

DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS

DIRECTOR'S OFFICE

CONSTRUCTION CODE

Filed with the secretary of state on

These rules take effect 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 408.30910a, R 408.30923a, R 408.30927a, R 408.30928a, R 408.30935a, R 408.30936a, R 408.30945a, R 408.30946, R 408.30946a, R 408.30995a, and R 408.30996 of the Michigan Administrative Code are amended, and R 408.30902a, R 408.30908a, R 408.30912a, R 408.30947a, and R 408.30948 are rescinded, as follows: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. The provisions of the international mechanical code, ~~2015~~**2018** edition, except for sections ~~102.10, 102.11, 103.2, 103.4, 104.6, 104.7, 106.1.1, 106.1.2, 106.3, 106.3.3, 106.4.5, 106.5.1 to 106.5.3, 107.2.5 to 107.2.5.3, 108.3, 108.5, 109.2, 109.1 to 109.7, 1101.10, and 1102.3~~ and appendix B 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. 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. The code is available for inspection, **and purchase** at the Department of Licensing and Regulatory Affairs, Bureau of Construction Codes, 611 W. Ottawa St., 1<sup>st</sup> Floor Ottawa Building, Lansing, MI 48933. The code may be purchased from the International Code Council, through the bureau's website at [www.michigan.gov/bcc](http://www.michigan.gov/bcc), at a cost as of the time of adoption of these rules of ~~\$76.00~~**\$83.00 for each code book.**

R 408.30902a ~~Licensing requirements~~**Rescinded.**

~~Rule 902a. Section 101.2 of the code is amended to read as follows:~~

~~—101.2. Scope. This code regulates the design, installation, maintenance, alteration, and inspection of mechanical systems that are permanently installed and utilized to provide~~

October 26, 2020

control of environmental conditions and related processes within buildings. This code shall also regulate the mechanical systems, system components, equipment, and appliances specifically addressed in this code.

~~Exceptions:~~

- ~~1. Mechanical systems within 1 and 2 family dwellings shall be constructed and maintained in accordance with the Michigan residential code for 1 and 2 family dwellings.~~
- ~~2. Mechanical systems in existing buildings undergoing repair, alterations, or additions, and change of occupancy shall be permitted to comply with the Michigan rehabilitation code for existing buildings.~~

#### R 408.30904a ~~Inspector registration~~ **Right of entry.**

Rule 904a. Section ~~103.1~~ **104.4** of the code is amended to read as follows:

~~103.1~~ **104.4. General.** The position of mechanical inspector is created. The mechanical inspector shall be appointed in accordance with 1986 PA 54, MCL 338.2301 et seq. **If a building or premises is occupied, the code official shall present his or her 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 other 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.**

**When a code official has first obtained 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 permit 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 definition of act is added to section 202 of the code and the definitions of code official and occupiable space in section 202 of the code are amended to read as follows:

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

"Code official" means ~~a person who is appointed and employed by a governmental subdivision who is charged with the administration and enforcement of the state code or codes, and who is registered in accordance with 1986 PA 54, MCL 338.2301 to 338.2313~~ **an individual, who is registered pursuant to article 10 of the skilled trades regulation act, 2016 PA 407, MCL 339.6001 to 339.6023, and who is authorized to conduct the inspections needed to determine compliance with the provisions of this code.**

**Construction or work that requires a permit shall be subject to inspection by the code official. This construction or work shall remain visible and be accessible for inspection purposes until approved.**

**"Cold Weather Months" means November 1 through April 1 in Climate Zone 5A of the 2015 Michigan Energy Code and from October 15 through May 1 in Climate Zones 6A and 7 in the 2015 Michigan Energy Code.**

**"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 in 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 ~~106.1~~, 106.2, ~~106.3~~, 106.3.1 106.4, 106.4.3 and 106.4.4 of the code are amended to read as follows:

~~106.1. Permits required. A contractor licensed under 1984 PA 192, MCL 338.971 to 338.988 who desires to erect, install, enlarge, alter, repair, remove, convert, or replace a mechanical system, the installation of which is regulated by this code, or to cause such work to be done, shall first make application in accordance with the requirements of the act.~~

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) The replacement of any minor part that does not alter the approval of equipment or an appliance or make such equipment or appliance unsafe.
- (f) A portable evaporative cooler.
- (g) Self-contained refrigeration systems that contain 10 pounds or less of refrigerant, or that are actuated by motors of ~~4~~ **1.5** horsepower or less.
- (h) Portable fuel cell appliances that are not connected to a fixed piping system and are not interconnected to a power grid.
- (i) An oil burner that does not require connection to a flue, such as an oil stove and a heater equipped with a wick.
- ~~(j) A portable gas burner that has inputs of less than 30,000 Btu's per hour.~~
- ~~(k)(j)~~ When changing or relocating a gas meter or regulator, a permit is not required when installing gas piping which shall be limited to 10 feet in length and not more than 6 fittings.
- ~~(k)(k)~~ 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~~ **pursuant to** 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 be deemed to 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 Application for permit. Each application for a permit, along with the required fee, shall be filed with the code official on a form furnished for that purpose and shall contain a general description of the proposed work and its location. The contractor who is performing the work shall sign the application. The permit application shall indicate the proposed~~

~~occupancy of all parts of the building and of that portion of the site or lot, if any, not covered by the building or structure and shall contain the information required by the act.~~

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. **Officials from the bureau of construction codes may require additional construction documents for unusual designs and when questions are asked about a system design that is beyond conventional system parameters.** The code official shall require construction documents, computations, and specifications to be prepared and designed by a registered design professional ~~in accordance with~~ **pursuant to the occupational code, 1980 PA 299, MCL 339.101 to 339.2919 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 ~~State of Michigan, bureau of construction codes~~ for any of the following ~~circumstance~~ **circumstances:**

~~a. One and 2 family dwellings when the heating or cooling input rating is 375,000 Btu's or less.~~

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

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

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

~~Bureau code officials may require construction documents in unusual designs and where questions arise as a result of a system design beyond conventional system parameters.~~

(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 permit ~~in accordance with~~ **pursuant to** 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 ~~thereto~~, 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 is not begun within 180 days from the date of the permit, or if the work authorized by the permit is suspended or abandoned at any time after the work is begun for a period of 180

days. Before work is recommenced, the permit shall be reinstated if the code has not changed. 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 Means of appeal Rescinded.**

~~Rule 908a. Section 109.1 of the code is amended to read as follows:~~

~~109.1. Means of appeal. An interested person may appeal a decision of the enforcing agency to the board of appeals in accordance with the act. An application for appeal shall be based on a claim that the true intent of the code or the rules governing construction have been incorrectly interpreted, the provisions of the code do not apply, or an equal or better form of construction is proposed. The decision of a local board of appeals may be appealed to the Construction Code Commission in accordance with the act and the applicable time frames.~~

**R 408.30910a Stop work order Intent.**

Rule 910a. Section 101.3 of the code is amended to read as follows:

108.5. Intent. The purpose of this code is to establish minimum standards to provide a reasonable level of safety, health, property protection, and public welfare by regulating and controlling the design, construction, installation, quality of materials, location, operation, and maintenance or use of mechanical systems. The ~~Act~~ **act** takes precedence over all provisions of this code.

**R 408.30912a Enclosed parking garages Rescinded.**

~~Rule 912a. Section 404.1 of the code is amended to read as follows:~~

~~404.1. Enclosed parking garages. Mechanical ventilation systems for enclosed parking garages are not required to operate continuously where the system is arranged to operate automatically upon detection of carbon monoxide (CO) not to exceed 25 parts per million (ppm) and nitrogen dioxide (NO<sub>2</sub>) not to exceed 3 ppm by approved automatic detection devices.~~

~~404.1.1 Testing. Testing of detection devices shall be per manufacturer's installation instructions. All detectors shall be calibrated per the manufacturer's instructions at an interval not to exceed 1 year.~~

**R 408.30923a Equipment installation.**

Rule 923a. Sections 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 ~~have~~ **has** an electrical disconnect switch on, or ~~immediately adjacent to,~~ **within 6 feet of,** the equipment.

309.1. Occupiable space heating ~~system~~ **systems**. Interior spaces intended for human occupancy shall be provided with heating facilities capable of maintaining a minimum

**interior** room temperature of 68°F (20°C) ~~degrees Fahrenheit~~ at a point 3 feet (914 mm) above the floor and 2 feet from exterior walls at the **required** design temperature. The installation of portable space heaters shall not be used to ~~achieve compliance~~ **comply** with this section.

Exception:

1. Interior spaces where the primary purpose is not associated with human comfort.
2. ~~Group F, H, S, and U occupancies.~~ **Interior, seasonal spaces which are unoccupied during cold weather months, including restroom & 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 Equipment and appliances on roofs or elevated structures.

Rule 927a. Sections 306.5 and 306.5.1 of the code are amended to read as follows:

306.5 Equipment and appliances on roofs or elevated structures. Where equipment or appliances requiring access are located on an elevated structure or the roof of a building so that personnel will have to climb higher than 16 feet above grade to access this equipment or these appliances, an interior or exterior means of access shall be provided. ~~Such~~ **This** access shall not require climbing over obstructions greater than 30 inches high or walking on roofs having a slope greater than 4 units vertical in 12 units horizontal (~~33-percent~~ **33%** slope). ~~Such~~ **This** access shall not require the use of portable ladders. Where access involves climbing over parapet walls, the height shall be measured to the top of the parapet wall.

Permanent ladders installed to provide the required access shall comply with all of the following minimum design criteria:

- (1) The side railing shall extend above the parapet or roof edge not less than 30 inches.
- (2) Ladders shall have rung spacing not to exceed 14 inches on center. The uppermost rung shall be a maximum of 24 inches below the upper edge of the roof hatch, roof, or parapet, as applicable.
- (3) Ladders shall have a toe spacing not less than 6 inches deep.
- (4) There shall be a minimum of 18 inches between rails.
- (5) Rungs shall have a minimum 0.75-inch diameter and be capable of withstanding a 300-pound load.
- (6) Ladders over 30 feet in height shall be provided with offset sections and landings capable of withstanding 100 pounds per square foot. Landing dimensions shall be not less than 18 inches and not less than the width of the ladder served. A guard rail shall ~~be~~ provided on all open sides of the landing.
- (7) Climbing clearance. The distance from the center line of the rungs to the nearest permanent object on the climbing side of the ladder shall be a minimum of 30 inches measured perpendicular to the rungs. This distance shall be maintained from the point of ladder access to the bottom of the roof hatch. A minimum clear width of 15 inches shall ~~be~~ provided on both sides of the ladder measured from the midpoint of and parallel with the rungs, except where cages or wells are installed.
- (8) Landing required. A ladder shall be provided with a clear and unobstructed bottom landing area having a minimum dimension of 30 inches by 30 inches centered in front of the ladder.
- (9) Ladders shall be protected against corrosion by approved means.

(10) Access to ladders shall be provided at all times.

Catwalks installed to provide the required access shall be not less than 24 inches wide and shall have railings as required for service platforms.

Exception 1: **For construction other than new construction, an** ~~An~~ approved, permanent building mounted ladder receiver that prevents the ladder from sliding sideways off the building, ~~or slipping backward~~ and meets the ladder safety standard under the OSHA regulations –at 29 CFR 1926.1053(b)(1) may be installed on buildings under 20 feet in height above grade to access such equipment or appliances.

Exception 2: This section shall not apply to group R-3 occupancies.

306.5.1 Sloped roofs. Where appliances are installed on a roof having a slope of 3 units vertical in 12 units horizontal or greater and having an edge more than 30 inches above grade at such edge, a level platform shall be provided on each side of the appliance to which the access is required for service, repair, or maintenance. The platform shall not be less than 30 inches in any dimension and shall be provided with guards. The guards shall extend not less than 42 inches above the platform, shall be constructed ~~so as~~ to prevent the passage of a 21-inch-diameter sphere, and shall comply with the loading requirements for guards specified in the Michigan building code. Access to appliances shall not require climbing over obstructions greater than 30 inches high or walking on roofs having a slope greater than 4 units vertical in 12 units horizontal. Permanent ladders, or equivalent, shall be provided on both sides requiring access ~~in accordance with~~ pursuant to the ladder requirements of section 306.5.

Exception: This section shall not apply to group R-3 occupancies.

R 408.30928a Solid fuel burning equipment.

Rule 928a. ~~Sections~~**Section** 901.5 ~~929.0, and 929.1 are~~ **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~~ **pursuant to** section 301.4-304.1 of the code and installed ~~in accordance with~~ **pursuant to** the manufacturer's instructions and NFPA 211-2013**2016** requirements.

~~929.0 Solid fuel hydronic heaters.~~

~~929.1 Solid fuel hydronic heaters shall be listed and labeled, or approved by the code official in accordance with the Michigan mechanical code section 105, or have certificate of acceptability issued by the Michigan construction code commission.~~

R 408.30935a Commercial kitchens; ventilation.

Rule 935a ~~Sections~~**Section** 506.1, 506.3-6, 507.1, and 507.2.6, of the code are amended and sections 507.16.1-**507.6.1.1** is added to the code to read as follows:

~~506.1. Ventilation requirements for commercial kitchens. Commercial kitchen hood ventilation ducts and exhaust equipment shall be in compliance with NFPA 96-2014, which is the standard of the national fire protection association listed in chapter 15 of the code.~~

~~506.3.6 Grease duct clearances. Grease duct systems and exhaust equipment serving a type I hood shall have clearances to combustibles as required by NFPA 96-2014, as listed in chapter 15 of the code.~~

~~Exception: Listed and labeled factory-built commercial kitchen grease ducts and exhaust equipment installed in accordance with section 304.1 of the code.~~

~~507.1 General. Commercial kitchen exhaust hoods shall comply with the requirements of this subrule and NFPA 96-2014. Hoods shall be type I or type II and shall be designed to capture and confine cooking vapors and residues. A type I or type II hood shall be installed at or above all commercial cooking appliances in accordance with sections 507.2 and 507.3 of the code. When a cooking appliance under a single hood requires a type I hood, a type I hood shall be installed. When a type II hood is required, a type I or type II hood shall be installed. When a type I hood is installed, the installation of the entire system, including the hood, ducts, exhaust equipment, and makeup air system, shall comply with the requirements of sections 506, 507, 508, and 509 of the code.~~

~~Exceptions:~~

~~1. Factory-built commercial exhaust hoods that are listed and labeled in accordance with UL 710, and installed in accordance with section 304.1 of the code, shall not be required to comply with sections 507.1.5, 507.2.3, 507.2.5, 507.2.8, 507.3.1, 507.3.3, 507.4, and 507.5 of the code.~~

~~2. Factory-built commercial cooking recirculating systems that are listed and labeled in accordance with UL 710B and installed in accordance with section 304.1 of the code, shall not be required to comply with sections 507.1.5, 507.2.3, 507.2.5, 507.2.8, 507.3.1, 507.3.3, 507.4, and 507.5 of the code. Spaces in which these systems are located shall be considered kitchens and shall be ventilated in accordance with table 403.3.1.1. For the purpose of determining the floor area required to be ventilated, each appliance shall be considered as occupying not less than 100 square feet (9.3 m<sup>2</sup>).~~

~~3. When cooking appliances are equipped with integral down-draft exhaust systems and such these appliances and exhaust systems are listed and labeled for the application in accordance with NFPA 96-2014, a hood shall not be required at or above these appliances.~~

~~507.2.6. Clearances for type I hood. A type I hood shall be installed with clearances from combustibles as required by NFPA 96-2014 as listed in chapter 15 of the code.~~

~~507.16.1~~ **507.6.1.1** Smoke test. The field test identified in section 507.16.1 of the code shall be conducted ~~in accordance with~~ **pursuant to** the smoke testing procedures established by the bureau of construction codes, which are available at no cost from the bureau's website at [www.michigan.gov/bcc](http://www.michigan.gov/bcc), or from the Michigan Department of Licensing and Regulatory Affairs, Bureau of Construction Codes, 611 W. Ottawa St., 1<sup>st</sup> Floor Ottawa Building, Lansing, MI 48933.

R 408.30936a Scope of article.

Rule 936a. Section 1001.2 is added to the code 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 be in compliance~~ **must comply** with the provisions of this code and the Michigan boiler ~~code-skilled trades regulation act, 2016 PA 407, MCL 339.5101 to 339.6133.~~



R 408.30945a Ventilation; exhaust.

Rule 945a. Sections 501.3, 504.4, **and** 504.8.2, ~~504.10, and 505.3~~ 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~~ **pursuant to** the manufacturer's instructions and when mechanical or natural ventilation is otherwise provided ~~in accordance with~~ **pursuant to** 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~~ **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.

504.8.2 Duct installation. Dryer exhaust ducts shall be supported at 4-foot (1,219 mm) 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.

~~504.10 Common exhaust systems for clothes dryers located in multistory structures. When a common multistory duct system is designed and installed to convey exhaust from multiple clothes dryers, the system shall be engineered by a registered design professional and installed in accordance with the Michigan building construction codes.~~

~~505.3 Common exhaust systems for domestic kitchens located in multistory structures. When a common multistory duct system is designed and installed to convey exhaust from multiple domestic kitchens, the system shall be engineered by a registered design professional and installed in accordance with the Michigan building construction codes.~~

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. Alterations and repairs to boilers ~~shall be in accordance with~~ **must be made pursuant to** the Michigan boiler act, 1965 PA 290, MCL 408.751 to 408.776 ~~skilled trades regulation act, 2016 PA 407, MCL 339.5101 to 339.6133.~~

R 408.30946a Welding.

Rule 946a. Section 1003.3 of the code is amended to read as follows:

1003.3. Welding on pressure vessels ~~shall be in accordance~~ **must be performed pursuant to ASME boiler and pressure vessel code section VIII and IX.**

R 408.30947a ~~Boiler connections~~**Rescinded.**

~~Rule 947a. Section 1005.1 of the code is amended to read as follows:~~

~~1005.1 Valves. Every boiler or modular boiler shall have a shutoff valve in the supply and return piping. For multiple boiler or multiple modular boiler installations, each boiler or modular boiler shall have individual shutoff valves in the supply and return piping.~~

~~Exception: Shutoff valves are not required in a system having a single low pressure steam boiler. When a boiler is located above the system and can be drained without draining the system, stop valves may be eliminated.~~

R 408.30948 ~~Boiler safety devices~~**Rescinded.**

~~Rule 948. Section 1006.1.1 is added to the code and 1006.7 of the code is amended to read as follows:~~

~~1006.1.1 Safety and safety relief inlets. The opening or connection between the boiler and any safety or safety relief valve shall have at least the area of the valve inlet.~~

~~1006.7. Boiler safety devices. Boilers shall be equipped with controls and limit devices as required by ASME, CSD-1-2012, the manufacturer's installation instructions, and the conditions of the listing. All controls and safety devices shall be tested and maintained in accordance with ASME code CSD-1-2012.~~

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 chapter 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 ~~be in compliance~~ **must comply** with the provisions of the code. Fire suppression systems ~~shall be in compliance~~ **must comply** with the provisions of the building code and shall be installed ~~in accordance with~~ **pursuant to** the code and NFPA-13-2010**2016**, NFPA-13D-2010**2016**, NFPA-13R-2010**2016**, and NFPA-24-2010**2016**, installation of sprinkler systems, installation of sprinkler systems in 1- and 2-family dwellings and manufactured homes, installation of sprinkler systems in residential occupancies up to 4 stories in height, 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 B31.3-2010**2018**

1700.2 Process piping. Process piping includes pipes that transfer chemicals and other fluids, gases, or vapors for systems other than air conditioning systems as covered by the

Michigan mechanical code. Process piping is not considered part of a refrigeration system or part of a system designed to provide air conditioning.