ORDINANCE NO. <u>2157</u>

AN ORDINANCE OF THE CITY OF COTTLEVILLE, MISSOURI, DELETING ARTICLES I THROUGH VII, ARTICLE IX AND ARTICLE X OF CHAPTER 500 OF THE MUNICIPAL CODE OF THE CITY OF COTTLEVILLE IN THEIR ENTIRETY, ENACTING, IN LIEU THEREOF, NEW ARTICLES I THROUGH VII, ARTICLE IX AND ARTICLE X OF CHAPTER 500 OF THE MUNICIPAL CODE; ADOPTING, WITH AMENDMENTS, THE INTERNATIONAL BUILDING CODE, 2021 EDITION; THE INTERNATIONAL PLUMBING CODE, 2021 EDITION; THE INTERNATIONAL MECHANICAL CODE, 2021 EDITION; THE NATIONAL ELECTRICAL CODE, 2020 EDITION; INTERNATIONAL PROPERTY MAINTENANCE CODE, 2021 EDITION; THE INTERNATIONAL RESIDENTIAL CODE, 2021 EDITION; THE INTERNATIONAL ENERGY CONSERVATION CODE, 2021 EDITION; THE INTERNATIONAL PRIVATE SEWAGE DISPOSAL CODE, 2021 EDITION: AND THE INTERNATIONAL SWIMMING POOL AND SPA CODE, 2021 EDITION, AS THE BUILDING CODES OF THE CITY, **PROVIDING FOR** THE REGULATION, INSPECTION PERMITTING OF BUILDINGS WITHIN THE CITY; ESTABLISHING PERMIT AND INSPECTION FEES; PROVIDING FOR PENALTIES FOR VIOLATIONS OF THE PROVISIONS OF SAID BUILDING CODES; AND OTHER MATTERS RELATED THERETO

WHEREAS, pursuant to the § 67.280.2, RSMo., a City "[...] may adopt or repeal an ordinance which incorporates by reference the provisions of any code or portions of any code, or any amendment thereof, properly identified as to date and source, without setting forth the provisions of such code in full[;]" and

WHEREAS, pursuant to the requirements of § 67.280.2, RSMo., one (1) copy each of the International Building Code, 2021 Edition, the International Plumbing Code, 2021 Edition, the International Mechanical Code, 2021 Edition, the NFPA National Electrical Code, 2020 Edition, the International Property Maintenance Code, 2021 Edition, the International Residential Code, 2021 Edition, the International Energy Conservation Code, 2021 Edition, the International Private Sewage Disposal Code, 2021 Edition, and the International Swimming Pool and Spa Code, 2021 Edition, as published by the International Code Council (collectively, the "Building Codes"), was filed with the City Clerk for a period of ninety (90) days prior to the adoption of this ordinance; and

WHEREAS, the Board of Aldermen of the City of Cottleville, Missouri, finds and determines it is to the benefit of the health, safety, and general welfare of its residents, that it adopt the above referenced Building Codes.

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

SECTION 1. That Article I of Chapter 500 of the Municipal Code of the City of Cottleville, Missouri, be and hereby is amended by deleting Article I of Chapter 500 in its entirety and enacting, in lieu thereof, a new Article I of Chapter 500, which shall read as follows:

CHAPTER 500: BUILDING AND CONSTRUCTION

ARTICLE I. BUILDING CODE ADOPTED

Section 500.010. Building Code Adopted.

The International Building Code, 2021 Edition, with Appendices C, E, F, G, I, J, and K, as published by the International Code Council, is hereby adopted as the Building Code of the City; and all of the regulations, provisions, penalties, conditions and terms of the International Building Code, 2021 Edition, with Appendices C, E, F, G, I, J, and K, as published by the International Code Council, are hereby referred to, adopted and made part thereof, as if fully set out in this Article, with the additions, insertions, deletions and changes prescribed in this Article.

Section 500.015. Jurisdictional Titles.

Throughout the Building Code adopted in Section 500.010, wherever the term "Name of Jurisdiction" or "Local Jurisdiction" appear, it shall be deemed to mean the City of Cottleville, Missouri.

Section 500.020. Code Official Titles.

Throughout the Building Code adopted pursuant to Section 500.010 of this Article, whenever the term "Department of Building Safety," "Building Official," or "Code Official" appear, it shall be deemed to mean the "Director of Public Works" of the City of Cottleville, Missouri.

Section 500.025. Other Official Titles.

Whenever the term "Chief Appointing Authority" is used in the code, it shall be deemed to mean the "Board of Aldermen" of the City of Cottleville, Missouri; whenever the term "Legal Representative" is used, it shall be deemed to mean "City Attorney."

Section 500.030. Complying With Setback Requirements.

All types of construction shall comply with building setback lines, side lots, yard requirements and height limitations as set out in the Zoning Ordinance and this Article or code; the Zoning Ordinance shall prevail; also in conjunction with Section 105.2 of the International Building Code, building permits shall be required on all building activities with the exception of ordinary repairs and the exceptions listed in Section 105.2. The Director of Public Works or his/her

designee has complete authority to inspect all buildings being constructed to ensure that the provisions of this Article and code are complied with.

Section 500.040. Amendments.

The Building Code adopted in Section 500.010 is amended as follows:

(CHAPTER 1 SCOPE AND ADMINISTRATION) (SECTION 101 GENERAL)

101.1 Title. Delete "NAME OF JURISDICTION" and insert "City of Cottleville, Missouri."

(SECTION 113 Board of Appeals)

Section 113 shall be deleted in its entirety, and inserted in lieu thereof shall be the following:

- and decide appeals of final orders, decisions, or determinations made by the building official in the application and interpretation of all codes adopted pursuant to this ordinance. Any person directly impacted by a final order, decision, or determination of the building official, such that the person would have standing in a court of law to challenge the order, decision, or determination, may petition the Board of Appeals for a review of a final order, decision, or determination of the building official. To the fullest extent permitted by law, the review procedures herein shall be exhausted before any action may be had in any court against the City or the building official. Any such petition for appeal shall only 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 any equally good or better form of construction is proposed. The Board of Appeals shall have no authority to waive or alter the requirements of this Code. A petition for appeal must be submitted on a form obtained from the building official within twenty (20) days after the date of the decision appealed from.
- 113.2 Membership of the Board. The Board of Adjustment of the City of Cottleville, Missouri, shall be the Board of Appeals.
- **113.2.1 Rules and procedures**. The Board of Appeals is authorized to establish policies and procedures as are necessary to perform its duties.
- 113.2.2 Disqualification of members. A member of the Board of Appeals shall not hear an appeal of a matter in which that member has a personal, professional, or financial interest.
- 113.2.3 Compensation of members. Members of the Board of Appeals shall serve without compensation.

- 113.3. Petition for appeal. Each petition for appeal before the Board of Appeals shall include the following:
 - 1. The names and addresses of all the owners of the property subject to the appeal.
 - 2. Signatures of all the owners of the property and the petitioner(s) for the building permit.
 - 3. A legal description of the property to be affected.
 - 4. A scaled map of such property, correlated with the legal description, and clearly showing the property's location.
 - 5. Date of filing with the Board of Appeals.
 - 6. All submittal documents required under Section 107.1
 - 7. The reasoning for the appeal.
 - 8. The filing fee, which shall be the same as the filing fee for a variance as set forth in the Municipal Code. The petitioner shall pay the reporter's charges for making a record of the testimony, objections, and rulings at the hearing upon such application and, in the event of an appeal of the decision of the Board of Appeals, for preparing a transcript of such hearing.
- 113.3.1 Review of petition for appeal. A completed petition for appeal shall be submitted to the building official who shall review the application for compliance with this ordinance and other ordinances of the City. The application shall be deemed submitted to the Board of Appeals on the earlier of (a) when the building official, in his or her sole discretion, finds the application in sufficient form for review by the Board of Appeals, or (b) sixty (60) days from submission to the building official. A hearing before the Board of Appeals shall take place at a date no earlier than fourteen (14) days after and no later than forty-five (45) days after the date of submission.
- 113.3.2 Hearing on petition for appeal. All hearings before the Board of Appeals should be open to the public. The petitioner, the petitioner's representative, the building official, and any person whose interests are directly affected shall be given an opportunity to be heard
- 113.4 Board Decision. The Board of appeals may only modify or reverse the decision of the building official by a concurring vote of four (4) of its members hearing the appeal
- 113.4.1 Copy of Decision. The decision of the Board of Appeals shall be in writing. Copies signed by the Chairman and Secretary shall be furnished to the petitioner and to the building official.
- 113.4.2 Administration. The building official shall take immediate action in accordance with any decision of the Board of Appeals.
- 113.4.3 Court review. A decision of the Board of Appeals may be appealed to the Circuit Court pursuant to the procedures for contested cases in Chapter 536, RSMo., only if the appeal is made within thirty (30) days from the date of the Board's decision.

(SECTION 114 VIOLATIONS)

Section 114 shall be deleted in its entirety.

(SECTION 115 STOP WORK ORDER)

115.2 Issuance. Delete in its entirety and insert:

The stop work order shall be in writing and shall be given to the owner of the property for which the application was submitted, the owner's authorized agent, or the person performing the work. Upon issuance of a stop work order, the work shall immediately cease. The stop work order shall state the reason(s) for the order and the condition(s) under which the work will be permitted to resume. Any person served with a stop work order shall pay an administrative penalty of up to two hundred fifty dollars (\$250.00).

Section 500.050. Penalty.

- A. Any person violating any of the provisions of the code adopted in this Article shall be deemed guilty of an ordinance violation and upon conviction thereof shall be fined in an amount not exceeding five hundred dollars (\$500.00) or be imprisoned in the City or County Jail for a period not exceeding ninety (90) days, or both such fine and imprisonment. Each day such violation is committed or permitted to continue shall constitute a separate ordinance violation and shall be punishable as such hereunder.
- B. Whenever any provision of the Revised Statutes of Missouri or other Statute of the State limits the authority of the City to punish the violation of any particular provision of the code adopted in this Article to a fine of less amount than that provided in this Section or imprisonment for a shorter term than that provided in this Section, the violation of such particular provision shall be punished by the imposition of not more than the maximum fine or imprisonment as authorized, or by both such fine or imprisonment, if authorized.

SECTION 2. That Article II of Chapter 500 of the Municipal Code of the City of Cottleville, Missouri, be and hereby is amended by deleting Article II of Chapter 500 in its entirety and enacting, in lieu t hereof, a new Article II of Chapter 500, which shall read as follows:

CHAPTER 500: BUILDING AND CONSTRUCTION

ARTICLE II. PLUMBING CODE ADOPTED

Section 500.060. Plumbing Code Adopted.

The International Plumbing Code, 2021 Edition, as published by the International Code Council, is hereby adopted as the Plumbing Code of the City; and all of the regulations, provisions, penalties, conditions and terms of the International Plumbing Code, 2021 Edition, as published by

the International Code Council, are hereby referred to, adopted and made part thereof, as if fully set out in this Article, with the additions, insertions, deletions and changes prescribed in this Article.

Section 500.062. Jurisdictional Titles.

Throughout the Plumbing Code adopted pursuant to Section 500.060 of this Article, whenever the term "Name of Jurisdiction" or "Local Jurisdiction" appear, it shall be deemed to mean "City of Cottleville, Missouri."

Section 500.064. Code Official Titles.

Throughout the Plumbing Code adopted pursuant to Section 500.060 of this Article, whenever the term "Department of Plumbing Inspection," "Building Official," or "Code Official" appear, it shall be deemed to mean the "Director of Public Works" of the City of Cottleville, Missouri.

Section 500.066. Other Official Titles.

Throughout the Plumbing Code adopted pursuant to Section 500.060 of this Article, whenever the term "Chief Appointing Authority" appears, it shall be deemed to mean the "Board of Aldermen" of the City of Cottleville, Missouri; whenever the term "Legal Representative" is used, it shall be deemed to mean "City Attorney."

Section 500.068. Amendments.

The Plumbing Code adopted in Section 500.060 is amended as follows:

(CHAPTER 1 SCOPE AND ADMINISTRATION) (SECTION 101 GENERAL)

101.1 Title. Delete "NAME OF JURISDICTION" and insert "City of Cottleville, Missouri."

(SECTION 103 CODE COMPLIANCE AGENCY)

103.2 Appointment. Delete "by the chief appointing authority of the jurisdiction" and insert "as provided by ordinance."

(SECTION 109 FEES)

Section 109.2 Schedule of Permit Fees. Delete in its entirety and insert:

Fees related to administration of this code shall be as set forth in Article XI of Chapter 500 of the Municipal Code of the City of Cottleville.

(SECTION 113 MEANS OF APPEAL)

Section 113 Delete in its entirety and insert:

For the purposes of this code, all appeals shall be in accordance with the procedure established for the Building Code of the City of Cottleville, Missouri.

(SECTION 114 BOARD OF APPEALS)

Section 114 Delete in its entirety.

(SECTION 115 VIOLATIONS)

Section 115.4 Violation Penalties. Delete.

(SECTION 116 Stop Work Orders)

Section 116.2 Issuance. Delete in its entirety and insert:

The stop work order shall be in writing and shall be given to the owner of the property for which the application was submitted, the owner's authorized agent, or the person performing the work. Upon issuance of a stop work order, the work shall immediately cease. The stop work order shall state the reason(s) for the order and the condition(s) under which the work will be permitted to resume. Any person served with a stop work order shall pay an administrative penalty of up to two hundred fifty dollars (\$250.00).

Section 500.070. Penalty.

- A. Any person violating any of the provisions of the code adopted in this Article shall be deemed guilty of an ordinance violation and upon conviction thereof shall be fined in an amount not exceeding five hundred dollars (\$500.00) or be imprisoned in the City or County Jail for a period not exceeding ninety (90) days, or both such fine and imprisonment. Each day such violation is committed or permitted to continue shall constitute a separate ordinance violation and shall be punishable as such hereunder.
- B. Whenever any provision of the Revised Statutes of Missouri or other Statute of the State limits the authority of the City to punish the violation of any particular provision of the code adopted in this Article to a fine of less amount than that provided in this Section or imprisonment for a shorter term than that provided in this Section, the violation of such particular provision shall be punished by the imposition of not more than the maximum fine or imprisonment as authorized, or by both such fine or imprisonment, if authorized.

SECTION 3. That Article III of Chapter 500 of the Municipal Code of the City of Cottleville, Missouri, be and hereby is amended by deleting Article III of Chapter 500 in its entirety and enacting, in lieu thereof, a new Article III of Chapter 500, which shall read as follows:

CHAPTER 500: BUILDING AND CONSTRUCTION

ARTICLE III. MECHANICAL CODE ADOPTED

Section 500.090. Mechanical Code Adopted.

The International Mechanical Code, 2021 Edition, as published by the International Code Council, is hereby adopted as the Mechanical Code of the City; and all of the regulations, provisions, penalties, conditions and terms of the International Mechanical Code, 2021 Edition, as published by the International Code Council, are hereby referred to, adopted and made part thereof, as if fully set out in this Article, with the additions, insertions, deletions and changes prescribed in this Article.

Section 500.092. Jurisdictional Titles.

Throughout the Mechanical Code adopted pursuant to Section 500.090 of this Article, whenever the term "Name of Jurisdiction" or "Local Jurisdiction" appear, it shall be deemed to mean "City of Cottleville, Missouri."

Section 500.094. Code Official Titles.

Throughout the Mechanical Code adopted pursuant to Section 500.090 of this Article, whenever the term "Department of Mechanical Inspection," "Building Official," or "Code Official" appear, it shall be deemed to mean the "Director of Public Works" of the City of Cottleville, Missouri.

Section 500.096. Other Official Titles.

Throughout the Mechanical Code adopted pursuant to Section 500.090 of this Article, whenever the term "Chief Appointing Authority" is used in the code, it shall be deemed to mean the "Board of Aldermen" of the City of Cottleville, Missouri, and whenever the term "Legal Representative" is used, it shall be deemed to mean "City Attorney."

Section 500.098. Amendments.

The Mechanical Code adopted in Section 500.090 is amended as follows:

(CHAPTER 1 SCOPE AND ADMINISTRATION)

(SECTION 101 GENERAL)

101.1 Title. Delete "[NAME OF JURISDICTION]" and insert "City of Cottleville, Missouri."

(SECTION 103 CODE COMPLIANCE AGENCY)

103.1 Creation of Agency. Delete in its entirety and insert:

The department of mechanical inspection is hereby created and the official in charge thereof shall be known as the Director of Public Works.

103.2 Appointment. Delete "by the chief appointing authority of the jurisdiction" and insert "as provided by ordinance."

(SECTION 109 FEES)

109.2 Payment of fees. Delete in its entirety and insert:

Fees related to administration of this code shall be as set forth in Article XI of Chapter 500 of the Municipal Code of the City of Cottleville.

(SECTION 113 STOP WORK ORDER)

113.2 Issuance. Delete in its entirety and insert:

The stop work order shall be in writing and shall be given to the owner of the property for which the application was submitted, the owner's authorized agent, or the person performing the work. Upon issuance of a stop work order, the work shall immediately cease. The stop work order shall state the reason(s) for the order and the condition(s) under which the work will be permitted to resume. Any person served with a stop work order shall pay an administrative penalty of up to two hundred fifty dollars (\$250.00).

(SECTION 114 MEANS OF APPEAL)

Section 114 Delete in its entirety and insert:

For purposes of this code, all appeals shall be in accordance with the procedure established for the Building Code of the City of Cottleville, Missouri.

(SECTION 115 VIOLATIONS)

115.4 Violation penalties. Delete in its entirety.

Section 500.100. Penalty.

A. Any person violating any of the provisions of the code adopted in this Article shall be deemed guilty of an ordinance violation and upon conviction thereof shall be fined in an amount not exceeding five hundred dollars (\$500.00) or be imprisoned in the City or County Jail for a period not exceeding ninety (90) days, or both such fine and imprisonment. Each day such violation is committed or permitted to continue shall constitute a separate ordinance violation and shall be punishable as such hereunder.

B. Whenever any provision of the Revised Statutes of Missouri or other Statute of the State limits the authority of the City to punish the violation of any particular provision of the code adopted in this Article to a fine of less amount than that provided in this Section or imprisonment for a shorter term than that provided in this Section, the violation of such particular provision shall be punished by the imposition of not more than the maximum fine or imprisonment as authorized, or by both such fine or imprisonment, if authorized.

SECTION 4. That Article IV of Chapter 500 of the Municipal Code of the City of Cottleville, Missouri, be and hereby is amended by deleting Article IV of Chapter 500 in its entirety and enacting, in lieu thereof, a new Article IV of Chapter 500, which shall read as follows:

CHAPTER 500: BUILDING AND CONSTRUCTION

ARTICLE IV. ELECTRICAL CODE ADOPTED

Section 500.120. Electrical Code Adopted.

The National Electrical Code, 2020 Edition, as published by the National Fire Protection Association, as amended, along with Appendix H, as amended, is hereby adopted as the Electrical Code of the City; and all of the regulations, provisions, penalties, conditions and terms of the National Electrical Code, 2020 Edition, including Appendix H, as published by the National Fire Protection Association, are hereby referred to, adopted and made part thereof, as if fully set out in this Article, with the additions, insertions, deletions and changes prescribed in this Article.

Section 500.125. Jurisdictional Titles.

Throughout the Electrical Code adopted pursuant to Section 500.120 of this Article, whenever the term "Name of Jurisdiction" or "Local Jurisdiction" appear, it shall be deemed to mean "City of Cottleville, Missouri."

Section 500.130. Code Official Titles.

Throughout the Electrical Code adopted pursuant to Section 500.120 of this Article, whenever the term "Chief Electrical Inspector" appears, it shall be deemed to mean the "Director of Public Works" of the City of Cottleville, Missouri.

Section 500.135. Other Official Titles.

Whenever the term "Chief Appointing Authority" is used in the code, it shall be deemed to mean the "Board of Aldermen" of the City of Cottleville, Missouri; whenever the term "Legal Representative" is used, it shall be deemed to mean "City Attorney."

Section 500.140. Amendments.

- 1. Annex H 80.15 (A) Creation of the Electrical Board. Delete.
- 2. Annex H 80.15 (B) Appointments. Delete.

- 3. Annex H 80.15 (C) Terms. Delete.
- 4. Annex H 80.15 (D) Compensation. Delete.
- 5. Annex H 80.15 (E) Quorum. Delete.
- 6. Annex H 80.15 (F) Duties. Delete.
- 7. **Annex H 80.15 (G) Appeals**. Delete in its entirety and insert: For the purposes of this code, all appeals shall be in accordance with the procedure established for the Building Code of the City of Cottleville, Missouri.
- 8. Annex H 80.19 (E) Fees. Delete in its entirety and insert: Fees related to the administration of this code shall be as set forth in Article XI of Chapter 500 of the Municipal Code of the City of Cottleville.
- 9. Annex H 80.23 (B) Penalties. Delete.

Section 500.150. Penalty.

- A. Any person violating any of the provisions of the code adopted in this Article shall be deemed guilty of an ordinance violation and upon conviction thereof shall be fined in an amount not exceeding five hundred dollars (\$500.00) or be imprisoned in the City or County Jail for a period not exceeding ninety (90) days, or both such fine and imprisonment. Each day such violation is committed or permitted to continue shall constitute a separate ordinance violation and shall be punishable as such hereunder.
- B. Whenever any provision of the Revised Statutes of Missouri or other Statute of the State limits the authority of the City to punish the violation of any particular provision of the code adopted in this Article to a fine of less amount than that provided in this Section or imprisonment for a shorter term than that provided in this Section, the violation of such particular provision shall be punished by the imposition of not more than the maximum fine or imprisonment as authorized, or by both such fine or imprisonment, if authorized.
- **SECTION 5**. That Article V of Chapter 500 of the Municipal Code of the City of Cottleville, Missouri, be and hereby is amended by deleting Article V of Chapter 500 in its entirety and enacting, in lieu thereof, a new Article V of Chapter 500, which shall read as follows:

CHAPTER 500: BUILDING AND CONSTRUCTION

ARTICLE V. ENERGY CONSERVATION CODE ADOPTED

Section 500.160. Energy Conservation Code Adopted.

The International Energy Conservation Code, 2021 Edition, as published by the International Code Council, is hereby adopted as the Energy Conservation Code of the City; and all of the regulations, provisions, penalties, conditions and terms of the International Energy Conservation Code, 2021 Edition, as published by the International Code Council, are hereby referred to, adopted and made part thereof, as if fully set out in this Article, with the additions, insertions, deletions and changes prescribed in this Article.

Section 500.165. Jurisdictional Titles.

Throughout the Energy Conservation Code adopted pursuant to Section 500.160 of this Article, whenever the term "Name of Jurisdiction" or "Local Jurisdiction" appear, it shall be deemed to mean "City of Cottleville, Missouri."

Section 500.170. Code Official Titles.

Throughout the Energy Conservation Code adopted pursuant to Section 500.160 of this Article, whenever the term "Code Official," "Building Official," or "Department of Building Safety" appear, it shall be deemed to mean the "Director of Public Works" of the City of Cottleville, Missouri.

Section 500.175. Other Official Titles.

Throughout the Energy Conservation Code adopted pursuant to Section 500.160 of this Article, whenever the term "Chief Appointing Authority" is used in the code, it shall be deemed to mean the "Board of Aldermen" of the City of Cottleville, Missouri, and whenever the term "Legal Representative" is used, it shall be deemed to mean "City Attorney."

Section 500.180. Amendments.

The Energy Conservation Code adopted in Section 500.160 is amended as follows:

(CHAPTER 1 [CE] SCOPE AND ADMINISTRATION) (SECTION C101 SCOPE AND GENERAL REQUIREMENTS)

C101.1 Title. Deleting NAME OF JURISDICTION and insert City of Cottleville, Missouri.

(SECTION C104 FEES)

C104.2 Schedule of permit fees. Delete in its entirety and insert:

Fees related to administration of this code shall be as set forth in Article XI of Chapter 500 of the Municipal Code of the City of Cottleville.

(SECTION 109 STOP WORK ORDER)

C109.1 Authority. Delete and insert:

For the purposes of this code, all stop work orders shall be in accordance with the procedure established for the Building Code of City of Cottleville, Missouri.

C109.2 Issuance. Delete.

C109.3 Emergencies. Delete.

C109.4 Failure to comply. Delete.

(SECTION 110 BOARD OF APPEALS)

C110.1 General. Delete in its entirety and insert:

For the purposes of this code, all appeals shall be in accordance with the procedure established for the Building Code of City of Cottleville, Missouri.

C110.2 Limitations on authority. Delete.

C110.3 Qualifications. Delete.

Section 500.190. Penalty.

- A. Any person violating any of the provisions of the code adopted in this Article shall be deemed guilty of an ordinance violation and upon conviction thereof shall be fined in an amount not exceeding five hundred dollars (\$500.00) or be imprisoned in the City or County Jail for a period not exceeding ninety (90) days, or both such fine and imprisonment. Each day such violation is committed or permitted to continue shall constitute a separate ordinance violation and shall be punishable as such hereunder.
- B. Whenever any provision of the Revised Statutes of Missouri or other Statute of the State limits the authority of the City to punish the violation of any particular provision of the code adopted in this Article to a fine of less amount than that provided in this Section or imprisonment for a shorter term than that provided in this Section, the violation of such particular provision shall be punished by the imposition of not more than the maximum fine or imprisonment as authorized, or by both such fine or imprisonment, if authorized.

SECTION 6. That Article VI of Chapter 500 of the Municipal Code of the City of Cottleville, Missouri, be and hereby is amended by deleting Article VI of Chapter 500 in its entirety and enacting, in lieu thereof, a new Article VI of Chapter 500 to read as follows:

CHAPTER 500: BUILDING AND CONSTRUCTION

ARTICLE VI. SWIMMING POOL AND SPA CODE ADOPTED

Section 500.200. Swimming Pool and Spa Code Adopted.

The International Swimming Pool and Spa Code, 2021 Edition, as published by the International Code Council, is hereby adopted as the Swimming Pool and Spa Code of the City; and all of the regulations, provisions, penalties, conditions and terms of the International Swimming Pool and Spa Code, 2021 Edition, as published by the International Code Council, are hereby referred to, adopted and made part thereof, as if fully set out in this Article, with the additions, insertions, deletions and changes prescribed in this Article.

Section 500.205. Jurisdictional Titles.

Throughout the Swimming Pool and Spa Code adopted pursuant to Section 500.200 of this Article, whenever the terms "Name of Jurisdiction" or "Local Jurisdiction" appear, it shall be deemed to mean "City of Cottleville, Missouri."

Section 500.210. Code Official Titles.

Throughout the Swimming Pool and Spa Code adopted pursuant to Section 500.200 of this Article, whenever the terms "Code Official," "Building Official" or "Department of Building Safety" appear, it shall be deemed to mean the "Director of Public Works" of the City of Cottleville, Missouri.

Section 500.215. Other Official Titles.

Throughout the Swimming Pool and Spa Code adopted pursuant to Section 500.200 of this Article, whenever the term "Chief Appointing Authority" is used in the code, it shall be deemed to mean the "Board of Aldermen" of the City of Cottleville, Missouri, and whenever the term "Legal Representative" is used, it shall be deemed to mean "City Attorney."

Section 500.220. Amendments.

The Swimming Pool and Spa Code adopted in Section 500.200 is amended as follows:

(CHAPTER 1 SCOPE AND ADMINISTRATION)

(SECTION 101 SCOPE AND GENERAL REQUIREMENTS)

101.1 Title. Delete and insert:

These regulations shall be known as the Swimming Pool and Spa Code of Cottleville, Missouri, hereinafter referred to as "this code."

(SECTION 103 CODE COMPLIANCE AGENCY)

103.1 Creation of agency. Delete and insert:

The Division of Public Works shall be the enforcement agency for this code and the Division's director shall be the code official referred to in this code.

(SECTION 108 FEES)

108.2 Schedule of permit fees. Delete and insert:

Fees related to administration of this code shall be as set forth in Article XI of Chapter 500 of the Municipal Code of the City of Cottleville.

(SECTION 111 MEANS OF APPEAL)

111.1 General. Delete in its entirety and insert:

For the purposes of this code, all appeals shall be in accordance with the procedure established for the Building Code of the City of Cottleville, Missouri.

- 111.2 Limitations on authority. Delete.
- 111.3 Qualifications. Delete.
- 111.4 Administration. Delete.

(SECTION 113 VIOLATIONS)

113.4 Violation Penalties. Delete in its entirety.

Section 500.225. Penalty.

- A. Any person violating any of the provisions of the code adopted in this Article shall be deemed guilty of an ordinance violation and upon conviction thereof shall be fined in an amount not exceeding five hundred dollars (\$500.00) or be imprisoned in the City or County Jail for a period not exceeding ninety (90) days, or both such fine and imprisonment. Each day such violation is committed or permitted to continue shall constitute a separate ordinance violation and shall be punishable as such hereunder.
- B. Whenever any provision of the Revised Statutes of Missouri or other Statute of the State limits the authority of the City to punish the violation of any particular provision of the code adopted in this Article to a fine of less amount than that provided in this Section or imprisonment for a shorter term than that provided in this Section, the violation of such particular provision shall be punished by the imposition of not more than the maximum fine or imprisonment as authorized, or by both such fine or imprisonment, if authorized.

SECTION 7. That Article VII of Chapter 500 of the Municipal Code of the City of Cottleville, Missouri, be and hereby is amended by deleting Article VII of Chapter 500 in its entirety and enacting, in lieu thereof, a new Article VII of Chapter 500 to read as follows:

CHAPTER 500: BUILDING AND CONSTRUCTION

ARTICLE VII. PRIVATE SEWAGE DISPOSAL CODE

Section 500.230. Private Sewage Disposal Code Adopted.

The International Private Sewage Disposal Code, 2021 Edition, as published by the International Code Council, is hereby adopted as the Private Sewage Disposal Code of the City; and all of the regulations, provisions, penalties, conditions and terms of the International Private Sewage Disposal Code, 2021 Edition, as published by the International Code Council, are hereby referred to, adopted and made part thereof, as if fully set out in this Article, with the additions, insertions, deletions and changes prescribed in this Article.

Section 500.235. Jurisdictional Titles.

Throughout the Private Sewage Disposal Code adopted pursuant to Section 500.230 of this Article, whenever the terms "Name of Jurisdiction" or "Local Jurisdiction" appear, it shall be deemed to mean "City of Cottleville, Missouri."

Section 500.240. Code Official Titles.

Throughout the Private Sewage Disposal Code adopted pursuant to Section 500.230 of this Article, whenever the terms "Code Official" or "Building Official" appear, it shall be deemed to mean the "Director of Public Works of the City of Cottleville, Missouri, or his or her designee."

Section 500.245. Other Official Titles.

Whenever the term "Chief Appointing Authority" is used in the code, it shall be deemed to mean the "Board of Aldermen" of the City of Cottleville, Missouri; whenever the term "Legal Representative" is used, it shall be deemed to mean "City Attorney."

Section 500.250. Amendments.

The Private Sewage Disposal Code adopted in Section 500.230 is amended as follows:

(CHAPTER 1 SCOPE AND ADMINISTRATION)

106.3.3 Expiration. Delete in its entirety and insert:

All permits for work under the scope of this code shall comply with Section 105.5 of the Building Code.

(SECTION 112 MEANS OF APPEAL)

112.1 General. Delete in its entirety and insert:

For the purposes of this code, all appeals shall be in accordance with the procedure established for the Building Code of the City of Cottleville, Missouri.

- 112.2 Limitations of authority. Delete.
- 112.3 Qualification. Delete.
- 112.4 Administration. Delete.

(SECTION 113 BOARD OF APPEALS)

Section 113 Delete.

(SECTION 114 VIOLATIONS)

114.4 Violation penalties. Delete.

(SECTION 115 STOP WORK ORDERS)

115.1 Delete and insert:

Upon notice from the code official, work on any private sewage disposal system that is being performed contrary to the provisions of this code or in a dangerous or unsafe manner shall immediately cease. Such notice shall be in writing and shall be given to the owner of the property, to the owner's authorized agent or to the person performing the work. The notice shall state the conditions under which work is authorized to resume. Where an emergency exists, the code official shall not be required to give a written notice prior to stopping the work. Any person who shall continue any work 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 liable to a fine of up to two hundred fifty dollars (\$250.00).

Section 500.265. Penalty.

A. Any person violating any of the provisions of the code adopted in this Article shall be deemed guilty of an ordinance violation and upon conviction thereof shall be fined in an amount not exceeding five hundred dollars (\$500.00) or be imprisoned in the City or County jail for a period not exceeding ninety (90) days, or both such fine and imprisonment. Each day such violation is committed or permitted to continue shall constitute a separate ordinance violation and shall be punishable as such hereunder.

B. Whenever any provision of the Revised Statutes of Missouri or other Statute of the State limits the authority of the City to punish the violation of any particular provision of the code adopted in this Article to a fine of less amount than that provided in this Section or imprisonment for a shorter term than that provided in this Section, the violation of such particular provision shall be punished by the imposition of not more than the maximum fine or imprisonment as authorized, or by both such fine or imprisonment, if authorized.

SECTION 8. That Article IX of Chapter 500 of the Municipal Code of the City of Cottleville, Missouri, be and hereby is amended by deleting Article IX of Chapter 500 in its entirety and enacting, in lieu thereof, a new Article IX of Chapter 500 to read as follows:

CHAPTER 500: BUILDING AND CONSTRUCTION

ARTICLE IX. PROPERTY MAINTENANCE CODE ADOPTED

Section 500.275. Property Maintenance Code Adopted.

The International Property Maintenance Code, 2021 Edition, as published by the International Code Council, is hereby adopted as the Property Maintenance Code of the City; and all of the regulations, provisions, penalties, conditions and terms of the International Property Maintenance Code, 2021 Edition, as published by the International Code Council, are hereby referred to, adopted and made part thereof, as if fully set out in this Article, with the additions, insertions, deletions and changes prescribed in this Article.

Section 500.278. Jurisdictional Titles.

Throughout the Property Maintenance Code adopted pursuant to Section 500.275, whenever the terms "Name of Jurisdiction" or "Local Jurisdiction" appear, it shall be deemed to mean "City of Cottleville, Missouri."

Section 500.280. Code Official Titles.

Throughout the Property Maintenance Code adopted pursuant to Section 500.275, whenever the term "Department of Property Maintenance," "Code Official," or "Building Official" appear, it shall be deemed to mean the "Director of Public Works" of the City of Cottleville, Missouri."

Section 500.283. Other Official Titles.

Throughout the Property Maintenance Code adopted pursuant to Section 500.275, whenever the term "Chief Appointing Authority" is used in the code, it shall be deemed to mean the "Board of Aldermen" of the City of Cottleville, Missouri; whenever the term "Legal Representative" is used, it shall be deemed to mean "City Attorney."

Section 500.285. Amendments.

The Property Maintenance Code adopted pursuant to Section 500.275 is amended as follows:

(CHAPTER 1 SCOPE AND ADMINISTRATION)

(SECTION 101 SCOPE AND GENERAL REQUIREMENTS)

101.1 Title. Delete "[NAME OF JURISDICTION]" and insert "City of Cottleville, Missouri."

(SECTION 103 CODE COMPLIANCE AGENCY)

103.1 Creation of agency. Delete in its entirety and insert:

Whenever the term "Jurisdiction" is used, it is deemed to mean the "City of Cottleville, Missouri," and whenever the expression or term "Code Official" is used, it is deemed to mean "Director of Public Works or his/her designee.

(SECTION 104 FEES)

104.1 Fees. Delete in its entirety and insert:

Fees related to administration of this code shall be as set forth in Article XI of Chapter 500 of the Municipal Code of the City of Cottleville.

(SECTION 107 MEANS OF APPEAL)

107.1 General. Delete in its entirety and insert:

For the purposes of this code, all appeals shall be in accordance with the procedure established for the Building Code of the City of Cottleville, Missouri.

107.2 Limitations of authority. Delete.

107.3 Qualification. Delete.

107.4 Administration. Delete.

(SECTION 108 BOARD OF APPEALS)

Section 108 Delete.

(SECTION 109 VIOLATIONS)

109.4 Violation Penalties. Delete.

(SECTION 110 STOP WORK ORDER)

110.2 Issuance. Delete in its entirety and insert:

The stop work order shall be in writing and shall be given to the owner of the property for which the application was submitted, the owner's authorized agent, or the person performing the work. Upon issuance of a stop work order, the work shall immediately cease. The stop work order shall state the reason(s) for the order and the condition(s) under which the work will be permitted to resume. Any person served with a stop work order shall pay an administrative penalty of up to two hundred fifty dollars (\$250.00).

110.4 Failure to comply. Delete in its entirety and insert:

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 liable to a fine of not less than one hundred dollars (\$100.00) or more than five hundred dollars (\$500.00).

Section 500.287. Penalty.

- A. Any person violating any of the provisions of the code adopted in this Article shall be deemed guilty of an ordinance violation and upon conviction thereof shall be fined in an amount not exceeding five hundred dollars (\$500.00) or be imprisoned in the City or County Jail for a period not exceeding ninety (90) days, or both such fine and imprisonment. Each day such violation is committed or permitted to continue shall constitute a separate ordinance violation and shall be punishable as such hereunder.
- B. Whenever any provision of the Revised Statutes of Missouri or other Statute of the State limits the authority of the City to punish the violation of any particular provision of the code adopted in this Article to a fine of less amount than that provided in this Section or imprisonment for a shorter term than that provided in this Section, the violation of such particular provision shall be punished by the imposition of not more than the maximum fine or imprisonment as authorized, or by both such fine or imprisonment, if authorized.

SECTION 9. That Article X of Chapter 500 of the Municipal Code of the City of Cottleville, Missouri, be and is amended by deleting Article X of Chapter 500 in its entirety and enacting, in lieu thereof, a new Article X of Chapter 500, to read as follows:

CHAPTER 500: BUILDING AND CONSTRUCTION

ARTICLE X: RESIDENTIAL CODE ADOPTED

Section 500.290. Residential Code Adopted.

The International Residential Code, One- and Two- Family Dwellings, 2021 Edition, with Appendices A, B, C, E, F, G, H, J, M, N and P, as published by the International Code Council, is

hereby adopted as the Residential Code of the City; and all of the regulations, provisions, penalties, conditions and terms of the International Residential Code, One- and Two- Family Dwellings, 2015 Edition, with Appendices A, B, C, E, F, G, H, J, M, N and P, as published by the International Code Council, are hereby referred to, adopted and made part thereof, as if fully set out in this Article, with the additions, insertions, deletions and changes prescribed in this Article.

Section 500.292. Jurisdictional Titles.

Throughout the Residential Code adopted pursuant to Section 500.290, whenever the terms "Name of Jurisdiction" or "Local Jurisdiction" appear, it shall be deemed to mean "City of Cottleville, Missouri."

Section 500.294. Code Official Titles.

Throughout the International Residential Code adopted pursuant to Section 500.290, whenever the terms "Department of Building Safety," "Code Official," or "Building Official" appear, it shall be deemed to mean the "Director of Public Works" of the City of Cottleville, Missouri.

Section 500.296. Other Official Titles.

Throughout the Residential Code adopted pursuant to 500.290, whenever the term "Chief Appointing Authority" is used in the code, it shall be deemed to mean the "Board of Aldermen" of the City of Cottleville, Missouri. Whenever the term "Legal Representative" is used, it shall be deemed to mean "City Attorney."

Section 500.298. Amendments.

The International Residential Code adopted in Section 500.290 is amended as follows:

(CHAPTER 1 SCOPE AND ADMINISTRATION)

(SECTION R101 GENERAL)

R101.1 Title. Delete [NAME OF JURISDICTION] and insert City of Cottleville, Missouri.

(SECTION R105 PERMITS)

R105.2 Work exempt from permit. Delete and insert:

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:

1. Building

- a. Other than storm shelters, one-story detached accessory structures used as tool and storage sheds, playhouses, and similar uses, provided the floor area does not exceed one hundred twenty (120) square feet (11.15 m2) or more.
- b. Retaining walls that are not over four (4) feet (1,219 mm) in height measured from the adjacent grade unless supporting a surcharge.
- c. Water tanks supported directly upon grade if the capacity does not exceed five thousand (5,000) gallons (18,927 L) and the ratio of height to diameter or width does not exceed two (2) to one (1).
- d. Sidewalks and driveways.
- e. Painting, papering, tiling, carpeting, cabinets, counter tops, and similar finish work
- f. Prefabricated swimming pools that are less than twenty-four (24) inches (610 mm) deep.
- g. Swings and other playground equipment.
- h. Window awnings supported by an exterior wall that do not project more than fifty-four (54) inches (1,372 mm) from the exterior wall and do not require additional support.
- i. Decks not exceeding two hundred (200) square feet (11.15 m2) in area, which are not more than thirty (30) inches (762 mm) above grade at any point, are not attached to a dwelling, do not serve as the exit door required by Section R311.4.
- j. Flag poles forty (40) feet or less in height.
- k. Replacement of doors and windows where the opening size is not increased or decreased.
- 1. Flatwork, other than driveways.

2. Electrical

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

3. Gas

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

4. Mechanical

- a. Portable heating appliances.
- b. Portable ventilation appliances.
- c. Portable cooling units.

- d. Steam, hot- or chilled-water piping within any heating or cooling equipment regulated by this code.
- e. Replacement of any minor part that does not alter approval of equipment or make such equipment unsafe.
- f. Portable evaporative coolers.
- g. Self-contained refrigeration systems containing ten (10) pounds (4.54 kg) or less of refrigerant or that are actuated by motors of one (1) horsepower (746 kW) or less.
- h. Portable-fuel-cell appliances that are not connected to a fixed piping system and are not interconnected to a power grid.

5. Plumbing

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

(SECTION R106 CONSTRUCTION DOCUMENTS)

R106.1 Submittal Documents. Delete and insert:

Submittal documents consisting of construction documents and other data shall be submitted in two sets and a digital format with each application for a permit. The construction documents shall be prepared by a registered design professional. Where special conditions exist, the building official is authorized to require additional construction documents to be prepared by a registered design professional. All construction documents shall bear the registered design professional's seal, signature and the date the documents were sealed by the Missouri licensed professional. Any addenda or modifications submitted for changes to the construction documents shall also bear the registered design professional's seal, signature and date the documents were sealed.

Exception: (1) The building official is authorized to waive the submission of construction documents and other data not required to be prepared by a registered design professional if it is found that the nature of the work applied for is such that reviewing of construction documents is not necessary to obtain compliance with this code and (2) miscellaneous structures such as single-story room additions, carports, garages, sheds, decks, fences, swimming pools, pergolas, gazebos, and the like.

R106.1.1 Information on construction documents. Delete and insert:

Construction documents shall be drawn upon suitable material. Electronic media documents shall be submitted and shall be retained by the building official. Construction documents shall be of sufficient clarity to indicate the location, nature and extent of the work proposed and show in detail that it will conform to the provisions of this code and relevant laws, ordinances, and regulations, as determined by the building official.

R106.3.1 Approval of Construction Documents. Delete and insert:

Where the building official issues a permit, the construction documents shall be approved in writing or by a stamp that states "APPROVED City of Cottleville." One set of construction documents so reviewed shall be retained by the building official. The other set shall be returned to the applicant, and may be kept at the site of work or made available at the time of inspection and shall be open to inspection by the building official or a duly authorized representative.

(SECTION R108 FEES)

R108.2 Fee schedule. Delete and insert:

Fees related to administration of this code shall be as set forth in Article XI of Chapter 500 of the Municipal Code of the City of Cottleville.

R108.6 Work commencing before permit issuance. Amend Section R108.6 by adding the following exception thereto:

Stakeouts and other necessary planning procedures.

(SECTION R112 BOARD OF APPEALS)

R112.1 General. Delete and insert:

For the purposes of this code, all appeals shall be in accordance with the procedure established for the Building Code of the City of Cottleville, Missouri.

R112.2 Limitations on authority. Delete.

R112.3 Qualifications. Delete.

R112.4 Administration. Delete.

(SECTION R113 VIOLATIONS)

R113.4 Violation penalties. Delete.

(SECTION R114 STOP WORK ORDER)

R114.1 Authority. Delete and insert:

Upon notice from the building official that work on any building or structure is being executed contrary to the provisions of this code or in an unsafe and dangerous manner, such work shall be immediately stopped. The stop work order shall be in writing and shall be given to the owner of the property for which the application was submitted, the owner's authorized agent, or the person performing the work. Upon issuance of a stop work order, the work shall immediately cease. The stop work order shall state the reason(s) for the order and the condition(s) under which the work will be permitted to resume. Any person served with a stop work order shall pay an administrative penalty of up to two hundred fifty dollars (\$250.00).

(CHAPTER 2 DEFINITIONS)

Section R202 shall be amended by deleting the definition of Story Above Grade Plane and enacting a new definition of Story Above Grade Plane to read as follows:

STORY ABOVE GRADE PLANE: Any story having its finished floor surface entirely above grade plane, or in which the finished surface of the floor next above is:

- 1. More than 6 feet above grade plane;
- 2. More than 6 feet (1829 mm) above the finished ground level for more than 50 percent of the total building perimeter; and
- 3. More than 12 feet above the finished ground level at any point.

(CHAPTER 3 BUILDING PLANNING)

(SECTION R301 DESIGN CRITERIA)

Table R301.2 shall be amended as follows:

Table R301.2 Climatic and Geographic Design Criteria

Grou nd Sno w Loa d ⁰	Wind Design				Seism	Subject to Damage From			Ice	Floo	Air	Mea
	Spee d d (mp h)	Topogra phic effects k	Spei ca l win d regi on ^l	Win d- bor ne deb ri s zon em	ic Desig n Categ	Weatheri ng ^a	Fro st line dep th b	Term ite c	Barrier d	d Hazar	Freez in g Index i	n Ann ual Tem p ^j
<u>20</u>	115 (51)	<u>NO</u>	<u>NO</u>	<u>NO</u>	<u>C</u>	SEVERE	<u>30</u>	<u>NO</u>	<u>NO</u>	<u>TBD</u>	<u>1000</u>	<u>55.2</u>

Subsection "h" below Table R301.2 shall be deleted and replaced as follows: "The jurside on shall fill in this part of the table with NO."

All other provisions of Table R301.2 and the subsections thereto remain applicable if not amended herein.

(SECTION 302 FIRE-RESISTANT CONSTRUCTION)

R302.1 Exterior Walls. Delete and insert:

Construction, projections, openings, and penetrations of exterior walls of dwellings and accessory buildings shall comply with Table R302.1(1), as amended; or dwellings equipped throughout with an automatic sprinkler system installed in accordance with Section P2904 shall comply with Table R302.1(2).

Exceptions:

- 1. Walls, projections, openings, or penetrations in walls perpendicular to the line used to determine the fire separation distance.
- 2. Walls of dwellings and accessory structures located on the same lot.
- 3. Detached tool sheds and storage sheds, playhouses and similar structures exempted from permits are not required to provide wall protection based on location on the lot. Projections beyond the exterior wall shall not extend over the lot line.
- 4. Detached garages accessory to a dwelling located within 5 feet (610 mm) of a lot line are permitted to have roof eave projections not exceeding 4 inches (102 mm).
- 5. Foundation vents installed in compliance with this Code are permitted.
- 6. Roof eave overhangs.

R302.5.1 Opening protection. Delete and insert:

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. Delete and insert:

Floor assemblies that are not required elsewhere in this code to be fire-resistance rated, shall be provided with one-half (1/2) inch (12.7 mm) gypsum wallboard membrane, five-eighths (5/8) inch (16 mm) wood structural panel membrane, or equivalent on the underside of the floor framing member. Penetrations or openings for ducts, vents, electrical outlets, lighting, devices, luminaires, wires, speakers, drainage, piping and similar openings or penetrations shall be permitted.

Exceptions:

1. Floor assemblies located directly over a space protected by an automatic sprinkler system in accordance with Section P2904, NFPA 13D, or other approved equivalent sprinkler system.

2. Floor assemblies located directly over a crawl space not intended for storage or fuel-

fired appliances.

3. Portions of floor assemblies shall be permitted to be unprotected where complying with the following:

a. 3.1 The aggregate area of the unprotected floor assembly does not exceed one

hundred (100) square feet per story.

- b. 3.2 Fireblocking in accordance with Section R302.11.1 is installed along the perimeter of the unprotected portion to separate the unprotected portion from the remainder of the floor assembly
- c. 3.3 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 two (2) inches of all previously listed items.
- 4. Wood floor assemblies using dimension lumber or structural composite lumber equal to or greater than two (2) inch by ten (10) inch (50.8 mm by 254 mm) nominal dimension, or other approved floor assemblies demonstrating equivalent fire performance.

(SECTION R303 LIGHT, VENTILATION AND HEATING)

R303.3 Bathrooms. Delete and insert:

Bathrooms, water closet compartments and other similar rooms shall be provided with aggregate glazing area in windows of not less than three (3) square feet, one half of which must be openable.

Exception. The glazed areas shall not be required where artificial light and a local exhaust system are provided. The minimum local exhaust rates shall be determined in accordance with Section M1505. Exhaust air from the space shall be exhausted directly to the outdoors, a ventilated soffit, or a gabled end vent.

(SECTION R306 SANITATION)

R306.5 Hose bibb. This section shall be added and shall read as follows:

Every dwelling shall provide one outside frost-proof hose bibb. The hose bibb shall be protected from backflow per section P2902.

R306.6. Floor drain. This section shall be added and shall read as follows:

All basements shall have a floor drain within twenty (20) feet of the heating/cooling system(s) and water heaters.

(SECTION R309 GARAGES AND CARPORTS)

R309.5 Fire sprinklers. Delete and insert:

Private garages shall be protected by fire sprinklers where the garage wall has been designed based on Table 302.1(2), Note a., and the homeowner has opted to purchase a fire sprinkler system for their residence, as per Missouri Revised Statutes 67.281. Sprinklers in garages shall be connected to an automatic sprinkler system that complies with Section P2904. Garage sprinklers shall be residential sprinklers or quick-response sprinklers, designed to provide a density of 0.05 gpm/ft2. Garage doors shall not be considered obstructions with respect to sprinkler placement.

(SECTION R311 MEANS OF EGRESS)

R311.3 Floors and landings at exterior doors. Delete and insert:

There shall be landing or floor at each required egress exterior door. The width of each landing shall not be less than the door served. Landings shall have a dimension of not less than 36 inches (914 mm) measured in the direction of travel. The slope at exterior landings shall not exceed 1/4 unit vertical in 12 units horizontal (2 percent).

Exceptions:

- 1. Exterior balconies less than 60 square feet (5.6 m2) and only accessed from a door are permitted to have a landing that is less than 36 inches (914 mm) measured in the direction of travel.
- 2. Non-required means of egress doors with no landing for future deck/balcony shall be protected with a guardrail when the door sill height exceeds seven and three-fourths inches (7 3/4") above grade.

R311.3.2 Floor elevations at other exterior doors. Delete and insert:

Doors other than the required egress door shall be provided with landings or floors not more than 7 3/4 inches (196 mm) below the top of the threshold.

Exceptions:

- 1. A top landing is not required where a stairway of four or fewer risers is located on the exterior side of the door, provided that door does not swing over the stairway.
- 2. Doors with no landing for future deck/balcony shall be protected by an approved guard if the door threshold is more than 7¾ inches above grade.

(SECTION R313 AUTOMATIC FIRE SPRINKLER SYSTEMS)

R313.1 Townhouse automatic fire sprinkler systems. Delete.

R313.1.1 Design and installation. Delete.

R313.2.1 Design and installation..

(CHAPTER 4 FOUNDATIONS)

(SECTION 403 FOOTINGS)

R403.1.7 Footings on or adjacent to slopes. Delete and insert:

The placement of buildings and structures on or adjacent to slopes steeper than 1 unit vertical in 3 units horizontal (33.3-percent slope) shall conform to Sections R403.1.7.1 through R403.1.7.4 or plans as signed and sealed by a professional engineer licensed in the State of Missouri.

Exception: Where unstable soil or ground water conditions do not exist, concrete foundation walls may be constructed in accordance with Table R404.1.2(10).

(SECTION R404 FOUNDATION AND RETAINING WALLS)

Insert a new Table R404.1.2(10) to read as follows:

Table R404.1.2(10) Concrete Foundation Walls

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

- 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.
- 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.

- 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.
- 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.
- 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.
- 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.

(SECTION R405 FOUNDATION DRAINAGE)

R405.1 Concrete or masonry foundations. Delete and insert:

Drains shall be provided around concrete or masonry foundations that retain earth and enclose habitable or usable spaces located below grade. Drainage tiles, gravel or crushed stone drains, perforated pipe or other approved systems or materials shall be installed at or below the top of the footing or below the bottom of the slab and shall discharge by gravity or mechanical means into an approved drainage system. Gravel or crushed stone drains shall extend not less than 1 foot (305 mm) beyond the outside edge of the footing and 6 inches (152 mm) above the top of the footing and be covered with an approved filter membrane material. The top of open joints of drain tiles shall be protected with strips of building paper. Except where otherwise recommended by the drain manufacturer, perforated drains shall be surrounded with an approved filter membrane or the filter membrane shall cover the washed gravel or crushed rock covering the drain. Drainage tiles or perforated pipe shall be placed on not less than 2 inches (51 mm) of washed gravel or crushed rock not less than one sieve size larger than the tile joint opening or perforation and covered with not less than 6 inches (152 mm) of the same material.

Exceptions:

- 1. A drainage system is not required where the foundation is installed on well-drained ground or sand-gravel mixture soils according to the Unified Soil Classification System, Group I soils, as detailed in Table R405.1.
- 2. Drains provided as detailed in Section R405.1.2 are approved as an alternative method to meet the requirements of this section.

R405.1.2 Soil evaluations. This section shall be added and read as follows:

An evaluation of the soil 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 Groundwater present. This section shall be added and shall read as follows:

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 No groundwater present. This section shall be added and shall read as follows:

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 Filter membranes. This section shall be added and shall read as follows:

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.

R450.1.2.4 Drainage system. This section shall be added and shall read as follows:

A drainage system shall discharge by gravity to daylight or be connected to an approved sump (15 inches in diameter x 18 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.

(CHAPTER 5 FLOORS)

(SECTION R506 CONCRETE FLOORS (ON GROUND))

R506.2.3 Vapor retarder. Delete and insert:

A minimum 6 mil (0.006 inch; 0.152 mm) vapor retarder conforming to ASTM E1745 Class A requirements with joints lapped not less than 6 inches (152 mm) shall be placed between the concrete floor slab and the base course or the prepared subgrade where a base course does not exist.

(CHAPTER 6 WALL CONSTRUCTION)

(SECTION R602 WOOD WALL FRAMING)

R602.1 General. Delete and insert:

Wood and wood-based products used for load-supporting purposes shall conform to the applicable provisions of this section.

Exception: Exterior wall sheathing shall not include wood structural panels with a thickness less than 3/8" or structural fiberboard sheathing with a thickness of less than 1/2". The use of such materials is prohibited for the purpose of providing structural support and protection to the exterior walls of residential buildings, mixing of exterior wall sheathing materials is prohibited.

(CHAPTER 9 ROOF ASSEMBLIES)

(SECTION R905 REQUIREMENTS FOR ROOF COVERINGS)

R905.2.8.2 Valleys. Delete and insert:

Valley linings shall be installed in accordance with the manufacturer's instructions before applying shingles. Valley linings of the following types shall be permitted:

- 1. For open valleys (valley lining exposed) lined with metal, the valley lining shall be not less than 24 inches (610 mm) wide and of any of the corrosion-resistant metals in Table R905.2.8.2.
- 2. For open valleys, valley lining of two plies of mineral-surfaced roll roofing, complying with ASTM D3909 or ASTM D6380 Class M, shall be permitted. The bottom layer shall be 18 inches (457 mm) and the top layer not less than 36 inches (914 mm) wide.
- 3. For closed valleys (valley covered with shingles), valley lining of two ply of No. 15 felt complying with ASTM 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. Delete and insert:

A drip edge shall be provided at eaves and rake edges of shingle roofs. Adjacent segments of drip edge shall be overlapped not less than 2 inches (51 mm). Drip edges shall extend not less than 1/4 inch (6.4 mm) below the roof sheathing and extend up back onto the roof deck not less than 2 inches (51 mm). Drip edges shall be mechanically fastened to the roof deck at not more than 12 inches (305 mm) o.c. with fasteners as specified in Section R905.2.5. Underlayment shall be installed over the drip edge along eaves and under the drip edge along rake edges.

Exception: Unless the drip edge is specifically required by the manufacturer's installation instructions, metal wrapped fascia extending 1 inch under the roof covering with the underlayment installed over it shall be deemed to meet the requirements of this section.

(CHAPTER 10 CHIMNEYS AND FIREPLACES)

(SECTION R1005 FACTORY BUILT CHIMNEYS)

R1005.9 Installation. This section shall be added and shall read as follows:

Factory-built chimneys shall be installed in accordance with the manufacturer's installation instructions. The flue chase for a factory-built chimney shall have a minimum of one thickness of five-eighths-inch Type X drywall or its equivalent extending to the roof sheathing of the structure applied to the inside of every portion of the flue chase that abuts a structure.

R1005.10 Required fire separation enclosures. This section shall be added and shall read as follows:

All prefabricated metal chimneys shall be enclosed in a shaft with one layer of five-eighths-inch Type X drywall or equivalent from the fireplace connector to the underside of the roof sheathing securely attached with framing material. When the chimney is located on the exterior of the structure, it need only be separated by lining the exterior wall adjacent to the shaft with one layer of five-eighths-inch Type X drywall or equivalent. All joints are to be tight within one-eighth inch or taped with a layer of joint compound. Required clearances shall be maintained between chimney and the drywall per the chimney manufacturer's specifications.

(SECTION 1006 EXTERIOR AIR SUPPLY)

R1006.2 Exterior air intake. Delete and insert:

The exterior air intake 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 non-mechanically 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.

(CHAPTER 11 ENERY EFFICIENCY)

(SECTION N1101 GENERAL)

N1101.5 (R103.2) Information on construction documents. Delete and insert:

Construction documents shall be drawn to scale on suitable material. Electronic media documents are permitted to be submitted when approved by the code official. Construction documents and supporting secondary documentation shall be of sufficient clarity to indicate the location, nature and extent of the work proposed, and show in sufficient detail pertinent

data and features of the building, systems and equipment as herein governed. Details shall include the following as applicable:

- 1. Energy compliance path.
- 2. Insulation material and their R Values.
- 3. Fenestration, U-factors, and solar heat gain coefficients (SHGC).
- 4. Area-weighted U-factor and solar heat gain coefficients (SHGC) calculations.
- 5. Mechanical system design criteria.
- 6. Mechanical and service water heating systems and equipment types, sizes, and efficiencies.
- 7. Equipment and system controls.
- 8. Duct sealing, duct and pipe insulation and location.
- 9. Air sealing details.

N1101.13 (R401.2) Application. Delete and insert:

Residential buildings shall comply with Section N1101.13.1, N1101.13.2, N1101.13.3 or N1101.13.4.

N1101.13.5 (R401.2.5) Additional energy efficiency. Delete.

(SECTION N1102 (R402) BUILDING THERMAL ENVELOPE)

Table N1102.1.3 (R402.1.3) shall be amended as follows:

For Climate Zone "4 except Marine" the values shall be replaced as follows: Fenestration U-Factor^{b,i} 0.40; Glazed Fenestration SHGC^{b,e}, NR; Ceiling R-Value, 38; Wood Frame Wall R-Value^g, 13; Basement Wall R-Value, 10ci or 13^j.

All other values not listed or changed herein, and other superscripts not listed or changed herein that are applicable to Table N1102.1.3 (R402.1.3) shall remain the same.

There shall be added a new subsection "j" to Table N1102.1.3 (R402.1.3) to read as follows:

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.

N1102.1.5 (R402.1.5 Total UA Alternative). Delete and insert:

Where the total building thermal envelope UA, the sum of U-factor times assembly area, is less than or equal to the Total UA resulting from multiplying the U-factors in Table N1102.1.2 by the same assembly area as in the proposed building, the building shall be considered to be in compliance with Table N1102.1.2. The UA calculation shall be performed using a method consistent with the ASHRAE Handbook of Fundamentals and shall include the thermal bridging effects of framing materials. In addition to UA compliance, the SHGC requirements of Table N1102.1.2 and the maximum fenestration U-factors of Section N1102.5 shall be met

Table N1102.1.5, Minimum Projection Factor Required by Orientation for SHGC Exception shall be added as to read as follows:

Orientation	Projection Factor	
North	>=0.40 ^a	
South	>=0.20	
East	>=0.50	
West	>=0.50	

a. For the north orientation, a vertical projection located on the west edge of the fenestration with the equivalent of PF >=0.15 shall also satisfy the minimum projection factor requirement.

N1102.2.4 (R402.2.4) Access hatches and doors. Delete and insert:

Access hatches and doors from conditioned to unconditioned spaces such as attics and crawl spaces shall be insulated to R-38.

N1102.4 (R402.4) Air leakage. Delete and insert:

The building thermal envelope may be designed and constructed to limit air leakage in accordance with the requirements of Sections N1102.4.1 through N1102.4.5.

Table N1102.4.1.1 (402.1.1.1)^a Air Barrier and Insulation Installation shall be amended as follows:

Component	Air Barrier Criteria	Insulation Installation Criteria
General Requirements	A continuous air barrier shall be required in the building envelope.	Air-permeable insulation shall not be used as a sealing material.
Ceiling/attic	Breaks or joints in the air barrier shall be sealed. The air barrier in any dropped ceiling or soffit shall be aligned with the insulation and any gaps in the air barrier sealed.	The insulation in any dropped ceiling/soffit shall be aligned with the air barrier.

	Access openings, drop-down stairs or	
	knee wall doors to unconditioned attic spaces shall be sealed weatherstripped.	
Walls	The air barrier in any dropped ceiling or soffit shall be aligned with the insulation and any gaps in the air barrier sealed.	The insulation in any dropped ceiling/soffit shall be aligned with the air barrier.
	Access openings, drop-down stairs or knee wall doors to unconditioned attic spaces shall be weatherstripped.	
Windows, skylights, and doors	The space between framing and skylights, and the jambs of windows and doors, shall be sealed.	
Rim joists	Rim joists shall include an exterior air barrier, ^b	Rim joists shall be insulated.
Floors, including cantilevered floors and floors above garages	The air barrier shall be installed at any exposed edge of insulation	Floor framing cavity insulation shall be installed to maintain permanent contact with the underside of subfloor decking. Alternatively, floor framing cavity insulation shall be in contact with the top side of sheathing, or continuous insulation installed on the underside of floor framing and extending from the bottom to the top of all perimeter floor framing members.
Basement crawl spaces and slab foundation	Exposed earth in unvented crawl spaces shall be covered with Class I vapor retarder/air barrier in accordance with Section R402.2.10.	Crawl space insulation, where provided instead of floor insulation, shall be installed in accordance with Section R402.2.10.
	Penetrations through concrete foundation walls and slabs shall be air sealed.	
	Class 1 vapor retarders shall not be used as an air barrier on below-grade walls and shall be installed in accordance with Section R702.7	
Shafts, penetrations	Duct and flue shafts and other similar penetrations to exterior or unconditioned space shall be sealed to allow for expansion, contraction and mechanical vibration.	Insulation shall be fitted tightly around utilities passing through shafts and penetrations in the building thermal envelope to maintain required R-value.
	Utility penetrations of the air barrier shall be caulked, gasketed or otherwise sealed and shall allow for expansion, contraction of materials and mechanical vibration.	
Narrow cavities	Narrow cavities of 1 inch or less that are not able to be insulated shall be air sealed.	Batts to be installed in narrow cavities shall be cut to fit or narrow cavities shall be filled with insulation that on installation readily conforms to the available cavity space.
Garage separation	Air sealing shall be provided between the garage and conditioned spaces.	Insulated portions of the garage separation assembly shall be installed in accordance with Sections R303 and R402.2.7.
Recessed lighting	Recessed light fixtures installed in the building thermal envelope shall be sealed in accordance with Section R402.4.5.	Recessed light fixtures installed in the building thermal envelope shall be airtight and IC rated, and shall be buried or surrounded with insulation.
Plumbing, wiring or other obstructions	All holes created by wiring, plumbing or other obstructions in the air barrier assembly shall be air sealed.	Insulation shall be installed to fill the available space and surround wiring, plumbing, or other obstructions, unless the required R-value can be met by installing insulation and air barrier systems completely to the exterior side of the obstructions.

Shower/tub on exterior wall		Exterior walls adjacent to showers and tubs shall be insulated.
Electrical/phone box on exterior walls	The air barrier shall be installed behind electrical and communication boxes. Alternatively, air-sealed boxes shall be installed.	
HVAC register boots	HVAC supply and return register boots that penetrate building thermal envelope shall be sealed to the subfloor, wall covering or ceiling penetrated by the boot.	
Concealed sprinklers	Where 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.	

For SI: 1 inch = 25.4 mm

- a. Inspection of log walls shall be in accordance with the provision of ICC 400.
- b. Air barrier and insulation full enclosure is not required in unconditioned/ventilated attic spaces and at rim joists.

N1102.4.1.2 (R402.4.1.2) Testing. Delete and insert:

Any building or dwelling unit may be tested for air leakage. The maximum design air leakage rate for any building or dwelling unit under any compliance path shall not exceed 5.0 air changes per hour or 0.28 cubic feet per minute (CFM) per square foot [0.0079 m3/(s x m2)] of dwelling unit enclosure area. For any building or dwelling unit designed for 3.0 or less air changes per hour, testing shall be conducted in accordance with ANSI/RESNET/ICC 380, ASTM E779 or ASTM E1827 and reported at a pressure of 0.2 inch 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 have been sealed.

Exception. For heated, attached private garages and heated, detached private garages accessory to one-and two-family dwelling and townhouses not more than three stories above grade plane in height, building envelope tightness and insulation installation shall be considered acceptable where the items in Table N1102.4.1.1, applicable to the method of construction, are field verified. Where required by the code official, an approved third party, independent from the installer, shall inspect both the air barrier and insulation installation criteria. Heated, attached private garage space shall be thermally isolated from all other conditioned spaces in accordance with Sections N1102.2.12 and N1102.3.5, as applicable.

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, where installed at the time of the test, shall be open.
- 4. Exterior or interior terminations for continuous ventilation systems shall be sealed.
- 5. Heating and cooling systems, where installed at the time of the test, shall be turned off.
- 6. Supply and return registers, where installed at the time of the test, shall be fully open.

Exception. When testing individual dwelling units, an air leakage rate not exceeding 0.30 cubic feet per minute per square foot [0.008m3/(s x m2)] of the dwelling unit enclosure area, tested in accordance with ANSI/RESNET/ICC 380, ASTM E779 or ASTM E1827 and reported at a pressure of 0.2 inch water gauge (50 Pa), shall be permitted in all climate zones for:

- 1. Attached single- and multiple-family building dwelling units.
- 2. Buildings or dwelling units that are 1,500 square feet (139.4m²) or smaller.

Mechanical ventilation shall be provided in accordance with Section M1505 of this code or Section 403.3.2 of the International Mechanical Code, as applicable, or with other approved means of ventilation.

N1102.4.1.3 (R402.4.1.3) Leakage rate. Delete and insert:

Where complying with Section N1101.13.1, the building or dwelling unit shall have a design air leakage rate not exceeding 5.0 air changes per hour.

N1102.4.4 (R402.4.4) Rooms containing fuel-burning appliances. Delete and insert:

In Climate Zones 3 through 8, where open combustion airducts provide combustion air to open combustion fuel-burning appliances, the appliances and combustion air opening shall be located outside the building thermal envelope or enclosed in a room that is isolated from inside the thermal envelope. Such rooms shall be sealed and insulated in accordance with the envelope requirements of Table N1102.1.3, where the walls, floors and ceilings shall meet a minimum of the basement wall R-value requirement. The door into the room shall be fully gasketed and any water lines and ducts in the room insulated in accordance with Section N1103. The combustion air duct shall be insulated where it passes through conditioned space to an R-value of not less than R-8.

Exceptions.

- 1. Direct vent appliances with both intake and exhaust pipes installed continuous to the outside.
- 2. Fireplaces and stoves complying with Sections N1102.4.2 and R1006, Mechanical equipment in an unfished space.

(SECTION N1103 (R403) SYSTEMS)

N1103.3.4 (R403.3.4) Sealing. Delete and insert:

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.

3. A duct air leakage test shall not be required where the ducts and air handlers are located entirely within the building thermal envelope.

N1103.3.5 (R403.3.5) Duct testing. Delete and insert:

Ducts shall be pressure tested in accordance with ANSI/RESNET/ICC 380 or ASTM E1554 to determine air leakage by one of the following methods:

- 1. Rough-in test: Total leakage shall be measured with a pressure differential of 0.1 inch w.g. (25 Pa) across the system, including the manufacturer's air handler enclosure if installed at the time of the test. Registers shall be taped or otherwise sealed during the
- 2. Postconstruction test: Total leakage shall be measured with a pressure differential of 0.1 inch w.g. (25 Pa) across the entire system, including the manufacturer's air handler enclosure. Registers shall be taped or otherwise sealed during the test.

Exception. A duct air-leakage test shall not be required where the ducts and air handlers are located entirely within the building thermal envelope. A duct air-leakage test shall not be required for ducts serving heating, cooling, or ventilation systems that are not integrated with ducts service heating or cooling systems.

N1103.3.7 (R403.3.7) Building cavities. Delete and insert:

Building farming cavities used as air plenums shall comply with section M1601.1.1#7.

N1103.5.2 (R403.5.2) Hot water pipe insulation. Delete and insert:

Insulation for service hot water piping with a thermal resistance, R-value, of not less than R-3 shall be applied to the following:

- 1. Piping larger than ¾ inch (19 mm) in nominal diameter located inside the conditioned
- 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 piping.

7. Supply and return piping in circulation and recirculation systems other than cold water pipe return demand recirculation systems.

N1103.6.1 (R403.6.1) Heat or energy recovery ventilation. Delete in its entirety.

N1103.6.2 (R403.6.2) Whole dwelling mechanical ventilation system fan efficacy. Delete.

Table N1103.6.2 (R403.6.2) Wole-Dwelling Mechanical Ventilation System Fan Efficacy. Delete.

N1103.6.3 (R403.6.3) Testing. Delete.

(SECTION N1104 (R404) ELECTRICAL POWER AND LIGHTING SYSTEMS)

N1104.3 (R404.3) Exterior lighting controls. Delete.

(CHAPTER 13 GENERAL MECHANICAL SYSTEM REQUIREMENTS)

(SECTION M1301 GENERAL)

M1301.2 Identification. Delete and insert:

Each ten foot length of pipe and tubing and each pipe fitting utilized in a mechanical system shall bear the identification of the manufacturer.

M1301.5 Third party testing and certification. Delete.

(SECTION M1305 APPLICANCE ACCESS)

M1305.1.3.3 Electrical requirements. Delete and insert:

A luminaire controlled by a switch located at the required passageway opening and a receptacle outlet shall be installed at or near the appliance location in accordance with Chapter 39. Exposed lamps shall be protected from damage by location or lamp guards.

Exception: Basements.

(SECTION M1307 APPLIANCE INSTALLATION)

M1307.2 Anchorage of appliances. Delete and insert:

Appliances designed to be fixed in position shall be fastened or anchored in an approved manner. In Seismic Design Categories D0, D1 and D2 water heaters and thermal storage units shall be anchored or strapped to resist horizontal displacement caused by earthquake motion in accordance with one of the following:

- 1. Anchorage and strapping shall be designed to resist a horizontal force equal to one-third of the operating weight of the water heater storage tank, acting in any horizontal direction. Strapping shall be at points within the upper one-third and lower one-third of the appliance's vertical dimensions. At the lower point, the strapping shall maintain a minimum distance of 4 inches (102 mm) above the controls.
- 2. The anchorage strapping shall be in accordance with the appliance manufacturer's recommendations.

(CHAPTER 14 HEATING AND COOLING EQUIPMENT AND APPLIANCES)

(SECTION M1411 HEATING AND COOLING EQUIPMENT)

M1411.3.1.2 Appliance, equipment and insulation in pans. Delete.

(CHAPTER 15 EXHAUST SYSTEMS)

(SECTION M1501 GENERAL)

M1501.1 Outdoor discharge. Delete and insert:

The air removed by every mechanical exhaust system shall be discharged to the outdoors in accordance with Section M1504.3. Air shall not be exhausted into an attic, soffit, ridge vent or crawl space.

Exceptions. Whole-house ventilation-type attic fans that discharge into the attic space of dwelling units having private attics shall be permitted. Bathroom exhaust may discharge to an attic gable vent or ventilated soffit.

(SECTION M1502 CLOTHES DRYER EXHAUST)

M1502.4.2 Duct installation. Delete and insert:

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.

(SECTION M1503 DOMESTIC COOKING EXHAUST EQUIPMENT)

M1503.6 Makeup air required. Delete and insert:

Where one or more gas, liquid or solid fuel-burning appliance that is neither direct-vent nor uses a mechanical draft venting system is located within a dwelling unit's air barrier, each exhaust system capable of exhausting in excess of 600 cubic feet per minute shall be mechanically or passively provided with makeup air at a rate approximately equal to the

exhaust air rate. Such makeup air systems shall be equipped with not fewer than one damper complying with Section M1503.6.2.

Exception. Makeup air is not required for exhaust systems installed for the exclusive purpose of space cooling and intended to be operated only when windows or other air inlets are open.

(CHAPTER 16 DUCT SYSTEMS)

(SECTION M1601 DUCT CONSTRUCTION)

M1601.1.1 Above ground duct systems. Delete and insert:

Above ground duct systems shall conform to the following:

- 1. Equipment connected to duct systems shall be designed to limit discharge air temperature to not greater than 250oF (121oC).
- 2. Fibrous glass duct construction shall conform to the SMACNA Fibrous Glass Duct Construction Standards or NAIMA Fibrous Glass Duct Construction Standards.
- 3. Field-fabricated and shop-fabricated metal and flexible duct constructions shall conform to the SMACNA HVAC Duct Construction Standards Metal and Flexible except as allowed by Table M1601.1.1. Galvanized steel shall conform to ASTM A 653.
- 4. The use of gypsum products to construct return air ducts or plenums is permitted, provided that the air temperature does not exceed 125oF (52oC) and exposed surfaces are not subject to condensation.
- 5. Duct systems shall be constructed of materials having a flame spread index of not greater than 200.
- 6. Stud wall cavities and the spaces between solid floor joists to be used as non-ducted air plenums shall comply with the following conditions:
 - a. These cavities or spaces shall not be used as a plenum for air supply.
 - b. These cavities or spaces shall not be a part of required fire-resistance-rated assembly.
 - c. Stud wall cavities shall not convey air from more than one floor level.
 - d. Stud wall cavities and joist-space plenums shall be isolated from adjacent concealed spaces by tight-fitting fireblocking in accordance with Section R302.11. Fire-blocking materials used for isolation shall comply with Section R302.11.1.
 - e. Stud wall cavities in the outside walls of building envelope assemblies shall not be utilized as air plenums.
 - f. Building cavities used as plenums shall be sealed.
- 7. Volume dampers, equipment and other means of supply, return and exhaust air adjustment used in system balancing shall may be provided with access.

Table M1601.1.1 shall be deleted and replaced as follows:

Duct Construction Minimum Sheet Metal Thickness for

Single Dwelling Units^a

	Static Pressure			
Round Duct Diameter	½ inch water gage		1 inch water gage	
(inches)	Thickness (inches)		Thickness (inches)	
	Galvanized	Aluminum	Galvanized	Aluminum
≤ 12	0.013	0.018	0.013	0.018
12 to 14	0.013	0.018	0.016	0.023
15 to 17	0.016	0.023	0.019	0.027
18	0.016	0.023	0.024	0.034
19 to 20	0.019	0.027	0.024	0.034
	Static Pressure			
Rectangular Duct	½ inch water gage		1 inch water gage	
Dimension (largest	Thickness (inches)		Thickness (inches)	
dimension)	Galvanized	Aluminum	Galvanized	Aluminum
<u>< 8</u>	0.013	0.018	0.013	0.018
9 to 10	0.013	0.018	0.016	0.023
11 to 12	0.016	0.023	0.019	0.027
13 to 16	0.016	0.027	0.019	0.027
17 to 18	0.019	0.027	0.024	0.034
19 to 20	0.019	0.034	0.024	0.034

For SI: 1 inch = 25.4 mm, 1 inch water gage = 249 Pa.

M1601.4.1 Joints, seams, and connections. Delete and insert:

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:

a. Ductwork that exceeds 20 inches by dimension or exceeds a pressure of 1 inch water gage shall be constructed in accordance with SMACNA *HVAC Duct Construction Standards - Metal and Flexible*

- 1. Spray polyurethane foam shall be permitted to be applied without additional joint seals.
- 2. Where a duct connection is made that is partially without access, three screws or rivets shall be equally spaced on the exposed portion of the joint as to prevent a hinge effect.

(SECTION M1602 RETURN AIR)

M1602.2 Return air openings. Delete and insert:

Return air openings for heating, ventilation and air conditioning systems shall comply with all of the following:

- 1. Openings shall not be located less than 10 feet (3048 mm) measured in any direction from an open combustion chamber or draft hood of another appliance located in the same room or space.
- 2. Return and transfer openings shall be sized in accordance with the appliance or equipment manufacturer's installation instructions, Manual D or the design of the registered design professional.
- 3. Return air shall not be taken from a closet less than 70 square feet, bathroom, toilet room, kitchen, garage, mechanical room, boiler room, furnace room or unconditioned attic.
 - a. Exceptions:
 - i. Taking return air from a kitchen is not prohibited where such return air openings serve the kitchen only and are located not less than 10 feet (3048 mm) from the cooking appliances.
 - ii. Dedicated forced-air systems serving only the garage shall not be prohibited from obtaining return air from the garage.
- 4. For other than dedicated HVAC systems, return air shall not be taken from indoor swimming pool enclosures and associated deck areas except where the air in such spaces is dehumidified.
- 5. Taking return air from an unconditioned crawl space shall not be accomplished through a direct connection to the return side of a forced-air furnace. Transfer openings in the crawl space enclosure shall not be prohibited.
- 6. Return air from one dwelling unit shall not be discharged into another dwelling unit.

(CHAPTER 21 HYDRONIC PIPING)

(SECTION 2101 HYDRONIC PIPING SYSTEMS INSTALLATION)

M2101.16 CPVC plastic pipe. Delete.

M2101.16.1 Threaded joints. Delete.

M2101.22.6 Expansion tanks. Delete and insert:

Shutoff valves may be installed at connections to non-diaphragm-type expansion tanks.

(SECTION M2105 GROUND-SOURCE HEAT-PUMP SYSTEM LOOP PIPING)

M2105.4 Piping and tubing materials standards. Delete and insert:

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 on geothermal ground loops both inside and underground.

M2105.9. CPVC plastic pipe. Delete.

M2105.9.1 Threaded joints. Delete.

(CHAPTER 24 FUEL GAS)

(SECTION G2408 (305) INSTALLATION)

G2408.4 (305.7) Clearance from grade. Delete and insert:

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.

(SECTION 2442 (618) FORCED-AIR WARM-AIR FURNANCES)

G2442.3 (618.3) Prohibited sources. Delete and insert:

Outdoor or return air for forced-air heating and cooling systems shall not be taken from the following locations:

- 1. Closer than 10 feet (3048 mm) from an appliance vent outlet, a vent opening from a plumbing drainage system or the discharge outlet of an exhaust fan, unless the outlet is 3 feet (914 mm) above the outside air inlet.
- 2. Where there is the presence of objectionable odors, fumes or flammable vapors; or where located less than 10 feet (3048 mm) above the surface of any abutting public way or driveway; or where located at grade level by a sidewalk, street, alley or driveway.
- 3. A hazardous or insanitary location or a refrigeration machinery room as identified in the International Mechanical Code.
- 4. A room or space, the volume of which is less than 25 percent of the entire volume served by such system. Where connected by a permanent opening having an area sized in accordance with this code, adjoining rooms or spaces shall be considered as a single room or space for the purpose of determining the volume of such rooms or spaces.
 - a. Exception. The minimum volume requirement shall not apply where the amount of return air taken from a room or space is less than or equal to the amount of supply air delivered to such room or space.

- 5. A room or space containing an appliance where such a room or space serves as the sole source of return air.
 - a. Exception. This shall not apply where:
 - i. The appliance is a direct-vent appliance or an appliance not requiring a vent in accordance with Section G2425.8.
 - ii. The room or space complies with the following requirements:
 - 1. The return air shall be taken from a room or space having a volume exceeding 1 cubic foot for each 10 Btu/h (9.6L/W) of combined input rating of all fuel-burning appliances therein.
 - 2. The volume of supply air discharged back into the same space shall be approximately equal to the volume of return air taken from the space.
 - 3. Return-air inlets shall not be located within 10 feet (3048 mm) of a draft hood in the same room or space or the combustion chamber of any atmospheric burner appliance in the same room or space.
 - iii. Rooms or spaces containing solid fuel-burning appliances, provided that return-air inlets are located not less than 10 feet (3048 mm) from the firebox of such appliances.
- 6. A closet, bathroom, toilet room, kitchen, garage, boiler room, furnace room or unconditioned attic.
 - a. Exceptions:
 - i. Where return air intakes are located not less than 10 feet (3048 mm) from cooking appliances and serve only the kitchen area, taking return air from a kitchen area shall not be prohibited.
 - ii. Dedicated forced air systems serving only a garage shall not be prohibited from obtaining return air from the garage.
 - iii. Where a closet 70 square feet or greater in size is provided with a supply register, taking return air from the closet shall not be prohibited.
- 7. A crawl space by means of direct connection to the return side of a forced-air system. Transfer openings in the crawl space enclosure shall not be prohibited.

(CHAPTER 26 GENERAL PLUMBING REQUIREMENTS)

(SECTION P2603 STRUCTURAL AND PIPING PROTECTION)

P2603.5.1 Sewer depth. Delete and insert:

Building sewers that connect to private sewage disposal systems shall be a not less than 18 inches (453 mm) below finished grade at the point of septic tank connection. Building sewers shall be not less than 30 inches (762 mm) below grade.

(CHAPTER 28 WATER HEATERS)

(SECTION P2801 GENERAL)

P2801.8 Water heater seismic bracing. Delete and insert:

In Seismic Design Categories D0, D1 and D2 water heaters shall be anchored or strapped in the upper one-third and in the lower one-third of the appliance to resist a horizontal force equal to one-third of the operating weight of the water heater, acting in any horizontal direction, or in accordance with the appliance manufacturer's recommendations.

(CHAPTER 39 POWER AND LIGHTING DISTRIBUTION)

(SECTION E3902 GROUND-FAULT AND ARC-FAULT CIRCUIT-INTERUPTER PROTECTION)

E3902.2 Garage and Accessory Building receptacles. Delete and insert:

125-volt, single-phase, 15- or 20-ampere receptacles installed in garage and grade-level portions of unfinished accessory buildings used for storage or work areas shall have ground-fault circuit-interrupter protection for personnel. [210.8(A)(2)]

Exception: Fastened in place appliances or outlets designated for refrigerators/freezers.

E3902.5 Unfinished basement receptacles. Delete and insert:

125-volt, single-phase, 15- and 20-ampere receptacles installed in unfinished basements shall have ground-fault circuit-interrupter protection for personnel. For purposes of this section, unfinished basements are defined as portions or areas of the basement not intended as habitable rooms and limited to storage areas, work areas, and similar areas. [210.8(A)(5)]

Exceptions:

- 1. A receptacle supplying only a permanently installed fire alarm or burglar alarm system. Receptacles installed in accordance with this exception shall not be considered as meeting the requirements of section E3901.9. Must be a single dedicated outlet (not a duplex).
- 2. Fastened in place appliances or outlets designated for refrigerators/freezers. Must be a single dedicated outlet (not a duplex).
- 3. Sump pump: sump pump receptacles must be a single dedicated outlet (not a duplex) and only when a sump pump has been installed.

E3902.6 Kitchen receptacles. Delete and insert:

125-volt, single-phase, 15- and 20-ampere receptacles that serve countertop surfaces shall have ground-fault circuit-interrupter protection for personnel. [210.8(A)(6)].

Exception: Fastened in place appliances or outlets designated for refrigerators/freezers.

E3902.9. Laundry areas. Delete.

E3902.11 Kitchen dishwasher branch circuit. Delete.

E3902.18 Location of ground-fault circuit-interrupter protection. Delete and insert:

Ground-fault circuit interrupters shall be installed only in a readily accessible location [210.8(A)].

E3902.20 Arc-fault circuit-interrupter protection. Delete and insert:

Branch circuits that supply 120-volt, single phase, 15 and 20 ampere outlets installed in bedrooms shall be protected by any method described in Section E3902.20(1) through (6), including the exception described therein.

E3902.21 Arc-fault circuit interrupter for branch circuit extensions or modifications. Delete and insert:

Where branch-circuit wiring is modified, replaced, or extended in any of the areas specified in Section E3902.17, the branch circuit shall be protected by one of the following:

- 1. A combination-type AFCI located at the origin of the branch circuit.
- 2. An outlet branch-circuit type AFCI located at the first receptacle outlet of the existing branch circuit. [210.12(B)]

Exceptions. AFCI protection shall not be required where the extension of the existing branch circuit conductors is not more than 30 feet (9.5 m) in length and does not include any additional outlets or devices other than splicing devices. This measurement shall not include the conductors inside an enclosure, cabinet or junction box. [210.12(B) Exception].

(CHAPTER 40 DEVICES AND LUMINARIES)

(SECTION E4002 RECEPTACLES)

E4002.8 Damp locations. Delete and insert:

A receptacle installed outdoors in a location protected from the weather or in other damp locations shall have an enclosure for the receptacle that is weatherproof when the receptacle cover(s) is closed and an attachment plug cap is not inserted. An installation suitable for wet locations shall also be considered suitable for damp locations [406.9(A)].

E4002.14 Tamper resistant receptacles. Delete.

Section 500.300. Penalty.

- A. Any person violating any of the provisions of the code adopted in this Article shall be deemed guilty of an ordinance violation and upon conviction thereof shall be fined in an amount not exceeding five hundred dollars (\$500.00) or be imprisoned in the City or County Jail for a period not exceeding ninety (90) days, or both such fine and imprisonment. Each day such violation is committed or permitted to continue shall constitute a separate ordinance violation and shall be punishable as such hereunder.
- B. Whenever any provision of the Revised Statutes of Missouri or other Statute of the State limits the authority of the City to punish the violation of any particular provision of the code adopted in this Article to a fine of less amount than that provided in this Section or imprisonment for a shorter term than that provided in this Section, the violation of such particular provision shall be punished by the imposition of not more than the maximum fine or imprisonment as authorized, or by both such fine or imprisonment, if authorized.

SECTION 10. Savings Clause: Except as expressly set forth herein, nothing contained in this Ordinance shall in any manner be deemed or construed to alter, modify, supersede, supplant, or otherwise nullify any other Ordinance of the City or the requirements thereof whether or not relating to or in any manner connected with the subject matter hereof.

SECTION 11. Severability Clause: If any term, condition, or provision of this Ordinance shall, to any extent, be held to be invalid or unenforceable, the remainder hereof shall be valid in all other respects and continue to be effective and each and every remaining provision hereof shall be valid and shall be enforced to the fullest extent permitted by law, it being the intent of the Board of Aldermen that it would have enacted this Ordinance without the invalid or unenforceable provisions. In the event of a subsequent change in applicable law so that the provision which had been held invalid is no longer invalid, said provision shall thereupon return to full force and effect without further action by the City and shall thereafter be binding.

SECTION 12. Effective Date: This Ordinance shall be in full force and take effect from and after its final passage and approval.

[The remainder of this page is intentionally left blank.]

Read the first (1st) time this 21 day of Lebruary, 2024.
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As Presiding Officer and as Mayor
Attest:
City Clerk
Read the second (2 nd) time and passed this 24 day of 4ml, 2024.
As Presiding Officer and as Mayor
Attest:
City Clerk
Approved this <u>24</u> day of <u>4un</u> , 2024.
Tget Kombrul
Mayor /
Attest:
City Clerk
Oil, citing of