

Introduced by Alderman: Barbara E. Laberer

AN ORDINANCE TO REPEAL SECTIONS 500.060 TO 500.065 CONCERNING THE ADOPTION AND ADMINISTRATION OF THE RESIDENTIAL CODE OF THE CODE OF ORDINANCES OF THE CITY OF UNION AND ENACT IN THEIR STEAD A REVISED RESIDENTIAL CODE AND ESTABLISHING THE EFFECTIVE DATE THEREOF.

NOW THEREFORE, BE IT ORDAINED BY THE BOARD OF ALDERMEN OF THE CITY OF UNION, MISSOURI AS FOLLOWS:

Section 1. Repeal

That Sections 500.060 to 500.065 concerning the adoption and administration of the International Residential Code (2009 Edition) of the Code of Ordinances of the City of Union are hereby repealed.

Section 2. Adoption

That the following sections are hereby enacted:

Section 500.060 Adoption of Residential Code.

- A. A certain document, one (1) copy of which is on file in the office of the City Engineer of the City of Union, being marked and designated as the International Residential Code, 2021 Edition, as published by the International Code Council Inc., be it hereby adopted as the Residential Code of the City of Union, Missouri, for the control of building and structures as herein provided; and each and all of the regulations, provisions, penalties, conditions and terms of said Residential Code are hereby referred to, adopted and made a part hereof, as if fully set out in this Section, with the additions, insertions, deletions and changes, if any, prescribed in Section 500.065 of this Chapter.
- B. Penalty. Any person violating any of the provisions of the Code adopted in this Section shall be deemed guilty of an ordinance violation and upon conviction thereof shall be fined in an amount not exceeding five hundred dollars (\$500.00) or be imprisoned in the City or County Jail for a period of not exceeding ninety (90) days, or both such fine and imprisonment. Each day such violation is committed or permitted to continue shall constitute a separate offense and shall be punishable as such hereunder.

Section 500.065 Additions, Insertions, Deletions and Changes.

- A. The following Sections of the International Residential Code, 2021 Edition, are hereby revised as follows:
 1. R101.1 Title
 - A. Replace "[NAME OF JURISDICTION]" with "the City of Union, Missouri"
 2. R105.2 Work exempt from permit
 - A. Delete numbers 1, 2 and 10
 3. R105.5 Expiration
 - A. Replace all instances of "180 days" with "365 days"
 4. R112.1 General
 - A. Replace "board of appeals" with "board of adjustment"
 5. R112.3 Qualifications
 - A. Change to read as follows: "The Board of Appeals shall comprise the Board of Adjustment as specified in Sections 400.050 through 400.130 of the City of Union Code of Ordinances."
 6. R114.1 Authority
 - A. Change to read as follows: "Upon notice from the Code Official, work on any plumbing system that is being done contrary to the provisions of this code or in a dangerous or unsafe manner shall immediately cease. Such notice shall be in writing and shall be given to the owner of the property, or to the owner's agent, or

to the person doing the work. The notice shall state the conditions under which work is authorized to resume. Where an emergency exists, the Code Official shall not be required to give a written notice prior to stopping the work. Any person who shall continue any work in or about the structure after having been served with a stop work order, except such work as the person is directed to perform to remove a violation or unsafe condition, shall be guilty of an ordinance violation punishable by a fine of not more than five hundred dollars (\$500.00).”

7. R202 Definitions

A. Add the following:

- i. Balcony, Exterior. An exterior floor projecting from and supported by a structure without additional independent supports.
- ii. Deck. An exterior floor system supported on at least two opposing sides by adjoining structure and/or posts, piers or other independent supports.

8. Table 301.2 Climatic and Geographic Design Criteria

ground snow load	wind design		seismic design category	subject to damage from			winter design temp	ice barrier underlayment required	flood hazards *	air freezing index	mean annual temperature
	Speed (mph)	topographic effects		weathering	frost line depth	termite					
20 psf	115 (3 sec. gust) 89 (fastest mile)	no	C	severe	30 inches	moderate to heavy	0 to 10 DF	no	10/09/2002 (ordinance #2607)	767	55.3 °F

*current firm: panel 2901370058 & 29049301608

9. Table R302.6 Dwelling-garage separation

- A. Delete all instances of 1/2-inch gypsum board and replace with 5/8-inch gypsum board

10. R302.11 Fireblocking

- A. Add the following as number 7:
 - i. Horizontal fireblocking is required in common walls separating living space and garage at vertical height midpoint

11. R302.13 Fire protection of floors

- A. Delete section

12. R303.3 Bathrooms

- A. Add the following sentence: “Outdoors is considered as ridge vent, gable vent and soffit vent.”

13. R309.2 Carports

- A. Delete the exception

14. R311.3.2 Floor elevations at other exterior doors

- A. Change exception to read as follows: “A top landing is not required where a stairway of 3 or fewer risers is located on the exterior side of the door, provided that the door does not swing over the stairway.”

15. R311.7.7 Stairway walking surface

- A. Delete the exception

16. R311.7.8 Handrails

- A. Replace “four or more risers” with “three or more risers”

17. R312.1.1 Where required

- A. Add the following sentence: Spindles shall be positioned vertically.

18. R312.1.3 Opening limitations

- A. Delete exception number 2

19. R312.2 Window fall protection

- A. Delete section

20. R313.2 One- and two-family dwellings automatic sprinkler systems

- A. Delete section

21. R318.2 Chemical termiticide treatment

- A. Add the following sentence: “Treatment of soils with chemicals shall be performed by a state-certified applicator.”

22. R402.1 Wood foundations

- A. Delete section
- 23. R402.2 Cold and Hot Weather Concreting (added section)
 - A. Cold Weather Concreting
 - i. Reference ACI 306 (Cold Weather Concreting)
 - ii. ACI 318 leads to ACI 308R
 - iii. ACI 308R references ACI 305R for hot weather curing
 - iv. ACI 308R – general guidance for hot weather concrete
 - B. Hot Weather Concreting
 - i. Reference ACI 305 (Hot Weather Concreting)
 - ii. ACI 318 leads to ACI 308R
 - iii. ACI 308R references ACI 306R for cold weather curing
 - iv. ACI 308R – general guidance for cold and hot weather concrete
- 24. R403.1 General
 - A. Delete “wood foundations”
- 25. Table R403.1(1)
 - A. Delete Table
 - B. Add the following table

minimum width and thickness for concrete or masonry footings (soil bearing 1500 to 4000 psf)		
number of floors supported by the footing	width of footing (inches)	thickness of footing (inches)
1	24	8
2	24	8
3	24	10

Reinforcing steel: Two (2) number 4 rebar continuous, per Section R403.1.3.5

- 26. Figure R403.1(2) Permanent wood foundation basement wall section
 - A. Delete figure
- 27. Figure R403.1(3) Permanent wood foundation crawl space section
 - A. Delete figure
- 28. R403.1.4.1 Frost protection
 - A. Exception 1 – Replace 600 square feet with 200 square feet
 - B. Delete exception 2
- 29. R403.2 Footings for wood foundations
 - A. Delete section
- 30. R403.3.1 Foundations adjoining frost-protected shallow foundations
 - A. Delete section
- 31. Figure R403.4(1) Basement or crawl space with precast foundation wall bearing on crushed stone
 - A. Delete figure
- 32. Table R403.4 Minimum Depth (D) and Width (W) of crushed stone footings
 - A. Delete table
- 33. R403.4.1 Crushed stone footings
 - A. Delete section
- 34. Table R404.1.1(1)
 - A. Delete the following tables:
 - iii. Table R404.1.1(1), R404.1.1(2), R404.1.1(3), R404.1.1(4), R404.1.2(1), R404.1.2(2), R404.1.2(3), R404.1.2(4), R404.1.2(5), R404.1.2(6), R404.1.2(7), R404.1.2(8), R404.1.2(9)
 - iv. Add the following table:

reinforced concrete foundation walls - 8-inch thickness

wall height (ft)	steel reinforcement ^b	
	grade 40 (minimum), diameter 1/2" (no. 4)	
	minimum vertical spacing (inches)	minimum horizontal spacing (inches)
<4	48	24
4 to <10	24	24
>=10	DESIGN REQUIRED	

35. R404.1.3.2 Reinforcement for foundation walls
 - B. Delete section
36. R405.2 Wood Foundations
 - A. Delete section
37. R406.3 Dampproofing for wood foundations
 - A. Delete section
38. R408.4 Access
 - A. Replace all references of openings "16 inches by 24 inches" with "18 inches by 24 inches"
39. R408.8 Under-floor vapor retarder
 - A. Delete exception
40. Table R503.2.1.1(1) Allowable spans and loads for wood structural panels for roof and subfloor sheathing and combination subfloor underlayment
 - A. Replace all instances of "Minimum Nominal Panel Thickness - Sheathing, 3/8 inch" with "Minimum Nominal Panel Thickness - Sheathing, 7/16 inch"
 - B. Replace all instances of "Minimum Nominal Panel Thickness - Underlayment, C-C plugged, single floor, roof, combination subfloor underlayment, 19/32, 5/8 inch" with "Minimum Nominal Panel Thickness - Underlayment, C-C plugged, single floor, roof, combination subfloor underlayment, 23/32, 3/4 inch"
41. R504 Pressure preservative-treated wood floors (on ground)
 - A. Delete section
42. R506.2.3 Vapor retarder
 - A. Delete exception number 2
43. R507.3 Footings
 - A. Delete exceptions 1 and 2
 - B. Add the following exception: "Deck posts for freestanding decks installed for mobile homes, with an area not exceeding 50 square feet, may be supported on concrete footings extending no less than 15 inches below the undisturbed ground surface."
44. R507.3.3 Frost protection
 - A. Delete exception 3
45. R507.4.1 Deck post to deck footing connection
 - A. Delete the following statement: "or a minimum post embedment of 12 inches (305 mm) in surrounding soils or concrete piers. Other footing systems shall be permitted."
 - B. Delete exception
46. Figure R602.10.6.3 Method PFG - portal frame at garage door openings in seismic design categories a, b and c
 - A. Add the following note: "A wood 2-inch by 4-inch may be substituted for the steel tension strap from the top of the double plate to the top of the foundation."
47. R702.3.7 Water-resistant gypsum backing board
 - A. Add the following: "Water-resistant gypsum board shall be extended at least twenty-four (24) inches past any tub or shower enclosure or area."
48. R1005.4.1 Factory-built fireplaces
 - A. Add the following: "The flue chase for factory-built fireplaces shall have one (1) layer of 5/8-inch, Type X gypsum board applied to the inside of the chase, terminating vertically at the roof sheathing. Gypsum board joints shall be fire taped or fire caulked."
49. Chapter 11 Energy Efficiency

- A. Delete chapter
- 50. M1401.4.1 Height Requirement (new)
 - A. Add the following: "Equipment installed outdoors shall be installed with a maximum height of three (3) feet from finish grade."
- 51. M1502.4.1.1 Duct Material (new)
 - A. Add the following: "All single-wall ventilation ducts serving toilet rooms and bathrooms shall be constructed of an approved rigid or flexible metal material. Vinyl duct is not allowed."
- 52. M1601.2 Vibration isolators
 - A. Add the following: "Metal duct work shall be bonded together."
- 53. G2412.5 Identification
 - A. Change to read as follows: "Exposed piping shall be identified by a yellow label marked "Gas". The marking shall be spaced at intervals not exceeding 5 feet (1524 mm)."
- 54. G2414.3.2 Steel
 - A. Replace "Schedule 10" with "Schedule 40"
- 55. G2420.5.3 Located at manifold
 - A. Delete section
- 56. P2503.7 Water-supply system testing
 - A. Replace "50 psi" with "80 psi"
- 57. P2902.5.3 Lawn irrigation systems
 - A. Change to read as follows: "The potable water supply to lawn irrigation systems shall be protected against backflow by a reduced pressure principle backflow preventer. Where chemicals are introduced into the system, the potable water supply shall be protected against backflow by a reduced pressure principle backflow preventer."
- 58. P2904 Dwelling unit fire sprinkler systems
 - A. Delete section
- 59. P2906.4 Water service pipe
 - A. Delete section
- 60. Table P2906.4 Water service pipe
 - A. Delete the following materials:
 - i. Acrylonitrile butadiene styrene (ABS) plastic pipe
 - i. Chlorinated polyvinyl chloride (CPVC) plastic pipe
 - ii. Chlorinated polyvinyl chloride/aluminum/chlorinated polyvinyl chloride (CPVC/AL/CPVC) plastic pipe
 - iii. Cross-linked polyethylene/aluminum/cross-linked polyethylene (PEX-AL-PEX) pipe
 - iv. Cross-linked polyethylene/aluminum/high-density polyethylene (PEX-AL-HDPE) pipe
 - v. Cross-linked polyethylene (PEX) plastic tubing
 - vi. Polyethylene/aluminum/polyethylene (PE-AL-PE) pipe
 - vii. Polyethylene of raised temperature (PE-RT) plastic tubing
 - B. Add the following material:
 - i. 3/4-inch CTS SDR-9 tubing 250 psi (ASTM D2737)
- 61. Table 2906.5 Water distribution pipe
 - A. Delete the following materials:
 - i. Chlorinated polyvinyl chloride/aluminum/chlorinated polyvinyl chloride (CPVC/AL/CPVC) plastic pipe
 - ii. Cross-linked polyethylene/aluminum/cross-linked polyethylene (PEX-AL-PEX) pipe
 - iii. Cross-linked polyethylene/aluminum/high-density polyethylene (PEX-AL-HDPE) pipe
 - iv. Polyethylene/aluminum/polyethylene (PE-AL-PE) composite pipe
 - v. Polyethylene of raised temperature (PE-RT) plastic tubing
 - vi. Polypropylene (PP) plastic pipe or tubing
- 62. Table 2906.6 Pipe fittings

- A. Delete the following materials
 - i. Acrylonitrile butadiene styrene (ABS) plastic
 - ii. Cross-linked polyethylene/aluminum/high-density polyethylene (PEX-AL-HDPE)
 - iii. Insert fittings for polyethylene/aluminum/polyethylene (PE-AL-PE) and cross-linked polyethylene/aluminum/cross-linked polyethylene (PEX-AL-PEX)
 - iv. Fittings for polyethylene of raised temperature (PE-RT) plastic tubing
 - v. Polypropylene (PP) plastic pipe or tubing
 - vi. Polyvinyl chloride (PVC) plastic
 - vii. Steel
- 63. Table 3002.1(1) Above-ground drainage and vent pipe
 - A. Delete the following materials:
 - i. Acrylonitrile butadiene styrene (ABS) plastic pipe in IPS diameters, including Schedule 40, DR 22 (PS 200) and DR 24 (PS 140); with a solid, cellular core or composite wall
 - ii. Polyolefin pipe
 - iii. Polyvinyl chloride (PVC) plastic pipe in IPS diameters, including Schedule 40, DR 22 (PS 200) and DR 24 (PS 140); with a cellular core or composite wall
 - iv. Polyvinyl chloride (PVC) plastic pipe with a 3.25-inch O.D. and a cellular core or composite wall
- 64. Table 3002.1(2) Underground building drainage and vent pipe
 - A. Delete the following materials:
 - i. Acrylonitrile butadiene styrene (ABS) plastic pipe in IPS diameters, including Schedule 40, DR 22 (PS 200) and DR 24 (PS 140); with a solid, cellular core or composite wall
 - ii. Polyolefin pipe
 - iii. Polyvinyl chloride (PVC) plastic pipe in IPS diameters, including Schedule 40, DR 22 (PS 200) and DR 24 (PS 140); with a cellular core or composite wall
 - iv. Polyvinyl chloride (PVC) plastic pipe with a 3.25-inch O.D. and a cellular core or composite wall
- 65. Table 3002.2 Building sewer pipe
 - A. Delete the following materials:
 - i. Acrylonitrile butadiene styrene (ABS) plastic pipe in IPS diameters, including Schedule 40, DR 22 (PS 200) and DR 24 (PS 140); with a solid, cellular core or composite wall
 - ii. Acrylonitrile butadiene styrene (ABS) plastic pipe in sewer and drain diameters, including SDR 42 (PS 20), PS35, SDR 35 (PS 45), PS50, PS100, PS140, SDR 23.5 (PS 150) and PS200; with a solid, cellular core or composite wall
 - iii. Polyvinyl chloride (PVC) plastic pipe in sewer and drain diameters, including PS 25, SDR 41 (PS 28), PS 35, SDR 35 (PS 46), PS 50, PS 100, SDR 26 (PS 115), PS140 and PS 200; cellular core or composite wall
 - iv. Polyethylene (PE) plastic pipe (SDR-PR)
 - v. Polyolefin pipe
 - vi. Polyvinyl chloride (PVC) plastic pipe in IPS diameters, including Schedule 40, DR 22 (PS 200) and DR 24 (PS 140); cellular core or composite wall
 - vii. Polyvinyl chloride (PVC) plastic pipe with a 3.25-inch O.D. cellular core or composite wall
 - viii. Vitrified clay pipe
- 66. Table 3002.2 Pipe fittings
 - A. Delete the following materials:
 - i. Acrylonitrile butadiene styrene (ABS) plastic pipe in IPS diameters
 - ii. Acrylonitrile butadiene styrene (ABS) plastic pipe in sewer and drain diameters
 - iii. Polyolefin

- iv. Vitriified clay
- 67. P3005.4.1 Branch and stack sizing
 - A. Delete "1-1/2 inches" and replace with "2 inches"
- 68. P3102.1 Required vent extension
 - A. Add the following statement: "The minimum size of the vent stack or stank vent shall be three (3) inches in diameter and shall run undiminished in size and as directly as possible from the building drainage system through to the open air above the roof. All other vents shall not be less than two (2) inches in diameter."
- 69. P3103.1.1 Roof extension
 - A. Change to read as follows: "Open vent pipes that extend through a roof that do not meet the conditions of Section P3103.1.2 or P3103.1.3 shall terminate not less than 12 inches (150 mm) above the roof or 6 inches (150 mm) above the anticipated snow accumulation, whichever is greater."
- 70. P3114.1 General
 - A. Add the following sentence: "Where approved by the Building Official."
- 71. P3303.1.5 Discharge piping location (new section)
 - A. Add the following: "Sump pump piping shall discharge to the exterior of the building only and no closer than ten (10) feet from the property line. There shall be no direct discharge of sump pumps to the sanitary and storm sewer systems."
- 72. Chapters 34 through 41
 - A. Delete chapters
 - B. Replace with 2020 edition of NFPA 70, National Electrical Code (NEC)
- 73. Chapter 42 Swimming pools
 - A. Delete chapter
- 74. Chapter 43 Class 2 remote-control, signaling and power-limited circuits
 - A. Delete Chapter
- 75. Appendices AA through AX
 - A. The provisions contained in the appendices are not mandatory unless specifically referenced in the adopting ordinances.

Section 3. Inconsistent Ordinances Repealed

That any ordinance or parts of ordinance in conflict herewith are hereby repealed.

Section 4. Saving Clause

That no section, or portion of any section of this ordinance, if for any reason, is held invalid by any court of competent jurisdiction, such portion shall be deemed a separate, distinct and independent provision and such holding shall not affect the validity of the remaining portions of this ordinance.

Section 5. Codifier to Number Sections

It is the intent of the Board of Alderman, and it is hereby ordained that the provisions of this ordinance shall become and be made part of the Code of Ordinances of the City of Union, Missouri and the sections of this ordinance shall be numbered by the codifier to accomplish such intent.

Section 6. Effective Date.

That this ordinance shall take full force and effect from and after the date of its passage by the Board of Alderman and approval by the Mayor, the public interest so requiring.

Passed this 13th day of November, 2023.

VOTE:

Jacob T. Doepke	<u>YEA</u>	Dennis Soetebier	<u>YEA</u>
Russell Rost	<u>YEA</u>	Barbara E. Laberer	<u>YEA</u>

Amanda Sullivan YEA

Brian Pickard YEA

Tom Strubberg ABSENT

Heather Epple YEA

Robert L. Schmuke
Presiding Officer

APPROVED this 13th day of November, 2023.

Robert L. Schmuke
Robert L. Schmuke, Mayor

ATTEST:

Jonita Copeland
Jonita Copeland, City Clerk

