

September 5, 2023

Language and changes the people of Michigan would like to see added or changed in the 2021 Michigan Mechanical Code.

1. Apprenticeship, Journeyman, Master:

- a. There must be an addition to the Code that mandates registered apprentices for a minimum of 3 years or 6,000 hours of documented work, and a Journeyman for a minimum of 2 years or 4,000 hours of documented work, before an individual is allowed to write for their Mechanical Contractors License.
- b. This would mirror the requirements of the Plumbing Code MCL 339.6117 of the Skilled Trades Regulation Act.
- c. Registration Fee of \$15.00 for an apprentice or waived with a completed Military/Uniformed Services Examination Waiver Form.
- d. "Mechanical Apprentice" means an individual who is registered under the Skilled Trades Regulation Act as an apprentice.
- e. "Mechanical Journey" means an individual, other than a mechanical contractor, who is qualified to engage in the practical installation or maintenance of a mechanical system and is licensed as a mechanical journeyer.

-A PERSON SHALL NOT ENGAGE IN OR WORK IN THE BUSINESS OF A MECHANICAL CONTRACTOR, JOURNEY TECHNICIAN, OR APPRENTICE TECHNICIAN UNLESS LICENSED OR REGISTERED BY THE DEPARTMENT. EXCEPT AS PROVIDED IN SUBSECTIONS (2), (3), AND (4). INSTALLATION OR SERVICING OF MECHANICAL EQUIPMENT SHALL BE PERFORMED BY A LICENSED MECHANICAL CONTRACTOR, JOURNEY TECHNICIAN OR REGISTERED APPRENTICE. A LICENSED MECHANICAL CONTRACTOR SHALL BE IN CHARGE AND RESPONSIBLE FOR PROPER INSTALLATION AND CONFORMANCE WITH THE CODE. INSTALLATION OF MECHANICAL EQUIPMENT SHALL NOT BE PERFORMED UNLESS THE MECHANICAL CONTRACTOR WHO IS RESPONSIBLE HAS SECURED A PERMIT FROM THE STATE OR A GOVERNMENTAL SUBDIVISION AUTHORIZED TO ISSUE PERMITS.

(2) A LICENSE IS NOT REQUIRED FOR MINOR REPAIR WORK:

(3) A HOMEOWNER WHO OCCUPIES OR WILL OCCUPY A HOME MAY INSTALL HIS OR HER OWN MECHANICAL EQUIPMENT IN HIS OR HER SINGLE-FAMILY DWELLING IF A PERMIT IS SECURED.

(4) THIS ACT DOES NOT PREVENT A PERSON FROM PERFORMING ACTIVITIES WITHIN THE SCOPE OF LICENSURE OR REGISTRATION UNDER ANY OTHER LICENSURE OR REGISTRATION ACT OR APPLICABLE CODES FOR THAT LICENSED OR REGISTERED PROFESSIONAL ADOPTED UNDER LAW.

**-MECHANICAL CONTRACTOR-**

UPON THE FILING OF AN APPLICATION ON A FORM PRESCRIBED BY THE DEPARTMENT AND PAYMENT OF THE EXAMINATION FEE PRESCRIBED IN SECTION 10, THE DEPARTMENT SHALL CONDUCT EXAMINATIONS TO ESTABLISH THE QUALIFICATIONS AND COMPETENCY OF APPLICANTS

SEEKING LICENSURE AS A MECHANICAL CONTRACTOR FOR THE CATEGORY FOR WHICH THE APPLICATION IS SUBMITTED AND SHALL ISSUED LICENSES TO THOSE WHO PASS THE EXAMINATIONS AND PAY THE INITIAL ISSUANCE FEE, EXCEPT AS OTHERWISE PROVIDED FOR IN THIS ACT. AN APPLICANT WHO SEEKS LICENSURE IN MORE THAN 1 WORK CLASSIFICATION LISTED

IN SUBSECTION (3) ON A SINGLE APPLICATION SHALL ONLY BE REQUIRED TO PAY 1 EXAMINATION FEE AND 1 INITIAL INSURANCE FEE AS PROVIDED IN SECTION 10. A PERSON APPLYING FOR A MECHANICAL CONTRACTOR LICENSE UNDER THIS ACT SHALL ALSO PAY THE AMOUNT REQUIRED TO BE PAID UNDER THE CONSTRUCTION LIEN ACT, 1980 PA 497, MCL 570.1101 TO 570.1305, WHICH AMOUNT SHALL BE PAID TO THE DEPARTMENT FOR DEPOSIT IN THE HOMEOWNER CONSTRUCTION LIEN RECOVERY FUND. A PERSON IS NOT REQUIRED TO PAY MORE THAN \$50.00-IN ASSESSMENT PERIOD UNDER THAT ACT, REGARDLESS OF THE NUMBER OF LICENSES-APPLIED-FOR-OF-HELD. (A) IN ADDITION TO THE LICENSE FEE, A PERSON WHO APPLIES FOR A MECHANICAL CONTRACTOR'S LICENSE SHALL PAY A FEE OF \$100.00 AND, SUBJECT TO SUBSECTION (6) OF SEC. 201 OF PA 497 OF 1980, A PERSON WHO APPLIES TO RENEW SHALL PAY A FEE OF \$10.00 FOR EACH YEAR THAT THE RENEWED THE LICENSE WILL BE VALID.

(2) AN APPLICANT IS NOT CONSIDERED ELIGIBLE FOR MECHANICAL CONTRACTOR EXAMINATION UNLESS THE APPLICANT IS OF GOOD MORAL CHARACTER, AS DEFINED IN 1914 PA 381, MCL 338.41 TO 338.47, AND HAS A MINIMUM OF 5 (FIVE) YEARS OF EXPERIENCE UNDER THE EMPLOYMENT AND SUPERVISION OF A LICENSED MECHANICAL CONTRACTOR OR AN EQUIVALENT OF THAT EXPERIENCE ACCEPTABLE TO THE BOARD, UPON PROPER SHOWING TO THE DEPARTMENT, IN 1 OR MORE OF THE WORK CLASSIFICATIONS LISTED IN

SUBSECTION (3). FOR UP TO SIX MONTHS FOLLOWING THE EFFECTIVE DATE OF THE AMENDATORY CHANGES TO THIS ACT, AN APPLICANT IS CONSIDERED ELIGIBLE FOR MECHANICAL CONTRACTOR EXAMINATION WHO POSSESSES 3 YEARS EXPERIENCE IN THE EMPLOYMENT AND SUPERVISION OF A LICENSED MECHANICAL CONTRACTOR EQUIVALENT OF THAT EXPERIENCE ACCEPTABLE TO THE BOARD, UPON PROPER SHOWING TO THE DEPARTMENT, IN 1 OR MORE, OR THE WORK CLASSIFICATIONS LISTED IN SUBSECTION 3I FO F GOOD MORAL CHARACTER A S DEFINED I N 1974 PA 381.

(3) A MECHANICAL contractor's license obtained shall be classified and limited. a s 1 or more of the following:

- (a) Hydronic heating and cooling and process piping.
- (D) HVAC equipment.
- (c) Ductwork.
- (d) Refrigeration.
- (e) Limited service, heating or refrigeration.
- (r) Unlimited service, heating or refrigeration.

(9) Fire suppression.

(h) specialty.

(4) THE MECHANICAL CONTRACTOR'S EXAMINATION SHALL CONSIST OF, BUT NOT BE LIMITED TO, QUESTIONS DESIGNED TO TEST AN INDIVIDUAL'S KNOWLEDGE OF THIS ACT, ANY RULES PROMULGATED UNDER THIS ACT, THE STILLE-DEROSSETT-HALE SINGLE STATE CONSTRUCTION CODE ACT, AND THE ADMINISTRATION AND ENFORCEMENT PROCEDURES OF THE CODE, ORAL AND WRITTEN TESTS AND SHALL COVER THE SCIENCE AND PRACTICE OF INSTALLATION OF MECHANICAL EQUIPMENT, KNOWLEDGE OF THE STATE MECHANICAL CODE, LAWS, RULES, REGULATIONS, INTERPRETATION OF CHARTS AND BLUEPRINTS, AND PLANS OF MECHANICAL EQUIPMENT INSTALLATIONS. THE DEPARTMENT SHALL ARRANGE FOR MECHANICAL CONTRACTOR EXAMINATIONS TO BE HELD FOUR TIMES EACH YEAR IN THE LOWER PENINSULA AND SHALL ARRANGE FOR AT LEAST 1 MECHANICAL CONTRACTOR EXAMINATION TO BE HELD IN THE UPPER PENINSULA EACH YEAR.

(5) UPON FAILURE TO PASS THE MECHANICAL CONTRACTOR'S EXAMINATION 2 TIMES WITHIN A PERIOD OF 2 YEARS, AN APPLICANT SHALL BE INELIGIBLE TO SIT FOR ANOTHER EXAMINATION UNTIL A PERIOD OF NOT LESS THAN 1 YEAR FROM THE DATE OF FAILURE OF THE SECOND EXAMINATION, AT WHICH TIME HE OR SHE SHALL PRESENT TO THE BOARD PROOF OF THE SUCCESSFUL COMPLETION OF A COURSE ON MECHANICAL CODE, MECHANICAL EQUIPMENT FUNDAMENTALS, OR MECHANICAL EQUIPMENT THEORY, APPROVED BY THE BOARD, IN ORDER TO BECOME ELIGIBLE TO AGAIN SIT FOR AN EXAMINATION.

-JOURNEYER-

UPON THE FILING OF AN APPLICATION ON A FORM PRESCRIBED BY THE DEPARTMENT AND PAYMENT OF THE EXAMINATION FEE PRESCRIBED IN SECTION 10, THE DEPARTMENT SHALL CONDUCT EXAMINATIONS TO ESTABLISH THE QUALIFICATIONS AND COMPETENCY OF APPLICANTS SEEKING LICENSURE AS JOURNEY TECHNICIAN FOR THE CATEGORY FOR WHICH THE APPLICATION IS SUBMITTED AND SHALL ISSUE LICENSES TO THOSE WHO PASS THE EXAMINATIONS AND PAY THE INITIAL ISSUANCE FEE, EXCEPT AS OTHERWISE PROVIDED FOR IN THIS ACT. AN APPLICANT FOR JOURNEY TECHNICIAN WHO SEEKS LICENSURE IN MORE THAN 1 WORK CLASSIFICATION LISTED IN SUBSECTION (X) ON A SINGLE APPLICATION SHALL ONLY BE REQUIRED TO PAY 1 EXAMINATION FEE AND INITIAL ISSUANCE FEE AS PROVIDED IN SECTION 10. (2) AN APPLICANT FOR JOURNEY TECHNICIAN IS NOT CONSIDERED ELIGIBLE FOR EXAMINATION UNLESS THE APPLICANT IS OF GOOD MORAL CHARACTER, AS DEFINED IN 1974 PA 381, MCL 338.41 TO 338.47, AND HAS A MINIMUM OF 3 YEARS OF EXPERIENCE UNDER THE EMPLOYMENT AND SUPERVISION OF A LICENSED MECHANICAL CONTRACTOR OR AN EQUIVALENT OF THAT

EXPERIENCE ACCEPTABLE TO THE BOARD, UPON PROPER SHOWING TO THE DEPARTMENT, NI 1 OR MORE OF THE WORK CLASSIFICATIONS LISTED NI SUBSECTION (X).

(3) A JOURNEY TECHNICIAN LICENSE OBTAINED SHALL BE CLASSIFIED AND LIMITED TO 1 OR MORE OF THE FOLLOWING:

(a) Hydronic heating and cooling and process piping.

(D) HVAC equipment.

(c) Ductwork.

(a) Refrigeration

(e) Limited service, heating or refrigeration.

(Unlimited service, heating or refrigeration.

(9) Fire suppression.

(h) Specialty.

(4) THE JOURNEY TECHNICIAN'S EXAMINATION SHALL CONSIST OF, BUT NOT BE LIMITED TO, ORAL, WRITTEN, AND PRACTICAL TESTS AND SHALL COVER THE THEORY AND PRACTICE OF MECHANICAL EQUIPMENT INSTALLATION AND KNOWLEDGE OF THE STATE MECHANICAL CODE, RULES, AND REGULATIONS. THE DEPARTMENT SHALL ARRANGE FOR JOURNEY TECHNICIAN EXAMINATIONS TO BE HELD FOUR TIMES EACH YEAR IN THE LOWER PENINSULA AND SHALL ARRANGE FOR AT LEAST 1 JOURNEY TECHNICIAN'S EXAMINATION TO BE HELD IN THE UPPER PENINSULA EACH YEAR.

(5) UPON FAILURE TO PASS THE JOURNEY TECHNICIAN EXAMINATION 2 TIMES WITHIN A PERIOD OF 2 YEARS, AN APPLICANT SHALL BE INELIGIBLE TO SIT FOR ANOTHER EXAMINATION UNTIL A PERIOD IF NOT LESS THAN 1 YEAR FROM THE DATE OF FAILURE OF THE SECOND EXAMINATION, AT WHICH TIME HE OR SHE SHALL PRESENT TO THE BOARD PROOF OF THE SUCCESSFUL COMPLETION OF A COURSE ON CODE, MECHANICAL EQUIPMENT FUNDAMENTALS, OR MECHANICAL EQUIPMENT THEORY, APPROVED BY THE BOARD, NI ORDER TO BECOME ELIGIBLE AGAIN TO SIT FOR AN EXAMINATION.

(6) THE BOARD SHALL REVIEW AND DETERMINE THE EQUIVALENCY OF NATIONALLY RECOGNIZED CERTIFICATION PROGRAMS, WHICH IS PROVIDED BY THE APPLICANT TO CREDIT NECESSARY HOURS REQUIRED.

(7) A PERSON WHO, AFTER THE EFFECTIVE DATE OF THIS ACT BECOMES REGISTERED AS AN APPRENTICE TECHNICIAN SHALL UPON PAYMENT OF THE JOURNEY TECHNICIAN LICENSE FEE AND UPON FURNISHING THE DEPARTMENT, UPON A FORM PROVIDED BY THE DEPARTMENT, WITH SATISFACTORY EVIDENCE OF HAVING BEEN EMPLOYED BY A LICENSED MECHANICAL CONTRACTOR FOR A MINIMUM OF 5 YEARS in one or more of THE CLASSIFICATIONS HELD BY THE LICENSED MECHANICAL CONTRACTOR WITH 2 YEARS AT THE JOURNEY LEVEL OR HIGHER IMMEDIATELY PRECEDING THE EFFECTIVE DATE OF THIS ACT, BE GRANTED A JOURNEY TECHNICIAN LICENSE WITHOUT EXAMINATION IF THE PERSON APPLIES WITHIN 6

MONTHS AFTER THE EFFECTIVE DATE OF THIS ACT.

-APPRENTICE-

- (1) AN INDIVIDUAL EMPLOYED AS AN APPRENTICE TECHNICIAN SHALL REGISTER WITH THE DEPARTMENT ON A FORM PROVIDED BY THE DEPARTMENT WITHIN 30 DAYS AFTER EMPLOYMENT.
- (2) AN APPRENTICE REGISTRATION IS INVALID AFTER 5 YEARS FROM THE DATE OF INITIAL REGISTRATION UNLESS THE REGISTERED APPRENTICE APPLIES FOR AND TAKES THE EXAMINATION FOR JOURNEY LICENSE. THE REGISTRATION REMAINS VALID UNTIL EITHER A LICENSE IS ISSUED OR THE APPRENTICE FAILS TO TAKE THE EXAM.
- (3) UPON REQUEST BY THE APPRENTICE TO THE BOARD, THE BOARD MAY GRANT AN EXTENSION OF AN APPRENTICE REGISTRATION FOR A PERIOD OF TIME AS DETERMINED APPROPRIATE BY THE BOARD.
- (4) AN APPRENTICE TECHNICIAN SHALL, AS HIS OR HER PRINCIPAL OCCUPATION, BE ENGAGED IN LEARNING AND ASSISTING IN THE INSTALLATION OR SERVICE OF MECHANICAL EQUIPMENT UNDER THE EMPLOYMENT AND SUPERVISION OF A MECHANICAL CONTRACTOR.
- (5) SERVICE WORK AND INSTALLATION PERFORMED AT ANY TIME BY A REGISTERED APPRENTICE REQUIRES DIRECT SUPERVISION BY A LICENSED MECHANICAL JOURNEY TECHNICIAN.

2. RATIO FOR JOURNEYER TO APPRENTICE:

- a. To ensure proper training, education, and safety for the apprentice.
- b. This method is currently enforced under the Michigan Electrical Code 339.5717 AND 339.5723 under the Skilled Trades Regulation Act. The addition of this ratio has proven its value for the future of Michigan's skilled labor workforce.

**-THE RATIO OF MECHANICAL JOURNEYER OR MASTER MECHANICAL LICENSE HOLDER TO REGISTERED MECHANICAL APPRENTICE SHALL BE ON THE BASIS OF 1 MECHANICAL JOURNEYER OR MASTER TO NO MORE THAN 3 REGISTERED MECHANICAL APPRENTICES. THE DEPARTMENT OR ENFORCING AGENCY SHALL ENFORCE THE RATIO ON A JOBSITE BASIS.**

3. CONTINUOUS EDUCATION FOR JOURNEYER MECHANICAL LICENSE:
  - a. Under section 339.5411 of the Skilled Trades Regulation Act (d): THE PERSON SUBMITS PROOF OF HAVING COMPLETED THE EQUIVALENT OF 1 YEAR OF CONTINUING EDUCATION WITHIN THE 12 MONTHS IMMEDIATELY PRECEDING THE DATE OF THE APPLICATION OF AS OTHERWISE PROVIDED IN A SPECIFIC ARTICLE OF THIS ACT OR BY RULE IF CONTINUING EDUCATION IS REQUIRED FOR THAT LICENSE UNDER A SPECIFIC ARTICLE.
  - b. All Plumbers must take a minimum of 5 hours of a code update within 1 year of the new code adoption. 339.6113 OF ACT 407.
  - c. All electricians must take a minimum of 15 hours of a code update within 1 year of the new code adoption. 339.5713 OF ACT 407.
  - d. THE MECHANICAL CODE MUST HAVE THE SAME REQUIREMENTS. EACH OF THE (10) SUBSECTIONS OF THE MECHANICAL CODE SHALL HAVE A MINIMUM REQUIREMENT OF 5 HOURS PER SUBSECTION OF REQUIRED CONTINUOUS EDUCATION IN ORDER TO RENEW A PERSON'S JOURNEYER OR MASTER OR CONTRACTOR LICENSE WITHIN 1 YEAR OF THE NEW CODE ADOPTION.
4. MECHANICAL INSPECTOR; REQUIREMENTS; PROHIBITED CONDUCT: 339.6123
  - a. AN INDIVIDUAL LICENSED UNDER THIS ACT EMPLOYED OR ACTING AS A MECHANICAL INSPECTOR SHALL NOT ENGAGE IN, OR BE DIRECTLY OR INDIRECTLY CONNECTED WITH, THE MECHANICAL EQUIPMENT INSTALLATION BUSINESS INCLUDING, BUT NOT LIMITED TO, THE FURNISHING OF LABOR, MATERIALS, OR APPLIANCES FOR THE CONSTRUCTION, ALTERATION, OR MAINTENANCE OF A BUILDING OR THE PREPARATION OF PLANS OR SPECIFICATIONS FOR THE CONSTRUCTION, ALTERATION, OR MAINTENANCE OF A BUILDING AND SHALL NOT ENGAGE IN ANY WORK THAT CONFLICTS WITH HIS OR HER OFFICIAL DUTIES IN THE INSPECTOR'S RESPECTIVE JURISDICTION(S).
5. OUT-OF-STATE LICENSING REQUIREMENTS:
  - a. CURRENTLY ACT 407 AND THE CURRENT MECHANICAL CODE STATES: THE DEPARTMENT MAY LICENSE, WITHOUT EXAMINATION AND UPON THE PAYMENT OF THE INITIAL LICENSE FEE PRESCRIBED IN SECTION 10, AN APPLICANT WHO IS LEGALLY AUTHORIZED MECHANICAL CONTRACTOR IN ANOTHER STATE OR COUNTRY IF THE LICENSING REQUIREMENTS OF THE STATE OR COUNTRY IS CONSIDERED BY THE BOARD AND THE DEPARTMENT TO BE SUBSTANTIALLY EQUIVALENT TO THE LICENSING REQUIREMENTS OF THIS STATE AND THE STATE OR THE COUNTRY OBSERVES RECIPROCITY IN REGARD TO MECHANICAL CONTRACTORS LICENSED IN THIS STATE.

(2) THE DEPARTMENT MAY LICENSE, WITHOUT EXAMINATION OR PAYMENT OF THE FEES PRESCRIBED IN SECTION 10, AN APPLICANT WHO IS CERTIFIED TO INSTALL, MODIFY, TEST, SERVICE, INSPECT, OR MAINTAIN REQUIRED FIRE SUPPRESSION SYSTEMS UNDER THE FIRE PREVENTION CODE, ACT NO. 207 OF THE PUBLIC ACTS OF 1941, BEING SECTIONS 29.1 TO 29.33 OF THE MICHIGAN COMPILED LAWS AND WHO SEEKS LICENSURE UNDER THIS ACT ONLY.

IN THE WORK CLASSIFICATION SET FORTH IN SECTION 6(3)(G).

(3) THE HOLDER OF A LICENSE ISSUED PURSUANT TO THIS SECTION SHALL HAVE THE RIGHT TO RENEW THE LICENSE PURSUANT TO SECTION XX.

b. Stated in Act 407 section 339.6111 (4) A licensed plumbing contractor may operate 1 or more branch offices in this state under the same business if a licensed master plumber is in charge and has the responsibility of supervision at each branch.

(5) If a license is issued to a plumbing contractor represented by a master plumber, the plumbing contractor and the master plumber are jointly and severally responsible for exercising the supervision or control of the plumbing operations necessary to secure full compliance with this article, the rules promulgated under this article, and all other laws and rules related to the installation of plumbing.

(6) Both a person, unless the person is a plumbing contractor, and the master plumber are jointly and severally responsible for exercising the supervision or control of the plumbing operations necessary to secure full compliance with this article, the rules promulgated under this article, and all other laws and rules related to the installation of plumbing.

(7) If a plumbing contractor is represented by a licensed master plumber who ceases to represent the plumbing contractor, the plumbing contractor has 30 days after the date the master plumber no longer represents the plumbing contractor in which to designate another licensed master plumber as the representative of the plumbing contractor. The plumbing contractor shall notify the department in writing of the change.

c. The same standards must be held to the Mechanical Code as the Plumbing Code. This ensures life safety and proper training for license holders for the State of Michigan.

## LARA-BCC-Rules

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**From:** Code Guy <rogerpa5401@gmail.com>  
**Sent:** Tuesday, September 5, 2023 3:28 PM  
**To:** LARA-BCC-Rules  
**Subject:** Part 9A Mechanical Code - Rule Set 2022-55 LR.

**CAUTION: This is an External email. Please send suspicious emails to [abuse@michigan.gov](mailto:abuse@michigan.gov)**

9/5/2023

Bureau of Construction Codes

Attn: Tony Williamson, Bureau of Construction Codes P.O. Box 30254, Lansing, MI 48909  
Bureau of Construction Codes, P.O Box 30254, Lansing, MI 48909  
Via Email to [Lara-bcc-rules@michigan.gov](mailto:Lara-bcc-rules@michigan.gov)

Dear Mr. Williamson.

I am writing today to point out an obvious drafting error in the proposed language for Rules for Construction Code - Part 9A Mechanical Code  
Rule Set 2022-55 LR.

The error is in R 408.30905a Definitions

Rule 905a

(b).

The Michigan Uniform Energy Code was rescinded by 2012 Act 504, eff. March 28, 2013.

The correct reference document, I believe, should be Michigan Energy Code (Part 10a).

Respectfully submitted,

Roger Papineau

1901 Beulah Highway

PO Box 574

Beulah, MI 49617-0574

231-651-9444

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Rheem Manufacturing Company  
Heat Transfer Products Group (HTPG)

September 05, 2023

Tony Williamson  
Bureau of Construction Codes  
Michigan Department of Licensing and Regulatory Affairs  
P.O. Box 30254  
Lansing, MI 48909

**Re: Michigan Construction Code – Part 9A. Mechanical Code Rule Set 2022–55 LR**

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Rheem Manufacturing Company (Rheem) appreciates the opportunity to comment on the proposed rule set 2022–55 LR to revise the Michigan Mechanical Code by adopting by reference the 2021 edition of the International Mechanical Code with amendments, deletions, and additions as proposed.

Headquartered in Atlanta, Georgia, Rheem operates multiple U.S. facilities for the manufacture and support of a comprehensive line of residential and commercial air conditioners and heat pumps, with nationwide distribution through various channels. Through its water heating division, Rheem manufactures heat pump water heaters and heat pump pool heaters, including those marketed under the Raypak® brand. The Heat Transfer Products Group (HTPG), a division of Rheem designs, manufactures, and markets energy-efficient commercial and industrial refrigeration equipment and system solutions sold under the trusted premium brands: Russell, Witt, Kramer, and ColdZone. Through its Friedrich Air Conditioning division, Rheem is the sole manufacturer of room air conditioners in North America, offering premium room conditioning and other home environment solutions for residential, lodging, and multifamily properties.

Rheem supports updates to the Michigan Mechanical Code to enable installation of equipment designed for and charged with group A2L refrigerants, and encourages the adoption by reference of the latest editions of the consensus safety standards ANSI/ASHRAE 15 (2022), ANSI/ASHRAE 34 (2022), ANSI/UL 60335–2–40 (2022), and ANSI/UL 60335–2–89 (2021), as proposed by Mr. Thomas Deary in his public comment submitted on behalf of the Air-Conditioning, Heating, and Refrigeration Institute (AHRI) during the public hearing on Tuesday, August 22, 2023 in Lansing, MI.

On December 15, 2022, the US Environmental Protection Agency proposed to restrict the use of certain refrigerants in newly manufactured air-conditioning and refrigeration equipment.<sup>1</sup> These restrictions are effective from January 01, 2025. Through SNAP Rules 23, 25, and 26 the EPA approved the use of several substitutes in these end uses<sup>2</sup>; many of these substitutes bear the ASHRAE safety classification of group A2L. The “2L”

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<sup>1</sup> Phasedown of Hydrofluorocarbons: Restrictions on the Use of Certain Hydrofluorocarbons Under Subsection (i) the American Innovation and Manufacturing Act of 2020, 87 Fed. Reg. 76738 (December 15, 2022) (to be codified at 49 CFR Part 84).

<sup>2</sup> Protection of Stratospheric Ozone: Listing of Substitutes Under the Significant New Alternatives Policy Program, 86 Fed. Reg. 24444 (May, 06, 2021) and 88 Fed. Reg. 26382 (April 28, 2023) (to be codified at 40 CFR Part 82).



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flammability classification indicates lower flammability.<sup>3</sup> To comply with the EPA's proposed restrictions, manufacturers of air-conditioning and refrigeration equipment are re-designing their product portfolio use new group A2L refrigerants.

Prescriptive requirements on the construction, installation, and operation of air-conditioning and refrigeration equipment containing group A2L refrigerants are written in the standards cited above. These are industry standards developed through the ANSI consensus process and have undergone several rounds of public review and subsequent revision. These standards have been accepted for inclusion by reference in the 2024 edition of the International Mechanical Code. Inclusion of these standards in the Michigan Mechanical Code will ensure that installation of air-conditioning and refrigeration equipment in the state of Michigan follows best practices. It will also prevent market disruption by maintaining consistency between the safety standards used by manufacturers when designing new equipment, and the safety standards referenced in the Michigan Mechanical Code.

Your sincerely,

Ronald Shughart  
Compliance Projects Manager

cc: Allison Skidd, Director of Global Regulatory Affairs–Air, Rheem Manufacturing Company.

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<sup>3</sup> American Society of Heating, Refrigeration and Air Conditioning Engineers. (2022). *Designation and Safety Classification of Refrigerants* (ANSI/ASHRAE 34–2022).



INTEGRATED HOME COMFORT

## Amendments to the 2021 International Mechanical Code

### SECTION 1101

#### GENERAL

##### 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. Systems using A2L refrigerants shall comply with ASHRAE 15.

### CHAPTER 15

#### REFERENCED STANDARDS

##### ASHRAE

ASHRAE  
1791 Tullie Circle, NE  
Atlanta, GA 30329

15—2019/2022

Safety Standard for Refrigeration Systems  
1101.6, 1105.8, 1108.1

34—2019/2022

Designation and Safety Classification of Refrigerants  
202, 1102.2.1, 1103.1

##### UL

UL LLC  
333 Pfingsten Road  
Northbrook, IL 60062-2096

UL/CSA 60335-2-40—17/2022

Household And Similar Electrical Appliances - Safety -  
Part 2-40: Particular Requirements for Electrical Heat  
Pumps, Air-Conditioners and Dehumidifiers  
908.1, 916.1, 918.1, 918.2, Table 1101.2

UL/CSA 60335-2-89—17/2021

Household And Similar Electrical Appliances - Safety -  
Part 2-89: Particular Requirements for Commercial  
Refrigerating Appliances with an Incorporated or  
Remote Refrigerant Unit or Compressor  
Table 1101.2

**Substantiation:**

Manufacturers are transitioning away from UL 1995 to UL 60335-2-40 for new products because UL 1995 will be withdrawn by UL effective 1/1/2024. The newest 4th edition of UL 60335-2-40, published December 2022, has many new requirements for electrical and refrigerant safety. Certification laboratories will use the latest version of the UL 60335-2-40 safety standard for certification testing.

With the change to Low GWP Refrigerants, the Mechanical Code needs to be updated to address the use of Group A2L refrigerants in high probability (direct) systems. All of the commonly used Low GWP replacement refrigerants for direct systems fall into the category of Group A2L in the 2022 edition of ASHRAE 34. The safety requirements in ASHRAE 15 address the concerns regarding the use of a mildly flammable refrigerant. There are provisions for listing of equipment, installation of refrigerant detectors, and ventilation to mitigate any leak of refrigerant. By referencing ASHRAE 15 directly, the requirements become an enforceable part of the code. ASHRAE 15 requires an A2L appliance or equipment to be listed to UL/CSA 60335-2-40-2019 or newer editions.

Finally, UL 1995 also contains requirements for commercial refrigeration appliances and systems that will transition into the UL/CSA 60335-2-89 standard. As such, reference to the 2021 edition of this standard is also included in this proposal as approved by ICC for the 2024 IMC.

My name is William Hordyk. I am a registered Building Official in the State of Michigan serving the community of Grand Rapids. I also hold 20 national certifications with the International Code Council including Master Code Professional. I come to you duly elected by the Metro Building Inspectors Association of Greater of Grand Rapids to speak on their behalf regarding these matters. The Metro Association is a group of over 130 registered building officials and inspectors performing their duties for over 70 delegated authorities in the state of Michigan.

#### Rule 901a

- The strike and bold text of rule 901a is incorrect, it does not include all text from the current rule as written in the Michigan Administrative Code.
  - o The current text of rule 901a references sections 103.2, 103.4, 106.5.1 to 106.5.3, 107.2.5 to 107.2.5.3 and 109.2 to 109.7. None of that text appears in the proposed rules as to remain or to be struck
  - o The proposed text also adds section 103.1 to the text but does not bold the reference which would indicate the section was listed in the current rule, which it is not.
  - o Current Text: 102.10, 102.11, 103.2, 103.4, 106.1.1, 106.1.2, 106.5.1 to 106.5.3, 107.2.5 to 107.2.5.3, 109.2 to 109.7, 1101.10
  - o Draft rule text: ~~102.10, 102.11~~, 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, ~~1101.10~~, **1101.9, 1102.3**
  - o
- It is proposed to strike section 104.8 and 104.8.1. We would request a reasoning to why the bureau is removing protections for the Code Official from the model code language.
- The model code language pertaining to "annual permits", 106.1.1 and 106.1.2, should be retained or simply modified to match the current language within the 2015 Michigan Building Code which does afford them.

#### Rule 905a

- The definition for "Act" should not written into code language. There are references within established rules and draft rules that reference different Public Acts of Michigan, such as the Skilled Trades Regulation Act, the Occupation Code, the Adult Foster Care Licensing Act, as well as the Stille Derosett-Hale Single State Construction Act. Where any Act is referenced within code language it is, and properly so, identified using it's full name. PA 230 is named the "Stille Derosett-Hale Single State Construction Act" within the Act. It does not need to be redefined in code language that is subordinate to the Act.
- "Cold Weather Months" should not be added as a definition. The language used here should, instead, be added to the code section you intend to modify; that being 309.1
- The definition of "Occupiable Space" should not be changed within the Mechanical Code. The term is used throughout the Codes with a common definition. Changing the definition here could confuse requirements from other model codes for application to the spaces mentioned. As an alternative to redefining "Occupiable Space". The desired exceptions to it should be identified in section 309.1 of the Mechanical Code.

#### Rule 906a

- The proposed changes to section 106.3.1 should be re-numbered to occur within the section applicable to construction documents in the model code, that being section 107. As it stands, the draft language overwrites language allowing (not requiring) preliminary inspections

#### Rule 923a

- To effect the desired outcome of defining "cold weather months" and redefining "occupiable space" the draft language of 309.1 should word the proposed exception 2 as follows:  
"Exception 2: Interior, seasonal spaces that are unoccupied during November 1 through April 1 in climate zone 5A and from October 15 through May 1 in climate zones 6A and 7, including spaces such as restrooms, shower buildings, day use restrooms, concession stands, press boxes, ticket booths and locker rooms."

#### Rule 935a

- The proposed language does not identify a section to be added, no section number is given in the text
- The text as written reads:  
"The field test identified in section 507.6.1.1 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](http://www.michigan.gov/bcc), or from the Michigan Department of Licensing and Regulatory Affairs, Bureau of Construction Codes, 611 West. Ottawa Street., 1st First Floor Ottawa Building, Lansing, Michigan 48933."

#### Rule 945a

- Chapter 5 of the 2021 International Mechanical Code addresses and agrees with any prior changes to code language adopted by Michigan. No changes should be made to the Model code language. Rule 945a should instead be rescinded in full. If one were to compare the draft language with the full text of chapter 5 of the IMC there is no need to continue modifying the model code.

#### Rule 955a

- The draft language adds reference to fire suppression systems. Fire suppression systems are scoped within the Building Code and should remain there. Adding this text to the Mechanical Code only adds confusion