearing Results
Committee Action: Disapproved

Committee Reason: The proposal was disapproved because attached accessory structures are part of the structure. The accessory structure is defined as detached. There are concerns about the fire separation requirements in the proposal. This could be read to prohibit common garages for duplex units. (Vote: 8-2)

Individual Consideration Agenda

Public Comment NUGENT-2:
IRC: R302.3, R302.3.2

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org) requests As Modified by Public Comment

Further modify as follows:

2021 International Residential Code

R302.3 Two-family dwellings. Dwelling units in two-family dwellings shall be separated from each other by wall and floor assemblies having not less than a 1-hour fire-resistance rating where tested in accordance with ASTM E119, UL 263 or Section 703.2.2 of the International Building Code. Such separation shall be provided regardless of whether a lot line exists between the two dwelling units or not.

Exceptions:

1. A fire-resistance rating of ½ hour shall be permitted in buildings equipped throughout with an automatic sprinkler system installed in accordance with Section P2904.

2. Wall assemblies need not extend through attic spaces where the ceiling is protected by not less than 5/8 inch (15.9 mm) Type X gypsum board, an attic draft stop constructed as specified in Section R302.12.1 is provided above and along the wall assembly separating the dwellings and the structural framing supporting the ceiling is protected by not less than ½-inch (12.7 mm) gypsum board or equivalent.

R302.3.2 Continuity. The fire-resistance-rated floor/ceiling and wall assemblies separating dwelling units shall include extensions through and separating attached enclosed accessory structures rooms. The fire-resistance rated assemblies shall extend to and be tight against the exterior wall, and wall assemblies shall extend from the foundation to the underside of the roof sheathing.

Exceptions:

1. Wall assemblies need not extend through attic spaces where the ceiling is protected by not less than 5/8 inch (15.9 mm) Type X gypsum board, an attic draft stop constructed as specified in Section R302.12.1 is provided above and along the wall assembly separating the dwellings and the structural framing supporting the ceiling is protected by not less than ½-inch (12.7 mm) gypsum board or equivalent.

2. The fire-resistance-rated floor/ceiling and wall assemblies are not required to extend through common rooms constructed in accordance with Section R302.3.3

Commenter’s Reason: This proposal addresses the concern where two-family dwelling units have attached areas that fall outside of the definition for a dwelling unit that must be separated by the fire-rated assemblies to maintain continuity. This public comment addresses the concerns from the committee by:

1. As the committee had a problem with attached accessory structures, This PC removing accessory and clarifies that the new section addresses separating attached enclosed rooms such as garages, mechanical closets and other storage spaces.

2. The committee has a concern about “This could be read to prohibit common garages for duplex units.” This PC incorporates the approved RB64-22, which allows for “Common” accessory rooms to simply be separated from the rest of the dwelling unit(s) rather than have all accessory rooms be split and dedicated to individual units.

3. This PC also moves the related exception #2 from the existing R302.3 to the new section R302.3.2.

The BCAC recognized that with the action on RB64-22, our proposal needed to include an exception that provides for those new provisions, while still addressing the original concern. The public comment ties everything together so that the code will work cleanly regardless as to whether there
are adjacent spaces, such as garages, that are dedicated to the individual units or common to both, so that there is less confusion for the code user, consistency in application, and fully maintains the intended level of protection from one dwelling unit to the other.
**Proposed Change as Submitted**

**Proponents:** Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org)

**2021 International Residential Code**

R311.3 Floors and landings at exterior doors. There shall be a landing or floor on each side of each exterior door. The width of each landing shall be not less than the door served. Landings shall have a dimension of not less than 36 inches (914 mm) measured in the direction of travel. The slope at exterior landings shall not exceed $\frac{1}{4}$ unit vertical in 12 units horizontal (2 percent).

**Exception:** Exterior balconies less than 60 square feet (5.6 m²) and only accessed from a door are permitted to have a landing that is less than 36 inches (914 mm) measured in the direction of travel.

R311.3.1 Floor elevations at the required egress doors. Landings or finished floors at the required egress door shall be not more than $1\frac{1}{2}$ inches (38 mm) lower than the top of the threshold.

**Exception:** The landing or floor on the exterior side shall be not more than $7\frac{3}{4}$ 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 R311.8 or a stairway in accordance with Section R311.7.

Revise as follows:

R311.3.2 Floor elevations at other exterior doors. At exterior doors other than the required egress door, the exterior side shall be provided with landings or floors not more than $7\frac{3}{4}$ inches (196 mm) below the top of the threshold.

**Exception:** A top landing or floor is not required at the exterior doorway where a stairway of not more than two risers is located on the exterior side of the door, provided that the door does not swing over the stairway.

R311.3.3 Storm and screen doors. Storm and screen doors shall be permitted to swing over exterior stairs and landings.

Revise as follows:

R311.7.6 Landings for stairways. There shall be a floor or landing at the top and bottom of each stairway. The width perpendicular to the direction of travel shall be not less than the width of the flight served. For landings of shapes other than square or rectangular, the depth at the walk line and the total area shall be not less than that of a quarter circle with a radius equal to the required landing width. Where the stairway has a straight run, the depth in the direction of travel shall be not less than 36 inches (914 mm).

**Exception:**

1. A floor or landing is not required at the top of an interior flight of stairs, including stairs in an enclosed garage, provided that a door does not swing over the stairs.

2. At an enclosed garage, the top landing at the stair shall be permitted to be not more than 7 3/4 inches (196 mm) below the top of the threshold.

3. At exterior doors, a top landing is not required for an exterior stairway of not more than two risers, provided that the door does not swing over the stairway.

R311.7.8 Handrails. Handrails shall be provided on not less than one side of each flight of stairs with four or more risers.

**Reason:** This proposal started as question – Can the landing or steps into a garage be the same as permitted for exterior doors or not? The following are current requirements - There is a requirement for landings at exterior doors (R311.3) and a requirement for landings at the top and bottom of stairways (R311.7.6). The required egress door has to open directly into a public way, yard or court (R311.1), so it has to be an exterior door. Egress is not permitted through a garage (R311.1).

Interior doors not have requirements for landings, so going out to a single step or multiple steps would be covered by the stairway landing requirement in Section R311.7.6. The current exception clarifies that steps into a garage are considered interior stairways.

The modifications –

R311.3.2 – This is a requirement for a landing or floor at both sides of an exterior doorway. This section has ‘exterior’ in the title, and is a subsection of ‘exterior doors’, but does not have ‘exterior’ in the text. Since titles are not part of the text, this could be read as all door, or it could be read to allow a 7-3/4” drop between the floor and the threshold on both sides of the door. The modification to the body of the text would limit this to exterior
doors and the exterior side for the step down. The current exception is for a stairway landing, not a door landing, so this needs to be more specific to door landings to match the requirement in the main paragraph. “Floor” is added to address balconies and decks.

This is what is permitted with current text for exterior doors other than the means of egress doorway. While perhaps there should be a threshold limit (not proposed here), the current allowances is a serious tripping hazard.

![Diagram of exterior door landing with 7 3/4-inch step down]

Was this not the intended allowance?

![Diagram of stairway landing with screen and storm doors]

R311.7.6 – This is the section for stairway landings. Interior doors do not have a doorway landing requirement in the IRC. The new exception #2 allows for a garage access door to swing out over a landing that is a step down, similar to an exterior door. The current exception #1 says the door has to swing in. Exception 3 for stairway landings at exterior stairways is added so that R311.3.2 and R311.7.6 are coordinated for landings at exterior doors with steps – literally this is the same landing space, but from two different requirements.

This is an example of the R311.7.6 with the current Exception 1.
This is an example of R311.7.6 new exception 2 – allowing for a step down to a landing or floor in a garage – the door can swing in or out. This is currently permitted for exterior doors (R311.3.2)
This is an example of R311.7.6 new exception 3 – which is equal to the intent of R311.3.2 exception.
This proposal is submitted by the ICC Building Code Action Committee (BCAC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2020 and 2021 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as interested parties. Related documents and reports are posted on the BCAC website at https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/building-code-action-committee-bcac/.

**Cost Impact:** The code change proposal will not increase or decrease the cost of construction. This proposal clarifies existing requirements and provides additional design options for door leading into attached garages. This option could improve safety without additional costs.

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**Public Hearing Results**

**Committee Action:** Disapproved

**Committee Reason:** The proposal was disapproved because a 7-3/4” high threshold is needed to help at exterior doors with snow and water intrusion. (Vote: 10-0).
Individual Consideration Agenda

Public Comment NUGENT-1:
IRC: R311.3.2

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org) requests As Modified by Public Comment

Modify as follows:

2021 International Residential Code

R311.3.2 Floor elevations at other exterior doors. At exterior doors other than the required egress door, the exterior side shall be provided with landings or floors not more than 7\(\frac{3}{4}\) inches (196 mm) below the top of the threshold.

Exception: An exterior landing or floor is not required at the exterior doorway where a stairway of not more than two risers is located on the exterior side of the door, provided that the door does not swing over the stairway.

Commenter’s Reason: The testimony and committee reason were all against not losing the 7-3/4” threshold at exterior doors due to water and snow infiltration. That portion has been removed from the change with the above deletion. The rest of the language at this section is strictly a clarification that Section R311.3.2 is applicable to exterior doors. This was in the title, but not in the text.
The original intent of this proposal was to allow for a step or landing in step down at a door into a garage similar to what is permitted at an exterior door.
Proposed Change as Submitted

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@iccwest.org)

2021 International Residential Code

SECTION R325
MEZZANINES

Revise as follows:

R325.2 Mezzanines. The clear height above and below mezzanine floor construction shall be not less than 7 feet (2134 mm).

Exception: The ceiling height above the mezzanine shall be permitted to comply with Section R305.1 where the mezzanine meets the minimum room size in Section R304.

SECTION R326
HABITABLE ATTICS

R326.2 Minimum dimensions. A habitable attic shall have a floor area in accordance with Section R304 and a ceiling height in accordance with Section R305.

Reason: The provisions for minimum room area (R304) and ceiling height (R305) provide criteria for with habitable rooms/spaces and basements, but neither specifically mentions mezzanines (R325) or habitable attics (R326). Habitable attics does reference R304 and R305 for minimum size and height, so you can do sloped ceilings or beams in the habitable attic. However, the current text does not address a sloped ceiling or beams in a mezzanine. While I do not believe it is the intent to require a mezzanine to be at least 70 sq.ft. or at least 7 feet in each direction the same as a room (per R304), the proposal would allow for mezzanines with sloped ceilings beams where the mezzanine was the size of a room. Below are sections R304 and R305 for reference. Mezzanines are habitable spaces.

SECTION R304
MINIMUM ROOM AREAS

304.1 Minimum area. Habitable rooms shall have a floor area of not less than 70 square feet (6.5 m²).

Exception: Kitchens.

R304.2 Minimum dimensions. Habitable rooms shall be not less than 7 feet (2134 mm) in any horizontal dimension.

Exception: Kitchens.

R304.3 Height effect on room area. Portions of a room with a sloping ceiling measuring less than 5 feet (1524 mm) or a furred ceiling measuring less than 7 feet (2134 mm) from the finished floor to the finished ceiling shall not be considered as contributing to the minimum required habitable area for that room.

SECTION R305
CEILING HEIGHT

R305.1 Minimum height. Habitable space, hallways and portions of basements containing these spaces shall have a ceiling height of not less than 7 feet (2134 mm). Bathrooms, toilet rooms and laundry rooms shall have a ceiling height of not less than 6 feet 8 inches (2032 mm).

Exceptions:

1. For rooms with sloped ceilings, the required floor area of the room shall have a ceiling height of not less than 5 feet (1524 mm) and not less than 50 percent of the required floor area shall have a ceiling height of not less than 7 feet (2134 mm).

2. The ceiling height above bathroom and toilet room fixtures shall be such that the fixture is capable of being used for its intended purpose. A shower or tub equipped with a showerhead shall have a ceiling height of not less than 6 feet 8 inches (2032 mm) above an area of not less than 30 inches (762 mm) by 30 inches (762 mm) at the showerhead.

3. Beams, girders, ducts or other obstructions in basements containing habitable space shall be permitted to project to within 6 feet 4 inches (1931 mm) of the finished floor.
4. Beams and girders spaced apart not less than 36 inches (914 mm) in clear finished width shall project not more than 78 inches (1981 mm) from the finished floor.

R305.1.1 Basements. Portions of basements that do not contain habitable space or hallways shall have a ceiling height of not less than 6 feet 8 inches (2032 mm).

Exception: At beams, girders, ducts or other obstructions, the ceiling height shall be not less than 6 feet 4 inches (1931 mm) from the finished floor.

This proposal is submitted by the ICC Building Code Action Committee (BCAC).

BCAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2020 and 2021 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as interested parties. Related documents and reports are posted on the BCAC website at https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/building-code-action-committee-bcac/.

**Cost Impact:** The code change proposal will not increase or decrease the cost of construction. This is a clarification only for mezzanines constructed under sloped roofs. It will increase design options without increasing requirements.

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**Public Hearing Results**

This proposal includes unpublished errata.

In Section R325.2 Mezzanines, the reference in the new exception should be R305.1 instead of 305.1.

**Committee Action:** Disapproved

**Committee Reason:** The committee felt that this ceiling height limit could limit design options for bathrooms and closets on mezzanines and would not match the pointer to habitable space. Some of the committee supported the proposal feeling it makes sense that a mezzanine used for habitable space should meet the same ceiling height as the rest of the building. (Vote: 6-3)

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**Individual Consideration Agenda**

**Public Comment NUGENT-1:**

**Proponents:** Mike Nugent, representing Building Code Action Committee (bcac@iccsafe.org) requests As Submitted

**Commenter’s Reason:** The BCAC is urging members to overturn the split committee decision for Disapproval of this code change proposal and support this public comment for (AS) Approval As Submitted. There was a concern that bathrooms are not addressed but bathrooms are allowed in Mezzanines. This proposed exception to Section R325.2 Mezzanines would allow the same ceiling height reductions above mezzanines that are currently allowed in the IRC for habitable attics. This proposed language correlates Mezzanines requirements with current typical ceiling height requirements in R305.1. This exception is limited to spaces above the mezzanine only and addresses a common field condition of how to work with sloped roofs.

We urge your support.

Public Comment# 3092
Proposed Change as Submitted

Proponents: Jeffrey Shapiro, representing Self (jeff.shapiro@intlcodeconsultants.com)

2021 International Existing Building Code

Add new definition as follows:

**ACCESSORY DWELLING UNIT.** An additional, subordinate dwelling unit on the same lot, that is entirely within a dwelling unit, attached to a dwelling unit, or in a detached structure.

Add new text as follows:

**SECTION 310**

**ACCESSORY DWELLING UNITS**

310.1 General. Where an accessory dwelling unit or second dwelling unit is added to an existing dwelling, the dwelling units shall be separated from each other by wall and floor assemblies having not less than a 1-hour fire-resistance rating where tested in accordance with ASTM E119, UL 263 or Section 703.2.2 of the International Building Code. Such separation shall be provided regardless of whether a lot line exists between dwelling units. Fire-resistance-rated floor/ceiling and wall assemblies shall extend to and be tight against the exterior wall, and wall assemblies shall extend from the foundation to the underside of the roof sheathing.

Exceptions:

1. A fire-resistance rating of 1/2 hour shall be permitted in buildings equipped throughout with an automatic sprinkler system installed in accordance with Section P2904 of the International Residential Code.
2. Wall assemblies need not extend through attic spaces where the ceiling is protected by not less than 1/2-inch (12.7 mm) Type X gypsum board, an attic draft stop constructed as specified in International Residential Code Section R302.12.1 is provided above and along the wall assembly separating the dwellings and the structural framing supporting the ceiling is protected by not less than 1/2-inch (12.7 mm) gypsum board or equivalent.
3. A fire-resistance rated separation is not required where one of the dwelling units is an accessory dwelling unit and the other is an owner-occupied dwelling unit.

Add new standard(s) as follows:

**ASTM**

100 Barr Harbor Drive, P.O. Box C700
West Conshohocken, PA 19428-2959


**UL**

333 Pfingsten Road
Northbrook, IL 60062

723-2018  Test for Surface Burning Characteristics of Building Materials

Reason: In Group A, Code Change Z1-21 added a new definition of Accessory Dwelling Unit, or ADU, with the apparent intent of formally recognizing what has become an increasingly common practice of adding additional dwelling unit(s) to a property or building that was originally intended and limited to function as a single family dwelling unit. The proliferation of ADUs in many jurisdictions as a means of increasing available housing has had an undiscussed consequence of often creating buildings that essentially constitute illegal two-family dwellings / duplexes, in that such buildings do not met adopted IRC provisions for a two-family dwelling.

The trend essentially allows construction of a single-family dwelling, issuance of a certificate of occupancy, then subdividing the floorplan to provide an additional dwelling unit, completely circumventing the fire safety considerations in the IRC, particularly the requirement for a fire-rated separation. There is no logic behind requiring a building permitted as a two-family dwelling to provide a suitable fire barrier between units, but not requiring that separation for a building permitted as a one-family dwelling that immediately or thereafter adds an ADU. This proposal will return parity between the fire separation requirements for two-family dwellings and dwellings with an ADU.

An exception is provided for ADUs in owner occupied housing because, like lodging houses, these situations at least provide some level of on-site oversight of the ADU. To those who might argue that “owner occupied” is not something that’s enforceable under the IRC, IEBC or otherwise, note that the concept of using this as a limitation is already baked into other portions of the IRC for lodging houses (see R101.2, Exception 2 and R320.1).
The intent here is to simply duplicate that precedent for ADUs. A similar change has been submitted to the IRC, and the intent of this proposal to the IEBC is to prevent the IEBC from becoming a loophole to escape the IRC requirement.

Cost Impact: The code change proposal will decrease the cost of construction.

The IRC currently requires all two-family dwellings to have a fire separation between dwelling units, and there is currently no differentiation that applies to dwelling units with an added ADU. This proposal provides a limited reduction in the code requirements by allowing an ADU to be unseparated when the primary dwelling unit is owner-occupied, thereby reducing the cost of construction for such cases.

Public Hearing Results

This proposal includes unpublished errata.

ASCE/SEI

7—16 with Supplement 22: Minimum Design Loads and Associated Criteria for Buildings and Other Structures

Committee Action: Disapproved

Committee Reason: Though the reason for the proposal was understood there were various concerns. First, this was viewed as more of a zoning issue. Questions were raised as to how these separations would affect aspects such as ceiling heights. Although these proposed fire safety related requirements and allowances are important there are others aspects including structural safety that need to be addressed. Generally, there were reservations about specifically promoting a practice that is not permitted by the current codes and such situations should be treated as a duplex. Others voiced a concern that although this issue needs to be addressed that this will not target those creating current violations to the code and instead will simply encourage this concept. There was also concerns with the applicability of the definition as it calls out detached structures in addition to the dwelling unit. (Vote: 10-4)

Individual Consideration Agenda

Public Comment NUGENT-1:

IIEBC: (New), APPENDIX AE (New), AE101 (New), AE101.1 (New), AE101.1.1 (New), AE101.2 (New), AE102 (New), AY201.1 (New), AY103 (New), AY103.1 (New), AY104 (New), AY104.1 (New), AY104.2 (New), AY104.3 (New), AY101.4 (New), AY105 (New), AY105.1 (New), AY105.2 (New), AY105.3 (New), AY105.4 (New)

Proponents: Mike Nugent, representing Building Code Action Committee (bcac@iccse.org) requests As Modified by Public Comment

Replace as follows:

2021 International Existing Building Code

Users note. The provisions contained in this appendix are not mandatory unless specifically referenced in the adopting ordinance.

About this appendix: Appendix AE provides for the design and construction of accessory dwelling units (ADUs), an alternative to two- and multifamily residential construction that promotes increased housing supply and affordability.

APPENDIX AE

ACCESSORY DWELLING UNITS (ADUs)

AE101

GENERAL

AE101.1 Scope. ADUs proposed for existing residential construction shall be in accordance with this appendix, other applicable requirements in this code and the existing building together with the ADUs shall not exceed the scoping limitations of Section R101.2 of the International Residential Code.

AE101.1.1 Prohibited Conditions. An ADU shall not be permitted within:
1. Live/work units located in townhouses
2. Owner-occupied lodging houses with five or fewer guestrooms.
3. A care-facility with five or fewer persons receiving medical care or custodial care within a dwelling unit
4. A day care-facility with five or fewer persons receiving care within a single-family dwelling unit.

**AE101.2 Conditions.** ADUs shall be permitted without requiring a change of occupancy to either a two- or multi-family dwelling where in compliance with all of the following:

1. An ADU shall be permitted within an existing single-family detached dwelling or within an existing townhouse unit, that is within the scope of the IRC.
2. Only one ADU shall be permitted for each primary dwelling unit.
3. The owner of a property containing an ADU shall reside in either the primary dwelling unit or the ADU, as of the date of permit approval.
4. An ADU shall have a separate house number from the primary dwelling unit.
5. ADUs shall be secondary in size and function to the primary dwelling unit and shall comply with all of the following limits.
   5.1. Not less than 190 square feet (17.65 m²) in area.
   5.2. Not more than 50 percent of the area of the primary dwelling unit
   5.3. Not more than 1,200 square feet (111 m²) in area.
6. An ADU shall be provided with a separate entrance than that serving the primary dwelling unit either from the exterior of the building or from a common hallway located within the building.
7. An ADU shall have a maximum number of two bedrooms.
8. The location of a detached ADU shall comply with Section R302 of the International Residential Code.
9. An ADU shall be provided with adequate provisions for electricity, water supply and sewage disposal.

**AE102 DEFINITIONS**

**AY201.1 Definitions.** The following words and terms shall, for the purposes of this appendix, have the meanings shown herein.

ACCESSORY DWELLING UNIT (ADU). An addition or alteration that is an additional, subordinate dwelling unit on the same lot, that is entirely within a dwelling unit, attached to a dwelling unit, or in a detached structure.

**AY103 PERMITS**

**AY103.1 Required.** Any owner or owner's agent who intends to construct an ADU within an existing or proposed building or structure shall first make application to the building official and obtain the required permit.

**AY104 ADU PLANNING**

**AY104.1 Design.** Except as modified by this section, building planning shall be in accordance with Chapter 3 of the International Residential Code and building structure shall comply with the International Residential Code.

**AY104.2 Means of egress.** The path of egress travel from an ADU to a public way or to a yard or court that opens to a public way shall be independent of, and not pass through the primary dwelling unit.

**AY104.3 Fire separation.** For ADUs adjoining the primary dwelling unit, the 1-hour fire-resistance rated wall and floor assembly provisions of Section R302.3 of the International Residential Code shall not be required provided that both of the following conditions have been met:

1. The interconnection of smoke alarms per Section R314.4 of the International Residential Code activates the smoke alarms in both the primary dwelling unit and the ADU.
2. The interconnection of carbon monoxide alarms per Section R315.5 of the International Residential Code activates the carbon monoxide alarms in both the primary dwelling unit and the ADU.

**AY101.4 Smoke and carbon monoxide alarms.** For ADUs adjoining the primary dwelling unit, the interconnectivity of smoke alarms and carbon monoxide alarms may be independent for the primary dwelling unit and the ADU provided that a 1-hour fire-resistance rating is provided for walls and floor assemblies as per R302.3 of the International Residential Code.
AY105
UTILITIES

AY105.1 Heating, ventilation and air-conditioning systems. A primary dwelling unit and an ADU shall be provided with:

1. A separate heating system.
2. Separate ducting for heating and cooling systems. Return air openings for heating, ventilation and air-conditioning shall not be taken from another dwelling unit.
3. Separate climate controls.

AY105.2 Electrical systems. A primary dwelling unit and an ADU shall be provided with:

1. Ready access to the service disconnecting means serving the dwelling unit.
2. Ready access for each occupant to all overcurrent devices protecting the conductors supplying the dwelling unit in which they reside.

AY105.3 Gas piping. A primary dwelling unit and an ADU shall be provided with:

1. Ready access to shutoff valves serving the dwelling unit in which they reside.
2. Ready access to appliance shutoff valves serving appliances in the dwelling unit in which they reside.

AY105.4 Water service. A primary dwelling unit and an ADU may share a common potable water system provided that there are separate, accessible main shutoff valves allowing the water to be turned off on one-side without affecting the other.

Commenter's Reason: Jeff Shapiro to provide reason statement -
It should be noted that proposals RB4-22 and RB5-22 are revising the exceptions to Section R101.2. It is the hope that Section AE101.1.1 can be coordinated with these changes.

This public comment is submitted by the ICC Building Code Action Committee (BCAC). B

CAC was established by the ICC Board of Directors in July 2011 to pursue opportunities to improve and enhance assigned International Codes or portions thereof. In 2020, 2021 and 2022 the BCAC has held several virtual meetings open to any interested party. In addition, there were numerous virtual Working Group meetings for the current code development cycle, which included members of the committee as well as interested parties. Related documents and reports are posted on the BCAC website at https://www.iccsafe.org/products-and-services/i-codes/code-development/cs/buildingcode-action-committee-bcac/.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction
This proposal does not increase nor decrease the cost of construction. The proposal creates a voluntary appendix allowing someone to build an accessory dwelling unit within a building legally constructed in accordance with the IRC. No one is under any obligation to build an ADU, nor are they required to plan for the construction of a future ADU.

For someone choosing not to construct an ADU these code provisions will not be applicable; there are no cost implications.

For someone choosing to construct an ADU these code provisions are applicable; the cost of construction will increase proportionally to the size of the project. According to an article titled Calculating the Costs of Building an ADU published on the BuildinganADU.com blog, the average cost for an ADU from 2016-2019 based on their research is as follows:

- Detached New Construction: $305/SF
- Basement ADU: $265/ SF
- Attached ADU: $300/ SF
- Garage Conversion: $297/ SF
- Detached New Construction Above a Garage: $212/ SF

Public Comment# 3081