

City of Black Hawk Staff & Inspection Consultants

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GENERAL PROVISIONS

- Goal: The AHJ and the OPS Conveyance Programs aim to protect the riding public and industry personnel in the State of Colorado and the City of Black Hawk from the hazards of dangerous conveyances.
- **Agency Cooperation:** The AHJ entered a 5-year renewable MOA with the OPS to regulate conveyances within its territory of authority.
- **AHJ Inspector:** The City contracts with a specific inspection agency for an AHJ Inspector.
- City Standards: The AHJ operates and enforces a Conveyance Regulation Program with standards equal to or more stringent than those within the current OPS statute and regulation.
- **Regulations Distribution:** The AHJ distributes Standard Operating Procedures to the AHJ Inspector, the Conveyance Owners, and Conveyance Contractors to establish guidelines for the design, construction, installation, registration, change of ownership, operation, maintenance, testing, inspection, conveyance accident reporting, entrapment and shutdown of dangerous conveyances for all entities to follow.

GENERAL PROVISIONS

- Basic AHJ and OPS Conveyance Program Requirements
 - **Licensing:** All Conveyance Contractors, Mechanics, and AHJ Inspectors maintain a current license issued by OPS.
 - **Registration:** The <u>Conveyance Owner</u> is responsible for submitting the Conveyance Registration Notice and fee for all conveyances to OPS with a separate notification to <u>the AHJ</u>.
 - **Change of Ownership:** When an ownership or address change occurs, The <u>Conveyance Owner</u> completes the Conveyance Change of Ownership/Address form and promptly submits it by email to OPS with a separate notification to <u>the AHJ.</u>
 - **Responsible Party:** According to the OPS and the AHJ, complete installation, alteration, maintenance, scheduling of the testing, and annual inspection of regulated conveyances with the AHJ is the sole responsibility of the Conveyance Owner.
- AMMR: The AHJ does NOT consider Alternate Materials and Methods (AMMR) Requests.

AHJ

Conveyance Policies, Standards and Operating Procedures

The AHJ entered into an MOA with the OPS to:

- Identify the responsibilities of each <u>Party</u>, defined as the AHJ, AHJ Inspector, Conveyance Owner and Conveyance Contractor, to ensure the safety of the Conveyances in the AHJ through compliance with the Elevator and Escalator Certification Act, Conveyance Regulations, Colorado Code Regulations and associated AHJ Policies, Standards and Operating Procedures.
- Formalize the cooperative working relationships between all Parties.
- To provide procedures for communication, exchange of information, and resolution of problems as necessary in order for the AHJ to carry out the provisions of the MOA.
- The AHJ shall make readily accessible to all Parties and the general public all AHJ Policies, Standards, Operating Procedures, Codes and amendments, which are more stringent or restrictive then the OPS program.



AHJ RESPONSIBILITES

- 1. Enforces both AHJ & OPS regulations.
- 2. Maintains permanent Conveyance records, reports required information to the OPS yearly, and participates in periodic audits.
- 3. Verifies registration of all Conveyances with the OPS.
- 4. Ensures the AHJ Inspectors hold all required OPS licenses and/or certifications.
- 5. Processes and issues building and conveyance permits.
- 6. Issues to the Conveyance Owner inspection tickets and certificates and approves invoices for Finance Department distribution.
- 7. Verifies OPS receives a copy of any Conveyance Owner's accident report.
- 8. Verifies all Conveyances are operating under a current CO or TCO.
- 9. Publishes all Conveyance fees and fines in the Black Hawk adopted fee schedule.

AHJ Inspector & AHJ Inspector's Acct Mgr RESPONSIBILITES

- 1. Tracks all CO, TCO, Shut Down, and Dormant expiration dates.
- 2. Confirms all Conveyances are operating under a current CO or TCO.
- 3. Ensures all Conveyance inspections are performed by OPS licensed Conveyance Contractors and are witnessed by the AHJ Inspector with the Conveyance Owner present.
- 4. Processes inspection requests received from Conveyance Owner and confirms them in NetSuite and with an Outlook invite.
- 5. Provides inspection tickets/certificates / invoices to the AHJ within the designated time period.
- 6. Processes a Conveyance permit plan review within designated review period.

CONVEYANCE OWNER'S RESPONSIBILITES



- 1. Creates and enforces their own Conveyance Program SOP specific to the property and their Conveyance Contractor and provides a copy to AHJ every year on or before January 30.
- 2. Ensures their Conveyance Contractor/Mechanics hold current OPS licenses.
- 3. Registers all Conveyances with the OPS with a notification to the AHJ.
- 4. Notifies OPS and AHJ of any change of ownership.
- 5. Guarantees all Conveyances are operating with a current CO or TCO.
- 6. Schedules all testing, inspections, or re-inspections with the AHJ before certificate expiration. Ensures the Conveyance Contractor is <u>onsite and ready</u> for all scheduled inspections.

CONVEYANCE OWNER'S RESPONSIBILITES



- 7. Attends all inspections witnessed by the AHJ Inspector.
- 8. Communicates with their Conveyance Contractor regarding compliance.
- 9. Applies for building and conveyance permits.
- 10. Confirms MCP compliance and ensures documentation is kept at each Conveyance.
- 11. Initiates and follows the procedures for Accident Reporting, Entrapment, and Dangerous Conveyance Shut-Down.

CONVEYANCE OWNER'S RESPONSIBILITES

Creates a Maintenance Control Program (MCP) and ensures it is maintained:

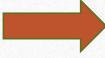
A documented set of maintenance tasks, maintenance procedures, examinations, and tests designed to ensure that equipment is maintained in compliance.

- Why is this important? Conveyances have <u>numerous moving parts</u> with many safety elements and electrical components that break down. This is a greater factor in Black Hawk because <u>Conveyances run non-stop</u>.
- > How often?
 - Conveyance Contractors should complete **regular inspections** and perform **frequent maintenance** and **repairs** at intervals **not exceeding one year.**
 - <u>Additional inspections</u> for satisfactory operations are vital and the AHJ recommends monthly maintenance.

CONVEYANCE CONTRACTOR'S RESPONSIBILITES



Reports directly to the Conveyance Owner.



Maintains the MCP program and ensures it is up to date.



Applies for permits and pays fees (depending on the contract).



Is solely responsible for all activities with removing entrapped passengers.

TESTING & INSPECTION SCHEDULING



TESTING & INSPECTION SCHEDULING for COs

ALL inspections are performed by the Conveyance Contractor and witnessed by the AHJ Inspector with the Conveyance Owner present at every inspection.

- 1. The Conveyance Owner emails an <u>inspection request</u> at least thirty (30) days before the requested date within the Compliance Month. The AHJ and AHJ Inspector prefer these inspections are scheduled one year in advance.
- 2. The AHJ Inspector's Account Manager schedules all requested testing and inspections in NetSuite and Outlook Calendar.
- 3. The Conveyance Contractor conducts the inspection, witnessed by the AHJ Inspector with the Conveyance Owner present.
- 4. The AHJ Inspector will shut down the unit if the CO is expired or the Annual Safety or Five-Year Witness test is 30 days past the Compliance Month. If there are no deficiencies noted, a CO is issued.
- 5. The AHJ Inspector's Account Manager emails the AHJ the inspection ticket, certificate, and invoice, as a packet, within 10 business days from inspection date.

TESTING & INSPECTION SCHEDULING for TCOs

If deficiencies are found, the AHJ Inspector issues a <u>non-renewable</u> TCO for 60 days from the inspection date.

- 1. The Conveyance Owner emails an inspection request within 48 hours of the TCO inspection.
- 2. The AHJ Inspector's Account Manager schedules all requested testing and inspections in NetSuite and Outlook Calendar.
- 3. The Conveyance Contractor conducts the inspection, witnessed by the AHJ Inspector with the Conveyance Owner present.
- 4. The AHJ Inspector will shut down the unit if the CO is expired or the TCO repairs are not made within 60 days.
- 5. The AHJ Inspector's Account Manager emails the AHJ the inspection ticket, certificate, and invoice, as a packet, within 10 business days from inspection date.

VIOLATIONS WARRANTING TCO SHUTDOWN OF ELEVATORS AND ESCALATORS (pg. 1)

Found on the SOP_AHJ Conveyance Inspections



Table 2-3-1-3a: Violations Warranting TCO or Shutdown for Elevators			
Deficiency Identified	тсо	Shutdown	
Failure of witnessed Acceptance Tests for a new Installation or alteration.		х	
Failure of components tested with full load (or via alternative testing) during a witnessed Category 5 test (see Section 2-3-2 of these regulations), such as, brakes, car and counterweight safeties, governor, buffer, or overspeed valve.		x	
Required electrical protective safety device missing or inoperable (stop switch, door interlock, final terminal stop, car top exit device, etc.).		х	
Any past due safety tests as listed in Table 2-3-2 of these regulations.	X		
Violations (other than those listed in this table) that are not mitigated prior to the next annual Periodic Inspection.	Х		
Maintenance Control Program (MCP) is missing or is not complete.	X		
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 which may warrant a TCO instead of a shutdown.		х	
Governor rope nominal size is: Less than 8mm and is undersized, the wire break criteria is not met, or there is evidence of rouging. Greater than 8mm and is undersized or the wire break criteria is not met.	x		
Wire suspension means are undersized or have breaks not meeting code requirements.	Х		
Suspension means monitoring devices are missing or inoperable.	Х		
Door restrictors are missing or inoperable for elevators: Installed between January 1,1990 to present Altered between January 1,1990 and present, where the Alteration required the installation of door restrictors (i.e., Alteration of hoistway openings or change in Type of Service) Where there is evidence that door restrictors have been previously installed on the elevator	х		
Top and/or bottom hoistway door retainers are missing. (NOTE: Required hoistway door bottom guides that are missing requires shutdown.)	X		
Door closing force exceeds 30 foot-pounds (lbf).	Х		
Firefighters' emergency operation components are inoperable (not including signage).	Х		
Two-way communication is missing or inoperable.	Х		
Keys described in Section 2-3-1-1(3) of these regulations are not made available.	X		

VIOLATIONS WARRANTING TCO SHUTDOWN OF ELEVATORS AND ESCALATORS (pg. 2)



Deficiency Identified	TCO	Shutdown
Failure of witnessed Acceptance Test (new or altered).		Х
Required electrical protective safety device missing or inoperable (stop switches, broken chain switch or floor access plate switch).		Х
Any past due safety tests as listed in Table 2-3-2 of these regulations.	X	
Violations (other than those listed in this table) that are not mitigated prior to the next annual Periodic Inspection.	Х	
MCP is missing or is not complete.	Χ	
Failure of Category 1 test items listed on the Administrator's test form except for the items listed in rows below which may warrant a TCO.		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.		X

Found on the SOP_AHJ Conveyance Inspections

Certificate of
Operation Process
for Permitted
Conveyance
Testing

= *Compliance Month

NEW CONVEYANCES ALTERED CONVEYANCES Register Conveyance Acceptance Test conducted by Acceptance Test conducted by Contractor and Contractor and witnessed by Inspector witnessed by Inspector One year Annual Safety Test conducted Annual Safety Test conducted by Contractor within 60 days by Contractor within 60 days prior to Compliance Month* prior to Compliance Month* Annual Inspection by Inspector Annual Inspection by Inspector within Compliance Month within Compliance Month **OPS** issues OPS issues Certificate of Operation Certificate of Operation which expires on last day of which expires on last day of Compliance Month Compliance Month Five-year Safety Test Five-year Safety Test conducted by Contractor conducted by Contractor within Compliance Month within Compliance Month and witnessed by Inspector and witnessed by Inspector

EXISTING CONVEYANCES Annual Safety Test conducted by Contractor within 60 days prior to Compliance Month* Annual Inspection by Inspector within Compliance Month OPS issues Certificate of Operation which expires on last day of Compliance Month **Five-year Safety Test** conducted by Contractor within Compliance Month and witnessed by Inspector



ACCIDENT REPORTING

A non-injury accident does <u>not</u> have to be reported to OPS or the AHJ but the Conveyance Owner and Contractor should investigate the accident to ensure the Conveyance is operating correctly.



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.

ACCIDENT REPORTING

The **Conveyance Owner MUST:**

- 1. Shut down the Conveyance.
- 2. Notify the OPS and AHJ within 24 hours.
- 3. Contact the Conveyance Contractor to Investigate the Accident.
 - If the accident was **not caused by equipment malfunction**, <u>only complete Step 8 below.</u> If the Conveyance complies with regulations and code, place it back into service.
 - If the accident was caused by equipment malfunction, complete Steps 4 through 8.
- 4. Contact the AHJ & AHJ Inspector to schedule an inspection of the Conveyance before any repairs or alterations are done.
- **5.** Authorize the Conveyance Contractor to perform appropriate repairs or alterations to the Conveyance.
- 6. Apply for a Conveyance permit (if required).
- 7. Ensure that the Conveyance Contractor re-inspects the Conveyance: The Conveyance Contractor performs the test, and the AHJ Inspector witnesses the test with the Conveyance Owner present.
- 8. Complete and submit the Conveyance Accident Report to the OPS and AHJ.

ENTRAPMENT

Evacuation is only attempted under the supervisions of the Conveyance Contractor.



- 1. <u>The Conveyance Owner</u> establishes communication with the elevator occupants, assesses the problem, and attempts Phase 1 procedures.
- 2. If there are any injuries or life-threatening emergencies, he calls 911.
- 3. If Phase 1 is unsuccessful, the <u>Conveyance Owner contacts the Conveyance Contractor</u> and requests an emergency service call.
- 4. The <u>Conveyance Contractor</u> exhausts all efforts to move the elevator before considering evacuation.
- 5. The Conveyance Contractor only calls the Fire Department if absolutely necessary, and the Fire Department follows evacuation procedures supervised by the Conveyance Contractor.

Refer to Conveyance / SOP_AHJ Conveyance Elevator Entrapment for details.



Dangerous Conveyance Shut-Down



A conveyance that poses imminent danger to passengers or inspection/maintenance personnel or equipment.

- 1. Shut Down by the AHJ Inspector after either the AHJ Inspector or Conveyance Contractor determines the conveyance poses a danger.
- 2. Notification: AHJ Inspector emails the Conveyance Owner and the AHJ.
- **3. Inspection** by the AHJ Inspector, who revokes the CO. AHJ issues a Shut Down Certificate and invoice.
- 4. Repairs must be completed within 6 months of the date of the Shut Down.
- **5. Re-inspection** is scheduled by the Conveyance Owner; the AHJ Inspector performs the inspection; and the AHJ issues the CO Certificate.

Refer to Conveyance / SOP_AHJ Shut Down Dangerous Conveyance for details.

REFERENCES

AHJ Website - Conveyance

- AHJ Conveyance Database
- AHJ CommunityCore Access
- AHJ Conveyance SOPs
- OPS 2023 Regulations

AHJ Conveyance Email: conveyance@cityofblackhawk.org

AHJ Conveyance Accident Email: ConveyanceIncidents@cityofblackhawk.org

OPS Conveyance Website: https://ops.Colorado.gov/Conveyance



THANKYOU FORATIENDING

BLACK HAWK