# COLORADO DEPARTMENT OF LABOR AND EMPLOYMENT DIVISION OF OIL AND PUBLIC SAFETY

# **CONVEYANCE REGULATIONS**

7 C.C.R. 1101-8

Effective: April 1, 2017



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#### ARTICLE 1 GENERAL PROVISIONS

#### Section 1-1 Statement of Basis and Purpose

These regulations are promulgated to establish rules for the design, installation, registration, construction, operation, maintenance and inspection of conveyances, and for the licensing of conveyance mechanics, contractors and inspectors. The purpose of these regulations is to ensure that elevators and other automated conveyances, accessible to the general public, are correctly and safely installed and operated within the state. The conveyance owner should communicate with local jurisdictions regarding more stringent requirements that may be in place, such as the required operation of the conveyance.

#### **Section 1-2 Statutory Authority**

These regulations have been created pursuant to the Elevator and Escalator Certification Act, Title 9 Article 5.5 Section 116 of the Colorado Revised Statutes (C.R.S.).

#### **Section 1-3 Effective Date**

These amended regulations shall be effective on April 1, 2017, and supersede all prior editions. The prior editions of the regulations were effective January 1, 2015, February 1, 2013, January 1, 2011, January 1, 2010, and January 1, 2009. Emergency regulations were in effect from April 2, 2008, until the promulgation of permanent rules.

#### **Section 1-4 Definitions**

- Terms in these regulations shall have the same definitions as those found in Article 5.5 of Title 9 of the C.R.S. or as defined below.
- ACCEPTANCE INSPECTION. The initial inspection and witnessing of acceptance testing, conducted by a licensed Conveyance Inspector, of a new or altered conveyance to verify compliance with standards as defined in these regulations.
- ACCEPTANCE TEST. The testing, conducted by a conveyance mechanic, of a new or altered conveyance to verify compliance with standards as defined in these regulations.
- ADMINISTRATOR. The Director of the Division of Oil and Public Safety within the Department of Labor and Employment or the Director's designee.
- ADVISORY BOARD. A group of experts within the conveyance industry chosen by the Administrator to assist in the development of regulations and resolution of issues relating to the operation of the conveyance program.
- AFFILIATED. An employment or subsidiary relationship between two entities.
- ALTERATION. As defined in American Society of Mechanical Engineers (ASME) A17.1: any change to equipment, including its parts, components, and/or subsystems, other than maintenance, repair, or replacement and as further defined by the Administrator as an activity that requires an alteration permit, as defined in Section 2-4-1 of all these regulations.
- ALTERATION, EMERGENCY. An alteration that is limited to minor alteration activities and to those facilities where the building is dependent on the conveyance as the sole means of access and no

other conveyance is available. The conveyance contractor performing such alteration shall submit a minor alteration permit application to the Administrator or Approved AHJ by the next working day.

- ALTERATION, MAJOR. An alteration that is extensive in scope such that it warrants a complete witnessed acceptance inspection and applicable tests.
- ALTERATION, MINOR. An alteration that is minor in scope, such that it only warrants the specific component(s) being altered to be tested and inspected.
- ALTERATION, SUBSTANTIAL. An alteration that includes one of the following:
  - (a) The change in the type of service of an elevator
  - (b) The change in the type of operation control or motion control
  - (c) The installation of a controller.

The Substantial Alteration Permit must also include any scope necessary to comply with the currently adopted edition of ASME A17.3, which in turn requires compliance with any more stringent requirements listed in the currently adopted edition of ASME A17.1.

- ALTERNATE MATERIALS AND METHODS REQUEST. The submittal of documentation to the Administrator or Approved AHJ by a conveyance owner or conveyance contractor that justifies the use of alternate methods or materials for the implementation of standards adopted pursuant to these regulations.
- ANSI. American National Standards Institute.
- ANSI/ASSE A10.4. Safety Requirements for Personnel Hoists and Employee Elevators on Construction and Demolition Sites.
- ASCE. American Society of Civil Engineers.
- ASCE 21. Automated People Mover Standards published as ASCE 21 Parts 1-4, as amended by ASCE.
- ASME. American Society of Mechanical Engineers.
- ASME A17.1. Safety Code for Elevators and Escalators.
- ASME A17.2. Guide for Inspection of Elevators, Escalators, and Moving Walks.
- ASME A17.3. Safety Code for Existing Elevators and Escalators.
- ASME A18.1. Safety Standard for Platform Lifts and Stairway Chairlifts.
- ASSE. American Society of Safety Engineers.
- AUTHORITY HAVING JURISDICTION (AHJ). A local jurisdiction (including a fire department, fire district or fire authority) that is responsible for enforcing the requirements of a code or standard or for approving equipment, materials, an installation or a procedure.

- AUTHORITY HAVING JURISDICTION (AHJ), APPROVED. A local jurisdiction or any agent thereof that has been approved by the Administrator pursuant to Section 3-1 of these regulations.
- AUTOMATED PEOPLE MOVER (APM). As defined in ASCE 21:a guided transit mode with fully automated operation, featuring vehicles that operate on guideways with exclusive right-of-way.
- AUTOMATED PEOPLE MOVER ALTERATION. Any change to equipment, including its parts, components and/or subsystems other than maintenance, repair or replacement that does not materially affect the APM integrity, operation or control.
- CERTIFICATE OF OPERATION (CO). A document issued by the Administrator or an Approved AHJ indicating that the conveyance has had the required safety inspection and tests and that fees have been paid as set forth in these regulations.
- CERTIFICATE OF OPERATION, CONSTRUCTION (CCO). A document issued by the Administrator or an Approved AHJ that allows the temporary operation of a conveyance for the support of construction activities without permitting conveyance access to the public.
- CERTIFICATE OF OPERATION, TEMPORARY (TCO). A document issued by the Administrator or an Approved AHJ that allows the temporary operation of a conveyance for public use if life safety issues have not been identified following the inspection of the conveyance by a conveyance inspector.
- CERTIFICATE OF SUBSTANTIAL COMPLETION. A document issued by the owner of an APM system stating that work relating to a product has progressed to the point that the owner can beneficially occupy or utilize the product for the purpose for which it is intended and that the work and product comply with all applicable codes and regulations.
- CONVEYANCE. A mechanical device to which these regulations apply pursuant to Section 1-5 of these regulations.
- CONVEYANCE, PRIVATE RESIDENCE. A power passenger conveyance that is limited in size, capacity, rise, and speed and is designed to be installed in a private residence or in a multiple dwelling as a means of access to a private residence.
- CONVEYANCE CONTRACTOR. A person who holds a current conveyance contractor license issued by the Administrator.
- CONVEYANCE MECHANIC. A person who holds a current conveyance mechanic or temporary conveyance mechanic license issued by the Administrator and who is employed by a conveyance contractor.
- CONVEYANCE OWNER. The owner of the conveyance or assigned agent responsible for maintaining the conveyance.
- DOOR RESTRICTORS. As described in the currently-adopted edition of ASME A17.1.
- DUMBWAITER. As defined in ASME A17.1: a hoisting and lowering mechanism equipped with a car of limited size that moves in guide rails and serves two or more landings that is used exclusively for carrying materials.

- ELEVATOR. As defined in ASME A17.1: a hoisting or lowering mechanism, equipped with a car that moves within guides and serves two or more landings.
- ELEVATOR, ELECTRIC. As defined in ASME A17.1: a power elevator in which the energy is applied, by means of an electric driving machine.
- ELEVATOR, HYDRAULIC. As defined in ASME A17.1: a power elevator in which the energy is applied, by means of a liquid under pressure, in a hydraulic jack.
- ELEVATOR, SPECIAL PURPOSE PERSONNEL (SPPE). As defined in ASME A17.1: an elevator that is limited in size, capacity, and speed, and permanently installed in structures, such as grain elevators, radio antennae, bridge towers, underground facilities, power plants and similar structures to provide vertical transportation of authorized personnel and their tools and equipment only. An SPPE shall not exceed the following specifications:

(1) Capacity: 1,000 pounds

(2) Size: 13 square feet

(3) Speed: 150 feet per minute

- ELEVATOR, WIND TURBINE TOWER. As defined in ASME A17.1: a hoisting and lowering mechanism equipped with a car located within a wind turbine tower.
- ESCALATOR. As defined in ASME A17.1: a power-driven inclined, continuous stairway used for raising or lowering passengers.
- FIREFIGHTERS' SERVICE. As described in the currently-adopted edition of ASME A17.1.
- INJURY. An injury that results in death or requires medical treatment (other than first aid) administered by a physician or by registered professional personnel under the standing orders of a physician. Medical treatment does not include first aid treatment or one-time treatment and subsequent observation of minor scratches, cuts, burns, splinters, and any other minor injuries that do not ordinarily require medical care even though treatment is provided by a physician or by registered professional personnel.
- INSPECTOR, AHJ. A conveyance inspector who holds a current conveyance inspector license issued by the Administrator, is employed by an Approved AHJ to inspect a conveyance and is not affiliated with the conveyance mechanic whose repair, alteration or installation is being inspected.
- INSPECTOR, AHJ-APPOINTED. A conveyance inspector who holds a current conveyance inspector license issued by the Administrator, is employed by a non-profit entity, voluntary association or other council of governments that has been appointed or designated by an Approved AHJ to provide conveyance plan review and/or inspection services and is not affiliated with the conveyance mechanic whose repair, alteration or installation is being inspected.
- INSPECTOR, CONVEYANCE. A person who meets the definition of AHJ Inspector, AHJ-Appointed Inspector or Private Inspector.
- INSPECTOR, PRIVATE. A conveyance inspector who holds a current conveyance inspector license issued by the Administrator, is not an Approved AHJ or Approved AHJ-appointed conveyance inspector, is retained by the conveyance owner to inspect a conveyance, and is not affiliated with

- the conveyance owner, general contractor or conveyance contractor who is performing work on the conveyance or with the conveyance mechanic whose repair, alteration or installation is being inspected.
- LICENSE. A written license, duly issued by the Administrator, authorizing a person, sole proprietor, firm or company to carry on the business of erecting, constructing, installing, altering, servicing, repairing, maintaining or performing inspections of conveyances covered by these regulations.
- LOCAL JURISDICTION. A city, county, city and county or any agent thereof.
- MAINTENANCE CONTROL PROGRAM (MCP). A documented set of maintenance tasks, maintenance procedures, examinations, and tests designed to ensure that equipment is maintained in compliance with the requirements of the currently-adopted edition of ASME A17.1.
- MANAGING AGENT. A person or company that is hired by the building owner or lessee to be responsible for maintenance of the conveyance(s).
- MATERIAL RISK. A risk to public safety as determined by the Administrator in cooperation with local jurisdictions.
- MOTION CONTROL. As defined in ASME A17.1: that portion of a control system that governs the acceleration, speed, retardation, and stopping of the moving member.
- MOVING WALK. As defined in ASME A17.1: a type of passenger-carrying device on which passengers stand or walk and in which the passenger-carrying surface remains parallel to its direction of motion and is uninterrupted.
- NFPA. National Fire Protection Association.
- NFPA 13. Standard for the Installation of Sprinkler Systems.
- OPERATION CONTROL. As defined in ASME A17.1: that portion of a control system that initiates the starting, stopping, and direction of motion, in response to a signal from an operating device.
- PERIODIC INSPECTION. The inspection and testing of an existing conveyance conducted by a licensed conveyance inspector to verify compliance with standards as defined in these regulations.
- PERSONNEL HOIST. A mechanism and its hoistway for use in connection with the construction, alteration, ongoing maintenance or demolition of a building, structure or other work. It is used for hoisting and lowering workers and/or materials and is equipped with a car that moves vertically on guide members. For the purpose of these regulations, a personnel hoist is only regulated if it is accessible to or used by members of the general public.
- PERSONNEL, AUTHORIZED. As defined in ASME A17.1: persons who have been instructed in the operation of the equipment and designated by the owner to use the equipment. The Administrator has determined that this does not include the general public.
- PERSONNEL, ELEVATOR. As defined in ASME A17.1: persons who have been trained in the construction, maintenance, repair, inspection, or testing of equipment.

- PERSONNEL, EMERGENCY. As defined in ASME A17.1: persons who have been trained in the operation of emergency or standby power and firefighters' emergency operation or emergency evacuation.
- PLATFORM LIFT. As defined in ASME A18.1: a powered hoisting and lowering mechanism designed to transport mobility impaired persons on a guided platform that travels vertically or on an incline.
- REFINISH. Those cab refinishing activities that are limited to "in place" work such that the removal of the cab panels or walls is not required and does not include any change in the type of materials of the existing cab interior. These cab refinishing activities shall not add or subtract weight to the existing cab.
- REPAIR. As defined in ASME A17.1: reconditioning or renewal of parts, components, and/or subsystems necessary to keep equipment in compliance with applicable Code requirements.
- REPLACEMENT. As defined in ASME A17.1: the substitution of a device or component and/or subsystems, in its entirety, with a unit that is basically the same as the original for the purpose of ensuring performance in accordance with applicable Code requirements.
- SYSTEM VERIFICATION. Activities with a set of minimum standards by which an APM system application shall be verified to meet ASCE 21 Parts 1, 2 and 3 and which shall include the elements of design review, analysis, qualification test, acceptance test, inspection, demonstration, and previous experience as listed in ASCE 21 Part 4 Section 14.

TYPE OF SERVICE. The passenger or freight classification for the use of an elevator.

#### Section 1-5 Scope

These conveyance regulations apply to all conveyances listed below and as defined in Section 1-4 of these regulations, except as provided in Section 1-5(4) of these regulations.

- (1) Hoisting and lowering mechanisms equipped with a car or platform that moves between two or more landings. Such equipment includes, but is not limited to:
  - (a) Elevators
  - (b) Platform lifts(c) Personnel hoists
  - (d) Dumbwaiters
- (2) Power-driven stairways and walkways for carrying persons between landings. Such equipment includes, but is not limited to:
  - (a) Escalators
  - (b) Moving walks
- (3) Automated people movers (APMs) as defined in ASCE 21.
- (4) The following are not included in the scope of these regulations.

- (a) Material hoists within the scope of ANSI A10.5
- (b) Manlifts within the scope of ASME A90.1
- (c) Mobile scaffolds, towers, and platforms within the scope of ANSI A92
- (d) Powered platforms and equipment for exterior and interior maintenance within the scope of ASME A120.1
- (e) Conveyors and related equipment within the scope of ASME B20.1
- (f) Cranes, derricks, hoists, hooks, jacks, and slings within the scope of ASME B30.10
- (g) Industrial trucks within the scope of ASME B56
- (h) Items of portable equipment that are not portable escalators
- (i) Tiering or piling machines used to move materials between storage locations that operate entirely within one story
- (j) Equipment for feeding or positioning materials at machine tools, printing presses, and other similar equipment
- (k) Skip or furnace hoists
- (I) Wharf ramps
- (m) Railroad car lifts or dumpers
- (n) Line jacks, false cars, shafters, moving platforms, and similar equipment used by a certified conveyance contractor for installing a conveyance
- (o) Conveyances at facilities regulated by the Mine Safety and Health Administration in the United States Department of Labor, or its successor, pursuant to the "Federal Mine Safety and Health Act of 1977," Pub.L. 91-173, codified at 30 U.S.C. sec. 801 et seq., as amended
- (p) Elevators within the facilities of gas or electric utilities that are not accessible to the public
- (q) A passenger tramway defined in §25-5-702, C.R.S.
- (r) Conveyances in a single-family residence
- (s) Stairway chairlifts as defined in ASME A18.1
- (t) Special purpose personnel elevators and wind turbine tower elevators that are used by authorized personnel, but are not accessible to or used by customers or members of the general public

#### **ARTICLE 2 ADMINISTRATION**

#### **Section 2-1 Registration**

- (1) The conveyance owner shall register the conveyance with the Administrator.
- (2) The registration notice shall include:
  - (a) A complete conveyance registration form, which is provided on the Administrator's website.
  - (b) The registration fee of \$200 per conveyance.
- (3) Upon the Administrator's approval of the registration, the Administrator will assign a unique number to each conveyance and to the facility at which each conveyance is located.
- (4) Conveyances installed after July 1, 2008, shall be registered with the Administrator before they are placed into service.
- (5) The conveyance owner shall be responsible for notifying the Administrator of any change in ownership or management contact information within 30 days of the change.

#### Section 2-2 Adoption of Nationally-Recognized Safety Standards

- (1) Within these regulations, the Administrator adopts standards and codes as listed below except as amended by the Administrator.
  - (a) ASME A17.1 2013
  - (b) ASME A18.1 2011
  - (c) ASME A17.3 2005
  - (d) ASCE 21 Parts 1-4
- (2) Nothing in these regulations prohibits a local jurisdiction from adopting and enforcing standards which are more stringent than the minimum requirements included herein.
- (3) Following the initial adoption of standards described in (1) of this Section, the Approved AHJ will remain current in adoption of future standard editions as they are adopted by the Administrator within the timeframe stated in the Memorandum of Agreement (MOA) or as determined by the Administrator.
- (4) The Administrator, in cooperation with the Advisory Board, shall review the latest edition of a standard listed in (1) of this Section and shall determine whether any or all portions of the edition of the standard will be modified or deleted as it pertains to these regulations.
- (5) The standards listed in (1) of this Section may be examined by contacting the Conveyance Program Manager at the office of the Administrator located at 633 17<sup>th</sup> Street, Suite 500 in Denver, Colorado.

#### Section 2-3 Inspections, Tests and Maintenance

#### **Section 2-3-1 Periodic Inspections and Certificates of Operation**

#### **Section 2-3-1-1 Periodic Inspection**

- (1) The conveyance owner shall arrange for a periodic inspection of an existing conveyance on an annual frequency or on a frequency as determined by the Administrator.
- (2) The periodic inspection shall be completed by a conveyance inspector. The conveyance owner may authorize a general contractor or conveyance contractor to select, contract with or hire a conveyance inspector. (3) The conveyance owner shall provide access at all times to all keys necessary for elevator personnel to conduct maintenance and inspections, for the Administrator to conduct inspections and for emergency personnel during an emergency. These keys shall include all keys listed in Section 8.1 of the currently-adopted edition of ASME A17.1, as applicable. Such keys shall include, but not be limited to:
  - (a) Machine room, control room, or machine or control space
  - (b) Hoistway access and hoistway enable switch
  - (c) Phase I and Phase II firefighters' emergency operation switch
  - (d) Emergency or standby power emergency access selector switch
  - (e) Pit access, if applicable
  - (f) Equipment access panels
- (4) The conveyance inspector shall:
  - (a) Obtain the permission of the conveyance owner to conduct the periodic inspection, acceptance inspection or test witness inspection, prior to commencing inspection activities.
  - (b) Inspect the conveyance to the applicable code using either of the following criteria:
    - (i) The code edition adopted by the AHJ at the time of original installation and/or alteration
    - (ii) The code edition that was in effect at the time of original installation and/or alteration if no code edition was adopted by the AHJ.
  - (c) Conduct the inspection using the latest edition of ASME A17.2, manufacturers' recommendation or the appropriate code based on the type of equipment as guidance.
  - (d) Witness all applicable tests in accordance with Section 2-3-2 of these regulations.
  - (e) Document the results of the inspection on an inspection report form provided on the Administrator's website. All applicable portions of the inspection report shall be completed.

- (f) Submit the completed inspection report(s) to the conveyance owner.
- (5) The conveyance owner shall submit the passing inspection report(s) and the required fee of \$30 per conveyance to the office of the Administrator.
- (6) All inspections must be completed prior to the expiration date of the current certificate of operation. The Administrator may commence enforcement actions on the conveyance owner for operating the conveyance without a current certificate of operation.
- (7) The expiration date for the ensuing certificate of operation will be set at the last day of the month of the inspection date.
- (8) The inspection may occur as early as the first day of the month prior to the expiration of the certificate of operation to maintain the current certificate of operation expiration date. If the inspection occurs before this date, the beginning date of the ensuing certificate of operation will be set at the last day of the month of the inspection.

#### 2-3-1-2 Certificate of Operation

- (1) A conveyance shall not operate unless the conveyance owner maintains a current certificate of operation for the conveyance. The certificate of operation must be available for review at the property where the conveyance is located.
- (2) Following the Administrator's review of the inspection report described in Section 2-3-1-1 of these regulations and determination that the conveyance is in compliance with the applicable standards listed in Section 2-2-1(1) of these regulations or the standard under which the conveyance was installed or altered and the conveyance is registered according to Section 2-1 of these regulations, the Administrator will issue the certificate of operation for the conveyance to the conveyance owner.
- (3) The Administrator may not issue the certificate of operation for the conveyance unless all deficiencies identified during previous periodic inspections have been corrected.

#### 2-3-1-3 Temporary Certificate of Operation

- (1) The Administrator may issue a Temporary Certificate of Operation (TCO) for a conveyance if the temporary operation of the conveyance for public use is necessary and a conveyance inspector has not identified imminent life safety issues.
- (2) The TCO shall be valid for a period as determined by the Administrator but shall not exceed 180 days from the date of issuance.
- (3) Violations identified on an inspection report that warrant the issuance of a TCO must be mitigated prior to the Administrator issuing a certificate of operation that is valid through the end of the 12month period. Following completion of the appropriate repairs and prior to the expiration of the TCO, submit verification to the Administrator that the violations have been mitigated using one of the following documents:
  - (a) The TCO Affidavit attached to the TCO, signed by the owner, licensed contractor or licensed mechanic performing the work

- (b) An inspection report indicating that an inspection occurred following the repairs and that the violations were mitigated
- (4) Violations identified by elevator personnel that warrant issuance of a TCO or shutdown of a conveyance are listed in Tables 2-3-1-3a and 2-3-1-3b of these regulations or as determined by the Administrator.
- (5) Elevator personnel who recommend shutdown of a conveyance for any reason must notify the Administrator.

Table 2-3-1-3a: Violations Warranting TCO or Shutdown for	or Elevato	ors
Deficiency Identified	TCO	Shutdown
Failure of witnessed acceptance tests for a new installation or alteration.		Х
Failure of components tested with full load during a witnessed Category 5 test (see Section 2-3-2 of these regulations), such as, brakes, car and counterweight safeties, governor, buffer, etc.		Х
Any safety tests past due as listed in Table 2-3-2 of these regulations.	Х	
Failure of Category 1 (see Section 2-3-2 of these regulations) test items listed on the Administrator's test form except for the items listed in rows below.		Х
<ul> <li>Governor rope nominal size is:</li> <li>Less than 8mm and is undersized, the wire break criteria is not met, or there is evidence of rouging.</li> <li>Greater than 8mm and is undersized or the wire break criteria is not met.</li> </ul>	Х	
Wire suspension means are undersized or have breaks not meeting code requirements.	Х	
Suspension means monitoring devices are missing or inoperable.	Х	
<ul> <li>Door restrictors are missing or inoperable for elevators:</li> <li>Installed between January 1,1990 to present</li> <li>Altered between January 1,1990 and present, where the alteration required the installation door restrictors (i.e., alteration of hoistway openings or change in type of service)</li> <li>Where there is evidence that door restrictors have been previously installed on the elevator</li> </ul>	Х	
Top and/or bottom hoistway door retainers are missing. (NOTE: Required hoistway door bottom guides that are missing requires shutdown.)	Х	
Door closing force exceeds 30 foot-pounds (lbf).	Х	
Firefighters' service components are inoperable (not including signage).	Х	
Two-way communication is missing or inoperable.	Х	
Keys described in Section 2-3-1-1(2) of these regulations are not made available.	Х	
Violations (other than those listed in this table) that are not mitigated prior to the next annual periodic inspection.	Х	

Table 2-3-1-3b: Violations Warranting TCO or Shutdown for Escalators and Moving Walks		
Deficiency Identified		Shutdown
Failure of witnessed acceptance test (new or altered).		Х
Any safety tests past due as listed in Table 2-3-2 of these regulations.	Х	
Failure of Category 1 test items listed on the Administrator's test form except for the items listed in rows below.		Х
Comb plates with two or more adjacent broken teeth.		X
Comb plates with one broken tooth not adjacent to another broken tooth.	Х	
Failure of a step-skirt indexing test.	Χ	
Violations (other than those listed in this table) that are not mitigated prior to the next annual periodic inspection.	X	

#### 2-3-1-4 Construction Certificate of Operation

- (1) The Administrator may issue a construction certificate of operation for an elevator that shall be valid for a period of 90 days if the temporary operation of the elevator is necessary to support building construction activities. The operation of the elevator shall conform to the following:
  - (a) The elevator shall be registered with the Administrator prior to the elevator being placed into service.
  - (b) The Administrator or Approved AHJ has issued an installation or alteration permit.
  - (c) A full passing acceptance inspection and a completed conveyance inspection form shall be submitted to the Administrator or Approved AHJ. Fire service operation and fire rating of the hoistway and machine room do not need to be completed for a passing acceptance inspection for a construction certificate of operation.
  - (d) The following items are required during construction use of the conveyance.
    - (i) The elevator shall conform to the requirements of the currently-adopted edition of ASME A17.1.
    - (ii) All testing shall be completed by a licensed conveyance mechanic and witnessed by a licensed conveyance inspector.
    - (iii) The elevator shall have a designated attendant for operation.
    - (iv) The elevator shall be run on independent service only.
    - (v) A means of two-way communication shall be provided. Cell phones shall not be accepted as a means of two-way communication.
    - (vi) The machine room shall be enclosed and have a lockable door to prevent entry.

- (vii) The hall call stations, if installed, shall be inactive.
- (viii) Penetrations that allow an object to be inserted in the hoistway while the elevator is in motion shall not be allowed.
- (ix) Substantially-flush floor surface shall be used in front of the entrances.
- (x) Adequate lighting shall be used in front of the entrances and in the machine room.
- (xi) The construction certificate of operation shall be posted inside the elevator and shall be visible to riders at all times.
- (e) If the finished cab interior was not installed when the initial tests were performed for a construction certificate of operation, all tests shall be performed again before a certificate of operation is issued.
- (2) The construction certificate of operation can be renewed following the inspection by a conveyance inspector and approval of the inspection report by the Administrator or Approved AHJ. A certificate of operation for public use will be issued by the Administrator or Approved AHJ only after re-inspection and approval of the inspection report by the Administrator.

#### **Section 2-3-2 Periodic and Acceptance Tests**

- (1) An acceptance test shall be conducted following the completion of a conveyance installation or alteration in accordance with the currently-adopted edition of the appropriate code based on the type of equipment before the conveyance is placed into service.
  - (a) For new installations, major alterations and substantial alterations, acceptance tests shall be completed in accordance with the applicable provisions of the currently-adopted edition of ASME A17.1.
  - (b) For minor alterations, only the portion or component that was altered must be tested and inspected in accordance with the applicable provisions of the currently-adopted edition of ASME A17.1.
- (2) Tests referred to as Category 1 and Category 5 in ASME A17.1 shall be performed by a conveyance mechanic employed by a conveyance contractor on all existing conveyances, except for an APM, at the frequencies listed in Table 2-3-2 of these regulations.
- (3) Effective January 1, 2019, non-witnessed Category 1 tests shall be conducted within 60 days prior to the occurrence of the periodic inspection described in Section 2-3-1-1 of these regulations. This requirement does not apply to an Approved AHJ that controls inspections and testing within its territory or other entities that have demonstrated to the Administrator that processes are in place allowing for the verification of annual testing by the Administrator.
- (4) Tests referred to as One-Year and Five-Year in ASME A18.1 shall be performed by a conveyance mechanic employed by a conveyance contractor on all existing platform lifts at the frequencies listed in Table 2-3-2 of these regulations.
- (5) The results of all tests discussed in this Section shall be recorded on the applicable conveyance test report form that is provided on the Administrator's website and be submitted to the Administrator

- upon request. The test report must be signed by the conveyance mechanic performing the test and, if applicable, the inspector witnessing the test.
- (6) A conveyance inspector shall witness the performance of tests at frequencies as listed in Table 2-3-2 of these regulations.
- (7) The frequency of test performance and witnessing shall be on the frequency listed in Table 2-3-2 of these regulations or as determined by the Administrator.

Table 2-3-2: Frequency of Periodic Tests				
Category 1 Conveyance Type (One-Year)			Category 5 (Five-Year)	
, ,,	Perform	Witness	Perform	Witness
Traction Elevators	Annually	5 years	5 years	5 years
Hydraulic Elevators	Annually	5 years	5 years <sup>1</sup>	5 years <sup>1</sup>
Other Elevators <sup>2</sup>	Annually	5 years	5 years	5 years
Dumbwaiters	5 years	Not Required	Not Required	Not Required
Escalators & Moving Walks	Annually	Annually	Not required	Not required
Indoor Platform Lifts	5 years	5 years	5 years	5 years
Outdoor Platform Lifts	3 years	6 years	3 years	6 years
Private Residence Elevators installed in commercial buildings <sup>3</sup>	5 years	5 years	5 years	5 years

A category 5 test is only required to be conducted and witnessed on a hydraulic elevator if the elevator is equipped with safeties, a plunger gripper, a governor, an oil buffer, or an over-speed valve.

- (8) The conveyance owner or designated conveyance contractor performing the acceptance test shall be responsible to notify the Administrator prior to the test.
- (9) Upon completion of a periodic test or an acceptance test, a metal test tag shall be permanently mounted to the controller, in a readily visible location, in accordance with currently-adopted code.
- (10) If Category 5 testing without load via alternative test methodologies will be utilized, the conveyance owner or conveyance contractor must notify the Administrator prior to development of the baseline and alternative testing procedures and must have approval from the Administrator prior to implementation of the alternative testing.

#### Section 2-3-3 Maintenance

- (1) A Maintenance Control Program (MCP) shall comply with this section and be in place to maintain regulated conveyance equipment in compliance with currently-adopted codes by July 1, 2015.
- (2) The MCP shall consist of the following components.

<sup>&</sup>lt;sup>2</sup> Includes roped-hydraulic elevators and Limited-Use/Limited-Application (LU/LA) elevators.

<sup>&</sup>lt;sup>3</sup> Private Residence Elevators shall not be installed in commercial settings after January 1, 2008, per section 2-4-2(5) of these regulations. For requirements of approved installations, refer to section 2-7(5) of these regulations.

- (a) General Maintenance Requirements: The General Maintenance Requirements component shall include, but not be limited to, the following:
  - (i) If the conveyance equipment was installed before January 1, 2000 and did not undergo a major or substantial alteration after this date, a version specific to the conveyance type (traction, hydraulic, etc.) will satisfy this requirement
  - (ii) If the conveyance equipment was installed or underwent a major or substantial alteration on or after January 1, 2000, a version applicable to the equipment model will satisfy this requirement
  - (iii) Required maintenance tasks, such as cleaning, lubricating and adjusting the equipment
  - (iv) Code-required examination and tests listed in ASME A17.1-2013 Sections 8.6.4 through 8.6.11
  - (v) Specified scheduled maintenance intervals
  - (vi) Procedures for tests, periodic inspections, maintenance, replacements, adjustments, and any other procedures included in On-site Documentation
- (b) On-site Documentation: The On-site Documentation component shall include items listed in ASME A17.1-2013 Section 8.6.1.2.2 and as summarized below.
  - (i) Up-to-date wiring diagram detailing circuits of all electrical protective devices for conveyances installed or altered on or after January 1, 2000, and, if they exist, for conveyances installed prior to January 1, 2000.
  - (ii) Written check-out procedures.
  - (iii) Unique procedures for all maintenance, inspections and tests not described in ASME A17.2; such as, repairs of the detection means and related circuits for tractionloss, broken-suspension-member and residual-strength as listed ASME A17.1-2013 Section 8.6.1.2.1(f)
  - (iv) Written procedures for evacuation by emergency personnel
  - (v) Written procedures for cleaning the exterior of cars and interior of hoistways which have transparent enclosures
- (c) Maintenance Records: The Maintenance Records component shall include items listed in ASME A17.1-2013 Section 8.6.1.4 and as summarized below.
  - (i) Description of maintenance tasks performed, including dates of service
  - (ii) Description and dates of examinations, tests (completed reports), adjustments, repairs and replacements
  - (iii) Written record of oil usage
  - (iv) Findings of the firefighter's service operation check

Maintenance records shall be retained for 5 years. A record of acceptance tests (completed reports) and test tags, required per Section 2-3-2(7) of these regulations, shall be retained permanently.

#### (3) All components of the MCP shall be:

- (a) Provided by the contractor responsible for maintenance of the conveyance or by the conveyance owner and the MCP is owned by the conveyance owner. When a maintenance contractor is no longer retained by the conveyance owner to maintain the conveyance, the contractor must leave the entire document at the facility in the location described in (3)(b) of this Section, with the exception of maintenance frequencies as determined in the contract between the conveyance owner and contractor. The maintenance frequencies provided by the contractor that is subsequently retained by the conveyance owner shall provide this documentation as described in Section (2)(a).
- (b) Kept on-site in the machine or control room, machinery or control space, escalator or moving walk pit area, or another on-site location with proper signage according to ASME A17.1-2013 Section 8.6.1.2.1(d). For those conveyances listed in ASME A18.1, the MCP shall be maintained on-site at a location with proper signage according to ASME A17.1-2013 Section 8.6.1.2.1(d). This requirement does not apply to call-back documents as described in (4) of this Section.
- (c) Presented in hard-copy or electronic form, unless specified by these regulations as written. The conveyance contractor or conveyance owner shall ensure that the mode of presentation is viewable by conveyance contractors, mechanics, inspectors, and the Administrator at all times from the time of the acceptance inspection and test or from the time of equipment installation or alteration.
- (d) Updated when any items listed in the MCP have been altered.
- (4) Call-backs (trouble calls): The description, dates and associated corrective actions of all call-backs are required to be maintained and made available to elevator personnel as required in the currently-adopted edition of ASME A17.1. These records are not required to be kept onsite.

#### Section 2-4 Alteration and New Installation

#### Section 2-4-1 Alteration

- (1) The conveyance owner or conveyance contractor who intends to complete an alteration on an existing conveyance shall submit a permit application and a fee of \$150 per conveyance to the Administrator at least 30 days prior to commencing construction.
- (2) Prior to the alteration of the conveyance, the permit application shall be reviewed and documentation approved by the Administrator. If all documentation in (1) of this Section is not complete and accurate, the application will not be approved and the applicant will be notified of the deficiencies. If approved, the permit issued by the Administrator shall be displayed in the conveyance control room or control space associated with the permitted conveyance.

- (3) Alteration activities shall commence within 180 days from the date of issuance of the permit from the office of the Administrator.
- (4) Alteration activities regarding elevators which require a permit application to be submitted to the Administrator are items listed in ASME A17.1 and include the following:
  - (a) Minor Alterations
    - (i) Addition of power operation to door systems
    - (ii) Changes to the guide rails, supports, or fastenings
    - (iii) Changes to car or counterweight buffers
    - (iv) Increase or decrease of the dead weight of the car that is sufficient to increase or decrease the sum of the dead weight and rated load, as originally installed, by more than 5%. Where this alteration increases the original building design reactions by more than 5%, the permit application shall also include documentation that the adequacy of the affected building structure has been verified by a licensed professional engineer.
    - (v) Installation of new car or counterweight safeties or alteration to existing safeties. If new car safeties are added to an existing conveyance, the permit application shall also include documentation that the adequacy of the affected building structure, guide rails, supports and fastenings has been verified by a licensed professional engineer.
    - (vi) Installation (other than Replacement) or alteration to a speed governor
    - (vii) Alteration to the terminal stopping device
    - (viii) Alteration to the standby or emergency power system
    - (ix) Alteration to firefighters' service
    - (x) Addition of a hoistway entrance
    - (xi) Controller replacement for a hoistway door, car door, or car gate
    - (xii) Increase in working pressure by more than 5%
    - (xiii) Change to or replacement of a plunger or cylinder (to include the installation of a plunger gripper)
    - (xiv) Replacement of an existing control valve with a valve of another type
    - (xv) Replacement of a hydraulic tank
    - (xvi) Replacement of a hydraulic tank and valve (power unit)

- (xvii) Any work within a cab other than that specified in Section 2-4-1-1 (1) of these regulations
- (b) Major Alteration Types
  - (i) Increase of rated load
  - (ii) Installation or alteration to driving machine, driving machine brake or driving machine sheaves. This includes moving a driving machine.
  - (iii) Increase to the rated speed
  - (iv) Increase or decrease in rise
  - (ix) Any alteration to a dumbwaiter or platform lift
- (c) Substantial Alteration
  - (i) The changes in the type of service
  - (ii) The change in the type of operation or motion control
  - (iii) The installation of a controller

The substantial alteration permit must also include any scope necessary to comply with the currently-adopted edition of ASME A17.3, which in turn requires compliance with any more stringent requirements listed in the currently-adopted edition of ASME A17.1. Refer to Section 2-7(1) of these regulations for further requirements.

- (5) Alteration activities regarding escalators and moving walks which require a permit application and processing fee of \$150 per conveyance to be submitted to the Administrator are listed below.
  - (a) Minor Alteration Types
    - (i) Installation of skirt deflector device or adjustment of the skirt
    - (ii) Alteration to handrails or handrail system
    - (iii) Alterations that involve the trusses, girders or supporting structures
    - (iv) Any alteration to or addition of operating and/or safety devices
    - (v) Alteration or addition to lighting, access or electrical work
    - (vi) Alteration to entrance or egress
  - (b) Major Alteration Types
    - (i) Change in angle of inclination or geometry of balustrades
    - (ii) Alteration to step system or treadway system

- (iii) Alteration to the step wheel tracks or track system
- (iv) Changes in rated load or speed
- (v) Installation or replacement of the controller
- (6) The Administrator or Approved AHJ may allow a conveyance contractor to perform emergency work on a conveyance that normally requires a permit if the emergency alteration activity is as defined in Section 1-4 of these regulations.
- (7) Following any alteration of a conveyance, where a permit is required from the Administrator or the Approved AHJ according to this Section, the conveyance owner shall arrange for an acceptance test and inspection of the conveyance in accordance with Section 2-3-2 of these regulations. The conveyance owner may authorize a general contractor or conveyance contractor to select, contract with, or hire a conveyance inspector who is not affiliated with the conveyance owner, general contractor, or conveyance contractor. The acceptance inspection and issuance of a certificate of operation shall be processed by the Administrator in accordance with Section 2-3-1 of these regulations.

#### **Section 2-4-1-1 Elevator Cab Interiors**

- (1) A conveyance owner may conduct the following type of repair work within the interior of an elevator cab without notification to or obtaining a permit from the Administrator.
  - (a) Change light lamps, not to include replacement of the luminaire (fixture)
  - (b) Repair or refinish existing materials
- (2) A conveyance owner or a licensed conveyance contractor shall first obtain a permit from the Administrator as described in Section 2-4-1 of these regulations for work within an elevator cab that involves the installation or alteration of cab components. A licensed conveyance mechanic shall conduct this work or direct the execution of this work by a conveyance helper or apprentice to ensure the safety of the conveyance.

#### Section 2-4-2 New Installation

- (1) The Conveyance Owner or Conveyance Contractor who intends to install a conveyance shall submit a permit application and a fee of \$300 per conveyance to the Administrator at least 30 days prior to commencing construction.
- (2) Prior to the installation of the conveyance, the permit application shall be reviewed and documentation approved by the Administrator. If all documentation in (1) of this section is not complete and accurate, the application will not be approved and the applicant will be notified of the deficiencies. If approved, the permit issued by the Administrator shall be displayed in the conveyance control room or control space associated with the permitted conveyance.
- (3) Installation activities shall commence within one year from the date of receipt of the permit application at the office of the Administrator.
- (4) Following the installation, where a permit is required from the Administrator or Approved AHJ according to Section 2-4-2 of these regulations, the conveyance owner shall arrange for an Acceptance Test and Inspection of the conveyance in accordance with Section 2-3-2 of these

regulations. The conveyance owner may authorize a general contractor or conveyance contractor to select, contract with or hire a conveyance inspector who is not affiliated with the conveyance owner, general contractor or conveyance contractor. The acceptance inspection and issuance of a certificate of operation shall be processed by the Administrator in accordance with Section 2-3-1 of these regulations.

(5) After January 1, 2008, the Administrator shall not allow the installation of a private residence conveyance in any commercial setting where the public or multiple private residences have access to the conveyance.

#### Section 2-4-3 Alternate Materials and Methods Request

- (1) The Administrator or Approved AHJ may grant the use of alternate materials and methods on a casespecific basis for the implementation requirements of the adopted codes or standards listed in Section 2-2 of these regulations.
- (2) Requests for the use of alternate materials and methods where a conveyance is not located within the area of an Approved AHJ shall be submitted to the Administrator and be completed on the alternate materials and methods request form provided on the Administrator's website. This request will not be reviewed unless the appropriate form and required documentation are complete.
- (3) A submitted alternate materials and methods request shall not relieve a person from complying with the applicable standards adopted in these regulations unless the Administrator or the Approved AHJ expressly approve the use of alternate materials and methods.

#### **Section 2-5 Automated People Movers**

- (1) The conveyance contractor who intends to install an APM or perform an APM alteration shall conform to the requirements in either Section 2-4-1 or 2-4-2 of these regulations.
- (2) The conveyance owner or managing agent where the APM system is located shall arrange for inspection of verification testing of the installed or altered APM system by a conveyance inspector and shall submit the following items to the Administrator.
  - (a) Report documenting system verification completed at the factory
  - (b) Report documenting on-site system verification
  - (c) certificate of substantial completion
- (3) A conveyance inspector shall witness the testing of the APM system as defined in ASCE 21 Part 4
  Section 16.2 (Annual Internal Audit Responsibilities) on an annual frequency. The results of the testing shall be submitted to the Administrator.
- (4) Following the Administrator's determination that the documentation listed in (2) or (3) of this Section indicates that the conveyance conforms to standards listed in Section 2-2-1(1)(d) of these regulations, the Administrator will issue the certificate of operation for the APM system.

#### **Section 2-6 Accident Reporting**

- (1) Any accident involving a conveyance that caused or could have caused injury to a person should be investigated by the conveyance owner or managing agent to determine if maintenance or repairs are needed to ensure proper operation of the conveyance and that the conveyance is in compliance with these regulations.
- (2) Following any accident involving a conveyance that causes injury to any person, the conveyance owner or managing agent shall:
  - (a) Conduct a preliminary investigation to determine whether the accident was the result of a component of the conveyance that malfunctioned or was not in compliance with these regulations.
  - (b) Report this information to the Administrator or Approved AHJ via phone or email within 24 hours of the accident. This report shall include the following items:
    - (i) Caller's first and last name, phone number and organization.
    - (ii) Accident location with conveyance description, facility name, facility address and conveyance registration number assigned by the Administrator
    - (iii) Description of the accident and the preliminary determination of whether the accident was a result of a component of the conveyance that malfunctioned or is not in compliance with these regulations
- (3) Based on results of the preliminary accident investigation, the following activities shall be conducted.
  - (a) If the accident is not the result of the malfunction of a component of the conveyance and the conveyance is in compliance with these regulations, the conveyance owner may make the conveyance accessible to the public and shall complete and submit to the Administrator or Approved AHJ an accident investigation report as described in (3)(b)(iii) of this Section.
  - (b) If the accident is the result of a component of the conveyance that malfunctioned or is not in compliance with these regulations, the Administrator or Approved AHJ will suspend or revoke the certificate of operation for the conveyance and the conveyance owner shall do the following:
    - (i) Immediately shut down the conveyance and arrange for an inspection of the conveyance to verify the cause of the accident prior to a conveyance contractor performing any modifications or repairs to the conveyance.
    - (ii) Arrange for a full Inspection of the conveyance following any modifications or repairs.
    - (iii) Complete and submit to the Administrator or Approved AHJ an accident investigation report, using the form that is provided on the Administrator's website, within 30 days of the accident or as approved by the Administrator. This report shall include a description of the actions taken to investigate the cause of the accident, corrective actions taken to repair and test the performance of the conveyance and any inspection reports.

The conveyance shall not be made accessible to the public without a current Certificate of Operation issued by the Administrator or Approved AHJ.

(4) When the Approved AHJ becomes aware of an accident associated with a conveyance, the Approved AHJ will report this accident to the Administrator within 24 hours from notification.

#### Section 2-7 Implementation of Adopted Standards for Existing Conveyances

- (1) All conveyances installed prior to July 1, 2008 are exempt from complying with currently-adopted edition of ASME A17.3 unless one of the following conditions exists:
  - (a) Substantial alteration of a conveyance
  - (b) An elevator presents a material risk

Any alteration that is a result of the conditions listed above shall conform to the currently adopted edition of ASME A17.1.

- (2) Material risk related to firefighters' service is present unless any of the following conditions apply:
  - (a) The elevator complies with ASME A17.1 1981 Rules 211.1 and 211.3.
  - (b) The elevator travels less than 75 feet above or below the emergency personnel access.
  - (c) The building is equipped with an automatic sprinkling system according to the NFPA 13.

Any elevator that does not meet one or more of the conditions listed above shall comply with firefighters' service requirements as described in the currently-adopted version of ASME A17.1. An AHJ may require and enforce more stringent standards than these minimum requirements regarding firefighters' service, including full compliance with ASME A17.3. Contact the AHJ for local requirements.

- (3) Regarding Door Restrictors, the following shall apply.
  - (a) Door restrictors shall be installed and operational on all elevators installed on or after January 1, 1990.
  - (b) Where there is evidence that door restrictors have been previously installed and not properly maintained, regardless of original installation date, the door restrictors shall be repaired to operate as intended.
  - (c) Door restrictors shall be installed in accordance with ASME A17.1-2013, Section 2.14.5.7 where an alteration permit is issued that includes a change in the type of motion control or operation control.
  - (d) Following review of additional information regarding door restrictors, the Administrator will determine whether door restrictors shall be required on elevators installed prior to January 1, 1990.

- (4) The Administrator will allow continued operation of a hydraulic elevator that has a hydraulic cylinder buried in the ground and is not provided with a safety bulkhead (typically installed prior to 1973) after January 1, 2012, if the conveyance owner completes one of the following actions in conformance with ASME A17.3 – 2005:
  - (a) The hydraulic cylinder shall be provided with a safety bulkhead
  - (b) The elevator shall be provided with car safeties, guide rails, guide-rail supports, and fastenings conforming to the currently-adopted edition of ASME A17.1
  - (c) The elevator shall be provided with a plunger gripper that shall grip the plunger when the applicable maximum governor tripping speed is achieved.
- (5) The Administrator will allow continued operation of a private residence conveyance installed in any building other than in a single-family residence if the following conditions are met:
  - (a) The conveyance was installed prior to January 1, 2008.
  - (b) The conveyance is registered with the Administrator on a form that is provided on the Administrator's website.
  - (c) The conveyance shall conform to all alteration and inspection requirements included in Article 2 of these regulations, and testing frequency listed in Section 2-3-2(5) of these regulations.
- (6) The Administrator will only require a code data plate (as required by ASME A17.1) on an existing conveyance if the conveyance was installed on or after July 1, 1997. For conveyances installed prior to July 1, 1997, the absence of a code data plate is not a violation of these regulations, and the edition of ASME A17.1 that will be referenced for inspection purposes will be one of the following:
  - (a) The edition in effect, or adopted by a local jurisdiction, on the date of installation
  - (b) The edition listed on an existing code data plate
- (7) The Administrator may allow deviations to specific code requirements for elevators located in law enforcement facilities, mental hospitals or similar facilities that are used to transport prisoners or other detainees. These elevators are still required to comply with the inspection, testing and maintenance requirements of Section 2-3 of these regulations.

#### Section 2-8 Shut-down of a Dangerous Conveyance

- (1) If a conveyance inspector determines that a conveyance poses imminent danger to passengers or inspection/maintenance personnel or equipment, the conveyance inspector shall immediately notify the Administrator or the Approved AHJ and the conveyance owner of the condition of the conveyance and shall follow the procedures of the Approved AHJ or as listed in the policy on the Administrator's website to shut down the dangerous conveyance.
- (2) If a conveyance mechanic determines that a conveyance poses imminent danger to passengers or inspection/maintenance personnel, the conveyance mechanic shall notify his/her employing conveyance contractor. Upon this notification, the conveyance contractor shall immediately notify the Administrator or the Approved AHJ and the conveyance owner of the condition of the

- conveyance and follow the procedures of the Approved AHJ or as listed in the policy on the Administrator's website to shut down the dangerous conveyance.
- (3) Any conveyance that has been shut down shall not be placed back into service without first obtaining approval from the Administrator or the Approved AHJ.
- (4) Upon shut-down of a conveyance, the conveyance owner shall have the necessary repairs completed within three months from the date of shut-down or place the conveyance in either a dormant or removed from service state.

#### **Section 2-9 Conveyances Made Dormant**

- (1) A conveyance is considered dormant based on the following conditions.
  - (a) The traction (electric) elevator car is parked at the top of the hoistway and the counterweights are parked at the bottom of the hoistway, or the hydraulic elevator is parked at the bottom of the hoistway.
    - (i) The hoistway doors are latched in the closed position.
    - (ii) The fuses are removed from the main line disconnect (if applicable).
    - (iii) The mainline disconnect is locked in the "off" position with a wire seal or a red tag provided by the Administrator is placed on the disconnect switch
  - (b) The escalators/moving walk has been adjusted in the following manner:
    - (i) The mainline disconnect is locked in the "off" position with a wire seal or a red tag provided by the Administrator is placed on the disconnect switch.
    - (ii) Entrances are permanently barricaded. Escalators that have been made dormant cannot be used as a stairway.
- (2) A conveyance inspector or the Administrator shall verify the status of the conveyance as dormant, place a wire seal on the mainline disconnect switch, document the activities on an inspection report and submit the inspection report to the conveyance owner, who shall then submit the report to the Administrator without fee.
- (3) A conveyance shall not be made dormant for more than five years. At the end of five years the conveyance owner shall obtain a valid certificate of operation or remove the conveyance from service pursuant to Section 2-10 of these regulations.
- (4) To place a dormant conveyance back in service, the following conditions shall be met.
  - (a) All applicable tests according to Section 2-3-2 of these regulations must be current, or if the applicable testing schedule was not maintained during dormancy, the applicable Category 1 and Category 5 tests must be completed and witnessed by a conveyance inspector.
  - (b) If the applicable testing schedule was maintained, a conveyance inspector must perform a periodic inspection on the conveyance.

- (c) Prior to conveyance operation, the conveyance owner must mitigate all violations identified on the inspection report and obtain a valid certificate of operation from the Administrator or Approved AHJ.
- (d) A temporary certificate of operation will not be issued when placing a dormant conveyance back in operation.

#### Section 2-10 Conveyances Removed From Service

- (1) A conveyance is removed from service per the following items as listed in the currently-adopted edition of ASME A17.1.
  - (a) Traction (Electric) Elevators and Dumbwaiters
    - (i) Remove the power feed line from the mainline disconnect switch.
    - (ii) Suspension ropes are removed.
    - (iii) Car and counterweights are parked at the bottom of the hoistway.
    - (iv)The hoistway doors are permanently barricaded or sealed in the closed position on the hoistway side. The lowest landing hoistway door may be sealed on the lobby side.
  - (b) Hydraulic Elevators
    - (i) Remove the power feed line from the mainline disconnect switch; and
    - (ii) The hydraulic elevator car is parked at the bottom of the hoistway; and
    - (iii) If provided, suspension means are removed and counterweight is parked at the bottom of the hoistway; and
    - (iv) Pressure piping has been disassembled and a section removed from the premises;
    - (v) The hoistway doors are permanently barricaded or sealed in the closed position on the hoistway side. The lowest landing hoistway door may be sealed on the lobby side.
  - (c) Escalators/Moving Walks
    - (i) The mainline disconnect is locked in the "off" position with a wire seal or a red tag provided by the Administrator is placed on the disconnect switch.
    - (ii) Entrances are permanently barricaded. Escalators that have been removed from service cannot be used as a stairway.

- (2) A conveyance inspector shall verify the status of the conveyance as out of service, place a wire seal on the mainline disconnect switch, document the activities on an inspection report and submit the inspection report to the conveyance owner, who shall then submit the report to the Administrator without fee.
- (3) If a conveyance owner has removed a conveyance from service and intends to place the conveyance back into operation, the conveyance shall conform to all of the provisions of the applicable standard listed in Section 2-2-1 of these regulations.
- (4) All applicable tests must be performed and witnessed according to Section 2-3-2 of these regulations.
- (5) Prior to conveyance operation, the conveyance owner must mitigate all violations identified on the inspection report and obtain a valid certificate of operation from the Administrator or Approved AHJ. A temporary certificate of operation may not be issued when placing an out-of-service conveyance back in operation.

#### Section 2-11 Removal of a Conveyance from a Facility

(1) The conveyance owner must notify the Administrator when a conveyance is removed from a facility.



#### ARTICLE 3 AUTHORITY HAVING JURISDICTION

#### **Section 3-1 Authority Having Jurisdiction Requirements**

- (1) A municipality or county (an authority having jurisdiction), or any agent thereof, may enter into a memorandum of agreement (MOA) with the Administrator under which the Administrator may delegate to the AHJ the authority to regulate conveyances located within the territory of the AHJ, provided that the AHJ program has standards that are equal to or more stringent than the minimum standards listed in Sections 2-2 through 2-11 of these regulations. The Administrator will maintain registration activities described in Section 2-1 of these regulations.
- (2) If an MOA as described above is executed, the AHJ will become an Approved AHJ and will be responsible for enforcing the applicable provisions of these regulations. If the Approved AHJ does not satisfy all requirements listed in Sections 2-2 through 2-11 of these regulations per the executed MOA, the Administrator may terminate the MOA. The Approved AHJ may also terminate the MOA per directions in the MOA.
- (3) The Approved AHJ will submit to the Administrator general information regarding new or existing conveyances as determined by the Administrator and listed in the MOA.
- (4) The Approved AHJ may set fees and collect or contract the collection of those fees to offset the cost of conducting activities described in Section 2-3 of these regulations for conveyances located within the Approved AHJ territory. Fee amounts will be determined by the Approved AHJ or agreed upon by the Approved AHJ and the contracted inspection organization.
- (5) Inspections of public school conveyances in Approved AHJ territories shall be conducted by the Approved AHJ or, with prior consent of the Administrator or Approved AHJ, by a conveyance inspector contracted by the public school district.

#### ARTICLE 4 LICENSING

#### **Section 4-1 Licensing Qualifications**

This section describes the requirements for the licensing of conveyance contractors, conveyance mechanics and conveyance inspectors. Each license allows the applicable licensee to perform installation, alteration, replacement, maintenance, removal, dismantling, or inspection activities of conveyances as identified in Section 1-5 of these regulations and as listed on the license. The Administrator may request documentation in addition to that described in the following sections to verify the accuracy of information provided with a license application.

Table 4-1: Licensing Fees for Conveyance Mechanics, Temporary Mechanics, Contractors and Inspectors		
License Type	License Fee	
Mechanic	\$125.00	
Temporary Mechanic	\$25.00	
Conveyance Contractor	\$500.00	
Inspector	\$175.00	
Replacement License	\$25.00	

#### **Section 4-1-1 Conveyance Mechanic**

- (1) The Administrator may issue a conveyance mechanic license to the applicant if the applicant has provided documentation required in this Section. The conveyance mechanic license will indicate the type(s) of conveyance(s) on which the licensee is allowed to conduct work per these regulations. The types of conveyance mechanic licenses are as follows:
  - (a) Type 1: All conveyances with the exception of APMs, which would include elevators, escalators, moving walkways, platform lifts and dumbwaiters, as described in ASME A17.1 and A18.1
    - (i) If the initial training program or continuing education does not include training for escalators and moving walks, an exclusion will be applied to the license that will not allow the mechanic to work on that type of equipment
  - (b) Type 2: Platform lifts only, as described in ASME A18.1
  - (c) Type 3: APM as described in ASCE 21
  - (d) Type 4: All conveyances listed in (1)(a) and (c) of this Section
- (2) A person applying for a conveyance mechanic license shall submit to the Administrator a completed conveyance mechanic license application using the form that is provided on the Administrator's website, the license fee, listed in Table 4-1 of these regulations and documentation that, as determined by the Administrator, indicates the applicant is qualified under one of the following scenarios:
  - (a) The applicant submits documentation that proves that the applicant has successfully completed a conveyance mechanic training program. This program will be subject to audit by the Administrator. Evaluation criteria for Administrator audit may include, but is not limited to, review of course materials, required classroom and field hours, classroom

activities, and test materials and procedures. Based on evaluation of the conveyance mechanic license training curriculum, the Administrator may set limitations on the license issued. To be approved, the training program shall either:

- (i) Be registered with the United States Department of Labor Office of Apprenticeship (USDOL) under specific apprentice occupation categories assigned by the USDOL to license types listed in (1) of this Section, and shall include classroom and field training according to the USDOL requirements on the actual equipment listed in the license types
- (ii) Be approved by the Administrator. Applicants seeking licensure under programs approved solely by the Administrator shall submit to the Administrator an executed affidavit on a form that is provided by the Administrator and signed by the applicant which states that during the applicant's participation in the approved program, the applicant's work experience consisted of at least 1,700 hours per year performing activities listed in the work process schedule attached to the affidavit.
- (b) In lieu of qualifying pursuant to (2)(a) of this Section, the applicant may qualify if the applicant submits to the Administrator one of the following types of documentation:
  - (i) Documentation that the applicant holds a current and valid license from another state whose standards, as determined by the Administrator, meet or exceed those of these regulations. This documentation will consist of:
    - (A) A copy of the license.
    - (B) Contact name, phone number and name of the issuing department of the state in which the license was obtained.
  - (ii) Documentation that the applicant has obtained both of the following items:
    - (A) Three years of work experience as a conveyance mechanic on nonresidential conveyances without supervision. One year of work experience will equal 1,700 hours. Documentation of work experience will consist of:
      - (I) A statement on the employer's letterhead and signed by the personnel administrator or other person of authority affirming that the condition in (A) is true; and
      - (II) Personnel records that indicate the timeframe and listing of hours for completion of the experience described in (A); or
      - (III) An affidavit on a form that is provided by the Administrator and signed by the applicant which states that the work experience indicated in personnel records submitted consists of unsupervised mechanic activities listed in the work process schedule attached to the affidavit.

- (B) A passing score on an examination provided by the Administrator, or a conveyance contractor thereof, on the codes and standards that relate to the type of conveyance mechanic license applied for, as described in (1) of this Section.
- (3) A person who obtains a conveyance mechanic license shall also complete eight hours of continuing education that has been approved by the Administrator every two years.
- (4) Following review of the application, the Administrator will notify the applicant of the approval or disapproval of the application. If the applicant is approved, the notification will include the conveyance mechanic license number, the type(s) of conveyance(s) on which the conveyance mechanic may perform work, a license card and a payment receipt. If the applicant is not approved, the notification will include a description of the deficiencies in the application.
- (5) The conveyance mechanic license issued by the Administrator shall be valid for one year. The Administrator may renew a license, provided the applicant submits the following:
  - (a) A completed conveyance mechanic license application form
  - (b) License renewal fee, listed in Table 4-1 of these regulations
  - (c) A copy of certification indicating that the applicant completed continuing education required in this Section

#### **Section 4-1-2 Emergency and Temporary Conveyance Mechanic**

- (1) When an emergency exists, as defined in § 9-5.5-108 (2) C.R.S., the Administrator may issue an emergency conveyance mechanic license. This license will be issued to a person who, based on the judgment of a conveyance contractor, has acceptable documented experience and education to perform work on specific types of conveyances identified in Section 1-5 of these regulations. Within five business days after commencing work, the applicant will complete and submit the conveyance mechanic license application to the Administrator. There will be no license fee for an emergency conveyance mechanic license.
- (2) Upon notification to the Administrator from a conveyance contractor that there are no mechanics available to perform conveyance work, the Administrator may issue a temporary conveyance mechanic license. This license will be issued to a person who is enrolled in and progressing through a mechanic training program as described in Section 4-1-1(2) of these regulations, and based on the judgment of a conveyance contractor, has acceptable documented experience and education to perform work on specific types of conveyances identified in Section 4-1-1(1) of these regulations. At least five working days prior to commencing work, the conveyance contractor who will employ the temporary conveyance mechanic shall submit the following documentation to the Administrator.
  - (a) A completed temporary conveyance mechanic license application on the form that is provided on the Administrator's website.
  - (b) The license fee, listed in Table 4-1 of these regulations.
- (3) Following review of the application, the Administrator will notify the conveyance contractor and temporary conveyance mechanic applicant of the approval or disapproval of the application. If the

applicant is approved, the notification will include the temporary conveyance mechanic license number and the type of conveyance on which the temporary conveyance mechanic may perform work. If the applicant is not approved, the notification will describe the deficiencies in the application.

(4) The emergency conveyance mechanic license will be valid for 60 days and the temporary conveyance mechanic license will be valid for 30 days. The Administrator may renew a temporary mechanic license, provided the conveyance contractor submits the license fee and notification to the Administrator that renewal is requested for a license issued the prior month. This documentation may include multiple license renewal requests for several conveyance mechanics.

#### **Section 4-1-3 Conveyance Contractor**

- (1) The Administrator will consider issuing a conveyance contractor license to a company if the applicant submits to the Administrator a completed conveyance contractor license application using the form provided on the Administrator's website, the license fee, listed in Table 4-1 of these regulations and:
  - (a) The applicant employs, at a minimum, one conveyance mechanic licensed with the Administrator, as indicated on the license application. The employment of temporary or emergency conveyance mechanics does not satisfy this requirement.
  - (b) A certificate of insurance, declaration page or insurance policy indicating that the applying company possesses insurance coverage according to § 9-5.5-115 (1) C.R.S.
- (2) The conveyance contractor license issued by the Administrator shall be valid for one year. The Administrator may renew a license, provided the applicant maintains current insurance according to (1)(b) of this Section and submits the following:
  - (a) A completed conveyance contractor license application form
  - (b) Documentation as described in (1)(a) of this Section
  - (c) License renewal fee, listed in Table 4-1 of these regulations

#### **Section 4-1-4 Conveyance Inspector**

- (1) The Administrator may issue a conveyance inspector license to the applicant if the applicant has provided documentation required in this Section. The conveyance inspector license will indicate the type of conveyance for which the licensee is allowed to inspect per these regulations. The types of conveyance inspector licenses are as follows:
  - (a) Type 1: All conveyances, with the exception of APMs, which would include elevators, escalators, personnel hoists, moving walkways, platform lifts, stairway chairlifts and dumbwaiters, as described in ASME A17.1 and A18.1
  - (b) Type 2: APM as defined in ASCE 21
  - (c) Type 3: All conveyances listed in (a) and (b) of this Section
- (2) A person applying for a conveyance inspector license shall submit to the Administrator a completed conveyance inspector license application using the form that is provided on the Administrator's

website, the license fee, listed in Table 4-1 of these regulations and documentation that, as determined by the Administrator, indicates that the applicant is qualified under one of the following scenarios.

- (a) Private Conveyance Inspector.
  - (i) To obtain a Type 1 conveyance inspector license, the applicant shall submit to the Administrator documentation that, as determined by the Administrator, proves one of the following:
    - (A) The applicant is certified to inspect conveyances by a nationally-recognized conveyance association, which will consist of a copy of the front and back of a current certification card from the issuing association.
    - (B) The applicant qualifies as Elevator Personnel as defined in ASME A17.1 and has been approved to take the certification exam offered by a nationallyrecognized conveyance association as determined by the Administrator. The applicant shall attend the first available exam offered by a nationallyrecognized conveyance association and obtain certification within six months of licensure. If the applicant fails the exam, the Administrator may suspend the applicant's license until proof of certification is submitted to the Administrator.
  - (ii) To obtain a Type 2 conveyance inspector license, the applicant will submit to the Administrator documentation that, as determined by the Administrator, indicates one of the following:
    - (A) The applicant possesses a current Professional Engineer license, or
    - (B) The applicant has, at a minimum, three years of experience participating in APM inspections and audits.
- (b) AHJ Conveyance Inspector or AHJ-appointed Conveyance Inspector
  - (i) To obtain a Type 1 conveyance inspector license, the applicant shall submit to the Administrator documentation that proves the applicant is certified to inspect conveyances by a nationally-recognized conveyance association as determined by the Administrator, which will consist of a copy of the front and back of a current certification card from the issuing association; or
  - (ii) The applicant submits the following items to the Administrator.
    - (A) Documentation that the applicant intends to obtain certification within one year from licensure
    - (B) Documentation showing that the applicanct has completed at least eight weeks of conveyance inspection activities under the direct supervision of a conveyance inspector prior to conducting conveyance inspection activities without direct supervision. During this supervised period, the licensee shall be trained on the inspection of any type of conveyance which the licensee will encounter in the inspection territory. This

documentation shall be submitted to and approved by the Administrator and should indicate that the applicant has received the required supervision prior to conducting unsupervised conveyance inspection activities.

- (3) If a licensee qualifies by (2)(a)(i)(B) or (2)(b)(ii) of this Section and the licensee fails to obtain certification as required, the Administrator may suspend or revoke the licensee's conveyance inspector license.
- (4) New applicants shall successfully pass a test that will be administered by the Administrator on these regulations, policies and guidance documents which are available on the Administrator's website.
  - (a) New applicants shall successfully pass the test administered by the Administrator before a license will be issued.
  - (b) Applicants shall obtain a passing score of not less than 90%.
  - (c) This exam requirement does not apply to those applying for a Type 2 inspector license or inspectors employed by the Administrator.
  - (d) The Administrator may waive or alter this exam requirement as necessary.
- (5) Any private or AHJ-appointed conveyance inspector applicant shall also submit to the Administrator a certificate of insurance or insurance policy indicating that the applicant possesses insurance coverage according to § 9-5.5-115 (2) C.R.S.
- (6) An AHJ conveyance inspector applicant is exempt from the requirement to provide insurance, pursuant to § 9-5.5-115 (2) C.R.S., while performing Approved AHJ official duties.
- (7) If a licensee receives a Type 1 license and will be conducting inspection activities on escalators or moving walks, the licensee shall complete at least eight hours of inspection training on this equipment prior to conducting unsupervised inspection activities on this equipment. This training shall consist of direct supervision under a conveyance inspector who has at least eight hours of experience inspecting, installing or maintaining this type of equipment. This requirement shall not apply to a licensee who has received training on this type of equipment through an Administrator-approved training program.(8) The conveyance inspector license issued by the Administrator shall be valid for one year. The Administrator may renew a license, provided the applicant submits the following:
  - (a) A completed conveyance inspector license application form
  - (b) Documentation that the applicant is certified by a nationally-recognized conveyance association
  - (c) Certification through the Administrator indicating completion of eight hours of continuing education per year as approved by the Administrator. This requirement is effective July 1, 2017, and will be required for licensing on July 1, 2018
  - (d) A certificate of insurance, declaration page or insurance policy indicating that the applicant possesses insurance coverage according to § 9-5.5-115 (2) C.R.S.
  - (e) License renewal fee, listed in Table 4-1 of these regulations.

#### **ARTICLE 5 ENFORCEMENT**

#### **Section 5-1 Enforcement Program**

The Administrator provides these regulations to assist the regulated community with maintaining safe and proper operation of regulated conveyances. When a regulated conveyance or licensed conveyance mechanic, contractor or inspector is found to be out of compliance with these regulations, the Administrator will pursue enforcement actions against the regulated party. The enforcement process will include requiring the regulated party to make repairs and/or upgrades, perform system tests, keep records, maintain current licenses, and other actions to bring the conveyance or licensee back into compliance. During and following the enforcement process, the Administrator will continue to assist the regulated party to remain in compliance. The enforcement process may include monetary penalties up to \$1,000 per conveyance per day of violation according to §8-20-104 C.R.S. if the enforcement obligations are not implemented according to the required schedule.

#### Section 5-1-1 Notice of Violation

- (1) A Notice of Violation (NOV) may be issued when a conveyance is found to be out of compliance with these regulations and/or §8-20 and 9-5.5 C.R.S. A NOV may also be issued if a licensed contractor, mechanic or inspector has violated any part of these regulations or any applicable statutes.
- (2) Within 10 working days after an NOV has been issued, the person issued the NOV may file a written request with the Administrator for an informal conference regarding the NOV. If the person issued the NOV does not request an informal conference within this time frame, all provisions of the NOV shall become final and not subject to further discussion. If the NOV is not resolved within the prescribed time frame, the Administrator may then seek judicial enforcement of the NOV, or an Enforcement Order may be issued.

#### Section 5-1-2 Enforcement Order

- (1) An Enforcement Order may be issued when the violations included within an NOV are not resolved within the prescribed time frame. The Enforcement Order may include increased fines up to one \$1,000.00 per conveyance for each day of violation. In addition, the Enforcement Order may include shut-down of the conveyance, and suspension and/or revocation of a conveyance license.
- (2) Within 10 working days after an Enforcement Order has been issued, the owner/operator may file a written request with the Executive Director for an informal conference regarding the Enforcement Order. If the owner/operator does not request an informal conference within this time-frame, all provisions of the Enforcement Order shall become final and not subject to further discussion. If the Enforcement Order is not resolved within the prescribed time frame, the Administrator may seek judicial enforcement of the Enforcement Order.

#### **Section 5-1-3 Informal Conference**

(1) Upon receipt of the request, the Administrator shall provide the owner/operator with notice of the date, time and place of the informal conference. The Administrator shall preside at the informal conference, during which the owner/operator and Administrator may present information and arguments regarding the allegations and requirements of the NOV or the Enforcement Order.

(2) Within 20 days after the informal conference, the Administrator shall issue a Settlement Agreement in which the violations from the NOV and/or Enforcement Order will be upheld, modified or stricken. The Settlement Agreement will include a schedule of required activity for resolution of the violations. If the terms and/or schedule in the Settlement Agreement are not satisfied, either an Enforcement Order will be issued or the Administrator may seek judicial enforcement of the previously issued Enforcement Order.

#### Section 5-1-4 License Review Board

The Administrator shall establish a License Review Board that shall consist of members of the Conveyance Advisory Board and a designee of the Administrator. This board will make recommendations to the Administrator on matters concerning suspension or revocation of conveyance licenses.

