#### DEPARTMENT OF LICENSING AND REGULATORY AFFAIRS

#### **DIRECTOR'S OFFICE**

#### **ELEVATORS**

Filed with the secretary of state on

These rules take effect 90 days after filing with the secretary of state.

These rules take effect immediately upon filing with the secretary of state unless adopted under section 33, 44, or 45a(6) of the administrative procedures act of 1969, 1969 PA 306, MCL 24.233, 24.244, or 24.245a. Rules adopted under these sections become effective 7 days after filing with the secretary of state.

(By authority conferred on the director of the department of licensing and regulatory affairs by section 8 of 1967 PA 227, MCL 408.808 and section 3 of 1976 PA 333, MCL 338.2153, Executive Reorganization Order Nos. 1996-2-2003.1, 2008-4 and 2011-4, MCL 445.2001, 445.2011, 445.2025, and 445.2030)

R 38.131, etc R 408.7002, R 408.7003, R 408.7004, R 408.7005, R 408.7007, R 408.7012, R 408.7014, R 408.7015, R 408.7019, R 408.7020, R 408.7023, R 408.7023a, R 408.7023b, R 408.7024, R 408.7025, R 408.7029, R 408.7030, R 408.7031a, R 408.7034, R 408.734a, R 408.7037a, R 408.7041, R 408.7045, R 408.7046, R 408.7054, R 408.7054a, R 408.7057, R 408.7057a, R 408.7058a, R 408.7058b, R 408.7059a, R 408.7060, R 408.7062, R 408.7069, R 408.7071, R 408.7079, and R 408.7081a are amended, R 408.7031b, R 408.7033a, R 408.7040a, R 408.7041a and R 408.7048a of the Michigan Administrative Code are added amended, as follows:

## CHAPTER 1. GENERAL PROVISIONS

R 408.7002 Definitions.

Rule 2. (1) As used in these rules:

- (a) "Act" means elevator safety board, 1967 PA 227, MCL 408.801to 408.824.
- (b) "Belt manlift" means a power-driven endless belt which has steps and handholds and which is used to transport persons in a vertical direction through successive floors or levels of a building or structure.
- (c) Buggy style shopping cart means ones that are intended to be pushed or pulled with goods in or on it. This type of cart is not intended for people to ride anywhere other than the noted seat if equipped with such.
  - (e) (d) "Department" means the department of licensing and regulatory affairs.
- -(d) (e) "Electrical-powered, 1-man elevator" means an elevator that has a car platform area of not more than 5 square feet, a rated load of not more than 300 pounds, and a rated speed of not more than 100 feet per minute. It is for the exclusive use of

certain designated operating and maintenance employees and is installed in any of the following structures:

- (i) A grain or feed mill.
- (ii) A chemical or alcohol distillery.
- (iii) A cement storage tower.
- (iv) A radio tower.
- (v) A similar structure that is not accessible to the general public.
- (e) (f) "Examination" means a survey of the design and construction of elevators or elevator equipment by a dealer in elevators or elevator equipment or an approved insurance company.
- (f) (g) "Hand-powered, 1-man elevator" means an elevator which has a car platform area of not more than 5 square feet, which has a rated load of not more than 300 pounds, and which is operated from the car only by pulling on a stationary rope that is located in the hoistway and passing through or adjacent to the car platform. The elevator is for the exclusive use of certain designated operating and maintenance employees and is installed in a grain or feed mill or a similar structure that is not accessible to the general public.
- (g) (h) "Inspection" means the official determination by a general inspector of the condition of all parts of equipment on which the safe operation of an elevator depends.
  - (i) "Kids carts or kid shopping cart" means either:
  - (a) A shopping cart intended for children to use in a store or
- (b) A shopping cart that has an area specifically for children to ride either in front or back of the goods storage area.
- (h) (j) "Private residence elevator" means any elevating device installed in or at a private residence or installed in a building as a means of access to a private residence within such building, provided the elevator is installed so that it is not accessible to the general public or to other occupants in the building. The use is restricted to the owner and the owner's immediate family and nonpaying guests. All other elevating device installations shall be classified as commercial.
- (i) (k) "Private residential incline elevator" means a private residence inclined elevator for use on a property of a private residence or homeowners' association in accordance with the act.
- (j) (l) "Special elevating device" includes other lifting or lowering apparatus which is guided as provided in section 3 of the act.
- (k) (m) "Temporary inspection" means the inspection of a permanent elevator that is to be used on a temporary basis.
- (n) "Maintenance" means the process of routine examination, lubrication, cleaning, and adjustment of parts for the purpose of ensuring performance in accordance with applicable Michigan Rule and ASME A17.1 section 8.6 code requirements.
  - (2) Terms defined in the act have the same meanings when used in these rules.

R 408.7003 Applicability of national standards.

Rule 3. The following standards are adopted by reference.

- (a) The following standards are available from the American Society of Mechanical Engineers (ASME), 22 Law Drive, Box 2900, Fairfield, New Jersey 07007-2900, at a cost as of the time of adoption of these rules, as stated in this subrule:
- (i) ASME A17.1-2010 2016 sSafety eCode for eElevators and eEscalators, except for sections, 2.5.1.5.3, 2.8.3.3.2, 2.8.6, 2.11.1.3, 2.11.1.4, 2.11.7.2, 2.11.7.2.1, 2.11.7.2.2, 2.11.7.2.3, 2.11.7.2.4, 2.11.7.2.5, 2.12.7.2.1(c), 2.12.7.2.2, 2.14.2.2(f), 2.14.2.6, 2.14.5.8.2, 2.14.5.9.2, 2.16.5.1.3, 2.22.2, 2.27.3.1.6(c), 3.18.3.8.3, 3.19.5.2, 3.22.1.6, 5.3.1.1.1, 5.3.1.1.2, 5.3.1.2.1, 5.3.1.14.3, 5.4.10.1, 5.4.10.2, 5.11, 5.12, 5.12.1, 5.12.1, 5.12.1.1, 5.12.1.2, 5.12.1.3, 5.12.1.4, 5.12.2, 5.12.3, 8.6.1.7.1, 8.6.4.20.1(b), 8.6.4.20.1(b)(1), 8.6.4.20.1(b)(2), 8.6.4.20.10(b), 8.6.4.20.10(b)(1), 8.6.4.20.10(b)(2), 8.6.5.8, 8.6.7.11 to 8.6.7.11.3, 8.6.7.12, 8.6.7.12.1, 8.6.7.12.2, 8.6.11.5 to 8.6.11.5.6, 8.6.11.10 to 8.6.11.10.4, 8.7.2.14.5.2, 8.10.1.1.3, 8.11.1.1, 8.11.1.1.1, 8.11.1.1.2, 8.11.5.14 to 8.11.5.15. Cost \$310.00.
- (ii) ASME A17.2-2012 2017 guide for inspection of elevators, escalators, and moving walks. Cost \$180.00.
- (iii) ASME A17.3-2017 Guide for inspections of existing elevators and escalators.
- (iii) (iv) ASME A17.6-2010 2017 standard for elevator suspension, compensation, and governor systems. Cost \$90.00.
- (iv) ASME A17.7-2007 performance-based safety code for elevators and escalators, except for where the Michigan elevator rules make an exception to, addition to, or an amendment of, an ASME A17.1/CA B44 code section the Michigan elevator rules shall govern over the corresponding section in ASME A17.7/CSA B44.7 and must obtain department approval. Cost \$155.00.
- (v) ASME A18.1-2011 2017 safety code standard for platform lifts and stairway chairlifts, except for sections 2.1.2 to 2.1.2.8, 2.1.3 to 2.1.3.10, 3.10.2 to 3.10.2.4, 10.1.1, 10.1.2 to 10.1.2.3, 10.1.3.3, 10.1.4, and 10.2.1. Cost \$90.00.
  - (vi) ASME A90.1-2009 safety standard for belt manlifts. Cost \$59.00.
- (b) ANSI A10.4-2007 2016, the American nNational sStandards iInstitute (ANSI), safety requirements for personnel hoist and employee elevators for construction and demolition and operations, except for sections 24.1.2.1 and 26.4.8.1, is available from ANSI at 1430 Broadway, New York, New York, 10018. Cost \$74.00.
- (c) The following standards are available from American Society for Testing and Materials, (ASTM), 100 Bar Harbor Drive, 2 Conshohocken, PA 19428-2959, at a cost as of the time of adoption of these rules, as stated in this subrule:
- (i) ASTM D 2667-2008, 'Standard test method for biodegradability of alkylbenzene sulfonates'. Cost \$47.00.
- (ii) ASTM E 648-2010, standard test method for critical radiant flux of floor-covering systems using a radiant heat energy source. Cost \$47.00.
- (ii) ASTM E 648-2010, standard test method for critical radiant flux of floor-covering systems using a radiant heat energy source. Cost \$47.00.
- (iii) ASTM F 714-2012, standard specification for polyethylene (PE) plastic pipe (SDR-PR) based on outside diameter'. Cost \$47.00.

- (d) The standards adopted in this subrule are also available for inspection at the Michigan Department of Licensing and Regulatory Affairs, Bureau of Construction Codes, 2501 Woodlake Circle, Okemos, Michigan 48864 611 W. Ottawa St., 1st Floor Ottawa Building, Lansing, MI 48933. Copies may be obtained from the bureau at the cost of the individual codes as noted in this subrule, plus the department's cost for shipping and handling.
- (e) All references to NFPA 70-2011 2017 mean the Michigan electrical code. The Michigan electrical code is available for inspection at or may be purchased from the Michigan Department of Licensing and Regulatory Affairs, Bureau of Construction Codes 2501 Woodlake Circle, Okemos, Michigan 48864, 611 W. Ottawa St., 1st Floor Ottawa Building, Lansing MI, 48933. at a cost as of the time of adoption of these amendatory rules of \$89.50.

R 408.7004 Registration of elevators.

Rule 4. An elevator shall be registered by the owner or user stating the location, type, capacity, name of manufacturer, and purpose for which it is used. This registration shall be made on a form furnished by the department. This information and the subsequent updating of information due to changes is the responsibility of the certificate holder, and it shall be performed in a manner prescribed by the department.

R 408.7005 Identification plates and tags.

- Rule 5. (1) The holder of a certificate of operation shall permanently attach to the elevator in an approved area an identification plate or an engraving in the car operating panel, showing the type, the rated load, and the State assigned serial number of each elevator. The assignment of a serial number does not automatically deem the unit safe for public operation. All units shall be inspected prior to use according to MR 408.7010.
- (2) One serial number tag shall be furnished and shall be permanently attached to the elevator machine controller.
- (3) Identification plates and tags shall be furnished by the department and remain the property of the department.

R 408.7007 Responsibility for elevator operation and maintenance.

- Rule 7. (1) Responsibility for the operation and maintenance of elevators shall be as follows:
- (a) The person, firm, or corporation installing, repairing, relocating, or altering an elevator shall be responsible for its operation and maintenance until the certificate of operation is issued, except as provided for in R 408.7012 and shall be responsible for all tests of new, repaired, relocated, and altered equipment until the certificate of operation is issued.
- (b) The holder of a certificate of operation or duly appointed agent shall be responsible for the safe operation and proper maintenance of the elevator.

The holder of the certificate of operation shall be responsible for all periodic inspections and tests, securing the renewal of the certificate of operation, and the compliance with correction orders. of violation notices.

- (c) The licensed contractor holding a temporary certificate of operation shall be responsible for the safe operation, and maintenance, testing and fees of the elevator during the period that the temporary certificate is in force.
- (2) Safety tests shall be performed by elevator journeypersons licensed in the State of Michigan. personnel approved by the department.

R 408.7012 Temporary use of permanent elevators during construction.

- Rule 12. (1) A licensed elevator contractor may request a temporary certificate of operation to permit the use of a passenger or freight elevator before its completion. for carrying workers, authorized personnel, or materials. Such elevator shall not be used until it has been approved by a general inspector, the required s/b fee has been paid, and a temporary certificate of operation has been obtained. Such certificate shall be issued for a period not to exceed 90 days. Renewals may be granted at the discretion of the department.
- (2) (a) Permanent elevators used temporarily during construction for the purpose of moving workers, authorized personnel and materials shall have maintenance performed be inspected every 30 days. by a licensed elevator journeyperson. These elevators shall be inspected by a general elevator inspector employed by the department every 90 days. Periodic inspections may be conducted by a general inspector every 30 days and the appropriate fees accessed at the discretion of the department.
- (2) A licensed elevator contractor may also request an inspection and temporary certificate of operation to allow the use of a passenger or freight elevator by the public before its completion. Such elevator shall not be used until it has been inspected by a general inspector, the required fee has been paid, and a temporary certificate of operation has been obtained. Such certificate shall be issued for a period not to exceed 90 days. Renewals may be granted at the discretion of the department.
- (a) Permanent elevators used temporarily by the public shall have maintenance performed by a licensed elevator journeyperson every 30 days. Periodic inspections may be conducted by a general inspector every 30 days and the appropriate fees assessed at the discretion of the department.

R 408.7014 Inspection reports and certificates of operation.

- Rule 14. (1) A general inspector shall **provide** forward to the department a report to the department of each inspection stating the condition of the elevator within 2 business days. The inspection report shall be filed with the department within 10 days after the inspection has been completed.
- (2) A report indicating an elevator has been sealed out of service shall be forwarded to the department within 48 hours.

(3) The director shall issue a certificate of operation for a capacity not to exceed that named in the inspection report.

#### R 408.7015 Correction orders Violation Notices.

- Rule 15. (1) If upon inspection an elevator is determined to be in an unsafe condition, or if the owner or user has not complied with these rules, then the general inspector shall issue to the holder of the certificate of operation a **violation notice** written correction order stating corrections required and a time limit within which the **violation notice** correction order shall be complied with by the owner or user. The owner or user shall notify the department in writing as soon as full compliance is effected affected. Notification shall be on forms furnished by the department.
- (2) If in the judgment of the general inspector, failure to make such corrections would endanger human life, then compliance with the **violation notice** <del>correction order</del> may be required immediately.
- (3) Noncompliance with the **violation notice** <del>correction order</del> may subject the holder of the certificate of operation to the penalty provisions of the act.

## R 408.7019 Fees.

Rule 19. (1) Fees shall be paid in accordance with the following schedule:

Commissions to inspect elevators Commission	\$50.00
Commission #Renewal	
Examination for certificates of competency	
Certificate of competency examination (nonrefundable)	\$50.00.
Elevator contractors and journeyperson examination and licenses	
Elevator contractor's license and renewal (nonrefundable)	\$100.00.
Elevator contractor's examination (nonrefundable)	\$100.00.
Elevator journeyperson license and renewal (nonrefundable)	\$40.00.
Elevator journeyperson examination (nonrefundable)	

## Installation permits fees

Elevator installation a Application fee all devices (nontransferable and nonrefundable) \$60.00-100.00. Base permit fee for each of the following below devices: \$200.00 300.00.

Passenger elevator

Freight elevator

## Mine elevator

Inclined elevator

Limited-use/limited application elevator

Private residence elevator

Private residence inclined elevator

Special purpose personnel elevator

Dumbwaiter

Material lift

Power sidewalk elevator

Rooftop Elevator

Belt manlift

Special elevating device

## **Personnel Hoist**

For the above installations, an additional **amount** \$25.00 is charged \$50.00/per for each hoistway opening and for each floor traveled without a hoistway opening and/or for each floor traveled without a hoistway opening.

Base Permit fee: Escalators and Moving Walks	
Base Permit Fee: Private Residence Platform Lift and Private Residency	Ψ240.00.
Stairway Chairlift\$250.0	0.
Base Permit Fee: Platform Lift and Stairway Chairlift\$100.0	
Personnel hoist, initial inspection	
Plus \$25.00 for each hoistway opening and for each floor traveled without a hoistway	
opening.	,
Private residence platform lift and private	
residence stairway chairlift	<del> \$40.00.</del>
Platform lift and stairway chairlift in buildings other	
than private residence	<del> \$70.00.</del>
Application Fee all devices, excluding Emergency Permits (nontransferable and non refundable) \$100.0 Alteration Personnel Hoist. \$150.0 For the above, an additional amount is charged for each additional alteration and/or personnel hoist tower rise at \$75.00/ per.  Dormant Elevator \$100.00	00. 00. 0.
For alterations (excluding personnel hoist) and dormant elevators, an \$25.00/pe	er
additional amount is charged for each hoistway opening and/or for each floor	
traveled without a hoistway opening.	
Emergency Permit Fee (max 2 items and not applicable for installations)	
Major alteration permits	
Elevator alteration application fee (nontransferable and nonrefundable)	
First alteration (including 1 final inspection)	<del> \$90.00.</del>

Elevator alteration application fee (nontransferable and nonrefundable)	<del>. \$60.00.</del>
First alteration (including 1 final inspection)	. \$90.00.
Each additional alteration	
Personnel hoist tower rise	.\$90.00.

Plus \$25.00 for each added hoistway opening and for each floor traveled without a hoistway opening.

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- (2) A final inspection fee is included in the installation and alteration permit fee. If a scheduled final inspection is canceled without 24 hours notice to the department, or if the elevator is not complete in the judgment of the general elevator inspector, then an additional fee shall be charged to the elevator contractor as follows:
- (a) \$300.00 **450.00** for private residence elevator, dumbwaiter, platform lift, or stairway chairlift.
  - (b) \$500.00 **750.00** for all other devices.
- (3) A written request for a refund on a permit must be made within 1 year from the application date. An issued permit shall become invalid unless the work on the site authorized by such permit is commenced within 180 days after issuance, or if the work authorized on the site by such permit is suspended or abandoned for a period of 180 days after work is commenced. A 1-time 180-day permit extension shall automatically be granted when a building permit for the same project remains valid.

## Certificate of oOperation Riennial and annual cCertificate of oOperation

Biennial and annual eCertificate of eOperation	\$ <del>45.00</del> <b>60.00</b> .
Temporary eCertificate of eOperation	\$ <del>200.00</del> <b>250.00</b> .
Inspection by gGeneral iInspector	
Biennial inspection for devices complying with R 408.7011(b)	\$ <del>110.00-</del> 125.00.
(·)	4
Annual and biennial inspection for all other devices	\$ <del>125.00</del> <b>175.00</b> .
•	
Plus \$5.00 for each hoistway opening and for each floor traveled without a hoistway	<del>way</del>
<del>opening.</del>	

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For the above, an additional amount of \$25.00 is charged for each hoistway opening and/or for each floor traveled without a hoistway opening.

For the above, an additional amount of \$35.00 is charged for each hoistway opening and/or for each floor traveled without a hoistway opening.

Plus \$5.00 for each hoistway opening and for each floor traveled without a hoistway opening.

Reinspection or correction order follow-up for devices complying with R 408.7011(b)\$\frac{110.00}{110.00}\$ 125.00. Reinspection or correction order follow-up for all other devices .................................\$\frac{125.00}{175.00}\$.

(4) The department may provide, upon written request, special services that are not otherwise covered in the fee structure. The charge for this service shall be at the rate of \$100.00 per hour including travel time-, any overnight accommodations, or special traveling needs such as flights if required.

Fees that are required pursuant to the provisions of the act shall be paid to the department. Checks or money orders shall be made payable to the "State of Michigan."

R 408.7020 Supervising employees Licensed Elevator Contractor and Elevator Contracting Company.

- Rule 20. (1) If a contractor's license is based on the qualification of a supervising employee, then termination of employment of a supervising employee shall result in the suspension of the license 90 days after termination of employment and the license shall remain suspended until another supervising employee is certified for the employer by the board. The supervising employee and the employer shall each notify the department in writing when the termination of the employment of the former occurs. If an elevator contracting company's ability to apply for permits is based on the qualification of employing full-time an individual who is licensed in the State of Michigan as an elevator contractor, the termination/separation of employment of the licensed elevator contractor shall result in the immediate suspension of the elevator contracting company's ability to obtain new permits. The elevator contracting company's ability to pull permits shall remain suspended until another license elevator contractor is working full-time for the elevator contracting company. Upon separation from the elevator contracting company the licensed elevator contractor and the elevator contracting company shall each immediately notify the department in writing when the termination or separation of the employment occurs. The responsibility of notifications to the Department of a new licensed elevator contractor working for an elevator contracting company, must be done in writing by the licensed elevator contractor and the elevator contracting company within 5 business days of employment. Failure to notify the department of separation or hiring may result in a \$50.00 fine to be paid by either or both parties found not to have notified the department.
- (2) A person serving as supervising employee of a contractor may not concurrently serve as supervising employee of another contractor. A supervising employee shall be employed on a full-time basis by the contractor. A person serving as the licensed elevator contractor of an elevator contracting company- may not concurrently serve as a licensed elevator contractor for another elevator contracting company. A licensed elevator contractor shall be employed on a full-time basis by the elevator contracting company they request permits for.
- (3) The person, firm, or corporation and the **licensed** elevator contractor <del>license</del> holder supervising employee shall be jointly and **separately** responsible for exercising the supervision and control of the elevator operations necessary to secure full compliance with the act, the rules promulgated under the act, and all other laws and rules related to elevating devices.

## R 408.7023 Appeals to the board.

Rule 23. (1) Any person, firm, or corporation aggrieved by any decision, ruling, or order of the director or of the department may appeal within 15 days from date of mailing of the decision, ruling, or order to the board, for a hearing before the board in accordance with section 8(d) of the act. An appeal shall specify the reasons and the relief sought and shall be submitted to the director for presentation to the board.

- (2) A \$200.00 250.00 non-refundable fee shall be made to the department at the time the appeal is filed. Checks or money orders shall be made payable to the "State of Michigan."
- (3) The board shall set a time for hearing of the appeal and provide written notice to the appellant at least 10 days before the date set for hearing.
- (4) A request for an adjournment shall be filed in writing at least 5 days before the date set for hearing. The board or the director may, for good cause, grant an adjournment.
- (5) If the appellant fails to appear at the time set for hearing, the board may proceed with the hearing and decide the case in the absence of the appellant. The board may affirm, modify, or set aside the ruling of the department and shall notify the director and the appellant in writing of its decision.

## R 408.7023a Variance requests.

- Rule 23a. (1) Any person, firm, or corporation upon application in specific cases, may request a variation of the requirements of the rules when it is clearly evident that exceptions or variations are necessary to prevent undue hardship or when existing conditions prevent compliance with the literal requirements. The request shall be on a form prescribed by the department and specify the reasons and the relief sought and shall be submitted to the department for review.
- (2) A \$75.00 100.00 nonrefundable fee shall be made to the department at the time the variance request is filed. Checks or money orders shall be made payable to the "State of Michigan".
- (3) The department may submit the variance request to the board for its action. The department shall set a time for reviewing a request submitted to the board and provide written notice to the appellant at least 10 days before the date set for the review.
- (4) A request for an adjournment shall be filed in writing by the appellant at least 5 days before the date set for the review. The department or the board may, for good cause, grant an adjournment.
- (5) If the appellant fails to appear at the time set for the variance request, the action may proceed continue and the board may decide the request in the absence of the appellant. The request may be approved, denied, modified, or set aside. The department shall notify the appellant in writing of the decision.

## R 408.7023b Product approval acknowledgement.

- Rule 23b. (1) All elevating devices, equipment, systems, subsystems, components, and functions must be reviewed for compliance with the current elevator requirements and approved by the department prior to use in this state. An initial \$75.00-100.00 nonrefundable application fee shall be made to the department at the time of application.
- (2) All product approval acknowledgement requests shall be on a form prescribed by the department and accompanied by a compliance document which reflects compliance with the corresponding requirements and supporting documents such as drawings, wiring diagrams, factor of safety calculations, certifications, and any other information the department finds necessary for the specific review.

- (3) A letter on the manufacturer's letterhead, signed by an engineer in their employ, must accompany the documentation. The letter must state that when installed per manufacturer specifications, the unit will be compliant with currently adopted Michigan Elevator Code and Rules.
- (3)(4) A rate of \$75.00 100.00 per hour shall may be charged for special services of a product review. The total charges shall be determined on an hourly basis for the review upon completion. An approval acknowledgement may not be granted until full payment of these services has been received.

R 408.7024 Applicability of rules and manual.

Rule 24. Elevators as defined in section 3 of the act installed before the effective date of this code edition shall comply with the Michigan elevator laws and rules in effect at the time of adoption of this code until the device is altered. All other approved existing features or components of the elevator shall comply with these rules and shall be maintained as described in the American sSociety of mMechanical eEngineers (ASME) guide for inspection of safety code for existing elevators, escalators, and moving walks ASME A17. 2-2012-17.3, which is adopted by reference in R 408.7003.

R 408.7025 Service and examination Maintenance of power elevators; frequency; exceptions.

- Rule 25. A power elevator, except a private residence elevator, private residence inclined elevator, private residence platform lift, or private residence stairway chairlift, shall be serviced maintained by a State of Michigan and examined for defects by a licensed elevator journeyperson at least once every 90 days, except for the following devices which shall be serviced maintained and examined at least once every 180 days:
  - (a) Dumbwaiters.
  - (b) One-person elevators, electric and hand-powered.
  - (c) Platform lifts and stairway chairlifts in buildings other than private residences.
- (d) Private residences inclined elevators installed under the requirements of the act for use by multiple residences.

An accessible ongoing written record of all service and examination maintaining and testing shall be maintained kept in the machine room or on-site if a machine room does not exist.

#### CHAPTER 2. ALL ELEVATORS

R 408.7029 Dormant elevators.

Rule 29. (1) An elevator, escalator, or moving walk which is inactive for 1 year shall be classified as dormant and placed out of service in compliance with section 8.11.1.4(b) of the ASME A17.1 code.

(2) A permit shall be obtained, and the elevator shall not be placed into service until it has been inspected and tested in the presence of a general inspector, except as provided in section 15 of act, 1967 PA 277.

- (2) (3) A platform lift or stairway chairlift which is inactive for 1 year shall be classified as dormant and placed out of service as follows:
  - (a) The device shall be lowered and any suspension means removed.
- (b) The power feed lines shall be disconnected from the machine disconnect switch and taped in compliance with section 10.1.6 of the ASME A18.1 code.
- (c) All landing entrances shall be secured in a closed position from inside the runway or hoistway.
  - (d) Folding type devices shall be secured against movement.
- (3) (4) Before a dormant elevating device may be placed in service, an alteration permit must be applied for and approved, and it shall be inspected by the department and shall conform to these rules and the applicable section of the standard.

R 408.7030 Elevator and escalator monitoring.

Rule 30. All elevators and escalators may be monitored from a remote location. Monitoring shall consist of passing information from the elevator control to a remote location for the collection of information. A device shall not have the capability to adjust, alter, change or reset any switch, parameter, or system of the elevator control from any location except the corresponding car, hoistway, machine room, lobby panel, or fire command center. The device shall not be capable of bypassing or resetting any safety or electrical protective device. The monitoring means may be used to initiate car and hall landing calls or to secure floors from access. Information collected shall be made available to the department upon request. A system related to the operation of an elevator or escalator that interfaces and communicates with the device and any other device shall also comply with Rule 30.

## CHAPTER 3. ASME A17.1 MODIFICATIONS

R 408.7031a ASME A17.7/CSA B44.7 Automated equipment utilizing elevator.

Rule 31a. Section 1.2.1 of the ASME A17.1/CSA B44 code is amended to read as follows:

- 1.2.1—The purpose of this code is to provide for the safety of life and limb, and to promote the public welfare. Compliance with this code shall be achieved by either subdivisions (a), (b) and (d) or (c) and (d):
  - -(a) Conformance with the requirements in ASME A17.1/CSA B44.
- (b) Conformance with some of the requirements in ASME A17.1/CSA B44 and for systems, subsystems, components, or functions that do not conform with certain requirements in ASME A17.1/CSA B44, conform with the applicable requirements in ASME A17.7/CSA B44.7. Where the Michigan elevator rules make an exception to, addition to, or an amendment of, an ASME A17.1/CSA B44 code section the Michigan elevator rules shall govern over the corresponding section in ASME A17.7/CSA B44.7 and shall also obtain department approval.
- (c) Conformance with the requirement in ASME A17.7/CSA B44.7. Where Michigan elevator rules make an exception to, addition to, or an amendment of, an ASME A17.1/CSA B44 code section the provisions of the Michigan elevator rules shall

govern over the corresponding section in ASME A17.7/CSA B44.7 and shall also obtain department approval.

- (d) Any ASME A17.7/CSA B44.7 certifications that violate the Michigan elevator rules exceptions, additions, or modifications to ASME A17.1/CSA B44 shall require approval from the department. Not more than 1 elevator in a bank shall be occupied by an automated device at any one time. In the event of single elevator selection in a bank due to normal power supply loss, automated devices shall not utilize that car. General public passenger cars shall not be used to transport automated devices.
- (2) A maintenance program for devices shall be instituted by building owner and available upon request.
- (3) Devices which utilize multiple carts shall be tested annually with all possible variations of carts. Records shall be kept onsite and available upon request.
- (4) All circuitry and controllers shall be kept out of elevator machine rooms/control spaces.
- (5) Proper signage shall be posted at each elevator connected to the automated devices. Signs shall include:
  - (a) Do not enter/use elevator if automated carts are entering/exiting or on car.
  - (b) Service elevator interfaced with automated carts, "Stand clear!"
  - (6) Any interfacing shall comply with MRR R 408.7030.

R 408.7031b Guards between adjacent pits.

R 31b. Section 2.2.3 of the ASME A17.1 code is amended to read as follows: Guards shall be provided between adjacent pits. The guard shall be not less than 2,000mm (79 in.) from the pit floor, metal unperforated or perforated, with openings that will reject a ball of 50 mm (2in.), it shall be supported and braced such that it will not deflect more than 25mm (1 in.) when subjected to a force of 4.79 kPa (100lbf/ft2) applied horizontally at any point. The guard shall extend not less than 305mm (12 in.) horizontally on each side of the ladder.

NOTE: A single horizontal structural element at the top of a pit ladder, used to stabilize the vertical side rails, is not considered a rung or handgrip.

EXCEPTION: The guard may be omitted if the clearance between the underside of the car sling when resting on a fully compressed buffer and the bottom of the pit is not less than 2.13m (7ft).

R 408.7033a Sumps and sump pumps.

Rule 33a. Section 2.2.2.6 of ASME A17.1 shall be amended to read as follows: Sumps and sump pumps in pits, where provided, shall be covered. Covers shall be secured and level with the pit floor and shall be either, recessed grate type or solid. If solid, it shall have means to permit water flow to comply with 2.2.2.5.

R 408.7034 Enclosure of machine rooms and machinery spaces.

Rule 34. Section 2.7.1 of the ASME A17.1 code is amended to read as follows:

2.7.1. Machines, control equipment, sheaves, and other machinery shall not be exposed to the weather. Machine room, control room, and machinery-space enclosures shall conform to section 2.7.1.1 or 2.7.1.2, and shall also conform to 2.7.1.3 of the ASME A17.1 code, as applicable.

Machine rooms and control rooms shall be located at a hoistway landing associated with the equipment within the room. Elevator machine and control rooms may be located overhead, adjacent to, underneath the hoistway, or at a remote location. The entrance to the machine room or control room shall be not more than 25 feet, clear unobstructed walking pathway from the elevator hoistway door. The distance from the machine room door to the hoistway door may be over 25 feet when the machine room is located directly above the hoistway in a conventional layout. Pit and hoistway access doors shall not be a direct access between a hoistway enclosure and machine room or control room.

Elevators installed without a machine room or control room shall locate the required disconnecting means in a single machinery space or control space outside the hoistway located within 25 feet clear unobstructed walking pathway of the elevator hoistway door, inspection and test panel, and at the same hoistway landing.

The disconnecting means shall be located in a single dedicated space, or dedicated room intended with or without full body entry, and shall be secured so only the elevator journeyperson or other qualified personnel may gain access. If the dedicated space is within a manufacture's door frame, signage will be placed at or near the frame with the specific location of the feeding circuit.

Access to machine rooms, control rooms, machine spaces, or control spaces shall not be through restrooms, lavatories, locker rooms, or associated vestibules. Where enclosed ceilings are required or provided they shall be of a solid type with no access panels. Drop type ceilings shall not be permitted. Machine rooms, control rooms, machinery spaces, and control spaces shall not be used as a pass through or for access to other areas. Building access panels or doors are prohibited in these areas.

R 408.7034a Location of equipment.

Rule 34a. Section 2.7.6.3.2 of the ASME A 17.1 code is amended to read as follows:

2.7.6.3.2 The motor controller shall be located in a machinery space within the hoistway, a machine room, or control room. A motor controller shall not be located outside the specified spaces. Regardless of location, illumination of s/b 19fc (foot candles) shall be provided where controller work is to be performed.

R 408.7037a Illumination of cars and lighting fixtures.

Rule 37a. Section 2.14.7.1.4 of ASME A17.1 is amended to read as follows:

2.14.7.1.4 Each elevator shall be provided with at least 2 electric light fixtures and a **GFCI** (**Ground Fault Circuit Interrupter**) convenience outlet fixture duplex receptable on the car top. The 2 light fixtures combined shall provide an illumination level of not less than 10 fc at any point on the car top. The light fixtures shall be permanent and be of the fixed or portable type and shall be equipped with guards.

R 408.7040a Phase I Emergency Recall Operation.

Rule 40a. Section 2.27.3.1.5 of the ASME A17.1 code is amended to read as follows:

All "FIRE RECALL" switches shall be provided with an illuminated visual signal. The visual signal shall be one of the symbols shown in Fig.2.27.3.1.6(h) to indicate when Phase I Emergency Recall Operation is in effect.

R 408.7041 Machinery spaces, machine rooms, control spaces, and control rooms. Rule 41. Sections 3.7 and 3.7.1 of the ASME A17.1 code is amended to read as follows:

- 3.7. A machinery space outside the hoistway containing a hydraulic machine and an elevator controller shall be a machine room. The hydraulic machine shall be located in a machine space within the elevator hoistway or outside the hoistway in an elevator machine room. Hydraulic machines being installed in the line of movement of an elevator car or wherein an effected person is required to work in the line of movement of an elevator car shall be prohibited. The elevator controller shall be accessible only from a machine room, control room, or hoistway.
- 3.7.1. Hydraulic machines, control equipment, sheaves, and other machinery shall not be exposed to the weather. Machine room, control room, and machinery-space enclosures shall conform to the requirements of sections 2.7.1 to 2.7.7 and 2.7.9 of the ASME A17.1 code and the following:

Machine rooms and control rooms shall be located at a hoistway landing associated with the equipment within the room. Elevator machine and control rooms may be located overhead, adjacent to, underneath the hoistway, or at a remote location. The entrance to the machine room or control room shall be not more than 25 feet, clear unobstructed walking pathway from the elevator hoistway door. The distance from the machine room door to the hoistway door may be over 25 feet when the machine room is located directly above the hoistway in a conventional layout. Pit and hoistway access doors shall not be for direct access between a hoistway enclosure and machine room or control room.

# Regardless of location, illumination of 19fc shall be provided where controller and machinery work is to be performed.

Elevators installed without a machine room or control room shall locate the required disconnecting means in a single machinery space or control space outside the hoistway located within 25 feet clear unobstructed walking pathway of the elevator hoistway door, inspection and test panel, and at the same hoistway landing.

The disconnecting means shall be located in a single dedicated space, or dedicated room intended with or without full body entry, and shall be secured so only the elevator journeyperson or other qualified personnel may gain access. If the dedicated space is within a manufacturer's door frame, signage will be placed at or near the frame with the specific location of the feeding circuit.

Access to machine rooms, control rooms, machine spaces, or control spaces shall not be through restrooms, lavatories, locker rooms, or associated vestibules. Where enclosed ceilings are required or provided they shall be of a solid type with no access panels. Drop type ceilings shall not be permitted. Machine rooms, control rooms,

machinery spaces, and control spaces shall not be used as a pass through or for access to other areas. Building access panels or doors are prohibited in these areas.

## R 408.7041a. Fire Extinguishers.

Rule 41a. Section 8.6.6.5 of ASME A17.1 is amended to read as follows: In jurisdictions not enforcing NBCC, Class "ABC" fire extinguishers shall be provided in elevator machine rooms, control rooms, and control spaces outside the hoistway intended for full bodily entry, and walk-in machinery and control rooms for escalators and moving walks; and they shall be located convenient to the access door.

For machine-room-less (MRL) installations, Class "ABC" fire extinguishers shall be conspicuously located where they are readily accessible outside of the elevator hoistway within 21 ft (6.4m) of the centerline of each elevator entrance associated with the controller.

R 408.7045 Shutoff valves; gauge snaps; underground piping; tags.

Rule 45. Section 3.19.4.1 of the ASME A17.1 code is amended to read as follows:

3.19.4.1 A shutoff valve shall be provided on a new or modernized hydraulic elevator and shall be installed in the cylinder supply line within the elevator machine room. If the hoistway is remotely located from the machine room, then a shutoff valve shall also be provided in the elevator pit.

Where the hydraulic machine is located in the hoistway, the manually operated shutoff valve may be located inside the hoistway, provided that it is accessible from outside the hoistway to elevator personnel only.

R 408.7046 Pressure gauge fittings.

Rule 46. Section 3.19.4.5 of the ASME A17.1 code is amended to read as follows:

3.19.4.5 A new hydraulic machine shall be provided with the necessary permanent pressure gauge snap-on fittings or permanent gauges, with a shut off valve to allow pressure readings at each pump for checking operating pressures. The gauge or fitting shall be located on the jack side of the check valve or immediately adjacent to the hydraulic control valve. Where the hydraulic machine is located in the hoistway, the pressure gauge fittings shall only be accessible to elevator personnel from outside the hoistway.

## R 408.7048a. Rupture or overspeed valve.

Rule 48a. Section 5.3.2.2.2 of the ASME A17.1 code is amended to read as follows: A pressure switch shall be provided to remove power from the pump motor and the control valve unless there is positive pressure at the control valve.

A rupture or overspeed valve shall be provided on all roped hydraulic jacks, either cable or chain, to stop the flow of fluid and arrest the descent of the car in the event of line or pipe rupture.

R 408.7054 Skirt deflector devices.

Rule 54. Section 6.1.3.3.10 of the ASME A17.1 code is amended to read as follows:

- 6.1.3.3.10 Deflector devices shall be permitted. Where provided, deflector devices shall extend from skirt panels parallel to the escalator path of travel. Means to secure such deflector devices may be on the exposed surface of the skirt. All fasteners shall be of steel with machine screw threads. Any exposed fastener heads shall be of the tamper-resistant type and flush to within 1 mm (0.04 inch).
  - (1) Rigid elements shall **comply** be in compliance with the following conditions:
- (a) Horizontal protrusions extending above the step shall be 18 mm (0.75 inch) maximum. Corners or changes in profile shall be rounded or beveled.

The exposed surfaces of such elements shall be smooth and permanently treated with a low-friction material.

- (b) On the incline, the area of any protrusion shall lie entirely offset outward from a line beginning on the vertical portion of the skirt panel measured 25 mm (1 inch) vertically above the step nose line. The lower surface shall be beveled not less than 10 degrees upward and the upper surface shall be beveled not less than 15 degrees downward in compliance with Figure 6.1.3.3.10 of the ASME A17.1 code.
- (c) At the upper and lower landing, any protrusion shall lie entirely above a line beginning on the vertical portion of the skirt panel 50 mm (2 inches) above the step nose line. The lower surface shall be beveled not less than 10 degrees upward and the upper surface shall be beveled not less than 15 degrees downward. Any rigid elements at the landings shall smoothly blend into the rigid elements along the incline in accordance with the radius of curvature of the transition zone.
- (d) If attached to the skirt, rigid elements shall withstand a force of 900 N (200 lbf) perpendicular to the line of attachment of the element without detachment or permanent deformation. The force shall be applied to an area of 645 mm² (1 inch²).
  - (2) Flexible elements shall be in compliance comply with the following conditions:
- (a) The horizontal protrusion extending from the skirt surface above the step shall be 50 mm (2 inches) maximum.
- (b) Shall be capable of deflecting to an angle of 10 degrees or greater above the horizontal protrusion.
- (c) Noncontinuous flexible elements shall be allowed to deflect to allow a maximum of 9.5 mm (0.375 inch) interference with any point on the step surface.
- (d) Continuous flexible elements shall not deflect such that they can contact the steps.

R 408.7054a Code data plate Moving Walk Modifications.

Rule 54a. Section 8.6.1.5.1 of the ASME A17.1 code is amended to read as follows: Section 6.2 of the ASME 17.1 code is amended to allow passengers on moving walkways as following:

- 8.6.1.5.1 A data plate that indicates the code and edition in effect at the time of installation and any alteration as described in section 8.7.1.8 of the ASME A17.1 code may be provided. The data plate may also specify the code and edition in effect at the time of any alteration and the applicable requirements of section 8.7 of the ASME A17.1 code.
- (1) The certificate holder shall prohibit the use of any cart other than those equipped with an appropriate wheel locking system. No other devices with wheels shall be used on a moving walk, including but not limited to, lumber carts, flatbed carts, two-wheeled hand carts, motorized carts, kid carts, hand trucks, pallet jacks, wheelchairs, walkers, and baby strollers.
- (2) The certificate holder shall install balustrades at the entrance of each moving walk to only allow for a cart equipped with the appropriate wheel locking system.
- (3) The certificate holder shall prohibit the public from riding in or on a "buggy style" cart equipped with the approved wheel locking system.
- (4) The certificate holder shall not allow "kid carts" on the walkway or allow children to ride in carts on the walkway.
- (5) The certificate holder shall provide on-site staff training to prevent the public from unauthorized use of prohibited wheeled devices on moving walks. A file record shall be maintained on-site to verify training and be made available upon request.
- (6) The certificate holder shall have a maintenance and testing program specific to the wheel locking system. The program shall incorporate monthly inspections and the replacement of any non-functioning parts included but not limited to the castors. A file record shall be maintained on-site to verify a maintenance log of the program and be made available upon request.
- (7) The certificate holder shall maintain appropriate signage at a height not to exceed 60 inches at the entrance of each moving walk informing the public of all prohibited use of wheeled devices and the proper use of "buggy style" carts equipped with the appropriate wheel locking system on moving walks.
- (8) The certificate holder shall maintain security cameras to video record the entrance and exit of all moving walks. The video recording of every accident involving personal injury or damage to a moving walk shall be made available for review for the department and the board for determination of possible safety enhancements.
- (9) All drawings, plans and permits submitted to the department in accordance with MCL 408.815(1) for moving walks must explicitly identify proposed uses beyond passenger only.

R 408.7057 Applicability of alteration requirements.

Rule 57. Section 8.7.1.1 of the ASME A17.1 code is amended to read as follows:

- 8.7.1.1 (1) If any alteration is performed to the elevator or any of its subsystems, regardless of any other requirements of section 8.7 of the ASME A17.1 code, then the installation the alteration, at a minimum, shall conform to both of the following requirements:
  - (a) The Michigan elevator laws and rules at the time of installation.

- (b) The Michigan elevator laws and rules for the alteration at the time of any alteration.
- (2) A permit shall be obtained and the elevator shall not be placed into service until it has been inspected and tested in the presence of a general inspector, except as provided in section 15 of the act.

R 408.7057a Code data plate Bottom Car Clearances.

Rule 57a. Section 8.7.1.8 of the ASME A17.1 code is amended to read as follows: Section 2.15.9.2(c) of ASME A17.1 is amended to read as follows;

8.7.1.8. A data plate may be provided as required by section 8.6.1.5 of the ASME A17.1 code. In jurisdictions enforcing national building code of Canada, the data plate required by 8.9.1 shall include the code and edition in effect at the time of alteration and the requirements in section 8.7 of the ASME A17.1 code that were applicable to the alteration. "where the installation is the result of replacement or modernization utilizing an existing hoistway and pit, the toe guard may be reduced in length proportionate to the maximum length the pit depth will allow complying with sec. 2.4.1.5. And at no time shall the toe guard be shorter than the leveling or truck zone plus 75mm (3in)."

R 408.7058a Escalators; general requirements Electrical Protective Devices.

Rule 58a. Section 8.7.6.1.1 6.1.6.3 of the ASME A17.1 code is amended to read as follows:

-8.7.6.1.1 A change in component parts that are interchangeable in form, fit, and function is an alteration and shall comply with the requirements in this section as described in section 8.6.3.1 of the ASME A17.1 code.

The addition of a component or a device that was not part of the original design is an alteration and shall conform to the requirements of section 8.7.6.1 of the ASME A17.1 code for that device or component.

The requirements of section 6.1.3.6.5 of the ASME A17.1 code do not apply to existing escalators that were not required to comply with this requirement at the time of the original installation. Electrical protective devices shall be provided in accordance with 6.1.6.3 through 6.1.6.3.16 and shall be the manually resetting type. Automatic resetting of a Safety device within these codes is prohibited.

R 408.7058b Moving wWalks; general requirements-Electrical Protective Devices.

Rule 58b. Section 8.7.6.2.1 6.2.6.3 of the ASME A17.1 code is amended to read as follows:

8.7.6.2.1. A change in component parts that are interchangeable in form, fit, and function is an alteration and shall comply with the requirements in this section as described in section 8.6.3.1 of the ASME A17.1 code.

The addition of a component or a device that was not part of the original design is an alteration and shall conform to the requirements of section 8.7.6.2 of the ASME A17.1 code for that device or component.

When multiple driving machines per moving walk are utilized, operating and safety devices required by section 8.7.6.2 of the ASME A17.1 code shall simultaneously control all driving machines. Electrical protective devices shall be provided in accordance with 6.2.6.3.1 through 6.2.6.3.12 and shall be the manually resetting type. Automatic resetting of a Safety device within these codes is prohibited.

R 408.7059a Periodic test tags.

Rule 59a. Section 8.6.1.7.2 8.10.1.1.1 of the ASME A17.1 code is amended to read as follows:

8.6.1.7.2-8.10.1.1.1. The acceptance inspection shall be made by an inspector employed by the authority having jurisdiction. All parts of the installation shall be inspected for conformity with the requirements of the Michigan Elevator laws, Michigan Elevator rules, and section 8.10 of the ASME A17.1 code. The American Society of Mechanical Engineers ASME A17.2, Guide- For Inspection of Elevators, Escalators, and Moving Walks. An approved paper tag with the applicable code requirement or requirements and date or dates performed, and the name of the person or firm performing the test, shall be installed in the machine room or machine space for all periodic tests.

R 408.7060 Three-year inspection and test requirements.

Rule 60. Section 8.6.5.15.3 is added to the ASME A17.1 code to read as follows: 8.6.5.15.3. (1) Cylinders shall be tested at intervals of not more than 36 months.

- (2) Three-year inspection and test requirements.
- (a) The relief valve setting shall be in compliance with section 3.19.4.2 of the ASME A17.1 code. The relief valve shall be resealed if the relief valve setting is altered or if the seal is broken.
- (b) Test the relief valve setting by first inching the empty car upward to engage the plunger stop ring or to engage other suitable blocking provided and then apply pressure from the pump to check the setting. A copy of test forms shall be maintained onsite in the machine room/space or available to elevator personnel as per section 8.6.1.4.1 of ASME A17.1.

Procedures for set test are as follows:

- (i) Put rated load in the car and locate it at any convenient level.
- (ii) Open the disconnect switch and locate the elevation of the platform with respect to a convenient reference.
- (iii) For cylinders that are not completely exposed, after not less than 2 hours, note the position of the platform with respect to the chosen reference. For cylinders that are completely exposed, after not less than 30 minutes, note the position of the platform with respect to the chosen reference. A change in the car position during a cylinder test that cannot be accounted for by visible oil leakage or temperature change of the oil indicates a failure of some type requiring further inspections, tests, or repairs. An accessible written record of all oil levels and all oil added shall be maintained in the machine room.

#### CHAPTER 4. ASME A18.1 MODIFICATIONS

R 408.7062 Runway entrance.

Rule 62. Section 2.1.1.2 of the ASME A18.1 code is amended to read as follows: 2.1.1.2 The runway entrance shall be guarded at the upper landing by a door of unperforated construction not wider than the platform plus 1 inch (25.4 mm). The door shall be self-closing **or power operated** and guard the entire opening to a height equal to or higher than the height of the platform enclosure. The openings created in the runway by these doors shall provide a minimum vertical clearance of 6 feet 8 inches. The doors shall guard the entire area of the openings except for space necessary for operation. Space necessary for operation shall reject a ball 12 mm (0.5 in.) in diameter. The lift side of the landing doors and sill shall present a smooth surface located not closer than 10 mm (0.375 in.) nor more than 20 mm (0.75 in.) from the platform floor.

## CHAPTER 5. ASME A90-1 MODIFICATIONS

R 408.7069 Applicability of national standard and rules of board.

- Rule 69. (1) This rule applies to manlifts, as described in the ASME A90.1-2009, which is adopted by reference in R 408.7003, that are used only to carry plant personnel in granaries, flour mills, parking garages, and similar buildings or occupancies. Belt manlifts shall not be used by the public and, if located in buildings to which the public has access, shall be located in an enclosure that is protected by self-closing, spring-locked doors. Keys to the doors shall be available to employees. The use of belt manlifts during construction is prohibited.
- (2) The hoistway enclosure shall comply with the Michigan **bB**uilding **eC**ode, R 408.30401 to R 408.30547, and shall maintain the fire rating of the structure.
- (3) The travel of any single belt manlift installed after February 14, 1968 shall not exceed 100 feet.

## CHAPTER 6. ANSI A10.4 MODIFICATIONS

R 408.7071 Location.

- Rule 71. Section 5.4.8 of the ANSI A10.4 standard is amended to read as follows:
- 5.4.8. (1) A personnel hoist shall be installed not less than 10 feet from any other lifting or lowering apparatus except other personnel hoists.
- (2) A hoistway shall not be located either partially or wholly over sidewalks or passageways.
- (3) If tower cranes or any other lifting or lowering apparatus are installed such that the boom, load, or trolley may go over or into the 10-foot restricted area, then the personnel hoist shall be unoccupied anytime the boom, boom, or trolley passes over the

restricted area. The evacuation of the personnel hoist shall be the responsibility of the crane operator and the general contractor.

R 408.7079 Rated load safety test.

Rule 79. Section 26.4.8 of the ANSI A10.4 standard is amended to read as follows:

26.4.8 A rated load safety test, as required by section 26.2.1.1 of the ANSI A10.4 standard, shall be performed by a licensed elevator contractor in the presence of a general elevator inspector every 90 days. Periodic inspections may be conducted every 30 days and the appropriate fees accessed at the discretion of the department.

R 408.7081a Operators.

Rule 81a. Section 30.3 of the ANSI A10.4 standard is amended to read as follows: 30.3 The user shall ensure that the operators are knowledgeable and capable of performing the duties outlined in the operating manual and are capable of recording such activity in their log. A list certifying the training of any operator shall be kept in the onsite documentation. Only authorized personnel listed in that document may operate the lift.