

BILL 10740

ORDINANCE 10583

AN ORDINANCE ADOPTING THE 2015 INTERNATIONAL RESIDENTIAL CODE FOR ONE- AND TWO- FAMILY DWELLINGS, INCLUDING APPENDIX A- "SIZING AND CAPACITY OF GAS PIPING", APPENDIX B- "SIZING OF VENTING SYSTEMS SERVING APPLIANCES EQUIPPED WITH DRAFT HOODS, CATEGORY I APPLIANCES AND APPLIANCES LISTED FOR USE WITH TYPE B VENTS", APPENDIX C- "EXIT TERMINALS OF MECHANICAL DRAFT AND DIRECT-VENT VENTING SYSTEMS", APPENDIX E- "MANUFACTURED HOUSING USED AS DWELLINGS"; APPENDIX F- "RADON CONTROL METHODS"; APPENDIX G- "PIPING STANDARDS FOR VARIOUS APPLICATIONS"; APPENDIX H- "PATIO COVERS", APPENDIX I- "PRIVATE SEWAGE DISPOSAL", APPENDIX J- "EXISTING BUILDINGS AND STRUCTURES"; APPENDIX K- "SOUND TRANSMISSION"; APPENDIX M- "HOME DAY CARE- R-3 OCCUPANCY"; APPENDIX-P "SIZING OF WATER PIPE SIZING", AS PUBLISHED BY THE INTERNATIONAL CODE COUNCIL, WITH MODIFICATIONS, AS THE RESIDENTIAL CODE OF THE CITY OF KIRKWOOD ESTABLISHING MINIMUM REGULATIONS GOVERNING THE DESIGN, CONSTRUCTION, ALTERATION, ENLARGEMENT, REPAIR, DEMOLITION, REMOVAL, QUALITY OF MATERIALS, ERECTION, LOCATION, RELOCATION, REPLACEMENT, MAINTENANCE AND USE OF ALL BUILDINGS AND STRUCTURES; PROVIDING FOR THE ISSUANCE OF PERMITS AND THE COLLECTION OF FEES; AND REPEALING THE EXISTING RESIDENTIAL CODE

WHEREAS, the ISO has recommended the City update its Building Codes and,

WHEREAS, the Building Commissioner's Office reviewed the latest Building Codes and recommends adoption with modification, and

WHEREAS, the Chief Administrative officer has approved the recommendation of the Public Services Department in updating the Building Code

NOW THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF KIRKWOOD, MISSOURI, AS FOLLOWS:

SECTION 1 That Section 5-2 (b) of the Kirkwood Code of Ordinance is hereby amended by inserting a new subsection (b) herein and renumbering subsection (b) to (c) as follows:

(b) Adoption of International Residential Code: The provisions of the "2015 International Residential Building Code" as modified, is hereby adopted as the City of Kirkwood Residential Building Code. See separate publication and adopting modification ordinance on file in the office of the City Clerk.

SECTION 2. That a certain document, which is on file in the office of the City Clerk, being marked and designated as the 2015 International Residential Code, as published by the International Code Council, Inc., be and is hereby adopted as the Residential Building Code of the City of Kirkwood, Missouri, for the control of building and structures as herein provided; and each and all of the regulations, provisions, penalties, conditions, and terms of the 2015 International Residential Code, are hereby referred to, adopted and made a part hereof, as if fully set out in this ordinance, with the additions, insertions, deletions, and changes, prescribed in this ordinance

SECTION 3. That throughout the 2015 International Residential Code, wherever the terms "Name of Jurisdiction" or "Local Jurisdiction" appear, it shall be deemed to mean the City of Kirkwood, Missouri, wherever the term "Department of Building Inspection" appears, it shall be deemed to mean Building Commissioner's Office, and wherever the term "Building Official" appears, it shall be deemed to mean Building Commissioner and wherever the term "Code" appears, it shall mean the 2015 International Building Code.

SECTION 4. The 2015 Residential Building Code is amended by the following provisions Each section, subsection or clause of the code that numerically corresponds to one of the following numbered provisions is hereby deleted where so noted, or amended to read as set forth below. Each provision set out below without a corresponding section, subsection or clause number in the Code is hereby enacted and added thereto.

Chapter 1 Scope and Administration

Section R101.1 is amended to read as follows; TITLE. These provisions shall be known as the Residential Code for One-and Two-Family Dwellings of the City of Kirkwood, and shall be cited as such and will be referred to herein as "this code".

Section R102.2.1 – is added to read as follows; Compliance with Kirkwood codes and ordinances. Subject to the provisions of this code, neither the granting of a permit, nor approval of construction documents, nor inspections made by the code official, or the code officials authorized representative, during the erection, movement, or demolition of a building or structure, or any alteration of addition thereto, shall in anyway relieve the owner or tenant of such building, structure or property from complying with the requirements of this code and all "City of Kirkwood ordinances"

Section R102.7.1 – is amended to read as follows; Requirements. An alteration to any structure shall conform to the code requirements for a new structure and shall not result in an increase in hazard to the occupants Portions of the structure not altered and not affected by the alteration are not required to comply with the code requirements for a new structure except as specified in Sections 3404.3 through 3404 7

Section R102.7.2 – is added to read as follows; Damaged Structures. If a structure is damaged by fire or any other cause, the renovation shall be considered an alteration and comply with Sections 102.7.3 through 102 7 6.

Section R102.7.3 – is added to read as follows, **Alterations Exceeding 50 Percent** If alterations or repairs are to be made within any period of twelve (12) months, costing in excess of fifty percent (50%) of the physical value of the structure, the requirements of this code for new structures shall apply. At the discretion of the Code Official, alterations required to resist earthquake loads may be phased as renovations to different portions of a structure occur

Section R102.7.4 – is added to read as follows; **Damages Exceeding 50 Percent.** If the structure is damaged by fire or any other cause to an extent in excess of fifty percent (50%) of the physical value of the structure before the damage was incurred, this code's requirements for new structures shall apply.

Section R102.7.5 – is added to read as follows; **Alterations Under 50 Percent.** If the cost of alterations or repairs to be made within any period of twelve (12) consecutive months, is between five and fifty percent (5%-50%) of the physical value of the structure, the Code Official shall determine to what degree the portions so altered or repaired shall be made to conform to the requirements for new structures to insure the safety, health and general welfare of the occupants and the public.

Section R102.7.6 – is added to read as follows; **Alterations Under 5 Percent** If the cost of alterations or repairs to be made within twelve (12) consecutive months is five percent (5%) or less of the physical value of the structure, the Code Official shall permit the restoration of the structure to its condition previous to damage or deterioration with the same kind of materials as those of which the structure was previously constructed; provided that such construction does not endanger the general safety and public welfare and complies with the provisions for existing roofs.

Section R102.7.7 – is added to read as follows, **Physical Value:** In applying the provisions of this section, the physical value of the structure shall be determined by the Code Official based on the current Building Valuation Data Report

Section R102.8 – is added to read as follows; **Matters not provided for.** Any requirements that are essential for the structural, fire or sanitary safety of an existing or proposed building or structure, or for the safety of the occupants thereof, which are not specifically provided for by this code, shall be determined by the code official.

Section R103.1 is amended to read as follows, The Kirkwood Building Department is hereby created and the official in charge thereof shall be known as the Building Commissioner.

Section R104.1.1 – is added to read as follows; **Disasters** In the event of a disaster, such as wind storm, tornado, flood, fire, earthquake, bomb blast, or explosion, the code official is hereby authorized to enter and inspect structures in the affected areas, subject to constitutional restrictions or unreasonable search and seizure. If the code official determines, after inspection, that a structure is unfit, he shall declare it a public nuisance, cause a report to be prepared and notify the affected parties in accordance with this code. When, in the sole opinion of the code official, there is imminent danger due to an unsafe condition, the code official shall take emergency measures in accordance with this code.

Section R104.2 – is amended to read as follows; Applications and Permits. The building official shall receive applications, review construction documents and issue permits for the erection, alteration, demolition and moving of buildings and structures, change of occupancy and inspect the premises for which such permits have been issued and enforce compliance with the provisions of this code.

Section R104.2.1 – is added to read as follows; Building Evaluation. The code official is authorized to require an existing building to be investigated and evaluated by a registered design professional to determine the existence of any potential nonconformance with the provisions of this code

Section R104.6.1 – is added to read as follows, Interference with Code Official. No person shall hinder, obstruct, resist, or fail to provide entry at reasonable times or otherwise interfere with the code official in the performance of his official duties

Section 104.12 – is added to read as follows; Rule-making authority. The code official shall have authority as necessary in the interest of public health, safety and general welfare, to adopt and promulgate rules and regulations to interpret and implement the provisions of this code to secure the intent thereof and to designate requirements applicable because of local climatic or other conditions. Such rules shall not have the effect of waiving structural or fire performance requirements specifically provided for in this code or of violating accepted engineering practice involving public safety

Section R105.1 – is amended to read as follows; Required. Any owner or authorized agent who intends to construct, enlarge, alter, repair, move, demolish, or change the occupancy of a building or structure, or install or alter a ground level paved parking lot other than those lots serving a single-family dwelling, or establish a new or relocated lot line that affects an existing structure, or to erect, install, enlarge, alter, repair, remove, convert or replace any electrical, gas, mechanical or plumbing system the installation of which is regulated by this code, or to cause any such work to be done, shall first make application to the building official and obtain the required permit

Section R105.1.1 is added to read as follows; Flood or Earthquake Damage Flood or earthquake damage repair permit required. It shall be unlawful to repair a structure when such repair is due to flood or earthquake without first registering and filing an application with the code official in writing and obtaining a Flood or Earthquake Damage Repair Permit. Flood or Earthquake Damage Repair Permits shall be issued at no cost if applied for within 90 days after the end of a flood or earthquake, where such date is determined by the code official, and shall authorize the work indicated therein to be completed within one year of the date of issuance. For the purpose of this section, the cost of flood or earthquake damage repair shall be defined in accordance with the Federal Emergency Management Agency (FEMA) regulations and definitions.

Section R105.1.2 is added to read as follows; Reroofing. Permits are required for the recovering or replacement of an existing roof covering when either of the following conditions apply

1. Permits are required for reroofing of roofs with a slope of less than 4:12 Plans and specifications are only required when reroofing a slope less than ¼ unit vertical in 12 units horizontal
2. Permits, plans and specifications are required for all structural changes in a roof covering system regardless of the roof slope.

Section R105.1.3 – is added to read as follows, Temporary Buildings and Structures. No temporary building or structure, either mobile or stationary, shall be erected, operated, used or maintained for any purpose without first obtaining a temporary structures permit. All temporary buildings and structures shall meet the requirements of chapter 31, Special Construction in the Kirkwood building code.

Section R105.1.3.1 – is added to read as follows; “Demolition Permit”: Demolition work shall start within thirty (30) days after issuance of a demolition permit and shall be completed within sixty (60) of such issuance date. The code official may, after receiving a written request from the applicant, extend the permit for one or more additional thirty (30) day period if, in his opinion, conditions such as weather may have prevented the completion of the work within the time allotted.

The Building Commissioner may establish a deposit in an amount set forth in the Chapter 5 Article VI “Various City Fees” of the Kirkwood Code of Ordinances to guarantee completion and site restoration including grading, seeding/strawing and/or sodding is completed in a reasonable time.

- (1) The performance guarantee shall be provided to the City before the issuance of the demolition permit.
- (2) Failure to complete the work and restore the site including grading, seeding/strawing and/or sodding and abate any code violations thereon, shall result in the performance guarantee being forfeited to the City of Kirkwood. The forfeiting of the performance guarantee does not relieve The developer or any other responsible party from completing all work and site restoration and the City assumes no responsibility to complete such improvements.
- (3) The City may perform the site restoration and deduct the cost for such work plus administrative fee from the deposit

Exception: Performance guarantees are not required for demolitions in an approved subdivision that has been reviewed by Planning and Zoning Commission and there is a valid performance guarantee on file with the City

Section R105.2 is amended to read as follows, Work exempt from permit. Exemption from permit requirements of this code shall not be deemed to grant authority for any work to be done in any manner in violation of the provisions of this code or any other laws or ordinances of this jurisdiction. Permits shall not be required for the following

Building:

1. Accessory buildings in use group R-3 (one or two family dwellings) not greater than 120 square feet in area and not greater than 12 feet in height and the building or structure does not contain any plumbing or electrical fixtures or devices. The building shall meet all zoning district requirements including but not limited to set back lines, lot coverage, etc.
2. Retaining walls, garden walls, planter boxes less than 24 inches in height
3. Roof covering replacement when done with like material, including replacement of 25% or less of the roof sheathing on roofs with a slope of 4:12 or greater or gutter repair or replacement unless required by section 105.1.2.
4. Walks, patios or other paving within property lines. NOTE: Sidewalks on public right-of-ways or easements, driveways, parking areas, and turnarounds require a permit. (The zoning code prohibits parking spaces in front of the building, therefore paving for this purpose is prohibited.) Driveways shall be paved in accordance with the Kirkwood Code of Ordinances.
5. Painting, interior or exterior, and wallpapering.
6. Siding, exterior, new or replacement metal, wood or vinyl installed over existing walls, soffits, fascia boards, overhangs, with no change to the size or location of existing wall openings
7. Window and door replacement or repair in an existing opening without modifications to the size or location of the wall opening
8. Storm window or storm door installation or replacement without modifications to the size or location of the wall opening.
9. Tuck-pointing
10. Portable or moveable cases, counters, pre-manufactured partitions not over 5 feet 9 inches (1753 mm) in height
11. Swings and other playground equipment for private use Note: The equipment shall meet all zoning district requirements including but not limited to set back lines, lot coverage, etc.

Electrical

1. Repairs and maintenance. Minor repair work, including the replacement of lamps or the connection of approved portable electrical equipment or temporary lighting, to approved permanently installed receptacles
2. Electrical wiring, devices, appliances, apparatus or equipment operating at less than 25 volts and not capable of supplying more than 50 watts of energy.

Gas:

1. Portable heating, cooking or clothes dryer appliances.
2. Replacement of any minor part that does not alter approval of equipment or make such equipment unsafe.

Mechanical:

1. Portable heating appliances
2. Portable ventilation devices
3. Portable cooling devices.
4. Steam, hot- or chilled-water piping within any heating or cooling equipment regulated by this code
5. Replacement of any minor part that does not alter approval of equipment or make such equipment unsafe
6. Portable evaporative coolers
7. Self-contained refrigeration systems containing 10 pounds (4.54 kg) or less of refrigerant or that are actuated by motors of 1 horsepower (746 W) or less.
8. Portable-fuel-cell appliances that are not connected to a fixed piping system and are not interconnected to a power grid.

Plumbing

1. The stopping of leaks in drains, water, soil, waste or vent pipe; provided, however that if any concealed trap, drainpipe, water, soil, waste or vent pipe becomes defective and it becomes necessary to remove and replace the same with new material, such work shall be considered as new work and a permit shall be obtained and inspection made as provided in this code.
2. The clearing of stoppages or the repairing of leaks in pipes, valves or fixtures, and the removal and reinstallation of water closets, provided such repairs do not involve or require the replacement or rearrangement of valves, pipes or fixtures

Section R105.3.3 – is added to read as follows, Authorization To Proceed. The code official may authorize the commencement of construction prior to issuance of a building permit when it can be shown that: a) the project is in compliance with the applicable regulations of the City of Kirkwood for that portion of the work to be performed; and b) the applicant agrees to proceed at his own risk without assurance that outstanding reviewing department agency final approvals may be obtained or that a permit for the entire structure will be granted. All necessary inspections shall be performed as required by this code.

Section R105.6.1 – is added to read as follows; Revocation For Lack Of Occupancy Permit. The code official shall be authorized to revoke any permit for any project which an occupancy permit has not been issued after one year of issuance of said building permit

Section R105.10 – is added to read as follows; “Additional Approval Requirements”: Prior to issuing any permit, approvals shall be obtained from the following agencies when applicable: The St. Louis County Department of Highways and Traffic, the St. Louis County Department of Health, Metropolitan St. Louis Sewer District (MSD), Missouri Department of Transportation (MoDot), Missouri Department of Natural Resources (DNR), and the City of Kirkwood Department of Public Works Engineering Office. The code official may issue a partial permit in accordance with Section 105.3.3 when clearances pertaining to the scope of the work are required from the applicable reviewing department/agencies listed above. The holder of such partial permit shall proceed at the owner’s risk without assurance that outstanding reviewing department/agency final approvals can be obtained or that a permit for the entire structure is granted.

Section R105.11 – is added to read as follows; Sewage Disposal: A building permit shall not be issued until an acceptable method of sewage disposal has been approved and complies with the City of Kirkwood plumbing code.

Section R105.12 – is added to read as follows; Addendums to Permits Once a permit is issued, all addendums submitted as an amendment to the approved construction documents shall be charged an additional review fee.

Section R105.13 – is added to read as follows; Integrated Permits: The code official may issue integrated building, plumbing, electrical and/or mechanical permits on a single permit application.

Section R105.14 – is added to read as follows, Applicant Responsibility: The integrated permit applicant shall be responsible for the return to the code official copies of the plumbing, electrical and/or mechanical permit form with the name, signature and license number of the appropriate sub-contractor

Section R105.15 – is added to read as follows, Investigation Fee for Work Performed without a Permit. Whenever any work for which a permit required by this code has been commenced without first obtaining said permit, a special investigation shall be made before a permit is issued. An investigation fee, in addition to the permit fee, shall be collected whether or not a permit is then or subsequently issued. The investigation fee shall be equal to the amount of the permit fee required by this code. Payment of the investigation fee shall not exempt any person from compliance with all the provisions of this code nor from any penalty prescribed by law.

Section R105.16 – is added to read as follows; Duty to Request Final Inspection. Upon completion of the work described in the permit application, the permit holder shall request and obtain a final inspection before any occupancy of the structure except as provided in Section 110.3 of this code. Failure of the permit holder to request and obtain a final inspection before occupancy will constitute a violation of this code.

Section R106.1 – is amended to read as follows; Submittal Documents The application for permit shall be accompanied by not less than three sets of construction documents. The construction documents and site plans for new construction, alteration, repairs, expansion, addition or modification for structures shall be prepared by a registered design professional All construction documents and site plans shall be prepared by the appropriate registered design professional consistent with the professional registration laws of the State of Missouri All construction documents submitted with an application for a building permit shall bear an original embossed or wet ink seal, the date and original ink signature of the registered design professional for each discipline on the front sheet of each discipline within each set of construction documents; or, on the cover sheet of each set of construction documents. In addition, all other sheets of the construction documents other than specifications or calculations shall bear the original embossed, wet ink, or mechanically reproduced seals of the registered design professional Any addenda or modifications submitted for changes to the construction documents shall also bear an original seal and signature of the registered design professional. Such changes shall be clearly indicated The construction documents shall include the name and address of the design professional and shall be signed, sealed, and dated by the registered design professional

Exception:

1. Miscellaneous structures accessory to one – and two-family dwellings and townhouses, such as room addition, carports, garages, sheds and other similar structures as approved by the code official.

Section R106.2.1 – is added to read as follows; Site Plan Review
Under authority of Section A-22 of the Kirkwood Zoning Code, the Director of Public Services shall review all site plans for construction requiring a building permit.

Section R106.2.2 - is added to read as follows; Review Criteria.
The Director of Public Services shall review all site plans in accordance with the applicable provisions of the Building Code, Zoning Code and Code of Ordinances of the City of Kirkwood

Section R106.2.3 is added to read as follows; Site Plan Review Application and Review required for New Single-Family Residences

Add: Prior to issuing a building permit for new single-family residences, an application for a site plan review shall be submitted and approved by the Director of Public Services. The site plan review application shall include a site plan drawn to scale with the signature and original seal of an architect, engineer or surveyor licensed in the State of Missouri containing the following information. The Director of Public Services may waive or modify the information required as site condition warrant in his/her discretion.

1. Boundary survey signed and sealed by a licensed surveyor;
2. Size and Location of all proposed and existing structures on the site;
3. Distance of all proposed and existing buildings from lot lines;
4. First floor elevation of all existing and proposed buildings;

5. Infill Residential Finished First Floor Height and Grade At Center of Foundation;
6. Zoning setback lines,
7. Driveway layout including all parking areas;
8. Site topography with two-foot contour intervals and spot/grade elevations,
- 9 Existing street grades and proposed finished grades of lot;
10. Infill Development Storm Water Management Plan;
11. Easements, existing and/or proposed;
- 12 Abutting rights-of-way;
- 13 Existing and proposed landscaping,
14. Kirkwood Tree Ordinance compliance.

Section R106.2.4 is added to read as follows; Required Public Improvements

Add: The Director of Public Services may require the following items as a condition of the site plan approval for new single-family residences:

1. Existing sidewalks repaired to City standards
- 2 Installation of accessible curb ramps
3. Installation of new sidewalks
4. Repair of existing curbs
5. Installation of new concrete curbs
- 6 Staked boundary survey
7. Consolidation plat of the property
8. Landscaping along street frontage and yard areas of the site
9. Repair or installation of driveways to City standards
- 10 Storm water drainage facilities
11. Existing significant trees to be saved

Section R106.2.5 is added to read as follows, Performance Guarantees

Add: The Public Services Director shall require a performance guarantee in the form of a cash deposit to insure compliance with the conditions of approval and site restoration including the requirements for drives, walks, utilities, parking, public improvements, landscaping, screening, significant trees, and other items.

- (1) The performance guarantee prescribed in Chapter 5, Article VI of the Code of Ordinances of the City of Kirkwood shall be provided to the City before the issuance of the permit authorizing the project or activity
- (2) The Public Services Director may require the value of trees to be reserved to be included in the performance guarantee. Should the designated trees be lost due to the willful action or neglect of the developer, the developer shall provide landscaping and trees in the site area equal to the performance guarantee amount or forfeit the amount to the General Revenues of the City of Kirkwood. The dollar value of the tree(s) shall be based on data contained in the International Society of Arboriculture's "Guide for Tree Appraisal".

- (3) Failure to satisfy the conditions of the site plan review approval shall result in the performance guarantee being forfeited to the City of Kirkwood. The forfeiting of the performance guarantee does not relieve the developer or any other responsible party from completing all work and site restoration and the City assumes no responsibility to complete such improvements

Exception. Single-family residences which are in an approved subdivision that has been reviewed by Planning and Zoning Commission and there is a valid Performance Guarantee on file with the City

Section R106.2.6 is added to read as follows; Site Protection Requirements Site protection shall comply with Chapter 33- "Safeguards During Construction" of the adopted 2015 Kirkwood Building Code.

Section R106.6 – is added to read as follows; Special Professional Services: When applications are filed for unusual designs, seismic design or a magnitude of construction which require construction review or inspection services beyond the capacity of the code official's staff, the code official may require the owner to retain a properly qualified registered design professional to perform the services necessary for code compliance. The code official may request and authorize a design professional to make inspections and keep daily records and submit reports as required Upon completion the design professional shall file a final report endorsed with his/her signature and seal indicating inspections that were performed and listing pertinent deviations for the building code and approved construction documents. All costs and fees related to the performance of special professional serviced shall be the responsibility of the owner

Section R106.6.1 – is added to read as follows; Elevations Certified. Any building being erected or constructed in a special flood hazard area shall provide an elevation certificate by a Registered Engineer or Land Surveyor, licensed by the State of Missouri, before final approval of foundation, building must also comply with Kirkwood City Flood Plain Ordmances

Section R108.2 is amended to read as follows; Schedule of permit fees. Fees shall be established as prescribed in Chapter 5, Article VI of the Code of Ordinances of the City of Kirkwood

Section R108.6 is amended to read as follows, Work commencing before permit issuance Any person who commences any work before obtaining the necessary permits shall be subject to a 100 percent (100%) of the usual total permit fee in addition to the required permit fees.

Section R109.1.4 is amended to read as follows, Frame and masonry inspection The Inspection of framing and masonry construction shall be made after the boundary survey verifying the location and height of foundation/Finished First Floor is submitted and approved This inspection is conducted after the completion of the roof, masonry; framing, firestopping, draftstopping and bracing are in place and after the plumbing, mechanical and electrical inspections are approved.

Section R110.1 – is amended to read as follows: Use and Occupancy: No change shall be made in the use or occupancy of any building that would place the building in a different division of the same group of occupancy or in a different group of occupancies, unless such building is made to comply with the requirements of the Building Code for such division or group of occupancy. Subject to the approval of the building official, the use or occupancy of existing buildings shall be permitted to be changed and the building is allowed to be occupied for purposes in other groups without conforming to all the requirements of this code for those groups, provided the new or proposed use is less hazardous, based on life and fire risk, than the existing use, except work exempt from permits under section 105.2

Section R110.2 – is amended to read as follows; Change of Occupant or Tenant: A change of occupant or tenant shall not be made to any structure or portion thereof without the approval of the code official and the issuance of an associated certificate of occupancy. Prior to issuance of the certificate of occupancy, the code official shall verify that.

- a. The structure containing the new occupant or tenant complies with applicable provisions of this code regarding maintenance of all equipment, systems, devices and safeguards required by this code for the applicable use and occupancy classification of the new occupant or tenant as well as applicable provisions of Property maintenance Code and the Zoning Ordinance; and
- b. Where the proposed change of occupancy or tenant also involves a change of use and occupancy classification as defined by this code, a permit application has been filed as prescribed by Section 105 of the Building Code and the structure shall meet the applicable requirements of this code with regard to the newly proposed use and occupancy classification

Section R110.3 – is amended to read as follows, Certificate Issued. After the building official inspects the building or structure and finds no violations of the provisions of this code or other laws that are enforced by the City of Kirkwood, the building official shall issue a Certificate of Occupancy

Section R110.4 – is amended to read as follows; Conditional Occupancy. The building official is authorized to issue a Conditional Certificate of Occupancy before the completion of the entire work covered by the permit, provided that such portion or portions shall be occupied safely. The building official shall set a time period during which the Conditional Certificate of Occupancy is valid

Section R110.5 delete in its entirety

Section R112.1 is amended to read as follows: Appeals. The owner of a building or structure or any other person having interest in said building or structure may appeal from a decision of the code official to the Board of Appeals appointed under the provisions of the Kirkwood Building Code, Chapter 1- Scope and Administration, Section 113- Board of Appeals.

Application for appeal may be made when it is claimed that the true content of this code has been incorrectly interpreted, the provisions of this code do not fully apply, or an equally good or better form of installation or construction can be used.

Sections R112.2 through R112.4 delete in their entirety

Section R113.4 – is amended to read as follows, Violation Penalties: Any person, firm or corporation who shall violate any provision of this ordinance, or who shall fail to comply with any of the requirements thereof who shall erect, construct, alter or repair a structure in violation of an approved plan or directive of the Code official, or of a permit or certificate issued under the provisions of the ordinance, or shall start any work requiring a permit without first obtaining a permit therefore, or who shall continue any work in or about a structure after having been served s stop work order, except for such work which that person, firm or corporation has been directed to perform to remove a violation or unsafe condition, or any owner or tenant of a building or premises or any other person who commits, takes part or assists in any violation of this Code or who maintains any building or premises in which such violation shall exist, shall be guilty of a misdemeanor punishable by a fine as prescribed in Section 1 8 of the Code of Ordinances of the City of Kirkwood

Section R115 is added to read as follows; Unsafe Structures and Equipment
Shall comply with the requirements of the Kirkwood Building Code, Chapter 1 Scope and Administration, section 116 Unsafe Structures and Equipment

Section R115.2 – is amended to read as follows; Unlawful Continuance. Any person who shall continue any work in or about a structure after having been served with a stop work order, except such work as he/she is directed to perform to remove a violation or unsafe condition, shall be guilty of a misdemeanor punishable by a fine as prescribed in Section 1 8 of the Code of Ordinances of the City of Kirkwood.

Chapter 2 Definitions

Section R202 – delete in its entirety, “Manufactured Homes”

Section R202 – is amended to read as follows; Height, Building, see Kirkwood Zoning Ordinances

**TABLE R301.2 (1) is amended to read as follows.
CLIMATIC AND GEOGRAPHIC DESIGN CRITERIA**

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

Ground Snow Load	Wind Design		Seismic Design Category	Subject to damage From			Winter Design Temp e	Ice Barrier Underlayment Required h	Flood Hazards g	Air Freezing Index i	Mean Annual Temp j
	Speed (mph) d	Topographic Effects k		Weathering a	Frost Line Depth b	Termite c					
20 PSF	115 MPH	NO	C	Severe	30 Inches	Moderate to Heavy	2° F	NO	02/04/15	1500 Days	54° F

Section R302.2 – is amended to read as follows; Townhouses;

Item 2: Where a fire sprinkler system in accordance with section P2904 is not provided, the common wall shall be not less than a 2-hour fire-resistance-rated wall assembly tested in accordance with ASTM E 119 or UL 263, or the common wall shall be two independent 1-hour fire-resistance-rated UL listed wall assemblies.

Section R302.15 is added to read as follows, Fireplace and Chimney Enclosure. All prefabricated “wood burning” fire place and metal chimneys shall be enclosed in a fire resistant enclosure with one layer of ½ type-x inch gypsum board or equivalent, starting from the supporting floor to the underside of the roof sheathing.

Exception: A fireplace and chimney chase located on an exterior wall of a structure need only be separated by lining the walls between the chimney chase and the exterior wall of the structure as specified in this section.

Section R306.5 is added to read as follows, Required. Every dwelling shall provide one outside frost-proof hose bib. Hose bibs shall be protected from backflow in accordance with the Plumbing Code

Section R310.6 is amended to read as follows; Alteration of existing basements. Unfinished areas of basement, converted to sleeping rooms or habitable spaces shall have emergency escape and rescue openings

Exception: When alterations of the basement are for habitable space, other than sleeping rooms, emergency escape and rescue openings are not required when all rooms and spaces are equipped with smoke detection devices per section R 314 of the Kirkwood Residential Code.

Section R311.3 – is added to exceptions to read as follows, #2. openings protected by a guardrail shall not be required to have an exterior landing ”

Section R312.2.2 – Delete in its entirety

Section R313.1 – is amended to read as follows; Townhouse automatic fire sprinkler systems Effective January 1, 2012, an automatic residential fire sprinkler system shall be installed in townhouses of more than four attached dwelling units.

Exception: An Automatic residential fire sprinkler system shall not be required when additions or alterations are made to existing townhouses that do not have an automatic residential fire sprinkler system installed.

Section R313.2 – is amended to read as follows, One and two family dwellings automatic fire systems A builder of single family dwellings or residences or multi-unit dwellings of four or fewer units shall offer to any purchaser on or before the time of entering into the purchase contract the option, at the purchaser’s cost, to install or equip fire sprinklers in the dwelling, residence or unit No purchaser of such a single-family dwelling, residence or multi-unit dwelling shall be denied the right to choose or decline to install a fire sprinkler system in such dwelling or residence being purchased in accordance with the requirements of Section 67 281, RSMo Supp 2009.

Section R317.1.4 – is added to read as follows, Posts, poles and columns supporting permanent structures and exposed to the weather, shall not be embedded in concrete or earth

Chapter 4 Foundations

Section R403.1 is amended by adding the following table; Minimum Size (Footings)

Table R403.1(4)
Minimum Width of Concrete, Precast, or Masonry Footings (inches)
for Light-Frame Construction with Pre-Fabricated Roof Trusses^{a,b,c}

	Load-Bearing Value of Soil (psf)			
	1500	2000	3000	≥4000
Conventional light-frame construction with pre-fabricated trusses				
1 story	12	12	12	12
2 story	15	12	12	12
3 story	23	17	12	12
4-inch brick veneer over light frame or 8-inch hollow concrete masonry				
1 story	12	12	12	12
2 story	21	16	12	12
3 story	32	24	16	12
8-inch solid or fully grouted masonry				
1 story	16	12	12	12
2 story	29	21	14	12
3 story	42	32	21	16

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

- a. Spread footings shall be same thickness as the wall (minimum of 8 inches)
- b. Where minimum footing width is 12 inches, use of a single wythe of solid or fully grouted 12-inch nominal concrete masonry units is permitted
- c. Snow Load or Roof Live Load shall not exceed 20 psf. If load exceeds 20 psf, designs must be completed by a licensed design professional

Section R405.2.3 – is amended to read as follows; Drainage system. A sump pit is required to be installed and shall comply with Chapter 33 of this code. The discharge shall be installed in compliance with the Infill Development Storm Water Management ordinance.

Section 602.7 table is added to read as follows,

Table R602.7.5 is amended to read as follows; Supports for Headers

Maximum Header Span (feet)	Ultimate Design Wind Speed and Exposure Category	
	<140mph, Exposure B or <130mph, Exposure C	≤115mph, Exposure B ^b
4	1	1
6	2	1
8	2	1
10	3	2
12	3	2
14	3	2
16	4	2
18	4	2

- a For header spans between those given above, use the minimum number of full-height studs associated with the larger header span.
- b The tabulated minimum number of full-height studs is applicable where jack studs are provided to support the header at each end in accordance with Table R602.7.(1). Where a framing anchor is used to support the header in lieu of a jack stud in accordance with footnote “d” of Table R602.7 (1), the minimum number of full-height studs at each end of a header shall be in accordance with requirements for wind speed <140mph, Exposure B.

Chapter 8 Roof-Ceiling Construction

Section R801.2.1 – is added to read as follows, Minimum thickness of all wood roof structural panels shall be nominal ½ inch

Section R801.3 – is amended to read as follows, Roof drainage. All dwellings and structures shall have a controlled method (gutter and downspout system) of water disposal from roof(s) that will collect and discharge roof drainage away from the foundation walls to an approved discharge per the Infill Development Storm Water Management ordinance.

Section R802.11.1.3 – is added to read as follows, Roof framing. Every roof girder, truss or joist and beams shall be anchored to its supporting member and top plate of the wall with an approved mechanical device, (commonly referred to as a hurricane clip) or other approved method to resist vertical uplift of the roof.

Chapter 11 Energy Efficiency

N1101.4 (R102.1.1) Above code programs – shall be amended by deleting the following sentence, “The requirements identified as “mandatory” in this chapter, as applicable, shall be met.”

Table N1102.1.2 (R402.1.2) is 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	Basement Wall R-Value c	Slab R-Value And Depth d	Craw Space Wall R-Value c
1	NR	0.75	0.25	30	13	¾	13	0	0	0
2	0.40	0.65	0.25	38	13	4/6	13	0	0	0
3	0.35	0.65	0.25	38	13	8/13	19	5/13 f	0	5/1
4 except Marine	0.35	0.55	0.40	38	13	8/13	19	10/13 j	10, 2ft	10/10 k
5 and Marine 4	0.32	0.55	NR	49	20 or 13+5 h	13/17	30 g	15/19	10, 2ft	15/1
6	0.32	0.55	NR	49	20 or 13+5 h	15/20	30 g	15/19	10, 4ft	15/1
7 and 8	0.32	0.55	NR	49	20 or 13+5 h	19/21	30 g	15/19	10, 4ft	15/1

- a R-values are minimums U-factors and SHGC are maximums When insulation is installed in a cavity which is less than the label or design thickness of the insulation, the installed R-value of the insulation 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 “15/19” means R-15 continuous insulation on the interior or exterior of the home or R-19 cavity insulation at the interior of the basement wall “15/19” shall be permitted to be met with R-13 cavity insulation on the interior wall plus R-5 continuous insulation on the interior or exterior of the home “10/13” means R-10 continuous insulation on the interior or exterior of the home Or R-13 insulation cavity insulation on the interior of the basement wall
- d R-5 shall be added to the required slab edge R-values for heated slabs Insulation depth shall be the depth of the footing or 2 feet, whichever is less, in zones 1 through 3 for heated slabs
- e There are no SHGC requirements in the Marine Zone
- f Basement wall insulation is not required in warm-humid locations as defined by Figure N1101.10 and Table N1101.10
- g Or insulation sufficient to fill the framing cavity, R-19 minimum
- h The first value is cavity insulation, the value is continuous insulation, so “13/5” means R-13 cavity insulation plus R-5 continuous insulation
- i The second R-value applies when more than half the insulation is on the interior
- j Unfinished basements may have a total of 20% of the total basement wall area exposed above the outside finished grade/ground level as un-insulated concrete foundation walls The foundation wall area above the outside grade/ground level that may be un-insulated is determined by the formula 0.20 times the basement wall height of all walls (including insulated exterior frame walls for walkout basements and walls common to both basement and attached garages) times the perimeter of these basement walls Exposed foundation wall area above the outside finished grade/ground level exceeding 20% of the total basement wall area shall be insulated with R-5 insulation When required in unfinished areas, the basement foundation wall insulation shall extend down to the basement floor slab or to a minimum of 24 inches below the outside finished grade when the grade is above the floor slab elevation
- k Naturally vented crawl space wall R-value may be 0

Section N1102.2.4 – Access hatches and doors is amended by deleting the following, “weatherstripped and”

Section N1102.4 (R402.4) is amended to read as follows, Air leakage. The *building thermal envelope* may be designed and constructed to limit air leakage in accordance with the requirements of Sections R1102.4.1 through R1102.4.4.”

Section N1102.4.1.2 (R402.4.1.2) is amended to read as follows; Testing. Any building or dwelling unit may be tested and verified as having an air leakage rate not exceeding five air changes per hour in Climate Zone 4”

Table N1102.4.1.1 (402.4.1.1) – delete in its entirety

Section N1103 (R403) and **N1104 (R404)** delete in their entirety,

Chapter 13 General Mechanical System Requirements

Section M1305.1.4.1 – is amended to read as follows; Ground clearance. *Equipment* and *appliances* supported from the ground shall be level and firmly supported on a concrete slab or other *approved* material extending not less than 2 inches (50.8 mm) above the adjoining ground. Such support shall be in accordance with the manufacturer’s installation instructions. *Appliances* suspended from the floor shall have a clearance of not less than 6 inches (152 mm) from the ground.

Section M1305.1.4.3 – is amended to read as follows; Electrical requirements. A luminaire controlled by a switch located at the required passageway opening and a receptacle outlet shall be installed at or near the *appliance* location in accordance with Chapter 39. Exposed lamps shall be protected from damage by location or lamp guards.

Exception: Basements

Chapter 15 Exhaust Systems

Section M1503.4 – is amended to read as follows; Makeup air required: Exhaust hood systems capable of exhausting in excess of 600 cubic feet per minute (0.19 m³/s) shall be provided with makeup air at a rate approximately equal to the exhaust air rate. Such makeup air systems shall be equipped with a means of closure and shall be automatically controlled to start and operate simultaneously with the exhaust system.

Chapter 16 Duct Systems

Section M1602.2 - is amended by the following; Return air openings. #2 is amended in its entirety and #3 is amended to delete the word “closet”.

Chapter 24 Fuel Gas

Section G2408.4 (305.7) – is amended to read as follows; Ground clearance. *Equipment* and *appliances* supported from the ground shall be level and firmly supported on a concrete slab or other *approved* material extending not less than 2 inches (50.8 mm) above the adjoining ground. Such support shall be in accordance with the manufacturer’s installation instructions. *Appliances* suspended from the floor shall have a clearance of not less than 6 inches (152 mm) from the ground.

Section G2415.3 (404.3) is amended to read as follows; Prohibited locations *Piping* shall not be installed in or through a ducted supply, return or exhaust, or a clothes chute, *chimney* or gas vent, dumbwaiter or elevator shaft *Piping* installed downstream of the *point of delivery* shall not extend through any townhouse unit other than the unit served by such *piping*

Exception: Or installed as approved by the Authority Having Jurisdiction (AHJ), such as Ameren or Spire

Section G2442.4 (618.4) (8)(3) Exception is added to read as follows; Prohibited sources. Outdoor or return air for forced-air heating and cooling systems shall not be taken from the following locations

3. Where a closet is provided with a supply register, taking return air from the closet shall not be prohibited.

Chapter 27 Plumbing Fixtures

Section P2603.5.1 is amended to read as follows; Sewer Depth. Installations shall meet the requirements of the Kirkwood plumbing code

Section P2719.1.1 – is added to read as follows; Required floor drain A floor drain shall be installed within 15 feet of and in the same room as the heating/cooling system(s) or hot water heater(s). The floor drain installations shall comply with the Plumbing Code.

Exception: When the water heater(s) or condensate producing appliance is installed and meets the requirements of the Kirkwood plumbing code, sections 504.7, 504.7.1 and 504.7.2

Section P2719.1 – is added to read as follows, Garage Floor drains. Floor drains in a garage shall not connect to a sanitary sewer line unless installed in compliance with the City of Kirkwood plumbing code

Chapter 30 Sanitary Drainage

Section P3001.4 is added to read as follows; Individual Sewage Disposal System Permitted. Individual sewage disposal systems shall be permitted only under the following condition:

1. Single family dwellings on lots one acre or larger and,
2. Property is not within 300 feet of a public sanitary sewer and,
3. The plans and construction documents for the individual disposal system shall be sealed by a professional engineer and,
4. The soil absorption system shall be at least 10 feet from all property lines and,
5. The system satisfies the requirements of the 2015 International Private Sewage Disposal Code.

Chapter 31 Vents

Section P3103.1 is amended to read as follows; Roof extension. Open vent pipes that extend through a roof shall be terminated not less than 12 inches (305 mm) above the roof. Where a roof is to be used for assembly or as a promenade, observation deck, sunbathing deck or similar purposes, open vent pipes shall terminate 7 feet (2134 mm) above the roof.

Chapter 36 Services

Section E3601.8 – is amended to read as follows, Split-Buss Electrical Service When any work within the structure requires a building or electrical permit, If a split-bus panel exist, said panel shall be replaced or made compliant with the Kirkwood Electric Code as adopted and approved by the City of Kirkwood.

Exception: permits for foundation repair/drainage, or minor repairs determined by the code official.

Chapter 39 Power and Lighting Distribution

Section E3902.16 – is amended to read as follows; Arc-fault circuit-interrupter protection Branch circuits that supply 120-volt, single phase, 15- and 20-ampere outlets installed in bedrooms shall be protected by any of following [210.12(A)]..... including items 1-6 and exception.

Section E3902.17 – Exception is amended to read as follows, “AFCI protection shall not be required where the extension of the existing conductors is not more than 30 feet (9.5m) in length and does not include any additional outlets or devices [210.12(B) Exception]”

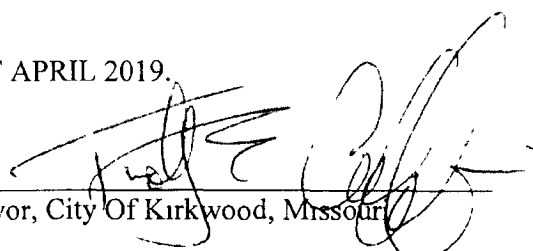
Section E4002.14 – Delete in its entirety

SECTION 5. Nothing in this ordinance or in the code hereby adopted shall be constructed to affect any suit or proceeding pending in any court, or any rights acquired, or liability incurred, or any cause or causes of action acquired or existing under any act or ordinance hereby repealed as cited herein.

SECTION 6. If any section, subsection provision, sentence, clause or phrase of this ordinance or of the 2015 International Residential Code, Second Printing, is for any reason held to be unconstitutional or invalid, such decision shall not affect the validity of the remaining portions of this ordinance or of said code, and the City Of Kirkwood hereby declares that it would have passed the same, even though such portion so held to be unconstitutional had not been included therein, and to this end the provisions of this ordinance declared to be severable.

SECTION 7. This ordinance shall be in full force and effect after its passage and approval, as provided by law

PASSED AND APPROVED THIS 4TH DAY OF APRIL 2019.



Mayor, City Of Kirkwood, Missouri

ATTEST:



City Clerk

1st Reading. March 21, 2019

2nd Reading. April 4, 2019