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DEPARTMENT OF PUBLIC SAFETY DIVISION OF FIRE SAFETY

Memorandum 004

To: Elevator Inspectors, Inspection Companies, and Elevator Contractors

From: Gus Guadamuz, Deputy Chief Elevator Inspector

Date: April 2, 2020

Effective April 30, 2020, the State of Missouri has adopted the ASME A17.1- 2016, A18.1-2014, ASME A17.2-2014, ANSI A90.1-2015, ANSI A10.4-2016, ANSI/SIA A92.10-2009, and ANSI A117.1-2009 code editions. This adoption is a result of amendments to a number of Missouri Code of State Regulations (CSR) in relation to the Elevator Safety Act as outlined below:

11 CSR 40-5.050 New Installations

(1) Minimum Standards. All new elevator equipment shall be constructed and installed in conformity with the standards prescribed in the American Society of Mechanical Engineers, ASME A17.1, **2016 edition** adopted by the board, *Safety Code for Elevators and Escalators*, A18.1, **2014** edition, *Safety Standards for Platform Lifts and Stairway Chair Lifts*, ASME A17.2 **2014** edition Guide for Inspection of Elevators, Escalators, and Moving Walks, *American National Standard Institute Safety Code for Manlifts* ANSI A90.1, **2015** edition, *American National Standard Institute Safety Code for Personnel Hoist* ANSI A10.4, **2016** edition, **ANSI/SIA A92.10** *Transport Platforms*, **2009**, *edition unless* exempted by section 701.359, RSMo.

(3) Inspection and Testing.

(A) Prior to the operation of any new elevator equipment or the issuance of the operating certificate, such elevator equipment shall be inspected by a licensed inspector. Testing must be performed **by a Licensed Elevator Mechanic** in accordance with these rules and regulations. The testing must be witnessed by a licensed inspector.

11CSR 40-5.055 Code Additions, Amendments and Interpretations

(1) The definitions, rules, and regulations for new construction shall be based upon and, at all times, follow the generally accepted nationwide engineering standards, formulae, and practices established and pertaining to elevator equipment construction and safety, known as *Elevator and Escalator Safety Code of the American Society of Mechanical Engineers* **2016 Edition**, which is incorporated by reference in this rule **as published by ASME, Two Park Avenue, New York, NY 10016-5990. This rule does not include any later amendments or additions.** Amendments and interpretations to the code shall be effective immediately upon being promulgated, to the end that the definitions, rules, and regulations shall at all times follow the generally accepted nationwide engineering standards.

- (2) Amendments to American Society of Mechanical Engineers, ASME A17.1, 2016 edition.
 - (A) Code deletions.
 - 1. Section 1.2.1 Purpose.
 - 2. Section 2.20.1 Suspension Means.
 - 3. Section 2.20.4.2 Aramid Fiber Ropes.
 - (B) Code additions.
- 1. Purpose of this code is to provide for safety and to promote the public welfare. The provisions of this code are not intended to prevent the use of systems, methods, or devices of equivalent or superior quality, strength, fire resistance, effectiveness, durability, and safety to those prescribed by this code, provided there is technical documentation to demonstrate the equivalency of the system, method, or device. The specific stipulations of this code may be modified by the authority having jurisdiction based upon technical documentation or physical performance verification to allow alternative arrangements that will assure safety equivalent to that which would be provided by conformance to the corresponding requirements of this code or functions that do not conform with certain requirements in ASME A17.1/CSA B44, but do conform with the applicable requirements in ASME A17.1/CSA B44.7 may be considered by the board for meeting the requirements of this code. Exceptions may be based on the stipulations of the above section.
 - 2. Suspension means.
- A. Elevator cars and counterweights shall be suspended by steel wire ropes or noncircular elastomeric-coated steel suspension members attached to the car frame or passing around sheaves attached to the car frame specified in 2.15.1.
- B. Suspension means which have previously been installed and/or used on another installation are not to be reused. All suspension members in a set of suspension means need to be the same material, grade, construction, and dimensions. A suitable means is to be provided to protect the suspension means during the installation process. Only the following may be permitted:
 - (I) Steel wire ropes constructed in accordance with ASME A17.6 2010 Edition, Part 1; or
- (II) Noncircular elastomeric-coated steel suspension members constructed in accordance with ASME A17.6 2010 Edition, Part 3.

11 CSR 40-5.065 Missouri Minimum Safety Codes for Existing Elevator Equipment

- (1) In a political subdivision or municipality that had adopted an edition of ASME A17.1 code, **shall conform** to the code **requirements** adopted and enforced at the time the elevator equipment was installed. The following standards apply to all existing elevator equipment installed prior to July 1, 1999 as provided in 11 CSR 40-5.060. Any installation which is in compliance with the latest ASME A17.1 version adopted and amended by the Elevator Safety Board, unless as exempted by 701.359, RSMo shall be considered to be in compliance with 11 CSR 40-5.065.
 - (G) Maintenance, Repair and Alterations.
- 1. All maintenance, repair and replacement shall comply with the applicable standard established by 11 CSR 40-5.050 (1) ASME A17.1, section 8.6 Safety Code for Elevators and Escalators.
- 2. All alterations shall comply with **the applicable standards established by 11CSR 40-5.5.050** (1) ASME A17.1, section 8.7 *Safety Code for Elevators and Escalators*.
- 3. All maintenance, repair and alterations to platform lifts and stairway chair lifts shall comply with **the applicable standards established by 11 CSR 40-5.050 (1)** ASME A18.1, *Safety Standard for Platform Lifts and Stairway Chair Lifts*.

11 CSR 40-5.070 Accessibility to the Disabled

(1) New Installations of Accessible Passenger Elevators and Wheelchair Lifts. In addition to the standards imposed, the board hereby adopts and incorporates herein the *American National Standards Institute Standard for Buildings and Facilities Providing Accessibility and Usability for Physically Disabled People*, **ANSI A117.1 2009** edition, Sections 407, 408, and 410, American Society of Mechanical Engineers (ASME), Three Park Avenue, New York, NY 10016 adopted by the Elevator Safety Board. This rule does not include any later amendments or additions.

11 CSR 40-5.080 Alterations

- (A) **Major** Alterations listed below require an alteration permit to be obtained and submission of plans or scope of work for review by the division. The plan review fee is one hundred fifty dollars (\$150) plus twenty-five dollars (\$25) per each floor opening including the bottom floor plus twenty-five dollars (\$25) for the alteration permit fee. An acceptance inspection shall be conducted after completion of the alteration.
- (B) Alterations **and major repairs** listed below only require an alteration permit to be obtained and an acceptance inspection conducted. Alteration permit fee is twenty-five dollars (\$25).
- (C) All other alterations are required to conform to 11 CSR 40-5.050 ASME A17.1 section 8.7. as amended by the Elevator Safety Board.

11 CSR 40-5.090 Inspection and Testing

PURPOSE: The purpose of this rule is to identify requirements for periodic inspections and testing of equipment. Inspections will be by qualified elevators inspectors (QEI) every year.

- (1) Minimum Standard. All inspections and testing required by Missouri Statute 701.350–701.380 and these rules and regulations shall be made in accordance with the standards established by **11 CSR 40-5.050** ASME A17.1, **ASME A**17.2 and **ASME** A18.1 adopted by the Elevator Safety Board excluding periodic inspection requirements of Table N-1, six (6)-month interval in ASME A17.1 The requirements of the six (6)-month periodic inspection is to be performed with the twelve (12)-month periodic inspection. The foregoing standards are incorporated by reference in this rule. This does not include any later amendments or additions.
- (C) Tests required by these rules and regulations shall be made by a **Licensed Elevator Mechanic** to perform such service employed by the owner, operator, lessee or agent of either, in the presence of a licensed inspector. The department has within its discretion, the authority to allow the testing to be performed without a licensed inspector present. In such cases, the elevator equipment shall be properly tagged by the qualified person performing the testing. The inspector shall verify the proper tagging of the elevator equipment within a ten (10)-day period. It will be required, without exception, that the testing be witnessed in the presence of a licensed inspector, at least every five (5) years.

11CSR 40-5.120 Inspectors

- (C) Have successfully passed the written examination for elevator inspectors administered by an association accredited by **a nationally or internationally recognized organization** and evidenced by a certification of the applicant or licensee as a qualified elevator inspector (QEI). This is commonly referred to as being QEI certified; (11) Revocation of License.
 - (A) The board may revoke any license for cause. Such cause includes, but is not limited to the following:
 - 1. Failure to comply with the provisions of sections 701.350–701.380, RSMo, or these rules and regulations;
- 2. Falsifying or making a material misstatement or omission on any application for license, financial disclosure statement, or inspection report;
- 3. Failure to attend at least one (1) Missouri state elevator code update meeting per calendar year conducted by the department; and
- 4. Conducting or performing state required safety inspections without a state licensed mechanic, if required.

11CSR 40-5.170 Elevator Mechanics License

- (1) Elevator Mechanic I—This license authorizes the holder to construct, install, alter, maintain, examine, relocate, test, remove, service, and repair all types of elevators and other conveyances in any location as covered in sections 701.350 to 701.383, RSMo, 11 CSR 40-5.010 to 11 CSR 40-5.195, and American Society of Mechanical Engineers (ASME) A17.1 and ASME A18.1.
- (A) Elevator Mechanic I license **may** be granted only to individuals who have demonstrated their qualifications and abilities **in meeting** one (1) of the following paragraphs:
- (2) Elevator Mechanic II—This license authorizes the holder to construct, install, alter, maintain, examine, relocate, test, remove, service, and repair all types of conveyances in any location, as covered in sections 701.350 to 701.383, RSMo, 11 CSR 40-5.010 to 11 CSR 40-5.150, and ASME A18.1, as well as section 5.2 of ASME A17.1 as it specifically relates to Limited-Use/Limited Application elevators and Section 7 of ASME A17.1 as it specifically relates to dumbwaiters.

A full copy of the rules regarding elevator equipment may be downloaded from the Missouri Secretary of State"s web site: www.sos.mo.gov.

New Code edition application for new installations will be the filing date of permits.

Any questions concering these changes may be addressed to the Elevator Safety Unit of the Division of Fire Safety.

Gus Guadamuz Deputy Chief Elevator Inspector