

ORDINANCE NO 2023-5.2

1 AN ORDINANCE AMENDING CHAPTER 150.071 OF THE CODE OF BENNET TO
2 ADOPT THE INTERNATIONAL RESIDENTIAL BUILDING CODE, 2018 EDITION; TO
3 ADOPT VARIOUS AMENDMENTS, EXCEPTIONS, ADDITIONS, AND DELETIONS
4 THERETO AS PERMITTED BY STATE LAW TO REDUCE UNNECESSARY COSTS OF
5 CONSTRUCTION, INCREASE SAFETY, DURABILITY, OR EFFICIENCY, ESTABLISH
6 BEST BUILDING OR CONSTRUCTION PRACTICES WITHIN THE CITY OF BENNET,
7 AND TO ADDRESS SPECIAL LOCAL CONDITIONS WITHIN THE CITY OF BENNET;
8 AND AMENDING §§ 150.071 OF THE CODE OF BENNET.
9

10 **FINDINGS**

11 The Mayor and City Council of the City of Bennet, Nebraska finds and determines that:

12 **I.**

13 Pursuant to State Law, it is necessary and appropriate to adopt the International Residential
14 Code, 2018 Edition with various amendments, exceptions, additions and deletions.

15 **II.**

16 Certain amendments, modifications, and deletions from said Code are necessary in order
17 to reduce unnecessary costs of construction, increase safety, durability, or efficiency, establish best
18 building or construction practices within the City, and address special local conditions within the
19 City.

20 NOW THEREFORE BE IT ORDAINED BY THE MAYOR AND CITY COUNCILOF
21 THE CITY OF BENNET, NEBRASKA:
22

23 Section 1. That Section 150.071 of the Code of Bennet be amended to read as follows:

24 **§ 150.071 International Residential Code, 2018 Edition; Adoption by Reference;**

25 **Application to Extraterritorial Zoning Jurisdiction.**

1 Except as hereinafter provided by specific amendment, the International Residential Code,
2 2018 Edition, as published by the International Code Council, Inc., and amended as necessary by
3 the city, (hereinafter referred to in this Chapter 150.071 as the “International Residential Code”),
4 a copy of which is on file in the office of the City Clerk/Treasurer, be and the same is hereby
5 adopted as the Bennet Residential Code for the City of Bennet and for the area within its
6 extraterritorial zoning jurisdiction, for the purpose of regulating and governing the construction,
7 alteration, enlargement, replacement, repair, equipment, location, removal, and demolition of
8 detached one- and two-single-family dwellings and (townhouses) not more than 3 stories in height
9 with separate means of egress as herein provided; providing for the issuance of permits and
10 collection of fees therefor; with the additions, insertions, deletions, and changes as hereinafter
11 provided in this Chapter.

12
13 Section 2. **International Residential Code; Section R101.1; Amended.**

14 Section R101.1 of the International Residential Code is amended to read as follows:

15 **R101.1 Title.** These provisions shall be known as the Bennet Residential Code and shall
16 be cited as such and will be referred to herein as the “International Residential Code” or “this
17 code.”

18
19 Section 3. **International Residential Code; Section 101.3; Amended.**

20 Section R101.3 of the International Residential Code is amended to read as follows:

21 **R101.3 Intent.** The purpose of this code is to establish the minimum requirements to
22 safeguard the public safety, health, and general welfare through affordability, structural strength,

1 means of egress facilities, stability, sanitation, light and ventilation, energy conservation, and
2 safety to life and property from fire and other hazards attributable to the built environment.

3
4 **Section 4. International Residential Code; Section R103; Deleted.**

5 Section R103 of the International Residential Code (Department of Building Safety) is
6 deleted in its entirety.

7
8 **Section 5. International Residential Code; Section R104.10.1 Flood Hazard Areas;**
9 **Deleted.**

10 Section R104.10.1 of the International Residential Code and all subsections thereof are
11 hereby deleted.

12
13 **Section 6. International Residential Code; Section R105.2; Amended.**

14 That portion of Section R105.2 of the International Building Code relating to buildings
15 exempt from permit requirements is amended to read as follows:

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

20 **Building:**

21 1. One story detached accessory structures, provided the floor area does not exceed
22 200 square feet (18.58 m²).

1 2. Retaining walls that are not over 4 feet (1219 mm) in height measured from the
2 bottom of the footing to the top of the wall, unless supporting a surcharge.

3 3. Water tanks supported directly upon grade if the capacity does not exceed 5,000
4 gallons (18927 L) and the ratio of height to diameter or width does not exceed 2 to 1.

5 4. Sidewalks and driveways not more than 30 inches (762 mm) above adjacent grade
6 and not over any basement or story below.

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

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

9 7. Swings and other playground equipment accessory to a one- or two-family
10 dwelling.

11 8. Window awnings supported by an exterior wall which do not project more than 54
12 inches (1372 mm) from the exterior wall and do not require additional support.

13 9. Shingling and re-siding.

14 The remainder of Section R105.2 is adopted as written.

15
16 Section 7. **International Residential Code; Section R105.3.1.1 Amended;**
17 **Determination of Substantially Improved or Substantially Damaged Existing Buildings in**
18 **Flood Hazard Areas.**

19 Section 105.3.1.1 of the International Residential Code is amended to read as follows:

20 **Section R105.3.1.1 Determination of substantially improved or substantially damaged**
21 **existing buildings in Flood Hazard Areas.** For buildings located in a floodplain or floodprone
22 area within the City’s zoning jurisdiction, the regulations and specifications set forth
23 in the Bennet Zoning Regulations shall apply.

1
2 Section 8. **International Residential Code; Section 106.1.4; Information for**
3 **Construction and Flood Hazard Areas; Deleted.**

4 Section 106.1.4 of the International Residential Code and all subsections thereof are hereby
5 deleted.

6
7 Section 9. **International Residential Code; Section R107; Deleted.**

8 Section R107 of the International Residential Code (Temporary Structures and Uses) is
9 hereby deleted in its entirety.

10
11 Section 10. **International Residential Code; Section R108; Amended.**

12 **R108.1 Payment of fees.** A permit shall not be valid until the fees prescribed by law have
13 been paid, nor shall an amendment for a permit be released until the additional fee, if any, has been
14 paid.

15 **R108.2 Schedule of permit fees.** The City Board shall adopt, by Resolution, a Schedule
16 of Permit Fees for each permit to be issued, and for any plan review or inspection to be conducted
17 under this code.

18 **R108.3 Plan review fees.** When a plan or other data is required to be submitted by Section
19 R105.3, a plan review fee shall be paid at the rate stated in the Bennet Schedule of Permit Fees.
20 One additional plan review of corrections made on the original plans after the initial plan review
21 shall be performed at no cost to the applicant; however, where plans require further corrections,
22 are incomplete, or are changed necessitating additional plan review, an additional plan review fee
23 shall be charged at the rate stated in the Schedule of Permit Fees.

24 **R108.4 Related fees.** The payment of the fee for construction, alteration, removal, or
25 demolition for work done in connection with or concurrently with the work authorized by a
26 building permit shall not relieve the applicant or holder of the permit from the payment of other
27 fees that are prescribed by law.

28 **R108.5 Refunds.** There shall be no refunds or credits given on permits or applications
29 regulated by this Chapter that have expired. A request for refund may be made to the City Council
30 only when the permit holder returns an unused permit prior to the expiration of the permit. A
31 refund of plan review fee may be requested only when an application for a permit for which such
32 fee has been paid is withdrawn or cancelled before any plan review is done.

1 **R108.6 Work commencing before permit issuance.** Any person who commences any
2 work requiring a permit on a building, structure, electrical, gas, mechanical, or plumbing system
3 before obtaining the necessary permits shall be subject to a fee equal to twice the otherwise
4 established fee for issuance of the required permit.

5
6 Section 11. **INTERNATIONAL RESIDENTIAL CODE; SECTION R109.1;**
7 **AMENDED.**

8 Section R109.1 of the International Residential Code is amended to read as follows:

9 **R109.1 Types of inspections.** All construction or work for which a permit is required
10 shall be subject to inspection by the Building Official and all such construction work shall remain
11 accessible and exposed for inspection purposes until approved by the Building Official.

12 Approval as a result of an inspection shall not be construed to be an approval of a violation
13 of the provisions of this code or of other ordinances of the City.

14 A survey of the lot or lots upon which permitted work for additions, alterations, or repairs
15 are being accomplished shall be provided by a duly licensed surveyor of the State of Nebraska
16 before plans and specifications shall be accepted by the Building Official to verify compliance
17 of the construction or work with building line setback requirements of the Bennet Municipal
18 Code. All boundary corners of a lot or lots with permanent survey monuments shall be marked
19 in the field by a duly licensed surveyor of the State of Nebraska.

20 It shall be the duty of the permit applicant to cause the work to remain accessible and
21 exposed for inspection purposes. Neither the Building Official nor the City shall be liable for
22 expense entailed in the removal or replacement of any material required to allow inspection.

23
24 Section 12. **International Residential Code; Section R109.1.4 Amended; Frame and**
25 **Masonry Inspection.**

1 Section R109.1.4 of the International Residential Code is amended to read as follows:

2 **R109.1.4 Frame and masonry inspection.** Inspection of framing construction shall be
3 made after all framing, firestopping, draftstopping, and bracing are in place and after the water-
4 resistive barrier and flashing and drainage system for any adhered masonry or EIFS (installed
5 against wood) is installed but before the exterior wall covering is installed.

6
7 Section 13. **International Residential Code; Section R109.1.7 Added; Reinspections.**

8 Section R109.1.7 is added to the International Residential Code to read as follows:

9 **R109.1.7 Reinspections.** A reinspection fee may be assessed for each inspection or
10 reinspection when such portion of work for which inspection is called is not complete or when
11 corrections called for are not made.

12 This subsection is not to be interpreted as requiring reinspection fees the first time a job
13 is rejected for failure to comply with the requirements of this code, but as controlling the
14 practice of calling for inspections before the job is ready for such inspection or reinspection.

15 Reinspection fees may be assessed when the inspection record card is not posted or
16 otherwise available on the work site, the approved plans are not readily available to the inspector,
17 for failure to provide access on the date for which inspection is requested, or for deviating
18 from plans requiring the approval of the Building Official.

19
20 Section 14. **International Residential Code; Section R109.5 Added; Address**
21 **Identification.**

22 Section R109.5 is added to the International Residential Code to read as follows:

1 **R109.5 Address identification.** All additions, alterations, or repairs for which a permit is
2 required by this code shall be provided with a construction address identification sign. Said
3 identification sign shall be a sign of metal, wood, plastic, or other approved rigid material with
4 permanent identification numbers and letters thereon indicating the legally assigned street or
5 other type address assigned by the Building Official. Said identification sign shall have numbers
6 and letters of such size and shall be so placed upon the construction site that said sign is readily
7 visible and identifiable from the public street. Said identification sign shall be properly
8 maintained during the entire period of time that the construction or work is being accomplished
9 or maintained.

10
11 Section 15. **International Residential Code; Sections R110.2 and R110.3; Amended;**
12 **Certificate of Occupancy.**

13 Sections R110.02 and R110.3 of the International Residential Code is amended to read as
14 follows:

15 **R110.2 Change in use.** Changes in the character or use of a building shall not be made
16 except as specified in Section 111.1 of the International Building Code and in accordance with the
17 International Existing Building Code, 2018 Edition.

18 **R110.3 Certificate issued.** After the Building Official inspects the building or structure
19 and finds no violations, of the provisions of this code or the laws that are enforced by the City, the
20 Building Official shall issue a certificate of occupancy.

21
22 Section 16. **International Residential Code; Section R111 Deleted; Service Utilities.**

1 Section R111 of the International Residential Code and all subsections thereof are hereby
2 deleted.

3
4 **Section 17. International Residential Code; Section R112; Board of Appeals; Deleted.**

5 Section R112 of the International Residential Code is deleted in its entirety.

6
7 **Section 18. International Residential Code; Section R115 Added; Demolition of**
8 **Buildings.**

9 Section R115 is added to the International Residential Code to read as follows:

10 **SECTION R115**

11 **DEMOLITION OF BUILDINGS**

12 **R115.1 General.** Demolition of buildings shall comply with Section 3303 of the
13 International Building Code as adopted by the City of Bennet in the Bennet Municipal Code.
14 Demolition under this code must start within thirty days and be completed sixty days after the date
15 the permit was issued. The Building Official may extend a demolition permit an additional thirty
16 days. Applications for demolition permits shall expire 180 days after the application date. In the
17 event of a conflict between this section and any part of Code of Bennet, Chapter 150, the relevant
18 section of the Unsafe Building Code shall control.

19
20 **Section 19. International Residential Code Table No. R301.2(1) Amended; Climatic**
21 **and Geographic Design Criteria.**

22 Table No. R301.2(1) of the International Residential Code is amended to read as follows:

23 **TABLE R301.2(1)**

CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA

<u>GROUND SNOW LOAD</u>	<u>WIND SPEED^d</u> (mph)	<u>SEISMIC DESIGN CATEGORY^f</u>	<u>SUBJECT TO DAMAGE FROM</u>			<u>WINTER DESIGN TEMP^e</u>	<u>ICE BARRIER UNDERLAYMENT REQUIRED^h</u>	<u>FLOOD HAZARDS^g</u>
			<u>Weathering^a</u>	<u>Frost Line depth^b</u>	<u>Termite^c</u>			
25 psf	115 mph	B	Severe	36"	moderate to heavy	70° F	Yes	See BMC §152.053

All footnotes to Table R301.2(1) of this code shall apply.

Section 20. International Residential Code; Section R301.2.4 Amended; Floodplain Construction.

Section R301.2.4 of the International Residential Code is amended to read as follows:

Section R301.2.4 Floodplain construction. For buildings located in a floodplain or floodprone area within the City’s zoning jurisdiction, the regulations and specifications set forth in Code of Bennet, Chapter 154 shall apply.

Section 21. International Residential Code; Table R301.5 Amended; Minimum Uniformly Distributed Live Loads.

Table R301.5 of the International Residential Code is amended to read as follows:

TABLE R301.5

MINIMUM UNIFORMLY DISTRIBUTED LIVE LOADS
(in pounds per square foot)

<u>USE</u>	<u>LIVE LOAD</u>
Attics with limited storage ^{b,g, h}	<u>20</u>
Attics without storage ^b	<u>10</u>
Attics served with a fixed stairs	<u>40</u>
Decks and exterior balconies ^e	<u>40</u>

<u>Fire escapes</u>	<u>40</u>
<u>Guardrails and handrails^d</u>	<u>200</u>
<u>Guardrails in-fill components^f</u>	<u>50ⁱ</u>
<u>Passenger vehicle garages^a</u>	<u>50^a</u>
<u>Rooms other than sleeping rooms</u>	<u>40</u>
<u>Sleeping rooms</u>	<u>40</u>
<u>Stairs</u>	<u>40^c</u>

1 For SI: 1 pound per square foot = 0.0479 kPa, 1 square inch = 645 mm², 1 pound = 4.45 N.

2 All footnotes to Table No. R301.5 of this code shall apply.

3

4 Section 22. **International Residential Code; Table R301.7 Amended; Allowable**
5 **Deflection of Structural Members.**

6 Table R301.7 of the International Residential Code is amended to read as follows:

7

TABLE R301.7

8

ALLOWABLE DEFLECTION OF STRUCTURAL MEMBERS

<u>STRUCTURAL MEMBER</u>	<u>ALLOWABLE DEFLECTION</u>
<u>Rafters having slopes greater than 3/12</u> <u>With finished ceiling not attached to rafters</u>	<u>L/180</u>
<u>Interior walls and partitions</u>	<u>H/240</u>
<u>STRUCTURAL MEMBER</u>	<u>ALLOWABLE DEFLECTION</u>
<u>Floors – 16’-6” span or less</u>	<u>L/360</u>
<u>Floors – over 16’-6” span</u>	<u>L/480</u>
<u>Ceilings with brittle finishes (including plaster and stucco)</u>	<u>L/360</u>
<u>Ceilings with flexible finishes (including gypsum board)</u>	<u>L/240</u>
<u>All other structural members</u>	<u>L/240</u>
<u>Exterior walls – wind loads^a with plaster or stucco finish</u>	<u>H/360</u>

<u>Exterior walls – wind loads ^a with other brittle finishes</u>	<u>H/240</u>
<u>Exterior walls – wind loads ^a with flexible finishes</u>	<u>H/180^d</u>

1 Note: L = span length, H = span height.

2 Footnotes a-d to Table No. R301.7 of this code shall apply.

3

4 **Section 23. International Residential Code; Section R302.1 Amended; Exterior Walls.**

5 Section R302.1 of the International Residential Code is amended to read as follows:

6 **R302.1 Exterior walls.** Construction, projections, openings, and penetrations of exterior
7 walls of dwellings and accessory buildings shall comply with Table R302.1(1). These provisions
8 shall not apply to walls, projections, openings, or penetrations in walls that are perpendicular to
9 the line used to determine the fire separation distance. Projections beyond the exterior wall shall
10 not extend more than 12 inches into the areas where openings are prohibited. No part of a detached
11 structure shall be closer than 2 feet from a lot line.

12 **Exception 1:** Detached tool sheds and storage sheds, playhouses, and similar structures
13 with a floor area of equal to or less than 120 square feet are not required to provide wall protection.

14 **Exception 2:** Detached accessory buildings greater than 120 square feet with walls located
15 less than 3 feet from a lot line shall be 1 hour protected with exposure from the inside with no
16 openings.

17 **Exception 3:** An accessory building 120 square feet or greater, located less than 6 feet
18 from a dwelling unit including decks greater than 30 inches above grade, shall be protected with
19 no less than 5/8" type X gypsum board applied to the interior side of the walls and the ceiling. The
20 door shall be no less than a solid core or steel door no less than 1 3/8" thickness. No other openings
21 shall be permitted.

Section 24. International Building Code; Table R302.1(1) Amended; Exterior Walls.

Table R302.1(1) of the International Building Code is amended to read as follows:

TABLE R302.1(1)
EXTERIOR WALLS

For SI: 1 foot = 304 mm

<u>EXTERIOR WALL ELEMENT</u>		<u>MINIMUM FIRE-RESISTANCE RATING</u>	<u>MINIMUM FIRE SEPARATION DISTANCE</u>
<u>Walls</u>	<u>(Fire-resistance rated)</u>	<u>1 hour with exposure from both sides*</u>	<u>0 feet</u>
	<u>(Not fire-resistance rated)</u>	<u>0 hours</u>	<u>3 feet</u>
<u>Projections</u>	<u>Not allowed</u>	<u>Not Applicable**</u>	<u><2 feet</u>
	<u>(Fire-resistance rated)</u>	<u>1 hour on the underside^{ab}</u>	<u><3 feet</u>
	<u>(Not fire-resistance rated)</u>	<u>0 hours</u>	<u>3 feet</u>
<u>Openings</u>	<u>Not allowed</u>	<u>N/A</u>	<u><3 feet</u>
	<u>Unlimited</u>	<u>0 hours</u>	<u>3 feet</u>
<u>Penetrations</u>	<u>All</u>	<u>Comply with Section R302.4</u>	<u><3 feet</u>
		<u>None required</u>	<u>3 feet</u>

a. The fire-resistance rating shall be permitted to be reduced to 0 hours on the underside of the eave overhang if fireblocking is provided from the wall top plate to the underside of the roof sheathing.

b. The fire-resistance rating shall be permitted to be reduced to 0 hours on the underside of the rake overhang where gable vent openings are not installed.

*Detached Garages – 1 hour protection from the inside only.

**Projections on property line for townhouse units, fire rating same as townhouse.

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Section 25. International Residential Code; Table R302.1(2) Deleted; Exterior Walls-
Dwellings with Fire Sprinklers.

Table R302.1(2) of the International Residential Code is hereby deleted.

Section 26. International Residential Code; Figure R302.2 (1) Added; Typical Party
Wall Section; Two 1 Hour Walls.

Figure R302.2 (1) is added to the International Residential Code as shown on said figure
at the end of this chapter.

Section 27. International Residential Code; Figure R302.2(2) Added; Typical Party
Wall Section; 2 Hour Non-Bearing Wall with Parallel Bearing Walls.

Figure R302.2 (2) is added to the International Residential Code as shown on said figure
at the end of this chapter.

Section 28. International Residential Code; Figure R302.2 (3) Added; Typical Party
Wall Section; One 2 Hour Shaft Wall.

Figure R302.2 (3) is added to the International Residential Code as shown on said figure
at the end of this chapter.

Section 29. International Residential Code; Figure R302.2 (4) Added; Typical Party
Wall Section; Single 2 Hour Wall.

1 Figure R302.2 (4) is added to the International Residential Code as shown on said figure
2 at the end of this chapter.

3
4 **Section 30. International Residential Code; Section R302.2.2 Amended; Common**
5 **Walls.**

6 Section R302.2.2 is added to the International Residential Code to read as follows:

7 **R302.2.2 Common Walls.** A common 2-hour fire-resistance-rated wall assembly tested
8 in accordance with ASTM E 119 or UL 263 is permitted for townhouses if such walls do not
9 contain plumbing or mechanical equipment, ducts, or vents in the cavity of the common wall. The
10 wall shall be rated for fire exposure from both sides and shall extend to and be tight against exterior
11 sheathing of exterior walls and the underside of the roof sheathing. Electrical installations shall be
12 installed in accordance with the State Electrical Code. Penetrations of electrical outlet boxes shall
13 be in accordance with Section R302.4.

- 14 1. Where a fire sprinkler system in accordance with the Bennet Plumbing Code is
15 provided, the common wall shall be not less than a 1-hour fire-resistance rated wall
16 assembly tested in accordance with ASTM E119, UL 263, or Section 703.3 of the
17 International Building Code.
- 18 2. Where a fire sprinkler system in accordance with the Bennet Plumbing Code is not
19 provided, the common wall shall be not less than a 2-hour fire-resistance-rated wall
20 assembly tested in accordance with ASTM E119, UL 263, or Section 703.3 of the
21 International Building Code.

1 Section 31. **International Residential Code; Section R302.2.6 Exception 5 Deleted;**
2 **Structural Independence.**

3 Exception 5 to Section R302.2.6 of the International Residential Code is hereby deleted.
4

5 Section 32. **International Residential Code; Section R302.3 Amended; Two-family**
6 **Dwellings.**

7 Section R302.3 of the International Residential Code is amended to read as follows:

8 **R302.3 Two-family dwellings.** Dwelling units in two-family dwellings shall be separated
9 from each other by wall and/or floor assemblies of not less than 1-hour fire-resistive rating when
10 tested in accordance with ASTM E 119. Fire-resistance-rated floor-ceiling and wall assemblies
11 shall extend to and be tight against the exterior wall, and wall assemblies shall extend to the
12 underside of the roof sheathing. The minimum connection between units of a two-family dwelling
13 shall be an 8-foot roof connection measured parallel to the adjoining walls and connected to each
14 unit.

15 **Exceptions:**

16 1. A fire resistance rating of 1/2 hour shall be permitted in buildings equipped throughout
17 with an automatic sprinkler system installed in accordance with NFPA 13.

18 2. Wall assemblies need not extend through attic spaces when the ceiling is protected by
19 not less than 5/8-inch Type X gypsum board and an attic draft stop constructed as specified in
20 Section R302.12.1 is provided above and along the wall assembly separating the dwellings. The
21 structural framing supporting the ceiling shall also be protected by not less than 1/2-inch gypsum
22 board or equivalent.

1 Section 33. International Residential Code; Section R302.5.1 Amended; Opening
2 **Protection.**

3 Section R302.5.1 of the International Residential Code is amended to read as follows:

4 **R302.5.1 Opening protection.** Openings from a private garage directly into a room used
5 for sleeping purposes shall not be permitted. Other openings between the garage and residence
6 shall be equipped with solid wood doors not less than 1 3/8 inches in thickness, solid or
7 honeycomb-core steel doors not less than 1 3/8 inches thick, or 20-minute fire-rated doors.

8
9 Section 34. International Residential Code; Section R302.5.2 Deleted; Duct
10 **Penetration.**

11 Section R302.5.2 of the International Residential Code is hereby deleted.

12
13 Section 35. International Residential Code; Section R302.6 Amended; Dwelling-
14 **Garage Fire Separation.**

15 Section 302.6 of the International Residential Code is amended to read as follows:

16 **R302.6 Dwelling-Garage Fire Separation.** The garage shall be separated from the
17 residence and its attic area by not less than 5/8-inch type X gypsum board applied to the garage
18 wall side. Garages beneath habitable rooms shall be separated from all habitable rooms above by
19 not less than 5/8- inch type X gypsum board or equivalent. Where the separation is a floor-ceiling
20 assembly, the structure supporting the separation shall also be protected by not less than 5/8-inch
21 type X gypsum board or equivalent. A cantilever projecting over a garage door shall be protected
22 on the underside by not less than 5/8-inch Type X gypsum board.

1 Garages located less than 6 feet from a dwelling unit on the same lot shall be protected with not
 2 less than 5/8-inch type X gypsum board applied to the interior side of exterior walls that are within
 3 this area. Openings in these walls shall be regulated by Table R302.1(1). This provision does not
 4 apply to garage walls that are perpendicular to the adjacent dwelling unit wall.
 5 Accessory buildings 120 square feet or greater, located less than 6 feet from the residence shall be
 6 protected by not less than 5/8-inch type X gypsum board applied to the interior side, with no
 7 openings permitted.

8

9 **Section 36. International Residential Code; Table R302.6 Amended; Dwelling/Garage**
 10 **Fire Separation.**

11 Table R302.6 of the International Residential Code is amended to read as follows:

12

TABLE R302.6

13

DWELLING/GARAGE SEPARATION

<u>SEPARATION</u>	<u>MATERIAL</u>
<u>From the residence and attics</u>	<u>Not less than 5/8-inch type X gypsum board or equivalent applied to the garage side.</u>
<u>Structure(s) supporting floor/ceiling assemblies used for separation required by this section</u>	<u>Not less than 5/8-inch type X gypsum board or equivalent.</u>
<u>Garages located less than 6 feet from a dwelling unit on the same lot</u>	<u>Not less than 5/8 type X gypsum board or equivalent applied to the interior side of exterior walls that area within this area.</u>

14

15 **Section 37. International Residential Code; Section R302.13 Deleted; Fire Protection**
 16 **of Floors.**

17 Section R302.13 of the International Residential Code is hereby deleted.

18

1 Section 38. **International Residential Code; Section R303.1 Exception 2 Amended;**

2 **Habitable Rooms.**

3 Exception 2 of Section R303.1 of the International Residential Code is amended to read
4 as follows:

5 2. The glazed areas shall not be required to be provided in habitable rooms in
6 basements except for bedrooms where Exception 1 above is satisfied and artificial light
7 is provided capable of producing an average illumination of 6 foot candles over the area of
8 the room at a height of 30 inches above the floor level. The glazed area required for a
9 basement bedroom shall be a maximum of 11.5 square feet.

10
11 Section 39. **International Residential Code; Section R303.3 Amended; Bathrooms.**

12 Section R303.3 of the International Residential Code is amended to read as follows:

13 **R303.3 Bathrooms.** Bathrooms, water closet compartments, laundry rooms, and other
14 similar rooms shall be provided with a mechanical ventilation system. The minimum ventilation
15 rates shall be 50 cfm for intermittent ventilation or 20 cfm for continuous ventilation. Ventilation
16 air from the space shall be exhausted directly to the outside.

17 In laundry rooms, dryers vented directly to the outside are deemed to meet the requirements
18 of this section.

19
20 Section 40. **International Residential Code; Section R303.4 Amended; Mechanical**
21 **Ventilation.**

22 Section R303.4 of the International Residential Code is amended to read as follows:

1 **R303.4 Mechanical ventilation.** See Bennet Municipal Code Chapter 150.072, Bennet
2 Mechanical Code.

3

4 Section 41. **International Residential Code; Sections R303.5 Amended; Opening**
5 **Location.**

6 Section R303.5 of the International Residential Code is amended to read as follows:

7 **R303.5 Opening location.** See Bennet Municipal Code Chapter 150.072, Bennet
8 Mechanical Code.

9

10 Section 42. **International Residential Code; Sections 303.5.1 Amended; Intake**
11 **Openings.**

12 Section R303.5.1 of the International Residential Code is amended to read as follows:

13 **R303.5.1 Intake Opening.** See Bennet Municipal Code Chapter 150.072, Bennet
14 Mechanical Code.

15

16 Section 43. **International Residential Code; Sections 303.5.2 Amended; Exhaust**
17 **Openings.**

18 Section R303.5.2 of the International Residential Code is amended to read as follows:

19 **R303.5.2 Exhaust openings.** See Bennet Municipal Code Chapter 150.072, Bennet
20 Mechanical Code.

21

22 Section 44. **International Residential Code; Section R303.6 Amended; Outside**
23 **Opening Protection.**

1 Section R303.6 of the International Residential Code is amended to read as follows:

2 **R303.6 Outside opening protection.** See Bennet Municipal Code Chapter 150.072,
3 Bennet Mechanical Code.

4
5 Section 45. **International Residential Code; Section R305.2 Added; Headroom**
6 **Clearance.**

7 Section R305.2 is added to the International Residential Code to read as follows:

8 **R305.2 Headroom clearance.** Any portion of a garage shall have an unobstructed
9 headroom clearance of not less than 6 feet 8 inches above the finished floor to any ceiling, beam,
10 pipe, or similar construction except for wall-mounted shelves, storage surfaces, racks, or cabinets.

11
12 Section 46. **International Residential Code; Section R306.2 Amended; Kitchen.**

13 Section R306.2 of the International Residential Code is amended to read as follows:

14 **R306.2 Kitchen.** Each dwelling unit shall be provided with a kitchen area and every
15 kitchen area shall be provided with a sink. Domestic free-standing or built-in ranges shall have a
16 vertical clearance above the cooking top of not less than 30 inches to unprotected combustible
17 material. When the underside of such combustible material is protected with insulating millboard
18 at least 1/4 inch thick covered with 28 gage metal or a metal ventilating hood, the distance shall
19 be not less than 24 inches.

20
21 Section 47. **International Residential Code; Figure R307.1 Amended; Minimum**
22 **Fixture Clearances.**

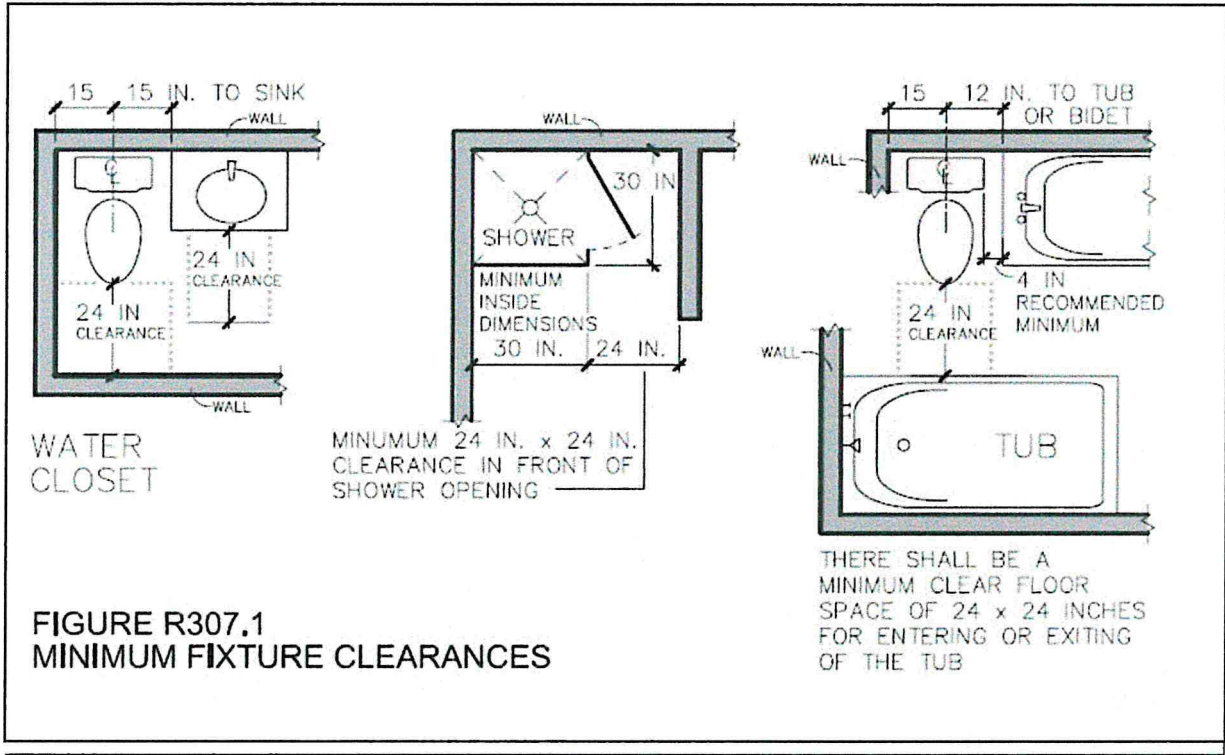
23 Figure R307.1 of the International Residential Code is amended to read as follows:

1

FIGURE R307.1

2

MINIMUM FIXTURE CLEARANCES



3

4 **Section 48. International Residential Code; Section R307.3 Added; Access to**
5 **Whirlpool Pump.**

6 Section R307.3 is added to the International Residential Code to read as follows:

7 **R307.3 Access to whirlpool pump.** Access shall be provided to circulation pumps in
8 accordance with the fixture manufacturer's installation instructions. Where the manufacturer's
9 instructions do not specify the location and minimum size of field fabricated access openings, a
10 12-inch by 12-inch minimum size opening shall be installed to provide access to the circulation
11 pump. Where pumps are located more than 2 feet from the access opening, an 18-inch by 18-inch
12 minimum size opening shall be installed. A door or panel shall be permitted to close the opening.

1 In all cases, the access opening shall be unobstructed and be of the size necessary to permit the
2 removal and replacement of the circulation pump.

3

4 Section 49. **International Residential Code; Section R309.3 Amended; Garages and**
5 **Carports; Flood Hazard Areas.**

6 Section R309.3 of the International Residential Code is amended to read as follows:

7 **R309.3 Flood hazard areas.** For buildings located in a floodplain or floodprone area
8 within the City’s zoning jurisdiction, the regulations and specifications set forth in Code of
9 Bennet, Chapter 154 shall apply.

10

11 Section 50. **International Residential Code; Section R309.5 Deleted; Fire Sprinklers.**

12 Section R309.5 of the International Residential Code is hereby deleted.

13

14 Section 51. **International Residential Code; Section R310.1 Amended; Emergency**
15 **Escape and Rescue Required.**

16 Section R310.1 of the International Residential Code is amended to read as follows:

17 **R310.1 Emergency escape and rescue required.** Basements, habitable attics, and every
18 sleeping room shall have at least one operable emergency escape and rescue opening. Where
19 basements contain one or more sleeping rooms, emergency egress and rescue openings shall be
20 required in each sleeping room. Rooms with a storage closet greater than 18 inches in depth or
21 direct access to a bathroom shall also comply with this requirement. Where emergency escape
22 and rescue openings are provided, they shall have a sill height of not more than 44 inches
23 measured from the finished floor to the bottom of the clear opening. The net clear opening

1 dimensions required by this section shall be obtained by the normal operation of the emergency
2 escape and rescue opening from the inside. Emergency escape and rescue openings with a
3 finished sill height below the adjacent ground elevation shall be in accordance with Section
4 R310.2. Emergency escape and rescue openings shall open directly into the public way, or a
5 yard or court that opens to a public way.

6 **Exception:** Basements used only to house mechanical equipment and not exceeding total
7 floor area of 200 square feet.

8
9 **Section 52. International Residential Code; Section R310.2.1 Exception Deleted;**
10 **Minimum Opening Area.**

11 The exception to Section R310.2.1 of the International Residential Code is hereby deleted.

12
13 **Section 53. International Residential Code; Section R310.2.1 Exception Deleted;**
14 **Minimum Opening Area.**

15 The exception to Section R310.2.1 of the International Residential Code is hereby deleted.

16
17 **Section 54. International Residential Code; Section R311.7.5.1 Amended; Risers.**

18 Section R311.7.5.1 is added to the International Residential Code to read as follows:

19 **R311.7.5.1 Risers.** The maximum riser height shall be 7 ¾ inches and the minimum
20 riser height shall be 4 inches. The riser shall be measured vertically between leading edges of
21 the adjacent tread. The greatest riser height within any flight of stairs shall not exceed the smallest
22 by more than 3/8 inch. Risers shall be vertical or sloped from the underside of the nosing of the

1 tread above at an angle not more than 30 degrees from the vertical. Open risers are permitted
2 between treads.

3
4 **Section 55. International Residential Code; Section R311.7.5.3 Amended; Nosings.**

5 Section R311.7.5.3 is amended to the International Residential Code to read as follows:

6 **R311.7.5.3 Nosings.** The radius of curvature at the nosing shall be no greater than 9/16
7 inch. A nosing not less than 3/4 inch but not more than 1 1/4 inches be provided on
8 stairways with solid risers. The greatest nosing projection shall not exceed the smallest nosing
9 projection by more than 3/8 inch between two stories, including the nosing at the level of floors
10 and landings. Beveling of nosings shall not exceed 1/2 inch. Risers shall be vertical or sloped
11 under the tread above from the underside of the nosing above at an angle not more than 30
12 degrees from the vertical. Open risers are permitted.

13 **Exception:** A nosing is not required where the tread depth is a minimum of 10 inches.

14
15 **Section 56. International Residential Code; Section R311.7.6 Amended; Landings for**
16 **Stairways.**

17 Section R311.7.6 is amended to the International Residential Code to read as follows:

18 **R311.7.6 Landings for stairways.** There shall be a floor or landing at the top and
19 bottom of each stairway.

20 **Exception 1:** A floor or landing is not required at the top of an interior flight of stairs,
21 including stairs in an enclosed garage, provided a door does not swing over the stairs. A flight
22 of stairs shall not have a vertical rise larger than 12 feet between floor levels or landings. The

1 width of each landing shall not be less than the width of the stairway served. Every landing shall
2 have a minimum dimension of 36 inches measured in the direction of travel.

3 **Exception 2:** The bottom of an exterior stair shall be supported by a concrete or stone
4 pad that provides a minimum landing of 12 inches, the top of which is at grade level, and shall
5 be the width of the stairs.

6

7 Section 57. **International Residential Code; Section R311.7.8.5 Amended; Grip Size.**

8 Section R311.7.8.5 is amended to the International Residential Code to read as follows:

9 **R311.7.8.5 Grip Size.** Required handrails shall be of one of the following types or provide
10 equivalent graspability.

11 1. Type I. Handrails with a circular cross section shall have an outside diameter of at least
12 1 1/4 inches (32 mm) and not greater than 2 inches (51 mm). If the handrail is not circular, it shall
13 have a perimeter dimension of at least 4 inches (102 mm) and not greater than 6 1/4 inches (160
14 mm) and a cross section of not more than 2 1/4 inches (57 mm). Edges shall have a minimum
15 radius of 0.01 inch (0.25 mm).

16 2. Type II. Handrails with a perimeter greater than 6 1/4 inches (160 mm) shall have a
17 graspable finger recess area on both sides of the profile. The finger recess shall begin within a
18 distance of 3/4 inch (19 mm) measured vertically from the tallest portion of the profile and achieve
19 a depth of at least 5/16 inch (8 mm) within 7/8 inch (22 mm) below the widest portion of the
20 profile. This required depth shall continue for at least 3/8 inch (10 mm) to a level that is not less
21 than 1 3/4 inches (45 mm) below the tallest portion of the profile. The width of the handrail above
22 the recess shall be 1 1/4 inches (32 mm) to a maximum of 2 3/4 inches (70 mm). Edges shall have
23 a minimum radius of 0.01 inch (0.25 mm).

1 3. Type III. Handrails for exterior stairs of an individual dwelling unit may consist of a 1
2 ½ inch x 3 ½ inch rail mounted in a horizontal position.

3
4 Section 58. **International Residential Code; Section R311.7.10 Amended; Special**
5 **Stairways.**

6 Section R311.7.10 is amended to the International Residential Code to read as follows:

7 **R311.7.10 Special stairways.** Spiral stairways, winder stairways, circular stairways, and
8 bulkhead enclosure stairways shall comply with all requirements of Section R311.7, except as
9 specified in sections R311.7.10.1 and R311.7.10.2.

10
11 Section 59. **International Residential Code; Section R311.7.10.1 Amended; Spiral**
12 **Stairways.**

13 Section R311.7.10.1 is amended to the International Residential Code to read as follows:

14 **R311.7.10.1 Spiral stairways.** Spiral stairways are permitted, provided the minimum
15 width shall be 26 inches with each tread having a 7½-inches minimum tread depth at 12 inches
16 from the narrower edge. All treads shall be identical, and the rise shall be no more than 9½ inches.
17 A minimum headroom of 6 feet 6 inches shall be provided.

18
19 Section 60. **International Residential Code; Section R311.7.10.2 Amended; Bulkhead**
20 **Enclosure Stairways.**

21 Section R311.7.10.2 is amended to the International Residential Code to read as follows:

22 **R311.7.10.2 Bulkhead Enclosure Stairways.** Bulkhead enclosures shall provide direct
23 access only to furnace, water heater, and other mechanical, plumbing, and electrical equipment.

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Section 61. **International Residential Code; Section R311.7.10.3 Amended; Circular Stairways.**

Section R311.7.10.3 is amended to the International Residential Code to read as follows:

R311.7.10.3 Circular stairways. Circular and winding stairways shall have a tread depth at a point not more than 12 inches from the side where the treads are narrower of not less than 10 inches and the minimum depth of any tread shall not be less than 7 inches. The largest tread depth shall not exceed the smallest by more than 3/8 inch.

Section 62. **International Residential Code; Section R312.1.1 Amended; Where Required.**

Section R312.1.1 of the International Residential Code is amended to read as follows:

R312.1.1 Where required. Guards shall be located along open-sided walking surfaces, including stairs, ramp, landing, deck, porch, patio, driveway, and sidewalks that are located more than 30 inches measured vertically to the floor or grade below.

A guard shall also be required when the drop off is more than 30 inches within 60 inches of the edge of the walking surface. The maximum slope of the grade from walking surface to the drop-off shall be 20% (12 inches). Insect screening shall not be considered as a guard.

Section 63. **International Residential Code; Section R312.1.3 Amended; Opening Limitations.**

Section R312.1.3 of the International Residential Code is amended to read as follows:

1 **R312.1.3 Opening Limitations.** Required guards on open sides of stairways, raised
2 floor areas, balconies, and porches shall have intermediate rails or ornamental closures which
3 do not allow passage of a sphere 5 inches or more in diameter.

4 **Exceptions:**

5 1. The triangular openings formed by the riser, tread, and bottom rail of a guard
6 at the open side of a stairway are permitted to be of such a size that a sphere 6 inches cannot
7 pass through.

8 2. Guards on the open side of stairs shall not have openings which allow passage
9 of a sphere 5 inches in diameter.

10
11 Section 64. **International Residential Code; Section R313 Deleted; Automatic Fire**
12 **Sprinkler Systems.**

13 Section R313 of the International Residential Code and all subsections thereof are hereby
14 deleted.

15
16 Section 65. **International Residential Code; Section R314.3 Amended; Location.**

17 Section R314.3 of the International Residential Code is amended to read as follows:

18 **R314.3 Location.** Single- and multiple-station smoke alarms shall be installed in the
19 following locations:

20 1. In each sleeping room; and

21 2. On each story of the dwelling, including basements and cellars but not including crawl
22 spaces and uninhabitable attics. In dwellings or dwelling units with split levels and without an
23 intervening door between the adjacent levels, a smoke alarm installed on the upper level shall

1 suffice for the adjacent lower level provided that the lower level is less than one full story below
2 the upper level.

3 When more than one smoke alarm is required to be installed within an individual dwelling
4 unit, the alarm devices shall be interconnected in such a manner that the actuation of one alarm
5 will activate all of the alarms in the individual unit. The alarm shall be clearly audible in all
6 bedrooms over background noise levels with all intervening doors closed.

7 All smoke alarms shall be listed and installed in accordance with the provisions of this code
8 and the household fire warning equipment provisions of NFPA 72.

9
10 **Section 66. International Residential Code; Section R315.3 Amended; Location.**

11 Section R315.3 of the International Residential Code is amended to read as follows:

12 **R315.3 Location.** One carbon monoxide alarm shall be installed on each floor of a
13 dwelling unit. Where a fuel-burning appliance is located within a bedroom or its attached
14 bathroom, a carbon monoxide alarm shall be installed within the bedroom.

15
16 **Section 67. International Residential Code; Section R317.1 Amended; Location**
17 **Required.**

18 Section R317.1 of the International Residential Code is amended to read as follows:

19 **R317.1 Location required.** Protection of wood and wood based products from decay
20 shall be provided in the following locations by the use of naturally durable wood or wood that is
21 preservative-treated in accordance with AWPA U1 for the species, product, preservative, and end
22 use. Preservatives shall be listed in Section 4 of AWPA U1.

- 1 1. Wood joists or the bottom of a wood structural floor when closer than 18 inches
2 or wood girders when closer than 12 inches to the exposed ground in crawl
3 spaces or unexcavated area located within the periphery of the building
4 foundation.
- 5 2. All wood framing members that rest on concrete or masonry exterior foundation
6 walls and are less than 8 inches from the exposed ground.
- 7 3. Sills and sleepers on a concrete or masonry slab that is in direct contact with the
8 ground unless separated from such slab by an impervious moisture barrier.
- 9 4. The ends of wood girders entering exterior masonry or concrete walls having
10 clearances of less than 1/2 inch on tops, sides, and ends.
- 11 5. Wood siding, sheathing, and wall framing on the exterior of a building having a
12 clearance of less than 6 inches from the ground or less than 2 inches measured
13 vertically from concrete steps, porch slabs, patio slabs, and similar horizontal
14 surfaces exposed to the weather.
- 15 6. Wood structural members supporting moisture-permeable floors or roofs that are
16 exposed to the weather, such as concrete or masonry slabs, unless separated from
17 such floors or roofs by an impervious moisture barrier.
- 18 7. Wood furring strips or other wood framing members attached directly to the
19 interior of exterior masonry walls or concrete walls below grade.
- 20 8. Bottom sill plates for bearing walls cannot be imbedded in concrete.

21

22 Section 68. International Residential Code; Section R317.1.2 Deleted; Ground

23 Contact.

1 Section R317.1.2 of the International Residential Code is hereby deleted.

2
3 Section 69. **International Residential Code; Section R317.1.4 Amended; Wood**
4 **Columns.**

5 Section R317.1.4 of the International Residential Code is amended to read as follows:

6 **R317.1.4 Wood columns.** Wood columns shall be approved wood of natural decay
7 resistance or approved pressure-preservative-treated wood. Posts, poles, and columns supporting
8 permanent structures shall bear upon a concrete footing and shall not be imbedded in the concrete
9 or in the ground unless approved for such use.

10 **Exceptions:**

11 1. Columns exposed to the weather or in basements when supported by concrete piers or
12 metal pedestals projecting 1 inch above a concrete floor or 6 inches above exposed earth and the
13 earth is covered by an approved impervious moisture barrier.

14 2. Columns in enclosed crawl spaces or unexcavated areas located within the periphery of
15 the building when supported by a concrete pier or metal pedestal at a height more than 8 inches
16 from exposed earth and the earth is covered by an impervious moisture barrier.

17
18 Section 70. **International Residential Code; Section R319.1 Amended; Address**
19 **Identification.**

20 Section R319.1 of the International Residential Code is amended to read as follows:

21 **R319.1 Address Identification.** Approved numbers or addresses shall be provided for all
22 new buildings in such a position as to be plainly visible and legible from the street or road

1 fronting the property. Premises shall have addresses provided on buildings as specified under
2 Section 92.20 of the Code of Bennet.

3

4 Section 71. **International Residential Code; Section R320 Deleted; Accessibility.**

5 Section R320 of the International Residential Code is hereby deleted.

6

7 Section 72. **International Residential Code; Section R322 Deleted; Flood-Resistant**
8 **Construction.**

9 Section R322 of the International Residential Code and all subsections thereof are hereby
10 deleted. Code of Bennet, Chapter 154 will apply.

11

12 Section 73. **International Residential Code; Section R326 Deleted; Swimming Pools,**
13 **Spas, and Hot Tubs.**

14 Section R326 of the International Residential Code and all subsections thereof are hereby
15 deleted.

16

17 Section 74. **International Residential Code; Section R401.3 Amended; Drainage.**

18 **R401.3 Drainage.** Surface drainage shall be diverted to a storm sewer conveyance or
19 other approved point of collection that does not create a hazard. Lots shall be graded to drain
20 surface water away from foundation walls as per the approved grading and drainage plan. The
21 grade from the foundation shall fall a minimum of 6 inches within the first 10 feet. The grade at
22 the property line shall not be changed/altered.

1 Exception: Where lot lines, walls, slopes, or other physical barriers prohibit 6 inches of
2 fall within 10 feet, drains or swales shall be constructed to ensure drainage away from the
3 structure. Impervious surfaces within 10 feet of the building foundation shall be sloped a
4 minimum of 2 percent away from the building.

5
6 Section 75. International Residential Code; Table R401.4.1 Amended; Load Bearing
7 Values.

8 Table R401.4.1 of the International Residential Code is amended to read as follows:

9 TABLE R401.4.1
10 PRESUMPTIVE LOAD-BEARING VALUES OF
11 FOUNDATION MATERIALS^a

<u>CLASS OF MATERIAL</u>	<u>LOAD-BEARING PRESSURE (pounds per square foot)</u>
<u>Crystalline bedrock</u>	<u>12,000</u>
<u>Sedimentary and foliated rock</u>	<u>4,000</u>
<u>Sandy gravel and/or gravel (GW and GP)</u>	<u>3,000</u>
<u>Sand, silty sand, clayey sand, silty gravel, and clayey gravel (SW, SP, SM, SC, GM and GC)</u>	<u>2,000</u>
<u>Clay, sandy clay, silty clay, clayey silt, silt, and sandy silt (CL, ML, MH and CH)</u>	<u>2,000</u>

12
13 For SI: 1 pound per square foot = 0.0479 kPa.

14 a. When soil tests are required by Section R401.4, the allowable bearing capacities of the
15 soil shall be part of the recommendations.

1 **Section 76. International Residential Code; Section R403.1.1 Amended; Minimum**
2 **Size.**

3 Section R403.1.1 of the International Residential Code is amended to read as follows:

4 **R403.1.1 Minimum size.** Minimum sizes for concrete and masonry footings shall be as
5 set forth in Table R403.1 and Figure R403.1(1). The footing width, W, shall be based on the
6 load-bearing value of the soil in accordance with Table R401.4.1. Spread footings shall be at
7 least 8 inches thick. Footing projections, P, shall be at least 2 inches and shall not exceed the
8 thickness of the footing. The size of footings supporting piers and columns shall be based on the
9 tributary load and allowable soil pressure in accordance with Table R401.4.1. Footings for wood
10 foundations shall be in accordance with the details set forth in Section R403.2.

11

12 **Section 77. International Residential Code; Table R403.1 Amended; Minimum Width**
13 **of Footings.**

14 Table R403.1 of the International Residential Code is amended to read as follows:

15

TABLE R403.1

16

MINIMUM WIDTH OF CONCRETE, PRECAST OR

17

MASONRY FOOTINGS

18

(inches)^a

	<u>LOAD-BEARING VALUE OF SOIL (psf)</u>
	<u>2,000</u>
<u>Conventional light-frame construction</u>	
<u>1 supported floor</u>	<u>12</u>
<u>2 supported floors</u>	<u>16</u>
<u>3 supported floors</u>	<u>24</u>

<u>4-inch brick veneer over light frame or 8-inch hollow concrete masonry</u>	
<u>1 supported floor</u>	<u>12</u>
<u>2 supported floors</u>	<u>16</u>
<u>3 supported floors</u>	<u>24</u>
<u>8-inch solid or fully grouted masonry</u>	
<u>1 supported floor</u>	<u>12</u>
<u>2 supported floors</u>	<u>21</u>
<u>3 supported floors</u>	<u>32</u>

1 For SI: 1 inch = 25.4 mm, 1 pound per square foot = 0.0479 kPa.

2 a. Where minimum footing width is 12 inches, use of a single wythe of solid or fully grouted
3 12-inch nominal concrete masonry units is permitted.

4
5 **Section 78. International Residential Code; Figure R403.1(1) Amended; Minimum**
6 **Footing Reinforcement.**

7 Figure R403.1(1) of the International Residential Code is amended as shown on said
8 figure at the end of this chapter.

9
10 **Section 79. International Residential Code; Section R403.1.3.3 Amended; Slabs-on-**
11 **Ground with Turned-Down Footings.**

12 Section 403.1.3.3 of the International Residential Code is amended to read as follows:

13 **R403.1.3.3 Slabs-on-ground with turned-down footings.** Slabs-on-ground with turned-
14 down footings shall have the minimum of one No. 4 bar at the top and the bottom of the footing.

15
16 **Section 80. International Residential Code; Section R403.1.4.1 Amended; Frost**
17 **Protection.**

1 Section R403.1.4.1 of the International Residential Code is amended to read as follows:

2 **R403.1.4.1 Frost protection.** Foundation walls, piers, and other permanent supports of
3 buildings and structures shall extend below the frost line specified in Table R301.2.(1). Any
4 conditioned space within a slab-on-grade building must have continuous frost line footings.

5 **Exceptions:**

6 1. Protection of freestanding, unconditioned accessory structures with an area of 400 square
7 feet or less, of light-framed construction, with an eave height of 10 feet or less shall not be required.

8 2. Protection of freestanding, unconditioned accessory structures with an area of 500 square
9 feet or less, of light-framed construction, with an eave height of 10 feet or less shall be allowed to
10 be a monolithic slab as shown in Figure R403.1(1).

11 3. Decks less than 400 square feet not supported by a dwelling need not be provided with
12 footings that extend below the frost line.

13
14 **Section 81. International Residential Code; Section R403.1.7.3 Amended; Foundation**
15 **Elevation.**

16 Section R403.1.7.3 of the International Residential Code is amended to read as follows:

17 **R403.1.7.3 Foundation elevation.** On graded sites, the top of all exterior foundation walls
18 shall be a minimum of 12 inches higher than the finish grade elevation 10 feet from the perimeter
19 of the foundation. The floor of a walkout basement shall be a minimum of 12 inches higher than
20 the grade 10 feet from the foundation. The top of the foundation wall below a daylight window
21 shall be a minimum of 12 inches higher than the finish grade elevation, 10 feet from the perimeter
22 of the foundation. Alternate elevations are permitted subject to the approval of the Building

1 Official, provided it can be demonstrated that required drainage to the point of discharge and away
2 from the structure is provided at all locations on the site.

3
4 **Section 82. International Residential Code; Section R403.3 and Subsections, Tables**
5 **and Figures Deleted; Frost Protected Shallow Foundations.**

6 Section R403.3 of the International Residential Code and all subsections, tables, and
7 figures under said Section R403.3 are hereby deleted.

8
9 **Section 83. International Residential Code; Section R403.4.1 Deleted; Crushed Stone**
10 **Footings.**

11 Section 403.4.1 of the International Residential Code is hereby deleted.

12
13 **Section 84. International Residential Code; Table R403.4 Deleted; Minimum Depth**
14 **of Crushed Stone Footings.**

15 Table 403.4 of the International Residential Code is hereby deleted.

16
17 **Section 85. International Residential Code; Table R404.1.1(1) Deleted; Plain**
18 **Masonry Foundation Walls.**

19 Table R404.1.1(1) of the International Residential Code is hereby deleted.

20
21 **Section 86. International Residential Code; Figure R404.1.1(1) Added; Permanent**
22 **Masonry Foundation Basement Wall Section.**

1 Figure R404.1.1(1) is added to the International Residential Code as shown on said figure
2 at the end of this chapter.

3
4 **Section 87. International Residential Code; Table R404.1.2(1) Deleted; Minimum**
5 **Horizontal Reinforcement for Concrete Basement Walls.**

6 Table R404.1.2(1) of the International Residential Code is hereby deleted.

7
8 **Section 88. International Residential Code; Table R404.1.2(2) Deleted; Minimum**
9 **Vertical Reinforcement for 6-inch Nominal Flat Concrete Basement Walls.**

10 Table R404.1.2(2) of the International Residential Code is hereby deleted.

11
12 **Section 89. International Residential Code; Table R404.1.2(3) Deleted; Minimum**
13 **Vertical Reinforcement for 8-inch Nominal Flat Concrete Basement Walls.**

14 Table R404.1.2(3) of the International Residential Code is hereby deleted.

15
16 **Section 90. International Residential Code; Table R404.1.2(4) Deleted; Minimum**
17 **Vertical Reinforcement for 10-inch Nominal Flat Concrete Basement Walls.**

18 Table R404.1.2(4) of the International Residential Code is hereby deleted.

19
20 **Section 91. International Residential Code; Table R404.1.2(8) Deleted; Minimum**
21 **Vertical Reinforcement for 6-, 8-, 10- inch and 12-inch Nominal Flat Basement Walls.**

22 Table R404.1.2(8) of the International Residential Code is hereby deleted.

1 Section 92. **International Residential Code; Table R404.1.2(9) Deleted; Minimum**
2 **Spacing for Alternate Bar Size and/or Alternate Grade of Steel.**

3 Table R404.1.2(9) of the International Residential Code is hereby deleted.

5 Section 93. **International Residential Code; Section R404.1.3.2 Amended;**
6 **Reinforcement for Foundation Walls.**

7 Section R404.1.3.2 of the International Residential Code is amended to read as follows:

8 **R404.1.3.2 Reinforcement for foundation walls.** Concrete foundation walls shall be
9 laterally supported at the top and bottom and vertical reinforcement shall be provided in
10 accordance with Figures R404.1.3.2(1) and R404.1.3.2(2).

12 Section 94. **International Residential Code; Figures R404.1.3.2(1) through**
13 **R404.1.3.2(7) Added; Reinforcement for Foundation Walls.**

14 Figure R404.1.3.2(1) through Figure R404.1.3.2(7) are added to the International
15 Residential Code as shown on said figures at the end of this chapter.

17 Section 95. **International Residential Code; Figure R404.1.3.2.1 Added; Deadman/4**
18 **Foot Concrete Wall.**

19 Figure R404.1.3.2.1 is added to the International Residential Code as shown on said figure
20 at the end of this chapter.

22 Section 96. **International Residential Code; Section R404.1.5.2 Amended; Concrete**
23 **Wall Thickness.**

1 Section R404.1.5.2 of the International Residential Code is amended to read as follows:

2 **R404.1.5.2 Concrete wall thickness.** The thickness of concrete foundation walls shall be
3 equal to or greater than the thickness of the wall in the story above. Concrete foundation walls
4 with corbels, brackets, or other projections built into the wall for support of masonry veneer or
5 other purposes are not within the scope of the tables in this section.

6 Where a concrete foundation wall is reduced in thickness to provide a 4-inch shelf for the
7 support of masonry veneer or a bearing ledge for joists, the reduced thickness of the wall shall not
8 be less than 6 inches. Vertical reinforcement shall be based on the thickness of the thinner portion
9 of the wall.

10 **Exception:** Where the height of the reduced thickness portion measured to the underside
11 of the floor assembly or sill plate above is less than or equal to 24 inches and the reduction in
12 thickness does not exceed 4 inches, the vertical reinforcement is permitted to be based on the
13 thicker portion of the wall.

14
15 **Section 97. International Residential Code; Figure R404.1.5.2 Added; Garage Stem**
16 **Wall Foundation Detail.**

17 Figure R404.1.5.2 is added to the International Residential Code as shown on said figure
18 at the end of this chapter.

19
20 **Section 98. International Residential Code; Section R408.7 Deleted; Flood Resistance.**

21 Section R408.7 of the International Residential Code is hereby deleted.

1 Section 99. **International Residential Code; Section R502.3 Amended; Allowable Joist**
2 **Spans.**

3 Section R502.3 of the International Residential Code is amended to read as follows:

4 **R502.3 Allowable joist spans.** Spans for floor joists shall be in accordance with Table
5 R502.3.1(2). For other grades and species and for other loading conditions, refer to the AF&PA
6 Span Tables for Joists and Rafters.

7

8 Section 100. **International Residential Code; Section R502.3.1 Deleted; Sleeping**
9 **Areas and Attic Joists.**

10 Section R502.3.1 of the International Residential Code is hereby deleted.

11

12 Section 101. **International Residential Code; Section R502.3.2 Deleted; Other Floor**
13 **Joists.**

14 Section R502.3.2 of the International Residential Code is hereby deleted.

15

16 Section 102. **International Residential Code; R502.3.3 Deleted; Floor Cantilevers.**

17 Section R502.3.3 of the International Residential Code is hereby deleted.

18

19 Section 103. **International Residential Code; Table R502.3.1(1) Deleted; Floor Joist**
20 **Spans for Common Lumber Species.**

21 Table R502.3.1(1) of the International Residential Code is hereby deleted.

22

1 Section 104. **International Residential Code; Table R502.3.3(1) Deleted; Cantilever**
2 **Spans for Floor Joists Supporting Light-Frame Exterior Bearing Wall and Roof Only.**

3 Table R502.3.3(1) of the International Residential Code is hereby deleted.

4
5 Section 105. **International Residential Code; Table R502.3.3(2) Deleted; Cantilever**
6 **Spans for Floor Joists Supporting Exterior Balcony.**

7 Table R502.3.3(2) of the International Residential Code is hereby deleted.

8
9 Section 106. **International Residential Code; Section R502.7.1 Amended; Bridging.**

10 Section R502.7.1 of the International Residential Code is amended to read as follows:

11 **R502.7.1 Bridging.** Joists exceeding a nominal 2 by 8 inches shall be supported laterally
12 by solid blocking, diagonal bridging (wood or metal), or a continuous 1-inch-by-3-inch strip nailed
13 across the bottom of the joists perpendicular to joists at intervals not to exceed 8 feet. Dimensional
14 lumber shall be supported laterally by solid blocking, diagonal bridging (wood or metal), or a
15 continuous 1-inch-by-3-inch strip nailed across the bottom of joists perpendicular to joists at
16 intervals not exceeding 8 feet.

17 **Exception:** Trusses, structural composite lumber, structural glued-laminated members,
18 and I-joists shall be supported laterally as required by the manufacturer's recommendations.

19
20 Section 107. **International Residential Code; Section R502.10 Amended; Framing of**
21 **Openings.**

22 Section R502.10 of the International Residential Code is amended to read as follows:

1 **R502.10 Framing of openings.** Openings in floor framing shall be framed with a header
2 and trimmer joists. When the header joist span does not exceed 4 feet, the header joist may be a
3 single member the same size as the floor joist. Single trimmer joists may be used to carry a single
4 header joist that is located within 3 feet of the trimmer joist bearing. When the header joist span
5 exceeds 4 feet, the trimmer joists and the header joist shall be doubled and of sufficient cross
6 section to support the floor joists framing into the header. Approved hangers shall be used for the
7 header joist to trimmer joist connection. Tail joists over 12 feet long shall be supported at the
8 header by framing anchors or on ledger strips not less than 2 inches by 2 inches.

9
10 Section 108. **International Residential Code; Section R507.4.1 Amended; Deck Post**
11 **to Deck Footing Connection.**

12 Section R507.4.1 of the International Residential Code is amended to read as follows:

13 **R507.4.1 Deck post to deck footing connection.** Where posts bear on concrete footings
14 in accordance with Section R403 and Figure R507.4.1, lateral restraint shall be provided by
15 manufactured connectors.

16
17 Section 109. **International Residential Code; Table R507.6 Amended; Deck Joist**
18 **Spans.**

19 Table R507.6 of the International Residential Code is amended to read as follows:

TABLE R507.6
DECK JOIST SPANS FOR COMMON LUMBER SPECIES (ft. – in.)

SPECIES ^a	SIZE	ALLOWABLE JOIST SPAN ^b			MAXIMUM CANTILEVER ^{c,f}		
		SPACING OF DECK JOISTS (Inches)			SPACING OF DECKS JOISTS WITH CANTILEVER ^c (Inches)		
		12	16	24	12	16	24
Southern pine	2 x 6	9-11	9-0	7-7	1-0	1-0	1-0
	2 x 8	13-1	11-10	9-8	2-0	2-0	2-0
	2 x 10	16-2	14-0	11-5	2-0	2-0	2-0
	2 x 12	18-0	16-6	13-6	2-0	2-0	2-0
Douglas fir-larch ^d , hem-fir ^d , spruce-pine-fir ^d	2 x 6	9-6	8-8	7-2	1-0	1-0	1-0
	2 x 8	12-6	11-1	9-1	1-6	2-0	2-0
	2 x 10	15-8	13-7	11-1	2-0	2-0	2-0
	2 x 12	18-0	15-9	12-10	2-0	2-0	2-0
Redwood, western cedars, ponderosa pine ^e , red pine	2 x 6	8-10	8-0	7-0	1-0	1-0	1-0
	2 x 8	11-8	10-7	8-8	1-6	1-6	1-6
	2 x 10	14-11	13-0	10-7	2-0	2-0	2-0
	2 x 12	17-5	15-1	12-4	2-0	2-0	2-0

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pound per square foot = 0.0479 kPa, 1 pound = 0.454 kg.

a. No. 2 grade with wet service factor

b. Ground snow load, live load = 40 psf, dead load = 10 psf, L/Δ = 360

c. Ground snow load, live load = 40 psf, dead load = 10 psf, L/Δ = 360 at main span, L/Δ = 180 at cantilever with a 220-pound point load applied to end.

d. Includes incising factor

e. Northern species with no incising factor.

f. Cantilevered spans not exceeding the nominal depth of the joist are permitted.

1

2 **Section 110. International Residential Code; Section R507.9.2 Amended; Lateral**
3 **Connection.**

4 Section R507.9.2 of the International Residential Code is amended to read as follows:

5 **R507.9.2 Lateral Connection.** Lateral loads shall be transferred to the ground or to a
6 structure capable of transmitting them to the ground. Where the lateral load connection is provided
7 in accordance with Figure R507.9.2(1), hold-down tension devices shall be installed in not less
8 than two locations per deck, within 24 inches (610 mm) of each end of the deck. Each device shall
9 have an allowable stress design capacity of not less than 1,500 pounds (6672 N). Where the lateral
10 load connections are provided in accordance with Figure R507.9.2(2), the hold-down tension
11 devices shall be installed in not less than four locations per deck, and each device shall have an
12 allowable stress design capacity of not less than 750 pounds (3336 N). Other methods designed
13 in accordance with accepted engineering practices may be allowed.

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Section 111. **International Residential Code; Figure R602.10.3.5 Added; Alternate Braced Wall Panel at Garage Door Openings.**

Figure R602.10.3.5 is added to the International Residential Code as shown on said figure at the end of this chapter.

Section 112. **International Residential Code; Figure R602.10.4 Added; Braced Walls Using Continuous OSB Sheathing.**

Figure R602.10.4 is added to the International Residential Code as shown on said figure at the end of this chapter.

Section 113. **International Residential Code; Section R702.7 Amended; Vapor Retarders.**

Section R702.7 of the International Residential Code is amended to read as follows:

R702.7 Vapor retarders. Class I or II vapor retarders are not permitted on the interior side of exterior walls.

Section 114. **International Residential Code; Section R703.1 Amended; General.**

Section R703.1 of the International Residential Code is amended to read as follows:

R703.1 General. To promote building durability, exterior walls shall provide the building with a weather-resistant exterior wall envelope. The exterior wall envelope shall include flashing as described in Section R703.8. The envelope shall provide proper integration of flashings with

1 the WRB and the exterior veneer. These components, in conjunction, shall provide a means of
2 draining water that enters the assembly to the exterior.

3 Exterior walls shall provide the building with a weather-resistant exterior wall envelope.
4 The exterior wall envelope shall include flashing as described in Section R703.8. The exterior wall
5 envelope shall be designed and constructed in such a manner as to prevent the accumulation of
6 water within the wall assembly by providing a water-resistive barrier behind the exterior veneer as
7 required by Section R703.2.

8 Any deteriorated or rotting veneer shall be removed prior to installing new veneer. An
9 approved weather barrier shall be installed prior to overlaying with a new veneer product.

10

11 Section 115. **International Residential Code; Section R703.7.3 Amended; Water-**
12 **Resistive Barriers.**

13 Section R703.7.3 of the International Residential Code is amended to read as follows:

14 **R703.7.3 Water-resistive barriers.** A water-resistive barrier shall be installed as required
15 in Section R703.2 with an approved rain screen (drainage system) that has either a minimum depth
16 of 1/8 inch or has an average minimum drainage efficiency of 90 percent when tested in accordance
17 with ASTM E 2271. The WRB shall be installed between the rain screen and the wall sheathing.
18 Flashing shall be installed in accordance with Section R703.4. No. 15 asphalt shall not be permitted
19 as a water-resistant barrier.

20

21 Section 116. **International Residential Code; Figure R703.8 Deleted; Masonry Veneer**
22 **Wall Details.**

23 Figure R703.8 of the International Residential Code is hereby deleted.

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Section 117. International Residential Code; Section R703.8.5 Amended; Flashing.

Section R703.8.5 of the International Residential Code is amended to read as follows:

R703.8.5 Flashing. Flashing shall be located beneath the first course of masonry above finished ground level above the foundation wall or slab and at other points of support, including structural floors, shelf angles, and lintels when masonry veneers are designed in accordance with Section R703.8. See Section R703.4 for additional requirements.

Exception: The requirements of R703.8.5 may be deleted if a poured concrete foundation is used with a minimum 8-inch brick ledge drop and all exterior window and door openings are caulked with sealant.

Section 118. International Residential Code; Section R703.8.6 Amended; Weepholes.

Section R703.8.6 of the International Residential Code is amended to read as follows:

R703.8.6 Weepholes. Weepholes shall be provided in the outside wythe of masonry walls at a maximum spacing of 33 inches on center. Weepholes shall not be less than 3 /16 inch in diameter. Weepholes shall be located immediately above the flashing.

Exception: The requirements of R703.8.6 may be deleted if a poured concrete foundation is used with a minimum 8-inch brick ledge drop and all exterior window and door openings are flashed per 703.8 amended.

Section 119. International Residential Code; Section R703.9.2 Amended; Exterior Insulation and Finish System (EIFS) With Drainage.

Section R703.9.2 of the International Residential Code is amended to read as follows:

1 **R703.9.2 Exterior insulation and finish system (EIFS) with drainage.**

2 EIFS with drainage shall comply with the following:

- 3 1. ASTM E2568
- 4 2. EIFS with drainage shall be required over all wall assemblies with the exception of
5 substrates of concrete or masonry wall assemblies.
- 6 3. EIFS with drainage shall have an average minimum drainage efficiency of 90
7 percent when tested in accordance with ASTM E2273.
- 8 4. The water-resistive barrier shall comply with Section R703.2 or ASTM E2570. No.
9 15 asphalt shall not be permitted as a water-resistive barrier.
- 10 5. The water-resistive barrier shall be applied between the drainage system and the
11 wall sheathing, per R703.7.3.
- 12 6. Flashing of EIFS with drainage shall be provided in accordance with the
13 requirements of Section R703.4.
- 14 7. EIFS with drainage shall be installed in accordance with the manufacturer's
15 instructions.
- 16 8. EIFS with drainage shall terminate no less than 6 inches (152 mm) above the
17 finished ground level.
- 18 9. Decorative trim shall not be face-nailed through the EIFS with drainage.

19
20 Section 120. **International Residential Code; Section R703.12.3 Amended; Water-**
21 **Resistive Barrier.**

22 Section R703.12.3 is added to the International Residential Code to read as follows:

1 **R703.12.3 Water-resistive barrier.** A water-resistive vapor-permeable barrier complying
2 with ASTM E2556 for Type II water-resistive barrier shall be installed as required in Section
3 R703.2 with an approved rain screen (drainage system) that has either a minimum depth of 1/8
4 inch or has an average minimum drainage efficiency of 90 percent when tested in accordance with
5 ASTM E 2273. The WRB shall be installed between the rain screen and the wall sheathing.
6 Flashing shall be installed in accordance with Section R703.4. No. 15 asphalt shall not be permitted
7 as a water-resistant barrier.

8
9 Section 121. **International Residential Code; Section R908.3.1.1 Amended; Roof**
10 **Recover Not Allowed.**

11 Section R908.3.1.1 of the International Residential Code is amended to read as follows:

12 **Section R908.3.1.1 Roof recover not allowed.** A roof recover shall not be permitted
13 where any of the following conditions occur:

- 14 1. Where the existing roof or roof covering is water-soaked or has deteriorated to the point
15 that the existing roof or roof covering is not adequate as a base for additional roofing.
- 16 2. Where the existing roof covering is wood shake, slate, clay, cement, or asbestos-cement
17 tile.
- 18 3. Where the existing roof has two or more applications of any type of roof covering.

19
20 Section 122. **International Residential Code; Section R1003.11 Deleted; Masonry**
21 **Chimneys; Flue Lining (Material).**

22 Section R1003.11 of the International Residential Code is hereby deleted.

1 Section 123. **International Residential Code; Section R1003.11.2 Deleted; Flue**
2 **Linings for Specific Appliances.**

3 Section R1003.11.2 of the International Residential Code is hereby deleted.

5 Section 124. **International Residential Code; Section R1003.11.3 Deleted; Gas**
6 **Appliances.**

7 Section R1003.11.3 of the International Residential Code is hereby deleted.

9 Section 125. **International Residential Code; Section R1003.11.4 Amended; Pellet**
10 **Fuel-Burning Appliances.**

11 Section R1003.11.4 of the International Residential Code is amended to read as follows:

12 **Section R1003.11.4 Pellet fuel-burning appliances.** Flue lining and vent systems for use
13 in masonry chimneys with pellet fuel-burning appliances shall be limited to the following:

- 14 1. Flue lining systems complying with Section R1003.11.1.
- 15 2. Pellet vents listed for installation within masonry chimneys. (See Section R1003.11.6 for
16 marking).

18 Section 126. **International Residential Code; Section R1003.11.5 Deleted; Oil-fired**
19 **Appliances.**

20 Section R1003.11.5 of the International Residential Code is hereby deleted.

22 Section 127. **International Residential Code; Section R1003.14 Deleted; Flue Area**
23 **(Appliance).**

1 Section R1003.14 of the International Residential Code is hereby deleted.

2

3 Section 128. International Residential Code; Section R1004.4 Deleted; Unvented Gas
4 Log Heaters.

5 Section R1004.4 of the International Residential Code is hereby deleted.

6

7 Section 129. International Residential Code; Chapters 12 through 43 of the
8 International Residential Code Deleted.

9 Chapters 11 through 43 of the International Residential Code are hereby deleted.


10


11 Section 130. That this ordinance shall take effect and be in full force from and after its
12 passage, approval, and publication or posting as required by law.

13

14 PASSED AND APPROVED on this 9th day of May, 2023.

ATTEST:


City Clerk


Mayor, City of Bennet

