

## CITY OF LAKE SAINT LOUIS, MISSOURI

### PUBLIC NOTICE OF ADOPTION OF 2021 BUILDING CODES

The City of Lake Saint Louis, Missouri will present Bill 4798 regarding adoption of the 2021 International Building Code and amendments to the Board of Aldermen on Monday, November 20, 2023, at 6:00 PM or as soon thereafter as may be heard at Lake Saint Louis Civic Center in the Board Room, 200 Civic Center Drive, Lake Saint Louis, Missouri.

The following codes are to be adopted with amendments as part of Title V Building and Construction, of the Code of Ordinances (The "Building Code"):

- 2021 International Building Code
- 2021 International Residential Code
- 2021 International Fire Code
- 2021 International Mechanical Code
- 2021 International Plumbing Code
- 2021 International Fuel Gas Code
- 2021 International Existing Building Code
- 2021 International Property Maintenance Code
- 2021 International Swimming Pool and Spa Code
- 2020 National Electric Code
- 2015 International Energy Conservation Code

At least one copy of the Codes listed above, and amendments thereto, are on file in the City Clerk's Office and will be available pursuant to RSMo 67.380 for public use, inspection, and examination for a period of ninety (90) days prior to the adoption of the Ordinance (anticipated date of February 20, 2024) which incorporates such Codes by reference and will remain available to the public upon adoption of the Ordinance.

Any questions regarding the proposed bill should be directed to Bryan Kopp, Chief Building Official at 636-625-7982 or [bkopp@lakesaintlouis.com](mailto:bkopp@lakesaintlouis.com).

Andrew Stanislav  
Director of Community Development

AN ORDINANCE AMENDING CHAPTER 500 OF THE LAKE SAINT LOUIS MUNICIPAL CODE AND ADOPTING THE 2021 INTERNATIONAL BUILDING, RESIDENTIAL, FIRE, EXISTING BUILDING, PLUMBING, MECHANICAL, FUEL GAS SWIMMING POOL AND SPA, PROPERTY MAINTENANCE, AND 2015 ENERGY CONSERVATION CODES AND THE 2020 NATIONAL ELECTRICAL CODE, ALONG WITH CERTAIN AMENDMENTS THERETO, AND PROVIDING FOR THE ISSUANCE OF PERMITS AND COLLECTION OF FEES.

WHEREAS, the Board of Aldermen for the City of Lake Saint Louis wishes to adopt updated standards regulating building construction and fire prevention; and

WHEREAS, the City Administrator for and the staff of the City have recommended to the Board the adoption, with certain amendments, of the 2021 International Building Code including appendices E, F, G, and O, the 2021 International Residential Code including appendices AA, AB, AC, AD, AF, AG, AH, AJ, AM, and AP, the 2021 International Fire Code including appendices B, C, and D, the 2021 International Fuel Gas Code including appendices A, B, C, D, and E, the 2021 International Plumbing Code including appendices B, C, D, and E, the 2021 International Mechanical Code including appendix A, the 2021 International Property Maintenance Code including appendix A, the 2015 International Energy Conservation Code, the 2021 International Existing Building Code including appendices A and B, the 2021 International Swimming Pool and Spa Code, and the 2020 National Electrical Code, including Annex H; and

WHEREAS, one (1) copy of each of the above referenced documents have been on file and available for public inspection in the Office of the City Clerk since November 20, 2023; and

WHEREAS, prior to adoption as an Ordinance of the City of Lake Saint Louis, this bill will have been read twice as required by City Charter, Municipal Code and State Law, with the First Reading having occurred on November 20, 2023 and Second Reading having occurred no earlier than February 20, 2024 more than ninety days following the date when the documents were officially filed in the Office of the City Clerk;

NOW, THEREFORE, be it ordained by the Board of Aldermen for the City of Lake Saint Louis, Missouri, as follows:

SECTION 1. That Section 500.010, entitled "Building Code and Permit", Subsection "A" be deleted in its entirety and replaced with the following text:

**SECTION 500.010: BUILDING CODE AND PERMIT**

A. *Comprehensive Building Code Adoption Including Building, Residential, Fire, Plumbing, Mechanical, Fuel Gas, Swimming Pool and Spa, Existing Building, Property Maintenance, Energy Conservation and Electrical Regulations.*

1. Certain documents, one (1) copy of which are filed in the office of the City Clerk of the City of Lake Saint Louis, being marked and designated as the *International*

*Building Code*, 2021 edition, the *International Residential Code*, 2021 edition, the *International Fire Code*, 2021 edition, the *International Plumbing Code*, 2021 edition, the *International Mechanical Code*, 2021 edition, the *International Fuel Gas Code*, 2021 edition, the *International Property Maintenance Code*, 2021 edition, the *International Energy Conservation Code*, 2015 edition, the *International Swimming Pool and Spa Code*, 2021 edition, the *International Existing Building Code*, 2021 edition, all as published by the International Code Council, and the *National Electrical Code*, 2020 edition, as published by the National Fire Protection Association, along with all additions, deletions, insertions and changes identified herein, are hereby adopted as the Comprehensive Building Code of the City of Lake Saint Louis in the State of Missouri, for regulating and governing the conditions and maintenance of all property, buildings and structures; by providing the standards for supplied utilities and facilities and other physical things and conditions essential to ensure that structures are safe, sanitary and fit for occupation and use; and the condemnation of buildings and structures unfit for human occupancy and use and the demolition of such structures as herein provided; providing for the issuance of permits and collection of fees there for; and each and all of the regulations, provisions, penalties, conditions and terms of said Building Code on file in the office of the City Clerk 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 Section 2 of this ordinance.

2. The Chief Building Official for the City of Lake Saint Louis shall serve as the Official Administrator of the Comprehensive Building Code of the City of Lake Saint Louis. Whenever and wherever reference is made in any of the documents comprising the Comprehensive Building Code of the City of Lake Saint Louis to the Building Official or the Code Official or the Authority Having Jurisdiction, that reference shall mean the Chief Building Official.

3. *Comprehensive Building Code additions, deletions, insertions and changes.*

a. The following Sections of the **2021 International Building Code**, as published by the International Code Council, are hereby revised as follows:

**[A] 101.1 Title.** (replace with) These regulations, referenced standards, and appendices E, F, G, and O shall be known as the *Building Code* of the City of Lake Saint Louis, Missouri, and shall be cited as such and will be referred to herein as “this code.”

**[A] 101.4.6 Energy** (add to the existing section) All references to the 2021 International Energy Conservation Code are replace with reference to the 2015 International Energy Conservation Code and the amended sections as listed in the Municipal Code of Lake Saint Louis.

**[A] 102.1 General** (replace with) Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall govern. Where differences occur between provisions of this code and the referenced standards, the provisions of this code shall apply. Where, in a specific case, different sections of this code or the Municipal Code of Lake Saint Louis specify different requirements, the most restrictive shall govern.

**Section 103 Code Compliance Agency** (delete)**[A] 105.1.1 Annual permit.** (delete)**[A] 105.1.2 Annual permit records.** (delete)

**[A] 105.2 Work exempt from permit.**(replace with) Exemptions from *permit* requirements of this code shall not be deemed to grant authorization 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:** (replace with)

1. Retaining walls that are not over 4 feet (1219 mm) in height measured from the bottom of the footing to the top of the wall, unless supporting a surcharge or impounding Class I, II or IIIA liquids.
2. Sidewalks and driveways not more than 30 inches above adjacent grade, and not over any basement or story below and are not part of an accessible route.
3. Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work.
4. Nonfixed and movable fixtures, cases, racks, counters and partitions not over 5 feet 9 inches in height.

**Electrical:** (add the following)

4. Listed cord-and-plug connected temporary decorative lighting.
5. Reinstallation of attachment plug receptacles but not the outlets therefor.
6. Replacement of branch circuit overcurrent devices of the required capacity in the same location.
7. Electrical wiring, devices, appliances, apparatus or equipment operating at less than 25 volts and not capable of supplying more than 50 watts of energy.
8. Minor repair work, including the replacement of lamps or the connection of approved portable electrical equipment to approved permanently installed receptacles.

**Gas:** (add the following)

3. Portable heating, cooking or clothes drying appliances.
4. Replacement of any minor part that does not alter approval of equipment or make such equipment unsafe.
5. Portable-fuel-cell appliances that are not connected to a fixed piping system and are not interconnected to a power grid.

**Mechanical:** (add number 8)

8. Portable-fuel-cell appliances that are not connected to a fixed piping system and are not interconnected to a power grid.

**[A] 105.3 Application for permit.** (replace with) Each application for a permit shall be made to the Code Official on a form or by a method provided by the department, and shall include a general description of the proposed work, its location, and the estimated cost of construction.

**[A]105.5 Expiration.** (replace with) Permits shall expire as follows:

1. New structures, remodeling, and interior finishes for non-residential and residential permits: 1 year from the date of permit issuance
2. Exterior improvements (pools, retaining walls, decks, gazebos, pergolas, and similar structures) for non-residential and residential permits unless listed elsewhere in the Lake Saint Louis Municipal Code: 6 months from the date of permit issuance.
3. MEP only (mechanical, electrical, or plumbing) permits: 3 months from the date of permit issuance.
4. Temporary electrical poles: 1 year from the date of permit issuance.
5. Fences for non-residential and residential permits: 3 months from the date of permit issuance.
6. Floodplain Development Permits: Same as coinciding permit.
7. Demolition for non-residential and residential permits: 6 months from the date of permit issuance.

**[A]105.5.1** (add new section) **Permit extensions.** The *code official* is authorized to grant, in writing, one extension of time for not more than 30 days. The extension must be requested in writing and a justifiable cause demonstrated. If work is not completed when the permit expires, a new permit must be applied for until the work is completed and has passed the final inspection.

**[A] 109.2 Schedule of permit fees.** (replace with) The fees for all permits shall be as indicated in the Lake Saint Louis Municipal Code.

**[A]109.2.1** (add new section) **Schedule of plan review fees.** All fees for plan review related to required permits shall be as indicated in the Lake Saint Louis Municipal Code.

**[A]109.2.2** (add new section) **Permit extension fees.** Permit extension fees for new structures, remodeling, interior finishes, and exterior improvement permits shall be based upon the cost of construction of remaining work and shall at no time be less than the minimum permit fee for the type of work permitted. The cost of renewal for all other permit types shall be the full cost of the original permit.

**[A] 109.4 Work commencing before permit issuance.** (replace with) Any person who commences any work on a building, structure, electrical, gas, mechanical or plumbing system before obtaining the necessary *permits* shall be subject to penalties as prescribed by law. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

Exception: (add exception)

1. Stakeouts and other necessary planning procedures, including installation of BMPs or other erosion control methods.

**[A] 109.6 Refunds.** (replace with) The code official may approve the refunding of permit and/or inspection fees only as permitted by the Lake Saint Louis Municipal Code and City policy.

**[A]110.6.1 (add new section) Re-inspections.** If an inspection fails twice for the same violation, an extra inspection fee as indicated in the Lake Saint Louis Municipal Code must be paid before each subsequent inspection is conducted for the remaining violation.

**[A] 111.3 Temporary occupancy.** (replace with) Upon the request of a permit holder, the Building Official is authorized to issue a temporary certificate of occupancy for a building or structure, or part thereof, before the entire work covered by the permit shall have been completed, provided that such portion or portions shall be occupied safely and provided that the permit holder shall provide to the City a cash surety bond in the form of cash, cashier's check or certified check in an amount sufficient to cover the cost of completion of the unfinished portion of the work covered by the permit, but in no case less than one thousand dollars (\$1,000.00), prior to the issuance of the temporary certificate of occupancy, in order to assure completion of construction work and site restoration. The Building Official shall establish a date by which the incomplete work shall be completed. All construction and site restoration work shall be completed within no more than six (6) months of the date the temporary certificate of occupancy is issued. In the event all the construction and site restoration work covered by the permit has not been completed to the satisfaction of the Building Official by the date established, the temporary certificate of occupancy shall be void and the cash bond shall be forfeited. In the event the unfinished portion of the work has been completed to the satisfaction of the Building Official by the date established, the cash bond shall be returned. Failure to comply with these requirements shall be deemed a violation of this Chapter and subject to penalties as prescribed by law. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

**[A] 113.1 General.** (replace with) The Lake Saint Louis Building Appeals Board shall hear and decide appeals of orders, decisions or determinations made by the *building official* relative to the application and interpretation of this code, All rules and requirements associated with such an appeal, as specified in the Lake Saint Louis Municipal Code, shall apply. Application to appeal any order, decision or determination made by the building official shall be filed with the building official within 20 days after

the order, decision or determination was served, on a form obtained from the Building Official.

**[A] 114.4 Violation penalties.** (replace with) Any person who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, construct, alter or repair a building or structure in violation of the approved construction documents or directive of the Building Official, or of a permit or certificate issued under the provisions of this code, shall be subject to penalties as prescribed by law. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

**[A] 115.4 Failure to comply.** (replace with) 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 that person is directed to perform to remove a violation or unsafe condition, shall be subject to penalties as prescribed by law.

**[F] 502.1** (replace “4 inches” with “6 inches”)

**Section 1110.5.1. Minimum number.** (replace with) No fewer than one drinking fountain shall comply with the requirements for people using a wheelchair.

Exception: Occupancies with an occupant load of less than 50 people shall be permitted to provide an approved bottled water dispenser in lieu of the required drinking fountain.

**1612.3 Establishment of flood hazard areas.** (replace with) To establish *flood hazard areas*, the applicable governing authority shall adopt a flood hazard map and supporting data. The flood hazard map shall include, at a minimum, areas of special flood hazard as identified by the Federal Emergency Management Agency in an engineering report entitled “The Flood Insurance Study for the City of Lake Saint Louis, Missouri,” dated January 20, 2016, as amended or revised with the accompanying Flood Insurance Rate Map (FIRM) and Flood Boundary and Floodway Map (FBFM) and related supporting data along with any revisions thereto. The adopted flood hazard map and supporting data are hereby adopted by reference and declared to be part of this section.

**1807.3.Embedded posts and poles.** (replace with) Any design that proposes the embedment of structural posts or poles into earth or concrete footings shall be designed, signed and wet-sealed by a Missouri-registered engineer and be accompanied by a corresponding soils report.

**1807.3.1** (delete)

**1807.3.2** (delete)

**1807.3.3** (delete)

**Chapter 35, under "ICC", (replace "IECC – 21" with "IECC – 15")**

b. The following Sections of the **2021 International Residential Code**, as published by the International Code Council, are hereby revised as follows:

**R101.1 Title.** (replace with) These regulations, referenced standards, and appendices AA, AB, AC, AD, AF, AG, AH, AJ, AM, and AP shall be known as the *Residential Code for One- and Two-family Dwellings* of the City of Lake Saint Louis, Missouri, and shall be cited as such and will be referred to herein as "this code."

**[R] 102.1 General.** (replace with) Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall govern. Where differences occur between provisions of this code and the referenced standards, the provisions of this code shall apply. Where, in a specific case, different sections of this code or the Municipal Code of Lake Saint Louis specify different requirements, the most restrictive shall govern.

**R103 Department of Building Safety** (delete)

**R105.2 Work exempt from permit.** (replace with) Exemption from *permit* requirements of this code shall not be deemed to grant authorization 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:** (replace with)

1. Retaining walls that are not over 4 feet (1219 mm) in height measured from the bottom of the footing to the top of the wall, unless supporting a surcharge. or impounding Class I, II or IIIA liquids.
2. Sidewalks and driveways not more than 30 inches above adjacent grade, and not over any basement or story below and are not part of an accessible route.
3. Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work.
4. Nonfixed and movable fixtures, cases, racks, counters and partitions not over 5 feet 9 inches in height.
5. Swings and other playground equipment accessory to one-family or two-family dwellings.

**R105.3 Application for permit.** (replace with) Each application for a permit shall be made to the Code Official on a form or by a method provided by the department, and shall include a general description of the proposed work, its location, and the estimated cost of construction.



**R105.5 Expiration.** (replace with) Permits shall expire as follows:

1. New structures, remodeling, and interior finishes for non-residential and residential permits: 1 year from the date of permit issuance
2. Exterior improvements (pools, retaining walls, decks, gazebos, pergolas, and similar structures) for non-residential and residential permits unless listed elsewhere in the Lake Saint Louis Municipal Code: 6 months from the date of permit issuance.
3. MEP only (mechanical, electrical, or plumbing) permits: 3 months from the date of permit issuance.
4. Temporary electrical poles: 1 year from the date of permit issuance.
5. Fences for non-residential and residential permits: 3 months from the date of permit issuance.
6. Floodplain Development Permits: Same as coinciding permit.
7. Demolition for non-residential and residential permits: 6 months from the date of permit issuance.

**R105.5.1** (add new section) **Permit extensions** The *code official* is authorized to grant, in writing, one extension of time for not more than 30 days. The extension must be requested in writing and a justifiable cause demonstrated. If work is not completed when the permit expires, a new permit must be applied for until the work is completed and has passed the final inspection.

**R108.2 Schedule of permit fees.** (replace with) The fees for all permits shall be as indicated in the Lake Saint Louis Municipal Code.

**R108.2.1** (add new section) **Schedule of plan review fees.** All fees for plan review related to required permits shall be as indicated in the Lake Saint Louis Municipal Code.

**R108.2.2** (add new section) **Permit extension fees.** Permit extension fees for new structures, remodeling, interior finishes, and exterior improvement permits shall be based upon the cost of construction of remaining work and shall at no time be less than the minimum permit fee for the type of work permitted. The cost of renewal for all other permit types shall be the full cost of the original permit.

**R108.5 Refunds.** (replace with) The code official may approve the refunding of permit and/or inspection fees only as permitted by the Lake Saint Louis Municipal Code and City policy.

**R108.6 Work commencing before permit issuance.** (replace with) Any person who commences any work before obtaining the necessary permits shall be subject to penalties as prescribed by law. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

Exceptions:

1. Emergencies as defined in the Lake Saint Louis Municipal Code
2. Stakeouts and other necessary planning procedures, including installation of BMPs or other erosion control methods.

**R109.5** (add new section) **Re-inspections.** If an inspection fails twice for the same violation, an extra inspection fee as indicated in the Lake Saint Louis Municipal Code must be paid before each subsequent inspection is conducted for the remaining violation.

**R112.1 General.** (replace with) The Lake Saint Louis Building Appeals Board shall hear and decide appeals of orders, decisions or determinations made by the *building official* relative to the application and interpretation of this code. All rules and requirements associated with such an appeal, as specified in the Lake Saint Louis Municipal Code, shall apply. Application to appeal any order, decision or determination made by the building official shall be filed with the building official within 20 days after the order, decision or determination was served, on a form obtained from the code official.

**R113.4 Violation penalties.** (replace with) Any person who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, construct, alter or repair a building or structure in violation of the approved construction documents or directive of the Building Official, or of a permit or certificate issued under the provisions of this code, shall be subject to penalties as prescribed by law. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

**R114.4 Failure to comply.** (replace with) 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 that person is directed to perform to remove a violation or unsafe condition, shall be subject to penalties as prescribed by law.

**Table R301.2(1). (delete existing and replace with)**

**Table R301.2(1) (replace with)  
Climatic and Geographic Design Criteria**

Ground Snow Load	Wind Design				Seismic Design Category <sup>f</sup>	Subject to Damage From			Ice Barrier Underlayment Required <sup>h</sup>	Flood Hazards <sup>g</sup>	Air Freezing Index <sup>i</sup>	Mean Annual Temp <sup>j</sup>
	Speed <sup>d</sup> (mph)	Topographic effects <sup>k</sup>	Special wind region <sup>l</sup>	Wind-borne debris zone <sup>m</sup>		Weathering <sup>a</sup>	Frost line depth <sup>b</sup>	Termite <sup>c</sup>				
<b>20</b>	<b>107 (48)</b>	<b>NO</b>	<b>NO</b>	<b>NO</b>	<b>B</b>	<b>SEVERE</b>	<b>30</b>	<b>YES</b>	<b>NO</b>	<b>7/15/96</b> <b>1/20/16</b> <b>29183C</b> <b>0220G</b>	<b>1500 or less</b>	<b>55.2</b>

For SI: 1 pound per square foot = 0.0479kPa, 1 mile per hour = 0.447 m/s.

[delete footnotes (e) and (n)]

**R302.5.1 Opening protection. (replace with)** Openings from a private garage directly into a room used for sleeping purposes shall not be permitted. Other openings between the garage and residence shall be equipped with solid wood doors not less than 1 3/8 inches (35 mm) in thickness, solid or honeycomb-core steel doors not less than 1 3/8 inches (35 mm) thick, or 20-minute fire-rated doors.

**R302.13 Fire protection of floors. (replace exceptions 3.1 and 3.2 with)**

- 3.1 The aggregate area of the unprotected floor assembly does not exceed 100 square feet (9.3m<sup>2</sup>) per story.
- 3.2 Fireblocking in accordance with Section 302.11.1 is installed along the perimeter of the unprotected portion to separate the unprotected portion from the remainder of the floor assembly. Areas of the floor assembly covered by HVAC metal plenum, trunk lines, and steel structural beams shall be considered protected. Gypsum wallboard membrane shall be within 2 inches of all previously listed items.

**R303.3 (add text to end of exception)** “ , a gabled end with an approved termination cap, or a soffit with solid material extending 3’ in either direction of an approved termination cap. “

**R306.5 (add new section) Hose Bibb.** Every dwelling shall provide one outside frost-proof hose bibb. The hose bibb shall be protected from backflow per Section P2902.

**R306.6 (add new section) Floor Drain.** All basements shall have a floor drain within 20 feet of the heating/cooling systems(s) and water heaters. The floor drain shall comply with Chapter 27 of the International Residential Code for one and two family dwellings.

**R311.3.2 Floor elevations for other exterior doors.** (replace exception with) Exception: A top landing is not required where a stairway of three (3) or fewer risers is located on the exterior side of the door, provided that door does not swing over the stairway.

**R311.5.1** (Add new section) **Exterior landing construction.** Exterior landings shall be constructed of a hard surface. Level grass areas shall not qualify as an approved exterior landing surface.

**R311.7.5 Stair treads and risers.** (add exception)

Exception: For remodeling projects inside existing dwelling units where the surrounding framing of the stairwell (framed stairwell hole) is not reconfigured or relocated, or where new additional stairs are not being added to the structure, stair tread and riser dimensions are permitted to match previous or existing conditions.

**R311.7.6 Landings for stairways.** (replace exception with)

Exception: A floor or landing is not required at the top of an interior flight of stairs, or an exterior flight of stairs with three or fewer risers, including stairs in an enclosed garage, provided that a door does not swing over the stairs.

**R313.1 Townhouse automatic fire sprinkler systems.** (replace with) An automatic residential fire sprinkler system shall be installed in *townhouses*, in accordance with §67.281 of the Missouri Revised Statutes.

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

**R313.2 One- and two-family dwellings automatic fire systems.** (replace with) A builder of a single-family dwelling or residence 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. Notwithstanding any other provision of law to the contrary, 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 by any code, ordinance, rule, regulation, order, or resolution by any county or other political subdivision. Any county or other political subdivision shall provide in any such code, ordinance, rule, regulation, order, or resolution the mandatory option for purchasers to have the right to choose and the requirement that builders offer to purchasers the option to purchase fire sprinklers in connection with the purchase of any single-family dwelling, residence, or multi-unit dwelling of four or fewer units.

**Exception:** An automatic residential fire sprinkler system shall not be required for *additions* or *alterations* to existing buildings that are not already provided with an automatic residential sprinkler system.

**R403.1.7 Footings on or adjacent to slopes.** (replace with) Footings on or adjacent to slopes. The placement of buildings and structures on or adjacent to slopes steeper than one (1) unit vertical in three (3) units horizontal (thirty-three and three tenths percent (33.3%) slope) shall conform to Sections R403.1.7.1 through R403.1.7.4 or plans as signed and sealed by a structural engineer licensed by the State of Missouri.

**R404.1.3.2 Reinforcement for foundation walls.** (add exception)  
 Exception: Where a licensed Missouri engineer’s geotechnical report confirms that unstable soil or ground water conditions do not exist on an individual home site, concrete foundation walls may be constructed in accordance with Table R404.1.2(10).

**Table R404.1.2(10) Concrete Foundation Walls** (add table)

Maximum Wall Height	Maximum Depth of Unbalanced Backfill	Minimum Nominal Wall Thickness
8'-0"	7'-6" or less	8" (Note a)
9'-0"	8'-6" or less	10" (Note b)
10'0"	9'-6" or less	12" (Note c)

Note a: Concrete foundation walls may be constructed a minimum of nominal 8 inches thick where the wall height from the top of the footing to the top of the wall does not exceed 8 feet. A minimum of two #4 reinforcing bars shall be placed horizontally in the top and bottom of the foundation wall. A minimum of two #5 reinforcing bars shall be provided around all window and door openings in concrete foundation and basement walls; bars shall extend a minimum of 24 inches beyond the corners of the openings.

Note b: Concrete foundation walls may be constructed a minimum of nominal 10 inches thick. A minimum of two #5 reinforcing bars shall be placed horizontally in the top, middle, and bottom of the foundation wall. A minimum of two #5 reinforcing bars shall be provided around all window and door openings in concrete foundation and basement walls; bars shall extend a minimum of 24 inches beyond the corners of the openings.

Note c: Concrete foundation walls may be constructed a minimum of nominal 12 inches thick. A minimum of three #5 reinforcing bars shall be placed horizontally in the top, middle, and bottom of the foundation wall. A minimum of two #5 reinforcing bars shall be provided around all window and door openings in concrete foundation and basement walls; bars shall extend a minimum of 24 inches beyond the corners of the openings.

Note d: The concrete minimum wall thickness shall be 8 inches for foundation walls in soil classes SC, MH, ML-CL and inorganic CL when maximum wall height is 8 feet.

Note e: The concrete minimum wall thickness shall be 10 inches for foundation walls in soil classes SC, MH, ML-CL and inorganic CL when the maximum wall height is 9 feet.

Note f: The concrete minimum wall thickness shall be 12 inches for foundation walls in soil classes SC, MH, ML-CL and inorganic CL when the maximum wall height is 10 feet.

**405.1 Concrete or masonry foundations.** (number existing exception as number one + add second exception)

2. Drains provided as detailed in Section R405.1.2 are approved as an alternative method to method to meet the requirements of this Section.

**R405.1.2 (add new section) Soil evaluations.** An evaluation of the soil by a geotechnical engineer for the presence or absence of groundwater is required. The evaluation report shall be based on either a subsurface soil investigation or satisfactory data from adjacent areas together with an inspection of the excavation prior to pouring concrete.

**R405.1.2.1 (add new section) Groundwater present.** Provide drain tile, perforated pipe or other approved foundation drainage systems (such as water channel system) around perimeter of the outside of the foundation and inside the foundation. Drain discharge shall be by gravity to daylight or be connected to a basement floor sump.

**R405.1.2.2 (add new section) No groundwater present.** Provide drain tile, perforated pipe or other approved foundation drainage systems (such as water channel system) around perimeter of the outside of the foundation or inside the foundation. Drain discharge shall be by gravity to daylight or be connected to a basement floor sump.

**R405.1.2.3 (add new section) Filter membranes.** An approved filter membrane shall be placed over the top of the joints/pipe perforations. The tile/pipe shall be placed on 2 inches minimum of gravel or crushed stone and have 6 inches of minimum cover.

**R405.1.2.4 (add new section) Drainage system.** A drainage system shall discharge by gravity to daylight or be connected to an approved sump (18 inches in diameter x 24 inches deep with fitted cover). A sump pump shall be provided if the basement is finished or partially finished with pump discharge by an approved method.

**R407.1.1 (Add new section) Embedded posts and poles.** Any design that proposes the embedment of structural posts or poles into earth or concrete footings shall be designed, signed and wet-sealed by a Missouri-registered architect or engineer and be accompanied by a corresponding soils report.

Exception: Posts for fences or similar construction

**R506.2.3 Vapor retarder.** (replace), "10 mil (0.010 inch; 0.254 mm)" with "6 mil (0.006 inch; 0.152 mm)"

**R507.4.1.1. (Add new section) Embedded posts and poles.** Any design that proposes the embedment of structural posts or poles into earth or concrete footings shall be

designed, signed and wet-sealed by a Missouri-registered engineer and be accompanied by a corresponding soils report.

**R905.2.8.2 Valleys.** (replace number 3 with)

3. For closed valleys (valley covered with shingles), valley lining of two ply of .15 felt complying with D226 Type I, ASTM D4869 Type I, or ASTM D6757, or valley lining as described in Item 1 and 2 shall be permitted. Self-adhering polymer modified bitumen *underlayment* complying with ASTM D1970 shall be permitted in lieu of the lining material.

**R905.2.8.5 Drip Edge.** (add exception)

Exception: An alternative design approved as provided for in R104.11

**R1005.7 Factory-built chimney offsets.** (add exception)

Exception: Chimneys installed per manufacturer's installation instructions

**R1006.1.1 Factory-built fireplaces.** (replace with) Exterior *combustion air* ducts for factory-built fireplaces shall be a *listed* component of the fireplace, or equivalent approved by the jurisdiction, and shall be installed according to the fireplace manufacturer's instructions.

**R1006.2** (replace with) **Exterior air intake.** The exterior air intake on masonry fireplaces shall be capable of supplying *combustion air* from the exterior of the *dwelling* or from spaces within the *dwelling* ventilated with outdoor air such as nonmechanically ventilated crawl or attic spaces. The exterior air intake shall not be located within the garage or *basement* of the dwelling. The exterior air intake, for other than *listed* factory-built fireplaces, shall not be located at an elevation higher than the firebox. The exterior air intake shall be covered with a corrosion-resistant screen of 1/4-inch (6.4 mm) mesh.

**N1101.1 Scope** (replace with) This chapter regulates the energy efficiency for the design and construction of buildings regulated by this code. All sections of chapter 11 of the 2021 International Residential Code and all references to the 2021 International Energy Conservation Code are to be deleted. Chapter 11 shall reference the 2015 International Residential Code and all references to the 2021 International Energy Conservation Code shall be replaced by referencing the 2015 International Energy Conservation Code and their amended sections as listed per city ordinance.

**N1101.4 (R102.1.1) Above code programs.** (replace with) The *building official* or other authority having jurisdiction shall be permitted to deem a national, state or local energy-efficiency program to exceed the energy efficiency required by this code. Buildings *approved* in writing by such an energy-efficiency program shall be considered in compliance with this code. Applicant must provide adequate information to the Lake Saint Louis Building Official to demonstrate that the Above Code Program satisfies all necessary code requirements.

**N1101.6 (R202) Defined terms.**

**PROJECTION FACTOR.** (add definition) The ratio of the horizontal depth of an overhang, eave, or permanently attached shading device, divided by the distance measured vertically from the bottom of the fenestration glazing to the underside of the overhang, eave, or permanently attached shading device.

**Table N1102.1.2 (R402.1.2) (replace with)  
Insulation and Fenestration Requirements by Component<sup>a</sup>**

Climate Zone	Fenestration U-Factor <sup>b</sup>	Skylight U-Factor <sup>b</sup>	Glazed Fenestration SHGC <sup>b,e</sup>	Ceiling R-Value	Wood Frame Wall R-Value	Mass Wall R-Value <sup>i</sup>	Floor R-Value	Basement Wall R-Value <sup>t</sup>	Slab <sup>d</sup> R-Value & Depth	Crawl Space <sup>c</sup> Wall R-Value
1	NR	0.75	0.25	30	13	3/4	13	0	0	0
2	0.40	0.65	0.25	38	13	4/6	13	0	0	0
3	0.35	0.55	0.25	38	20 or 13 + 5 <sup>h</sup>	8/13	19	5/13 <sup>f</sup>	0	5/13
4 except Marine	0.40	0.55	NR	38	13	8/13	19	0 <sup>j</sup>	10, 2 ft	10/13
5 and Marine 4	0.32	0.55	NR	49	20 or 13 + 5 <sup>h</sup>	13/17	30 <sup>g</sup>	15/19	10, 2 ft	15/19
6	0.32	0.55	NR	49	20 + 5 or 13 + 10 <sup>h</sup>	15/20	30 <sup>g</sup>	15/19	10, 4 ft	15/19
7 and 8	0.32	0.55	NR	49	20 + 5 or 13 + 10 <sup>h</sup>	19/21	38 <sup>g</sup>	15/19	10, 4 ft	15/19

For SI: 1 foot = 304.8mm.

- 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. Exception: Skylights may be excluded from glazed fenestration SHGC requirements in Climate Zones 1 through 3 where the SHGC for such skylights does not exceed 0.30.
- 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 of the basement 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 cavity insulation at 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 or Table N1101.10.
- g. Or insulation sufficient to fill the framing cavity, R-19 minimum.
- h. The first value is cavity insulation, the second 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 of the insulation is on the interior of the mass wall.



- j. Exception: Unfinished basements may have up to a maximum of 20 percent of the total basement wall area exposed above the outside finished grade/ground level as uninsulated concrete foundation walls. The foundation wall area above the outside grade/ground level that may be uninsulated is determined by the formula [.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]. In unfinished areas, the basement foundation wall insulation shall extend down to the basement floor slab or to a minimum of 24 inches below outside finished grade when the grade is above the floor slab elevation.

**N1102.1.3 (R402.1.3) (replace with) R-value computation.** Insulation material used in layers, such as framing cavity insulation, or continuous insulation shall be summed to compute the corresponding component R-value. The manufacturer’s settled R-value shall be used for blown insulation. Computed R-values may include an R-value for other building materials or air films. Where insulated siding is used for the purpose of complying with the continuous insulation requirements of Table N1102.1.2, the manufacturer’s labeled R-Value for insulated siding shall be reduced by R-0.6.

**N1102.1.5 (R402.1.5) Total UA alternative. (replace with)** If the total *building envelope* UA (sum of U-factor times assembly area) is less than or equal to the total UA resulting from using the U-factors in Table N1102.1.4 (multiplied by the same assembly rea as in the proposed building), the building shall be considered in compliance with Table N1102.1.2. The UA calculation shall be done using a method consistent with the ASHRAE *Handbook of Fundamentals* and shall include the thermal bridging effects of framing materials. The SHGC requirements shall be met in addition to UA compliance.

Exception: Glazed fenestration SHGC. In Climate Zone 4, permanently shaded vertical fenestration shall be permitted to satisfy SHGC requirements. Jurisdiction will require a separate sealed submission for each proposed home to use shaded vertical fenestration. The projection factor of an overhang, eave, or permanently attached shading device shall be greater than or equal to the value listed in Table N1102.2.2.1 for the appropriate orientation. The minimum projection shall extend beyond each side of the glazing a minimum of 12 inches. Each orientation shall be rounded to the nearest cardinal orientation (+/- 45 degrees or 0.79 rad) for purposes of calculations and demonstrating compliance.

**Table N1102.1.5 (add table)**

**Minimum Projection Factor Required by Orientation for SHGC Exception**

<b><u>Orientation</u></b>	<b><u>Projection Factor</u></b>
<b><u>North</u></b>	<b><u><math>\geq 0.40^a</math></u></b>
<b><u>South</u></b>	<b><u><math>\geq 0.20</math></u></b>
<b><u>East</u></b>	<b><u><math>\geq 0.50</math></u></b>
<b><u>West</u></b>	<b><u><math>\geq 0.50</math></u></b>

**For the north orientation, a vertical projection located on the west-edge of the fenestration with the equivalent of PF $\geq 0.15$  shall also satisfy the minimum projection factor requirement**

**N1102.2.4 (R402.2.4) Access hatches and doors.** (replace with) Access doors from conditioned spaces to unconditioned spaces such as attics and crawl spaces shall be insulated to a level equivalent to the insulation on the surrounding surfaces. Access shall be provided to all equipment that prevents damaging or compressing the insulation. A wood-framed or equivalent baffle or retainer is required to be provided when loose-fill insulation is installed, the purpose of which is to prevent the loose-fill insulation from spilling into the living space when the attic access is opened, and to provide the permanent means of maintaining the installed *R*-value of the loose-fill insulation.

Exception: Vertical doors that provide access from the conditioned to unconditioned spaces shall be permitted to meet the fenestration requirements of Table R1102.1.2 based on the applicable climate zone specified in Chapter 3.

**N1102.4 (R402.4) Air leakage** (replace with) 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.

**N1102.4.1.2 (R402.4.1.2) (replace with) Testing Option.** If testing is elected, the building or dwelling unit shall be tested and verified as having an air leakage rate of not exceeding five air changes per hour in Climate Zone 4. Testing shall be conducted in accordance with ASTM E 779 or ASTM E 1827 and reported at a pressure of 0.2 inches w.g. (50 Pascals). Where required by the *code official*, 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 *code 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 weatherstripping 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.
6. Supply and return registers, if installed at the time of the test, shall be fully open.

**Table N1102.4.1.1 (402.4.1.1) (replace with)  
Air Barrier and Insulation Installation**

Component	Air Barrier Criteria	Insulation Installation Criteria
General Requirements	<p>A continuous air barrier shall be installed in the building envelope.</p> <p>The exterior thermal envelope contains a continuous air barrier.</p> <p>Breaks or joints in the air barrier shall be sealed.</p>	<p>Air-permeable insulation shall not be used as a sealing material.</p>
Ceiling/attic	<p>The air barrier in any dropped ceiling/soffit shall be aligned with the insulation and any gaps in the air barrier sealed.</p> <p>Access openings, drop down stairs or knee wall doors to unconditioned attic spaces shall be sealed.</p>	<p>The insulation in any dropped ceiling/soffit shall be aligned with the air barrier.</p>
Walls	<p>The junction of the foundation and sill plate shall be sealed.</p> <p>The junction of the top plate and the top of the exterior walls shall be sealed.</p> <p>Knee walls shall be sealed.</p>	<p>Cavities within corners and headers of frame walls shall be insulated by completely filling the cavity with a material having a thermal resistance of R-3 per inch minimum.</p> <p>Exterior thermal envelope insulation for framed walls shall be installed in substantial contact and continuous alignment with the air barrier.</p>
Windows, skylights and doors	<p>The space between window/door jambs and framing, and skylights and framing shall be sealed.</p>	
Rim joists	<p>Rim joists shall include the air barrier.</p>	<p>Rim joists shall be insulated.</p>
Floors (including above garage and cantilevered floors)	<p>The air barrier shall be installed at any exposed edge of insulation.</p>	<p>Floor framing cavity insulation shall be installed to maintain permanent contact with the underside of subfloor decking, or floor framing cavity insulation shall be permitted to be in contact with the top side of sheathing, or continuous insulation installed on the underside of floor framing; and extends from the bottom to the top of all perimeter floor framing members.</p>
Crawl space walls	<p>Exposed earth in unvented crawl spaces shall be covered with Class I vapor retarder with overlapping joints taped.</p>	<p>Where provided instead of floor insulation, insulation shall be permanently attached to the crawl space walls.</p>
Narrow cavities		<p>Batts in narrow cavities shall be cut to fit, or narrow cavities shall be filled by insulation that on installation readily conforms to</p>

		the available cavity space.
Garage separation	Air sealing shall be provided between the garage and conditioned spaces.	
Plumbing and wiring		Batt insulation shall be cut neatly to fit around wiring and plumbing in exterior walls, or insulation that on installation readily conforms to available space shall extend behind piping and wiring.
Shower/tub on exterior wall	The air barrier installed at exterior walls adjacent to showers and tubs shall separate them from showers and tubs.	Exterior walls adjacent to showers and tubs shall be insulated.
Electrical/phone box on exterior walls	The air barrier shall be installed behind electrical or communication boxes or air-sealed boxes shall be installed.	
Concealed sprinklers	When required to be sealed, concealed fire sprinklers shall only be sealed in a manner that is recommended by the manufacturer. Caulking or other adhesive sealants shall not be used to fill voids between fire sprinkler cover plates and walls or ceilings.	

a. In addition, inspection of log walls shall be in accordance with the provisions of ICC 400.

**N1102.4.5 (R402.4.5) Recessed lighting.** (replace with) Recessed luminaires installed in the *building thermal envelope* may be sealed to limit air leakage between conditioned and unconditioned spaces. All recessed luminaires may be IC-rated and labeled as having an air leakage rate not more than 2.0 cfm (0.944 L/s) when tested in accordance with ASTM E 283 at a 1.57 psf (75 Pa) pressure differential. All recessed luminaires may be sealed with a gasket or caulk between the housing and interior wall or ceiling covering.

**N1103.1.1 (R403.1.1) Programmable thermostat.** (delete section)

**N1103.3.2 (R403.3.2) Sealing.** (replace with) Ducts, air handlers and filter boxes shall be sealed. Joints and seams shall comply with either the *International Mechanical Code* or Section M1601.4.1 of this code, as applicable.

**Exceptions:**

1. Air-impermeable spray foam products shall be permitted to be applied without additional joint seals.
2. Continuously welded and locking-type longitudinal joints and seams in ducts operating at static pressure less than 2 inches of water column (500 Pa) pressure classification shall not require additional closure systems.

**N1103.3.3 (R403.3.3) Duct testing (Mandatory).** (delete section)**N1103.3.5 (R403.3.5) Building cavities (Mandatory).** (delete section)

**N1103.4.1 (R403.4.1) Protection of piping insulation.** (replace with) Piping insulation exposed to weather shall be protected from damage, including that caused by sunlight, moisture, equipment maintenance and wind, and shall provide shielding from solar radiation that can cause degradation of the material. Adhesive tape which otherwise meets the requirements of this section shall be permitted.

**N1103.5.2 (R405.5.2) Hot water pipe insulation.** (replace #1 with)

1. Metallic piping larger than or equal to three fourths (3/4) inch (19 mm) in nominal diameter.

**N1103.5.3 (R405.5.3) Hot water pipe insulation (Prescriptive).** (replace with) Insulation for hot water pipe with a minimum thermal resistance (*R*-value) of R-3 shall be applied to the following:

1. Metallic piping larger than or equal to 3/4 inch (19 mm) nominal diameter.
2. Piping serving more than one dwelling unit.
3. Piping located outside the conditioned space.
4. Piping from the water heater to a distribution manifold.
5. Piping located under a floor slab.
6. Buried in piping.
7. Supply and return piping in recirculation systems other than demand recirculation systems.

**N1103.6 (R403.6) Mechanical ventilation.** (replace with) If, in accordance with previous code sections or as part of an Above Code Program, the resulting air changes per hour (ACH) at 50 Pascals is 3 air changes or less, the building shall be provided with ventilation that meets the requirements of Section M1507 of this code or the *International Mechanical Code*, as applicable, or with other approved means of ventilation. Outdoor air intakes and exhausts shall have automatic or gravity dampers that close when the ventilation system is not operating.

**N1103.7 (R403.7) Equipment sizing and efficiency rating (Mandatory).** (replace with) Equipment sizing and efficiency rating (mandatory). Heating and cooling equipment shall be sized in accordance with ACCA Manual J or other approved heating and cooling calculation methodologies. New or replacement heating and cooling

equipment shall have an efficiency rating equal to or greater than the minimum required by Federal law for the geographic location where the equipment is installed.

**SECTION N1104 (R404) (delete section)**  
**ELECTRICAL POWER AND LIGHTING SYSTEMS**  
**(MANDATORY)**

**Table N1105.5.2(1) [R405.5.2(1)] (replace with)**  
**Specifications for the Standard Reference and Proposed Designs**

Building Component	Standard Reference Design	Proposed Design
Above-grade walls	Type: mass wall if proposed wall is mass; otherwise wood frame	As proposed
	Gross area: same as proposed	As proposed
	U-factor: as specified in Table N1102.1.4	As proposed
	Solar absorptance = 0.75	As proposed
	Remittance = 0.90	As proposed
Basement and crawl space walls	Type: same as proposed	As proposed
	Gross area: same as proposed	As proposed
	U-factor: from Table N1102.1.4, with insulation layer on interior side of walls	As proposed
Above-grade floors	Type: wood frame	As proposed
	Gross area: same as proposed	As proposed
	U-factor: as specified in Table N1102.1.4	As proposed
Ceilings	Type: wood frame	As proposed
	Gross area: same as proposed	As proposed
	U-factor: as specified in Table N1102.1.4	As proposed
Roofs	Type: composition shingle on wood sheathing	As proposed
	Gross area: same as proposed	As proposed
	Solar absorptance = 0.75	As proposed
	Emittance = 0.90	As proposed
Attics	Type: vented with aperture = 1 ft <sup>2</sup> per 300 ft <sup>2</sup> ceiling area	As proposed
Foundations	Type: same as proposed	As proposed
	Foundation wall area above and below grade and soil characteristics: same as proposed	As proposed
Opaque doors	Area: 40 ft <sup>2</sup>	As proposed
	Orientation: North	As proposed
	U-factor: same as fenestration from Table N1102.1.4	As proposed
Vertical fenestration other than opaque doors	Total area <sup>b</sup> = 15 percent of the conditioned floor area	As proposed
	Orientation: equally distributed to four cardinal compass orientations (N, E, S & W)	As proposed
	U-factor: as specified in Table N1102.1.4	As proposed
	SHGC: as specified in Table N1102.1.2 except that for climates with no requirement (NR) SHGC = 0.40 shall be used	As proposed
	Interior shade fraction: 0.92 – (0.21 x SHGC for the standard reference design)	0.92 – (0.21 x SHGC)

		as proposed)
	External shading: none	As proposed
Skylights	None	As proposed
Thermally isolated sunrooms	None	As proposed
Air exchange rate	<p>Air leakage rate of 5 air changes per hour in Climate Zones 4 The mechanical ventilation rate shall be in addition to the air leakage rate and the same as in the proposed design, but no greater than <math>0.01 \times CFA + 7.5 \times (N_{br} + 1)</math></p> <p>where:  <math>CFA</math> = conditioned floor area  <math>N_{br}</math> = number of bedrooms</p> <p>Energy recovery shall not be assumed for mechanical ventilation                      Air leakage rate of 5 air changes per hour in at a pressure of 0.2</p>	<p>For residences that are not tested, the same air leakage rate as the standard reference design.</p> <p>For tested residences, the measured air exchange rate<sup>a</sup>.</p> <p>The mechanical ventilation rate<sup>b</sup> shall be in addition to the air leakage rate and shall be proposed.</p>
Mechanical ventilation	<p>None, except where mechanical ventilation is specified by the proposed design, in which case:</p> <p>Annual vent fan energy use:  <math>kWh/yr = 0.03942 \times CFA + 29.565 \times (N_{br} + 1)</math></p> <p>where:  <math>CFA</math> = conditioned floor area  <math>N_{br}</math> = number of bedrooms</p>	As proposed
Internal gains	$IGain = 17,900 + 23.8 \times CFA + 4104 \times N_{br}$ (Btu/day per dwelling unit)	Same as standard reference design.
Internal mass	An internal mass for furniture and contents of 8 pounds per square foot of floor area	Same as standard reference design, plus any additional mass specifically designed as a thermal storage element <sup>c</sup> but not integral to the building envelope or structure.
Structural mass	For masonry floor slabs, 80 percent of floor area covered by R-2 carpet and pad, and 20 percent of floor directly exposed to room air	As proposed
	For masonry basement walls, as proposed, but with insulation required by Table R402.1.4 located on the interior side of the walls	As proposed
	For other walls, for ceilings, floors, and interior walls, wood frame construction	As proposed
Heating systems <sup>d, e</sup>	<p>Fuel type: same as the proposed design</p> <p>Efficiencies:                      Electric: air-source heat pump with prevailing federal minimum standards</p>	As proposed

	Nonelectric Furnaces: natural gas furnace with prevailing federal minimum standards Nonelectric boilers: natural gas boiler with prevailing federal minimum standards Capacity: sized in accordance with Section N1103.7	
Cooling systems <sup>d, f</sup>	Fuel type: electric Efficiency: in accordance with prevailing federal minimum standards Capacity: sized in accordance with Section N1103.7	As proposed
Service water heating <sup>d, e, f</sup>	Fuel type: same as proposed design Efficiency: in accordance with prevailing federal minimum standards Use: gal/day = 30 + 10 x $N_{br}$ Tank temperature: 120°F	As proposed Same as standard reference
Thermal distribution systems	Duct insulation: from Section N1103.2.1  A thermal distribution system efficiency (DSE) of 0.88 shall be applied to both the heating and cooling system efficiencies for all systems other than tested duct systems. For tested duct systems, the leakage rate shall be 4 cfm (113.3 L/min) per 100 ft <sup>2</sup> (9.29 m <sup>2</sup> ) of conditioned floor area at a pressure of differential of 0.1 inches w.g. (25 Pa)	As tested or specified in Table R405.5.2(2) if not tested. Duct insulation shall be as proposed.
Thermostat	Type: Manual, cooling temperature setpoint = 75°F; Heating temperature setpoint = 72°F	Same as standard reference

For SI: 1 square foot = 0.93 m<sup>2</sup>, 1 British thermal unit = 1055 J, 1 pound per square foot = 4.88 kg/m<sup>2</sup>, 1 gallon (US) = 3.785 L, °C = (°F-32)/1.8, 1 degree = 0.79 rad

- a. Where required by the *code official*, testing shall be conducted by an *approved party*. Hourly calculations as specified in the ASHRAE *Handbook of Fundamentals*, or the equivalent shall be used to determine the energy loads resulting from infiltration.
- b. The combined air exchange rate for infiltration and mechanical ventilation shall be determined in accordance with Equation 43 of 2001 ASHRAE *Handbook of Fundamentals*, page 26.24 and the “Whole-house Ventilation” provisions of 2001 ASHRAE *Handbook of Fundamentals*, page 26.19 for intermittent mechanical ventilation.
- c. Thermal storage element shall mean a component not part of the floors, walls or ceilings that is part of a passive solar system, and that provides thermal storage such as enclosed water columns, rock beds, or phase-change containers. A thermal storage element must be in the same room as fenestration that faces within 15 degrees (0.26 rad) of true south, or must be connected to such a room with pipes or ducts that allow the element to be actively charged.
- d. For a proposed design with multiple heating, cooling or water heating systems using different fuel types, the applicable standard reference design system capacities and fuel types shall be weighted in accordance with their respective loads as calculated by accepted engineering practice for each equipment and fuel type present.
- e. For a proposed design without a proposed heating system, a heating system with the prevailing federal minimum efficiency shall be assumed for both the standard reference design and proposed design.



- f. For a proposed design home without a proposed cooling system, an electric air conditioner with the prevailing federal minimum efficiency shall be assumed for both the standard reference design and the proposed design.
- g. For a proposed design with a nonstorage-type water heater, a 40-gallon storage-type water heater with the prevailing federal minimum energy factor for the same fuel as the predominant heating fuel type shall be assumed. For the case of a proposed design without a proposed water heater, a 40-gallon storage-type water heater with the prevailing federal minimum efficiency for the same fuel as the predominant heating fuel type shall be assumed for both the proposed design and standard reference design.

**M1301.2 Identification.** (add exception)

Exception: Line sets and similar materials provided the installer can provide documentation related to the material used such as, but not limited to, a receipt, invoice, or container.

**M1305.1.3.1 Ground clearance.** (replace with) 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 two (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 six (6) inches (152 mm) from the ground.

**M1305.1.3.3 Electrical Requirements.** (add exception)

Exception: Basements

**M1411.3.1.2 Appliance, equipment and insulation in pans.** (delete)**M1501.1 Outdoor discharge.** (number existing exception as number one + add second exception)

1. (existing exception)
2. Bathroom exhaust may discharge to a gabled end with an approved termination cap, or a soffit with solid material extending 3' in either direction of an approved termination cap. "

**M1502.4.1 Material and size.** (replace with) Exhaust ducts shall have a smooth interior finish and be constructed of metal having a minimum thickness of 0.0157 inch (0.3950 mm) (No. 30 gage). The duct shall be 4 inches (102 mm) nominal in diameter.

**M1502.4.2 Duct installation.** (replace with) Exhaust ducts shall be supported at intervals not to exceed 12 feet (3658 mm) and shall be secured in place. The insert end of the duct shall extend into the adjoining duct or fitting in the direction of airflow. Exhaust duct joints shall be sealed in accordance with Section M1601.4.1 and shall be mechanically fastened or fastened by other methods as approved by the Authority Having Jurisdiction. Ducts shall not be joined with screws or similar fasteners that protrude more than 1/8 inch (3.2 mm) into the inside of the duct.

**M1502.4.3 Transition duct.** (add language to end of existing section) “Flexible duct that is listed and labeled for the intended purpose may be used as the transition duct.”

**M1502.4.5 Booster fans prohibited.** (add exception)

Exception: Booster fans may be permitted when a signed and sealed engineered design is provided.

**M1503.6 Makeup air required.** ( replace with) Exhaust hood systems capable of exhausting in excess of four hundred (400) cubic feet per minute (0.19 m<sup>3</sup>/s) shall be mechanically or naturally provided with makeup air at a rate approximately equal to the exhaust air rate. Such makeup air systems shall be equipped with not less than one (1) damper. Each damper shall be a gravity damper or an electrically operated damper that automatically opens when the exhaust system operates. Dampers shall be accessible for inspection, service, repair and replacement without removing permanent construction or any other ducts not connected to the damper being inspected, serviced, repaired or replaced. 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.

**M1601.1.1 Above-ground duct systems.** (replace number 2 with)

2. Factory-made ducts shall be listed and labeled in accordance with UL 181 and installed in accordance with the manufacturer’s instructions.

**M1601.4.1 Joints, seams and connections.** (replace with)

Joints of *duct systems* shall be made substantially airtight in an unconditioned area by means of tapes, mastics, liquid sealants, gasketing or other *approved* closure systems. Closure systems used with rigid fibrous glass ducts shall comply with UL 181A and shall be marked 181A-P for pressure-sensitive tape, 181A-M for mastic or 181A-H for heat-sensitive tape. Closure systems used with flexible air ducts and flexible air connectors shall comply with UL 181B and shall be marked 181B-FX for pressure-sensitive tape or 181B-M for mastic. Duct connections to flanges of air distribution system *equipment* or sheet metal fittings shall be mechanically fastened. Mechanical fasteners for use with flexible nonmetallic air ducts shall comply with UL 181B and shall be marked 181B-C. Crimp joints for round metal ducts shall have a contact lap of at least 1 inch and shall be

mechanically fastened with at least three sheet metal screws or rivets equally spaced around the joint. Closure systems used to seal metal ductwork shall be installed in accordance with the manufacturer's installation instructions.

Exceptions:

1. Spray polyurethane foam shall be permitted to be applied without additional joint seals.
2. Where a duct connection is made that is partially inaccessible, three screws or rivets shall be equally spaced on the exposed portion of the joint so as to prevent a hinge effect.
3. Continuously welded and locking-type longitudinal joints and seams in ducts operating at static pressure less than 2 inches of water column (500 Pa) pressure classification shall not require additional closure systems.

**M2101.16 CPVC plastic pipe.** (delete)

**M2101.16.1 Threaded joints.** (delete)

**M2101.22.6 Expansion tanks.** (delete)

**M2101.26 Pipe penetrations.** (replace with) Openings for pipe penetrations in walls, floors and ceilings shall be larger than the penetrating pipe. Openings in the foundation wall underground shall be sealed to not allow groundwater into a building.

**M2105.4 Piping and tubing materials standards.** (replace with) Piping and tubing materials standards. Ground-source heat-pump ground-loop pipe and tubing shall conform to the standards listed in Table M2105.4. However, polyvinyl chloride (PVC) and chlorinated polyvinyl chloride (CPVC) shall not be used for geothermal application inside or underground.

**M2105.9 CPVC plastic pipe.** (delete section)

**M2105.9.1 Threaded joints.** (delete section)

**G2408.4 (305.7) Clearances from grade.** (replace with) *Equipment and appliances* installed at grade level shall be supported on a level concrete slab or other *approved* material extending not less than 2 inches (50.8 mm) above adjoining grade or shall be suspended not less than 6 inches (152 mm) above adjoining grade. Such supports shall be installed in accordance with the manufacturer's installation instructions.

**E3601.8 Emergency disconnects.** (delete)

**E3606.5 Surge protection.** (delete)**E3902.6 Kitchen receptacles.** (add exception)

Exception: When a simplex / single receptacle is installed for fastened in place appliances or outlets designated for refrigerators/freezers.

**E3902.11 Kitchen dishwasher branch circuit.** (add exception)

Exception: When on a dedicated circuit and a simplex / single receptacle is installed.

**E3902.18 Location of ground-fault circuit interrupters.** (replace with) Location of ground-fault circuit interrupters. Ground-fault circuit interrupters shall be installed only in a readily accessible location. [210.8(A)]

**E3902.20 Arc-fault circuit interrupter protection.** Arc-fault circuit interrupter protection. (replace first paragraph) Branch circuits that supply 120-volt, single phase, 15 and 20 ampere outlets installed in bedrooms, and any branch circuit that has in-part or in-whole aluminum wiring shall be protected by any of the following: [210.12(A)]

**Chapter 44** (under "ICC", replace "IECC – 21" with "IECC – 15" )

c. The following Sections of **the 2021 International Fire Code**, as published by the International Code Council, are hereby revised as follows:

**[A] 101.1 Title.** (replace with) These regulations, referenced standards, and appendices B, C, and D shall be known as "Lake Saint Louis Fire Protection District of St. Charles County, Missouri"

**Section 103** (replace with) **Code Compliance Agency**

**[A] 103.1** (replace with) **Administrative designation.** The Fire Chief of the Lake Saint Louis Fire Protection District is the Fire Code Official in charge of implementation, administration, and enforcement of the provisions of this code.

**[A] 103.2** (replace with) **Fire Code Official.** Code official, wherever it may appear in this code, shall be read as 'Fire Code Official'.

**[A] 103.3** (delete)

**[A] 105.1.6 Annual permit.** (delete)

**[A] 105.1.6.1 Annual permit records.** (delete)

**[A] 105.2 Application for permit.** (replace with) Each application for a permit shall be made to the Fire Code Official on a form or by a method provided by the department, and shall include a general description of the proposed work, its location, and the estimated cost of construction.

**Section 105.6.24 Temporary membrane structures and tents.**

(replace with) Tents and membrane structure shall be subject to application for permit and inspection from the fire code official as required under 3103.2.

**[A] 107.2 Schedule of permit fees.** (replace with) The fees for all permits shall be as indicated in the Lake Saint Louis Municipal Code.

**[A]107.2.1** (add new section) **Schedule of plan review fees.** All fees for plan review related to required permits shall be as indicated in the Lake Saint Louis Municipal Code.

**[A]107.2.2** (add new section) **Permit extension fees.** Permit extension fees for new structures, remodeling, interior finishes, and exterior improvement permits shall be based upon the cost of construction of remaining work and shall at no time be less than the minimum permit fee for the type of work permitted. The cost of renewal for all other permit types shall be the full cost of the original permit.

**[A] 107.4 Work commencing before permit issuance.** (replace with) A person who commences any work, activity or operation regulated by this code before obtaining the necessary permits shall be subject to penalties as prescribed by law. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

**[A] 107.6 Refunds.** (replace with) The fire code official may approve the refunding of permit and/or inspection fees only as permitted by the Lake Saint Louis Municipal Code and City policy.

**[A]108.4.1** (add new section) **Re-inspections.** If an inspection fails twice for the same violation, an extra inspection fee as indicated in the Lake Saint Louis Municipal Code must be paid before each subsequent inspection is conducted for the remaining violation.

**[A] 111.1 Appeals.** (replace with) The Lake Saint Louis Building Appeals Board shall hear and decide appeals of orders, decisions or determinations made by the fire code official relative to the application and interpretation of this code. All rules and requirements associated with such an appeal, as specified in the Lake Saint Louis Municipal Code, shall apply. Application to appeal any order, decision or determination

made by the fire code official shall be filed with the fire code official within twenty (20) days after the order, decision or determination was served.

**[A] 111.3 Qualifications** (delete)

**[A] 112.4 Violation penalties.** (replace with) Persons who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter, repair or do work in violation of the approved construction documents or directive of the fire code official, or of a permit or certificate used under provisions of this code, shall be subject to penalties as prescribed by law. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

**[A] 113.4 Failure to comply.** (replace with) 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 that person is directed to perform to remove a violation or unsafe condition, shall be subject to penalties as prescribed by law.

**307.4.3 Portable outdoor fireplaces.** (delete exception)

**505.1 Address identification.** (replace "4 inches" with "6 inches")

**507.5.2 Inspection, testing and maintenance.** (replace with) The utility company and/or District shall make or cause to be made, an inspection for proper operation of each fire hydrant within the boundaries of said District. Fire hydrant systems shall be maintained in an operative condition at all times and shall be repaired when defective. The District shall notify in writing each water utility, person, business or corporation responsible for the maintenance of any hydrants, of the location and nature of defect of any inoperative or deficient hydrants. Any defect, inoperative or deficient hydrant that is not repaired within seven (7) days after receiving written notice shall be in violation of this ordinance. Each water utility, person, business or corporation or other entity responsible for the operation and maintenance of a fire hydrant in the Lake Saint Louis Fire Protection District of St. Charles County, shall immediately notify the Fire District whenever a fire hydrant is placed out of service.

**507.5.5 Clear space around hydrants and fire protection equipment.** (replace with) There shall be no obstruction, i.e., plantings, bushes, trees, signs, light standards, mailboxes, etc. within five (5) feet of any fire hydrant, and/or fire department connection to an automatic sprinkler or standpipe system, in all directions, except as otherwise required or approved.

**507.5.6.1** (add new section) **Parking by hydrants.** Where fire hydrants are located in areas where vehicles would be parked,

said vehicle parking shall be restricted for five (5) feet in each direction from the hydrant.

**507.5.6.2** (add new section) **Parking by fire department connections.** When fire department connections are located in an area where vehicles may be parked, said parking shall be restricted for ten (10) feet in each direction from the fire department connection.

**507.5.7** (add new section) **Tampering with fire hydrant.** It shall be unlawful for any person to use or operate a fire hydrant for any purpose other than the suppression of a fire unless permitted otherwise by the Fire Code Official. This provision shall not apply to employees of the municipality or village, firefighters or employees of the public utility supplying water to the fire hydrant while in the performance of their duties as firefighters or employees.

**604.5.5** (add new section) **Elevator emergency operations testing.** All elevators that are equipped with emergency elevator operations in accordance with Rule 211.3 of ASME A17.1/CSA B44 listed in Chapter 45 shall be tested at least once each year in all phases of emergency functions. An approved elevator service company shall conduct the tests.

**901.6.3** (add new section) **Records.** Records of all system inspections, tests and maintenance required by the referenced standards shall be maintained on the premises for a minimum of 3 years or for the required testing frequency if greater than 3 years and shall be made available to the code official upon request. Accurate logs shall be maintained indicating the number, location and type of device tested. Any defect, modification or repair shall be logged.

## **Appendix C**

**Section C105** (delete entire section, rename and replace with)  
**Section C105 Fire Hydrant Standards**

**C105.1** (add new section) **Fire Hydrant location near Fire Department Connection.** Buildings or structures equipped with an automatic fire sprinkler system or standpipe system shall have a fire hydrant within 150 feet of the fire department connection.

**C105.2** (add new section) **Fire Hydrant Standards.** All fire hydrants installed shall each have not less than:

- 1) Two (2) 2-1/2-inch outlets

- 2) One (1) 4-1/2-inch outlet-18-24 inches from grade to the center of the outlet, facing the direction designated by the fire code official.
- 3) A 5-1/4- inch valve
- 4) A 6-inch barrel
- 5) Shall be of a break-away design
- 6) Shall be frost free
- 7) Shall have chains on the caps
- 8) Shall have left hand National Standard Threads (NST) on all three outlets.

**C105.3** (replace with) **Control Valves**. Each fire hydrant shall be provided with a control valve in the hydrant connection such that the hydrant can be removed from service without shutting off water supply to other functions. Whenever a water main is more than twelve hundred (1200) feet in length, such main shall have a control valve.

#### **Appendix D**

**D103.3** (replace with) **Turning radius**. The minimum turning radius shall be 42 feet at outside of curb.

d. The following Sections of the **2021 International Fuel Gas Code**, as published by the International Code Council, are hereby revised as follows:

**[A] 101.1 Title.** (replace with) These regulations, referenced standards, and appendices A, B, C, D, and E shall be known as the Fuel Gas Code of the City of Lake Saint Louis, Missouri, hereinafter referred to as "this code."

#### **Section 103** (delete section) **(IFGC) Code Compliance Agency**

**[A]106.5.3** (replace with) **Expiration**. Permits shall expire as follows:

1. New structures, remodeling, and interior finishes for non-residential and residential permits: 1 year from the date of permit issuance
2. Exterior improvements (pools, retaining walls, decks, gazebos, pergolas, and similar structures) for non-residential and residential permits unless listed elsewhere in the Lake Saint Louis Municipal Code: 6 months from the date of permit issuance.
3. MEP only (mechanical, electrical, or plumbing) permits: 3 months from the date of permit issuance.
4. Floodplain Development Permits: Same as coinciding permit.
5. Demolition for non-residential and residential permits: 6 months from the date of permit issuance.

**[A]106.5.4** (replace with) **Permit extensions**. The *code official* is authorized to grant, in writing, one extension of time for not more than 30 days. The extension must be



requested in writing and a justifiable cause demonstrated. If work is not completed when the permit expires, a new permit must be applied for until the work is completed and has passed the final inspection.

[A] 106.1.1 **Annual permit.** (delete)

[A] 106.1.2 **Annual permit records.** (delete)

[A] 106.3 **Application for permit.** (replace with) Each application for a permit shall be made to the Code Official on a form or by a method provided by the department, and shall include a general description of the proposed work, its location, and the estimated cost of construction.

[A] 109.2 **Schedule of permit fees.** (replace with) The fees for all permits shall be as indicated in the Lake Saint Louis Municipal Code.

[A]109.2.1 (add new section) **Schedule of plan review fees.** All fees for plan review related to required permits shall be as indicated in the Lake Saint Louis Municipal Code.

[A]109.2.2 (Add new section) **Permit extension fees.** Permit extension fees for new structures, remodeling, interior finishes, and exterior improvement permits shall be based upon the cost of construction of remaining work and shall at no time be less than the minimum permit fee for the type of work permitted. The cost of renewal for all other permit types shall be the full cost of the original permit.

[A] 109.4 **Work commencing before permit issuance.** (replace with) Any person who commences any work before obtaining the necessary permits shall be subject to penalties as prescribed by law. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

[A] 109.6 **Refunds.** (replace with) The code official may approve the refunding of permit and/or inspection fees only as permitted by the Lake Saint Louis Municipal Code and City policy.

[A]112.2.3.1 (add new section) **Re-inspections.** If an inspection fails twice for the same violation, an extra inspection fee as indicated in the Lake Saint Louis Municipal Code must be paid before each subsequent inspection is conducted for the remaining violation.

[A] 113.1 **General.** (replace with) Any aggrieved person with a material interest in the decision of the code official shall have the right to appeal such a decision to the Lake Saint Louis Building Appeals Board. All rules and requirements associated with such an

appeal, as specified in the Lake Saint Louis Municipal Code, shall apply. The application for appeal shall be filed with the code official within twenty (20) days after the decision of the code official was given.

**Section 114 (IFGC) (delete section) Board of Appeals**

**[A] 115.4 Violation penalties.** (replace with) Persons who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, construct, alter or repair work in violation of the approved construction documents or directive of the code official, or of a permit or certificate issued under the provisions of this code, shall be subject to penalties as prescribed by law. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

**[A] 116.4 Failure to comply.** (replace with) 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 that person is directed to perform to remove a violation or unsafe condition, shall be subject to penalties as prescribed by law.

e. The following Sections of the **2021 International Mechanical Code**, as published by the International Code Council, are hereby revised as follows:

**[A] 101.1 Title.** (replace with) These regulations, referenced standards, and appendix A shall be known as the Mechanical Code of the City of Lake Saint Louis, Missouri, hereinafter referred to as "this code."

**Section 103 Code Compliance Agency (delete section)**

**[A] 106.1.1 Annual permit.** (delete)

**[A] 106.1.2 Annual permit records.** (delete)

**[A] 106.3 Application for permit.** (replace with) Each application for a permit shall be made to the Code Official per a form or method provided by the department and shall include a general description of the proposed work, its location, and estimated cost of construction.

**[A]106.4.3 Expiration.** (replace with) Permits shall expire as follows:

1. New structures, remodeling, and interior finishes for non-residential and residential permits: 1 year from the date of permit issuance
2. Exterior improvements (pools, retaining walls, decks, gazebos, pergolas, and similar structures) for non-residential and residential permits unless listed

elsewhere in the Lake Saint Louis Municipal Code: 6 months from the date of permit issuance.

3. MEP only (mechanical, electrical, or plumbing) permits: 3 months from the date of permit issuance.
4. Floodplain Development Permits: Same as coinciding permit.
5. Demolition for non-residential and residential permits: 6 months from the date of permit issuance.

**[A]106.4.4 Permit extensions.** (replace with) The *code official* is authorized to grant, in writing, one extension of time for not more than 30 days. The extension must be requested in writing and a justifiable cause demonstrated. If work is not completed when the permit expires, a new permit must be applied for until the work is completed and has passed the final inspection.

**[A] 109.2 Schedule of permit fees.** (replace with) The fees for all permits shall be as indicated in the Lake Saint Louis Municipal Code.

**[A]109.2.1** (add new section) **Schedule of plan review fees.** All fees for plan review related to required permits shall be as indicated in the Lake Saint Louis Municipal Code.

**[A]109.2.2** (Add new section) **Permit extension fees.** Permit extension fees for new structures, remodeling, interior finishes, and exterior improvement permits shall be based upon the cost of construction of remaining work and shall at no time be less than the minimum permit fee for the type of work permitted. The cost of renewal for all other permit types shall be the full cost of the original permit.

**[A] 109.4 Work commencing before permit issuance.** (replace with) Any person who commences any work before obtaining the necessary permits shall be subject to penalties as prescribed by law. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

**[A] 109.6 Fee refunds.** (replace with) The code official may approve the refunding of permit and/or inspection fees only as permitted by the Lake Saint Louis Municipal Code and City policy.

**[A]112.2.3.1** (add new section) **Re-inspections.** If an inspection fails twice for the same violation, an extra inspection fee as indicated in the Lake Saint Louis Municipal Code must be paid before each subsequent inspection is conducted for the remaining violation.

**[A] 113.1 General.** (replace with) Any aggrieved person with a material interest in the decision of the code official shall have the right to appeal such a decision to the Lake Saint Louis Building Appeals Board. All rules and requirements associated with such an

appeal, as specified in the Lake Saint Louis Municipal Code, shall apply. The application for appeal shall be filed with the code official within twenty (20) days after the decision of the code official was given.

**Section 114 Board of Appeals** (delete section)

**[A] 115.4 Violation penalties.** (replace with) Persons who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, construct, alter or repair any work in violation of the approved construction documents or directive of the code official, or of a permit or certificate issued under the provisions of this code, shall be subject to penalties as prescribed by law. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

**[A] 116.4 Failure to comply.** (replace with) Any person who shall continue any work on the system after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be subject to penalties as prescribed by law.

f. The following Sections of the **2021 International Plumbing Code**, as published by the International Code Council, are hereby revised as follows:

**[A] 101.1 Title.** (replace with) These regulations, referenced standards, and appendices B, C, D, and E shall be known as the International Plumbing Code of the City of Lake Saint Louis, Missouri, herein after referred to as "this code."

**Section 103 Code Compliance Agency** (delete section)

**[A] 106.1.1 Annual permit.** (delete)

**[A] 106.1.2 Annual permit records.** (delete)

**[A] 106.3 Application for permit.** (replace with) Each application for a permit shall be made to the Code Official on a form or by a method provided by the department, and shall include a general description of the proposed work, its location, and the estimated cost of construction.

**[A]105.5.3 Expiration.** (replace with) Permits shall expire as follows:

1. New structures, remodeling, and interior finishes for non-residential and residential permits: 1 year from the date of permit issuance
2. Exterior improvements (pools, retaining walls, decks, gazebos, pergolas, and similar structures) for non-residential and residential permits unless listed

elsewhere in the Lake Saint Louis Municipal Code: 6 months from the date of permit issuance.

3. MEP only (mechanical, electrical, or plumbing) permits: 3 months from the date of permit issuance.
4. Floodplain Development Permits: Same as coinciding permit.
5. Demolition for non-residential and residential permits: 6 months from the date of permit issuance.

**[A]106.5.4 Permit extensions.** (replace with) The *code official* is authorized to grant, in writing, one extension of time for not more than 30 days. The extension must be requested in writing and a justifiable cause demonstrated. If work is not completed when the permit expires, a new permit must be applied for until the work is completed and has passed the final inspection.

**[A] 109.2 Schedule of permit fees.** (replace with) The fees for all permits shall be as indicated in the Lake Saint Louis Municipal Code.

**[A]109.2.1** (add new section) **Schedule of plan review fees.** All fees for plan review related to required permits shall be as indicated in the Lake Saint Louis Municipal Code.

**[A]109.2.2** (Add new section) **Permit extension fees.** Permit extension fees for new structures, remodeling, interior finishes, and exterior improvement permits shall be based upon the cost of construction of remaining work and shall at no time be less than the minimum permit fee for the type of work permitted. The cost of renewal for all other permit types shall be the full cost of the original permit.

**[A] 109.3 Work commencing before permit issuance.** (replace with) Any person who commences any work before obtaining the necessary permits shall be subject to penalties as prescribed by law. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

**[A] 109.5 Refunds.** (replace with) The code official may approve the refunding of permit and/or inspection fees only as permitted by the Lake Saint Louis Municipal Code and City policy.

**[A]112.2.3.1** (add new section) **Re-inspections.** If an inspection fails twice for the same violation, an extra inspection fee as indicated in the Lake Saint Louis Municipal Code must be paid before each subsequent inspection is conducted for the remaining violation.

**[A] 113.1 General.** (replace with) Any aggrieved person with a material interest in the decision of the code official shall have the right to appeal such a decision to the Lake Saint Louis Building Appeals Board. All rules and requirements associated with such an appeal, as specified in the Lake Saint Louis Municipal Code, shall apply. The

application for appeal shall be filed with the code official within twenty (20) days after the decision of the code official was given.

**Section 114 Board of Appeals** (delete section)

**[A] 115.4 Violation penalties.** (replace with) Any person who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or shall erect, construct, alter or repair any work in violation of the approved construction documents or directive of the Building Official, or of a permit or certificate issued under the provisions of this code, shall be subject to penalties as prescribed by law. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

**[A] 116.4 Failure to comply.** (replace with) 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 that person is directed to perform to remove a violation or unsafe condition, shall be subject to penalties as prescribed by law.

**305.4.1 Sewer depth.** (replace with) Building sewers that connect to private sewage disposal systems shall be installed not less than thirty (30) inches (762 mm) below finished grade at the point of septic tank connection. Building sewers shall be installed not less than thirty (30) inches (762 mm) below grade.

**701.2 Connection to sewer required.** (delete the exception)

**903.1.1 Roof extension.** (replace with) Open vent pipes that extend through a roof shall be terminated not less than fourteen (14) inches (356 mm) above the roof.

g. The following Sections of the **2021 International Property Maintenance Code**, as published by the International Code Council, are hereby revised as follows:

**[A] 101.1 Title.** (insert) These regulations, referenced standards, and appendix A shall be known as the Property Maintenance Code of the City of Lake Saint Louis, Missouri, hereinafter referred to as "this code."

**[A] 102.1 General.** (replace with) Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall govern. Where differences occur between provisions of this code and the referenced standards, the provisions of this code shall apply. Where, in a specific case, different sections of this

code or the Municipal Code of Lake Saint Louis specify different requirements, the most restrictive shall govern.

**[A] Section 103 Code Compliance Agency** (delete section)

**[A] 104.1 Fees.** (replace with) The fees for activities and services performed by the department in carrying out its responsibilities under this code shall be as indicated in the Lake Saint Louis Municipal Code.

**[A] 104.2 Refunds.** (replace with) The code official may approve the refunding of permit and/or inspection fees only as permitted by the Lake Saint Louis Municipal Code and City policy.

**[A] 104.3** (add new section) **Work commencing before permit issuance.** Any person who commences any work before obtaining the necessary permits shall be subject to penalties as prescribed by law. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

**[A]105.2.1** (add new section) **Re-inspections.** If an inspection fails twice for the same violation, an extra inspection fee as indicated in the Lake Saint Louis Municipal Code will be assessed for each subsequent inspection conducted for the remaining violation.

**[A] 107.1 General.** (replace with) Any aggrieved person with a material interest in the decision of the code official shall have the right to appeal such a decision to the Lake Saint Louis Building Appeals Board. All rules and requirements associated with such an appeal, as specified in the Lake Saint Louis Municipal Code, shall apply. The application for appeal shall be filed with the code official within twenty (20) days after the decision of the code official was given.

**Section 108 Board of Appeals** (delete section)

**[A] 109.4 Violation penalties.** (replace with) Any person who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or shall erect, construct, alter or repair any work in violation of the approved construction documents or directive of the Building Official, or of a permit or certificate issued under the provisions of the Lake Saint Louis Municipal Code, shall be subject to penalties as prescribed by law. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

**[A] 110.4 Failure to comply.** (replace with) Any person who shall continue any work after having been served with a stop work order, except such work as that person is

directed to perform to remove a violation or unsafe condition, shall be subject to penalties as prescribed by law.

**302.4 Weeds.** (insert, “seven (7) inches”)

**302.8 Motor vehicles** (delete)

**304.14 Insect screens.** (replace with) Every door, window and other outside opening required for ventilation of habitable rooms, food preparation areas, food service areas or any areas where products to be included or utilized in food for human consumption are processed, manufactured, packaged or stored shall be supplied with approved tightly fitting screens of minimum sixteen (16) mesh per inch (16 mesh per 25 mm), and every screen door used for insect control shall have a self-closing device in good working condition.

Exception: Screens shall not be required where other approved means, such as air curtains or insect repellent fans, are employed.

**403.2 Bathrooms and toilet rooms.** (delete section)

**602.3 Heat supply.** (replace with) Every owner and operator of any building who rents, leases or lets one (1) or more dwelling units or sleeping units on terms, either expressed or implied, to furnish heat to the occupants thereof shall supply heat to maintain a minimum temperature of 68° F. (20° C.) in all habitable rooms, bathrooms and toilet rooms.

Exceptions:

1. When the outdoor temperature is below the winter outdoor design temperature for the locality, maintenance of the minimum room temperature shall not be required provided that the heating system is operating at its full design capacity. The winter outdoor design temperature for the locality shall be as indicated in Appendix D of the International Plumbing Code.
2. In areas where the average monthly temperature is above 30° F. (-1° C.), a minimum temperature of 65° F. (18° C.) shall be maintained.

**602.4 Occupiable work spaces.** (replace with) Indoor occupiable work spaces shall be supplied with heat to maintain a minimum temperature of 65° F. (18° C.) during the period the spaces are occupied.

Exceptions:

1. Processing, storage and operation areas that require cooling or special temperature conditions.
2. Areas in which persons are primarily engaged in vigorous physical activities.



**605.2.1** (add section) **GFCI Receptacles:** Ground Fault circuit interrupter protect is required in all locations specified per NEC 210.8 (A) through (D).  
Exception: Existing electrical systems with non-grounded wiring that has not been altered or replaced.

h. The following Sections of the **2015 International Energy Conservation Code**, as published by the International Code Council, are hereby revised as follows:

**C101.1 Title.** (replace with) This code shall be known as the *International Energy Conservation Code* of the City of Lake Saint Louis, Missouri, and shall be cited as such. It is referred to herein as “this code.”

**C107.3 Work commencing before permit issuance.** (replace with) Any person who commences any work before obtaining the necessary permits shall be subject to penalties as prescribed by law. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

**C108.4 Failure to comply.** (replace with) Any person who shall continue any work after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be as prescribed by law.

#### **SECTION C109** (rename section) **APPEALS**

**C109.1 General.** (replace with) Any aggrieved person with a material interest in the decision of the code official shall have the right to appeal such a decision to the Lake Saint Louis Building Appeals Board. All rules and requirements associated with such an appeal, as specified in the Lake Saint Louis Municipal Code, shall apply. The application for appeal shall be filed with the code official within 20 days after the decision of the code official was given on a form obtained from the code official.

**C109.3 Qualifications.** (delete)

**R101.1 Title.** (replace with) This code shall be known as the *International Energy Conservation Code* of the City of Lake Saint Louis, Missouri, and shall be cited as such. It is referred to herein as “this code.”

**R107.3 Work commencing before permit issuance.** (replace with) Any person who commences any work before obtaining the necessary permits shall be subject to penalties as prescribed by law. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

**R108.4 Failure to comply.** (replace with) Any person who shall continue any work after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be penalties as prescribed by law.

#### **SECTION C109** (rename section) **APPEALS**

**R109.1 General.** (replace with)

Any aggrieved person with a material interest in the decision of the code official shall have the right to appeal such a decision to the Lake Saint Louis Building Appeals Board. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of this code do not fully apply, or an equally good or better form of construction is proposed. All rules and requirements associated with such an appeal, as specified in the Lake Saint Louis Municipal Code, shall apply. The application for appeal shall be filed with the code official within 20 days after the decision of the code official was given on a form obtained from the code official.

**R109.3 Qualifications.** (delete)

i. The following Sections of the **2021 International Existing Building Code**, as published by the International Code Council, are hereby revised as follows:

**[A] 101.1 Title.** (replace with) These regulations, referenced standards, and appendices A and B shall be known as the Existing Building Code of the City of Lake Saint Louis, Missouri, hereinafter referred to as "this code."

**Section 103** (delete section) **Code Compliance Agency**

**[A] 105.1.1 Annual permit.** (delete)

**[A] 105.1.2 Annual permit records.** (delete)

**[A] 105.2 Work exempt from permit.**

**Building** (replace with)

1. Retaining walls that are not over four (4) feet (1,219 mm) in height measured from the bottom of the footing to the top of the wall, unless supporting a surcharge or impounding Class I, II or IIIA liquids.
2. Sidewalks and driveways not more than 30 inches above adjacent grade, and not over any basement or story below and are not part of an accessible route.
3. Painting, papering, tiling, carpeting, cabinets, counter tops and similar finish work.
4. Nonfixed and movable fixtures, cases, racks, counters, and partitions not over 5 feet 9 inches in height.

**Electrical** (add the following):

4. Listed cord-and-plug connected temporary decorative lighting.
5. Reinstallation of attachment plug receptacles but not the outlets therefor.
6. Replacement of branch circuit overcurrent devices of the required capacity in the

same location.

7. 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 (add the following):

3. Portable cooking or clothes drying appliances.
4. Portable-fuel-cell appliances that are not connected to a fixed piping system and are not interconnected to a power grid.

**[A] 105.3 Application for permit.** (replace with) Each application for a permit shall be made to the Code Official on a form or by a method provided by the department, and shall include a general description of the proposed work, its location, and the estimated cost of construction.

**[A]105.5 Expiration.** (replace with) Permits shall expire as follows:

1. New structures, remodeling, and interior finishes for non-residential and residential permits: 1 year from the date of permit issuance
2. Exterior improvements (pools, retaining walls, decks, gazebos, pergolas, and similar structures) for non-residential and residential permits unless listed elsewhere in the Lake Saint Louis Municipal Code: 6 months from the date of permit issuance.
3. MEP only (mechanical, electrical, or plumbing) permits: 3 months from the date of permit issuance.
4. Temporary electrical poles: 1 year from the date of permit issuance.
5. Fences for non-residential and residential permits: 3 months from the date of permit issuance.
6. Floodplain Development Permits: Same as coinciding permit.
7. Demolition for non-residential and residential permits: 6 months from the date of permit issuance.

**[A]105.5.1** (add new section) **Permit extensions.** The *code official* is authorized to grant, in writing, one extension of time for not more than 30 days. The extension must be requested in writing and a justifiable cause demonstrated. If work is not completed when the permit expires, a new permit must be applied for until the work is completed and has passed the final inspection.

**[A] 108.2 Schedule of permit fees.** (replace with) The fees for all permits shall be as indicated in the Lake Saint Louis Municipal Code.

**[A]108.2.1** (add new section) **Schedule of plan review fees.** All fees for plan review related to required permits shall be as indicated in the Lake Saint Louis Municipal Code.

**[A]108.2.2** (Add new section) **Permit extension fees.** Permit extension fees for new structures, remodeling, interior finishes, and exterior improvement permits shall be based upon the cost of construction of remaining work and shall at no time be less than the minimum permit fee for the type of work permitted. The cost of renewal for all other permit types shall be the full cost of the original permit.

**[A] 108.4 Work commencing before permit issuance.** (replace with)

Any person who commences any work before obtaining the necessary permits shall be subject to penalties as prescribed by law. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

**[A] 108.6 Refunds.** (replace with) The code official may approve the refunding of permit and/or inspection fees only as permitted by the Lake Saint Louis Municipal Code and City policy.

**[A]109.7** (add new section) **Re-inspections.** If an inspection fails twice for the same violation, an extra inspection fee as indicated in the Lake Saint Louis Municipal Code must be paid before each subsequent inspection is conducted for the remaining violation.

**[A] 112.1 General.** (replace with) Any aggrieved person with a material interest in the decision of the code official shall have the right to appeal such a decision to the Lake Saint Louis Building Appeals Board. All rules and requirements associated with such an appeal, as specified in the Lake Saint Louis Municipal Code, shall apply. The application for appeal shall be filed with the code official within twenty (20) days after the decision of the code official was given.

**[A] 113.4 Violation penalties.** (replace with) Any person who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who repairs or alters or changes the occupancy of a building or structure in violation of the approved construction documents or directive of the Building Official, or of a permit or certificate issued under the provisions of this code, shall be subject to penalties as prescribed by law. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

**[A] 114.4 Failure to comply.** (replace with) 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 that person is directed to perform to remove a violation or unsafe condition, shall be subject to penalties as prescribed by law.

j. The following Sections of the **2021 International Swimming Pool and Spa Code**, as published by the International Code Council, are hereby revised as follows:

**[A] 101.1 Title.** (insert) These regulations and referenced standards shall be known as the Swimming Pool and Spa Code of the City of Lake Saint Louis, Missouri, hereinafter referred to as "this code."

**Section 103** (delete section) **Code Compliance Agency**

**[A] 105.2 Application for permit.** (replace with) Each application for a permit shall be made to the Code Official on a form or by a method provided by the department and shall include a general description of the proposed work, its location, and the estimated cost of construction.

**[A]105.4.3 Expiration.** (replace with) Permits shall expire as follows:

1. Exterior improvements (pools, retaining walls, decks, gazebos, pergolas, and similar structures) for non-residential and residential permits unless listed elsewhere in the Lake Saint Louis Municipal Code: 6 months from the date of permit issuance.
2. MEP only (mechanical, electrical, or plumbing) permits: 3 months from the date of permit issuance.
3. Temporary electrical poles: 1 year from the date of permit issuance.
4. Fences for non-residential and residential permits: 3 months from the date of permit issuance.
5. Floodplain Development Permits: Same as coinciding permit.
6. Demolition for non-residential and residential permits: 6 months from the date of permit issuance.

**[A]105.4.4 Permit extensions.** (replace with) The *code official* is authorized to grant, in writing, one extension of time for not more than 30 days. The extension must be requested in writing and a justifiable cause demonstrated. If work is not completed when the permit expires, a new permit must be applied for until the work is completed and has passed the final inspection.

**[A] 108.2 Schedule of permit fees.** (replace with) The fees for permits shall be as indicated in the Lake Saint Louis Municipal Code.

**[A]108.2.1** (add new section) **Schedule of plan review fees.** All fees for plan review related to required permits shall be as indicated in the Lake Saint Louis Municipal Code.

**[A]108.2.2** (Add new section) **Permit extension fees.** Permit extension fees for new structures, remodeling, interior finishes, and exterior improvement permits shall be based upon the cost of construction of remaining work and shall at no time be less than the minimum permit fee for the type of work permitted. The cost of renewal for all other permit types shall be the full cost of the original permit.

**[A] 108.4 Work commencing before permit issuance.** (replace with) Any person who commences any work before obtaining the necessary permits shall be subject to penalties as prescribed by law. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

**[A] 108.6 Refunds.** (replace with) The code official may approve the refunding of permit and/or inspection fees only as permitted by the Lake Saint Louis Municipal Code and City policy.

**[A]110.6.1 (add new section) Re-inspections.** If an inspection fails twice for the same violation, an extra inspection fee as indicated in the Lake Saint Louis Municipal Code must be paid before each subsequent inspection is conducted for the remaining violation.

**[A] 111.1 General.** (replace with) Any aggrieved person with a material interest in the decision of the code official shall have the right to appeal such a decision to the Lake Saint Louis Building Appeals Board. All rules and requirements associated with such an appeal, as specified in the Lake Saint Louis Municipal Code, shall apply. The application for appeal shall be filed with the code official within twenty (20) days after the decision of the code official was given.

## **Section 112 (delete section) Board of Appeals**

**[A] 113.4 Violation penalties.** (replace with) Any person who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or who shall erect, install, alter or repair any work in violation of the approved construction documents or directive of the code official, or of a permit or certificate issued under the provisions of this code, shall be subject to penalties as prescribed by law. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

**[A] 114.4 Failure to comply.** (replace with) 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 that person is directed to perform to remove a violation or unsafe condition, shall be subject to penalties as prescribed by law.

**305.1 General.** (replace with) The provisions of this sections shall apply to the design of barriers for restricting entry into areas having pools and spas. Where spas or hot tubs are equipped with a lockable safety cover complying with ASTM F1346, the areas

where those spas or hot tubs are shall not be required to comply with Sections 305.2 through 305.7.

k. The following Sections of the ***National Electrical Code, 2020 Edition***, as published by the National Fire Protection Association, are hereby revised as follows:

**Annex H: Administration**

**80.1 Scope.** (replace with) These regulations, referenced standards, and annexes including Annex H shall be known as the Electrical Code of the City of Lake Saint Louis, Missouri, hereinafter referred to as "this code." The following functions are covered by this code:

**(2)** (delete)

**80.13 Authority.**

**(13)** (replace with) Whenever any installation subject to inspection prior to use is covered or concealed without having first been inspected, the authority having jurisdiction shall be permitted to require that such work be exposed for inspection. The authority having jurisdiction shall be notified when the installation is ready for inspection and shall conduct the inspection within two (2) business days of such notification.

**80.15 Electrical Board.** (delete and replace with)

**80.15 Appeals.** (replace with)

The Lake Saint Louis Building Appeals Board shall hear and decide appeals of orders, decisions or determinations made by the authority having jurisdiction relative to the application and interpretation of this code. Appeals shall be based only upon an assertion that the true intent of the codes or ordinances described in this code has been incorrectly interpreted, or that the provisions of the codes or ordinances do not fully apply, or that a decision made by the authority having jurisdiction is unreasonable or arbitrary as it applies to alternatives or new materials. All rules and requirements associated with appeals, as specified in the Lake Saint Louis Municipal Code, shall apply. Application to appeal any order, decision or determination made by the authority having jurisdiction shall be filed with the authority having jurisdiction within twenty (20) days after the order, decision or determination was served. The Lake Saint Louis Building Appeals Board shall not have authority relative to interpretation of the administration of this code nor shall such board be empowered to waive requirements of this code.

**80.19 Permits and Approvals.**

**(A)** (replace with) Application for permit. Each application for a permit shall be made to the Code Official on a form or by a method provided by the department, and shall include a general description of the proposed work, its location, and the estimated cost of construction.

**(B) Content.** (delete and replace with) **Permit Expiration.** Permits shall expire as follows for the work the permit is associated with:

1. New structures, remodeling, and interior finishes for non-residential and residential permits: 1 year from the date of permit issuance
2. Exterior improvements (pools, retaining walls, decks, gazebos, pergolas, and similar structures) for non-residential and residential permits unless listed elsewhere in the Lake Saint Louis Municipal Code: 6 months from the date of permit issuance.
3. MEP only (mechanical, electrical, or plumbing) permits: 3 months from the date of permit issuance.
4. Temporary electrical poles: 1 year from the date of permit issuance.
5. Floodplain Development Permits: Same as coinciding permit.
6. Demolition for non-residential and residential permits: 6 months from the date of permit issuance.

**(D) Annual permits** (delete and replace with)

**(D)** (delete and add new section) **Work commencing before permit issuance.** Any person who commences any work before obtaining the necessary permits shall be subject to penalties as prescribed by law. Each day that a violation continues after due notice has been served shall be deemed a separate offense.

**(E) Fees.** (replace with)

- (1)** The fees for all permits shall be as indicated in the Lake Saint Louis Municipal Code.
- (2)** The code official may approve the refunding of permit and/or inspection fees only as permitted by the Lake Saint Louis Municipal Code and City policy.
- (3)** Schedule of plan review fees. All fees for plan review related to required permits shall be as indicated in the Lake Saint Louis Municipal Code.
- (4)** Permit extension fees. Permit extension fees for new structures, remodeling, interior finishes, and exterior improvement permits shall be based upon the cost of construction of remaining work and shall at no time be less than the minimum permit fee for the type of work permitted. The cost of renewal for all other permit types shall be the full cost of the original permit.
- (5)** Re-inspection fees. If an inspection fails twice for the same violation, an extra inspection fee as indicated in the Lake Saint Louis Municipal Code must be paid before each subsequent inspection is conducted for the remaining violation.



**(F) Inspection and Approvals.**

(3) (replace with) When any portion of the electrical installation within the jurisdiction of an Electrical Inspector is to be hidden from view by the permanent placement of parts of the building, the person, firm or corporation installing the equipment shall notify the Electrical Inspector, and such equipment shall not be concealed until it has been approved by the Electrical Inspector.

**(H) Applications and Extensions.**

(1) (replace with) The *code official* is authorized to grant, in writing, one extension of time for not more than 30 days. The extension must be requested in writing and a justifiable cause demonstrated. If work is not completed when the permit expires, a new permit must be applied for until the work is completed and has passed the final inspection.

**80.23 Notice of Violations, Penalties.****(B) (replace with) Penalties.**

- (1) Any person who shall violate a provision of this code or shall fail to comply with any of the requirements thereof or shall erect, construct, alter or repair any work in violation of the approved construction documents or directive of the Building Official, or of a permit or certificate issued under the provisions of this code, shall be subject to penalties as prescribed by law. Each day that a violation continues after due notice has been served shall be deemed a separate offense.
- (2) 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 that person is directed to perform to remove a violation or unsafe condition, shall be subject to penalties as prescribed by law.

**80.25 Connection to Electricity Supply.**

(C) (insert, "5")

**80.27 Inspector's Qualifications. (delete)****80.29 Liability for Damages. (insert, "City of Lake Saint Louis, Missouri")**

**80.35 Effective Date.** (replace with) Article 80 shall take effect immediately after the Board of Aldermen of the City of Lake Saint Louis approve the adopting ordinance.

**210.8 Ground-Fault Circuit-Interrupter Protection for Personnel.**

(A)

(add exception to #2)

**(2) Exception:** Garage door opener receptacles not installed in readily accessible locations.

(add exception to #5)

**(5) Exception:** Sump pump receptacles must be a single dedicated outlet (not a duplex) and only when a sump pump has been installed.

**230.67 Surge Protection.** (delete section)

SECTION 2. That if any section, subsection, sentence, clause or phrase of this ordinance is, for any reason, held to be unconstitutional, such decision shall not affect the validity of the remaining portions of this ordinance. The Board of Aldermen of the City of Lake Saint Louis hereby declares that it would have passed this ordinance, and each section, subsection, clause or phrase thereof, irrespective of the fact that any one or more sections, subsections, sentences, clauses and phrases be declared unconstitutional.

SECTION 3. That nothing in this ordinance or in the Comprehensive Building Code hereby adopted shall be construed to affect any suit or proceeding impending 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 in Section 2 of this ordinance; nor shall any just or legal right or remedy of any character be lost, impaired or affected by this ordinance.

SECTION 4. All other portions and sections of Title V. Building Code, shall remain in full force and effect.

SECTION 5. This ordinance shall be in full force and effect from and after its passage and approval.

PASSED AND APPROVED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 202\_

\_\_\_\_\_  
Jason Law, Mayor

ATTEST: \_\_\_\_\_  
Donna F. Daniel, City Clerk

APPROVED AS TO FORM: \_\_\_\_\_  
Matthew Reh, City Attorney