

ORDINANCE NO. 2435

AN ORDINANCE AMENDING CHAPTER IV OF THE PRAIRIE VILLAGE MUNICIPAL CODE ENTITLED "BUILDINGS AND CONSTRUCTION" BY AMENDING ARTICLE 2 ENTITLED "INTERNATIONAL RESIDENTIAL CODE" TO INCORPORATE BY REFERENCE THE "INTERNATIONAL RESIDENTIAL CODE, 2018 EDITION", AND ADDING NEW AND SUBSTITUTE PROVISIONS THERETO, AND REPEALING THE PREVIOUS ARTICLE SO AMENDED.

BE IT ORDAINED BY THE GOVERNING BODY OF THE CITY OF PRAIRIE VILLAGE, KANSAS:

Section I.

Existing Article 2 of Chapter IV of the Prairie Village Municipal Code is hereby deleted in its entirety and amended to read as follows:

ARTICLE 2. INTERNATIONAL RESIDENTIAL CODE (IRC)

4-201 INTERNATIONAL RESIDENTIAL CODE ADOPTED

The *International Residential Code, 2018 Edition*, published by the International Code Council, hereafter referred to as the 2018 IRC, is hereby adopted by reference and made a part of this Chapter and Article save and except such parts or portions thereof as are specifically deleted, added, or changed in the City Code. At least one (1) copy of said *International Residential Code, 2018 edition*, will be kept on file in the office of the City Clerk, marked or stamped "Official Copy as Incorporated by Ordinance No. 2435," with all sections or portions thereof intended to be deleted or changed clearly marked to show any deletions, additions, or changes.

4-202 AMENDMENTS TO SECTION R101.1 - TITLE

Section R101.1 of the 2018 IRC is hereby amended to read as follows:

R101.1 Title. These provisions shall be known as the *Residential Code for One and Two Family Dwellings of the City of Prairie Village*, hereinafter referred to as the 2018 IRC.

4-203 AMENDMENTS TO SECTION R101.4 – ADMINISTRATION

A new Section R101.4 is hereby added to the 2018 IRC, as adopted by the City, to read as follows:

R101.4 Administration. The administrative and enforcement provisions for this code shall be those provisions found in Sections 103 through 116 of the International Building Code.

4-204 AMENDMENTS TO SECTION R102.5 – APPENDICES ADOPTED

Section R102.5 of the 2018 IRC is hereby amended to read as follows:

R102.5 Appendices adopted. The following appendices are adopted as part of this code:

- a. Appendix H – Patio Covers
- b. Appendix K – Sound Transmission

4-205 AMENDMENTS TO TABLE R301.2(1) OF SECTION R301 – CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA

Table R301.2(1) of the 2018 IRC is hereby amended to read as follows:

**TABLE R301.2(1)
CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA**

GROUND SNOW LOAD	WIND DESIGN	SEISMIC DESIGN CATAGORY	SUBJECT TO DAMAGE FROM	WINTER DESIGN TEMP	ICE BARRIER UNDERLAYMENT REQUIRED	FLOOD HAZARDS	AIR FREEZING INDEX	MEAN ANNUAL TEMP
	1.Speed-mph 2.Topographic Effects		1.Weathering 2.Frost Line Depth 3.Termite					
20	1. 115 mph 2. No	A	1.Severe 2. 36" 3.Moderate to Heavy	6°	YES	CURRENT FIRM	1000	54°

4-206 AMENDMENTS TO SECTION R302.3 – TWO-FAMILY DWELLINGS

Section R302.3 of the 2018 IRC is hereby amended to read as follows:

R302.3 Two-family dwellings. Two-family dwellings shall comply with the same fire separation requirements as townhouses per Section R302.2.

4-207 AMENDMENTS TO SECTION R303.4 – MECHANICAL VENTILATION

Section R303.4 of the 2018 IRC is hereby amended to read as follows:

R303.4 Mechanical ventilation. Where the air infiltration rate of a dwelling unit is less than three (3) air changes per hour when tested with a blower door at a pressure of 0.2 inch w.c (50 Pa) in accordance with Section N1102.4.1.2, the dwelling unit shall be provided with whole-house ventilation in accordance with Section M1505.4.

4-208 ADDITION OF SECTION R309.6 – RESIDENTIAL DRIVEWAYS

Section R309.6 of the 2018 IRC is hereby amended to read as follows:

R309.6. Residential driveways. Residential concrete and asphalt driveway slabs shall be a minimum of 4 inches thick. The driveway shall have a constant slope so as to avoid ponding of water. The slope shall be away from the house or building or drain. Concrete driveways shall be provided with #4 rebar at 24" on center spacing in both directions as a minimum standard, and installed in accordance with ACI318-11 concrete quality and field practices.

4-209 DELETION OF SECTION R313.2 – ONE- AND TWO-FAMILY DWELLINGS AUTOMATIC FIRE SPRINKLER SYSTEMS

Section R313.2 of the 2018 IRC is hereby deleted.

4-210 AMENDMENTS TO SECTION R401.2 - REQUIREMENTS

Section R401.2 of the 2018 IRC is hereby amended to read as follows:

R401.2 Requirements. Foundation construction shall be capable of accommodating all loads according to Section R301 and of transmitting the resulting loads to the supporting soil. Fill soils that support footings and foundations shall be designed, installed and tested in accordance with accepted engineering practice.

R401.2.1 Design required. A design in accordance with accepted engineering practice shall be provided for concrete or masonry foundation walls when any of the following conditions exist:

1. Walls subject to hydrostatic pressure from groundwater.
2. Walls supporting more than 48 inches of unbalanced fill that do not have permanent lateral support at the top and bottom.
3. Sites containing CH, MH, OL, or OH soils as identified in Table R405.1.
4. Foundation walls exceeding 10 feet in height, measured from the top of the wall to the bottom of the slab.
5. Lots identified on the grading plan as having more than 6 feet of fill or having a finished slope steeper than 4 units horizontal to 1 unit vertical before grading.
6. Footings and foundations with existing fill soils below the footing level.
7. Sloping lots greater than 4 to 1 before grading.
8. Lots where some of the footings bear on soil and other footings bear on rock.
9. Areas where problems have historically occurred.
10. Stepped footing and foundation walls.

R401.2.2 Continuous footing reinforcement. Continuous footings for basement foundation walls shall have a minimum horizontal reinforcement consisting of not less than two (2) No. 4 bars, uniformly spaced, located a minimum 3 inches clear from the bottom of the footing.

R401.2.3 Foundation anchorage. The spacing of anchor bolts or foundation anchor straps required by Section R403.1.6 shall be reduced to a maximum of 3 feet on center for basement foundation walls.

4-211 AMENDMENTS TO SECTION R405.1 – CONCRETE OR MASONRY FOUNDATIONS

Section R405.1 of the 2018 IRC is hereby amended to read as follows:

R405.1 Concrete or masonry foundations. Drains shall be provided around all concrete or masonry foundations that retain earth and enclose habitable or usable spaces located below grade. Drainage tiles, gravel, or crushed stone drains, perforated pipe, or other approved systems or material shall be installed at or below the area to be protected and shall discharge by gravity or mechanical means into an approved drainage system. Gravel or crushed stone drains shall extend at least 1 foot beyond the outside edge of the footing and 6 inches above the top of the footing and be covered with an approved filter membrane material. The top of open joints of drain tiles shall be protected with strips of building paper. Perforated drains shall be surrounded with an approved filter membrane or the filter membrane shall cover the washed gravel or crushed rock covering the drain. Drainage tiles or perforated pipe shall be placed on a minimum of 2 inches of washed gravel or crushed rock at least one sieve size larger than the tile joint opening or perforation and covered with not less than 6 inches of the same material.

Exceptions:

1. A drainage system is not required when the foundation is installed on well-drained ground or sand-gravel mixture soils according to the Unified Soil Classification System, Group I Soils, as detailed in Table R405.1 This exception must be verified and documented by a soils engineer and/or a certified testing agency.
2. A filter membrane is not required where perforated drains are covered with at least 18 inches of washed gravel or crushed rock.
3. For gravel or crushed stone drains, a filter membrane is not required when the gravel or crushed stone extends at least 18 inches above the top of the footing.

4-212 ADDITION OF SECTION R506.3 – DESIGN REQUIRED

A new Section R506.3 is hereby added to the 2018 IRC, as adopted by the City, to read as follows:

R506.3 Design required. A design in accordance with accepted engineering practice shall be provided for concrete floors when the limitations for fill material set forth in Section R506.2.1 are exceeded.

4-213 ADDITION OF SECTION R506.4 – BASEMENT FLOOR SLAB ISOLATION

A new Section R506.4 is hereby added to the 2018 IRC, as adopted by the City, to read as follows:

R506.4 Basement floor slab isolation. Basement floor slabs shall be isolated from column pads, interior columns, and interior bearing walls to facilitate differential movement. Nonbearing walls supported on basement floor slabs shall be provided with a minimum 1 inch expansion joint to facilitate differential movement between the floor slab and the floor framing

above. Isolation and/or expansion joint is not required within 6 inches of exterior walls.

4-214 AMENDMENTS TO TABLE N1102.1.2 IN SECTION R401.1.2 – INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT

Table N1102.1.2 in Section R401.1.2 of the 2018 IRC is hereby amended to read as follows:

**TABLE N1102.1.2 (R402.1.2)
INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT^a**

Climate zone	Fenestration U-factor (b)	Skylight (b) U-factor	Glazed Fenestration SHGC (b)(e)	Ceiling R-value	Wood Frame wall R-value	Mass wall R-value (i)	Floor R-value	Base-ment-wall R-value (c)	Slab (d) R-value & Depth	Crawl space(c) Wall R-value
4 not marine	0.32	0.55	0.40	49	15	8/13	19	10/13	10/2ft	10/13

For SI: 1 foot = 304.8 mm.

NR = Not Required.

- a. R-values are minimums. U-factors and SHGC are maximums. Where insulation is installed in a cavity, that is less than the label or design thickness of the insulation, the installed R-value shall not be less than the R-value specified in the table.
- b. The fenestration U-factor column excludes skylights. The SHGC column applies to all glazed fenestration.
- c. "10/13" means R-10 continuous insulation on the interior or exterior of the home or R-13 cavity insulation at the interior of the basement walls.
- d. R-5 insulation shall be provided under the full slab area of a heated slab.
- e. There shall be no SHGC requirements in the Marine zone.
- f. Basement wall insulation shall not be required in warm-humid locations as defined by figure N1101.7 and Table N1101.7
- g. Alternatively, insulation sufficient to fill the framing cavity providing not less than R-value of R-19.
- h. The first value is cavity insulation, the second value is continuous insulation. Therefore, as an example, "13+5" means R-13 cavity insulation plus R-5 continuous insulation.
- i. Mass walls shall be in accordance with section N1102.2.5. The second R-value applies where more than half of the insulation is on the interior of the mass wall.

4-215 AMENDMENT TO SECTION N1102.4.1.2 – TESTING

Section N1102.4.1.2 of the 2018 IRC is hereby amended to read as follows:

N1102.4.1.2 Testing. Where required by the building official, the building or dwelling unit shall be tested and verified as having an air leakage rate not

exceeding 5 air changes per hour. Testing shall be conducted with a blower door at a pressure of 0.2 inches w.g. (50 Pascals). Testing shall be conducted by an approved third party. A written report of the results of the test shall be signed by the party conducting the test and provided to the building official. Testing shall be performed at any time after creation of all penetrations of the building thermal envelope. During testing:

1. Exterior windows and doors, fireplace, and stove doors shall be closed, but not sealed beyond the intended weather-stripping or other infiltration control measures;
2. Dampers, including exhaust, intake, makeup air, backdraft, and flue dampers shall be closed, but not sealed beyond intended infiltration control measures;
3. Interior doors, if installed at the time of the test, shall be open;
4. Exterior doors for continuous ventilation systems and heat recovery ventilators shall be closed and sealed;
5. Heating and cooling systems, if installed at the time of the test, shall be turned off; and
6. Supply and return registers, if installed at the time of the test, shall be fully open.

4-216 AMENDMENT TO SECTION N1106.4 - ERI-BASED COMPLIANCE.

A new Section N1106.4 is hereby added to the 2018 IRC, as adopted by the City, to read as follows:

N1106.4 ERI-based compliance. Compliance based on an ERI analysis requires that the rated design be shown to have an ERI less than or equal to the appropriate value of 68 when compared to the ERI reference design. Where on-site renewable energy is included for compliance using the ERI analysis of Section N1106.4, the building shall meet mandatory requirements of Section N1106.2, and the building thermal envelope shall be greater than or equal to the levels of efficiency and SHGC in Table N1102.1.2 or Table N1102.1.4.

4-217 AMENDMENTS TO SECTION E3902.5 – UNFINISHED BASEMENT RECEPTACLES

Section E3902.5 of the 2018 IRC is hereby amended to read as follows:

E3902.5 Unfinished basement receptacles. 125-volt, single-phase, and 15- and 20-ampere receptacles installed in unfinished basements shall have ground-fault circuit-interrupter protection for personnel. For purpose of this section, unfinished basements are defined as portions or areas of the basement not intended as habitable rooms.

Exceptions: A receptacle supplying only a permanently installed fire alarm, burglar alarm system, or where a dedicated single-use style receptacle is installed for the sole purpose to supply power to a sump pump and the face

of the receptacle is labeled not GFCI protected. Receptacles installed in accordance with this exception shall not be considered as meeting the requirement of Section E3901.9.

Section II. Repeal of Prior Ordinances.

Article 2 of Chapter IV, consisting of Sections 4-201 through 4-226 (inclusive), of the Prairie Village Municipal Code, in existence as of and prior to the adoption of this Ordinance, and all other ordinances and parts thereof that are inconsistent with any provision of this Ordinance, are hereby repealed.

Section III. Effective Date.

This ordinance shall take effect and be in force beginning June 1, 2021 upon and after its passage, approval, and publication as provided by law.

PASSED by the City Council of the City of Prairie Village, Kansas on March 1, 2021.

APPROVED by the Mayor on MARCH 1ST, 2021.

CITY OF PRAIRIE VILLAGE, KANSAS



Eric Mikkelson, Mayor

ATTEST:



Adam Geffert, City Clerk

APPROVED AS TO LEGAL FORM:



David E. Waters, City Attorney