**Item 8** IPC Storm water flow discrepancy with IBC storm water flow

The following is a Group B proposal. This is a two part proposal with both parts heard by IBC-S committee. This proposal to be forwarded to BCAC for their review.

**Pnn-24 Part I**

**International Plumbing Code**

Revise as follows:

**[BS] 1101.7 Roof design.** Roofs shall be designed for the rain load in accordance with the International Building Code, maximum possible depth of water that will pond thereon as determined by the relative levels of roof deck and overflow weirs, scuppers, edges or serviceable drains in combination with the deflected structural elements. In determining the maximum possible depth of water, all primary roof drainage means shall be assumed to be blocked. The maximum possible depth of water on the roof shall include the height of the water required above the inlet of the secondary roof drainage means to achieve the required flow rate of the secondary drainage means to accommodate the design rainfall rate as required by Section 1106.

**Pnn-24 Part II**

**International Building Code**

**1611.1 Design rain loads.** Each portion of a roof shall be designed to sustain the load of rainwater as per the requirements of Chapter 8 of ASCE 7. The design rainfall shall be based on the 100-year 15-minute duration event, or on other rainfall rates determined from approved local weather data. Alternatively, a design rainfall of twice the 100-year hourly rainfall rate indicated in Figures 1611.1(1) through 1611.1(5) shall be permitted.

\[
R = 5.2(ds + dh) \quad \text{(Equation 16-19)}
\]

For SI: \( R = 0.0098(ds + dh) \)

where:

\( dh \) = Additional depth of water on the undeflected roof above the inlet of secondary drainage system at its design flow (in other words, the hydraulic head), in inches (mm).

\( ds \) = Depth of water on the undeflected roof up to the inlet of secondary drainage system when the primary drainage system is blocked (in other words, the static head), in inches (mm).

\( R \) = Rain load on the undeflected roof, in psf (kN/m2).

Where the phrase “undeflected roof” is used, deflections from loads (including dead loads) shall not be considered when determining the amount of rain on the roof.

**1611.2 Design roof drains.** The design of the roof drainage system shall comply with the requirements of the International Plumbing Code based on the rainfall rates specified in the International Plumbing Code.
**Reason:** This change will clarify that there is a difference in rainfall rates between the Building Code and the Plumbing Code, however, each code needs to apply the rainfall rates specified in that particular code. The concern with the Building Code is the structural loading from the ponding of water on the roof. The Plumbing Code is concerned with the drainage of the water from the roof.

A more conservative rainfall rate is selected in the Building Code which will result in a greater structural loading on the roof. The Building Code rainfall rate is considered a microburst. This heavy rainfall in a short period of time, can result in a greater amount of water ponding near the roof drain when compared to the rainfall rates used in the Plumbing Code.

The Plumbing Code rainfall rates are designed for a greater overall amount of water during the storm incident. Hence, if there is a microburst, the plumbing storm drainage system can still drain the water within a reasonable period of time, there just may be a greater amount of ponding on the roof for a short duration.

**Cost Impact:** This change neither increases nor decreases the cost of construction.

**Cost impact Substantiation:** This proposed change is editorial without any change in the technical requirements of either code.
Item 1 BCAC Admin – draft in progress 8-15-2023 – with input from PMGCAC and FCAC

BCAC Accessible
See G1-2021 Part 1 D, 2 public comments
Videos
https://www.cdpaccess.com/videos/3935/
https://www.cdpaccess.com/videos/4663/

G1-21 Part 2, 3, 4 and 6 AS
G1-21 Part 5 AMPC

This proposal will be reviewed by BCAC, FCAC, PMGCAC and SEHPCAC for co-sponsorship.

BCAC

IBC

[M] ACCESS (TO). That which enables a device, an appliance or equipment to be reached by ready access or by a means that first requires the removal or movement of a panel or similar obstruction [see also “Ready access (to)”].

[M] READY ACCESS (TO). That which enables a device, appliance or equipment to be directly reached, without requiring the removal or movement of any panel or similar obstruction [see also “Access (to)”].

703.5 Marking and identification. Where there is an accessible access is provided to a concealed space that is located under a floor, within a floor-ceiling or an attic space, fire walls, fire barriers, fire partitions, smoke barriers and smoke partitions or any other wall required to have protected openings or penetrations shall be effectively and permanently identified with signs or stenciling in the concealed space. Such identification shall:

1. Be located within 15 feet (4572 mm) of the end of each wall and at intervals not exceeding 30 feet (9144 mm) measured horizontally along the wall or partition.
2. Include lettering not less than 3 inches (76 mm) in height with a minimum 3/8-inch (9.5 mm) stroke in a contrasting color incorporating the suggested wording, “FIRE AND/OR SMOKE BARRIER—PROTECT ALL OPENINGS,” or other wording.
1004.7 Outdoor areas. Yards, patios, occupiable roofs, courts and similar outdoor areas accessible to and usable intended for use by the building occupants shall be provided with means of egress as required by this chapter. The occupant load of such outdoor areas shall be assigned by the building official in accordance with the anticipated use. Where outdoor areas are to be used by persons in addition to the occupants of the building, and the path of egress travel from the outdoor areas passes through the building, means of egress requirements for the building shall be based on the sum of the occupant loads of the building plus the outdoor areas.

Exceptions:
1. Outdoor areas used exclusively for service of the building need only have one means of egress.
2. Both outdoor areas associated with Group R-3 and individual dwelling units of Group R-2.

1011.5.5.3 Solid risers. Risers shall be solid.

Exceptions:
1. Solid risers are not required for stairways that are not required to comply with Section 1009.3, provided that the opening between treads does not permit the passage of a sphere with a diameter of 4 inches (102 mm).
2. Solid risers are not required for occupancies in Group I-3 or in Group F, H and S occupancies other than areas accessible open to the public. The size of the opening in the riser is not restricted.
3. Solid risers are not required for spiral stairways constructed in accordance with Section 1011.10.

1011.7.1 Stairway walking surface. The walking surface of treads and landings of a stairway shall not be sloped steeper than one unit vertical in 48 units horizontal (2-percent slope) in any direction. Stairway treads and landings shall have a solid surface. Finish floor surfaces shall be securely attached.

Exceptions:
1. Openings in stair walking surfaces shall be a size that does not permit the passage of 1/2-inch-diameter (12.7 mm) sphere. Elongated openings shall be placed so that the long dimension is perpendicular to the direction of travel.
2. In Group F, H and S occupancies, other than areas of parking structures accessible open to the public, openings in treads and landings shall not be prohibited provided that a sphere with a diameter of 1 1/8 inches (29 mm) cannot pass through the opening.

1015.2 Where required. Guards shall be located along open-sided walking surfaces, including mezzanines, equipment platforms, aisles, 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 and at the perimeter of occupiable roofs. *Guards* shall be adequate in strength and attachment in accordance with Section 1607.9.

**Exceptions:** *Guards* are not required for the following locations:

1. On the loading side of loading docks or piers.
2. On the audience side of *stages* and raised *platforms*, including *stairs* leading up to the *stage* and raised *platforms*.
3. On raised *stage* and *platform* floor areas, such as runways, ramps and *side stages* used for entertainment or presentations.
4. At vertical openings in the performance area of *stages* and *platforms*.
5. At elevated walking surfaces appurtenant to *stages* and *platforms* for access to and utilization of special lighting or equipment.
6. Along vehicle service pits not *accessible* open to the public.
7. In assembly seating areas at cross *aisles* in accordance with Section 1030.17.2.
8. On the loading side of station platforms on fixed guideway transit or passenger rail systems.
9. Portions of an occupiable roof located less than 30 inches (762 mm) measured vertically to adjacent unoccupiable roof areas where approved *guards* are present at the perimeter of the roof.
10. At portions of an occupiable roof where an approved barrier is provided.

**Walls and partitions.** Walls and partitions within 2 feet (610 mm) of service sinks, urinals and water closets shall have a smooth, hard, nonabsorbent surface, to a height of not less than 4 feet (1219 mm) above the floor, and except for structural elements, the materials used in such walls shall be of a type that is not adversely affected by moisture.

**Exception:** This section does not apply to the following buildings and spaces:

1. Dwelling units and *sleeping units*.
2. Toilet rooms that are not *accessible* open to the public and that have not more than one water closet.

Accessories such as grab bars, towel bars, paper dispensers and soap dishes, provided on or within walls, shall be installed and sealed to protect structural elements from moisture.

**Handrails and guards.** *Handrails* and *guards* shall be designed to resist a linear *load* of 50 pounds per linear foot (plf) (0.73 kN/m) in accordance with Section 4.5.1.1 of ASCE 7. Glass handrail assemblies and *guards* shall comply with Section 2407.

**Exceptions:**

1. For one- and two-family dwellings, only the single concentrated *load* required by Section 1607.9.1.1 shall be applied.
2. In Group I-3, F, H and S occupancies, for areas that are not accessible open to the general public and that have an occupant load less than 50, the minimum load shall be 20 pounds per foot (0.29 kN/m).

1704.2.2 Access for special inspection. The construction or work for which special inspection or testing is required shall remain accessible and exposed and with access for special inspection or testing purposes until completion of the required special inspections or tests.

1807.2.5 Guards. Guards shall be provided at retaining walls in accordance with Sections 1807.2.5.1 through 1807.2.5.3. Exception: Guards are not required at retaining walls in areas not accessible open to the public.

2111.3.1 Ash dump cleanout. Cleanout openings, located within foundation walls below fireboxes, where provided, shall be equipped with ferrous metal or masonry doors and frames constructed to remain tightly closed, except when in use. Cleanouts shall be accessible provided with access and located so that ash removal will not create a hazard to combustible materials.

2113.9.2 Spark arrestors. Where a spark arrestor is installed on a masonry chimney, the spark arrestor shall meet all of the following requirements:
1. The net free area of the arrestor shall be not less than four times the net free area of the outlet of the chimney flue it serves.
2. The arrestor screen shall have heat and corrosion resistance equivalent to 19-gage galvanized steel or 24-gage stainless steel.
3. Openings shall not permit the passage of spheres having a diameter greater than \( \frac{1}{2} \) inch (12.7 mm) nor block the passage of spheres having a diameter less than \( \frac{3}{8} \) inch (9.5 mm).
4. The spark arrestor shall be accessible provided with access for cleaning and the screen or chimney cap shall be removable to allow for cleaning of the chimney flue.

2405.3 Screening. Broken glass retention screens, where required, shall be: capable of supporting twice the weight of the glazing, firmly and substantially fastened to the framing members, and installed within 4 inches (102 mm) of the glass. The screens shall be constructed of a noncombustible material not thinner than No. 12 B&S gage (0.0808 inch) with mesh not larger than 1 inch by 1 inch (25 mm by 25 mm). In a corrosive atmosphere, structurally equivalent noncorrosive screen materials shall be used. Exception: In monolithic and multiple-layer sloped glazing systems, the following applies:
1. Fully tempered glass installed without protective screens where glazed between intervening floors at a slope of 30 degrees (0.52 rad) or less from the vertical plane shall have the highest point of the glass 10 feet (3048 mm) or less above the walking surface.

2. Screens are not required below any glazing material, including annealed glass, where the walking surface below the glazing material is permanently protected from the risk of falling glass or the area below the glazing material is not a walking surface.

3. Any glazing material, including annealed glass, is permitted to be installed without screens in the sloped glazing systems of commercial or detached noncombustible greenhouses used exclusively for growing plants and not open to the public, provided that the height of the greenhouse at the ridge does not exceed 30 feet (9144 mm) above grade.

4. Screens shall not be required in individual dwelling units in Groups R-2, R-3 and R-4 where fully tempered glass is used as single glazing or as both panes in an insulating glass unit, and all of the following conditions are met:
   4.1. Each pane of the glass is 16 square feet (1.5 m²) or less in area.
   4.2. The highest point of the glass is 12 feet (3658 mm) or less above any walking surface or other accessible area.
   4.3. The glass thickness is \( \frac{3}{16} \) inch (4.8 mm) or less.

5. Screens shall not be required for laminated glass with a 15-mil (0.38 mm) polyvinyl butyral (or equivalent) interlayer used in individual dwelling units in Groups R-2, R-3 and R-4 within the following limits:
   5.1. Each pane of glass is 16 square feet (1.5 m²) or less in area.
   5.2. The highest point of the glass is 12 feet (3658 mm) or less above a walking surface or other accessible area.

2405.3.3 Screening not required in monolithic and multiple-layer sloped glazing systems. In monolithic and multiple-layer sloped glazing systems, retention screens are not required for any of the following:

1. Fully tempered glass where glazed between intervening floors at a slope of 30 degrees (0.52 rad) or less from the vertical plane, and the highest point of the glass is 10 feet (3048 mm) or less above the walking surface.

2. Any glazing material, including annealed glass, where the walking surface below the glazing material is permanently protected from the risk of falling glass or the area below the glazing material is not a walking surface.

3. Any glazing material, including annealed glass, in the sloped glazing systems of commercial or detached noncombustible greenhouses used exclusively for growing plants and not open to the public, provided that the height of the greenhouse at the ridge does not exceed 30 feet (9144 mm) above grade.

4. Individual dwelling units in Groups R-2, R-3 and R-4 where fully tempered glass is used as single glazing or as both panes in an insulating glass unit, and all of the following conditions are met:
   4.1. Each pane of the glass is 16 square feet (1.5 m²) or less in area.
   4.2. The highest point of the glass is 12 feet (3658 mm) or less above any walking surface or other accessible area.
   4.3. The glass thickness is \( \frac{3}{16} \) inch (4.8 mm) or less.
5. Laminated glass with a 15-mil (0.38 mm) polyvinyl butyral or equivalent interlayer used in individual dwelling units in Groups R-2, R-3 and R-4 where both of the following conditions are met:

   5.1. Each pane of glass is 16 square feet (1.5 m²) or less in area.
   5.2. The highest point of the glass is 12 feet (3658 mm) or less above a walking surface or other accessible area.

2406.4.3 Glazing in windows. Glazing in an individual fixed or operable panel that meets all of the following conditions shall be considered to be a hazardous location:

1. The exposed area of an individual pane is greater than 9 square feet (0.84 m²).
2. The bottom edge of the glazing is less than 18 inches (457 mm) above the floor or adjacent walking surface.
3. The top edge of the glazing is greater than 36 inches (914 mm) above the floor or adjacent walking surface.
4. One or more walking surface(s) are within 36 inches (914 mm), measured horizontally and in a straight line, of the plane of the glazing.

Exceptions:

1. Decorative glazing.
2. Where a horizontal rail is installed on the accessible walking surface side(s) of the glazing at 34 to 38 inches (864 to 965 mm) above the walking surface. The rail shall be capable of withstanding a horizontal load of 50 pounds per linear foot (730 N/m) without contacting the glass and be not less than 1 1/2 inches (38 mm) in cross-sectional height.
3. Outboard panes in insulating glass units or multiple glazing where the bottom exposed edge of the glass is 8 feet (2438 mm) or more above any grade or walking surface adjacent to the glass exterior.

3008.9 Emergency voice/alarm communication system. The building shall be provided with an emergency voice/alarm communication system. The emergency voice/alarm communication system shall be accessible to the fire department. The system shall be provided in accordance with Section 907.5.2.2.

F101.5.1 Rodent-accessible access to openings. Windows and other openings for the purpose of light and ventilation in the exterior walls not covered in this chapter, accessible to that are susceptible to entry by rodents by way of exposed pipes, wires, conduits and other appurtenances, shall be covered with wire cloth of at least 0.035-inch (0.89 mm) wire. In lieu of wire cloth covering, said pipes, wires, conduits and other appurtenances shall be blocked from rodent usage by installing solid sheet metal guards 0.024 inch (0.61 mm). Guards shall be fitted around pipes, wires, conduits or other appurtenances. In addition, they shall be fastened securely to and shall extend perpendicularly from the exterior wall for not less than 12 inches (305 mm) beyond and on either side of the pipes, wires, conduits or appurtenances.
H110.1 General. Roof signs shall be constructed entirely of metal or other approved noncombustible material except as provided for in Sections H106.1.1 and H107.1. Provisions shall be made for electric grounding of metallic parts. Where combustible materials are permitted in letters or other ornamental features, wiring and tubing shall be kept free and insulated therefrom. Roof signs shall be so constructed as to leave a clear space of not less than 6 feet (1829 mm) between the roof level and the lowest part of the sign and shall have not less than 5 feet (1524 mm) clearance between the vertical supports thereof. Roof sign structures shall not project beyond an exterior wall.

Exception: Signs on flat roofs with every part of the roof accessible—there is access to the signs.

IRC

[RB] ACCESS (TO). That which enables a device, an appliance or equipment to be reached by ready access or by a means that first requires the removal or movement of a panel, door or similar obstruction [see also “Ready access (to)”].

[RB] READY ACCESS (TO). That which enables a device, appliance or equipment to be directly reached, without requiring the removal or movement of any panel, door or similar obstruction [see also “Access (to)”].

TABLE M1306.2
REDUCTION OF CLEARANCES WITH SPECIFIED FORMS OF PROTECTION

a. Reduction of clearances from combustible materials shall not interfere with combustion air, draft hood clearance and relief, and accessibility of access for servicing.

M1803.4.1 Closure and accessibility access. A noncombustible seal shall be provided below the point of connection to prevent entry of room air into the flue. Means shall be provided for access to the flue for inspection and cleaning.

M2006.2 Clearances. The clearances shall not interfere with combustion air, draft hood or flue terminal relief, or accessibility access for servicing.

P2704.1 Slip joints. Slip-joint connections shall be installed only for tubular waste piping and only between the waste outlet of a fixture and the connection to the drainage piping.
Slip-joint connections shall be made with an approved elastomeric sealing gasket. Slip-joint connections shall be accessible. Such access shall be provided with access. Such access shall be provided by provide an opening that is not less than 12 inches (305 mm) in its smallest dimension.

SECTION P2706
WASTE RECEPTORS

P2706.1 General. For other than hub drains that receive only clear-water waste and standpipes, a removable strainer or basket shall cover the waste outlet of waste receptors. Waste receptors shall not be installed in concealed spaces. Waste receptors shall not be installed in plenums, attics, crawl spaces or interstitial spaces above ceilings and below floors. Ready access shall be provided to Waste receptors shall be readily accessible.

P2712.6 Access. Access to the Parts in a flush tank shall be accessible provided for repair and replacement.

P2720.2 Piping drainage. The circulation pump shall be accessibly located above the crown weir of the trap. Access to the circulation pump shall be provided. The pump drain line shall be properly graded to ensure minimum water retention in the volute after fixture use. The circulation piping shall be installed to be self-draining.

P2722.4 Individual pressure-balancing in-line valves for individual fixture fittings. Individual pressure-balancing in-line valves for individual fixture fittings shall comply with ASSE 1066. Such valves shall be installed in an accessible a location and shall not be used as a substitute for the balanced pressure, thermostatic or combination shower valves required in Section P2708.4. Access to such valves shall be provided.

P2903.9.5 Hose bibb bleed. A readily accessible An air bleed shall be installed in hose bibb supplies at the manifold or at the hose bibb exit point. Ready access to the air bleed shall be provided.

P2903.10.1 Service valve. Each dwelling unit shall be provided with a be provided with an main shutoff valve near the entrance of the water service. Access shall be provided for such valve. The valve shall be of a full-open type having nominal restriction to flow, with provision for drainage such as a bleed orifice or installation of a separate drain valve. Additionally, the water service shall be valved at the curb or lot line in accordance with local requirements.

P2903.10.2 Water heater valve. A readily accessible full-open valve with ready access shall be installed in the cold-water supply pipe to each water heater at or near the water heater.
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 bathtubs and showers. Access shall be provided to valves serving individual plumbing fixtures, plumbing appliances, risers and branches shall be accessible.

P2903.11 Hose bibb. Hose bibbs subject to freezing, including the “frostproof” type, shall be equipped with an accessible stop-and-waste-type valve located inside the building. Access shall be provided to such valve.

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).

P2911.5 Filtration. Untreated water collected for reuse shall be filtered as required for the intended end use. Access shall be provided to Filters shall be accessible for inspection and maintenance. Filters shall utilize a pressure gauge or other approved method to provide indication when a filter requires servicing or replacement. Filters shall be installed with shutoff valves immediately upstream and downstream to allow for isolation during maintenance.

P2911.8.1 Bypass valve. One three-way diverter valve certified to NSF 50 or other approved device shall be installed on collection piping upstream of each storage tank, or drainfield, as applicable, to divert untreated on-site reuse sources to the sanitary sewer to allow servicing and inspection of the system. Bypass valves shall be installed downstream of fixture traps and vent connections. Bypass valves shall be labeled to indicate the direction of flow, connection and storage tank or drainfield connection. Access shall be provided to Bypass valves shall be installed in accessible locations. Two shutoff valves shall not be installed to serve as a bypass valve.

P2911.9 Pumping and control system. Access shall be provided to Mechanical equipment including pumps, valves and filters. shall be accessible. Such mechanical equipment shall be removable in order to perform repair, maintenance and cleaning. The minimum flow rate and flow pressure delivered by the pumping system shall be appropriate for the application and in accordance with Section P2903.

P2912.4 Roof washer. An amount of rainwater shall be diverted at the beginning of each rain event, and not allowed to enter the storage tank, to wash accumulated debris from the collection surface. The amount of rainfall to be diverted shall be field adjustable as necessary to minimize storage tank water contamination. The roof washer shall not rely on manually operated valves or devices, and shall operate automatically. Diverted rainwater shall not be drained to the roof surface, and shall be discharged in a manner consistent with the stormwater runoff requirements of the jurisdiction. Access shall be provided to Roof washers shall be accessible for maintenance and service.
P2912.8 Filtration. Collected rainwater shall be filtered as required for the intended end use. Access shall be provided to Filters shall be accessible for inspection and maintenance. Filters shall utilize a pressure gauge or other approved method to provide indication when a filter requires servicing or replacement. Filters shall be installed with shutoff valves installed immediately upstream and downstream to allow for isolation during maintenance.

P2912.12 Pumping and control system. Access shall be provided to Mechanical equipment, including pumps, valves and filters. Such mechanical equipment shall be removable in order to perform repair, maintenance and cleaning. The minimum flow rate and flow pressure delivered by the pumping system shall be appropriate for the application and in accordance with Section P2903.

P3005.1.5 Provisions for future fixtures. Where drainage has been roughed-in for future fixtures, the drainage unit values of the future fixtures shall be considered in determining the required drain sizes. Such future installations shall be terminated with an accessible permanent plug or cap fitting. Access to such plugs or caps shall be provided.

P3007.2 Valves required. A check valve and a full open valve located on the discharge side of the check valve shall be installed in the pump or ejector discharge piping between the pump or ejector and the gravity drainage system. Access shall be provided to such valves. Such valves shall be located above the sump cover required by Section P3007.3.2 or, where the discharge pipe from the ejector is below grade, the valves shall be accessibly located outside the sump below grade in an access pit with a removable access cover.

P3007.3.2 Sump. The sump shall be not less than 18 inches (457 mm) in diameter and 24 inches (610 mm) deep, unless otherwise approved. The sump shall be accessible. Access shall be provided to the sump and. The sump shall be located so that drainage flows into the sump by gravity. The sump shall be constructed of tile, concrete, steel, plastic or other approved materials. The sump bottom shall be solid and provide permanent support for the pump. The sump shall be fitted with a gastight removable cover that is installed not more than 2 inches (51 mm) below grade or floor level. The cover shall be adequate to support anticipated loads in the area of use. The sump shall be vented in accordance with Chapter 31.

P3302.1 Subsoil drains. Subsoil drains shall be open-jointed, horizontally split or perforated pipe conforming to one of the standards indicated in Table P3302.1. Such drains shall be not less than 4 inches (102 mm) in diameter. Where the building is subject to backwater, the subsoil drain shall be protected by an accessibly located backwater valve. Access shall be provided to the backwater valve. Subsoil drains shall discharge to a trapped area drain, sump, dry well or approved location above ground. The subsoil
The sump shall not be required to have either a gastight cover or a vent. The sump and pumping system shall comply with Section P3303.

**P3303.1.2 Sump pit.** The sump shall be not less than 18 inches (457 mm) in diameter and 24 inches (610 mm) deep, unless otherwise approved. The sump shall be accessible **Access shall be provided to the sump** and **The sump shall be** located so that all drainage flows into the sump by gravity. The sump shall be constructed of tile, steel, plastic, cast iron, concrete or other approved material, with a removable cover adequate to support anticipated loads in the area of use. The sump floor shall be solid and provide permanent support for the pump.

**P3303.1.4 Piping.** Discharge piping shall meet the requirements of Sections P3002.1, P3002.2, P3002.3 and P3003. Discharge piping shall include an accessible **a full-flow check valve** that is provided **with access.** Pipe and fittings shall be the same size as, or larger than, the pump discharge tapping.

Chapter 34-43 are not included because these are a copy of NFPA Electrical code

**SECTION AE108**

**INSPECTIONS**

**AE108.1 General.** All construction or work for which a manufactured home installation permit is required shall be subject to inspection by the building official, and certain types of construction shall have continuous inspection by special inspectors as specified in Section AE109. The building official has the authority to require a survey of the lot to verify that the structure is located in accordance with the approved plans.

It shall be the duty of the permit applicant to cause the work to be accessible and be exposed for inspection purposes. Access shall be provided to the work. Neither the building official nor this jurisdiction shall be liable for expense entailed in the removal or replacement of any material required to allow inspection.

**AE114.6 Under-floor clearances—ventilation and access.** A minimum clearance of 12 inches (305 mm) shall be maintained beneath the lowest member of the floor support framing system. Clearances from the bottom of wood floor joists or perimeter joists shall be as specified in this code.

Under-floor spaces shall be ventilated with openings as specified in this code. If combustion air for one or more heat-producing appliance is taken from within the under-floor spaces, ventilation shall be adequate for proper appliance operation.

Under-floor access openings shall be provided. Such openings shall be not less than 18 inches (457 mm) in any dimension and not less than 3 square feet (0.279 m²) in area, and shall be located **so that access is provided to** any water supply and sewer drain connections located under the manufactured homes **are accessible.**
AF103.8 **Access to Vent pipe accessibility.** Access shall be provided to radon vent pipes shall be accessible for future fan installation through an attic or other area outside the habitable space.

Exception: The radon vent pipe need not be accessible in an Attic spaces where an approved roof-top electrical supply is provided for future use.

AF103.9 **Vent pipe identification.** Exposed and visible interior radon vent pipes shall be identified with not less than one label on each floor and in accessible attics provided with access. The label shall read: “Radon Reduction System.”

AF103.12 **Power source.** To provide for future installation of an active submembrane or subslab depressurization system, an electrical circuit terminated in an approved box shall be installed during construction in the attic or other anticipated location of vent pipe fans. Access shall be provided to an electrical supply shall be accessible in anticipated locations of system failure alarms.

IZC

801.4.3 Stall access. Each required parking stall shall be individually and easily accessed. Automobiles shall not be required to back onto any public street or sidewalk to leave any parking stall where such stalls serve more than two dwelling units or other than residential uses. Access shall be provided from Portions of a public lot or garage to other portions thereof without requiring the use of any public street.

SECTION 806
LOADING SPACES

806.1 General. Loading spaces shall be provided on the same lot for every building in the C or FI zones. No loading space is required if prevented by an existing lawful building.

806.2 Size. Each loading space shall have a clear height of 14 feet (4267 mm) and shall be directly accessible through a usable door not less than 3 feet (914 mm) in width and 6 feet, 8 inches (2032 mm) high. The minimum area of a loading space shall be 400 square feet (37.2 m²) and the minimum dimensions shall be 20 feet (6096 mm) long and 10 feet (3048 mm) deep.

FCAC

[IFC] ACCESS (TO). That which enables a device, appliance or equipment to be reached by ready access or by a means that first requires the removal or movement of a panel or similar obstruction [see also “Ready access (to)”].
[M] READY ACCESS (TO). That which enables a device, appliance or equipment to be directly reached, without requiring the removal or movement of any panel or similar obstruction [see “Access (to)’”].

WILDFIRE RISK AREA. Land that is covered with grass, grain, brush or forest, whether privately or publicly owned, which is so situated or is of such inaccessible location that where a fire originating upon it would present an abnormally difficult job of suppression or would result in great or unusual damage through fire or such areas designated by the fire code official.

907.8.2 Testing. Testing shall be performed in accordance with the schedules in NFPA 72 or more frequently where required by the fire code official. Records of testing shall be maintained.

   Exception: Devices or equipment that are inaccessible located without access because of safety considerations shall be tested during scheduled shutdowns where approved by the fire code official, but not less than every 18 months.

3.0 Remote Virtual Inspection Process Recommended Practices for Remote Virtual Inspections (RVI)

4. As each site and inspection is different, allot the proper amount of time for the type of inspection and accessibility of access to the site.

IWUIC

A103.2 Restricted areas Trespassing on posted private property. Where the code official determines that a specific area within a wildland-urban interface area presents an exceptional and continuing fire danger because of the density of natural growth, difficulty of terrain, proximity to structures or accessibility open to the public, such areas shall be restricted or closed until changed conditions warrant termination of such restriction or closure. Such areas shall be posted in accordance with Section A103.2.1.

TABLE C101.1
FIRE HAZARD SEVERITY FORM

<table>
<thead>
<tr>
<th>3. Accessibility_Vehicle access</th>
</tr>
</thead>
<tbody>
<tr>
<td>Road grade 5% or less</td>
</tr>
<tr>
<td>Road grade more than 5%</td>
</tr>
</tbody>
</table>
G101.3.2 Alternative water supply systems for exposure protection. Pools and spas are often offered as an alternative water source for fire departments. These water sources must be reliable and able to be accessed to be of any use by fire protection forces. Accessibility Access means that the fire department must be able to withdraw the water without having to go through extraordinary measures such as knocking down fences or having to set up drafting situations. Designs have been created to put liquid- or gas-fueled pumps or gravity valves on pools and spas to allow fire departments to access these water systems. A key vulnerability to the use of these alternative water systems is loss of electrical power. When the reliability of a water system depends on external power sources, it cannot be relied upon by fire fighters to be available in a worst-case scenario.

PMGCAC

IPC

[M] ACCESS (TO). That which enables a fixture, appliance or equipment to be reached by ready access or by a means that first requires the removal or movement of a panel, door or similar obstruction (see also “Ready access (to)”).

[M] READY ACCESS (TO). That which enables a fixture, appliance or equipment to be directly reached without requiring the removal or movement of any panel, door or similar obstruction and without the use of a portable ladder, step stool or similar device (see also “Access (to)”).

712.2 Valves required. A check valve and a full open valve located on the discharge side of the check valve shall be installed in the pump or ejector discharge piping between the pump or ejector and the gravity drainage system. Access shall be provided to such valves. Such valves shall be located above the sump cover required by Section 712.1 or, where the discharge pipe from the ejector is below grade, the valves shall be accessibly located outside the sump below grade in an access pit with a removable access cover.

SECTION 1111
SUBSOIL DRAINS

1111.1 Subsoil drains. Subsoil drains shall be open-jointed, horizontally split or perforated pipe conforming to one of the standards listed in Table 1102.5. Such drains shall be not less than 4 inches (102 mm) in diameter. Where the building is subject to backwater, the subsoil drain shall be protected by an accessibly located a backwater valve that is provided with access. Subsoil drains shall discharge to a trapped area drain, sump, dry well or approved location above ground. The subsoil sump shall not be required to have either a gastight cover or a vent. The sump and pumping system shall comply with Section 1113.1.
ACCESS (TO). That which enables a device, appliance or equipment to be reached by ready access or by a means that first requires the removal or movement of a panel or similar obstruction [see also Ready access (to)].

READY ACCESS (TO). That which enables a device, appliance or equipment to be directly reached, without requiring the removal or movement of any panel or similar obstruction [see Access (to)].

NET OCCUPIABLE FLOOR AREA. The floor area of an occupiable space defined by the inside surfaces of its walls but excluding shafts, column enclosures and other areas that are permanently enclosed, unoccupiable and not provided with access. Obstructions in the space such as furnishings, display or storage racks and other obstructions, whether temporary or permanent, shall not be deducted from the space area.

506.3.8 Grease duct cleanouts and openings. Grease duct cleanouts and openings shall comply with all of the following:

1. Grease ducts shall not have openings except where required for the operation and maintenance of the system.
2. Sections of grease ducts that are inaccessible cannot be accessed from the hood or discharge openings shall be provided with cleanout openings spaced not more than 20 feet (6096 mm) apart and not more than 10 feet (3048 mm) from changes in direction greater than 45 degrees (0.79 rad).
3. Cleanouts and openings shall be equipped with tight-fitting doors constructed of steel having a thickness not less than that required for the grease duct.
4. Cleanout doors shall be installed liquid tight.
5. Door assemblies including any frames and gaskets shall be approved for the application and shall not have fasteners that penetrate the grease duct.
6. Gasket and sealing materials shall be rated for not less than 1,500ºF (816ºC).
7. Listed door assemblies shall be installed in accordance with the manufacturer's instructions.

603.4.1 Minimum fasteners. Round metallic ducts shall be mechanically fastened by means of not less than three sheet metal screws or rivets spaced equally around the joint.

Exception: Where portions of a duct connection inaccessible cannot be accessed, three screws or rivets shall be equally spaced on the exposed portion so as to prevent a hinge effect.
IFGC

[M] ACCESS (TO). That which enables a device, appliance or equipment to be reached by ready access or by a means that first requires the removal or movement of a panel, door or similar obstruction (see also “Ready access”).

[M] READY ACCESS (TO). That which enables a device, appliance or equipment to be directly reached, without requiring the removal or movement of any panel, door or similar obstruction (see “Access”).

IPMC

PEST ELIMINATION. The control and elimination of insects, rodents or other pests by eliminating their harborage places; by removing or eliminating access to or making inaccessible materials that serve as their food or water; by other approved pest elimination methods.

[BF] 703.3 Maintenance. The required fire-resistance rating of fire-resistance-rated construction, including walls, firestops, shaft enclosures, partitions, smoke barriers, floors, fire-resistive coatings and sprayed fire-resistant materials applied to structural members and joint systems, shall be maintained. Such elements shall be visually inspected annually by the owner and repaired, restored or replaced where damaged, altered, breached or penetrated. Records of inspections and repairs shall be maintained. Where concealed, such elements shall not be required to be visually inspected by the owner unless the concealed space is accessible is provided with access by the removal or movement of a panel, access door, ceiling tile or entry to the space. Openings made therein for the passage of pipes, electrical conduit, wires, ducts, air transfer and any other reason shall be protected with approved methods capable of resisting the passage of smoke and fire. Openings through fire-resistance-rated assemblies shall be protected by self- or automatic-closing doors of approved construction meeting the fire protection requirements for the assembly.

SEHPCAC

IECC

C202 and R202

ACCESS (TO). That which enables a device, appliance or equipment to be reached by ready access or by a means that first requires the removal or movement of a panel or similar obstruction.
READY ACCESS (TO). That which enables a device, appliance or equipment to be directly reached without requiring the removal or movement of any panel or similar obstruction.

CECPI-3-21 AM

C402.5.1.5 C402.5.2.3 Building envelope design and construction performance verification criteria. Where Sections C402.5.2.1 and C402.5.2.2 are not applicable, the installation of the continuous air barrier shall be verified by the code official, a registered design professional or approved agency in accordance with the following:

1. A review of the construction documents and other supporting data shall be conducted to assess compliance with the requirements in Section C402.5.1.

2. Inspection of continuous air barrier components and assemblies shall be conducted during construction while the air barrier is still accessible for inspection and repair to verify compliance with the requirements of Sections C402.5.1.3 C402.5.2.3.1 and C402.5.4.1-4 or C502.5.2.3.2. The air barrier shall remain accessible for inspection and repair.

3. A final commissioning inspection report shall be provided for inspections completed by the registered design professional or approved agency. The commissioning inspection report shall be provided to the building owner or owner's authorized agent and the code official. The report shall identify deficiencies found during inspection the review of the construction documents and inspection and details of corrective measures taken.

C405.12.5 Graphical energy report. A permanent and readily accessible reporting mechanism with ready access shall be provided in the building that is accessible by building operation and management personnel. The reporting mechanism shall have the capability to graphically provide the electrical energy consumption for each end-use category required by Section C405.12.2 at least every hour, day, month and year for the previous 36 months. The graphical report shall also incorporate natural gas interval data or the ability to enter gas utility bills into the report.

CEPI-203-21 AM

C406.10.5 Graphical energy report. A permanent and readily accessible reporting mechanism with ready access shall be provided in the building that is accessible by building operation and management personnel. The reporting mechanism shall have the capability to graphically provide the energy consumption for each end-use category required by Section C406.10.2 at least every hour, day, month and year for the previous 36 months.

Reason:
Because the term ‘accessible’ is most commonly understood as requiring access for persons with disabilities we are making the changes to delete the word accessible from
the remaining codes and replace it with other words, defined terms or phrases that are not attributed to requiring access for the physically disabled. Many of the codes use the defined term ‘access (to)’ or ‘ready access (to)’ for access by maintenance and service personnel or fire departments. This proposal provides clarity and consistency in the remaining codes where those coordination modifications missed or came in as part of new code changes.

This a correlation piece for proposals over the last couple of cycles. This effort was started by the CACs in 2015/16 code change cycle, and continued in 2018/19. This proposal is to provide coordination with the action taken with -P84-15, M2-15, RB2-16, F12-16, CE137-16 Part 1, CE29-19 Part 1 and 2. G1-21 Part 1 was disapproved; however Part 2 through 7 were approved
IRC Radon control methods

**AF103.12 Power source.** To provide for future installation of an active submembrane or subslab depressurization system, an electrical circuit terminated in an *approved* box shall be installed during construction in the attic or other anticipated location of vent pipe fans. An electrical supply shall be accessible in anticipated locations of system failure alarms.

Reason: The last sentence should be deleted. ‘Anticipated’ is too open for interpretation. What alarms is this talking about? There is no other discussion of alarms in this appendix. The electrical code already has specific requirements for access to components of the electrical system for where connections are made to the conductors.

Cost impact: Decreases. Removes ambiguous requirement with no clear path for requirements.
This is the PC provided for Part 2.

2021 International Residential Code
Revise as follows:

SECTION R107
TEMPORARY STRUCTURES, USES, EQUIPMENT AND USES SYSTEMS

R107.1 General. The building official is authorized to issue a permit for temporary structures, and temporary uses, equipment or systems. Such permits shall be limited as to time of service, but shall not be permitted for more than 180 days. The building official is authorized to grant extensions for demonstrated cause.

R107.2 Conformance. Temporary structures, and uses, equipment or systems shall conform to the structural strength, fire safety, means of egress, light, ventilation and sanitary requirements of this code as necessary to ensure the public health, safety and general welfare.

R107.3 Temporary power service utilities. The building official is authorized to give permission to temporarily supply service utilities in accordance with Section R111. and use power in part of an electric installation before such installation has been fully completed and the final certificate of completion has been issued. The part covered by the temporary certificate shall comply with the requirements specified for temporary lighting, heat or power in NFPA 70.

R107.4 Termination of approval. The building official is authorized to terminate such permit for a temporary structure, uses, equipment or use systems and to order the temporary structure or use same to be discontinued.

SECTION R111
SERVICE UTILITIES

R111.1 Connection of service utilities. A person shall not make connections from a utility, a source of energy, fuel, or power to any building or system that is regulated by this code for which a permit is required, until approved by the building official.

R111.2 Temporary connection. The building official shall have the authority to authorize the temporary connection of the building or system to the utility, source of energy, fuel or power.
R111.3 Authority to disconnect service utilities. The building official shall have the authority to authorize disconnection of utility service to the building, structure or system regulated by this code and the referenced codes and standards set forth in Section R102.4 in case of emergency where necessary to eliminate an immediate hazard to life or property or where such utility connection has been made without the approval required by Section R111.1 or R111.2. The building official shall notify the serving utility and where possible the owner or the owner's authorized agent and occupant of the building, structure or service system of the decision to disconnect prior to taking such action. If not notified prior to disconnection, the owner, the owner’s authorized agent or occupant of the building, structure or service system shall be notified in writing as soon as practical thereafter.

Reason: This proposal was approved for IBC, IEBC, IFC, IFGC, IMC, IPC, IPSDC, ISPSC, IWUIC.

The IRC committee objected to the use of the term ‘system’, however, this is already used in several places in R111 and is commonly understood to be a set of things working together. While brought up by the last committee that "system" is not defined in the International Residential Code (IRC), it should not be for the following reasons:

- The word "system" is a common word with a well-understood meaning. It is defined in most dictionaries as a set of things working together as a whole or a complex whole consisting of parts that are interconnected and interdependent.
- The IRC does not use the word "system" in a technical sense. It simply uses the word to refer to any group of components that work together to achieve a common goal. For example, the IRC refers to the "plumbing system," the "electrical system," and the "mechanical system", all without definition.
- Defining the word "system" in the IRC would not add any clarity to the code, alternatively, defining the word "system" in the IRC could actually lead to confusion.

Generally - The word “use” is moved to the front, and the lists are made the same throughout all the codes.

Temporary power - The allowances for temporary connection under inspection and testing address more than just utilities, so the language in this section should match. The phrase “certificate of completion” is not defined, so “approved” would be a better choice.

The section on Conformance includes a laundry list “structural strength, fire safety, means of egress, accessibility, light, ventilation and sanitary”, that is not needed for the section and includes provisions that are not addressed in all of the codes (e.g. IPC does not address structural strength, means of egress, or light).

Addition to reason statement from Kota Wharton.
While brought up by the last committee that "system" is not defined in the International Residential Code (IRC), it should not be for the following reasons:

- The word "system" is a common word with a well-understood meaning. It is defined in most dictionaries as *a set of things working together as a whole or a complex whole consisting of parts that are interconnected and interdependent*.
- The IRC does not use the word "system" in a technical sense. It simply uses the word to refer to any group of components that work together to achieve a common goal. For example, the IRC refers to the "plumbing system," the "electrical system," and the "mechanical system," all without definition.
- Defining the word "system" in the IRC would not add any clarity to the code, alternatively, defining the word "system" in the IRC could actually lead to confusion.
BCAC ADM Item 11 - Purpose
ADM10-19 Part 1, 3 and 4 AS
ADM10-10 Part 2 D with PC
Video
https://www.cdpaccess.com/videos/1586/
https://www.cdpaccess.com/videos/2887/

RB6-22 D
Video
https://www.cdpaccess.com/videos/4859/
https://www.cdpaccess.com/videos/5699/

7-18-2023 – move to BCAC

2021 International Residential Code

Revise as follows:

R101.3 Purpose. The purpose of this code is to establish minimum requirements to provide a reasonable level of life safety, health and general welfare through affordability, structural strength, means of egress, stability, sanitation, light and ventilation, energy conservation and property protection from fire and other hazards and to provide a reasonable level of safety to fire fighters and emergency responders during emergency operations.

Commenter’s Reason:

The purpose of this proposal is for consistency in language for the sections related to the purpose of the codes throughout the ICC family of codes. This would be consistent with IFC, IBC, IEBC, ISPSC, and IZC – which were passed with ADM10-19.

This is an editorial change that makes the codes consistent.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction. This is an editorial change with no changes to technical requirements.
2021 International Building Code

Revise as follows:

SECTION 106
FLOOR AND ROOF DESIGN LOADS

[A] 106.1 Live loads posted. In commercial or industrial buildings, for each floor or portion thereof designed for live loads exceeding 50 psf (2.40 kN/m²), such design live loads shall be conspicuously posted by the owner or the owner’s authorized agent in that part of each story in which they apply, using durable signs. It shall be unlawful to remove or deface such notices.

[A] 106.2 Issuance of certificate of occupancy. A certificate of occupancy required by Section 111 shall not be issued until the floor load signs, required by Section 106.1, have been installed.

[A] 106.3 Restrictions on loading. It shall be unlawful to place, or cause or permit to be placed, on any floor or roof of a building, structure or portion thereof, a load greater than is permitted by this code.

1607.8.5 Posting. The maximum weight of vehicles allowed into or on a garage or other structure shall be posted on a durable sign in a readily visible location at the vehicle entrance to the building or other approved location by the owner or the owner’s authorized agent in accordance with Section 106.1.

Reason: The intent of this proposal is to remove a section for structural signage from Chapter 1. Signage requirements are ineffective in Chapter 1, do not belong in the administrative provisions and no signage requirements are found in any of the Administrative requirements in any of the other codes.

This section was moved to the administrative provisions from structural by S48-07/08. The structural committee felt that this sign did not belong with the loading provisions in Chapter 16.

The BCAC has attempted to move this requirement back to the related requirements in Chapter 16 (S52-19), similar to the signage for occupant load and exits in Chapter 10. There was testimony stating that the existing requirements for signage when live loads exceeded 50 pounds was an erroneous requirement. This code requirement is a hold-over from the legacy codes and its origins are unknown. The Structural committee disapproved this change because they did not want these signs in Chapter 16.

S99-22 attempted to clarify and limit the signage requirements (based on the testimony to S52-19) and move that small portion to Section 1607 with the requirements. The Structural committee again expressed that they felt the requirements were more appropriate however they still did not want the signage requirement in Chapter 16.

The text as currently written in unreasonable and unenforceable. Considering the expected audience of such a sign, it isn’t practical that the end user of a building would equate a PSF load posting into a
practical limitation as to the use of the structure. Further, the code only requires one sign be posted per story in a building of any area, it is unlikely that a majority of building users would ever even see such a sign. Following is a detailed reasoning for the deletion of this section.

Section 106 - Chapter 1 is an administrative chapter. Signage posting requirements are not an administrative function. These signage requirements should be located with the loading requirements to be consistent with the code - examples include - signage for gas detection alarms (916.9) under gas detection systems (916); occupant load posting (1004.9) with occupant loads (1004); area of refuge and two-way communication requirements (1009.9) with accessible means of egress (1009); stairway identification signage (1023.9) in exit stairways (1023); exit signs (1013) are located with exit requirements in Chapter 10; toilet room signage (2902.4) in minimum plumbing facilities (2902); elevator signage (3002.3) with the elevator provisions (3002), and heavy vehicle loading signage (1607.8.5) are located in Heavy vehicle loads (1607.8).

Section 106.1 - Table 1607.1 does not have 'commercial' or 'industrial' buildings listed and these terms are not defined, leaving it unclear where the signage is required. The weight requirement of "exceeding 50 lbs" could be interpreted to require this signage in many spaces listed in Table 1607.

Section 106.2 - Signage requirements should not be tied to receiving a certificate of occupancy, anymore than other code section would be.

Section 106.3 - This is unenforceable. Making sure the loading in a spaces is not exceeded is an operational issue, not a building code issue. There is no mechanism to enforce this beyond the final building inspection.

Section 1607.8.5 - The proposed language removes the reference to Section 106 and provides more specific information for the required signage. This signage is already in Chapter 16.

Cost Impact: The net effect of the public comment and code change proposal will not increase or decrease the cost of construction This technically is a reduction in the signage requirements, but it is our understanding that this is not currently being enforced. This is not a change to the technical requirements.
Egress Item 2 – R-2 in single exit tables
7-12-2023 – move to BCAC

Videos:
https://www.cdpaccess.com/videos/4312/
https://www.cdpaccess.com/videos/4740/

Link to change: https://www.cdpaccess.com/public-comment/2584/preview/23089/

Assigned to Cesar Lujan

E-24
IBC: TABLE 1006.3.4(1), TABLE 1006.3.4(2), 1031.2 (IFC:[BE] TABLE 1006.3.4(1), TABLE 1006.3.4(2), 1031.2)

Proposed Change as Submitted

Proponents: Jeff Grove, Chair, representing ICC Building Code Action Committee (bcac@icc SAFE.ORG)

2021 International Building Code

1006.3.4 Single exits. A single exit or access to a single exit shall be permitted from any story or occupiable roof where one of the following conditions exists:

1. The occupant load, number of dwelling units and exit access travel distance do not exceed the values in Table 1006.3.4(1) or 1006.3.4(2).
2. Rooms, areas and spaces complying with Section 1006.2.1 with exits that discharge directly to the exterior at the level of exit discharge, are permitted to have one exit or access to a single exit.
3. Parking garages where vehicles are mechanically parked shall be permitted to have one exit or access to a single exit.
4. Group R-3 and R-4 occupancies shall be permitted to have one exit or access to a single exit.
5. Individual single-story or multistory dwelling units shall be permitted to have a single exit or access to a single exit from the dwelling unit provided that both of the following criteria are met:
   5.1. The dwelling unit complies with Section 1006.2.1 as a space with one means of egress.
   5.2. Either the exit from the dwelling unit discharges directly to the exterior at the level of exit discharge, or the exit access outside the dwelling unit’s entrance door provides access to not less than two approved independent exits.
### TABLE 1006.3.4(1) STORIES AND OCCUPIABLE ROOFS WITH ONE EXIT OR ACCESS TO ONE EXIT FOR R-2 OCCUPANCIES

<table>
<thead>
<tr>
<th>STORY OR OCCUPIABLE ROOF</th>
<th>OCCUPANCY</th>
<th>MAXIMUM NUMBER OF DWELLING UNITS</th>
<th>MAXIMUM EXIT ACCESS TRAVEL DISTANCE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basement, first, second or third story above grade plane and occupiable roofs over the first or second story above grade plane</td>
<td>R-2 consisting of dwelling units</td>
<td>4 dwelling units</td>
<td>125 feet</td>
</tr>
<tr>
<td></td>
<td>R-2 consisting of sleeping units</td>
<td>20 occupants</td>
<td>125 feet</td>
</tr>
<tr>
<td>Fourth story above grade plane and higher</td>
<td>NP</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

For SI: 1 foot = 304.8 mm.
NP = Not Permitted.
NA = Not Applicable.

**a.** Buildings classified as Group R-2 equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2 and provided with emergency escape and rescue openings in accordance with Section 1031.

**b.** This table is used for Group R-2 occupancies consisting of dwelling units. For Group R-2 occupancies consisting of sleeping units, use Table 1006.3.4(2).

**b.c.** This table is for occupiable roofs accessed through and serving individual dwelling units or sleeping units in Group R-2 occupancies. For Group R-2 occupancies with occupiable roofs that are not access through and serving individual dwelling units or sleeping units, use Table 1006.3.4(2).

---

### TABLE 1006.3.4(2) STORIES AND OCCUPIABLE ROOFS WITH ONE EXIT OR ACCESS TO ONE EXIT FOR OTHER OCCUPANCIES

<table>
<thead>
<tr>
<th>STORY OR OCCUPIABLE ROOF</th>
<th>OCCUPANCY</th>
<th>MAXIMUM OCCUPANT LOAD PER STORY AND OCCUPIABLE ROOF</th>
<th>MAXIMUM EXIT ACCESS TRAVEL DISTANCE (feet)</th>
</tr>
</thead>
<tbody>
<tr>
<td>First story above or below grade plane above grade plane and occupiable roofs over the first or second story above grade plane</td>
<td>A, B&lt;sup&gt;ab&lt;/sup&gt;, E, F&lt;sup&gt;ab&lt;/sup&gt;, M, U</td>
<td>49</td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>H-2, H-3</td>
<td>3</td>
<td>25</td>
</tr>
<tr>
<td></td>
<td>H-4, H-5, I, R-1, R-2&lt;sup&gt;a,c&lt;/sup&gt;</td>
<td>10</td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>S&lt;sup&gt;a,b,d&lt;/sup&gt;</td>
<td>29</td>
<td>75</td>
</tr>
<tr>
<td>Second story above grade plane</td>
<td>B, F, M, S&lt;sup&gt;bd&lt;/sup&gt;</td>
<td>29</td>
<td>75</td>
</tr>
<tr>
<td>STORY OR OCCUPIABLE ROOF</td>
<td>OCCUPANCY</td>
<td>MAXIMUM OCCUPANT LOAD PER STORY AND OCCUPIABLE ROOF</td>
<td>MAXIMUM EXIT ACCESS TRAVEL DISTANCE (feet)</td>
</tr>
<tr>
<td>--------------------------</td>
<td>-----------</td>
<td>------------------------------------------------------</td>
<td>-------------------------------------------</td>
</tr>
<tr>
<td>Third story above grade plane and higher</td>
<td>NP</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

For SI: 1 foot = 304.8 mm.
NP = Not Permitted.
NA = Not Applicable.

- **a. Buildings classified as Group R-2 equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2 and provided with emergency escape and rescue openings in accordance with Section 1031.**
- **b-a.** Group B, F and S occupancies in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or on an occupiable roof of such buildings shall have a maximum exit access travel distance of 100 feet.
- **c. This table is used for Group R-2 occupancies consisting of sleeping units. For Group R-2 occupancies consisting of dwelling units, use Table 1006.3.4(1).**
- **d.** The length of exit access travel distance in a Group S-2 open parking garage shall be not more than 100 feet.

### 1031.2 Where required.
In addition to the means of egress required by this chapter, emergency escape and rescue openings shall be provided in the following occupancies:

1. Group R-2 occupancies located in stories with only one exit or access to only one exit as permitted by Tables Table 1006.3.4(1) and 1006.3.4(2).
2. Group R-3 and R-4 occupancies.

Basements and sleeping rooms below the fourth story above grade plane shall have not fewer than one emergency escape and rescue opening in accordance with this section. Where basements contain one or more sleeping rooms, an emergency escape and rescue opening shall be required in each sleeping room, but shall not be required in adjoining areas of the basement. Such openings shall open directly into a public way or to a yard, or court that opens to a public way, or to an egress balcony that leads to a public way.

**Exceptions:**

1. **Basements** with a ceiling height of less than 80 inches (2032 mm) shall not be required to have emergency escape and rescue openings.
2. Emergency escape and rescue openings are not required from basements or sleeping rooms that have an exit door or exit access door that opens directly into a public way or to a yard, court or exterior egress balcony that leads to a public way.
3. **Basements** without habitable spaces and having not more than 200 square feet (18.6 m²) in floor area shall not be required to have emergency escape and rescue openings.
4. Storm shelters are not required to comply with this section where the shelter is constructed in accordance with ICC 500.

5. Within individual dwelling and sleeping units in Groups R-2 and R-3, where the building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3, sleeping rooms in basements shall not be required to have emergency escape and rescue openings provided that the basement has one of the following:
   5.1. One means of egress and one emergency escape and rescue opening.
   5.2. Two means of egress.

Reason:
The purpose of this code change is to coordinate and consolidate requirements for R-2 units in Tables 1006.2.1 (single exit space), 1006.3.4(1) and 1006.3.4(2) (single exit buildings).

Proposal E17-15 increased the maximum occupant load for R-2 Occupancies from 10 to 20 occupants for single exit spaces stating that it's appropriate since Group R-2 occupancies require sprinkler protection per Section 903.3.1.1 or 903.3.1.2. and that the exit access travel distance is 125’ in both Table 1006.2.1 and 1006.3.4(1). There is no logic for a unit on the 1st floor of single exit building to have a lower occupant load or a shorter travel distance. In addition, if 4 single exit dwelling units are permitted on the 2nd and 3rd floor of a Group R-2 building, why is a single exit dwelling not permitted at the 2nd floor of a mixed-use building? Please note that emergency escape and rescue openings would be required in the single exit building. The change to 1031.2 is editorial to recognize that R-2 is only in one table.

Cost Impact:
The code change proposal will decrease the cost of construction. This will only affect dwelling units on the basement, 1st or 2nd floor of a mixed-use building. This will most likely be no change in units less than 2,000 sq. ft. This will allow for a single exit in some apartments between 2,000 and 4,000 sq. ft., provided they can meet the exit access travel distance and provide EEROs.
**IBC**

1110.2.1 **Family or assisted-use** Family or companion toilet and bathing rooms. In assembly and mercantile occupancies, an accessible family or assisted-use family or companion toilet room shall be provided where an aggregate of six or more male and female water closets is required. In buildings of mixed occupancy, only those water closets required for the assembly or mercantile occupancy shall be used to determine the family or assisted-use family or companion toilet room requirement. In recreational facilities where separate-sex bathing rooms are provided, an accessible family or assisted-use family or companion bathing room shall be provided. Fixtures located within family or assisted-use family or companion toilet and bathing rooms shall be included in determining the number of fixtures provided in an occupancy.

**Exception:** Where each separate-sex bathing room has only one shower or bathtub fixture, a family or assisted-use family or companion bathing room is not required.

1110.2.1.1 **Standard.** Family or assisted-use Family or companion toilet and bathing rooms shall comply with Sections 1110.2.1.2 through 1110.2.1.6.

**(E141-21 D/AMPC1)**

1110.2.1.2 **Family or assisted-use** Family or companion toilet rooms. Family or assisted-use Family or companion toilet rooms shall include only one water closet and only one lavatory. A family or assisted-use Family or companion bathing room in accordance with Section 1110.2.1.3 shall be considered to be a family or assisted-use Family or companion toilet room.

**Exception:** The following additional plumbing fixtures shall be permitted in a family or assisted-use family or companion toilet room:

1. A urinal.
2. A child-height water closet.
3. A child-height lavatory.
4. An adult changing station also used for bathing.

1110.2.1.3 **Family or assisted-use** Family or companion bathing rooms. Family or assisted-use Family or companion bathing rooms shall include only one shower or bathtub fixture. Family or assisted-use Family or companion bathing rooms shall also include one water closet and one lavatory. Where storage facilities are provided for separate-sex bathing rooms, accessible storage facilities shall be provided for family or assisted-use family or companion bathing rooms.
1110.2.1.4 Location. Family or assisted use Family or companion toilet and bathing rooms shall be located on an accessible route. Family or assisted use Family or companion toilet rooms shall be located not more than one story above or below separate-sex toilet rooms. The accessible route from any separate-sex toilet room to a family or assisted use family or companion toilet room shall not exceed 500 feet (152 m).

1110.2.1.5 Prohibited location. In passenger transportation facilities and airports, the accessible route from separate-sex toilet rooms to a family or assisted use family or companion toilet room shall not pass through security checkpoints.

1110.2.1.6 Privacy. Doors to family or assisted use family or companion toilet and bathing rooms shall be securable from within the room and be provided with an “occupied” indicator.

(E142-21 AS/AMPC 1 & 2)

1110.4.1 Where required. At least one adult changing station shall be provided in all of the following locations:

1. In assembly and mercantile occupancies, where family or assisted use family or companion toilet or bathing rooms are required to comply with Section 1110.2.1.

2. In Group B occupancies providing educational facilities for students above the 12th grade, where an aggregate of twelve or more male and female water closets are required to serve the classrooms and lecture halls.

3. In Group F occupancies, where a room or space used for assembly purposes requires an aggregate of six or more male and female water closets for that room or space.

4. In highway rest stops and highway service plazas.

(E142-21 AS/AMPC 1 & 2)

1110.4.2 Room. Adult changing stations shall be located in toilet rooms that include only one water closet and only one lavatory. Fixtures located in such rooms shall be included in determining the number of fixtures provided in an occupancy. The occupants shall have access to the required adult changing station at all times that the associated occupancy is occupied.

Exception: Adult changing stations shall be permitted to be located in family or assisted use family or companion toilet rooms required in Section 1110.2.1.

1112.3 Directional signage. Directional signage indicating the route to the nearest like accessible element shall be provided at the following locations. These directional signs shall include the International Symbol of Accessibility and sign characters shall meet the visual character requirements in accordance with ICC A117.1.

1. Inaccessible building entrances.
2. Inaccessible public toilets and bathing facilities.
3. Elevators not serving an accessible route.
4. At each separate-sex toilet and bathing room indicating the location of the nearest family or assisted use family or companion toilet or bathing room where provided in accordance with Section 1110.2.1.
5. At exits and exit stairways serving a required accessible space, but not providing an approved accessible means of egress, signage shall be provided in accordance with Section 1009.10.
6. Where drinking fountains for persons using wheelchairs and drinking fountains for standing persons are not located adjacent to each other, directional signage shall be provided indicating the location of the other drinking fountains.

[P] 1210.3.2 Urinal partitions. Each urinal utilized by the public or employees shall occupy a separate area with walls or partitions to provide privacy. The walls or partitions shall begin at a height not more than 12 inches (305 mm) from and extend not less than 60 inches (1524 mm) above the finished floor surface. The walls or partitions shall extend from the wall surface at each side of the urinal not less than 18 inches (457 mm) or to a point not less
than 6 inches (152 mm) beyond the outermost front lip of the urinal measured from the finished backwall surface, whichever is greater.

**Exceptions:**

1. Urinal partitions shall not be required in a single-occupant or family or assisted-use family or companion toilet room with a lockable door.
2. Toilet rooms located in child day care facilities and containing two or more urinals shall be permitted to have one urinal without partitions.

**[P] 2902.1.2 Single-user toilet and bathing room fixtures.** The plumbing fixtures located in single-user toilet and bathing rooms, including family or assisted-use family or companion toilet and bathing rooms that are required by Section 1110.2.1, shall contribute toward the total number of required plumbing fixtures for a building or tenant space. Single-user toilet and bathing rooms, and family or assisted-use family or companion toilet rooms and bathing rooms shall be identified as being available for use by all persons regardless of their sex.

The total number of fixtures shall be permitted to be based on the required number of separate facilities or based on the aggregate of any combination of single-user or separate facilities.

**[P] 2902.2.1 Family or assisted-use Family or companion toilet facilities serving as separate facilities.** Where a building or tenant space requires a separate toilet facility for each sex and each toilet facility is required to have only one water closet, two family or assisted-use family or companion toilet facilities shall be permitted to serve as the required separate facilities. Family or assisted-use Family or companion toilet facilities shall not be required to be identified for exclusive use by either sex as required by Section 2902.4.

**[P] 2902.3.6 Door locking.** Where a toilet room is provided for the use of multiple occupants, the egress door for the room shall not be lockable from the inside of the room. This section does not apply to family or assisted-use family or companion toilet rooms.

**[P] 2903.1.5 Urinal partitions.** Each urinal utilized by the public or employees shall occupy a separate area with walls or partitions to provide privacy. The horizontal dimension between walls or partitions at each urinal shall be not less than 30 inches (762 mm). The walls or partitions shall begin at a height not greater than 12 inches (305 mm) from and extend not less than 60 inches (1524 mm) above the finished floor surface. The walls or partitions shall extend from the wall surface at each side of the urinal not less than 18 inches (457 mm) or to a point not less than 6 inches (152 mm) beyond the outermost front lip of the urinal measured from the finished backwall surface, whichever is greater.

**Exceptions:**

1. Urinal partitions shall not be required in a single-occupant or family assisted-use family or companion toilet room with a lockable door.
2. Toilet rooms located in child day care facilities and containing two or more urinals shall be permitted to have one urinal without partitions.

**IEBC**

**306.7.12 306.7.11 Toilet rooms.** Where it is technically infeasible to alter existing toilet rooms to be accessible, one accessible single-user toilet room or one accessible family or assisted-use family or companion toilet room constructed in accordance with Section 1110.2.1 of the *International Building Code* is permitted. This toilet room shall be located on the same floor and in the same area as the existing toilet rooms. At the inaccessible toilet rooms, directional signs indicating the location of the nearest such toilet room shall be provided. These directional signs shall include the International Symbol of Accessibility, and sign characters shall meet the visual character requirements in accordance with ICC A117.1.

**306.7.13 306.7.12 Bathing rooms.** Where it is technically infeasible to alter existing bathing rooms to be accessible, one accessible single-user bathing room or one accessible family or assisted-use family or companion bathing room constructed in accordance with Section 1110.2.1 of the *International Building Code* is permitted.
This accessible bathing room shall be located on the same floor and in the same area as the existing bathing rooms. At the inaccessible bathing rooms, directional signs indicating the location of the nearest such bathing room shall be provided. These directional signs shall include the International Symbol of Accessibility, and sign characters shall meet the visual character requirements in accordance with ICC A117.1.

**306.7.14 Additional toilet and bathing facilities.** In assembly and mercantile occupancies, where additional toilet fixtures are added, not fewer than one accessible family or assisted-use family or companion toilet room shall be provided where required by Section 1110.2.1 of the International Building Code. In recreational facilities, where additional bathing rooms are being added, not fewer than one family or assisted-use family or companion bathing room shall be provided where required by Section 1110.2.1 of the International Building Code.

**EB31-22**

**306.7.15 Adult changing stations.** Where additional toilet facilities are being added, in occupancies where adult changing stations are required by Section 1110.4.1 of the International Building Code, not fewer than one accessible family or assisted-use family or companion toilet room with an adult changing station shall be provided in accordance with Section 1110.4 of the International Building Code. The adult changing station shall be permitted to be located in an accessible family or assisted-use family or companion toilet room or bathing room required by Sections 306.7.12, 306.7.13 or 306.7.14.

**306.7.18.4 306.7.16.4 Toilet facilities.** Where toilet rooms are provided, not fewer than one accessible single-user toilet room or one accessible family or assisted-use family or companion toilet room complying with Section 1110.2.1 of the International Building Code shall be provided.

**306.7.18.5 306.7.16.5 Bathing facilities.** Where bathing rooms are provided, not fewer than one accessible single-user bathing room or one accessible family or assisted-use family or companion bathing rooms complying with Section 1110.2.1 of the International Building Code shall be provided.

**IPC**

**P25-21 AMPC1**

**P28-21 AS**

**403.1.2 Fixtures in single-user toilet facilities and bathing rooms.** The plumbing fixtures located in single-user toilet facilities and single-user bathing rooms, including family or assisted-use toilet facilities and bathing rooms that are required by Section 1109.2.1 of the International Building Code, shall contribute toward the total number of required plumbing fixtures for a building or tenant space. The number of fixtures in single-user toilet facilities, single-user bathing rooms and family or assisted-use family or companion toilets facilities shall be deducted proportionately from the required gender ratios of Table 403.1. Single-user toilet facilities and bathing rooms, and family or assisted-use family or companion toilet facilities rooms and bathing rooms shall be identified as being available for use by all persons regardless of their sex.

The total number of fixtures shall be permitted to be based on the required number of separate facilities or based on the aggregate of any combination of single-user or separate facilities.

**P28-21 AS**

**P35-21 AMPC1**

**[BE] 403.3.6 Door locking.** Where a toilet facility room is provided for the use of multiple occupants, the egress door for the room shall not be lockable from the inside of the room. This section does not apply to family or assisted-use family or companion toilet facilities rooms.
**Exception:** The egress door of a multiple occupant toilet room shall be permitted to be lockable from inside the room where all the following criteria are met:

1. The egress door shall be lockable from the inside of the room only by authorized personnel by the use of a key or other approved means.
2. The egress door shall be readily openable from the toilet room in accordance with IBC Section 1010.2.
3. The egress door shall be capable of being unlocked from outside the room with a key or other approved means.

**P28-21 AS**

**405.3.5 Urinal partitions.** Each urinal utilized by the public or employees shall occupy a separate area with walls or partitions to provide privacy. The horizontal dimension between walls or partitions at each urinal shall be not less than 30 inches (762 mm). The walls or partitions shall begin at a height not greater than 12 inches (305 mm) from and extend not less than 60 inches (1524 mm) above the finished floor surface. The walls or partitions shall extend from the wall surface at each side of the urinal not less than 18 inches (457 mm) or to a point not less than 6 inches (152 mm) beyond the outermost front lip of the urinal measured from the finished backwall surface, whichever is greater.

**Exceptions:**

1. Urinal partitions shall not be required in a single occupant or family/assisted use family or companion toilet room with a lockable door.
2. Toilet facilities rooms located in child day care facilities and containing two or more urinals shall be permitted to have one urinal without partitions.

**Reason:** Both the family or assisted use bathrooms and assisted toileting and bathing options are needed in the code. This is not intended to change any technical requirements. However, the terminology is so close, it is causing confusion – especially when it comes to the options for the water closet and showers permitted in the family or assisted use toilet room. Do I have to use the water closet with two swing up grab bars or only a roll-in shower – that is not the intent. This change in terminology will clarify the options.

**Cost impact:** None – this is a clarification of an existing element.
1003.3 Protruding objects. Protruding objects on circulation paths shall comply with the requirements of Sections 1003.3.1 through 1003.3.4.

(E38-21) AS

1003.3.1 Headroom. Protruding objects are permitted to extend below the minimum ceiling height required by Section 1003.2 where a minimum headroom of 80 inches (2032 mm) is provided over any circulation paths, including walks, corridors, aisles and passageways. Not more than 50 percent of the ceiling area of a circulation path means of egress shall be reduced in height by protruding objects.

Exception: Door closer, overhead door stops, frame stops, power door operators, and electromagnetic door locks shall be permitted to project into the door opening height not lower than 78 inches (1980 mm) above the floor.

A barrier shall be provided where the vertical clearance above a circulation path is less than 80 inches (2032 mm) high above the finished floor. The leading edge of such a barrier shall be located 27 inches (686 mm) maximum above the finished floor.

1003.3.2 Post-mounted objects. A free-standing object mounted on a post or pylon shall not overhang that post or pylon more than 4 inches (102 mm) where the lowest point of the leading edge is more than 27 inches (686 mm) and less than 80 inches (2032 mm) above the finished floor. Where a sign or other obstruction is mounted between posts or pylons and the clear distance between the posts or pylons is greater than 12 inches (305 mm), the lowest edge of such sign or obstruction shall be 27 inches (686 mm) maximum or 80 inches (2032 mm) minimum above the finished floor or ground.

Exception: These requirements shall not apply to sloping portions of handrails between the top and bottom riser of stairs and above the ramp run.

1003.3.3 Horizontal projections. Objects with leading edges more than 27 inches (685 mm) and not more than 80 inches (2030 mm) above the finished floor shall not project horizontally more than 4 inches (102 mm) into the circulation path.

Exception: Handrails are permitted to protrude 4 1/2 inches (114 mm) from the wall or guard.

1003.3.4 Clear width. Protruding objects shall not reduce the minimum clear width of accessible routes.

1003.4 Slip-resistant surface. Circulation paths of the means of egress shall have a slip-resistant surface and be securely attached.

Reason:
[BE] CIRCULATION PATH. An exterior or interior way of passage from one place to another for pedestrians.

Section 1003 applies to all parts of the means of egress system.

- In IBC/IFC 1003.3 “circulation path” is not followed by “of the means of egress”.

- In IBC/IFC 1003.4 “circulation path” is followed by “of the means of egress”.

The inclusion of “of the means of egress” in one, but not the other, gives the unintended mistaken interpretation that the provisions of section 1003.3 apply to all circulation paths and the provisions of section 1003.4 applies only circulation paths of the means of egress.

This proposal is primarily editorial and to remove the possibility of misinterpretation.

Cost impact: none; editorial clarification
Clarify pedestrian facilities (add definition) in IBC 1006.2.2.5 – pedestrian walkway

Revise as follows:

**IBC/IFC 1006.2.2.5 Vehicular ramps.** Vehicular ramps intended only for vehicle traffic shall not be considered as an exit access ramp unless pedestrian facilities except where a walkway used exclusively as a pedestrian trafficway is provided.

Reason: Are vehicular ramps the driveways and crossovers for cars only with no parking on either side; or are they wherever a car drives in a parking garage. Pedestrian walkways are used for bridges between buildings in Chapter 31, so we did not want to use the defined term, but the words in the defined term would add clarity to this requirement. The term “pedestrian facilities” is not defined and is not clear.

Cost impact: None: Clarification of requirements for pedestrians on vehicular ramps.
BCAC Egress Item 26 – elevators

From Kota

Notes: 7-12-2023 – Move forward to BCAC

IBC/IFC

1003.7 Elevators, escalators and moving walks. Elevators, escalators and moving walks shall not be used as a component of a required means of egress from any other part of the building.

Exception: Elevators used as an accessible means of egress in accordance with Section 1009.4.

Reason: “From any other part of the building” is redundant. This code change removes redundancy for clarity.

Cost impact: None. Removes redundant language and does not change requirements.
IBC 1004.7 Outdoor areas. Yards, patios, occupiable roofs, courts and similar outdoor areas accessible to and usable by the building occupants shall be provided with means of egress as required by this chapter. The occupant load of such outdoor areas shall be assigned by the building official in accordance with the anticipated use. Where outdoor areas are to be used by persons in addition to the occupants of the building, and the path of egress travel from the outdoor areas passes through the building, means of egress requirements for the building shall be based on the sum of the occupant loads of the building plus the outdoor areas.

Exceptions:
1. Outdoor areas used exclusively for service or maintenance of the building need only have one means of egress.
2. Both outdoor areas associated with Group R-3 and individual dwelling units of Group R-2.

Rational: Service could be understood to be limited to reading a gas meter. Maintenance could be replacing or repairing a piece of equipment. Both are limited personnel, so addition MOE is not warranted.

Cost impact – none. Clarification of current allowances for MOE.
1008.3 Illumination required by an emergency electrical system. An emergency electrical system shall be provided to automatically illuminate the following areas in the event of a power supply failure:

1. In rooms or spaces that require two or more exits or access to exits:
   1.1. Aisles
   1.2. Corridors
   1.3. Exit access stairways and ramps

2. In buildings that require two or more exits or access to exits:
   2.1. Interior exit access stairways and ramps
   2.2. Interior and exterior exit stairways and ramps
   2.3. Exit passageways
   2.4. Vestibules and areas on the level of discharge used for exit discharge in accordance with Section 1028.2
   2.5. Exterior landings as required by Section 1010.1.5 for exit doorways that lead directly to the exit discharge

3. In other rooms and spaces:
   3.1. Electrical equipment rooms
   3.2. Fire command centers
   3.3. Fire pump rooms
   3.4. Generator rooms
   3.5. Public restrooms with an area greater than 300 square feet (27.87 m²)
   3.6. Areas of refuge
   3.7. Exterior areas for assisted rescue

Rational: As per commentary, essential portions of the interior egress system should be illuminated. Areas of refuge and exterior areas for assisted rescue are essential portions of the interior egress system and should be illuminated. Lighting at the areas of refuge would also make it easier to read the informational signage required in Section 1009.

Cost impact: Increase. This could require minimal additional lights. Most of the time it would already be part of the egress routes.
BCAC Egress Item 30 Center handrail
From Kota
Revised 7-26-2023

Revise as follows:

**IBC/IFC 1014.10 Intermediate handrails.** *Stairways with a required width of greater than 60 inches,* shall have intermediate handrails located in such a manner that all portions of the stairway minimum width or required capacity are within 30 inches (762 mm) of a handrail. On monumental stairs, *where intermediate handrails are required,* handrails shall be located along the most direct path of egress travel.

Rational (work on): The intermediate handrail requirement can be inadvertently read to require an intermediate handrail every 5’, or to require a center handrail with a center door. This is a clarification for where they would be required. This is not a technical change.

Where there is sufficient distance for occupants to navigate to the sides of a monumental stairway the most direct path of egress, the centerline of the door to the exit, may not be the natural path.

This modification gives guidance to the building official to allow intermediate handrails to not be installed in the correct locations.
Cost impact: None. This is a clarification of what is already required. This could be a cost savings if additional handrails were required where they were not needed.
BCAC Egress Item 31 EERO exception

Revise to coordinate with change to coordinate with IEBC.

(G20-21 Part 1 AM)

1006.3.4 Single exits. A single exit or access to a single exit shall be permitted from any story or occupied occupiable roof where one of the following conditions exists:

1. The occupant load, number of dwelling units and exit access travel distance do not exceed the values in Table 1006.3.4(1) or 1006.3.4(2).

2. Rooms, areas and spaces complying with Section 1006.2.1 with exits that discharge directly to the exterior at the level of exit discharge, are permitted to have one exit or access to a single exit.

3. Parking garages where vehicles are mechanically parked shall be permitted to have one exit or access to a single exit.

4. Group R-3 and R-4 occupancies shall be permitted to have one exit or access to a single exit.

5. Individual single-story or multistory dwelling units shall be permitted to have a single exit or access to a single exit from the dwelling unit provided that both of the following criteria are met:

   5.1. The dwelling unit complies with Section 1006.2.1 as a space with one means of egress.

   5.2. Either the exit from the dwelling unit discharges directly to the exterior at the level of exit discharge, or the exit access outside the dwelling unit’s entrance door provides access to not less than two approved independent exits.

(E21-21) AS (G20-21, Pt 1correlation– CCC IBC14-22)

<table>
<thead>
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<th>TABLE 1006.3.4(1)</th>
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<tr>
<td>STORY OR OCCUPIED-OCCUPIABLE ROOF</td>
</tr>
<tr>
<td>Basement, first, second or third story above grade plane and occupied occupiable roofs over the first or second story above grade plane</td>
</tr>
<tr>
<td>Fourth story above grade plane and higher</td>
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</tbody>
</table>

For SI: 1 foot = 304.8 mm.

NP = Not Permitted.
NA = Not Applicable.

a. Buildings classified as Group R-2 equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2 and provided with emergency escape and rescue openings in accordance with Section 1031.

b. This table is used for Group R-2 occupancies consisting of dwelling units. For Group R-2 occupancies consisting of sleeping units, use Table 1006.3.4(2).

c. This table is for occupied occupiable roofs accessed through and serving individual dwelling units in Group R-2 occupancies. For Group R-2 occupancies with occupied occupiable roofs that are not access through and serving individual units, use Table 1006.3.4(2).

(E21-21) AS; (G20-21, Pt 1correlation– CCC IBC14-22)

<table>
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<td>STORY AND OCCUPIED-OCCUPIABLE ROOF</td>
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<tr>
<td>A, B&lt;sup&gt;a&lt;/sup&gt;, E, F&lt;sup&gt;b&lt;/sup&gt;, M, U</td>
</tr>
<tr>
<td>First story above or below grade plane and occupied/occupiable roofs over the first story above grade plane</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>H-4, H-5, I, R-1, R-2</td>
</tr>
<tr>
<td>S</td>
</tr>
<tr>
<td>Second story above grade plane</td>
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<tr>
<td>Third story above grade plane and higher</td>
</tr>
</tbody>
</table>

For SI: 1 foot = 304.8 mm.
NP = Not Permitted.
NA = Not Applicable.

a. Buildings classified as Group R-2 equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or 903.3.1.2 and provided with emergency escape and rescue openings in accordance with Section 1031.
b. Group B, F and S occupancies in buildings equipped throughout with an automatic sprinkler system in accordance with Section 903.3.1.1 or on the occupiable roof of such buildings shall have a maximum exit access travel distance of 100 feet.
c. This table is used for Group R-2 occupancies consisting of sleeping units. For Group R-2 occupancies consisting of dwelling units, use Table 1006.3.4(1).
d. The length of exit access travel distance in a Group S-2 open parking garage shall be not more than 100 feet.

**1006.3.4.1 Mixed occupancies.** Where one exit, or exit access stairway or ramp providing access to exits at other stories, is permitted to serve individual stories, mixed occupancies shall be permitted to be served by single exits provided that each individual occupancy complies with the applicable requirements of Table 1006.3.4(1) or 1006.3.4(2) for that occupancy. Where applicable, cumulative occupant loads from adjacent occupancies shall be considered to be in accordance with the provisions of Section 1004.1. In each story of a mixed occupancy building, the maximum number of occupants served by a single exit shall be such that the sum of the ratios of the calculated number of occupants of the space divided by the allowable number of occupants indicated in Table 1006.3.4(2) for each occupancy does not exceed one. Where dwelling units are located on a story with other occupancies, the actual number of dwelling units divided by four plus the ratio from the other occupancy does not exceed one.

**SECTION 1031**

**EMERGENCY ESCAPE AND RESCUE**

**1031.1 General.** Emergency escape and rescue openings shall comply with the requirements of this section.

**(E111-21) AS editorial**

**1031.2 Where required.** In addition to the means of egress required by this chapter, emergency escape and rescue openings shall be provided in the following occupancies:

1. Group R-2 occupancies located in stories with only one exit or access to only one exit as permitted by Tables 1006.3.4(1) and 1006.3.4(2).
2. Group R-2 occupancies with only one exit or access to only one exit as permitted by Section 1006.3.4 Exceptions 2 and 5.
3. Group R-3 and R-4 occupancies.

Basements and sleeping rooms below the fourth story above grade plane shall have not fewer than one emergency escape and rescue opening in accordance with this section. Where basements contain one or more sleeping rooms, an emergency escape and rescue opening shall be required in each sleeping room, but shall not be required in adjoining areas of the basement. Such openings shall open directly into a public way or to a yard or court that opens to a public way, or to an egress balcony that leads to a public way.

**Exceptions:**

1. Basements with a ceiling height of less than 80 inches (2032 mm) shall not be required to have emergency escape and rescue openings.
2. Emergency escape and rescue openings are not required from basements or sleeping rooms that have an exit door or exit access door that opens directly into a public way or to a yard, court or exterior egress balcony that opens that leads to a public way.
3. Basements without habitable spaces and having not more than 200 square feet (18.6 m²) in floor area shall not be required to have emergency escape and rescue openings.

4. Storm shelters are not required to comply with this section where the shelter is constructed in accordance with ICC 500.

5. Within individual dwelling and sleeping units in Groups R-2 and R-3, where the building is equipped throughout with an automatic sprinkler system installed in accordance with Section 903.3.1.1, 903.3.1.2 or 903.3.1.3, sleeping rooms in basements shall not be required to have emergency escape and rescue openings provided that the basement has one of the following:
   5.1. One means of egress and one emergency escape and rescue opening.
   5.2. Two means of egress.

Reason: Should someone be able to use 1006.3.4 Exception 2 and 5 and not have to have EERO in a bedroom? You do have to provide EERO if you use Exception 1 for Group R-2.

Exception 2 is limited to exits at the level of exit discharge, however Exception 5 could be multiple stories. Could Exception 2 be a single story unit with multiple rooms, or only an efficiency unit? Travel distance in Table 1006.2.1 is 125 feet. An R-2 townhouse can use an NFPA13D system. BCAC has a separate change for travel distance for Group R-2 with an NFPA 13D (suggesting 75 feet).

1006.2.6 Groups R-3 and R-4. Where Group R-3 occupancies are permitted by Section 903.2.8 to be protected by an automatic sprinkler system installed in accordance with Section 903.3.1.3, the exit access travel distance for Group R-3 shall be not more than 125 feet (38 100 mm). Where Group R-4 occupancies are permitted by Section 903.2.8 to be protected by an automatic sprinkler system installed in accordance with Section 903.3.1.3, the exit access travel distance for Group R-4 shall be not more than 75 feet (22 860 mm).

Cost impact. None. This provides clarification for requirements and meets the original intent.
BCAC Egress Item 32 EERO maintenance

Revise to coordinate with change to coordinate with IEBC.

IFC 2024

[F]1032.7 Emergency escape and rescue openings. Required emergency escape and rescue openings shall be maintained in accordance with the code in effect at the time of construction, and both of the following:

1. Required emergency escape and rescue openings shall be operational from the inside of the room without the use of keys or tools. Window-opening control devices complying with ASTM F2090 shall be permitted for use on windows serving as a required emergency escape and rescue opening.

2. Bars, grilles, grates or similar devices are permitted to be placed over emergency escape and rescue openings or area well that serve such openings provided that the minimum net clear opening size complies with the code that was in effect at the time of construction and the unit is equipped with smoke alarms installed in accordance with Section 907.2.11. Such devices shall be releasable or removable from the inside without the use of a key, tool or force greater than that which is required for normal operation of the emergency escape and rescue opening.

Reason: The EERO’s have been extensively coordinated between the IBC and IRC over the last couple of cycles. It is suggested that this section be revised to not repeat items that are addressed in Section 1031.2.1 and 1031.6.

Cost impact. None. This provides clarification for requirements and meets the original intent.
507.4 Sprinklered, one-story buildings. The area of a Group A-4 building not more than one story above grade plane of other than Type V construction, or the area of a Group B, F, M or S building no more than one story above grade plane of any construction type, shall not be limited where the building is provided with an automatic sprinkler system throughout in accordance with Section 903.3.1.1 and is surrounded and adjoined by public ways or yards not less than 60 feet (18 288 mm) in width.

Exceptions:
1. Buildings and structures of Type I or II construction for rack storage facilities that do not have access by the public shall not be limited in height, provided that such buildings conform to the requirements of Sections 507.4 and 903.3.1.1 and Chapter 32 of the International Fire Code.
2. The automatic sprinkler system shall not be required in areas occupied for indoor participant sports, such as tennis, skating, swimming and equestrian activities in occupancies in Group A-4, provided that all of the following criteria are met:
   2.1. Exit doors directly to the outside are provided for occupants of the participant sports areas.
   2.2. The building is equipped with a fire alarm system with manual fire alarm boxes installed in accordance with Section 907.
   2.3. **Other than above spectator seating areas**, an automatic sprinkler system is provided in storage rooms, press boxes, concession booths or other spaces ancillary to the sport activity space.
   2.4. Where every part of the roof construction is 30 feet or more above the highest foot board of the seating and the floor in the viewing area and of any floor of the playing surface.

Reason: G146-15 added Item 2.3. With that edition, there is a question about if sprinklers are required over seating to view the events. G146-15, which was approved as submitted, required automatic sprinkler protection to “storage rooms, press boxes, concession booths or other spaces ancillary to the sport activity space”. The reason statement for this previous code change outlined that “it is appropriate to eliminate fire sprinklers in the large open spaces of these facilities”.

The current code commentary states the following:

“The spectator seating is usually situated around the perimeter of the sports field or area. These types of indoor recreation areas often require very large, open areas with such high ceilings that the installation of an automatic sprinkler system in the immediate participant sport area would be ineffective. The potential for significant fire involvement in such an area is generally quite low because of the low fuel load; therefore, sprinkler coverage is unnecessary for the playing field in most of these buildings. These areas are, therefore, exempt from the suppression requirement of this section, provided that the conditions regarding exiting and the required fire alarm system are met”.

For the uses listed in Exception No. 2, the limited hazard presented by the spectator seating areas is no greater than that of the participant sports areas. Hence, this code change proposal provides clarification as to where automatic sprinkler protection is not required.
Cost Impact: This code change proposal will neither increase nor decrease the cost of construction. It is clarification in nature only.
BCAC Occupancy WG #2 – Day Care
IBC: 305.2.2, 305.2.3, 308.5.3, 308.5.4, 310.4.1

SECTION 305
EDUCATIONAL GROUP E

305.2 Group E, day care facilities. This group includes buildings and structures or portions thereof occupied by more than five children older than 2½ years of age who receive educational, supervision or personal care services for fewer than 24 hours per day.

305.2.1 Within places of religious worship. Rooms and spaces within places of religious worship providing such day care during religious functions shall be classified as part of the primary occupancy.

Revise as follows:

305.2.2 Five or fewer children. A facility having five or fewer children receiving such day care shall be classified as part of the primary occupancy. Such a facility, located within a detached one- or two-family dwelling or townhouse that is within the scope of the International Residential Code, shall be constructed in accordance with this code or the International Residential Code.

Delete without substitution:

305.2.3 Five or fewer children in a dwelling unit. A facility such as the above within a dwelling unit and having five or fewer children receiving such day care shall be classified as a Group R-3 occupancy or shall comply with the International Residential Code.

SECTION 308
INSTITUTIONAL GROUP I

308.5 Institutional Group I-4, day care facilities. Institutional Group I-4 occupancy shall include buildings and structures occupied by more than five persons of any age who receive custodial care for fewer than 24 hours per day by persons other than parents or guardians; relatives by blood, marriage or adoption; and in a place other than the home of the person cared for. This group shall include, but not be limited to, the following:

- Adult day care
- Child day care

308.5.1 Classification as Group E. A child day care facility that provides care for more than five but not more than 100 children 2½ years or less of age, where the rooms in which the children are cared for are located on a level of exit discharge serving such rooms and each of these child care rooms has an exit door directly to the exterior, shall be classified as Group E.

308.5.2 Within a place of religious worship. Rooms and spaces within places of religious worship providing such care during religious functions shall be classified as part of the primary occupancy.

Revise as follows:

308.5.3 Five or fewer persons receiving care. A facility having five or fewer persons receiving custodial care shall be classified as part of the primary occupancy. Such a facility, located within a detached one- or two-family dwelling or townhouse that is within the scope of the International Residential Code, shall be constructed in accordance with this code or the International Residential Code.

Delete without substitution:
308.5.4 Five or fewer persons receiving care in a dwelling unit. A facility such as the above within a dwelling unit and having five or fewer persons receiving custodial care shall be classified as a Group R-3 occupancy or shall comply with the International Residential Code.

SECTION 310
RESIDENTIAL GROUP R

Revise as follows:

310.4.1 Care facilities within a dwelling. Care facilities for five or fewer persons receiving care or a day care that are located within a single-family dwelling or a detached one- or two-family dwelling or townhouse that is within the scope of the International Residential Code, shall be constructed in accordance with this code or with the International Residential Code. Facilities constructed in accordance with the International Residential Code shall be protected by an automatic sprinkler system installed in accordance with Section P2904 of the International Residential Code.

Reason: The purpose of this code change is to clarify how the occupancy classification for small child care, adult day care or custodial care facilities is determined. The proposal allows small daycare, adult care or custodial care facilities serving five or fewer persons to be classified as part of the primary occupancy of a building housing such a facility, and to note that where they are contained in one- and two-family dwellings or townhouses falling within the scope of the International Residential Code they are permitted to be constructed either per the IBC or IRC.

Consolidating the requirements recognizes Group R-2 townhouses or apartments may also have contain a small daycare facility and allows for such facilities serving 5 or fewer occupants to be classified as part of the primary occupancy. This fixes a glitch where the literal text in current Sections 305.2.3 and 308.5.4 says a day care in a dwelling unit make this an R-3 even though the building may be Group R-2.

For facilities that meet the scoping of the IRC (detached single family dwellings, duplexes, and townhouses three stories or less above grade plane), the day care and small care facilities can continue to be constructed under the IRC.

A similar BCAC proposal submitted last cycle, G34-21, was disapproved over concerns the original proposal expanded the scope of IRC to include apartment buildings, and that it could be argued a dwelling unit in an apartment building is within the scope of the IRC. Also, some felt the proposal language implied that dwelling units can be included in Group I facilities. BCAC worked with the opponents to develop a public comment to explicitly recognize the types of buildings covered in the IRC scope but was not able to overturn the committee disapproval. This new proposal reflects the clarifications requested by the opponents and committee last cycle.

Cost Impact: The code change proposal will not increase or decrease the cost of construction. This is basically a coordination item for what facilities can use IRC. This should not change construction requirements.
BCAC Occupancy WG #3 – Custodial or Medical Care
IBC: 308.2.4, 308.3.2, 310.4.1

SECTION 308
INSTITUTIONAL GROUP I

308.2.4 Five or fewer persons receiving custodial care. A facility with five or fewer persons receiving custodial care shall be classified as Group R-2 or Group R-3 based on the primary occupancy of the building or shall comply. Such a facility, located within a detached one- or two-family dwelling or townhouse that is within the scope of the International Residential Code, shall be constructed in accordance with this code or with the International Residential Code, provided Facilities constructed in accordance with the International Residential Code shall be protected by an automatic sprinkler system installed in accordance with Section 903.3.1.3 or Section P2904 of the International Residential Code.

308.3.2 Five or fewer persons receiving medical care. A facility with five or fewer persons receiving medical care shall be classified as Group R-2 or Group R-3 based on the primary occupancy of the building or shall comply. Such a facility, located within a detached one- or two-family dwelling or townhouse that is within the scope of the International Residential Code, shall be constructed in accordance with this code or with the International Residential Code, provided Facilities constructed in accordance with the International Residential Code shall be protected by an automatic sprinkler system installed in accordance with Section 903.3.1.3 or Section P2904 of the International Residential Code.

Reason:
The purpose of this code change is to clarify how the occupancy classification for small medical or custodial care facilities is determined. The proposal allows these small care facilities serving five or fewer persons to be classified as part of the primary occupancy of any home environment, be it a detached single-family dwelling, townhouse, apartment or condominium, housing such a facility, and to note that where they are contained in one- and two-family dwellings or townhouses falling within the scope of the International Residential Code they are permitted to be constructed either per the IBC or IRC.

The Fair Housing Act does not allow for “family” to be defined by blood or marriage. Multiple court cases have confirmed that people have the right to live in a home environment instead of an institutional facility if they so choose. If this is a business, this small group home is most likely operating as a family; and would fall below the licensure rules of most states. However, in most cases, this will be couple with foster children or someone taking care of a friend who needs assistance - not a business. The IBC does not typically go into issues on licensure or who is paying what – it looks at the use of the space.

This proposal does not change what sorts of care facilities can currently be constructed under the IRC, however, in the past there have been arguments that these care facilities should not be permitted under the IRC. This proposal clarifies that such care facilities in dwellings that meet the scoping of the IRC (detached single family dwellings, duplexes, and townhouses three stories or less above grade plane), can continue to be constructed under the IRC.
A similar BCAC proposal submitted last cycle, G42-21, was disapproved over concerns the original proposal expanded the scope of IRC to include apartment buildings, and that it could be argued a dwelling unit in an apartment building is within the scope of the IRC. Also, some felt the proposal language implied that dwelling units can be included in Group I-2 facilities. BCAC worked with the opponents to develop a public comment to explicitly recognize the types of buildings covered in the IRC scope but was not able to overturn the committee disapproval. This new proposal reflects the clarifications requested by the opponents and committee last cycle.

**Cost Impact:** The code change proposal will not increase or decrease the cost of construction. This is basically a coordination item for what facilities can use the IRC. This should not change construction requirements.
IBC MOE Scope

Notes 7-12-23: Send to BCAC and FCAC

IBC
CHAPTER 10
MEANS OF EGRESS

SECTION 1001 ADMINISTRATION GENERAL

1001.1 General Scope. Buildings or portions thereof shall be provided with a means of egress system as required by this chapter. The provisions of this chapter shall control the design, construction and arrangement of means of egress components required to provide an approved means of egress from structures and portions thereof.

[F] SECTION 1002 MAINTENANCE AND PLANS

[F] 1002.1 Maintenance. Means of egress shall be maintained in accordance with the International Fire Code.

[F] 1002.2 Fire safety and evacuation plans. Fire safety and evacuation plans shall be provided for all occupancies and buildings where required by the International Fire Code. Such fire safety and evacuation plans shall comply with the applicable provisions of Sections 401.2 and 404 of the International Fire Code.

1002.3 1001.2 Minimum requirements. It shall be unlawful to alter a building or structure in a manner that will reduce the number of exits, or the minimum width, or required capacity of the means of egress to less than required by this code.

CHAPTER 11
ACCESSIBILITY

SECTION 1101 GENERAL

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

IFC
CHAPTER 10
MEANS OF EGRESS

SECTION 1001 ADMINISTRATION GENERAL

1001.1 General Scope. Buildings or portions thereof shall be provided with a means of egress system as required by this chapter. The provisions of this chapter shall control the design, construction and arrangement of means of egress components required to provide an approved means of egress from structures and portions thereof.
Sections 1003 through 1031 shall apply to new construction. Section 1032 shall apply to existing buildings.

*Exception:* 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 structures shall comply with the International Residential Code.

**SECTION 1002 MINIMUM REQUIREMENTS**

[BE]1001.2 1002.1 Minimum requirements General. It shall be unlawful to alter a building or structure in a manner that will reduce the number of exits or the minimum width or required capacity of the means of egress to less than required by this code.

**SECTION 1002 DEFINITIONS**

(Move definitions to Chapter 2)