ORDINANCE NO. 213, 2025
OF THE COUNCIL OF THE CITY OF FORT COLLINS
AMENDING CHAPTER 5, ARTICLE II, DIVISION 2 OF THE CODE OF THE CITY OF FORT COLLINS FOR THE PURPOSE OF REPEALING THE 2021 INTERNATIONAL RESIDENTIAL CODE AND ADOPTING THE 2024 INTERNATIONAL RESIDENTIAL CODE, WITH AMENDMENTS

A. Since 1924, the City has reviewed, amended and adopted the latest nationally recognized building standards available for the times.

B. Upon recommendation of City staff, the City Council has determined that it is in the best interests of the City to align eleven interconnected basic construction codes under one publication year.

C. The eleven interconnected basic construction codes are the *International Building Code, International Residential Code, International Mechanical Code, International Fuel Gas Code, International Energy Conservation Code, International Property Maintenance Code*, *International Swimming Pool and Spa Code, International Existing Building Code, International Plumbing Code*, *International Fire Code*, and the *International Wildland-Urban Interface Code* to the extent adopted by the *Colorado Wildfire Resiliency Code*.

D. The City Council has determined that the 2024 publication year of these interconnected basic construction codes should be adopted and that any counterpart *International* codes previously adopted should be repealed, both to align the publication years of the codes and because the 2024 publications contain improvements in construction code regulation.

E. City staff has conducted a significant public outreach program, working with the regulated construction industry and building professionals.

F. The adoption of the interconnected basic construction codes has been presented to community groups and feedback has been received from the Water Commission, Energy Board, Commission on Disability, Natural Resource Advisory Board, Poudre Fire Authority Board, Building Review Commission, Affordable Housing Board, and Air Quality Advisory Board.

G. The City Council has determined that it is in the best interest of the health, safety and welfare of the City and its residents that the *2024 International Residential Code* be adopted, with local amendments as set forth in this Ordinance.

H. Pursuant to the City Charter, Article II, Section 7, City Council may enact any ordinance which adopts a code by reference in whole or in part provided that before adoption of such ordinance the Council hold a public hearing thereon and that notice of the hearing shall be published twice in the newspaper of general circulation published in the City, with one of such publications occurring at least eight (8) days preceding the

hearing and the other publication occurring at least fifteen (15) days preceding the hearing.

I. In compliance with City Charter, Article II, Section 7, the City Clerk published in the Fort Collins *Coloradoan* such notice of hearing concerning adoption of the 2024 International Codes on November 16, 2025, and November 23, 2025.

J. Attached as Exhibit A and incorporated herein by reference is the Notice of Public Hearing dated November 16, 2025, that was so published and which the Council finds meets the requirements of Article II, Section 7 of the City Charter.

In light of the foregoing recitals, which the Council makes and adopts as determinations and findings, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF FORT COLLINS as follows:

Section 1. The City Council hereby repeals the 2021 *International Residential Code* ("IRC") and adopts the 2024 IRC as amended by this Ordinance.

Section 2. Section 5-26(c) of the Code of the City of Fort Collins is hereby amended to read as follows:

> (c) Pursuant to the power and authority conferred on the City Council by Colorado Revised Statutes Section 31-16-202 and Article II, Section 7 of the Charter, the City Council has adopted the *2024 International Residential Code* published by the International Code Council, second printing (October 2024), as amended by the City, which shall have the same force and effect as though set forth in full herein. The subject matter of the *International Residential Code* adopted herein includes comprehensive provisions and standards for the protection of the public health and safety by prescribing regulations governing the construction, alteration, enlargement, relocation, replacement, repair, equipment, use and occupancy, location, removal and demolition of, and its applicability is hereby limited to, individual nonattached one- and two-family dwellings and multiple single-family dwellings (townhouses) not more than three (3) stories above grade in height with a separate means of egress, and their accessory structures. As provided in the *2024 International Residential Code*, Appendices are not adopted except as expressly set forth in Section 5-30.

Section 3. Section 5-30 of the Code of the City of Fort Collins is hereby repealed and reenacted to read as follows:

Sec. 5-30. Amendments and Deletions to the 2024 International Residential Code.

The *2024 International Residential Code* adopted in § 5-26(c) is amended to read as follows:

1. **Section R101.1 Title** is amended to read as follows:

R101.1 Title. These provisions shall be known as the *Residential Code for One- and Two-family Dwellings* of the City of Fort Collins, and shall be cited as such and will be referred to herein as "this code."

2. **Section R101.2 Scope** is amended to read as follows:

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

Exception: The following shall be permitted to be constructed in accordance with this code:

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

3. **Section R102.4 Referenced codes and standards** is amended to read as follows:

R102.4 Referenced codes and standards. The codes and standards referenced in this code shall be those that are listed in Section 101.4 of the adopted *International Building Code*, entitled "Referenced Codes," and shall be considered part of the requirements of this code to the prescribed extent of each such reference and as further regulated in Sections R102.4.1 and R102.4.2.

Exception: Where enforcement of a code provision would violate the conditions of the *listing* of the *equipment* or *appliance*, the conditions of the *listing* and manufacturer's instructions shall apply."

4. **SECTION 103 CODE COMPLIANCE AGENCY** is deleted in its entirety and replaced with the following:

SECTION R103 CODE ADMINISTRATION

R103.1 Entity charged with code administration. The entity charged with code administration shall be as determined in accordance with Section 103 of the adopted *International Building Code*, entitled "CODE ADMINISTRATION."

5. **Section 104.2.3.1 Flood hazard areas** is deleted in its entirety and replaced with the following:

> **104.2.3.1 Flood hazard areas.** For *existing buildings* or *structures* regulated under the scope of this code that are in whole or in part located in *flood hazard areas*, construction documents shall be submitted as established in accordance with Chapter 10 of the City Code, entitled “Flood Prevention and Protection.”

6. **Section R105.2 Work exempt from permit** is amended to read as follows, with the subsections for **Gas** and **Mechanical** being retained in their entirety:

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

Building:

1. Other than *storm shelters*, one-story detached *accessory structures* for lawn and garden equipment storage, tool storage and similar uses, including arbors, pergolas, and similar structures, provided that the floor area does not exceed 120 square feet (11.15 m^2) or 8 feet (2438 mm) in height, the structures do not house flammable liquids in quantities exceeding 10 gallons (38 L) per building, and the structures are located at least 3 feet from an adjoining property line.

2. Fences not over 6 feet (1829 mm) high.

3. *Retaining walls* that are not over 4 feet (1219 mm) in height measured from the low side grade to the top of the wall, unless supporting a surcharge, provided that the horizontal distance to the next uphill retaining wall is at least equal to the total height of the lower retaining wall.

4. Water tanks supported directly upon *grade* if the capacity does not exceed 5,000 gallons (18 927 L) and the ratio of height to diameter or width does not exceed 2 to 1.

5. Sidewalks and driveways.

6. Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work.

7. Prefabricated swimming pools that are less than 24 inches (610 mm) deep.

8. Swings and other playground equipment or playhouse/play structures provided that such does not exceed 120 square feet (11.15 m^2) in floor area nor greater than 8 feet (2438 mm) in height measured from grade, no more than one elevated playhouse or play structure is designed per lot, and said equipment or structure is used exclusively for play. Elevated playhouses or play structures shall not exceed 64 square feet (5.9 m^2) of floor area nor 6 feet (1829 mm) in height measured from the floor to the highest point of such structure.

9. Window awnings supported by an exterior wall that do not project more than 54 inches (1372 mm) from the exterior wall and do not require additional support. Storm window, storm door and rain gutter installation except that, for structures that are fifty years of age or older, historic review pursuant to Chapter 14 of the City Code must be completed first.

10. Decks not exceeding 200 square feet (18.58 m^2) in area, that are not more than 30 inches (762 mm) above *grade* at any point, are not attached to a *dwelling* or *townhouse* and do not serve the exit door required by Section R318.4.

11. Roofing repair or replacement work not exceeding one square (100 square feet) of covering per building.

12. Replacement of nonstructural siding that is not installed on or over a fire-rated assembly when removal of siding is performed in accordance with State laws regarding asbestos and lead paint except that, for structures fifty (50) years of age or older, historic review pursuant to Chapter 14 of the City Code must be completed first.

13. Shade cloth or maximum 6 mil single layer poly-roofed structures constructed for nursery or agricultural purposes, not including service systems, and no entry by the general public.

14. Temporary special event structures.

15. Shade sails that are freestanding and not more than 120 square feet (11.15 m^2) or taller than 8 feet (2438 mm) from grade.

Electrical:

. . .

6. Replacement of lighting controls, ceiling fans and interior light fixtures provided the new fixture is rated at less or equal power consumption rate.

. . .

Plumbing:

. . .

2. The clearing of stoppages or the repairing of leaks in pipes, valves or fixtures, and the repair and replacement of garbage disposal units and dishwashers directly connected to the sanitary sewer system, including the necessary replacement of all tail pipes and traps, or the repair, maintenance, and replacement of sinks, faucets, drains, showers, tubs, and toilets, provided such repairs do not involve or require the replacement or rearrangement of valves, pipes or fixtures.

7. **Section R105.3.2 Time limitation of application** is amended to read as follows:

R105.3.2 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. Applications that have been deemed abandoned for 30 days or more will be considered void, unless the *building official* determines, in their reasonable discretion, that an extension of no more than 180 days should be allowed due to conditions beyond the applicant's control.

8. **Section R105.5 Expiration** is amended by adding a second paragraph to read as follows:

R105.5 Expiration. Every *permit* issued shall become invalid unless the work authorized by such *permit* is commenced within 180 days after its issuance or after commencement of work if more than 180 days pass between inspections. The *building official* is authorized to grant, in writing, one or more extensions of time, for periods not more than 180 days each. The extension shall be requested in writing and justifiable cause demonstrated.

Regardless of when the permit was issued relative to the effective date of this code, any work authorized by a *permit* regulated by this code or any other building construction code administered by the *building official* that involves the construction or alteration of an exterior building component, assembly or finish material, such as the foundation, wall and roof framing, sheathing, siding, fenestration, and roof covering, shall be fully finished and completed for permanent outdoor exposure within 24 months of date of this issuance of such *permit*.

9. A new **Section R105.10 Premises Identification** is added to read as follows:

R105.10 Premises Identification During Construction. The approved *permit* number and street address number shall be displayed and plainly visible and legible from the public street or road fronting the property on which any new *building* is being constructed.

10. A new **Section R105.11 Transfer of permits** is added to read as follows:

R105.11 Transfer of permits. A current valid building *permit* may be transferred from one party to another upon written application to the *building official* with consent of both parties. When any changes are made to the original plans and specifications that substantially differ from the plans submitted with the *permit*, as determined by the *building official*, a new plan review fee shall be paid as calculated in accordance with Section R108. A fee of $50 shall be paid to cover administrative costs for all building *permit* transfers. No change shall be made to the expiration date of the original *permit*.

11. **Section R106.1.4 Information for construction in flood hazard areas** is deleted its entirety and replaced with the following:

R106.1.4 Information for construction in flood hazard areas. For *buildings* or structures regulated under the scope of this code that are in whole or in part located in flood hazard areas, construction documents shall be submitted in accordance with Chapter 10 of the City Code, entitled “Flood Prevention and Protection.”

12. A new **Section R106.1.6 Grading performance plans and certificate** is added to read as follows:

R106.1.6 Grading performance plans and certificate. Every building *permit* application for a new *building* regulated by this code shall be accompanied by a site drainage/grading performance plan as prescribed by City standards. Drainage plans shall be submitted to and approved by the City’s Stormwater Utility prior to the issuance of a *permit*.

13. **Section R106.3.1 Approval of construction documents** is amended to read as follows:

R106.3.1 Approval of construction documents. Where the *building official* issues a *permit*, the *construction documents* shall be *approved* in writing or by a stamp indicating the approved *permit* number. One set of *construction documents* so reviewed shall be retained by the *building official*. The other set shall be returned to the applicant, shall be kept at the site of work and shall be open to inspection by the *building official* or a duly authorized representative.

14. **SECTION R108 FEES** is deleted in its entirety and replaced with the following:

SECTION R108 FEES

R108.1 Fees. All items relating to fees shall be as specified in Section 109 of the adopted *International Building Code*, entitled "FEES."

R108.2 Work commencing before permit issuance. In addition to penalties set forth in R113.4, any *person* or firm who, before obtaining the necessary *permit(s)*, commences any construction of, or work on, a *building*, *structure*, electrical, gas, mechanical or plumbing system that is not otherwise exempted from obtaining a *permit*, may be subject to a stop work order and a work without a *permit* fee in addition to the required *permit* fee as established by the *building official*.

15. A new **Section R109.1.7 Site Survey required** is added to read as follows*:*

> **R109.1.7 Site Survey required.** A survey or improvement location certificate of the site on which a new *building* or *addition* is to be constructed may be required by the *building official* to verify that the *structure* is located in accordance with the approved plans and any other regulations of the City.

16. **SECTION R112 MEANS OF APPEALS** is deleted in its entirety and replaced with the following:

SECTION R112 MEANS OF APPEALS

R112.1 General. Appeals of decisions, determinations and interpretations of this code shall be made pursuant to applicable provisions as set forth in Section 113 of the adopted *International Building Code*, entitled "MEANS OF APPEALS."

17. **Section R113.4 Violation penalties** is deleted in its entirety and replaced with the following amended to read as follows:

R113.4 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, commits a civil infraction and is subject to the provisions contained in § 1-15(f) of the City Code. Each day that a violation continues shall be deemed a separate offense*.*

18. **SECTION R202 DEFINITIONS** is amended to modify, or add, in alphabetical order, the following definitions:

[RB] BASEMENT. That portion of a *building* located partly or completely below grade, wherein the underside of the floor system immediately above is 72 inches (1829 mm) or more above the surface of an approved permanent basement floor system.

. . .

CITY shall mean the municipal corporation of Fort Collins, Colorado, including its physical location and boundaries.

. . .

[RB] CRAWL SPACE. That portion of a *building* that is conditioned or non-conditioned space located partly or completely below grade (excluding the under-floor space beneath below-grade structural floor systems), wherein the underside of the adjacent finished floor above is less than 72 inches (1829 mm) above the bottom surface of such crawl space.

. . .

DOWN DIRECTIONAL LUMINAIRE. Down directional luminaire lighting directs light straight down from the fixture.

. . .

[RB] DWELLING. A *building* used exclusively for residential occupancy and for permitted accessory uses, including single-family dwellings, two-family dwellings and multi-family dwellings. The term *dwelling* shall not include hotels, motels, homeless shelters, seasonal overflow shelters, tents or other structures designed or used primarily for temporary occupancy. Any *dwelling* shall be deemed to be a principal *building*.

[RB] DWELLING UNIT. One or more rooms and a single kitchen and at least one bathroom, designed, occupied or intended for occupancy as separate quarters for the exclusive use of a single family for living, cooking and sanitary purposes, located in a single-family, two-family or multi-family *dwelling* or mixed-use *building*.

. . .

FLOOR AREA. The area included within the surrounding exterior walls of a *building* or portion thereof, exclusive of vent shafts and courts. The *floor area* of a *building*, or portion thereof, not provided with surrounding exterior walls shall be the usable area under the horizontal projection of the roof or floor above.

. . .

FULLY SHIELDED LUMINAIRE. A light fixture that has a solid barrier (cap) at the top of the fixture in which the lamp (bulb) is located. The fixture is angled so the lamp is not visible below the barrier (no light visible below the horizontal angle).

. . .

GUEST ACCESSIBILITY. A residence's ease of access for persons with disabilities.

. . .

HEIGHT, BUILDING. The vertical distance in feet measured from the average of the finished ground level at the center of all walls of a *building* or structure to the highest point of the roof surface or structure.

. . .

ROOM, SLEEPING (BEDROOM). A habitable space within a *dwelling* or other housing unit designed primarily for the purpose of sleeping. The presence of a bed, cot, mattress, convertible sofa or other similar furnishing used for sleeping purposes is indicia for determining that such space or room qualifies as a *sleeping room*. The presence of closets and similar storage facilities is not considered a relevant factor in determining whether or not a room is a *sleeping room*.

. . .

SITE. A parcel of land bounded by a property line or a designated portion of a public right-of-way.

. . .

[RB] TOWNHOUSE. A single-family *dwelling unit* constructed in a group of two or more attached individual units, each of which is separated from the other from the foundation to the roof and is located entirely on a separately recorded and platted parcel of land (site) bounded by property lines that is deeded exclusively for such single-family *dwelling*.

. . .

19. **Section 301.1.3 Engineered design** is amended to read as follows:

R301.1.3 Engineered design. When a building of otherwise conventional light-frame construction contains structural elements not conforming to this code, these elements shall be designed in accordance with accepted engineering practice. The extent of such design need only demonstrate compliance of nonconventional elements with other applicable provisions and shall be compatible with the performance of the conventional framed system. Engineered design in accordance with the adopted *International Building Code* is permitted for all *buildings*, *structures*, and portions thereof, included in the scope of this code.

20. **Section R301.2 Climatic and geographic design criteria** is amended to read as follows:

R301.2 Climatic and geographic design criteria. *Buildings* shall be constructed in accordance with the provisions of this code as limited by the provisions of this section. Climatic and geographic design criteria are set forth in Table R301.2. The thermal design parameters shown below shall be used for mechanical load calculations and designs.

21. **TABLE R301.2 CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA** is deleted in its entirety and replaced with the following:

TABLE R301.2 FORT COLLINS APPLICABLE CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA			
GROUND SNOW LOAD[a]	**WIND DESIGN SPEED[b]**	**SPECIAL WIND REGION**	**WINDBORNE DEBRIS ZONE**
35 psf	140 mph	Yes	No

SEISMIC DESIGN CATEGORY	**SUBJECT TO DAMAGE FROM**		
	Weathering	**Frost line depth**	**Termite**
B	Severe[c]	30 inches	Slight to moderate

ICE BARRIER UNDERLAYMENT	**FLOOD HAZARDS**	**AIR FREEZING INDEX**	**MEAN ANNUAL TEMP**
Required	July 16, 1979	906	48.4°F

MANUAL J DESIGN CRITERIA			
Elevation:	4987	**Outdoor winter design dry-bulb temp:**	6°F
Latitude:	40.5853	**Heating temp difference**	66°F
Altitude correction factor:	0.83	**Indoor summer design relative humidity:**	50°F
Daily Range:	High	**Indoor summer design dry-bulb temp:**	75°F
Coincident wet bulb:	62°F	**Outdoor summer design dry-bulb temp:**	91°F
Indoor winter design dry-bulb temp:	72°F	**Cooling temp difference:**	16°F

a. As an alternate to the basic 35 psf ground snow load, location-specific ground snow load values can be used that are provided in the Geodatabase of geocoded design ground snow load values, which can be accessed at the ASCE 7 Hazard Tool at https://asce7hazardtool.online/ or shall be determined in accordance with section 1608 of the International Building Code or approved equivalent.
b. The basic design wind speed V, in mph, for the determination of the wind loads shall be: 140 miles per hour (Ultimate) or shall comply with ASCE 7-22, ASCE Design Geodatabase published 2025. The ASCE Design Geodatabase is available at https://asce7hazardtool.online.
c. Where weathering requires a higher strength concrete or higher 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 the weathering index, "negligible," "moderate" or "severe" for concrete as determined from Figure R301.2(1). 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.

22. **SECTION R306 FLOOD-RESISTANT CONSTRUCTION** is deleted in its entirety and replaced with the following:

SECTION R306 FLOOD-RESISTANT CONSTRUCTION

R306.1 General. *Buildings* and *structures* constructed in whole or in part in flood hazard areas shall be designed and constructed in accordance with the provisions of Chapter 10 of the City Code, entitled Flood Prevention and Protection. In riverine flood hazard areas where design flood elevations are specified but floodways have not been designated, the applicant shall demonstrate that the cumulative effect of the proposed *buildings* and *structures* on design flood elevations, including fill, when combined with all other existing and anticipated development, will not increase the design flood elevation more than one foot at any point within the City.

23. **Section R309.2 One- and two-family dwellings automatic sprinkler systems** is amended to read as follows:

R309.2 Two-family dwellings automatic fire sprinkler systems. An automatic residential fire sprinkler system shall be installed in two-family *dwellings*.

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

24. **Section R310.2.2 Alterations, repairs and additions** is amended by deleting exception #2.

25. **Section R310.4 Interconnection** is amended to read as follows:

R310.4 Interconnection. Where more than one smoke alarm is required to be installed within an individual *dwelling unit* in accordance with Section R314.3, the alarm devices shall be interconnected in such a manner that the actuation of one alarm will activate all of the alarms in the individual *dwelling unit*. Physical interconnection of smoke alarms shall not be required where *listed* wireless alarms are installed and all alarms sound upon activation of one alarm.

Exception: Interconnection of smoke alarms in existing areas shall not be required where installation would require the removal of interior wall or ceiling finishes, unless there is an attic, crawl space, or basement available to provide access for interconnection without the removal of interior finishes.

26. **Section R311.2.2 Alterations, repairs and additions** is amended to read as follows, with the exceptions being deleted in their entirety:

R311.2.2 Alterations, repairs and additions. Where *alterations*, *repairs* or *additions* requiring a *permit* occur, or where one or more *sleeping rooms* are added or created in existing *dwellings*, the individual *dwelling unit* shall be equipped with *carbon monoxide alarms* located as required for new *dwellings*.

27. **Section R322.1 Dwelling units or sleeping units** is amended to read as follows:

R322.1 Dwelling units. Where there are four or more dwelling *units* in a single structure, the applicable provisions of Colorado Revised Statutes Section 9-5-101 *et. seq.*, and the provisions of Chapter 11 of the adopted *International Building Code* for Group R-3 shall apply. Nothing in this section shall abrogate or otherwise modify an owner's duties or responsibilities under the Americans with Disabilities Act or any other state or federal law or regulation regarding accessibility.

28. A new **Section R322.4 Guest accessibility** is added to read as follows:

R322.4 Guest accessibility. A new *dwelling unit* with habitable space on the first story shall provide at least one bathroom group or half bath on the first story that is designed and constructed to meet the *guest accessibility* requirements of this section.

R322.4.1 Bathrooms within dwelling units. A bathroom group or half bath designated for *guest accessibility* must have a minimum clear opening of 30 inches (762 mm).

R322.4.2 Wall reinforcement. A bathroom group or half bath designated for *guest accessibility* must have reinforced walls that meet the following standards:

1. Lateral nominal wood blocking, with minimum dimensions of 2 inches (50.8 mm) by 6 inches (152.4 mm), must be installed flush with stud edges of bathroom walls; and
2. The centerline of the blocking must be 34 inches (863.6 mm) from and parallel to the interior floor level.

Exception: Blocking is not required in the portion of the wall located directly behind the lavatory.

R322.4.3 Lighting and environmental controls. Light switches, receptacles and other environmental controls located in a bathroom or a half bath designated for *guest accessibility* must be no higher than 48 inches (1219.2 mm) above the interior floor level. Receptacles shall be a minimum of 15 inches (381 mm) above the interior floor level.

R322.4.4 Guest accessibility routes within the dwelling unit. A bathroom group or half bath designated for *guest accessibility* must be visitable by a route through the living room, dining room, bedroom or kitchen that provides a minimum clear width of 32 inches (812.8 mm), and any interior doors on the route must have lever handles.

29. A new **SECTION R333 RESOURCE EFFICIENCY** is added to read as follows:

SECTION R333 RESOURCE EFFICIENCY

R333.1 Construction waste management. For remodels over 1,500 square feet, additions over 1,500 square feet, and all new buildings, a signed construction waste declaration of responsibility is required at the time of application for a building permit; the construction waste recycling regulations shall be implemented; all concrete, asphalt, masonry, wood, metals, and cardboard shall be recycled; and all mixed construction and demolition materials (as defined in § 12-16 of the City Code) shall be delivered to any facility identified in and disposed of in accordance with § 12-22(c) of the City Code. Compliance shall be certified by inspection and documentation and submission of a signed final construction waste management report.

Exception: Basement finish projects.

R333.1.1 Building demolitions. *Buildings* or portions of *buildings* that are removed shall be processed in such a way as to safely remove all asbestos and lead paint contaminants. For all demolitions, excluding non-structural demolitions under 1000 square feet a signed demolition waste declaration of responsibility is required at the time of application for a demolition permit. All metals, asphalt, concrete, and masonry that are free of asbestos and lead paint shall be recycled, and where possible, all remaining materials, such as doors, windows, cabinets, fixtures, and wood, shall be recycled. All mixed construction and demolition materials (as defined in § 12-16 of the City Code) shall be delivered to any facility identified in and disposed of in accordance with § 12-22(c) of the City Code. Compliance shall be certified by inspection, documentation, and submission of a signed final demolition waste management report.

R333.2 Exterior lighting. All exterior lighting fixtures shall be *down directional* and *fully shielded luminaires* and shall have a nominal correlated color temperature (CCT) of no greater than 3000 Kelvin.

R333.3 Operations and maintenance. In new *buildings*, operation and maintenance information addressing all installed systems shall be provided to the *building* owner.

R333.4 Electrical vehicle ready. All new single family *dwellings* with an attached garage or carport shall be provided one continuous 40-amp, 208/240-Volt dedicated branch circuit for electric vehicle supply equipment that is terminated at a receptacle or electric vehicle supply equipment.

Exception: In cases where a transformer upgrade is required.

30. **Section R401.1 Application** is deleted in its entirety and replaced with the following:

R401.1 Application. The provisions of this chapter shall control the design and construction of the foundation and foundation spaces for *buildings*. In addition to the provisions of this chapter, the design and construction of foundations in areas prone to flooding shall meet the provisions of Section R306. All foundations shall be designed by a qualified professional licensed in the State of Colorado. Such designs shall be performed in accordance with accepted and approved engineering practices, including considerations for soil load-bearing capacities, surface and subsurface water conditions, adequate foundation and floor drainage, adequate ventilation of enclosed interior foundation spaces, and foundation waterproofing and damp-proofing. Final engineer's reports, indicating their acceptance of the above requirements, shall be submitted to the *building official* prior to the issuance of the Certificate of Occupancy

Exception: Foundations for non-habitable detached accessory *buildings*.

31. A new **Section R401.5 Wood foundations** is added to read as follows:

R402.5 Wood foundations. Wood foundations shall be designed and installed in accordance with ANSI/AWC Permanent Wood Foundation Design Specification (PWF). Wood foundations in Seismic Design Category D0, D1 or D2 shall be designed in accordance with accepted engineering practice by a qualified professional licensed in the State of Colorado.

32. A new **Section R401.6 Placement of backfill** is added to read as follows:

R401.6 Placement of backfill. The excavation outside the foundation, including utility trenches and excavation ramps, shall be backfilled with soil that is substantially free of organic material, construction debris and cobbles, boulders, and solid soil masses larger than 6 inches (152 mm) diameter, and free of frozen soil. The backfill shall be placed in lifts and compacted as set forth in the engineering documents. The backfill shall be placed in a manner that does not damage the foundation or the waterproofing or damp-proofing material. Excavation

ramps shall be backfilled in such a manner that the ramp does not become a conduit for surface water to flow toward the foundation. Where excavations include more than one *structure*, a specially engineered drainage system may be required by the *building official*.

33. **Section R405.1 Concrete or masonry foundations** is deleted in its entirety and replaced with the following:

R405.1 Concrete or masonry foundations. Drains consisting of piping conforming with ASTM Designation D2729-89 shall be provided adjacent to the lowest concrete or masonry foundations that retain earth and enclose spaces that are partially or entirely located below grade. Unless perimeter drains are designed to daylight, they shall terminate in sump pits with an electrical power source permanently installed within 36 inches (914 mm) of the sump opening. Piping for sump pumps shall discharge at least 60 inches (1524 mm) away from foundations, or as otherwise approved by the *building official*. Drains shall be installed in bedding materials that are of such size and installed in such manner to allow ground water to seep into the perimeter drain. Filter fabric or other measures to restrict the passage of fines shall be used to further protect the perimeter drain from blockage.

Exceptions:

1. A drainage system is not required where it has been determined by the engineer of record that the foundation is installed on well-drained ground or sand-gravel mixture soils according to the Unified Soil Classification System, Group I soils, as detailed in Table R401.4.1(2).
2. Existing buildings that do not have foundation drains.

34. A new **Section R405.3 Landscape irrigation** is added to read as follows:

R405.3 Landscape irrigation. Landscape irrigation systems, other than drip systems, shall be installed such that the ground surface within 60 inches (1524 mm), measured perpendicular from the foundation, is not irrigated.

35. **Section R408.2 Openings for under-floor ventilation** is amended to read as follows:

R408.2 Underfloor ventilation. Under-floor ventilation shall be provided per Section R408.3 (conditioned crawl), except where high groundwater conditions exist that would require vented under-floor space (unconditioned crawl). Ventilation openings through foundation or exterior walls surrounding the under-floor space shall be provided in accordance with this section. The minimum net area of ventilation openings shall be not less than 1 square foot (0.0929 m^2) for each 150 square feet (14 m^2) of under-floor area. One ventilation opening shall be within 3 feet (915 mm) of each external corner of the under-floor space. Ventilation openings shall be covered for their height and width with any of the following

materials provided that the least dimension of the covering shall not exceed ¼ inch (6.4 mm), and operational louvers are permitted:

1. Perforated sheet metal plates not less than 0.070 inch (1.8 mm) thick.
2. Expanded sheet metal plates not less than 0.047 inch (1.2 mm) thick.
3. Cast-iron grill or grating.
4. Extruded load-bearing brick vents.
5. Hardware cloth of 0.035 inch (0.89 mm) wire or heavier.
6. Corrosion-resistant wire mesh, with the least dimension being ⅛ inch (3.2 mm) thick.

Exceptions:

1. The total area of ventilation openings shall be permitted to be reduced to $^{1}/_{1,500}$ of the under-floor area where the ground surface is covered with an *approved* Class I vapor retarder material.
2. Where the ground surface is covered with an *approved* Class 1 vapor retarder material, ventilation openings are not required to be within 3 feet (915 mm) of each external corner of the under-floor space provided that the openings are placed to provide cross *ventilation* of the space.

36. A new **Section R408.3.1 Spaces under below-grade floors** is added to read as follows:

R408.3.1 Spaces under below-grade floors. Mechanical ventilation systems for spaces under below-grade floors shall be designed by a professional engineer and installed in accordance with such designs, or a mechanical ventilation system for spaces under below-grade floors shall be provided with an active, fan assisted submembrane depressurization system installed per Appendix BE, Radon Control Methods. In addition, the space above the soil-gas-retarder and below the floor shall be provided with continuously operated mechanical exhaust ventilation at a rate equal to 1 cubic foot per minute for each 50 square feet (4.65 m^2) of under-floor area and either mechanical supply air at the same rate or an air pathway (such as a duct or transfer grille) to the common area that is not located in rooms containing open combustion fuel burning appliances.

37. **Section R702.7 Vapor retarders** is amended to read as follows, with the exceptions being deleted in their entirety:

R702.7 Vapor retarders. Vapor retarder materials shall be classified in accordance with Table R702.7(1). If provided on the interior side of frame walls, a vapor retarder shall be provided in accordance with Table R702.7(2), and Table R702.7(3) or R702.7(4) where applicable. Class I vapor retarders are not allowed on basement foundation walls or any concrete or masonry below grade wall. An *approved* design using accepted engineering practice for hygrothermal analysis shall be

permitted as an alternative. Vapor retarders shall be installed in accordance with Section R702.7.2.

The *climate zone* shall be determined in accordance with Section R301.1 of the *International Energy Conservation Code*.

38. **TABLE R702.7(2) VAPOR RETARDER OPTIONS** is deleted in its entirety.

39. **Section R702.7.2 Vapor retarder installation** is amended to read as follows:

R702.7.2 Vapor retarder installation. Vapor retarders shall be installed in accordance with the manufacturer's instructions, accepted installation methods or an *approved* design. Where a vapor retarder also functions as a component of a continuous *air barrier*, the vapor retarder shall be installed as an *air barrier* in accordance with Section R402.5.1.1 of the *International Energy Conservation Code*.

Class I, II, and III vapor retarders are all permitted in climate zone 5. A responsive vapor retarder shall be allowed on the interior side of any frame wall in all climate zones. In frame walls, use of a Class I vapor retarder that is not a responsive vapor retarder on the interior side with a Class I vapor retarder on the exterior side shall require an approved design. Where a Class I or II vapor retarder is used in combination with foam plastic insulating sheathing or insulated siding installed as continuous insulation on the exterior side of frame walls, the continuous insulation shall comply with Table R702.7(4) and the Class I or II vapor retarder shall be a responsive vapor retarder.

40. A new **Section R703.11.3 Vinyl siding and soffits on buildings** is added to read as follows:

R703.11.3 Vinyl siding and soffits on buildings. Vinyl siding and soffits on *buildings* shall be installed over one-hour fire-rated assemblies listed for exterior fire exposure, in both the vertical and horizontal plane or in accordance with the adopted *Colorado Wildfire Resiliency Code*, whichever is more restrictive.

Exception: Repairs less than 100 square feet (9.3 m^2) unless subject to the *Colorado Wildfire Resiliency Code*.

41. A new **Section R703.13.2 Insulated vinyl siding and soffits on buildings** is added to read as follows:

R703.13.2 Insulated vinyl siding and soffits on buildings. Insulated vinyl siding and soffits on *buildings* shall be installed over one-hour fire-rated assemblies listed for exterior fire exposure, in both the vertical and horizontal plane or in accordance with the adopted *Colorado Wildfire Resiliency Code*, whichever is more restrictive.

Exception: Repairs less than 100 square feet (9.3 m^2) unless subject to the *Colorado Wildfire Resiliency Code*.

42. **Section R703.14 Polypropylene siding** is amended to read as follows:

R703.14 Polypropylene siding. *Polypropylene siding* shall be certified and *labeled* as conforming to the requirements of ASTM D7254, and those of Section R703.14.2 or Section R703.14.3, by an *approved* agency. *Polypropylene siding* on *buildings* shall be installed over one-hour fire-rated assemblies listed for exterior fire exposure, in both the vertical and horizontal plane or in accordance with the adopted *Colorado Wildfire Resiliency Code*, whichever is more restrictive.

Exception: Repairs less than 100 square feet (9.3 m^2) unless subject to the *Colorado Wildfire Resiliency Code*.

43. **Section R902.1 Roofing assemblies** is deleted in its entirety and replaced with the following:

R902.1 Roofing covering materials. Roofs shall be covered with materials listed as Class A and with materials as set forth in Section R904 and roof coverings as set forth in Section R905. Class A roofing shall be tested in accordance with UL 790 or ASTM E108. Roof assemblies with coverings of brick, masonry, slate, clay or concrete roof tile, exposed concrete roof deck, ferrous or copper shingles or sheets, or metal sheets and shingles shall be considered Class A roof coverings.

44. **Section R905.1.2 Ice barriers** is amended to read as follows:

R905.1.2 Ice barriers. In areas where there has been a history of ice forming along the eaves causing a backup of water as designated in Table R301.2, an ice barrier shall be installed for asphalt shingles, *metal roof shingles*, mineral-surfaced roll roofing, slate and slate-type shingles, wood shingles and wood shakes. The ice barrier shall consist of not fewer than two layers of *underlayment* cemented together, or a self-adhering polymer-modified bitumen sheet shall be used in place of normal *underlayment* and extend from the lowest edges of all roof surfaces to a point not less than 24 inches (610 mm) inside the exterior wall line of the *building*.

On roofs with slope equal to or greater than 8 units vertical in 12 units horizontal (67-percent slope), the ice barrier shall be applied not less than 36 inches (914 mm) measured along the roof slope from the eave edge of the *building*.

Exceptions:

1. Detached *accessory structures* not containing *conditioned floor area*.
2. Re-roofing where the existing roof covering has not been removed.

45. **Section R905.2.1 Sheathing requirements** is amended to read as follows:

R905.2.1 Sheathing requirements. Asphalt shingles shall be fastened to *wood structural panels* or solid lumber sheathing. Gaps in the solid decking shall not exceed ⅛ inch.

46. A new **Section R905.2.4.2 Impact resistance of asphalt shingles** is added to read as follows:

R905.2.4.2 Impact resistance of asphalt shingles. Asphalt shingles shall be Class 4 impact resistant, tested in accordance with UL 2218, and installed in accordance with the manufacturer's installation instructions.

Exceptions:

1. When existing asphalt shingles are less than Class 4 impact resistant, and the owner wishes to replace the existing asphalt shingles with tiles of a similar color or style, but no Class 4 impact resistance shingles that are similar color or style to the existing asphalt shingles are available, the *building official* may approve alternate materials that are less than Class 4 impact resistant; however, the *building official* will impose the highest class of impact resistance for which shingles of a matching color or style to the existing asphalt shingles are available. If no impact resistant materials are available, the *building official* may approve non-impact resistant materials if the alternate materials meet all other applicable requirements of this code.

2. When the owner is repairing or adding to existing asphalt singles that are less than Class 4 impact resistant, the owner may use the same or similar materials as the current existing asphalt shingles, even if that same or similar material is not impact resistant provided the repair does not exceed 49% of the roof area or the addition does not exceed 50% of the original *building* size.

47. **Section R908.1 General** is amended to read as follows:

R908.1 General. Materials and methods of application used for recovering or replacing an existing *roof covering* shall comply with the requirements of Chapter 9.

Exceptions:

1. *Reroofing* shall not be required to meet the minimum design slope requirement of one-quarter unit vertical in 12 units horizontal (2-percent slope) in Section R905 for roofs that provide *positive roof drainage*.
2. For roofs that provide positive drainage, recovering or replacing an *existing roof covering* shall not require the secondary (emergency

overflow) drains or *scuppers* of Section R903.4.1 to be added to an existing roof.

3. Any existing roof covering system may be replaced with a roof covering of the same materials and classification, provided the replacement roof covering has a minimum rating of Class C.

48. **Section R1004.1 General** is amended to read as follows:

R1004.1 General. Factory-built fireplaces shall be *listed* and *labeled* and shall be installed in accordance with the conditions of the *listing*. Factory-built fireplaces shall be tested in accordance with UL 127. Solid fuel fireplaces, fireplace stoves and solid-fuel-type room heaters shall also comply with §5-110 of the City Code and must be installed with a spark arrestor.

49. **Section R1004.4 Unvented gas log heaters** is deleted in its entirety.

50. **CHAPTER 11 [RE] ENERGY EFFICIENCY** is deleted in its entirety and replaced with the following:

CHAPTER 11 [RE] ENERGY EFFICIENCY

SECTION R1101 GENERAL

R1101.1 General. Any buildings or portion thereof regulated by this code shall comply with the adopted *International Energy Conservation Code*—Residential Provisions (IECC-R).

51. A new **SECTION M1309 TESTING AND VERIFICATION** is added to read as follows:

SECTION M1309 TESTING AND VERIFICATION

M1309.1 General. Installed heating, cooling and *ventilation* systems shall be performance-tested and adjusted per the Residential New Construction Mechanical Systems Testing Guide as currently adopted by the City of Fort Collins and to operate within design specifications, in accordance with ANSI/ACCA QI 5-2010 *HVAC Quality Installation Specification*. Documentation of results must be submitted to the *building official* prior to the issuance of the certificate of occupancy.

52. **Section M1401.3 Equipment and appliance sizing** is deleted in its entirety and replaced with the following:

M1401.3 Heating and cooling system design. The design of new heating and cooling systems shall meet the requirements of this section. Design documents

shall be submitted to the *building official* at the time of application for a building *permit*.

53. A new **Section M1401.3.1 Equipment and appliance sizing** is added to read as follows:

M1401.3.1 Equipment and appliance sizing. Heating and cooling *equipment* and *appliances* shall be sized in accordance with ACCA Manual S, based on design building loads calculated in accordance with ACCA Manual J, or other equivalent methodology approved by the *building official*, using thermal design parameters in Table R301.2 as amended. The total equipment or *appliance* output capacity shall be between the following limits, as applicable for the equipment type:

1. 95% and 115% of calculated system cooling load, for air conditioners and heat pumps;
2. 95% and 125% of calculated system cooling load, for heat pumps with winter heating dominated requirements;
3. 100% and 140% of calculated system heating load, for warm air systems, unless dictated by the cooling equipment selection; and
4. 100% and 115% of calculated system heating load, for heating boilers.

When there is no equipment available to satisfy these applicable capacity limits, the next largest nominal piece of equipment that is available may be used.

54. A new **Section M1401.3.2 Room loads** is added to read as follows:

M1401.3.2 Room loads. Room-by-room design heating and cooling loads shall be calculated in the design of new heating and cooling systems.

55. A new **Section M1401.3.3 Matched components** is added to read as follows:

M1401.3.3 Matched components. Air-conditioning, Heating and Refrigeration Institute (AHRI) matched evaporators, condensing units and air handlers shall be required in the design of new heating and cooling systems.

56. A new **Section M1402.4 Total electric heating** is added to read as follows:

M1402.4 Total electric heating. Primary indoor central heating systems utilizing only electric heat shall utilize a ground source heat pump system(s) or cold climate heat pump system(s) specifically designed to heat in cold climates and at the Winter Outdoor, Design Dry-Bulb temperature defined in Section C301.5 of the *International Energy Conservation Code* and Table R301.2 of this code. The heat pump system shall not be gas or propane fuel fired. Electric resistance strip heat shall only serve as emergency back-up heat or supplemental heat at outdoor temperatures below 15°F as necessary.

57. **Section M1414.1 General** is amended to read as follows:

M1414.1 General. Fireplace stoves shall be *listed*, *labeled* and installed in accordance with the terms of the listing. Fireplace stoves shall be tested in accordance with UL 737*.* Wood burning *appliances* shall meet the latest emission standards as required by the State of Colorado and Federal Regulation 40 CFR Part 60, Subpart AAA.

58. A new **Section M1501.2 Indoor depressurization** is added to read as follows:

M1501.2 Indoor depressurization. Ducted exhaust systems shall not induce or create a negative pressure sufficient to cause back-drafting of naturally vented, open combustion-chamber or fuel-burning appliances, nor create negative pressure in excess of negative 3 Pa in the immediate proximity of combustion chambers of such appliances.

59. **Section M1502.4.2 Duct installation** is amended to read as follows:

M1502.4.2 Duct installation. Exhaust ducts shall be supported at intervals not to exceed 12 feet (3658 mm) and shall be secured in place. The insert end of the duct shall extend into the adjoining duct or fitting in the direction of airflow. Exhaust duct joints shall be sealed in accordance with Section M1601.4.1 and shall be mechanically fastened. Ducts shall not be joined with screws or similar fasteners. Where dryer exhaust ducts are enclosed in wall or ceiling cavities, such cavities shall allow the installation of the duct without deformation.

60. **Section M1505.4 Whole-house mechanical ventilation system** is deleted in its entirety and replaced with the following:

M1505.4 Whole-dwelling unit mechanical ventilation system. For new *dwellings*, a mechanical exhaust system, supply system, or combination thereof shall be installed for each *dwelling unit* to provide whole-*dwelling unit ventilation*. Such system shall comply with Sections M1505.4.1 through M1505.5. System design documents must be submitted to the *building official* at the time of application for a *building permit*.

61. **Section M1601.1 Duct design** is amended to read as follows:

M1601.1 Duct design. *Duct systems* serving heating, cooling and *ventilation equipment* in new *buildings*, or new duct systems in *additions*, shall be designed and fabricated in accordance with the provisions of this section and ACCA Manual D or other *approved* methods.

62. **Section M1601.1.1 Above-ground duct systems** is amended to read as follows:

M1601.1.1 Above-ground duct systems. Above-ground *duct systems* shall conform to the following:

. . .

6. *Duct systems* shall be constructed of materials having a *flame spread index* of not greater than 200.

7. Volume dampers, equipment and other means of supply, return and exhaust air adjustment used in system balancing shall be provided with access.

63. A new **Section M1601.4.11 Construction debris and contamination** is added to read as follows:

M1601.4.11 Construction debris and contamination. Mechanical air-handling systems and their related ducts shall be protected from the entrance of dirt, debris, and dust during the construction and installation process. Prior to passing final inspection or issuance of a certificate of occupancy, such systems shall be substantially free of construction-related contaminants.

64. **Section M1602.2 Return air openings** is amended to read as follows:

M1602.2 Return air openings. A return air path shall be provided in all habitable rooms by means of ducts or transfer grills. Return air openings for heating, *ventilation* and air conditioning systems shall comply with all of the following:

. . .

65. **Section G2404.3 (301.3) Listed and labeled** is amended to read as follows:

G2404.3 (301.3) Listed and labeled. *Appliances* regulated by this code shall be *listed* and *labeled* for the application in which they are used unless otherwise *approved* in accordance with Section R104.2.2.

66. **Section G2406.2 (303.3) Prohibited locations** is amended by deleting items #3 and #4.

67. **Section G2407.11 (304.11) Combustion air ducts** is amended by adding a new Item #9 to read as follows:

. . .

9. All combustion air openings or ducts shall be readily identifiable with an approved label or by other means warning persons that obstruction of such openings or ducts may cause fuel-burning equipment to release combustion products and dangerous levels of carbon monoxide into the *building*.

68. **Section G2415.12 (404.12) Minimum burial depth** is amended to read as follows:

G2415.12 (404.12) Minimum burial depth. Underground *piping systems* shall be installed a minimum depth of 18 inches (457.2 mm) below grade.

69. **Section G2415.12.1 (404.12.1) Individual outside appliances** is deleted in its entirety.

70. **Section G2417.4.1 (406.4.1) Test pressure** is deleted in its entirety and replaced with the following:

G2417.4.1 (406.4.1) Test pressure. The test pressure to be used shall be 10 psi minimum for non-welded pipe and 60 psi minimum for welded pipe.

71. **Section G2425.8 (501.8) Appliances not required to be vented** is amended to read as follows:

G2425.8 (501.8) Appliances not required to be vented. The following *appliances* shall not be required to be vented:

1. Electric ranges.
2. Electric built-in domestic cooking units *listed* and marked for optional venting.
3. Hot plates and laundry stoves.
4. *Type 1 clothes dryers (Type 1 clothes dryers* shall be exhausted in accordance with the requirements of Section G2439).
5. Refrigerators.
6. Counter *appliances*.

Where the *appliances* listed in Items 5 through 6 are installed so that the aggregate input rating exceeds 20 Btu per hour per cubic foot (207 W/m3) of volume of the room or space in which such *appliances* are installed, one or more shall be provided with venting *systems* or other *approved* means for conveying the *vent gases* to the outdoor atmosphere so that the aggregate input rating of the remaining *unvented appliances* does not exceed 20 Btu per hour per cubic foot (207 W/m3). Where the room or space in which the *appliance* is installed is directly connected to another room or space by a doorway, archway or other opening of comparable size that cannot be closed, the volume of such adjacent room or space shall be permitted to be included in the calculations.

72. **Section G2427.6.5 (503.6.6) Minimum height** is amended to read as follows:

G2427.6.5 (503.6.6) Minimum height. A Type B or L gas *vent* shall terminate not less than 5 feet (1524 mm) in vertical height above the highest connected *appliance draft hood* or *flue collar*. A Type B-W gas *vent* shall terminate not less than 12 feet (3658 mm) in vertical height above the bottom of the wall

furnace. All gas vents shall terminate a minimum of 22 inches (559 mm) above the surface or grade directly below.

73. **TABLE G2427.8 (503.8) THROUGH-THE-WALL VENT TERMINAL CLEARANCE** is amended to read as follows:

TABLE G2427.8 (503.8) THROUGH-THE-WALL VENT TERMINAL CLEARANCE			
FIGURE CLEARANCE	**CLEARANCE LOCATION**	**MINIMUM CLEARANCE FOR DIRECT-VENT TERMINALS**	**MINIMUM CLEARANCES FOR NONDIRECT-VENT TERMINALS**
A	Clearance above finished grade level, veranda, porch, deck or balcony	22 inches	
. . .	. . .	. . .	

74. **SECTION G2445 (621) UNVENTED ROOM HEATERS** is deleted in its entirety.

75. A new **Section G2447.6 (623.8) Gas cooking appliances** is added to read as follows:

G2447.6 (623.8) Gas cooking appliances. Gas cooking appliances shall be supplied with an exhaust system vented to the outside in accordance with Section M1503. Ducts serving gas appliance exhaust systems shall not terminate in an attic or crawl space or areas inside the *building*, induce or create negative pressure in excess of negative 3 Pa, or adversely affect gravity-vented appliances.

76. A new **Section G2451.3 (630.3) Combustion and ventilation air** is added to read as follows:

G2451.3 (630.3) Combustion and ventilation air. Where infrared heaters are installed, natural or mechanical means shall provide outdoor ventilation air at a rate of not less than 4 cfm per 1,000 Btu/h (0.38 m^3/min/kW) of the aggregate input rating of all such heaters installed in the space. Outdoor exhaust openings for removing flue products shall terminate above the level of the heaters.

77. A new **Section P2501.3 Compliance** is added to read as follows:

P2501.3 Compliance. Plumbing shall conform to and be installed in accordance with the provisions of Chapters 25 through 33 of the *International Plumbing Code*.

78. **Section P2503.5.1 Rough Plumbing** is amended to read as follows:

P2503.5.1 Rough plumbing. DWV systems shall be tested on completion of the rough piping installation by water, by air, or by a vacuum, without evidence of leakage. The test shall be applied to the drainage system in its entirety or in sections after rough-in piping has been installed, as follows:

. . .

79. **Section P2903.1 Water supply system design criteria** is amended to read as follows:

P2903.1 Water supply system design criteria. The water service and water distribution systems shall be designed and sized for peak demand using values shown in Table P2903.1 or Appendix E of the *International Plumbing Code*.

80. **Section P2903.2 Maximum flow and water consumption** is amended to read as follows:

P2903.2 Maximum flow and water consumption. The maximum water consumption flow rates and quantities for all plumbing fixtures and fixture fittings shall be in accordance with Table P2903.2 and, except for fixture types that are not labeled under the WaterSense® program, shall be Environmental Protection Agency (EPA) WaterSense® labeled fixtures.

81. **TABLE P2903.2 MAXIMUM FLOW RATES AND CONSUMPTION FOR PLUMBING FIXTURES AND FIXTURE FITTINGS[b]** is amended to read as follows:

TABLE P2903.2 MAXIMUM FLOW RATES AND CONSUMPTION FOR PLUMBING FIXTURES AND FIXTURE FITTINGS[b]	
PLUMBING FIXTURE OR	**MAXIMUM FLOW RATE OR QUANTITY**
Lavatory faucet	1.5 gpm at 60 psi
Shower head[a]	1.8 gpm at 80 psi
Sink faucet	1.8 gpm at 60 psi
Water closet	1.1 gallons per flushing cycle, with minimum MaP threshold of 600 grams. Dual flush gallons per flushing cycle: Average of three flushes (two reduced flushes and one full flush)[c]

For SI: 1 gallon per minute = 3.785 L/m, 1 pound per square inch = 6.895 kPa.
a. A hand-held shower spray shall be considered to be a shower head.
b. Consumption tolerances shall be determined from referenced standards.
c. In existing *buildings* not increasing the *building* size, a 1.28 gpf maximum water closet is allowed.

82. **CHAPTER 34 GENERAL REQUIREMENTS** through **CHAPTER 43 CLASS 2 REMOTE-CONTROL, SIGNALING AND POWER-LIMITED CIRCUITS** are deleted in their entirety and replaced with the following:

CHAPTER 34 ELECTRICAL REQUIREMENTS

SECTION 3401 ADMINISTRATION

3401.1 General. Any buildings or portion thereof regulated by this code shall comply with the *National Electrical Code* as adopted by the City. All references in this code to any section of Chapters 34 through 43 inclusive shall instead refer to the applicable corresponding sections of the *National Electrical Code*.

83. **APPENDIX BA MANUFACTURED HOUSING USED AS DWELLINGS** is adopted in its entirety.

84. **APPENDIX BB TINY HOUSES** is adopted in its entirety.

85. **APPENDIX BC ACCESSORY DWELLING UNITS (ADU)** is adopted in its entirety, and is amended to read as follows:

. . .

BC101.2 Conditions. ADUs shall be permitted without requiring a *change of occupancy* where in compliance with all of the following:

1. An ADU shall be permitted within an existing single-family detached *dwelling* or within an existing *townhouse unit* that is within the scope of the *International Residential Code.*
2. Only one ADU shall be permitted for each lot.
3. An ADU shall have a separate house number from the primary *dwelling unit*.
4. ADUs shall be secondary in size and function to the primary *dwelling unit* and shall comply with the Land Use Code.
5. An attached ADU shall be provided with a separate entrance from that serving the primary *dwelling unit,* either from the exterior of the *building* or from a common hallway located within the *building*.
6. The location of a detached ADU shall comply with Section R302.

7. An ADU shall be provided with adequate provisions for electricity, water supply and sewage disposal.

SECTION BC102 DEFINITIONS

BC102.1 Definitions. The following words and terms shall, for the purposes of this appendix, have the meanings shown herein:

ACCESSORY DWELLING UNIT (ADU). Any structure meeting the definition of an attached or detached accessory dwelling unit as defined under the Land Use Code.

. . .

86. **APPENDIX BD HOME DAY CARE OCCUPANCY** is adopted in its entirety.

87. **APPENDIX BE RADON CONTROL METHODS** is adopted in its entirety, and is amended to read as follows:

. . .

BE101.1 General. Radon-resistant construction is required for all new dwellings constructed under this code as prescribed in this Appendix.

FIGURE BE101.1 EPA MAP OF RADON ZONES

. . .

BE103.1 General. The following construction techniques are intended to resist radon entry and prepare the *building* for post-construction radon mitigation.

. . .

BE103.2 Subfloor preparation. A layer of gas-permeable material may 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. Each radon reduction vent pipe riser shall serve no more than 4,000 square feet of uninterrupted under slab/floor area. 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 ¼-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.

   Exception: A sand base course is not required under geotextile drainage matting where the concrete slab is installed on well-drained ground or sand-gravel mixture soils classified as Group 1 according to the United Soil Classification as detailed in Table R401.4.1(2).

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

BE103.3 Soil-gas-retarder. The soil in crawl spaces shall be covered with a continuous layer of a minimum 6-mil (0.15 mm) polyethylene or 3 mil (0.75 mm) cross-laminated polyethylene soil-gas-retarder. The ground cover shall be lapped not less than 12 inches at joints and sealed or taped. The edges of the ground cover shall extend a minimum of 12 inches (152 mm) up onto all foundation walls enclosing the under-floor space and be sealed to the wall and any footing pads. 6-mil polyethylene also shall be sealed and mechanically fastened to the wall. An interior perimeter drain tile loop shall be connected to a plumbing tee or other approved connection as per BE103.5.3.

. . .

BE103.5 Passive submembrane depressurization system. In *buildings* with *crawl space* foundations, the following components of a passive *submembrane depressurization system* shall be installed during construction.

BE103.5.2 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.

. . .

BE103.13 Provisions for future depressurization fan installation. Permanent provisions shall be made for the future installation of an in-line fan to be connected to every radon vent pipe. Such designated fan locations shall be outside of the conditioned envelope of the *building*, such as in the attic, garage and similar locations, excluding *crawl spaces* and other interior under-floor spaces. Designated locations shall accommodate an unobstructed permanent cylindrical space with the following minimum dimensions: 12 inches (305 mm) measured radially around the radon vent pipe along a vertical distance of 30 inches (760 mm). Designated fan locations shall be permanently accessible for servicing and maintenance. An electrical receptacle outlet shall be provided within 48 inches (1219 mm) of and within sight from designated fan locations and installed so as to not be covered by insulation. A light fixture shall be installed in the area of future fan location.

SECTION BE104 TESTING

BE104.1 TESTING. Where radon-resistant construction is required, radon testing shall be as specified in Items 1 through 10:

. . .

9. Written radon test results shall be provided by the test lab or testing party. The final written test report with results less than 4 picocuries per liter (pCi/L) shall be provided to the *code official* or a fan installed as per Item 10.

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 BE103.9 and BE103.12.

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

88. **APPENDIX BF PATIO COVERS** is adopted in its entirety.

Section 4. The codifier of the Code of the City of Fort Collins is hereby directed to amend all existing cross references in the City Code and the Land Use Code in accordance with the provisions of this ordinance.

Section 5. The City Attorney and the City Clerk are hereby authorized to modify the formatting and to make such other amendments to this Ordinance as necessary to facilitate publication in the Fort Collins City Code; provided, however, that such modifications and amendments shall not change the substance of the Code provisions.

Introduced, considered favorably on first reading on December 2, 2025, and approved on second reading for final passage on December 16, 2025.

_____
Mayor

ATTEST:

_____
City Clerk

Effective Date: December 26, 2025
Approving Attorney: Madelene Shehan

Exhibit: Exhibit A – Notice of Publication