

Document Owner: Cynthia Linker/ Emily Richards	Date Created: 8/18/22
Approver(s): Cynthia Linker/ Emily Richards	Date Approved: 2/15/23

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**Policy:** Conveyance Elevator Entrapment

**Purpose:** To describe the procedure for freeing people trapped in an elevator

**Scope:** AHJ (CP&D Director & CP&D Development Services Coordinator), Conveyance Owner, Conveyance Contractor, CoBH Fire Department

**Definitions:**

1. **Acceptance Test:** a required safety test on a new installation or alteration performed by the Conveyance Mechanic and witnessed by the AHJ Inspector.
2. **AHJ (Authority Having Jurisdiction):** The City of Black Hawk, as the Authority Having Jurisdiction, is responsible for enforcing the requirements of a code, and standards for approving equipment, materials, an installation, or a procedure. [conveyance@cityofblackhawk.org](mailto:conveyance@cityofblackhawk.org)
3. **AHJ Inspector:** The Conveyance Inspector hired by the AHJ, who holds a current Conveyance Inspector License issued by the Division of Oil and Public Safety within the Colorado Department of Labor and Employment, is employed by an Approved by the AHJ to inspect a conveyance and is not affiliated with the Conveyance Contractor whose Repair, Alteration or Installation is being inspected. [conveyance@cityofblackhawk.org](mailto:conveyance@cityofblackhawk.org)
4. **AHJ Inspector's Account Manager:** The Account Manager for the Conveyance Inspector hired by the AHJ. Responsible for all administration, scheduling, and invoicing. The point of contact and liaison between the AHJ Inspector and the AHJ.
5. **Alteration, Major:** An alteration that is extensive in scope warrants a complete witnessed Acceptance Inspection and applicable tests. Ex. controller, signal fixtures, rotating equipment, drive (multiple components), fire alarm, fire recall.
6. **Alteration, Minor:** An alteration that is minor in scope, such that it only warrants the specific components(s) being altered to be tested and inspected. Ex. cab finishes, valve work, power unit install, door operator replacement, re-rope/brake suspension, escalator handrails.
7. **Annual Safety Test:** a required safety test performed by the Conveyance Mechanic and witnessed by the AHJ Inspector.
8. **ASME:** American Society of Mechanical Engineers
9. **ASME A17.1:** Adopted Safety Code for Elevators and Escalators
10. **Bluebeam Revu:** The AHJ and AHJ Inspector use this software to review all Conveyance and Building permit submittals.
11. **Certificate, Certificate of Construction Operation (CCO):** A document issued by the AHJ that allows the temporary operation of a conveyance to support construction activities without permitting conveyance access to the public. Operating the Conveyance requires 2-way communication and a full-time operator.
12. **Certificate, Certificate of Operation (CO):** A document issued by the AHJ for each Conveyance that indicates the Conveyance has the required safety inspections and tests.

- 13. Certificate, Dormant:** An inspection by the AHJ Inspector must be performed to ensure that the OPS requirement for Conveyance Made Dormant has been met. Following this inspection, a Dormant Certificate will be issued. A Conveyance shall not be made dormant for more than 5 years. At the end of 5 years the Conveyance Owner shall obtain a valid Certificate of Operation or remove the Conveyance from Service.
- 14. Certificate, Removed from Service:** An inspection by the AHJ Inspector must be performed to ensure that the OPS requirement for Conveyance Removed from Service has been met. Following this inspection, a Removed from Service Certificate will be issued. Once a Conveyance has been Removed from Service, the only way to put it back into service is to bring it up to all currently adopted codes and a Certificate of Operation issued. No TCO may be issued when placing a Removed from Service Conveyance back into service.
- 15. Certificate, Shut Down:** A document issued by the AHJ if there are Life Safety concerns or the TCO requirements are not met within the allotted time frame. Once a Shut Down Certificate is issued, the Conveyance Owner has 6 months to bring the Conveyance into compliance. After 6 months, the Conveyance Owner must decide if they will make the Conveyance Dormant or Remove it from Service.
- 16. Certificate, Temporary Certificate of Operation (TCO):** A document issued by the AHJ that allows temporary operation of a conveyance for public use if no imminent life safety issues are not identified following the inspection of the Conveyance by the AHJ Inspector. A TCO is only valid for 60 days from the date of inspection.
- 17. CommunityCore:** AHJ's online permit and inspection portal.
- 18. Compliance Month:** The month of the year in which the Certificate of Operation expires; it will always be the month of the last Five-Year Witness Test.
- 19. Conveyance:** A mechanical device described as an elevator, platform lift, dumbwaiter, escalator, or moving walk.
- 20. Conveyance Contractor:** A Contractor licensed with the Division of Oil and Public Safety within the Colorado Department of Labor and Employment and contracted by the Conveyance Owner to perform their maintenance and repairs. Conveyance Mechanics must hold a current OPS license.
- 21. Conveyance Owner:** The Conveyance Owner (General Manager or Facilities Manager) is solely responsible for maintenance, scheduling inspections, and repairs to the Conveyances.
- 22. Conveyance Reporting Spreadsheet:** AHJ Excel spreadsheet used to track all Conveyance activity.
- 23. Dangerous Conveyance:** A conveyance that poses imminent danger to passengers or inspection/maintenance personnel or equipment.
- 24. Dumbwaiter:** As defined in ASME A17.1: a hoisting or lowering mechanism equipped with a car that moves within an electric driving machine.
- 25. 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.
- 26. Escalator:** As defined in ASME A17.1: a power-driving inclined, continuous stairway used for raising or lowering passengers.
- 27. Five-Year Witness Test:** a required complete safety test (more rigorous and thorough than the Annual Safety Test) performed every five years by the Conveyance Mechanic and witnessed by the AHJ Inspector.
- 28. Hoistway:** An opening through a building or structure for the travel of a conveyance in which car rails have been installed.

- 29. Injury:** An injury is one 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. The 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.
- 30. Inspection, Emergency Life Safety:** An inspection requested due to an evacuation, dangerous Conveyance, or accident caused by a Conveyance during regular business hours or outside normal business hours.
- 31. Inspection, Outside Regular Business Hours:** Any non-emergency life safety inspection requested outside of Monday through Thursday between 7:00 a.m. and 4:00 p.m.
- 32. Inspection, Regular Business Hours:**  
The AHJ Inspector conducts inspections Monday through Thursday between 7:00 a.m. and 4:00 p.m. Failure on the part of the Conveyance Owner, Conveyance Contractor to be onsite and/or ready at the specified date and time of inspection will result in the Conveyance Owner being invoiced a full charge inspection and subject to re-inspection fees.
- 33. 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 and the Sec 2-3-3 of the OPS regulations; provided and maintained onsite by the Conveyance Contractor.
- 34. Material Lift Type B:** A powered hoisting and lowering mechanism used for carrying material and on which only the operator or the person necessary for unloading and loading the material is permitted to ride.
- 35. Memorandum of Agreement (MOA):** An agreement executed between the Colorado Department of Labor and Employment, Division of Oil and Public Safety (OPS) and the City of Black Hawk (AHJ) for local jurisdiction regulation of conveyances, renewable every five years.
- 36. 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.
- 37. NetSuite:** Business management software.
- 38. OPS:** Oil and Public Safety Division within the Colorado Department of Labor and Employment; <https://ops.colorado.gov/Conveyances>
- 39. Platform Lift:** As defined in ASME A17.1: a powered hoisting and lowering mechanism designed to transport mobility-impaired persons on a guided platform that travels vertically or on an incline.
- 40. Specified Scheduled Maintenance Intervals** are defined by the City of Black Hawk as the maintenance schedule agreed upon between the Conveyance Contractor and the Conveyance Owner. See amendment AHJ\_Inspections\_Final **C. Maintenance Control Program (MCP)**

#### **Procedure:**

- I. Passenger Entrapment: Evacuation Procedures and Emergency Contact Information**
  - A.** Rescue shall only be attempted by the Conveyance Contractor or other authorized personnel of the Conveyance Owner.

- B.** The Conveyance Owner immediately establishes communication with the occupants through the communication system (phone or intercom) or the elevator doors and follows the steps outlined below:
1. Verify how many passengers are in the elevator.
  2. Verify if any passengers are injured or have a life-threatening emergency, and call 911 immediately.
  3. Verify if the elevator cab has power and lights.
  4. Verify that the passengers have attempted to exit the elevator.
  5. Verify if the passengers tripped the Car Stop button. If the passengers did trip the Car Stop button, ask them to reset it to its original position.
- C.** If the passengers remain entrapped in an elevator, the Conveyance Owner can attempt to place the elevator into a Phase I recall. The Conveyance Owner inserts the Firefighter Emergency Operation Phase I key into the switch at the designated level and turns the key to the "on" position.
1. If this does not return the elevator to the designated floor level, the Conveyance Owner places the car back into regular operation by resetting the fire service.
  2. The Conveyance Owner resets the fire service by turning the key to reset it, then turning it to the "on" or "run" position.
- D.** If the Phase I recall was unsuccessful, the Conveyance Owner can attempt to locate the main disconnect for the elevator, turn it off, and then back on to reset the main operational controller.
1. Before attempting this function, the Conveyance Owner communicates with the entrapped passengers, verifies that the occupants have not tried to exit the elevator, and informs them that you will be removing power to the elevator.
  2. Once the Conveyance Owner establishes communication with the passengers and locates the main disconnect, the Conveyance Owner looks away from the disconnect and sets it to the "off" position.
  3. Once the power is off, the Conveyance Owner waits approximately 30 seconds and then sets the switch to the "on" position.
  4. If this process does not return the elevator to regular operation, the Conveyance Owner contacts the Conveyance Contractor or calls 911.
- E.** The Conveyance Owner contacts the Conveyance Contractor and requests an emergency service call.
1. The Conveyance Owner provides complete and detailed information to the Conveyance Contractor on the situation and what has occurred.
  2. The Conveyance Owner requests an estimated arrival time for the Conveyance Contractor, preferably one (1) hour or less.
  3. Per regulation 7 CCR 1101-8 Sec 4-1, 3 & 4, the Conveyance Owner or their authorized personnel are unauthorized to enter the hoistway at any time. Violation of unauthorized personnel entering the hoistway will result in a violation fee to the Conveyance Owner.

- F. After the Conveyance Owner makes the emergency service call, they communicate with the entrapped passengers, check their status, and notify them about the Conveyance Contractor's estimated arrival time.
- G. The Conveyance Contractor is solely responsible for all activities with removing entrapped passengers.
  - 1. The Conveyance Contractor gives all instructions.
  - 2. The Conveyance Contractor exhausts all efforts to move the elevator before considering evacuation.
  - 3. The Conveyance Contractor approves and supervises the evacuation procedures and is only assisted by Fire Department personnel if necessary.
  - 4. The Fire Department notifies the AHJ if they assist with an entrapment evacuation by emailing [ConveyanceIncidents@cityofblackhawk.org](mailto:ConveyanceIncidents@cityofblackhawk.org)
- H. Following an entrapment, reference the SOP\_AHJ Conveyance Accident Reporting, and the SOP\_AHJ Conveyance Shut Down Dangerous Conveyance.

**\*\*If at any time a life-threatening emergency exists, call 911\*\***

#### **Related Documents:**

Conveyance / SOP\_AHJ Conveyance Accident Reporting.  
 Conveyance / SOP\_AHJ Conveyance Certificates\_Invoicing  
 Conveyance / SOP\_AHJ Conveyance Inspections  
 Conveyance / SOP\_AHJ Conveyance Permits  
 Conveyance / SOP\_AHJ Shut Down Dangerous Conveyance

#### **References:**

[Black Hawk, CO | \(cityofblackhawk.org\)](http://cityofblackhawk.org)

#### **Quality Records**

Title	Location Kept	Duration Kept	Disposal Method