## INTERNATIONAL RESIDENTIAL CODE

**Sec. 8.16.010. Deletion of the 2021 Edition of the International Residential Code.**

Pursuant to the powers and authority conferred by the laws of the State and the Charter of the City, The International Residential Code, 2021 Edition, will not be adopted.

# Chapter 8.20

## INTERNATIONAL BUILDING CODE

**Editor's note**—Ord. No. 55-1999, §2, repealed former Ch. 8.20, pertaining to the Building Code and enacted a new Ch. 8.20 as herein set out. Former Ch. 8.20 was derived from Code 1962 §§4-1-1—4-1-4, Code 1971 §§7-140—7-143 and Ord. Nos. 22-1960, 4-1965, 32-1967, 36-1968, 22-1969, 7-1971, 9-1974, 15-1974, 70-1975, 13-1976, 21-1976, 27-1976, 45-1976, 63-1976, 12-1977, 12-1978, 1-1979, 52-1979, 17-1981, 33-1981, 1-1983, 9-1983, 20-1984, 62-1985, 7-1987, 32-1987, 10-1988, 59-1990, 79-1990, 44-1991, 53-1994, 68-1994, 53-1995, 54-1995, 3-1996, 12-1996, 43-1996 and 15-1997.

**Sec. 8.20.010. Adoption of the 2021 Edition of the International Building Code.**

Pursuant to the powers and authority conferred by the laws of the State and the Charter of the City, there is hereby adopted and incorporated herein by reference as if fully set forth those regulations contained in the International Building Code, **2021** Edition, including Appendix C, E, and P and all errata published by the International Code Council, 4051 West Flossmoor Road, Country Club Hills, Illinois, 60478-5795, except as otherwise provided by amendment or deletion as contained in Section 8.20.020 of this Chapter. At least one (1) copy of the International Building Code shall be available for inspection during regular business hours.

**Sec. 8.20.020. Amendments.**

The International Building Code, 2021 Edition, as adopted by the City at Section 8.20.010, is hereby amended to read as follows;

a. **Section 101.1** These provisions shall be known as the Building Code for the City of Aspen and will be referred to herein as this code.

b. **Section 101.2 Scope** shall be modified by removing the exception in its entirety.

c. **Section 101.4 Referenced Codes.** The other codes listed in Sections 101.4.1 through 101.4.11 and referenced elsewhere in this code shall be considered part of the requirements of this code to the prescribed extent of each such reference.

d. **Section 101.4.4 Property maintenance.** All references to the International Property Maintenance code within this code shall be deleted without substitution.

e. **Section 101.4.5 Fire Prevention.** Where not otherwise amended in Section 8.50 of the Aspen Municipal Code, the provisions of the Fire Code as adopted by the Aspen Fire Protection District shall apply to matters affecting or relating to structures, processes and premises from the hazard of fire and explosion arising from the storage, handling or use of structures, materials or devices; from conditions hazardous to life, property or public welfare in the occupancy of structures or premises; and from the construction, extension, *repair, alteration* or removal of fire suppression, *automatic sprinkler systems* and alarm systems or fire hazards in the structure or on the premises from occupancy or operation.

f. **Section 101.4.8 Electrical**. All references to the NFPA 70 (National Electrical Code) within the International Building Code shall refer to the National Electrical Code as adopted in Chapter 8.24 of this code.]

g. **Section 101.4.9 Pools and Spas** The provisions of the *International Swimming Pool and Spa Code* shall apply to the installation, repair, and alteration of swimming pools, hot tubs, and related accessories as referenced in this code.

h. **Section 101.4.10 Solar Energy** The provisions of the *International Solar Energy Provisions* shall apply to the installation, repair, and alteration of photovoltaic and solar thermal systems.

i. **Section 101.4.11 International Residential Code.** All references to the International Residential Code (IRC) within this code shall be deleted and the requirement of this code as it pertains to one- and two-family dwellings and townhouses shall apply.

j. **Section 103.1 Creation of enforcement agency.** The Aspen Building Department is hereby created and the official in charge thereof shall be known as the *building official*. The function of the agency shall be the implementation, administration, and enforcement of the provisions of this code.

k. [A] **105.3.2 Time limitation of application**. An application for a permit for any proposed work shall be deemed to have been abandoned 180 days after the date of filing, unless such application has been pursued in good faith or a permit has been issued; except that the building official is authorized to grant one or more extensions of time for additional periods not exceeding 180 days each. The extension shall be requested in writing and justifiable cause demonstrated.

l. **Section 109.1 Payment of fees.** A permit shall not be valid until the fees prescribed by Section 2.12.100 of the Aspen Municipal Code are paid in full.

m. **Section 110.3.12 Final inspection.** The final inspection shall be made after all work required by the Building Permit is completed and all applicable review agencies have accepted the work to comply with conditions of approval and any specific regulations.

n. **Section 113.1 General.** In order to hear and decide appeals of orders, decisions or determinations made by the building official relative to the application and interpretation of this code, there shall be and is hereby created a board of appeals. The building official shall be an ex officio member of said board but shall have no vote on any matter before the board. The board of appeals shall be appointed by the governing body and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business and shall render all decisions and findings in writing to the appellant with a duplicate copy to the building official. The Building Code Board of Appeals shall possess that authority as provided in this Code, Chapter 8.08.

o. **Section 114.1 Unlawful acts.** It shall be unlawful for any person, including an owner, occupant or builder, to erect, construct, enlarge, alter, repair, move, improve, remove, convert or demolish, equip, use, occupy or maintain any building or structure in the City or cause the same to be done, contrary to or in violation of any of the provisions of this Code. It shall be unlawful to remove or deface a posted correction notice or stop work order]

p. **114.2 Notice of violation.** The *building official* is authorized to serve a notice of violation or order on the person responsible for the erection, construction, *alteration*, extension, *repair*, moving, removal, demolition or occupancy of a building or structure in violation of the provisions of this code, or in violation of a *permit* or certificate issued under the provisions of this code. Such order shall direct the discontinuance of the illegal action or condition and the abatement of the violation.

q. **Section 114.4 Violation Penalties.** Any person who violates a provision of this code or fails to comply with any of the requirements thereof or who erects, constructs, alters or repairs a building or structure in violation of the *approved construction documents* or directive of the *building official*, or of a *permit*

or certificate issued under the provisions of this code, shall be subject to a misdemeanor charge, punishable upon conviction by a fine, imprisonment, or both a fine and imprisonment, as set forth in Section 1.04.080 of this Code. A separate offense shall be deemed committed on each day or portion thereof that the violation of any of the provisions of this Code occurs or continues unabated after the time limit set for abatement of the violation.

r. **Section 202 Definitions.** TYPE C UNIT. A dwelling unit or sleeping unit designed and constructed for accessibility in accordance with this code and the provisions for Type C units in ICC A117.1.1.

s. **310.4 Residential group R-3.** Shall be modified with the addition of

Townhouses constructed in accordance with Section 705.12

t. **705.5 Fire-resistance ratings. Exception 1 is added as follows:**

Exception 1. Separation walls between dwelling units in townhouses shall be permitted to comply with Section 705.12

u. **705.12. Townhouse dwelling unit separation.** Walls separating *dwelling units* in *townhouse buildings* shall be permitted to be constructed in accordance with Sections 705.12.1 or 705.12.2 and shall comply with Sections 705.12.3 and 705.12.4. Fire-resistance-rated wall assemblies shall be tested in accordance with ASTM E119, UL 263 or Section 703.2.2 of the *International Building Code* and rated for fire exposure from both sides.

**705.12.1 Double walls.** Each dwelling unit shall be separated from other dwelling units by two 1-hour fire- resistance-rated wall assemblies. Each wall shall be permitted to be constructed with plumbing or mechanical equipment, ducts or vents in the wall cavity. Penetrations of double walls shall be in accordance with Section 714.

**705.12.2 Common walls.** Each dwelling unit shall be separated from other dwelling units by one 1-hour fire- resistance-rated wall assembly. The common wall shared by two townhouse units shall be constructed without plumbing or mechanical equipment, ducts or vents, other than water-filled fire sprinkler piping in the cavity of the common wall. Penetrations of common walls shall not be permitted.

**Exceptions:**

1. Membrane penetrations of common walls for electrical outlet boxes shall be in accordance with Section 714.4.2.
2. Penetrations of water filled sprinkler pipe shall be in accordance with Section 714.

**705.12.3 Continuity.** The fire-resistance-rated wall assembly shall be provided with a parapet constructed in accordance with Section 705.11 and 705.11.1 and shall be continuous from the foundation to the top of the parapet. The fire-resistance rating shall extend the full horizontal length of the wall or assembly, including wall extensions through and separating attached enclosed accessory structures. The wall shall terminate against the inside face of the exterior sheathing of exterior walls or to the inside face of exterior walls without stud cavities.

**Exception:** Common walls are permitted to extend to and be tight against the inside of the exterior walls if the cavity between the end of the common wall and the exterior sheathing is filled with a minimum of two 2- inch nominal thickness wood studs.

**705.12.4 Structural independence.** Double walls in accordance with Section 705.12.1 shall be designed to allow collapse of the wall under fire conditions without the collapse of the second wall. Common walls in accordance with Section 705.12.2 shall be designed to allow collapse of the structure on either side of the wall without the collapse of the wall.

v. **706.1.1 Party walls is amended by adding Exception 3 as follows:**

**Exception 3.** Dwelling units in townhouse buildings shall be permitted to be separated in accordance with Section 705.12.

w. **Section 406.2.1.1 Automatic garage door opener battery backup.** All automatic garage door openers installed in Group R occupancies shall have a battery backup function that is designed to operate when activated by an interruption of the electrical service to the opener. The battery backup function shall operate in a manner so that the automatic garage door opener is operational without interruption.

x. **Chapter 9.** Chapter 9 provisions are replaced with Chapter 9 of the International Fire Code as adopted in accordance with Section 8.50 of the Aspen Municipal Code.

y. **1010.1.4 Floor elevation.** Exception 7 is added as follows:

**Exception 7.** At exterior doors serving *dwelling units* in Group R-3 *dwellings* and *townhouses* that are not required *exits*, and where such units are not required to be Accessible units, Type A units, or Type B units, the exterior landing of stairways with 2 or less risers shall be not more than 15 ½ inches below the door threshold, provided the door does not swing over the landing.

z. **Section 1011.14 Alternating tread devices.** Alternating tread devices are limited to an element of a means of egress in buildings of Groups F, H and S from a mezzanine not more than 250 square feet (23 m2) in area and that serves not more than five occupants; in buildings of Group I-3 from a guard tower, observation station or control room not more than 250 square feet (23 m2) in area; within individual dwelling units from a mezzanine having a floor area of 250 square feet (18.6 m2) or less and for access to unoccupied roofs. Alternating tread devices used as a means of egress shall not have a rise greater than 20 feet (6096 mm) between floor levels or landings.

aa. **Section 1011.15 Ships ladders.** Ships ladders are permitted to be used in Group I-3 as a component of a means of egress to and from control rooms or elevated facility observation stations not more than 250 square feet with not more than three occupants; within individual dwelling units from a mezzanine having a floor area of 250 square feet or less and for access to unoccupied roofs. The minimum clear width at and below the handrails shall be 20 inches. Ship's ladders shall be designed for the live loads indicated in Section 1607.17.

bb. **Section 1015.2 Where required.** Guards shall be located along open-sided walking surfaces, including mezzanines, equipment platforms, aisles, stairs, ramps, landings and adjacent to hot tubs, spas, and pools 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. Guards shall be adequate in strength and attachment in accordance with Section 1607.9.

cc. **Section 1015.3 Height. Exception 9.** At surfaces adjacent to hot tubs, spas, and pools, where the open side is less than 18 inches in width measured perpendicularly from the water's edge, guards shall not be less than 18 inches high.

dd. **Section 1031.2.2 Where required in mezzanines.** Mezzanines in Group R occupancies shall have an emergency escape and rescue opening.

**Exception:** Emergency escape and rescue opening shall not be required where all the following conditions exist:

1. The floor area of the mezzanine is not greater than 250 square feet.
2. A smoke alarm in accordance with section 907.2.11 is installed in the mezzanine

3. The mezzanine shall be open and unobstructed to the room in which such mezzanine is located except for walls not more than 42 inches (1067 mm) in height, columns and posts or where the aggregate floor area of the enclosed space is not greater than 40 square feet.

4. The travel distance from the most remote location of the mezzanine to the dwelling unit entry shall be less than 50 feet (15240 mm)

ee. **Section 1031.3.3 Location.** *Emergency escape and rescue openings* shall not be located directly above an area well.

ff. **Section 1031.6 Bars, grilles, covers and screens.** Bars, grilles, covers, screens and similar devices shall not be permitted over area wells serving *emergency escape and rescue openings*.

gg. **Section 1031.7 Emergency escape and rescue openings under decks, porches and cantilevers.** *Emergency escape and rescue openings* installed under decks, porches and cantilevers shall be fully openable and provide a path not less than 7 feet (2134 mm) in height and 36 inches (914 mm) in width to a *yard* or court.

hh. **Section 1107.2 Electrical vehicle charging stations.** Electrical vehicle charging stations shall comply with the *International Energy Conservation Code*.

ii. **Section 1107.2.1 and 1107.2.2** are deleted.

jj. **Section 1108.6.2.3 Group R-2 other than live/work units, apartment houses, monasteries and convents.** In Group R-2 occupancies, other than live/work units, apartment houses, monasteries and convents falling within the scope of Sections 1108.6.2.1 and 1108.6.2.2, Accessible units and Type B units shall be provided in accordance with Sections 1108.6.2.3.1 and 1108.6.2.3.2. Type C units shall be provided in accordance with Section 1108.6.2.3.3. Bedrooms within congregate living facilities, dormitories, sororities, fraternities and boarding houses shall be counted as sleeping units for the purpose of determining the number of units. Where the bedrooms are grouped into dwelling or sleeping units, only one bedroom in each dwelling or sleeping unit shall be permitted to count toward the number of required Accessible units.

kk. **1108.6.2.3.3 Type C units.** Where there are four or more *dwelling units* or *sleeping units intended to be occupied as a residence* in a single structure, every *dwelling unit* and every *sleeping unit intended to be occupied as a residence* that is not a *Type B unit* shall be a *Type C unit*.

**Exceptions:**

1. *Dwelling units* and *sleeping units* without *habitable space* on the ground floor.

2. The number of *Type C units* is permitted to be reduced in accordance with Section 1108.7.5.

ll. **1108.7.5 Flood hazard areas.** Is amended to include Type C units.

mm. **Section 1109.2.3 Companion seats.** At least one companion seat shall be provided for each wheelchair space required by Section 1109.2.2.1 through 1109.2.2.3 and for each wheelchair space required at bars.

nn. **Section 1110.2.2 Water Closets design for assisted toileting** (and all subsections) Delete in its entirety

oo. **Section 1110.2.3 Standard roll-in-type shower compartment design for assisted bathing** (and all subsections) Delete in its entirety.

pp. **1110.2.5 Lavatories**. Where lavatories are provided, at least 5 percent, but not less than one, shall be accessible and located in the multicompartment toilet room outside of all toilet compartments. Where the total lavatories provided in a toilet room or bathing facility is six or more, at least one lavatory with enhanced reach ranges shall be provided.

qq. **1110.2.5.1 Additional Lavatories**. Where separate restroom facilities are not provided in accordance with Exception 6 of Section 2902.2 an accessible lavatory shall be located within each accessible water closet compartment.

rr. **1110.9 Lifts.** Platform (wheelchair) lifts are permitted to be a part of a required accessible route in new construction where indicated in Items 1 through 10. Platform (wheelchair) lifts shall be installed in accordance with ASME A18.1. Keyed platform controls are prohibited.

[Items 1 through 10 remain unchanged]

ss. **1110.12 Seating and standing spaces at dining surfaces and work surfaces**. Where seating or standing space is provided at dining surfaces or work surfaces in accessible spaces, such seating and standing spaces, but not less than one, shall be accessible and shall comply with Sections 1110.12.1 through 1110.12.3.

**1110.12.1 Dining Surfaces**. At least 5 percent of the seating and standing space provided at fixed, built-in, and moveable dining surfaces shall be accessible.

**1110.12.2 Work Surfaces**. At least 5 percent of the seating and standing spaces at fixed or built-in work surfaces shall be accessible.

**Exception**: Check-writing surfaces at check-out aisles not required to comply with Section 1110.14.1 are not required to be accessible.

**1110.12.3 Dispersion.** Accessible seating and standing spaces at dining and work surfaces shall be distributed throughout the space or facility containing such elements and shall be located on a level accessed by an accessible route.

tt. **Section 1505.1 General**. Roof assemblies shall be Class A rated. Class A roof assemblies and roof coverings required to be listed by this section shall be tested in accordance with ASTM E 108 or UL 790. In addition, fire-retardant-treated wood roof coverings shall be tested in accordance with ASTM D 2898. All roofs shall have a roof assembly that complies with a Class A rating. For roof coverings where the profile allows a space between the roof covering and roof decking, the space at the eave ends shall be constructed to preclude entry of flames or embers, or have one layer of 72-pound (32.4 kg) mineral-surfaced, non-perforated cap sheet complying with ASTM D 3909 installed over the combustible decking.

**Exception:** Skylights and sloped glazing that comply with Chapter 24 or Section 2610.

uu. **Section 1507.1.2 Ice Barrier**. In all locations below where ice barriers are required, an ice dam barrier that consists of at least two (2) layers of underlayment cemented together or of a self-adhering polymer modified bitumen sheet shall be used in lieu of normal underlayment and shall extend from the roof eave edge at least six (6) feet inside the exterior wall line as measured along the roof surface, eighteen (18) inches from the centerline of the valley and up twenty-four (24) inches on the vertical wall at a roof and wall juncture.

vv. **Section 1513 Snow shed design**. Roofs shall be designed so that they do not shed ice and snow onto adjacent properties; potentially occupied areas such as a walkway, stairway, alley, deck, pedestrian and

vehicular exit from buildings; emergency escape and rescue opening area wells; areas where there is potential for personal injury or property damage; and areas directly above or in front of gas utility or electric utility meters.

**Exception:** Mechanical barriers installed to roof framing members or solid blocking secured to framing in accordance to manufacturers' instructions. Barriers shall be installed within the first 3 feet (944 mm) of the roof eave and spaced per the design of the system.

ww. **Section 1601.2 Design criteria.** Buildings shall be designed and constructed in accordance with the design criteria provided in Table 1601.2

## Table 1601.2 CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA is replaced as follows:

### TABLE 1601.2
### CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA

| GROUND SNOW LOAD[o] | WIND DESIGN | | | | SEISMIC DESIGN CATEGORY[f] | SUBJECT TO DAMAGE FROM | | | ICE BARRIER UNDERLAYMENT REQUIRED[h] | FLOOD HAZARDS[g] | AIR FREEZ-ING INDEX[i] | MEAN ANNUAL TEMP[j] |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Speed[d] (mph) | | special wind region[l] | windborne debris zone[m] | | Weathering[a] | Frost line depth[b] | Ter-mite[c] | | | | |
| 100 | 89/B | - | - | - | C | Severe | 36″ | None to slight | Yes | See Sec 1612.3 | 2000 | 40°F |

| DESIGN CRITERIA 2 | | | | | | |
|---|---|---|---|---|---|---|
| **Elevation** | **Altitude correction factor[e]** | **Coincident wet bulb** | **Indoor winter design relative humidity** | **Indoor winter design dry-bulb temperature** | **Outdoor winter design dry-bulb temperature** | **Heating temperature difference** |
| **7820’** | .745 | 54 | **30%** | **70°F** | **-15°F** | **85°F** |
| **Latitude** | **Daily Range** | **Indoor summer design relative humidity** | **Summer design gains** | **Indoor summer design dry-bulb temperature** | **Outdoor summer design dry-bulb temperature** | **Cooling temperature difference** |
| **39.64°N** | **H** | **50%** | -33 to -53 | **75°F** | **82°F** | **7°** |

For SI: 1 pound per square foot = 0.0479 kPa, 1 mile per hour = 0.447 m/s.

a. Where weathering requires a higher strength concrete or grade of masonry than necessary to satisfy the structural requirements of this code, the frost line depth strength required for weathering shall govern. The weathering column shall be filled in with weathering index, “negligible”, “moderate” or “severe” for concrete. The grade of masonry units shall be determined from ASTM C34, ASTM C55, ASTM C62, ASTM C73, ASTM C90, ASTM C129, ASTM C145, ASTM C216 or ASTM C652.

b. The jurisdiction shall fill in the frost line depth column with the minimum depth of footing below finish grade.

c. The jurisdiction shall fill in this part of the table to indicate the need for protection depending on whether there has been a history of local subterranean termite damage.

d. The jurisdiction shall fill in this part of the table with the wind speed. Wind exposure category shall be determined on a site-specific basis.

e. The jurisdiction shall fill in this section of the table to establish the design criteria using Table 10A from ACCA Manual J or established criteria determined by the jurisdiction.

f. The jurisdiction shall fill in this part of the table with the seismic design category.

g. The jurisdiction shall fill in this table with: the date of the jurisdictions' entry into the National Flood Insurance Program (date of adoption of the first code or ordinance for management of flood hazard areas); and the title and date of the currently effective Flood Insurance Study or other flood hazard study.

h. Where there has been a history of local damage from the effects of ice damming, the jurisdiction shall fill in this part of the table with “YES.” Otherwise, the jurisdiction shall fill in this part of the table with “NO.”

i. The jurisdiction shall fill in this part of the table with the 100-year return period air freezing index (BF-days) or from the 100-year (99 percent) value on the National Climatic Data Center data table “Air Freezing Index-USA Method (Base 32°F).”

j. The jurisdiction shall fill in this part of the table with the mean annual temperature from the National Climatic Data Center data table “Air Freezing Index-USA Method (Base 32°F).”

k. Where there is local historical data documenting structural damage to buildings due to topographic wind speed-up effects, the jurisdiction shall fill in this part of the table with “YES.” Otherwise, the jurisdiction shall indicate “NO” in this part of the table.

l. Where there is local historical data documenting unusual wind conditions, the jurisdiction shall fill in this part of the table with "YES" and identify any specific requirements. Otherwise, the jurisdiction shall indicate "NO" in this part of the table.
m. The jurisdiction shall indicate the wind-borne debris wind zone(s). Otherwise, the jurisdiction shall indicate "NO" in this part of the table.
n. The jurisdiction shall fill in these sections of the table to establish the design criteria using Table 1a or 1b from ACCA Manual J or established criteria determined by the jurisdiction.
o. The jurisdiction shall fill in this section of the table using the Ground Snow Loads.

xx. **Section 1612.3. Establishment of flood hazard areas**. To establish flood hazard areas, the applicable governing authority shall adopt a flood hazard map and supporting data. The flood hazard map shall include, at a minimum, areas of special flood hazard as identified by the Federal Emergency Management Agency in an engineering report entitled "The Flood Insurance Study for City of Aspen," dated June 4, 1987, as amended or revised with the accompanying Flood Insurance Rate Map (FIRM) and Flood Boundary and Floodway Map (FBFM) and related supporting data along with any revisions thereto. The adopted flood hazard map and supporting data are hereby adopted by reference and declared to be part of this section.

yy. **Section 2111.1 General.** The construction of masonry fireplaces, consisting of concrete or masonry, shall be in accordance with this section, and Section 13.08.070 of the Aspen Municipal Code

zz. **Section 2308.1 General.** The requirements of this section are intended for *conventional light-frame construction*. Other construction methods are permitted to be used, provided that a satisfactory design is submitted showing compliance with other provisions of this code. Interior nonload-bearing partitions, ceilings and curtain walls of *conventional light-frame construction* are not subject to the limitations of Section 2308.2.

aaa. **Section 2407.1 Materials** is amended by deleting the exception.

bbb. **Section 2407.1.2 Guards with structural glass balusters** is deleted.

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

**Exceptions:**

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

2. Where multiple-user facilities are designed for use by all genders, the minimum fixture count shall be calculated 100 percent, based on total occupant load. In such multiple-user facilities, each fixture type shall be in accordance with ICC A117.1 and each urinal that is provided shall be located in a stall.

ddd. **Section 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 toilet and bathing rooms, shall contribute toward the total number of required plumbing fixtures for a building or tenant space, and shall be deducted proportionately from the required gender ratios of Table 2902.1. Single-user toilet and bathing rooms, and family or assisted-use toilet rooms and bathing rooms shall be identified as being available for use by all persons regardless of 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 multiple-user facilities.

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

**Exceptions:**

1. Separate facilities shall not be required for dwelling units and sleeping units.
2. Separate facilities shall not be required in structures or tenant spaces with a total occupant load, including both employees and customers, of 25 or fewer.
3. Separate facilities shall not be required in mercantile occupancies in which the maximum occupant load is 100 or fewer.
4. Separate facilities shall not be required in business occupancies in which the maximum occupant load is 25 or fewer.
5. Separate facilities shall not be required to be designated by sex where single-user toilet rooms are provided in accordance with Section 2902.1.2.
6. Separate facilities shall not be required where rooms having both water closets and lavatory fixtures are designed for use by all genders and privacy is provided for water closets in accordance with Section 2902.1.4 and for urinals in accordance with Section 2902.1.5.1

fff. **Section 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 shall not apply to family or assisted-use toilet rooms.

ggg. **2902.3.7 Doors prohibited.** Where a multiple-user facility or toilet room is designed for use by all genders, the room serving the single-user toilet compartments shall not be provided a door at the egress opening from the room.

hhh. **2903.1.4 Water closet compartment.** Each water closet utilized by the public or employees shall occupy a separate compartment with walls or partitions and a door enclosing the fixtures to ensure privacy. Partitions for water closets located in multiple-user facilities designed for use by all genders shall have fully enclosed floor to ceiling height compartments with full height lockable doors that have hardware to indicate if it is occupied or not. Compartments shall be provided with a local exhaust in accordance with Table 403.3.1.1 of the *International Mechanical Code.* [Exceptions remain]

iii. **Section 2902.1.5.1 Urinal compartment**. Partitions for urinal compartments located in multiple-user facilities designed for use by all genders shall have fully enclosed floor to ceiling height compartments with full height lockable doors that have hardware to indicate if it is occupied or not.

jjj. **Section 3001.6 Permits required.** Elevator permits and inspections are required through the Northwest Colorado Council of Governments (NWCCOG). As required by the division of Oil and Public Safety (OPS), the following codes and standards shall apply to all conveyance equipment and conveyance equipment installations.

ASME A17.1 - 2013 – Safety code for Elevators and Escalators

ASME A18.1 - 2011 – Safety Standard for Platform Lifts and Stairway Chair Lifts

kkk. **3103.1.1 Conformance.** Temporary structures and uses shall conform to the structural strength, fire safety, *means of egress*, accessibility, light, *ventilation* and sanitary requirements of this code as necessary to ensure public health, safety and general welfare. Temporary structures erected for a period of more than 14 days and less than 180 days shall also comply with all the following:

a. Controls in accordance with Section C403.13 of the *International Energy Conservation Code-Commercial Provisions*
b. Appendix RD: REMP of the *International Energy Conservation Code- Residential Provisions*
c. 100% high efficacy lighting

lll. **Chapter 34: Resiliency is added as follows:**

## CHAPTER 34
## RESILIENCY

### SECTION 3401

### GENERAL

**3401.1 Scope.** The provisions of this chapter shall govern the features, equipment, materials and assemblies of new buildings and structures, additions, and exterior alterations.

**3401.2 Purpose.** The purpose of this Chapter is to establish minimum regulations consistent with nationally recognized good practice for safeguarding of life and for property protection. Regulations in this code are intended to mitigate the risk to life and structures from intrusion of fire from wildland fire exposures and fire exposures from adjacent structures and to mitigate structure fires from spreading to wildland fuels. The unrestricted use of property in wildland-urban interface areas is a potential threat to life and property from fire and resulting erosion. Safeguards to prevent the occurrence of fires and to provide adequate fire protection facilities to control the spread of fire in wildland-urban interface areas shall be in accordance with this code.

**3401.3 Definitions.** The following words and terms shall, for the purpose of this chapter, have the meanings shown in this section:

**NONCOMBUSTIBLE.** As applied to building construction material means a material that, in the form in which it is used, is either one of the following:

1. Material of which no part will ignite and burn when subjected to fire. Any material conforming to ASTM E 136 shall be considered noncombustible within the meaning of this section.

2. Material having a structural base of noncombustible material as defined in Item 1 above, with a surfacing material not over 1/8 inch (3.2 mm) thick, which has a flame spread index of 50 or less. Flame spread index as used herein refers to a flame spread index obtained according to tests conducted as specified in ASTM E84 or UL 723.

"Noncombustible" does not apply to surface finish materials. Material required to be noncombustible for reduced clearances to flues, heating appliances or other sources of high temperature shall refer to material

conforming to Item 1. No material shall be classified as noncombustible that is subject to increase in combustibility or flame spread index, beyond the limits herein established, through the effects of age, moisture or other atmospheric condition.

**NONCOMBUSTIBLE ROOF COVERING.** A roof covering consisting of any of the following:

1. Cement shingles or sheets.

2. Exposed concrete slab roof.

3. Ferrous or copper shingles or sheets.

4. Slate shingles.

5. Clay or concrete roofing tile.

6. Approved roof covering of noncombustible material.

**ROOF ASSEMBLY.** A system designed to provide weather protection and resistance to design loads. The system consists of a roof covering and roof deck or a single component serving as both the roof covering and the roof deck. A roof assembly can include an underlayment, thermal barrier, ignition barrier, insulation or a vapor retarder.

**ROOF COVERING.** The covering applied to the roof deck for weather resistance, fire classification or appearance.

**ROOF DECK.** The flat or sloped surface not including its supporting members or vertical supports.

## SECTION 3402

## IGNITION-RESISTANT CONSTRUCTION AND MATERIAL

**3402.1 General.** Buildings shall be of Class 2 ignition-resistant construction in accordance with Sections 3401.2 through 3401.11.

**3402.2 Roof assembly.** Roofs shall have a *roof assembly* that complies with not less than a Class A rating when tested in accordance with ASTM E108 or UL 790, or an *approved noncombustible roof covering*. For *roof assemblies* where the profile allows a space between the *roof covering* and *roof deck*, the space at the eave ends shall be firestopped to preclude entry of flames or embers or have one layer of cap sheet complying with ASTM D3909 installed over the combustible *roof deck*.

**3401.2.1 Roof valleys.** Where provided, valley flashings shall be not less than 0.019-inch (0.48 mm) (No. 26 galvanized sheet gage) corrosion-resistant metal installed over a minimum 36-inch-wide (914 mm) underlayment consisting of one layer of 72-pound (32.4 kg) mineral-surfaced, nonperforated cap sheet complying with ASTM D3909 running the full length of the valley.

**3402.3 Protection of eaves.** Combustible eaves, fascias and soffits shall be enclosed with solid materials with a minimum thickness of 3/4 inch (19 mm). Exposed rafter tails shall not be permitted unless constructed of heavy timber materials.

**3402.4 Gutters and downspouts.** Gutters and downspouts shall be constructed of *noncombustible* material. Gutters shall be provided with an approved means to prevent the accumulation of leaves and debris in the gutter.

**3402.5 Exterior walls.** Exterior walls of buildings or structures shall be constructed with one of the following methods:

1. Materials approved for not less than 1-hour fire-resistance-rated construction on the exterior side.
2. *Approved noncombustible materials.*
3. Heavy timber or log wall construction.
4. Fire-retardant-treated wood on the exterior side. The fire-retardant-treated wood shall be labeled for exterior use and meet the requirements of Section 2303.2 of the *International Building Code.*
5. Ignition-resistant building materials in accordance with Section 3402.12 on the exterior side.

Such material shall extend from the top of the foundation to the underside of the roof sheathing.

**3402.6 Underfloor enclosure.** Buildings or structures shall have underfloor areas enclosed to the ground, with exterior walls in accordance with Section 3402.5.

**Exception:** Complete enclosure shall not be required where the underside of exposed floors and exposed structural columns, beams and supporting walls are protected as required for exterior 1-hour fire-resistance-rated construction or heavy timber construction or fire-retardant-treated wood. The fire-retardant-treated wood shall be labeled for exterior use and meet the requirements of Section 2303.2 of the *International Building Code*.

**3402.7 Appendages and projections.** Unenclosed accessory structures attached to buildings with habitable spaces and projections, such as decks, shall be not less than 1-hour fire-resistance-rated construction, heavy timber construction or constructed of one of the following:

1. *Approved noncombustible* materials.
2. Fire-retardant-treated wood identified for exterior use and meeting the requirements of Section 2303.2 of the *International Building Code.*
3. Ignition-resistant building materials in accordance with Section 3402.12.

**Exception:** Coated materials shall not be used as the walking surface of decks.

**3402.8 Exterior glazing.** Exterior windows, window walls and glazed doors, windows within exterior doors, and skylights shall be tempered glass, multilayered glazed panels, glass block or have a fire protection rating of not less than 20 minutes.

**3402.9 Exterior doors**. Exterior doors shall be approved *noncombustible* construction, solid core wood not less than 1 3/4 inches thick (45 mm) or have a fire protection rating of not less than 20 minutes. Windows within doors and glazed doors shall be in accordance with Section 3402.8.

**Exception:** Vehicle access doors.

**3402.10 Vents.** Attic ventilation openings, foundation or underfloor vents or other ventilation openings in vertical exterior walls and vents through roofs shall not exceed 144 square inches (0.0929 m2) each. Such vents shall be covered with noncombustible corrosion-resistant mesh with openings not to exceed 1/4 inch (6.4 mm) or shall be designed and approved to prevent flame or ember penetration into the structure.

**3402.10.1 Vent locations.** Attic ventilation openings shall not be located in soffits, in eave overhangs, between rafters at eaves, or in other overhang areas. Gable end and dormer vents shall be located not less than 10 feet (3048 mm) from lot lines. Underfloor ventilation openings shall be located as close to grade as practical.

**Exception:** Existing buildings

**3402.11 Detached accessory structures.** Detached accessory structures located less than 50 feet (15 240 mm) from a building containing habitable space shall have exterior walls constructed with materials approved for not less than 1-hour fire-resistance-rated construction, heavy timber, log wall construction, or constructed with *approved noncombustible* materials or fire-retardant-treated wood on the exterior side. The fire-retardant-treated wood shall be labeled for exterior use and meet the requirements of Section 2303.2 of the *International Building Code.*

**3402.11.1 Underfloor areas.** Where the detached accessory structure is located and constructed so that the structure or any portion thereof projects over a descending slope surface greater than 10 percent, the area below the structure shall have underfloor areas enclosed to within 6 inches (152 mm) of the ground, with exterior wall construction in accordance with Section 3402.5 or underfloor protection in accordance with Section 3402.6.

**Exception:** The enclosure shall not be required where the underside of exposed floors and exposed structural columns, beams and supporting walls are protected as required for exterior 1-hour fire-resistance-rated construction or heavy-timber construction or fire-retardant-treated wood on the exterior side. The fire-retardant-treated wood shall be labeled for exterior use and meet the requirements of Section 2303.2 of the *International Building Code*.

**3402.12 Ignition-resistant building material.** Ignition-resistant building materials shall comply with any one of the following:

1. Material shall be tested on all sides with the extended ASTM E84 (UL 723) test or ASTM E2768, except panel products shall be permitted to test only the front and back faces. Panel products shall be tested with a ripped or cut longitudinal gap of 1/8 inch (3.2 mm). Materials that, when tested in accordance with the test procedures set forth in ASTM E84 or UL 723 for a test period of 30 minutes, or with ASTM E2768, comply with the following:
    1.1. Flame spread. Material shall exhibit a *flame spread index* not exceeding 25 and shall not show evidence of progressive combustion following the extended 30-minute test.
    1.2. Flame front. Material shall exhibit a flame front that does not progress more than 10 1/2 feet (3200 mm) beyond the centerline of the burner at any time during the extended 30-minute test.
    1.3. Weathering. Ignition-resistant building materials shall maintain their performance in accordance with this section under conditions of use. Materials shall meet the performance requirements for weathering (including exposure to temperature, moisture and ultraviolet radiation) contained in the following standards, as applicable to the materials and the conditions of use:
        1.3.1. Method A “Test Method for Accelerated Weathering of Fire-Retardant-Treated Wood for Fire Testing” in ASTM D2898, for fire-retardant treated wood, wood-plastic composite and plastic lumber materials.
        1.3.2. ASTM D7032 for wood-plastic composite materials.
        1.3.3. ASTM D6662 for plastic lumber materials.
    1.4. Identification. Materials shall bear identification showing the fire test results.

**Exception:** Materials composed of a combustible core and a noncombustible exterior covering made from either aluminum at a minimum 0.019 inch (0.48 mm) thickness or corrosion-resistant steel at a minimum 0.0149 inch (0.38 mm) thickness shall not be required to be tested with a ripped or cut longitudinal gap.

2. Noncombustible material. Material that complies with the requirements for *noncombustible* materials in Section 202.
3. Fire-retardant-treated wood. Fire-retardant-treated wood identified for exterior use and meeting the requirements of Section 2303.2 of the *International Building Code*.
4. Fire-retardant-treated wood *roof coverings*. *Roof assemblies* containing fire-retardant-treated wood shingles and shakes that comply with the requirements of Section 1505.6 of the *International Building Code* and classified as Class A *roof assemblies* as required in Section 1505.2 of the *International Building Code*.

mmm. **Appendix P: Radon control methods, is added as follows:**

## APPENDIX P
## RADON CONTROL METHODS

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User note:

About this appendix: Appendix P contains provisions that are intended to mitigate the transfer of radon gases from the soil into dwelling units. Radon is a radioactive gas that has been identified as a cancer-causing agent. Radon comes from the natural breakdown of uranium in soil, rock and water.

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### SECTION AF101
### SCOPE

**AF101.1 General**. This appendix contains requirements for new residential construction in the City of Aspen and shall apply to all one- and two-family dwellings, townhouses and duplexes, as well as all R-2 and R-3 dwellings.

### SECTION AF102
### DEFINITIONS

**AF102.1 General**. For the purpose of these requirements, the terms used shall be defined as follows:

**DRAIN TILE LOOP**. A continuous length of drain tile or perforated pipe extending around all or part of the internal or external perimeter of a basement or crawl space footing.

**RADON GAS**. A naturally occurring, chemically inert, radioactive gas that is not detectable by human senses. As a gas, it can move readily through particles of soil and rock and can accumulate under the slabs and foundations of homes where it can easily enter into the living space through construction cracks and openings.

**SOIL-GAS-RETARDER**. A continuous membrane of 6-mil (0.15 mm) polyethylene or other equivalent material used to retard the flow of soil gases into a building.

**SUBMEMBRANE DEPRESSURIZATION SYSTEM**. A system designed to achieve lower submembrane air pressure relative to crawl space air pressure by use of a vent drawing air from beneath the soil-gas-retarder membrane.

**SUBSLAB DEPRESSURIZATION SYSTEM (Active)**. A system designed to achieve lower subslab air pressure relative to indoor air pressure by use of a fan-powered vent drawing air from beneath the slab.

**SUBSLAB DEPRESSURIZATION SYSTEM (Passive)**. A system designed to achieve lower subslab air pressure relative to indoor air pressure by use of a vent pipe routed through the conditioned space of a building and connecting the subslab area with outdoor air, thereby relying on the convective flow of air upward in the vent to draw air from beneath the slab.

## SECTION AF103
## REQUIREMENTS

**AF103.1 General**. The following construction techniques are intended to resist radon entry and prepare the building for post-construction radon mitigation, if necessary (see Figure AF103.1). These techniques are required in areas where designated by the jurisdiction.

**AF103.2 Subfloor preparation**. A layer of gas-permeable material shall be placed under all concrete slabs and other floor systems that directly contact the ground and are within the walls of the living spaces of the building, to facilitate future installation of a subslab depressurization system, if needed. The gas-permeable layer shall consist of one of the following:

1. A uniform layer of clean aggregate, not less than 4 inches (102 mm) thick. The aggregate shall consist of material that will pass through a 2-inch (51 mm) sieve and be retained by a 1/4-inch (6.4 mm) sieve.

2. A uniform layer of sand (native or fill), not less than 4 inches (102 mm) thick, overlain by a layer or strips of geotextile drainage matting designed to allow the lateral flow of soil gases.

3. Other materials, systems or floor designs with demonstrated capability to permit depressurization across the entire subfloor area.

**AF103.3 Soil-gas-retarder.** A minimum 6-mil (0.15 mm) [or 3-mil (0.075 mm) cross-laminated] polyethylene or equivalent flexible sheeting material shall be placed on top of the gas-permeable layer prior to casting the slab or placing the floor assembly to serve as a soil-gas-retarder by bridging any cracks that develop in the slab or floor assembly, and to prevent concrete from entering the void spaces in the aggregate base material. The sheeting shall cover the entire floor area with separate sections of sheeting lapped not less than 12 inches (305 mm). The sheeting shall fit closely around any pipe, wire or other penetrations of the material. Punctures or tears in the material shall be sealed or covered with additional sheeting.

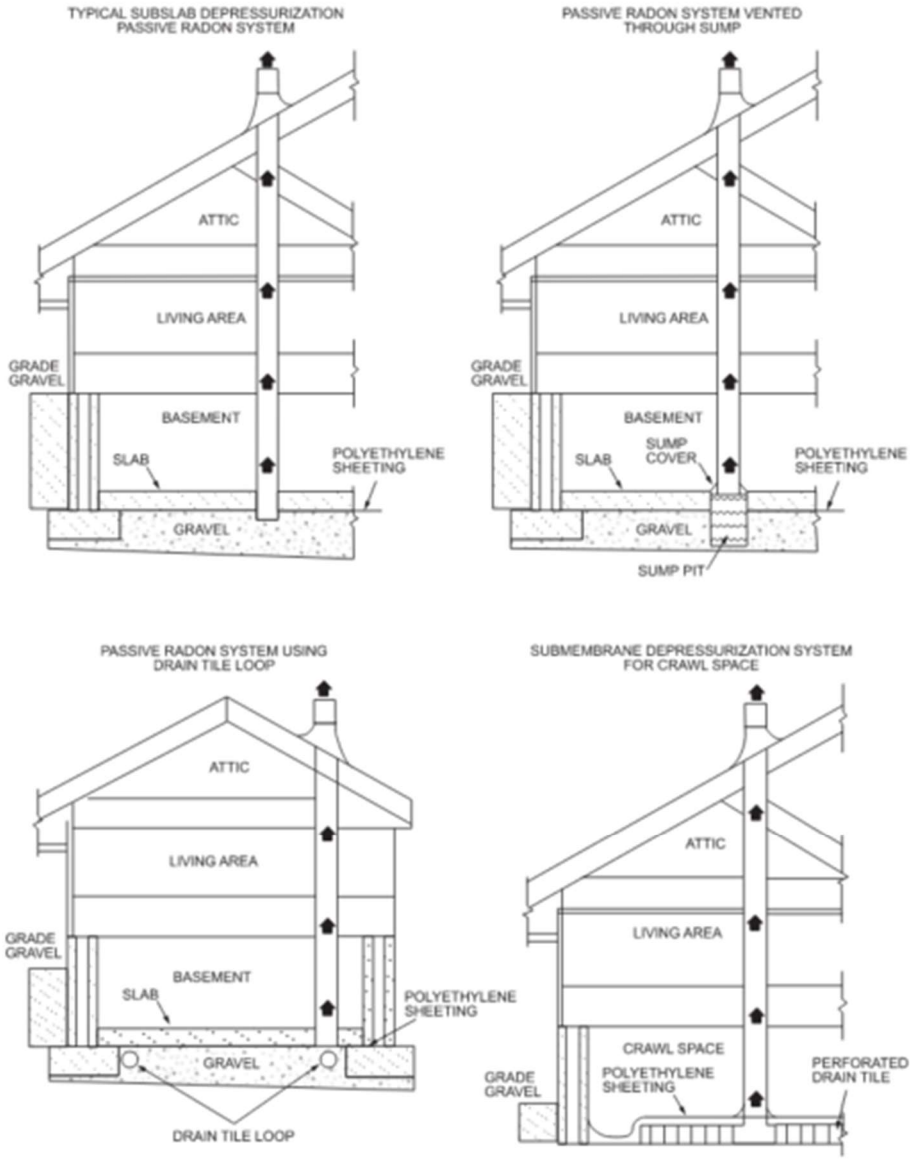


**FIGURE AF103.1**
**RADON-RESISTANT CONSTRUCTION DETAILS FOR FOUR FOUNDATION TYPES**

**AF103.4 Entry routes.** Potential radon entry routes shall be closed in accordance with Sections AF103.4.1 through AF103.4.10.

**AF103.4.1 Floor openings**. Openings around bathtubs, showers, water closets, pipes, wires or other objects that penetrate concrete slabs, or other floor assemblies, shall be filled with a polyurethane caulk or equivalent sealant applied in accordance with the manufacturer's recommendations.

**AF103.4.2 Concrete joints.** Control joints, isolation joints, construction joints, and any other joints in concrete slabs or between slabs and foundation walls shall be sealed with a caulk or sealant. Gaps and joints shall be cleared of loose material and filled with polyurethane caulk or other elastomeric sealant applied in accordance with the manufacturer's recommendations.

**AF103.4.3 Condensate drains**. Condensate drains shall be trapped or routed through nonperforated pipe to daylight.

**AF103.4.4 Sumps**. Sump pits open to soil or serving as the termination point for subslab or exterior drain tile loops shall be covered with a gasketed or otherwise sealed lid. Sumps used as the suction point in a subslab depressurization system shall have a lid designed to accommodate the vent pipe. Sumps used as a floor drain shall have a lid equipped with a trapped inlet.

**AF103.4.5 Foundation walls**. Hollow block masonry foundation walls shall be constructed with either a continuous course of solid masonry, one course of masonry grouted solid, or a solid concrete beam at or above finished ground surface to prevent the passage of air from the interior of the wall into the living space. Where a brick veneer or other masonry ledge is installed, the course immediately below that ledge shall be sealed. Joints, cracks or other openings around all penetrations of both exterior and interior surfaces of masonry block or wood foundation walls below the ground surface shall be filled with polyurethane caulk or equivalent sealant. Penetrations of concrete walls shall be filled.

**AF103.4.6 Dampproofing**. The exterior surfaces of portions of concrete and masonry block walls below the ground surface shall be dampproofed in accordance with Section 1805

**AF103.4.7 Air-handling units**. Air-handling units in crawl spaces shall be sealed to prevent air from being drawn into the unit.

> **Exception:** Units with gasketed seams or units that are otherwise sealed by the manufacturer to prevent leakage.

**AF103.4.8 Ducts**. Ductwork passing through or beneath a slab shall be of seamless material unless the air-handling system is designed to maintain continuous positive pressure within such ducting. Joints in such ductwork shall be sealed to prevent air leakage. Ductwork located in crawl spaces shall have seams and joints sealed by closure systems in accordance with Section 603.9 of the *International Mechanical Code.*

**AF103.4.9 Crawl space floors.** Openings around all penetrations through floors above crawl spaces shall be caulked or otherwise filled to prevent air leakage.

**AF103.4.10 Crawl space access**. Access doors and other openings or penetrations between basements and adjoining crawl spaces shall be closed, gasketed or otherwise filled to prevent air leakage.

**AF103.5 Passive submembrane depressurization system.** In buildings with crawl space foundations, the following components of a passive submembrane depressurization system shall be installed during construction.

> **Exception:** Buildings in which an approved mechanical crawl space ventilation system or other equivalent system is installed.

**AF103.5.1 Ventilation**. Crawl spaces shall be provided with vents to the exterior of the building. The minimum net area of ventilation openings shall comply with Section 1202.4.

**AF103.5.2 Soil-gas-retarder**. The soil in crawl spaces shall be covered with a continuous layer of minimum 6-mil (0.15 mm) polyethylene soil-gas-retarder. The ground cover shall be lapped not less than 12 inches (305 mm) at joints and shall extend to all foundation walls enclosing the crawl space area.

**AF103.5.3 Vent pipe.** A plumbing tee or other approved connection shall be inserted horizontally beneath the sheeting and connected to a 3- or 4-inch-diameter (76 or 102 mm) fitting with a vertical vent pipe installed through the sheeting. The vent pipe shall be extended up through the building floors and terminate not less than 12 inches (305 mm) above the roof in a location not less than 10 feet (3048 mm) away from

any window or other opening into the conditioned spaces of the building that is less than 2 feet (610 mm) below the exhaust point, and 10 feet (3048 mm) from any window or other opening in adjoining or adjacent buildings.

**AF103.6 Passive subslab depressurization system.** In basement or slab-on-grade buildings, the following components of a passive subslab depressurization system shall be installed during construction.

**AF103.6.1 Vent pipe**. A minimum 3-inch-diameter (76 mm) ABS, PVC or equivalent gastight pipe shall be embedded vertically into the subslab aggregate or other permeable material before the slab is cast. A "T" fitting or equivalent method shall be used to ensure that the pipe opening remains within the subslab permeable material. Alternatively, the 3-inch (76 mm) pipe shall be inserted directly into an interior perimeter drain tile loop or through a sealed sump cover where the sump is exposed to the subslab aggregate or connected to it through a drainage system.

The pipe shall be extended up through the building floors and terminate not less than 12 inches (305 mm) above the surface of the roof in a location not less than 10 feet (3048 mm) away from any window or other opening into the conditioned spaces of the building that is less than 2 feet (610 mm) below the exhaust point, and 10 feet (3048 mm) from any window or other opening in adjoining or adjacent buildings.

**AF103.6.2 Multiple vent pipes**. In buildings where interior footings or other barriers separate the subslab aggregate or other gas-permeable material, each area shall be fitted with an individual vent pipe. Vent pipes shall connect to a single vent that terminates above the roof or each individual vent pipe shall terminate separately above the roof.

**AF103.7 Vent pipe drainage.** Components of the radon vent pipe system shall be installed to provide positive drainage to the ground beneath the slab or soil-gas-retarder.

**AF103.8 Vent pipe accessibility**. 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 space 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. The label shall read: "Radon Reduction System."

**AF103.10 Combination foundations.** Combination basement/crawl space or slab-on-grade/crawl space foundations shall have separate radon vent pipes installed in each type of foundation area. Each radon vent pipe shall terminate above the roof or shall be connected to a single vent that terminates above the roof.

**AF103.11 Building depressurization**. Joints in air ducts and plenums in unconditioned spaces shall meet the requirements of Section M1601. Thermal envelope air infiltration requirements shall comply with the *International Energy Conservation Code*. Fireblocking shall meet the requirements in Section 718

**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.

## SECTION AF104
## TESTING

**AF104.1 Testing.** Where radon-resistant construction is required, radon testing shall be as specified in Items 1 through 11:

1. Testing shall be performed after the dwelling passes its air tightness test.

2. Testing shall be performed after the radon control system and HVAC installations are complete. The HVAC system shall be operating during the test. Where the radon system has an installed fan, the dwelling shall be tested with the radon fan operating.

3. Testing shall be performed at the lowest occupied floor level, whether or not that space is finished. Spaces that are physically separated and served by different HVAC systems shall be tested separately.

4. Testing shall not be performed in a closet, hallway, stairway, laundry room, furnace room, bathroom or kitchen.

5. Testing shall be performed with a commercially available radon test kit or testing shall be performed by an approved third party with a continuous radon monitor. Testing with test kits shall include two tests, and the test results shall be averaged. Testing shall be in accordance with this section and the testing laboratory kit manufacturer's instructions.

6. Testing shall be performed with the windows closed. Testing shall be performed with the exterior doors closed, except when being used for entrance or exit. Windows and doors shall be closed for not fewer than 12 hours prior to the testing.

7. Testing shall be performed by the builder, a registered design professional or an approved third party.

8. Testing shall be conducted over a period of not less than 48 hours or not less than the period specified by the testing device manufacturer, whichever is longer.

9. Written radon test results shall be provided by the test lab or testing party. The final written test report with results of less than 4 picocuries per liter (pCi/L) shall be provided to the code official.

10. Where the radon test result is 4 pCi/L or greater, the fan for the radon vent pipe shall be installed as specified in Sections AF103.9 and AF103.12.

11. Where the radon test result is 4 pCi/L or greater, the system shall be modified and retested until the test result is less than 4 pCi/L.

**Exception:** Testing is not required where the occupied space is located above an unenclosed open space.

(Ord. No. 55-1999, §2 [part]; Ord. No. 47-2002, §12; Ord. No. 10-2003, §1, Ord. No. 59-2003, §1; Ord. No. 7, 2007, §1; Ord. No. 11-2009 §3; Ord. No. 31-2011§5; Ord. No. 35-2013§2)

## Chapter 8.32

## INTERNATIONAL EXISTING BUILDING CODE

**Editor's note**—Ord. 5-1999, § 4, repealed former Ch. 8.32, pertaining to the Housing Code and enacted a new Ch. 8.32 as herein set out. Former Ch. 8.32 was derived from Code 1962 §§ 4-8-1, Code 1971 §§ 7-196—7-198 and Ord. Nos. 5-1965, 3-1971, 52-1974 and 12-1996.

### Sec. 8.32.010. Adoption of the International Existing Building Code, 2021 Edition.

Pursuant to the powers and authority conferred by the laws of the State and the Charter of the City, there is hereby adopted and incorporated herein by reference as if fully set forth those regulations contained in the International Existing Building Code, 2021 Edition, and all errata as published by the International Code Council, 4051 West Flossmoor Road, Country Club Hills, Illinois, 60478-5795, except as otherwise provided by amendment or deletion as contained in Section 8.32.020 of this Chapter. At least one (1) copy of the International Existing Building Code shall be available for inspection during regular business hours. (Ord. No. 59-2003, § 6)

### Sec. 8.32.020. Amendments.

The International Existing Building Code, 2021 Edition, as adopted by the City at Section 8.32.010, is hereby amended to provide and read as follows:

a. **Section 101.1 Title.** These regulations shall be known as the *Existing Building Code* of the City of Aspen, hereinafter referred to as "this code."

**b. Section 101.2 Scope is amended by deleting the exception.**

c. **Section 101.2.2 International Residential Code.** All references to the International Residential Code (IRC) within this code shall be deleted and the requirement of this code as it pertains to one- and two-family dwellings and townhouses shall apply.

**d. Section 101.4.2 is amended by deleting the reference to the International Property Maintenance Code**

**e. Section 103.1 Creation of agency.** The Department of Building Safety is hereby created and the official in charge thereof shall be known as the building official. The function of the agency shall be the implementation, administration and enforcement of the provisions of this code.

**f. Section 108.1 Payment of fees**. is hereby amended to read as follows: A permit shall not be valid until the fees prescribed by Section 2.12.100 of the Aspen Municipal Code are paid in full.

**g. Section 108.6 Refunds.** The building official shall authorize the refunding of fees as follows.

a. The full amount of any fee paid hereunder which was erroneously paid or collected.

b. Not more than 80 percent of the permit fee paid when no work has been done under a permit issued in accordance with this code.

c. Not more than 80 percent of the plan review fee paid when an application for a permit for which a plan review fee has been paid is withdrawn or canceled before any plan review effort has been expended.

The building official shall not authorize the refunding of any fee paid, except upon written application filed by the original permittee not later than 180 days after the date of fee payment.

**h.** **Section 112.1 General.** Appeals of orders, decisions or determinations made by the building official shall be in accordance with Section 8.08 of the Aspen Municipal Code.

i. **Section 113.1 Unlawful acts.** It shall be unlawful for any person, including an owner, occupant or builder, to erect, construct, enlarge, alter, repair, move, improve, remove, convert or demolish, equip, use, occupy or maintain any building or structure in the City or cause the same to be done, contrary to or in violation of any of the provisions of this Code.

j. **Section 113.4 Violation penalties.** A violation of any of the provisions of the International Existing Building Code shall constitute a misdemeanor, punishable upon conviction by a fine, imprisonment, or both a fine and improvement, as set forth in Section 1.04.080 of the Aspen Municipal Code. A separate offense shall be deemed committed on each day or portion thereof that the violation of any of the provisions of this Code occurs or continues unabated after the time limit set for abatement of the violation.

k. **Section 116.4 Failure to comply.** Any person who shall continue any work on the system after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be liable for a fine of not less than double the permit fees for each violation.

l. **Section 302.2 Additional codes** is amended by deleting the reference to the International Property Maintenance Code and the International Private Sewage Disposal Code

m. **Section 505.2 Window openings control devices on replacement windows** is amended by deleting Item 3.2**Section 702.4 Window opening control devices on replacement windows.** Is amended by deleting Item 3.2

n. **Section 708.1 Minimum requirements.** Level 1 *alterations* to *existing buildings* shall comply with chapter 5 of the *International Energy Conservation Code*.

**o.** **801.4 Compliance, Exception 7 is added as follows:**

> **Exception 7.** Habitable spaces created in existing basements of R-3 occupancies shall have a ceiling height of not less than 6 feet, 8 inches (2032) except that the ceiling height at obstructions shall be not less than 6 feet 4 inches (1930 mm) from the basement floor. Existing ceiling heights in nonhabitable spaces in basements shall not be reduced.

p. **804.10.1 Minimum requirement.** Every required exit stairway that is part of the means of egress for any work area and that has three or more risers and is not provided with not fewer than one handrail, or in which the existing handrails are judged to be in danger of collapsing, shall be provided with handrails for the full length of the stairway on not fewer than one side. Exit stairways with a required egress width of more than 66 inches (1676 mm) shall have handrails on both sides.

> **Exception.** R-3 occupancies shall comply with Section 804.10.1 on flights of stairs with four or more risers.

q. **804.11 Stairs.** Stairs in Group R-3 occupancies shall be permitted to comply with Sections 804.11.1 through 804.11.3.

> **804.11.1 Stair width.** Existing *basement* stairs and *handrails* not otherwise being altered or modified shall be permitted to maintain their current clear width at, above and below existing *handrails*.

**804.11.2 Stair headroom.** Headroom height on existing *basement* stairs being altered or modified shall not be reduced below the existing *stairway* finished headroom. Existing *basement* stairs not otherwise being altered shall be permitted to maintain the current finished headroom.

**804.11.3 Stair landing.** Landings serving existing *basement* stairs being altered or modified shall not be reduced below the existing *stairway* landing depth and width. Existing *basement* stairs not otherwise being altered shall be permitted to maintain the current landing depth and width.

r. **Section 809.1 Minimum requirements.** Level 2 *alterations* to *existing buildings* shall comply with Chapter 5 of the *International Energy Conservation Code.*

s. **Section 904.1.4 Groups A, B, E, F-1, H, I-1, I-3, I-4, M, R-1, R-2, R-3, R-4, S-1 and S-2**. In *buildings* with occupancies in Groups A, B, E, F-1, H, I-1, I-3, I-4, M, R-1, R-2, R-3, R-4, S-1 and S-2 *work areas* shall be provided with automatic sprinkler protection in accordance with the *International Building Code* as applicable to new construction.

*t.* **Section 907.1 Minimum requirements.** Level 3 *alterations* to *existing buildings* shall comply with Chapter 5 of the *International Energy Conservation Code.*

**u. Section 1011.2.1 Fire sprinkler system, Exceptions 1, 2 and 3 are deleted.**

v. **Section 1104.1 Minimum requirements.** *Additions* to *existing buildings* shall comply with Chapter 5 of the *International Energy Conservation Code.*

w. **Section 1301.3.2 Compliance with other codes** is amended by deleting the reference to the International Property Maintenance Code.

x. **Section 1401.2 Conformance** is amended by deleting the reference to the International Property Maintenance Code.

(Ord. No. 59-2003, § 6)

## Chapter 8.28

## INTERNATIONAL FUEL GAS CODE[1]

[1] **Editor's note**—Ord. No. 7-1971, adopted March 8, 1971, repealed former Art. VII, §§ 7-179—7-182, pertaining to the Gas Fitting Code. Said former Art. VII has been reserved to maintain Code format and for future legislation.

### Sec. 8.28.010. Adoption of the 2021 Edition of the International Fuel Gas Code.

Pursuant to the powers and authority conferred by the laws of the State and the Charter of the City, there is hereby adopted and incorporated herein by reference as if fully set forth those regulations contained in the Colorado Fuel Gas Code (as required by C.R.S. Title 12 Article 155 and the Colorado State Plumbing Board) and the International Fuel Gas Code, 2021 Edition, and all errata as published by the International Code Council, 4051 West Flossmoor Road, Country Club Hills, Illinois, 60478-5795, except as otherwise provided by amendment or deletion as contained in Section 8.36.020 of this Chapter. At least one (1) copy of the International Fuel Gas Code shall be available for inspection during regular business hours.

**Sec. 8.28.020. Amendments**

The International Fuel Gas Code, 2021 Edition, as adopted by the City of Aspen at Section 8.20.010 is hereby amended to read as follows:

a. **Section 101.1 Title**. These regulations shall be known as the Fuel Gas Code of City of Aspen, hereinafter referred to as this code.

b. **Section 101.2 Scope is amended by deleting the exception.**

c. **Section 103.1 Creation of agency.** The Department of Building Safety is hereby created and the official in charge thereof shall be known as the *building official.* The function of the agency shall be the implementation, administration and enforcement of the provisions of this code.

d. **Section 109.1 Payment of fees.** A permit shall not be valid until the fees prescribed by Section 2.12.100 of the Aspen Municipal Code are paid in full.

e. **Section 109.6 Refunds.** The *building official* shall authorize the refunding of fees as follows.

    1. The full amount of any fee paid hereunder which was erroneously paid or collected.

    2. Not more than 80 percent of the permit fee is paid when no work has been done under a permit issued in accordance with this code.

    3. Not more than 80 percent of the plan review fee paid when an application for a permit for which a plan review fee has been paid is withdrawn or canceled before any plan review effort has been expended.

    The *building official* shall not authorize the refunding of any fee paid, except upon written application filed by the original permittee not later than 180 days after the date of fee payment.

f. **102.5 Application of residential code.** All references to the International Residential Code (IRC) within this code shall be deleted and the requirement of this code as it pertains to one- and two-family dwellings and townhouses shall apply

g. **Section 113.1 General.** Appeals of orders, decisions or determinations made by the building official shall be in accordance with Section 8.08 of the Aspen Municipal Code.

h. **Section 115.1 Unlawful acts.** It shall be unlawful for any person, including an owner, occupant or builder, to erect, construct, enlarge, alter, repair, move, improve, remove, convert or demolish, equip, use, occupy or maintain any building or structure in the City or cause the same to be done, contrary to or in violation of any of the provisions of this Code.

i. **Section 115.4 Violation penalties.** A violation of any of the provisions of the International Fuel Gas Code shall constitute a misdemeanor, punishable upon conviction by a fine, imprisonment, or both a fine and improvement, as set forth in Section 1.04.080 of the Aspen Municipal Code. A separate offense shall be deemed committed on each day or portion thereof that the violation of any of the provisions of this Code occurs or continues unabated after the time limit set for abatement of the violation.

j. **Section 116.4 Failure to comply.** Any person who shall continue any work on the system after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be liable for a fine of not less than double the permit fees for each violation.

k. **Section 301.2.1 Appliance Controls.** Fuel burning appliances used for purposes other than space conditioning, water heating, snowmelt, pool and spa heaters, and the main cooking sources shall be controlled by an occupancy sensing device or a timer switch, so that the appliance shuts off when occupants are not present or within an hour of being turned on.

**Exception.** A manual override switch may be provided that, when initiated, shall permit the controlled appliance to remain on for not more than 2 hours.

l. Table 503.8: Table 503.8 row A is replaced as follows:

| | | |
|---|---|---|
| A | Clearance above finished grade level, veranda, porch, deck, or balcony | 36 inches |

(All other values within the table are unchanged.)"

m. **Section 501.8 Appliances not required to be vented** is amended by deleting items 8 and 10.

n. **Section 603.1 General.** Log lighters are prohibited

*o.* **Section 604.3 Direct vent.** Vented gas *fireplaces* shall be *direct-vent,* sealed-combustion, *category III or IV appliances.*

*p.* **Section 605.2 Direct vent.** Vented gas *fireplace* heaters shall be *direct-vent*, sealed-combustion, *category III or IV appliances.*

*q.* **Section 621.1 General**. Unvented room heaters are prohibited.

(Ord. No. 59-2003 § 5; Ord. No. 31-2011§7)

## Chapter 8.36

## INTERNATIONAL PLUMBING CODE

**Editor's note**—Ord. No. 55-1999, § 5, repealed former Ch. 8.36, pertaining to the Plumbing Code and enacted a new Ch. 8.36 as herein set out. Former Ch. 8.36 was derived from Code 1962 §§ 4-3-1—4-3-5, Code 1971 §§ 7-213—7-218 and Ord. Nos. 1969-1, 9-1988, 58-1990, 53-1994, 53-1995, 12-1996 and 43-1996.

### Sec. 8.36.010. Adoption of the International Plumbing Code, 2021 Edition.

Pursuant to the powers and authority conferred by the laws of the State and the Charter of the City, there is hereby adopted and incorporated herein by reference as if fully set forth those regulations contained in the Colorado Plumbing Code (as required by C.R.S. Title 12 Article 155 and the Colorado State Plumbing Board) and the International Plumbing Code, 2021 Edition, and all errata as published by the International Code Council, 4051 West Flossmoor Road, Country Club Hills, Illinois, 60478-5795, except as otherwise provided by amendment or deletion as contained in Section 8.36.020 of this Chapter. At least one (1) copy of the International Plumbing Code shall be available for inspection during regular business hours.

### Sec. 8.36.020. Amendments.

The International Plumbing Code, 2021 Edition, as adopted by the City at Section 8.36.010 above, is hereby amended to provide and read as follows:

a. All references to the International Residential Code (IRC) within this code shall be deleted and the requirement of this code as it pertains to one- and two-family dwellings and townhouses shall apply

b. **Section 101.1 Title.** These regulations shall be known as the International Plumbing Code of City of Aspen hereinafter referred to as "this code."

c. **Section 101.2 Scope is amended by deleting the exception.**

d. **Section 102.8 Referenced codes and standards is amended by adding the exception as follows:**

**Exception.** All references to the International Residential Code (IRC) within this code shall be deleted and the requirement of this code as it pertains to one- and two-family dwellings and townhouses shall apply.

e. **Section 103.1 Creation of agency.** The Department of Building Safety is hereby created and the official in charge thereof shall be known as the *building official*. The function of the agency shall be the implementation, administration and enforcement of this code.

f. **Section 109.1 Payment of fees**. A permit shall not be valid until the fees prescribed by Section 2.12.100 of the Aspen Municipal Code are paid in full.

g. **Section 109.5 Refunds**. The *building official* shall authorize the refunding of fees as follows:

   a. The full amount of any fee paid hereunder that was erroneously paid or collected.

   b. Not more than 80 percent of the permit fee paid when no work has been done under a permit issued in accordance with this code.

   c. Not more than 80 percent of the plan review fee paid when an application for a permit for which a plan review fee has been paid is withdrawn or canceled before any plan review effort has been expended.

The *building official* shall not authorize the refunding of any fee paid except upon written application filed by the original permittee not later than 180 days after the date of fee payment.

h. **Section 113.4 Failure to comply.** Any person who shall continue any work after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be subject to a fine of not less than double the permit fee for each violation.

i. **Section 114.1 General.** Appeals or orders, decisions or determinations made by the building official shall be in accordance with Chapter 8.08 of the Aspen Municipal Code.

j. **Section 115.1 Unlawful acts**. It shall be unlawful for any person, including an owner, occupant or builder, to erect, construct, enlarge, alter, repair, move, improve, remove, convert or demolish, equip, use, occupy or maintain any building or structure in the City or cause the same to be done, contrary to or in violation of any of the provisions of this Code.

k. **Section 115.4 Violation penalties.** A violation of any of the provisions of the International Plumbing Code shall constitute a misdemeanor, punishable upon conviction by a fine, imprisonment, or both a fine and improvement, as set forth in Section 1.04.080 of the Aspen Municipal Code. A separate offense shall be deemed committed on each day or portion thereof that the violation of any of the provisions of this Code occurs or continues unabated after the time limit set for abatement of the violation.

l. **Section 305.4.1 Sewer Depth.** Building sewers that connect to private sewage disposal systems shall be a minimum of 48 inches below finished grade at the point of septic tank connection. Building sewers shall be a minimum of 48 inches below grade.

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

**Exceptions:**

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

2. Where multiple-user facilities are designed for use by all genders, the minimum fixture count shall be calculated 100 percent, based on total occupant load. In such multiple-user facilities, each fixture type shall be in accordance with ICC A117.1 and each urinal that is provided shall be located in a stall

n. **Section 403.1.2 Single-user toilet and bathing room fixtures.** The plumbing fixtures located in single-user toilet and bathing rooms, including family or assisted-use toilet and bathing rooms, shall contribute toward the total number of required plumbing fixtures for a building or tenant space, and shall be deducted proportionately from the required gender ratios of Table 403.1. Single-user toilet and bathing rooms, and family or assisted-use toilet rooms and bathing rooms shall be identified as being available for use by all persons regardless of 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 multiple-user facilities.

o. **Section 403.2 Separate Facilities.** Where plumbing fixtures are required, separate facilities shall be provided for each sex.

**Exceptions:**

1. Separate facilities shall not be required for dwelling units and sleeping units.

2. Separate facilities shall not be required in structures or tenant spaces with a total occupant load, including both employees and customers, of 25 or fewer.

3. Separate facilities shall not be required in mercantile occupancies in which the maximum occupant load is 100 or fewer.

4. Separate facilities shall not be required in business occupancies in which the maximum occupant load is 25 or fewer.

5. Separate facilities shall not be required to be designated by sex where single-user toilet rooms are provided in accordance with Section 403.1.2.

p. 6. Separate facilities shall not be required where rooms having both water closets and lavatory fixtures are designed for use by all genders and privacy is provided for water closets in accordance with Section 405.3.4 and for urinals in accordance with Section 405.3.5.1. **Section 403.3.6 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 toilet rooms.

q. **Section 403.3.7 Doors prohibited.** Where a multiple-user facility or toilet room is designed for use by all genders, the room serving the single-user toilet compartments shall not be provided a door at the egress opening from the room.

r. **405.3.4 Water closet compartment.** Each water closet utilized by the public or employees shall occupy a separate compartment with walls or partitions and a door enclosing the fixtures to ensure privacy. Partitions for water closets located in multiple-user facilities designed for use by all genders shall have fully enclosed floor to ceiling height compartments with full height lockable doors that have hardware to indicate if it is occupied or not. Compartments shall be provided with a local exhaust in accordance with Table 403.3.1.1 of the *International Mechanical Code*. [Exceptions remain]

s. **Section 405.3.5.1 Urinal compartment**. Partitions for urinal compartments located in multiple-user facilities designed for use by all genders shall have fully enclosed floor to ceiling height compartments with full height lockable doors that have hardware to indicate if it is occupied or not.

t. **Section 424.2 Substitution for water closets.** In each bathroom or toilet room, urinals shall not be substituted for more than 67 percent of the required water closets for males according to Table 403.1 in assembly and educational occupancies. Urinals shall not be substituted for more than 50 percent of the required water closets for males according to Table 403.1 in all other occupancies.

u. **Section 606.1 Location of Full-open valves is amended by replacing item 2 and deleting item 2.1 as follows:**

**2.** On the water distribution supply pipe at the entrance into the structure and at the entrance to each dwelling unit and tenant space.

v. **Section 702.3.1 Vitrified clay pipe.** Vitrified clay pipe shall not be permitted as a building sewer pipe.

w. **Section 903.1.1 Roof extension unprotected.** Open vent pipes that extend through a roof shall be terminated not less than 12 inches above the roof.

x. **Section 1101.2 Disposal.** Rainwater from roofs and storm water from paved areas, yards, courts and courtyards shall drain to an *approved* place of disposal and shall not discharge over a walking surface.

For one- and two-family dwellings, and where *approved*, storm water is permitted to discharge onto flat areas, such as streets or lawns, provided that the storm water flows away from the building.

y. **Section 1108.2 Separate systems required.** Secondary roof drain systems shall have the end point of discharge separate from the primary system. Discharge shall be above grade, in a location that would normally be observed by the building occupants or maintenance personnel. Discharge shall not be located over an egress path.

**(Ord. No. 55-1999, § 5(part); Ord. No. 47-2002 § 13, 2002; Ord. No. 59-2003, § 7; Ord. No. 31-2011§8)Chapter 8.44INTERNATIONAL MECHANICAL CODE**

**Editor's note—**Ord. No. 55-1999, § 6, repealed former Ch. 8.44, pertaining to the Mechanical Code and enacted a new Ch. 8.44 as herein set out. Former Ch. 8.44 was derived from Code 1971 §§ 7-245—7-247 and Ord. Nos. 32-1981, 57-1990, 53-1994, 53-1995, 12-1996 and 43-1996.

**Sec. 8.44.010. Adoption of the 2021 Edition of the International Mechanical Code.**

Pursuant to the powers and authority conferred by the laws of the State and the Charter of the City, there is hereby adopted and incorporated herein by reference as if fully set forth those regulations contained in the International Mechanical Code, 2021 Edition, and all errata as published by the International Code Council, 4051 West Flossmoor Road, Country Club Hills, Illinois, 60478-5795, except as otherwise provided by amendment or deletion as contained in Section 8.44.020 of this Chapter. At least one (1) copy of the International Mechanical Code shall be available for inspection during regular business hours.

**Sec. 8.44.020. Amendments.**

The International Mechanical Code, 2021 Edition, as adopted by the City at Section 8.44.010, is hereby amended to provide and read as follows:

a. All references to the International Residential Code (IRC) within this code shall be deleted and the requirement of this code as it pertains to one- and two-family dwellings and townhouses shall apply

b. **Section 101.1 Title**. These regulations shall be known as the Mechanical Code of the City of Aspen, hereinafter referred to as "this code."

c. **Section 101.2 Scope is amended by deleting the exception**

d. **Section 103.1 Creation of agency.** The Department of Building Safety is hereby created and the official in charge thereof shall be known as the building official. The function of the agency shall be the implementation, administration and enforcement of the provisions of this code.

e. **Section 109.1 Payment of fees.** A permit shall not be valid until the fees prescribed by Section 2.12.100 of the Aspen Municipal Code are paid in full.

f. **Section 109.6 Refunds.** The *building official* shall authorize the refunding of fees as follows.

1. The full amount of any fee paid hereunder which was erroneously paid or collected.

2. Not more than 80 percent of the permit fee paid when no work has been done under a permit issued in accordance with this code.

3. Not more than 80 percent of the plan review fee paid when an application for a permit for which a plan review fee has been paid is withdrawn or canceled before any plan review effort has been expended.

4. The *building official* shall not authorize the refunding of any fee paid, except upon written application filed by the original permittee not later than 180 days after the date of fee payment.

g. **Section 113.4 Failure to comply.** Any person who shall continue any work after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be subject to a fine of not less than double the permit fee for each violation

h. **Section 114.1 General.** Appeals of orders, decisions or determinations made by the building official shall be in accordance with Chapter 8.08 of the Aspen Municipal Code.

i. **Section 114.2 Limitations on authority is deleted.**

j. **Section 114.3 Qualifications is deleted.**

k. **Section 114.4 Administration is deleted.**

l. **Section 115.1 Unlawful acts.** It shall be unlawful for any person, including an owner, occupant or builder, to erect, construct, enlarge, alter, repair, move, improve, remove, convert or demolish, equip, use, occupy or maintain any building or structure in the City or cause the same to be done, contrary to or in violation of any of the provisions of this Code.

m. **Section 115.4 Violation penalties.** A violation of any of the provisions of the International Mechanical Code shall constitute a misdemeanor, punishable upon conviction by a fine, imprisonment, or both a fine and improvement, as set forth in Section 1.04.080 of the Aspen Municipal Code. A separate offense shall be deemed committed on each day or portion thereof that the violation of any of the provisions of this Code occurs or continues unabated after the time limit set for abatement of the violation.

n. **Section 202 Definitions is amended by replacing the following definitions:**

**LOWER FLAMMABLE LIMIT (REFRIGERANT) (LFL).** The minimum concentration of refrigerant that is at which a flame is capable of propagating a flame through a homogeneous mixture of refrigerant and air under specific test conditions in accordance with ASHRAE 34.

**REFRIGERANT.** The fluid used for heat transfer in a refrigeration system that undergoes a change of state to absorb heat.

**REFRIGERATION SYSTEM**. A combination of interconnected parts in which a refrigerant is enclosed and is circulated for the purpose of extracting then rejecting heat.

o. **Section 202 Definitions is amended by adding the following definitions:**

**STEAM BATH EQUIPMENT**. Includes steam bath generators, combination room and steam generator systems, and steam bath cabinets intended for high-humidity concentrated heating at elevated temperatures for personal bathing.

p. **Section 306.5 Equipment and appliances on roofs or elevated structures is amended by replacing item 1 as follows:**

1. The side railing shall extend above the parapet or roof edge not less than 42 inches (1067 mm).

q. **Section 401.2 Ventilation required.** Every occupied space shall be ventilated by natural means in accordance with Section 402 or by mechanical means in accordance with Section 403. Dwelling units

shall be ventilated by mechanical means in accordance with Section 403. Ambulatory care facilities and Group I-2 occupancies shall be ventilated by mechanical means in accordance with Section 407.

r. **Section 401.4 is amended by adding item 5 as follow:**

**5.** The bottom of intake openings shall be located not less than 36 inches (914 mm) above finished grade or finished surface.

s. **Section 403.1 Ventilation system.** Mechanical ventilation shall be provided by a method of supply air and return or exhaust air. The amount of supply air shall be approximately equal to the amount of return and exhaust air. The system shall not be prohibited from producing negative or positive pressure. The system to convey ventilation air shall be designed and installed in accordance with Chapter 6.

t. **Section 403.3.2.1 Outdoor air for dwelling units.** Balanced ventilation systems shall be installed to provide outdoor air for each dwelling unit. A ducted system shall supply air directly to each bedroom and to one or more of the following rooms:

1. Living room

2. Dining room

3. Kitchen

The outdoor air balanced ventilation system shall be designed to provide the required rate of outdoor air continuously during the period that the building is occupied. The minimum continuous outdoor airflow rate shall be determined in accordance with Equation 4-9.

$$Qr = ((0.01 \times Afloor) + [7.5 \times (Nbr + 1)]) \times Sc \qquad \text{Equation 4-9}$$

Where:

Qr = ventilation flow rate, cubic feet per minute (cfm)
Afloor = Conditioned floor area in square feet (ft2)
Nbr = number of bedrooms, not less than one
Sc = 0.70 (system coefficient for balanced systems)

a. **Section 501.6 Common ducts.** The discharge from exhaust fans serving separate dwelling or sleeping units shall not be connected to a common duct or shaft, except where the common duct or shaft is maintained at a negative pressure.

b. **Section 505.1 General.** Domestic cooking exhaust *equipment* shall comply with the requirements of this section and the Manufacturer's venting recommendations of the cooking appliance it serves.

c. **Section 701.3** Combustion air ducts. Combustion air ducts shall terminate to the outside a minimum of 36 inches (914 mm) above finished grade.

d. **Section 804.3.4 Horizontal terminations is amended by replacing item 6 as follows:**

6. The bottom of the vent termination shall be located not less than 36 inches (914 mm) above finished grade.

e. **Section 901.5 Fireplaces allowed**. The number of fireplaces allowed shall be determined by Section 13.08.070 of the Aspen Municipal Code.

f. **Section 903.3 gas log heaters.** Gas log heaters are prohibited.

g. **Section 917.2.1 Exhaust required.** Combustion equipment for domestic cooking appliances in dwelling units shall be provided an exhaust system in accordance with Section 505 and sized to provide a minimum of 150 CFM of intermittent exhaust.

Exception. An exhaust system shall not be required for existing cooking appliances.

a. **SECTION 931 STEAM BATH EQUIPMENT is added as follows:**

**931.1 General.** Steam bath equipment shall be listed and labeled in accordance with UL 499 and shall be installed in accordance with their listing and the manufacturer's instructions.

b. **Section 1203.16 Stainless steel pipe.** Joints between stainless steel pipe or fittings shall be mechanical joints that are made with an approved elastomeric seal, or shall be threaded or welded joints conforming to Section 1203.3.6

c. **Section 1203.17 Stainless steel tubing.** Joints between stainless steel tubing or fittings shall be mechanical or welded joints conforming to Section 1203.3.6

(Ord. No. 55-1999, § 6 [part]; Ord. No. 47-2002, § 14; Ord. No. 59-2003, § 8; Ord. No. 31-2011§9)

Chapter 8.50

## INTERNATIONAL FIRE CODE

**Sec. 8.50.010. As adopted by the Aspen Fire Protection District Resolution 2022-09-01 Series of 2022, including amendments as provided in Section 8.50.020**

**Sec. 8.50.020. Amendments.**

The International Fire Code, 2021 Edition, as adopted by the Aspen Fire Protection District in Section 8.50.010 above, is hereby amended to provide and read as follows:

**Section 101.2.2 International Residential Code is added as follows:**

**101.2.2 International Residential Code.** All references to the International Residential Code (IRC) within this code shall be deleted and the requirement of this code as it pertains to one- and two-family dwellings and townhouses shall apply

**Section 903.2 Where required is amended by adding the following paragraph and Exception 2.**

Any structures 3,000 square feet or greater as defined by fire area, all Group R occupancies, and any location that is difficult to access, as determined by the fire code official, shall be equipped with an approved automatic sprinkler system including the installation of a fire department connection. A minimum of a three-sprinkler head hydraulic calculation shall be submitted for approval by the fire code

official, and the official may require a larger number of sprinkler heads depending upon the structural design submitted. Fire separations shall not constitute separate buildings for this purpose, including all R-3 occupancies.

**Section 915 Carbon Monoxide Detection.** This section is deleted in its entirety and is replaced with Section 8.15 of the Aspen Code.

**Section 1207.11.3. Location, Item 4 is replaced as follows:**

4. Enclosed utility closets, basements, storage or utility spaces within dwelling unit with finished or noncombustible walls and ceilings. Wall and ceilings of unfinished wood-framed construction shall be provided with not less than 5/8-inch (15.9 mm) Type X gypsum wallboard.

Add: ESS shall not be installed in sleeping rooms, or closets or spaces opening directly into sleeping rooms.

**Section 1207.11.11 Documentation and labeling. The following information shall be provided:**

1. A copy of the manufacturer's installation, operation, and decommissioning instructions shall be provided to the owner or placed in a conspicuous location near the ESS equipment.
2. A label on the installed system containing the contact information for the qualified maintenance and service providers.