

## **2021 International Building Code (11-9-5)**

## **2021 International Residential Code (11-9-6)**

**Note:**

The proposed amendments to these codes are very similar to the current amendments in place for the 2015 IBC and IRC with added language to correlation with the other codes. These amendments are generally intended to address conditions unique to the City of Westminster that were part of previously adopted codes such as our restriction on the installation of solid fuel burning devices or amendments to “fill in the blanks” in the model codes to localize them to the City of Westminster based on things like weather factors and soil conditions.

The proposed amendments to these codes do not contain any substantive changes from the previously adopted amendments to the IBC and IRC.

### **11-9-5. INTERNATIONAL BUILDING CODE AMENDMENTS.**

(A) Chapter 1 of the International Building Code is replaced as follows:

The scope and administration of this code shall be in accordance with Title 11, Chapter 9 of the Westminster Municipal Code.

(B) Section 406.3.2.1 of the International Building Code is replaced as follows:

**406.3.2.1 Dwelling unit separation.** The *private garage* shall be separated from the *dwelling unit* and its *attic* area by means of minimum 5/8-inch type "X" *gypsum board* applied to the garage side. Where the separation is horizontal the structure supporting the separation shall also be protected by not less than 5/8-inch type "X" gypsum board or equivalent. Door openings between a private garage and the dwelling unit shall be equipped with either solid wood doors not less than 1 3/8 inch thickness, solid or honeycomb core steel door not less than 1 3/8 inches thick, or doors in compliance with Section 716.2.2.1 with a *fire protection rating* of not less than 20 minutes. Doors shall be *self-closing* and self-latching.

(C) Section 907.2.11 of the International Building Code is replaced as follows:

**907.2.11 Single- and multiple-station smoke alarms.** *Listed* single- and multiple-station smoke alarms complying with UL 217 shall be installed in accordance with Sections 907.2.11.1 through 907.2.11.7, NFPA 72 and the manufacturer's published instructions.

(D) Section 915.4 of the International Building Code is replaced as follows:

**915.4 Carbon monoxide alarms.** Carbon monoxide alarms shall be installed in accordance with the manufacturer's installation instructions and shall comply with Sections 915.4.1 through 915.4.4.

(E) **Section 1101.1** of the International Building Code is amended by adding the following sentence:

Where there are seven or more residential dwelling units in a project, the provisions of Colorado Revised Statutes (C.R.S.) Title 9, Article 5, Standards for Accessible Housing, shall be required

(F) Section 1507.1.2 of the International Building Code is replaced as follows:

**1507.1.2 Ice barriers.** Ice barriers are not required.

(G) **Sections 1507.3.9, 1507.5.7, 1507.8.8, 1507.9.9, and 1507.8.1.1** of the International Building Code are amended by adding the following:

The average daily temperature in The City of Westminster in January is above 25°F (4°C)

(H) Section 1507.17.4.2 of the International Building Code is replaced as follows:

**1507.17.4.2 Ice barrier.** Ice barriers are not required.

(I) Section 1511.2.4 of the International Building Code is replaced as follows:

**1511.2.4 Type of construction.** Penthouses shall be constructed of *building element* materials as required for the type of construction of the building. Penthouse *exterior walls* and roof construction shall have a *fire-resistance rating* as required for the type of construction of the building. Supporting construction of such *exterior walls* and roof construction shall have a *fire-resistance rating* not less than required for the *exterior wall* or roof supported.

(J) Section 1512.2.1.1 of the International Building Code is amended by replacing Item 2 as follows:

**1512.2.1.1 Exceptions.**

- (Remains the same)
- Where the existing roof covering is slate, clay, cement, asbestos-cement tile, or asphalt shingles.
- (Remains the same)

(K) Section 1607.3.1 of the International Building Code is added as follows:

**1607.3.1 Live load signage.** In commercial or industrial buildings, for each floor or portion thereof designed for live loads exceeding 50 psf, such design live loads shall be conspicuously posted in that part of each story in which they apply, using durable signs.

(L) Section 1607.3.2 of the International Building codes is added as follows:

**1607.3.2 Restrictions on loading.** It shall be unlawful to place, or cause or permit to be placed, on any floor or roof of a building, structure or portion thereof, a load greater than is permitted by this code.

(M) Section 1608.2 of the International Building Code is replaced as follows:

**1608.2 Ground snow loads.** The ground snow load to be used within the City of Westminster in determining the design snow loads for roofs is 30 pounds per square foot.

(N) Section 1609.3 of the International Building Code is replaced as follows:

**1609.3 Basic design wind speed.** Wind speeds to be per the table below and the zones as published by the City of Westminster. Exposure B shall be used unless specified as exposure C by the Building Official.

2021 IBC BASIC DESIGN WIND SPEED CRITERIA - V			
CITY MAP WIND ZONES	1	2	3
RISK CATEGORY I	120	125	135
RISK CATEGORY II	130	140	150
RISK CATEGORY III & IV	140	150	160

(O) Section 1612.2 of the International Building Code is replaced as follows:

**1612.2 Design and construction.** The design and construction of buildings and structures located in flood hazard areas, including flood hazard areas subject to high velocity wave action, shall be designed and constructed in accordance with City of Westminster standards and ASCE 24, whichever is the most restrictive.

(P) Section 1612.3 of the International Building Code is replaced as follows:

**1612.3 Establishment of flood hazard areas.** The flood hazard areas of the City of Westminster are as established in Title 11, Chapter 8 of the Westminster Municipal Code.

(Q) Section 2111.1 of the International Building Code is replaced as follows:

**2111.1 General.** The construction of masonry fireplaces, consisting of concrete or masonry, shall be in accordance with this Section and subject to the restrictions of Title 8, Chapter 6 of the Westminster Municipal Code.

(R) Section 2304.12.2.3 of the International Building Code is amended as follows:

**Section 2304.12.2.3 Supporting member for permanent appurtenances.**  
*Exception:* is deleted in its entirety.

(S) **Section 2701.1** of the International Building Code is amended as follows:

The reference to the International Property Maintenance Code is deleted.

(T) **Section 2801.1** of the International Building Code is amended as follows:

The reference to the International Property Maintenance Code is deleted.

(U) **Section 2909.1** of the International Building Code is amended as follows:

The reference to the International Property Maintenance Code is deleted.

(V) Section 2902.2.1 of the International Building Code is replaced as follows:

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

(W) Section 2902.8 of the International Building Code is added as follows:

**2902.8 Baby diaper-changing accommodations.** Group A occupancies, Group M occupancies in excess of 5,000 square feet, and Group B office buildings in excess of 5,000 square feet shall install and maintain baby diaper changing stations, at each floor level containing restrooms, if the facility is open to the public. Where separate facilities are provided for each sex, there shall be at least one safe, sanitary, and convenient baby diaper changing station located in each facility. Each station shall include signage at or near the entrance to the restroom indicating the availability of the baby diaper changing station. If there is a central directory identifying, for the benefit of the public, the location of offices, restrooms, and other facilities in the building, that central directory shall indicate the location of the baby diaper changing stations.

**Exceptions.**

- If there is centrally located facility with a baby diaper changing station located within 300 feet of the entrance to a restaurant or retail establishment.
- This section does not apply to a nightclub, bar or similar occupancy that does not permit anyone who is under 18 years of age to enter the premises.
- This section also does not apply to a restroom located in a health facility if the restroom is intended for the use of one patient or resident at a time.
- A new establishment or use shall not be subject to the provisions of this section if compliance would create a hardship defined as:
  - No reasonable physical alternative exists for providing baby diaper-changing accommodations, or

- The cost of providing such accommodations exceeds 10 percent of the cost of constructing or substantially modifying the building or space occupied by the establishment or use.

### **INTERNATIONAL BUILDING CODE APPENDIX ADOPTION**

Appendices are Added, Adopted, Adopted as Amended, or Not Adopted as part of this Code as noted in Appendix Adoption Table of the *International Building Code*. Prescriptive design provisions and mandatory requirements from appendices that are added, adopted, or adopted as amended carry the full authority of this code.

#### **APPENDIX ADOPTION TABLE**

<b>APPENDIX</b>	<b>TITLE – SUBJECT</b>	<b>STATUS</b>
AE	Supplementary Accessibility Requirements	Adopted
AI	Patio Covers	Adopted

**11-9-6. INTERNATIONAL RESIDENTIAL CODE AMENDMENTS.**

(A) Chapter 1 of the International Residential Code is replaced as follows:

The scope and administration of this code shall be in accordance with Title 11, Chapter 9 of the Westminster Municipal Code.

(B) Table R301.2(1) of the International Residential Code is replaced as follows:

**TABLE R301.2  
CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA**

Ground snow load	WIND DESIGN				SEISMIC DESIGN CATEGORY <sup>f</sup>	SUBJECT TO DAMAGE FROM			ICE BARRIER UNDERLAYMENT REQUIRED <sup>h</sup>	FLOOD HAZARDS <sup>g</sup>	AIR FREEZING INDEX <sup>i</sup>	MEAN ANNUAL TEMP <sup>j</sup>	ANTI-CIPATED SNOW
	Speed <sup>d</sup>	Topographic effects <sup>k</sup>	Special wind region <sup>l</sup>	Windborne debris zone <sup>m</sup>		Weathering <sup>a</sup>	Frost line depth <sup>b</sup>	Termite <sup>c</sup>					
30 psf	130-155 MPH	No	Yes	No	B	Severe	36"	Protection not req.	No	N/A	532	51.0	12 inches
MANUAL J DESIGN CRITERIA <sup>2</sup>													
Elevation		Altitude correction factor <sup>e</sup>	Coincident wet bulb	Indoor winter design relative humidity		Indoor winter design dry-bulb temperature		Outdoor winter design dry-bulb temperature		Heating temperature difference			
<u>5384</u>		<u>.832</u>	<u>60</u>	30%		70°		-1°		71°			
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			
39.84°N		H	50%	-33to-53		75°		95°		20°			

Footnotes not shown and unchanged.

(C) Section R301.2.4 of the International Residential Code is replaced as follows:

**R301.2.4 Floodplain construction.** The design and construction of buildings and structures located in whole or in part in flood hazard areas, including flood hazard areas subject to high velocity wave action, shall be designed and constructed in accordance with City of Westminster standards and R322, whichever is the most restrictive.

(D) **Table R302.1(1)** of the International Residential Code is amended as follows:

Footnote b is deleted in its entirety.

(E) **Table R302.1(2)** of the International Residential Code is amended as

follows: Footnote a is deleted in its entirety.

Footnote c is deleted in its entirety.

(F) **Section R302.5.1** of the International Residential Code is modified by adding the following sentence:

Doors shall be fully gasketed and sealed on all edges when in the closed position.

(G) Section R302.6 of the International Residential Code is replaced as follows:

**R302.6 Dwelling-garage fire separation.** The garage shall be separated from the residence and its attic space by not less than 5/8-inch type "X" gypsum board applied to the garage side. Where the separation is horizontal the structure supporting the separation shall also be protected by not less than 5/8-inch type "X" gypsum board or equivalent. Garages located less than 3 feet from a dwelling unit on the same lot shall be protected with not less than 5/8-inch type "X" gypsum board on the interior side of exterior walls. Openings and penetrations in these walls shall be regulated by Section R302.5.

(H) Table R302.6 of the International Residential Code is deleted as follows:

**Table R302.6 Dwelling-garage separation.**

Table is deleted in its entirety.

(I) **Section R302.11** item 4 of the International Residential Code is replaced as follows:

4. At opening around vents, pipes, ducts, cables and wires at ceiling and floor levels, with an *approved* material to resist the free passage of flame and products of combustion. Tightly packed fiberglass or mineral wool insulation shall be permitted as the material filling this annular space. Other materials shall not be required to meet the ASTM E136 requirements, but shall be evaluated by an approved agency as equivalent to tightly packed insulation.

(J) Section R305.1.2 of the International Residential Codes is added as follows:

**R305.1.2 Habitable attics and basements in existing buildings.** Where a habitable attic or habitable space in a basement is created in an existing building, ceiling height shall be not less than 6 feet 8 inches. Bathrooms, toilet rooms and laundry rooms shall have a ceiling height of not less than 6 feet 4 inches.

**Exceptions:**

1. For rooms with sloped ceilings, the required floor area of the room shall have a ceiling height of not less than 5 feet (1524 mm) and not less than 50 percent of the required floor area shall have a ceiling height of not less than 6 feet 8 inches (2134 mm).

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

(K) Section R309.5 of the International Residential Code is deleted as follows:

**R309.5 Fire Sprinklers.**

Section is deleted in its entirety.

(L) Section R309.6 of the International Residential Code is added as follows:

**R309.6 Electric vehicle charging systems.** Where provided, electric vehicle charging systems shall be installed in accordance with NFPA 70. Electric vehicle charging system equipment shall be listed and labeled in accordance with UL 2202. Electric vehicle supply equipment shall be listed and labeled in accordance with UL 2594.

(M) **Section 310.1** of the International Residential Code is amended as follows:

Exception 2 is deleted in its entirety.

(N) Section R310.7 of the International Residential Code is deleted as follows:

**R310.7 Alterations or repairs of existing basements.**

Section is deleted in its entirety.

(O) **Section R310.7.1** of the International Residential Code is deleted in its entirety.

(P) **Section R311.7.5** of the International Residential Code is modified by adding the following exception:

(Q) **Exception:** Alterations to existing stairs shall not be required to comply with minimum tread depth or maximum riser height where the existing space and construction does not allow a reduction in pitch or slope of the stairs.

(R) Section R314.1.2 of the International Residential Code is added as follows:

**R314.1.2 Installation.** Smoke alarms and combination smoke and carbon monoxide alarms shall be installed in accordance with their listing and the manufacturer's instructions.

(S) Section R315.1.2 of the International Residential Code is added as follows:

**R315.1.2 Installation.** Carbon monoxide alarms shall be installed in accordance with their listing and the manufacturer's instructions.

(T) **Section R317.1** of the International Residential Code is amended as follows:

Item 8, Exception.

Exception is deleted in its entirety.

(U) **Section R320.1** of the International Residential Code is amended by adding the following:

Where there are seven or more residential dwelling units in a project, the provisions of Colorado Revised Statutes (C.R.S.) Title 9, Article 5, Standards for Accessible Housing, shall be required.

(V) Section R404.1.1, item 2 of the International Residential Code is replaced as follows:

**R404.1.1 Design required.** Item 2. Walls supporting more than 36 inches of unbalanced backfill that do not have permanent lateral support at the top or bottom.

(W) Section R506.2.3 of the International Residential Code is replaced as follows:

**R506.2.3 Vapor retarder.** A minimum 6 mil (0.006 inch; 152 μm) polyethylene or *approved* vapor retarder with joints lapped not less than 6 inches (152 mm) shall be placed between the concrete floor slab and the base course or the prepared subgrade where a base course does not exist.

(X) Section R908.3.1.1, item 2 of the International Residential Code is replaced as follows:

**R908.3.1.1, Item 2.** Where the existing roof covering is slate, clay, cement, asbestos-cement tile, or asphalt shingles.

(Y) Section R1001.1 of the International Residential Code is replaced as follows:

**R1001.1 General.** Masonry fireplaces shall be constructed in accordance with this Section and the applicable provisions of Chapters 3 and 4 of this Code and subject to the restrictions of Title 8, Chapter 6 of the Westminster Municipal Code.

(Z) **Section R1002.1** of the International Residential Code is amended by adding the following:

*Masonry heaters* shall be approved by the Colorado Department of Public Health and Environment and listed on their currently published list of Colorado Approved Masonry Heaters.

(AA) Section R1004.1 of the International Residential Code is replaced 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 UL127 and be subject to the restrictions of Title 8, Chapter 6 of the Westminster Municipal Code.

(BB) Section R1004.4 of the International Residential Code is replaced as follows:

**R1004.4 Unvented gas log heaters.** Unvented fuel-fired appliances are prohibited.

(CC) Section N1101.6 of the International Residential Code is amended as follows:

**Section N1101.6 Defined Terms. RESIDENTIAL BUILDING.** For this code, includes detached one- and two-family dwellings and townhouses as well as Group R-3 and R-4 buildings three stories or less in height above grade plane.

(DD) Section N1101.11 of the International Residential Code is amended to read as follows:

**N1101.11 Installation.** Materials, systems, and equipment shall be installed in accordance with the manufacturer's instructions and this code. Insulation shall meet the requirements of the Grade I standard in ICC/RESNET 301 Normative Appendix A.

(EE) Section N1101.13.4 of the International Residential Code is amended as follows:

**Section N1101.13.4 Tropical Climate Region Option** is deleted in its entirety.

(FF) Section N1101.14 of the International Residential Code is amended as follows:

**Section N1101.14 Certificate is amended as follows:**

7. The code edition under which the structure was permitted, and the compliance path used, and where applicable, the additional efficiency measures selected for compliance with N1108.

8. Where a solar-ready zone is provided, the certificate shall indicate the location, and dimensions.

(GG) Section N1103.1.2 of the International Residential Code is amended as follows:

**N1103.1.2 Heat pump supplementary heat.** Heat pumps having supplementary electric resistance heat shall have controls that are configured to prevent supplemental heat operation when the capacity of the heat pump compressor can meet the heating load. Limit supplemental heat operation to only those times when one of the following applies:



1. The vapor compression cycle cannot provide the necessary heating energy to satisfy the thermostat setting.
2. The heat pump is operating in defrost mode.
3. The vapor compression cycle malfunctions.
4. The thermostat malfunctions.

(HH) Section N1107 of the International Residential Code is amended as follows:

**Section N1107 Tropical Climate Region Compliance Path** is deleted in its entirety.

(II) Section M1410.1 of the International Residential Code is amended by adding the following:

*Pellet fuel-burning appliances* shall be listed in the EPA Certified Wood Heater Database published by the Environmental Protection Agency as currently EPA Certified under the 2020 rule.

(JJ) Section M1414.1 of the International Residential Code is amended by adding the following:

*Fireplace stoves* and wood heaters shall be listed in the EPA Certified Wood Heater Database published by the Environmental Protection Agency as currently EPA Certified under the 2020 rule.

(KK) Section M1416 of the International Residential Code is added as follows:

**M1416 Unvented room heaters.**

**M1416.1 General.** Unvented room heaters, fireplaces, gas logs or other similar unvented devices are prohibited.

(LL) Section M1502.4.6.2 of the International Residential Code is deleted as follows:

**M1502.4.6.2 Manufacturer's instructions.** Section is deleted in its entirety.

(MM) Section M1801.1 of the International Residential Code is replaced as follows:

**M1801.1 Venting required.** Fuel-burning appliances shall be vented to the outdoors in accordance with their listing and label and manufacturer's installation guidelines or instructions. Venting systems shall consist of approved chimneys or vents, or venting assemblies that are integral parts of labeled appliances. Gas-fired appliance shall be vented in accordance with Chapter 24.

(NN) Section G2406.2 of the International Residential Code is amended as follows:

**G2406.2 Prohibited locations.** Items 3 and 4 are deleted in their entirety.

(OO) Section G2417.4.1 of the International Residential Code is replaced as follows:

**G2417.4.1 Test pressure.** The minimum test pressure to be used on threaded pipe shall be 20 psi gauge pressure. For welded pipe the minimum test pressure shall be 60 psi gauge pressure.

(PP) Section G2425.8 of the International Residential Code is amended as follows:

**G2425.8 Equipment not required to be vented.** Item #7 is deleted.

(QQ) Sections G2445.1 through G2445.7.1 of the International Residential Code are replaced as follows:

**G2445.1 Prohibited.** Unvented room heaters and unvented decorative room heaters are prohibited.

(RR) Section P2603.5.1 of the International Residential Code is replaced as follows:

**P2603.5.1 Sewer depth.** Building sewers that connect to private sewage disposal systems shall be a minimum of 42 inches below finished grade at the point of septic tank connection. Building sewers shall be a minimum of 42 inches below grade.

(SS) Table P2903.2 of the International Residential Code is replaced as follows:

**TABLE P2903.2**

**MAXIMUM FLOW RATES AND CONSUMPTION FOR PLUMBING FIXTURES AND  
FIXTURE FITTINGS<sup>b</sup>**

PLUMBING FIXTURE OR FIXTURE FITTING	PLUMBING FIXTURE OR FIXTURE FITTING
Lavatory faucet	1.5 gpm at 60 psi
Shower head <sup>a</sup>	2.0 gpm at 60 psi
Sink faucet	2.2 gpm at 60 psi
Water closet	1.28 gallons per flushing cycle

- a. A hand-held shower spray shall be considered to be a shower head.
- b. Consumption tolerances shall be determined from referenced standards.

(TT) Section P3201.5 of the International Residential Code is modified by adding item #6 as follows:

6. Running traps and those where the inlet side of the trap is not vertically oriented.

(UU) Table P3201.7 of the International Residential Code is amended as follows:

**TABLE P3201.7 SIZE OF TRAPS FOR PLUMBING FIXTURES** is amended to reflect the trap size minimum for a shower is 2 inches.

(VV) Section E3401.1 of the International Residential Code is amended by adding the following:

Whenever there is a conflict between this Code and the National Electrical Code, the provisions of the National Electrical Code will govern.

(WW) Section E3601.6.2 of the International Residential Code is replaced as follows:

**E3601.6.2 Location.** The service disconnecting means shall be installed at a readily accessible location on the outside of the building unless approved by the Building Official.

**INTERNATIONAL RESIDENTIAL CODE APPENDIX ADOPTION**

Appendices are Added, Adopted, Adopted as Amended, or Not Adopted as part of this Code as noted in Appendix Adoption Table of the *International Residential Code*. Prescriptive design provisions and mandatory requirements from appendices that are added, adopted, or adopted as amended carry the full authority of this code.

**APPENDIX ADOPTION TABLE**

APPENDIX	TITLE – SUBJECT	STATUS
AA	Sizing and Capacities of Gas Piping (IFGC)	Adopted
AH	Patio Covers	Adopted
AJ	Existing Buildings and Structures	Adopted
AK	Sound Transmission	Adopted

AM	Home Day Care – R-3 Occupancy	Adopted
AQ	Tiny Homes	Adopted