

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 45(9) 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, ~~and~~ Executive Reorganization Order Nos. 1996-2, ~~2003-1~~, **2003-1**, 2008-4 and 2011-4, MCL 445.2001, 445.2011, 445.2025, and 445.2030)

R 408.7002, R 408.7003, R 408.7004, R 408.7005, R 408.7006, 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 408.7057, R 408.7057a, R 408.7058a, R 408.7058b, R 408.7059a, R 408.7060, R 408.7062, R 408.7071, R 408.7079, and R 408.7081a of the Michigan Administrative Code are amended, R 408.7054a is rescinded, and R 408.7031b, R 408.7033a, R 408.7040a, R 408.7041a, and R 408.7048a are added, as follows: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 408.801 to 408.824.

(b) "Belt manlift" means a power-driven endless belt ~~which~~ **that** 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) "Department" means the department of licensing and regulatory affairs.

(d) "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) "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) "Hand-powered, 1-man elevator" means an elevator ~~which~~ **that** 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) "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.
 - (h) "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~~ **must** be classified as commercial.
 - (i) "Special elevating device" includes another lifting or lowering apparatus ~~which~~ **that** is guided as provided in section 3 of the act, **MCL 408.803**.
 - (j) "Temporary inspection" means the inspection of a permanent elevator that is to be used on a temporary basis.
 - (k) **"Maintenance" means the process of routine examination, lubrication, cleaning, and adjustment of parts components or subsystems, or both, to ensure performance pursuant to these rules and the American Society of Mechanical Engineers (ASME) A17.1.**
- (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, <https://www.asme.org>, at a cost as of the time of adoption of these rules, as stated in this subdivision:

(i) ASME A17.1-~~2010~~ **2016** safety code for elevators and escalators, except for sections, **1.2.1(b), 1.2.1(c)**, 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, 5.12.1.1, 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-\$252.00.

(ii) ~~ASME A17.2-2012~~ **2017** guide for inspection of elevators, escalators, and moving walks. Cost ~~\$180.00~~**\$195.00**.

(iii) **ASME A17.3-2017 safety code for existing elevators and escalators. Cost \$168.00.**

~~(iii)~~(iv) ~~ASME A17.6-2010~~ **2017** standard for elevator suspension, compensation, and governor systems. Cost ~~\$90.00~~**\$92.00**.

~~(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)~~(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~~**\$98.00**.

~~(vi)~~ (vi) ~~ASME A90.1-2009~~ safety standard for belt manlifts. Cost \$59.00.

(b) ~~ANSI A10.4-2007~~ **2016**, the American National Standards Institute (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, <https://www.ansi.org>. Cost ~~\$74.00~~ **\$110.00**.

(c) The following standards are available from American Society for Testing and Materials, (ASTM), 100 Bar Harbor Drive, 2 Conshohocken, ~~PA~~ **Pennsylvania** 19428-2959, at a cost as of the time of adoption of these rules, as stated in this subdivision:

(i) ~~ASTM D 2667-2008, “Standard test method for biodegradability of alkylbenzene sulfonates”.~~ Cost ~~\$47.00~~**\$69.00**.

~~(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.~~ ASTM E 648-2010, standard test method for critical radiant flux of floor-covering systems using a radiant heat energy source. Cost ~~\$47.00~~**\$69.00**.

(iii) ~~ASTM F 714-2012, “standard specification for polyethylene (PE) plastic pipe (SDR-PR) based on outside diameter”.~~ Cost ~~\$47.00~~ **\$69.00**.

(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, Michigan 48933**. ~~Copies~~ **Direction to the organizations’ website to order the book** may be obtained from the bureau of construction codes. ~~at~~ ~~€~~ ~~The cost of the individual codes as is 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, Michigan 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.~~ **The certificate holder is responsible for submitting this information and updating this information. The certificate holder shall submit this information to the department in writing.**

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 make the unit safe for public operation. All units shall be inspected before use pursuant to R 408.7010.**

(2) One serial number tag ~~shall~~ **must** be furnished and ~~shall be~~ permanently attached to the elevator machine controller.

(3) Identification plates and tags ~~shall be~~ **are** furnished by the department and remain the property of the department.

R 408.7006 Accident reports.

Rule 6. The holder of a certificate of operation shall notify the department within 48 hours of every accident involving personal injury or damage to the elevator: **in a manner and on a form prescribed by the department.** The department may investigate any accidents involving personal injury or damage to the elevator.

R 408.7007 Responsibility for elevator operation and maintenance.

Rule 7. (1) Responsibility for the operation and maintenance of elevators ~~shall be~~ **is** as follows:

(a) The person, firm, or corporation installing, repairing, relocating, or altering an elevator ~~shall be~~ **is** responsible for its operation and maintenance until the certificate of operation is issued, except as provided for in R 408.7012, and ~~shall be~~ **is** 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~~ **is** responsible for the safe operation and proper maintenance of the elevator.

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

~~(e)~~**(d)** The licensed contractor holding a temporary certificate of operation ~~shall be~~ **is** 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~~ **must** be performed by **elevator journeypersons who are licensed in this state.** ~~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~~ The passenger or freight elevator ~~shall~~ **must** not be used until it has been approved by a general inspector, the required fee has been paid, and a temporary certificate of operation has been obtained. ~~Such~~ **This** certificate ~~shall~~ **must** be issued for a period not to exceed 90 **calendar** days. Renewals may be granted at the discretion of the department.

~~(2)(a)~~ **(a)** Permanent elevators used temporarily during construction **to move workers, authorized personnel, and materials shall must have maintenance performed** ~~be inspected every 30 calendar days-~~ **by a licensed elevator journeyperson.** These elevators **must be inspected by a general elevator inspector employed by the department every 90 calendar days.**

(b) Periodic inspections may be conducted by a general inspector every 30 calendar days. The fees are cited in R 408.7019 and may be assessed 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. This elevator must not be used until it is inspected by a general inspector; the required fee, listed in R 408.7019, is paid; and a temporary certificate of operation is issued by the department to the licensed elevator contractor. The certificate must be issued for a period not to exceed 90 calendar days. Renewals may be granted at the discretion of the department.

(a) Permanent elevators used temporarily by the public must have maintenance performed by a licensed elevator journeyperson every 30 calendar days.

(b) Periodic inspections may be conducted by a general inspector every 30 calendar 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 of the inspection.** ~~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~~ **must** be forwarded to the department within 48 hours **of being sealed.**

(3) The director shall issue a certificate of operation for a capacity not to exceed ~~that~~ **the capacity** 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 **owner or user must comply with 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 **he or she has complied with the corrections stated in the violation notice and** full compliance is **affected.** Notification ~~shall~~ **must** be on forms furnished by the department.

(2) If in the judgment of the general inspector, failure to make ~~such these~~ corrections would endanger human life, then compliance with the **violation notice** ~~correction order~~ may be required immediately.

(3) Noncompliance with the **violation notice** ~~correction order~~ 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~~ **must** be paid in accordance with the following schedule:

Commissions to inspect elevators	
Commission	\$50.00.
Commission renewal.....	\$50.00.
Examination for certificates of competency	
Certificate of competency examination (nonrefundable)	\$50.00.
Elevator contractors and journeyman examination and licenses	
Elevator contractor's license and renewal (nonrefundable).....	\$100.00.
Elevator contractor's examination (nonrefundable)	\$100.00.
Elevator journeyman license and renewal (nonrefundable).....	\$40.00.
Elevator journeyman examination (nonrefundable).....	\$100.00.
Installation permits fees	
Elevator installation application Application fee all devices (nontransferable and nonrefundable)	\$60.00 100.00.
Base permit fee for each of the following 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 elevator	

Belt manlift
 Special elevating device
Personnel Hoist hoist

For ~~above~~ **these** installations, an additional **amount of \$50.00** ~~\$25.00~~ is charged ~~for each hoistway opening and for each floor traveled without a hoistway opening or for each floor traveled without a hoistway opening, or both.~~

Base permit fee: Escalators and moving walks \$240.00 ~~360.00~~.
~~Moving walk~~ \$240.00.

Base permit fee: private residence platform lift and private residency stairway chairlift..... \$250.00.

Base permit fee: platform lift and stairway chairlift\$100.00.

~~Personnel hoist, initial inspection~~ \$340.00.
~~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~~ \$40.00.
~~Platform lift and stairway chairlift in buildings other than private residence~~ \$70.00.

Alteration, replacement, and dormant elevator permit fees

Application fee: all devices, excluding emergency permits, nontransferable and nonrefundable. \$100.00.

Alteration personnel hoist \$150.00.

For the specified alteration fees, an additional amount is charged for each additional alteration and or personnel hoist tower rise at \$75.00.

Dormant elevator \$100.00.

For alterations, excluding personnel hoist, and dormant elevators, an additional amount of \$25.00 is charged for each hoistway opening or for each floor traveled without a hoistway opening, or both.

Emergency permit fee, maximum 2 items and not applicable for installations. \$500.00.

Major alteration permits

~~Elevator alteration application fee (nontransferable and nonrefundable)~~..... \$60.00.
~~First alteration (including 1 final inspection)~~..... \$90.00.
~~Each additional alteration~~ \$65.00.
~~Personnel hoist tower rise~~ \$90.00.

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

~~Maximum alteration fee (includes \$60.00 nontransferable and nonrefundable application fee)~~..... \$395.00.

(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~~ **must** 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~~ becomes invalid unless the work on the site authorized by the permit is commenced within 180 days after issuance, or if the work authorized on the site by the permit is suspended or abandoned for a period of 180 days after work is commenced. A 1-time 180-day permit extension ~~shall~~ **must** automatically be granted when a building permit for the same project remains valid.

Certificate of operation

Biennial and annual certificate of operation	\$45.00 60.00.
Temporary certificate of operation	\$200.00 250.00.

Inspection by general inspector

Biennial inspection for devices complying with R 408.7011(b)	\$110.00 125.00.
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Annual and biennial inspection for all other devices	\$125.00 175.00.
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~~Plus \$5.00 for each hoistway opening and for each floor traveled without a hoistway opening.~~

The items listed under "Inspection by general inspector" also have an additional amount of \$25.00 that will be charged for each hoistway opening or for each floor traveled without a hoistway opening, or both.

Temporary certificate of operation inspection	\$125.00 200.00.
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The temporary certificate of operation inspection has an additional amount of \$35.00 that will be charged for each hoistway opening or for each floor traveled without a hoistway opening, or both.

~~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)	\$110.00 125.00.
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Reinspection or correction order follow-up for all other devices	\$125.00 175.00.
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(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~~ **is at the rate of \$100.00 150.00** 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~~ **must** be paid to the department. Checks or money orders ~~shall~~ **must** 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 an individual who works full-time and is licensed in this state as an elevator contractor, the termination or separation of employment of the licensed elevator contractor must result in the immediate suspension of the elevator contracting company's ability to obtain new permits. An elevator contracting company's ability to request permits remains suspended until another licensed 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 notification to the department of a new licensed elevator contractor working for an elevator contracting company must be submitted in writing by the licensed elevator contractor and the elevator contracting company within 5 business days of hiring. 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 must be employed on a full-time basis by the elevator contracting company for whom the elevator contractor requests permits.**

(3) ~~The elevator contracting company and the license holder supervising employee shall be~~ **are** jointly and **separately** ~~severally~~ 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~~ **pursuant to** section 8(1)(d) of ~~the elevator safety board act,~~ **of the act, MCL 408.808.** An appeal **must** 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 nonrefundable** fee ~~shall~~ **must** be made to the department at the time the appeal is filed. Checks, ~~or~~ money orders, **e-checks, cashier's checks, or credit card charges shall must** 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~~ **must** 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~~ **A** 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 of the act and these rules**. The request ~~shall~~ **must** be on a form prescribed by the department. ~~and~~ **A person, firm, or corporation shall** specify on the form the reasons **for the variance** and the relief sought. ~~The form and~~ **shall must** be submitted to the department for review.

(2) A ~~\$75.00~~ **100.00** nonrefundable fee ~~shall~~ **must** be **paid** to the department at the time the variance request is filed. Checks, ~~or~~ money orders, **e-checks, cashier's checks, or credit card charges shall must** 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~~ **must** 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 before use in this state. An initial ~~\$75.00~~ **100.00** nonrefundable application fee ~~shall~~ **must** be made to the department at the time of application.

(2) All product approval **acknowledgement** requests **must** be on a form prescribed by the department and accompanied by a compliance document **that** reflects compliance with the corresponding requirements and supporting documents, **including, but not**

limited to, 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 who is employed by the manufacturer, must accompany the documentation. The letter must state that when installed per manufacturer specifications, the unit will comply with the applicable standards or codes, or both, that are adopted by reference in R 408.7003.

~~(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~~ **are** 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 **that were** installed before the effective date of this code edition ~~shall~~ **must** comply with the this state's 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~~ **must** comply with these rules and ~~shall~~ be maintained as described in the ~~American society of mechanical engineers (ASME) guide for inspection of safety code for existing elevators, and 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. **(1)** A power elevator, except a private residence elevator, private residence inclined elevator, private residence platform lift, or private residence stairway chairlift, ~~shall~~ **must** be ~~serviced~~ **maintained at least once every 90 days by** and ~~examined for defects by a licensed~~ **an** elevator journey person **who is licensed in this state**, except for the following devices, which ~~shall~~ **must** 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.

(2) An ~~accessible~~ **ongoing** written record of all ~~service and examination~~ **maintenance and testing** ~~shall~~ **must** 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 that~~ is inactive for 1 year ~~shall~~ **must** 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 must be obtained and the elevator must not be placed into service until it has been inspected and tested by a general inspector, except as provided in section 15 of the act, MCL 408.815.

~~(2)(3)~~ A platform lift or stairway chairlift ~~which that~~ is inactive for 1 year ~~shall~~ **must** be classified as dormant and placed out of service as follows:

(a) The device ~~shall~~ **must** be lowered and any suspension means removed.

(b) The power feed lines ~~shall~~ **must** be disconnected from the machine disconnect switch and taped in compliance with section 10.1.6 of the ASME A18.1 code, **as adopted by reference in R 408.7003.**

(c) All landing entrances ~~shall~~ **must** be secured in a closed position from inside the runway or hoistway.

(d) Folding type devices ~~shall~~ **must** 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 by the department. The dormant elevating device** ~~it shall~~ **must** 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~~ **must** consist of passing information from the elevator control to a remote location for the collection of information. A device ~~shall~~ **may** 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~~ **must** 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~~ **must** 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 must also comply with this rule.**

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) ~~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 may be occupied by an automated device at any 1 time. If a single elevator bank is selected due to normal power supply loss, automated devices may not utilize that car. General public passenger cars may not be used to transport automated devices.~~

(2) A maintenance program for devices must be instituted by the building owner and be available to the requestor upon request.

(3) Devices that utilize multiple carts must be tested annually with all possible variations of carts. Records must be kept onsite and be available to the requestor upon request.

(4) All circuitry and controllers must be kept out of elevator machine rooms and control spaces.

(5) Proper signage must be posted at each elevator connected to the automated devices. Signs must include both of the following language:

(a) Do not enter or use elevator if automated carts are entering, exiting, or on the car.

(b) Service elevator interfaced with automated carts, "Stand clear!"

(6) Any interfacing must comply with R 408.7030.

R 408.7031b Guards between adjacent pits.

Rule 31b. Section 2.2.3 of the ASME A17.1 code is amended to read as follows: Guards must be provided between adjacent pits. The guard must be not less than 2,000mm, or 79 inches, from the pit floor, metal unperforated or perforated, with openings that will reject a ball of 50 mm, or 2 inches. It must be supported and braced such that it will not deflect more than 25mm, or 1 inch, when subjected to a force of 4.79 kPa (100lb/ft²) applied horizontally at any point. The guard may extend not less than 305mm, or 12 inches, 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, or 7 feet.

R 408.7033a Sumps and sump pumps.

Rule 33a. Section 2.2.2.6 of ASME A17.1 is amended to read as follows: Sumps and sump pumps in pits, where provided, must be covered. Covers must be secured and level with the pit floor and be either a recessed grate type or solid. If solid, it must have means to permit water flow to comply with section 2.2.2.5 of ASME 17.1.

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~~ **may** not be exposed to the weather. Machine room, control room, and machinery-space enclosures ~~shall~~ **must** 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~~ **must** 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~~ **may** 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~~ **may** 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~~ **must** locate the required disconnecting means ~~in a single machinery space or control space outside of the hoistway in a separate dedicated control space that is readily accessible and adjacent to the control space that contains the control, located within 25 feet clear unobstructed walking pathway of the elevator hoistway door, inspection, and test panels, and at the same hoistway landing.~~

The disconnecting means ~~shall~~ **must** 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 journey person or other qualified personnel may gain access.~~ **at a distance not to exceed 25 feet from the landing that contains the elevator control, inspection, or test panel. The disconnecting means must be secured so that only elevator journeyman and qualified personnel may gain access. If the controller is within a manufacture's door frame, signage must be placed at or near the frame with the specific location of the disconnecting means.**

Access to machine rooms, control rooms, machine spaces, or control spaces ~~shall~~ **may** not be through restrooms, lavatories, locker rooms, or associated vestibules. Where enclosed ceilings are required or provided, they ~~shall~~ **must** be of a solid type with no access panels. Drop type ceilings ~~shall~~ **are** not be permitted. Machine rooms, control rooms, machinery spaces, and control spaces ~~shall~~ **may** 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~~ **must** be located in a machinery space within the hoistway, a machine room, or control room. A motor controller ~~shall~~ **may** not be located outside the specified spaces. **Regardless of location, illumination of 19fc, meaning foot candles, must 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~~ **must** be provided with at least 2 electric light fixtures and a **ground fault circuit interrupter convenience outlet fixture duplex receptable** on the car top. The 2 light fixtures combined ~~shall~~ **must** provide an illumination level of not less than 10 fc at **any point on** the car top. The light fixtures ~~shall~~ **must** 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 must be provided with an illuminated visual signal. The visual signal must be 1 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~~ **must** be a machine room. The hydraulic machine ~~shall~~ **must** 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 where an affected person is required to work in the line of movement of an elevator car must be prohibited.** The elevator controller ~~shall~~ **must** be accessible only from a machine room, control room, or hoistway.

3.7.1. Hydraulic machines, control equipment, sheaves, and other machinery ~~shall~~ **may** not be exposed to the weather. Machine room, control room, and machinery-space enclosures ~~shall~~ **must** 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~~ **must** 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~~ **must** 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 may~~ not be for direct access between a hoistway enclosure and machine room or control room. **Regardless of location, illumination of 19fc, meaning foot candles, must be provided where controller and machinery work is to be performed.**

Elevators installed without a machine room or control room ~~shall~~ **must** locate the required disconnecting means ~~in a single machinery space or control space outside of the hoistway in a separate dedicated control space, readily accessible and adjacent to the control space that contains the control,~~ 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~~ **must** be located in a single dedicated space, or dedicated room, intended with or without full body entry, **at a distance not to exceed 25 feet from the landing that contains the elevator control, inspection, or test panel.** ~~and~~ **The disconnecting means shall must** be secured **so that only** ~~so only~~ the elevator journeyperson ~~journeyman or other~~ **and** qualified personnel may gain access. **Signage must be placed in plain view, at or near the controller, and state the location of the disconnecting means.**

Access to machine rooms, control rooms, machine spaces, or control spaces ~~shall~~ **may** not be through restrooms, lavatories, locker rooms, or associated vestibules. Where enclosed ceilings are required or provided, they ~~shall~~ **must** be of a solid type with no access panels. Drop type ceilings ~~shall are~~ not be permitted. Machine rooms, control rooms, machinery spaces, and control spaces ~~shall~~ **may** 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 the National Building Code of Canada, Class “ABC” fire extinguishers must 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 must be located convenient to the access door.

For machine-room-less (MRL) installations, Class “ABC” fire extinguishers must 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 must 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~~ **must** 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~~ **must** 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~~ **must** 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 must 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 must 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~~ **are** permitted. Where provided, deflector devices ~~shall~~ **must** extend from skirt panels parallel to the escalator path of travel. Means to secure ~~such~~ **these** deflector devices may be on the exposed surface of the skirt. All fasteners ~~shall~~ **must** be of steel with machine screw threads. Any exposed fastener heads shall be of the tamper-resistant type and flush to within 1 mm, ~~or~~ (0.04 inch).

(1) Rigid elements ~~shall~~ **must comply** ~~be in compliance~~ with the following conditions:

(a) Horizontal protrusions extending above the step ~~shall~~ **must** be 18 mm, ~~or~~ (0.75 inch), maximum. Corners or changes in profile ~~shall~~ **must** be rounded or beveled.

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

(b) On the incline, the area of any protrusion ~~shall~~ **must** lie entirely offset outward from a line beginning on the vertical portion of the skirt panel measured 25 mm, ~~or~~ (1 inch), vertically above the step nose line. The lower surface ~~shall~~ **must** be beveled not less than 10 degrees upward and the upper surface ~~shall~~ **must** 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~~ **must** lie entirely above a line beginning on the vertical portion of the skirt panel 50 mm, ~~or~~ (2 inches), above the step nose line. The lower surface ~~shall~~ **must** be beveled not less than 10 degrees upward and the upper surface ~~shall~~ **must** be beveled not less than 15 degrees downward. Any rigid elements at the landings ~~shall~~ **must** 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~~ **must** 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 **must be in compliance**~~ **comply** with the following conditions:

(a) The horizontal protrusion extending from the skirt surface above the step ~~shall~~ **must** be 50 mm, ~~or (2 inches)~~, maximum.

(b) ~~Shall~~ **Must** be capable of deflecting to an angle of 10 degrees or greater above the horizontal protrusion.

(c) Noncontinuous flexible elements ~~shall be~~ **are** allowed to deflect to allow a maximum of 9.5 mm, ~~or (0.375 inch)~~, interference with any point on the step surface.

(d) Continuous flexible elements ~~shall~~ **may** not deflect such that they can contact the steps.

R 408.7054a Code data plate. **Rescinded.**

Rule 54a. ~~Section 8.6.1.5.1 of the ASME A17.1 code is amended to read as follows:~~
~~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.~~

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 ~~an~~ 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~~ **must** conform to both of the following requirements:

(a) ~~The Michigan~~ **This state's** elevator laws and rules at the time of installation.

(b) ~~The Michigan~~ **This state's** elevator laws and rules for the alteration at the time of any alteration.

(2) A permit ~~shall~~ **must** be obtained and the elevator ~~shall~~ **may** 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, **MCL 408.815**.

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.~~ **2.15.9.2(c). Where the installation is the result of replacement or**

modernization utilizing an existing hoistway and pit, the toe guard may be reduced in length utilizing an existing hoistway and pit, provided the car speed does not exceed 150 feet per minute. The toe guard may be reduced in length proportionate to the maximum length the pit depth will allow complying with section 2.4.1.5. At no time may the toe guard be shorter than the leveling or truck zone plus 75mm, or 3 inches.

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.~~ **6.1.6.3. Electrical protective devices must be provided pursuant to 6.1.6.3 through 6.1.6.3.16 and be the manually resetting type. Automatic resetting of a safety device within these codes is prohibited.**

R 408.7058b Moving walks; ~~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.~~ **6.2.6.3. Electrical protective devices must be provided pursuant to 6.2.6.3.1 through 6.2.6.3.12 and 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 must be made by an inspector employed by the authority having jurisdiction. All parts of the installation must be inspected for conformity with the requirements of this state's elevator laws, these rules, and section 8.10 of the ASME A17.1 and ASME 17.2. 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 **must** 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 **must** be tested at intervals of not more than 36 months.

(2) Three-year inspection and test requirements **are as follow-:**

(a) The relief valve setting **must shall be in compliance comply** with section 3.19.4.2 of the ASME A17.1 code. The relief valve shall **must** 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 must be maintained on site in the machine room or space available to elevator personnel pursuant to 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 **must** 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 **must** be guarded at the upper landing by a door of unperforated construction not wider than the platform plus 1 inch, **or (25.4 millimeters)**. The door shall **must** 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 **must** provide a minimum vertical clearance of 6 feet 8 inches. The doors shall **must** guard the entire area of the openings except for space necessary for operation. Space necessary for operation shall **must** reject a ball 12 mm, **or (0.5 inches-),** in diameter. The lift side of the landing doors and sill shall **must** present a smooth surface located not closer than 10 mm, **or (0.375 inches-),** or more than 20 mm, **or (0.75 inches-),** from the platform floor.

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~~ **must** be installed not less than 10 feet from any other lifting or lowering apparatus except other personnel hoists.

(2) A hoistway ~~shall~~ **may** 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~~ **must** be unoccupied anytime the boom, or trolley passes over the restricted area. The evacuation of the personnel hoist ~~shall~~ **must** 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~~ **must** 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 assessed 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 must be kept in the on-site documentation. Only authorized personnel listed in that document may operate the lift.**