

DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS

DIRECTOR'S OFFICE

CONSTRUCTION CODE

Filed with the secretary of state on November 13, 2023

These rules become effective 120 days after filing with the secretary of state.

(By authority conferred on the director of the department of licensing and regulatory affairs by section 4 of the Stille-DeRossett-Hale single state construction code act, 1972 PA 230, MCL 125.1504, and Executive Reorganization Order Nos. 2003-1, 2008-4 and 2011-4, MCL 445.2011, 445.2025 and 445.2030)

R 408.30901a, R 408.30904a, R 408.30905a, R 408.30906a, R 408.30923a, R 408.30928a, R 408.30935a, R 408.30936a, R 408.30945a, R 408.30946, R 408.30995a, and R 408.30996 of the Michigan Administrative Code are amended, R 408.30918 and R 408.30947b is added, and R 408.30902a, R 408.30908a, R 408.30910a, R 408.30912a, R 408.30927a, R408.30947a, and R 408.30948 are rescinded, as follows:

PART 9A. MECHANICAL CODE

AMENDMENTS AND ADDITIONS TO BASIC MECHANICAL CODE

R 408.30901a International mechanical code; adoption by reference.

Rule 901a. (1) The provisions of the international mechanical code, 2021 edition, except for sections 103.1 to 103.3, 104.2, 104.8, 104.8.1, 106.1.1, 106.1.2, 106.3, 106.3.2, 106.4.5, 109.1 to 109.6, 112.2.5 to 112.2.5.3, 113.1 to 113.4, 114.1, 115.3, 116.1 to 116.4, 1101.9, 1102.3, appendix B, and appendix C, govern the construction, alteration, relocation, demolition, use, and occupancy of buildings and structures. With the exceptions noted, the code is adopted in these rules by reference.

(2) All references to the International Building Code, International Residential Code, International Energy Conservation Code, National Electrical Code, International Mechanical Code, and International Plumbing Code mean the Michigan Building Code, Michigan Residential Code, Michigan Energy Code, Michigan Electrical Code, Michigan Mechanical Code, and Michigan Plumbing Code respectively.

(3) ASHRAE 15-2022 edition: Safety Standard for Refrigeration Systems and ASHRAE 34-2022 edition: Designation and Safety Classification of Refrigerants can be purchased at www.techstreet.com/ashrae for \$178.00. UL/CSA 60335-2-40-2022 edition: Household and Similar Electrical Appliances-Safety-Part 2-40: Particular Requirements for Electrical Heat Pumps, Air Conditioners and Dehumidifiers can be purchased at www.shopulstandards.com for \$521.00. UL/CSA 60335-2-89-2021 edition: Household

and Similar Electrical Appliances-Safety-Part 2-89: Particular Requirements for Commercial Refrigerating Appliances with an incorporated or Remote Refrigerant Unit or Compressor can be purchased at www.shopulstandards.com for \$519.00. Inspection of standards are available at the Michigan Department of Licensing and Regulatory Affairs, Bureau of Construction Codes, 611 W. Ottawa Street First Floor Ottawa Building, Lansing, Michigan 48933, or purchased through the bureau's website at www.michigan.gov/bcc. Additionally, the standards adopted are available for purchase from www.techstreet.com/ashrae and www.shopulstandards.com. The cost for purchase of the individual standard is noted in this subrule.

(4) The 2021 Michigan Mechanical code is available for inspection and purchase at the Department of Licensing and Regulatory Affairs, Bureau of Construction Codes, 611 West Ottawa Street, First Floor Ottawa Building, Lansing, Michigan 48933. The code may be purchased from the International Code Council, through the bureau of construction code's website at www.michigan.gov/bcc, at a cost as of the time of adoption of these rules of \$87.50 for each code book.

R 408.30902a Rescinded.

R 408.30904a Right of entry.

Rule 904a. Section 104.4 of the code is amended to read as follows:

104.4. If a building or premises are occupied, the code official shall present credentials to the occupant and request entry. If a building or premises is unoccupied, the code official shall first make a reasonable effort to locate either the owner, the owner's authorized agent, or another person having care or control of the building or premises and request entry. If entry is refused, the code official has recourse to every remedy provided by law to secure entry. If a code official obtains a proper inspection warrant or other remedy provided by law to secure entry, the owner, owner's authorized agent or occupant or person having charge, care or control of the building or premises shall not fail or neglect, after a proper request is made as provided in this rule, to allow the code official prompt entry into the building or premises to inspect or examine the building or premises pursuant to this code.

R 408.30905a Definitions.

Rule 905a. The following definitions are added to section 202 as follows:

(a) "Act" means the Stille-DeRossett-Hale single state construction code act, 1972 PA 230, MCL 125.1501 to 125.1531.

(b) "Cold weather months" means November 1 through April 1 in Michigan Energy Code climate zone 5A and from October 15 through May 1 in Michigan Energy Code climate zones 6A and 7.

(c) "Occupiable space" means a room or enclosed space designed for regular or non-regular human occupancy in which individuals congregate for activities, amusement, educational or similar purposes, or in which occupants are engaged at labor, and which is equipped with means of egress, heat, light, and ventilation facilities meeting the

requirements of this code. Occupiable space does not include those spaces that are intended primarily for other purposes such as storage rooms and equipment rooms.

R 408.30906a Work permit; submitting plans and specifications to authority.

Rule 906a. Sections 106.2, 106.3.1 106.4, 106.4.3, 106.4.4 of the code are amended to read as follows:

106.2. Permits not required. A person is not required to obtain a permit to perform mechanical work on any of the following items:

- (a) A portable heating or gas appliance that has inputs of less than 30,000 Btu's per hour.
- (b) Portable ventilation appliances and equipment.
- (c) A portable cooling unit.
- (d) Steam, hot water, or chilled water piping within any heating or cooling equipment or appliances regulated by the code.
- (e) Except for a heat exchanger, replacement of any manufacturer installed part on a listed and labeled appliance or listed and labeled equipment, if the replacement does not alter the approval of the appliance or equipment or make the appliance or equipment unsafe.
- (f) Self-contained refrigeration systems that contain 10 pounds or less of refrigerant, or that are actuated by motors of 1.5 horsepower or less.
- (g) Portable fuel cell appliances that are not connected to a fixed piping system and are not interconnected to a power grid.
- (h) An oil burner that does not require connection to a flue, such as an oil stove and a heater equipped with a wick.
- (i) Installing gas piping limited to 10 feet in length and not more than 6 fittings when changing or relocating a gas meter or regulator.
- (j) When installing geothermal vertical closed loops under the supervision of a mechanical contractor licensed in HVAC as long as the company meets both the following:
 - (1) Has obtained a certificate of registration as a well drilling contractor pursuant to part 127 of the public health code, 1978 PA 368, MCL 333.12701 to 333.12771.
 - (2) Has installed the geothermal vertical closed loops in accordance with the department of environment, Great Lakes, and energy's best practices regarding geothermal heat pump closed loops.

Exemption from the permit requirements of this code shall not grant authorization for work to be done in violation of the provisions of this code or other laws or ordinances of this jurisdiction.

106.3.1 Construction documents.

(1) Construction documents, engineering calculations, diagrams, and other data shall be submitted in 2 or more sets with each application for a permit. Code officials may require additional construction documents at any point during construction. The code official shall require construction documents, computations, and specifications to be prepared and designed by a registered design professional, licensed in accordance with the occupational code, 1980 PA 299, MCL 339.101 to 339.2677.

Exceptions:

1. The code official may waive the submission of construction documents, calculations, or other data if the nature of the work applied for is such that reviewing of construction documents is not necessary to determine compliance with the code.

2. Construction documents shall not be required when obtaining a permit from the bureau of construction codes for any of the following circumstances:

a. Alterations and repair work determined by the mechanical official to be of a minor nature.

b. Business, mercantile, and storage use group buildings having HVAC equipment only, with 1 fire area and not more than 3,500 square feet.

c. Work completed by a governmental subdivision or state agency costing less than \$15,000.00.

(2) Where special conditions exist, the code official may require additional construction documents to be prepared by a registered design professional.

(3) Construction documents shall be drawn to scale and shall be of sufficient clarity to indicate the location, nature, and extent of the work proposed and show in detail that the work conforms to the provisions of this code.

(4) Construction documents for buildings more than 2 stories in height shall indicate where penetrations will be made for mechanical systems, and the materials and methods for maintaining required structural safety, fire-resistance rating, and fire blocking.

106.4. Permit issuance. The enforcing agency shall review the application, construction documents, and other data filed by an applicant for a permit in accordance with the act. If the enforcing agency finds that the proposed work conforms to the requirements of the act, the code, and all other applicable laws and ordinances, and that all fees prescribed by the act have been paid, then the enforcing agency shall issue a permit to the applicant.

106.4.3. Expiration. Each permit issued by the code official under the provisions of the code shall expire by limitation and become null and void if the work authorized by the permit has not started within 180 days after the date of the permit is issued, or if the work authorized by the permit is suspended or abandoned at any time after the work has started, for a period of 180 days. Before work is recommenced on a project where a permit has expired, the permit must either be restored to "Issued" status and all necessary fees must be paid, or a new permit must be secured. If the code has changed and the work was not started, a new permit shall be first obtained, provided no changes have been made or will be made in the original construction document and that suspension or abandonment has not exceeded 1 year.

106.4.4. Extensions. A permittee holding an unexpired permit may apply for an extension of the time within which the permittee may begin work under that permit if for good and satisfactory reasons. The code official shall extend the time for action by the permittee for a period not exceeding 180 days if there is reasonable cause. No permit shall be extended more than once.

R 408.30908a Rescinded.

R 408.30910a Rescinded.

R 408.30912a Rescinded.

R 408.30918 Violation penalties.

Rule 918. Section 115.4 of the code is amended to read as follows:

115.4 Violation penalties. A person that violates a provision of the code, that fails to conform with any of the requirements of the code, or that erects, installs, alters, or repairs mechanical work in violation of the approved construction documents or directive of the enforcing agency, or a permit or certificate issued under the provisions of the code is subject to review, which may result in licensing action pursuant to the skilled trades regulation act, 2016 PA 407, MCL 339.5101 to 339.6133.

R 408.30923a Equipment installation.

Rule 923a. Section 301.10.1 is added to the code and section 309.1 of the code is amended to read as follows:

301.10.1. Electrical disconnect. The mechanical contractor shall ensure that all equipment is equipped with an externally accessible electrical disconnect switch on, or within 6 feet of, the equipment. The disconnect shall be permanently identified.

309.1. Occupiable space heating systems. Interior spaces intended for human occupancy shall be provided with heating facilities capable of maintaining a minimum interior room temperature of 68 degrees Fahrenheit, 20 degrees Celsius, at a point 3 feet, 914 millimeters, above the floor and 2 feet, 609.6 millimeters, from exterior walls at the required design temperature. The installation of portable space heaters shall not be used to comply with this section.

Exception:

1. Interior spaces where the primary purpose is not associated with human comfort.
2. Interior, seasonal spaces that are unoccupied during cold weather months, including restrooms, shower buildings, day use restrooms, concession stands, press boxes, ticket booths and locker rooms.
3. Group F, H, S or U occupancies.

R 408.30927a Rescinded.

R 408.30928a Solid fuel burning equipment.

Rule 928a. Section 901.5 is added to the code to read as follows:

901.5 Solid fuel burning equipment. Solid fuel burning equipment shall be listed and labeled in accordance with section 304.1 of the code and installed in accordance with the manufacturer's instructions and NFPA 211-2019 requirements.

R 408.30935a Performance test.

Rule 935a. Section 507.6.1.1 is added to the code to read as follows:

507.6.1.1 Capture and containment procedure. The field test identified in section 507.6.1 of the code shall be conducted in accordance with the smoke testing procedures established by the bureau of construction codes, which are available at no cost from the bureau of

construction code's website at www.michigan.gov/bcc, or from the Michigan Department of Licensing and Regulatory Affairs, Bureau of Construction Codes, 611 West Ottawa Street, First Floor Ottawa Building, Lansing, Michigan 48933.

R 408.30936a Scope of article.

Rule 936a. Section 1001.2 is added to the to read as follows:

1001.2. Boilers. In addition to the other provisions of the code, this article governs the installation, alteration, and repair of water heaters and boilers. The installation of boilers shall comply with the provisions of this code and the skilled trades regulation act, 2016 PA407, MCL 339.5101 to 339.6133.

R 408.30945a Ventilation; exhaust.

Rule 945a. Sections 501.3, 504.4, and 504.9.2, of the code are amended to read as follows:

501.3 Exhaust discharge. The air removed by every mechanical exhaust system shall be discharged outdoors at a point where it will not cause a public nuisance and not less than the distances specified in section 501.3.1 of the code. The air shall be discharged to a location from which it cannot again be readily drawn in by a ventilating system. Air shall not be exhausted into an attic or a crawl space, be directed onto walkways, or terminate within 3 feet of a ventilated section in a soffit.

Exceptions:

1. Whole-house ventilation-type attic fans shall be permitted to discharge into the attic space of dwelling units that have private attics.

2. Commercial cooking recirculating systems.

3. When installed in accordance with the manufacturer's instructions and when mechanical or natural ventilation is otherwise provided in accordance with chapter 4 of the code, listed and labeled domestic ductless range hoods shall not be required to discharge to the outdoors.

504.4 Exhaust installation. Dryer exhaust ducts for clothes dryers shall terminate on the outside of the building, shall not terminate within 3 feet of a ventilated section in a soffit, and shall be equipped with a back-draft damper. Screens shall not be installed at the duct termination. Ducts shall not be connected or installed with sheet metal screws or other fasteners that will obstruct the exhaust flow. Clothes dryer exhaust ducts shall not be connected to a vent connector, vent, or chimney. Clothes dryer exhaust ducts shall not extend into or pass through ducts or plenums.

504.9.2 Duct installation. Dryer exhaust ducts shall be supported at 4-foot, 1,219 millimeters, intervals and secured in place. The insert end of the duct shall extend into the adjoining duct or fitting in the direction of airflow. Ducts shall not be joined with screws or similar fasteners that protrude into the inside of the duct.

R 408.30946 Alterations and repairs.

Rule 946. Section 1001.3 is added to the code to read as follows:

1001.3. Alterations and repairs to boilers shall be in accordance with the skilled trades regulation act, 2016 PA 407, MCL 339.5101 to 339.6133.

R 408.30947a Rescinded.

R 408.30947b Refrigerants other than ammonia.

Rule 947b. Section 1101.1.1 of the code is amended to read as follows:

1101.1.1 Refrigerants other than ammonia. Refrigerant piping design and installation for systems containing a refrigerant other than ammonia, including pressure vessels and pressure relief devices, shall comply with this chapter and ASHRAE 15. System using A2L refrigerants shall comply with ASHRAE 15.

R 408.30948 Rescinded.

R 408.30995a Automatic sprinkler systems generally.

Rule 995a. Sections 1600.0, 1600.1, and 1600.2 are added to the code to read as follows:

1600.0. Automatic sprinkler systems; fire suppression systems.

1600.1 Scope. The provisions of this article provide the minimum requirements for the design and installation of automatic sprinkler systems in all occupancies, except for 1- and 2-family dwellings.

1600.2. Installations. Installations shall be in compliance with the provisions of the code. Fire suppression systems shall be in compliance with the provisions of the building code and shall be installed in accordance with the code and NFPA-13-2019 or NFPA-13D-2019 or NFPA-13R-2019, and NFPA-24-2019, and standards of the National Fire Protection Association listed in chapter 15.

R 408.30996 Process piping.

Rule 996. Sections 1700.0 and 1700.1 are added to the code to read as follows:

1700.0. Process piping.

1700.1 Scope. The provisions of this chapter provide the minimum requirements for the design and installation of process piping systems pursuant to ASME B31.3-2022.

1700.2 Process piping. Piping which is not part of a refrigeration system or part of a system designed to provide air conditioning. Process piping includes pipes which transfer chemicals and other fluids, gases, or vapors for systems other than air conditioning systems as covered by the Michigan mechanical code.