New Construction/Modernization Installation Acceptance Check-list

Installation of new elevators and modernizations, the elevator contractor and general contractor must complete and submit this form to the email address elevatorsupervisors@cincinnati-oh.gov at least three business days prior to an acceptance inspection. Use of this form does not change how acceptance inspections are scheduled; however, failure to file this form on time will result in cancellation of a scheduled inspection. This Acceptance Checklist is a general list of frequent problems discovered during elevator inspections and is not a substitute for the applicable codes.

The following items shall be completed and tested by the appropriate contractor(s) prior to the acceptance inspection.

Building Name		City Permit No.	Elevator Asset Number
Address			
City	State		Zip Code
Elevator Contractor/Contact Person		Elevator Contractor/Contact Phone	
General Contractor/Contact Person		General Contractor/Contact Phone	

State of Ohio Common Violation Reference List for *NEW & ALTERED*

Email: elevatorsupervisors@cincinnati-oh.gov Fax: 513-352-2579

- This checklist should be reviewed before the request for an inspection is submitted. The checklist is applicable for all new installations and most major alterations of Passenger, Freight and LULA elevators.
- Acceptance inspection will not be scheduled until all known violations are corrected.
- See ASME A17.1 2016 edition for the full text of the violations listed. In addition, see the referenced documents of

✓	Quick reference	**Common Violations** (Building-related)
		Machine Room/Space **Elevator machinery/control space/room:** A space inside or outside the hoistway, intended to be accessed with or without full bodily entry that contains elevator mechanical equipment, and could also contain electrical equipment used directly in connection with the elevator.
☐	**Access to Machine Room**	Access to and from machine room shall be safe and convenient. It is prohibited to allow access to a machine room to non-authorized personnel. Per A17.1 - 2.7.3.
☐	**Machine Room Door**	The machine room door shall be self-closing and self-locking. The door shall be provided with a spring-type lock arranged to permit the doors to be opened from the inside without a key per A17.1 - .2.7.3.4.1.
☐	**7' Clear Headroom**	The clear headroom in a machine room shall be not less than seven feet per A17.1 - 2.7.4.1. LULA elevator headroom clearances shall be not less than 79" per A17.1 - 5.2.1.7.1.
☐	**Non-Elevator**	All non-elevator-related piping and equipment shall be prohibited from entering or passing through the machine room per ASME A17.1 - 2.8.
☐	**Maintenance Clearance**	A clear path and a clearance of not less than 18" shall be provided in the directions required for maintenance access per A17.1 I - 2.7.2.
☐	**"ABC" Fire Extinguisher**	An "ABC" type fire extinguisher shall be located in the room or convenient to the space per A17.1 - 8.6.1.6.5. The fire extinguisher should be sized for the room/space dimensions.
☐	**Passage Across roofs**	Access to Machine rooms/space across slope roofs exceeding 15deg or without a parapet or handrail require standard railing per A17.1 - 2.7.3.2. Hatch covers shall not be permitted

	Temperature and Humidity	Machine/control room/space shall be provided with natural or mechanical means to keep the ambient air temperature and humidity in the range specified by the elevator equipment manufacturer to ensure safe and normal operation of the elevator. **The temperature and humidity range shall be permanently posted in the machine/control room/space** per A17.1 - 2.7.9.2, OBC 3005.2
	Remote Machine Control	When provided, a permanent means of communication shall be provide between the elevator car and remote machine/control room per A17.1 - 2.7.8.4.
	Sprinkler Machine Room/ Space	Sprinklers may serve a machine room via a branch line, when the machine room is located above the roof of the building, risers, return pipes, and branch lines for the machine room sprinkler(s) shall be permitted to be located in the hoistway between the top floor and the machine room, but they shall not pass through the machine room per A17.1 - 2.8.3. Sprinklers shall not be installed on fire service access or OEO Elevators per OBC 3007, 3008
	Emergency Power/Standby	Where an emergency or standby power system is provided to operate an elevator in the event of normal power failure shall conform. Per A17.1 - 2.27.2, OBC 3003
	Electrical Clearances	All electrical clearances shall be provided and maintained in front of the controller and disconnect at all times. Advisory: It is interpreted that machine room doors that swing into the electrical clearance area endanger worker safety and are prohibited and they shall meet the provisions of NFPA 70 620.5.
	Disconnects	Electrical disconnects shall be lockable in the open position and properly located within sight of the elevator devices as outlined in NFPA 70 620.51. All disconnects shall be properly fused or utilize a non-self-resetting circuit breaker. A lockable disconnect with over current protection shall be located in the machine/control room/space room serving the car lighting per NFPA 70 620.22 and 620.53. Advisory: The preferred location for electrical disconnects is near the jamb side of the access door in order to be readily accessible to qualified personnel.
	Grounding	All electrical equipment, controllers, and machines shall be properly installed and grounded per NFPA 70 620.81 and A17.1 - 2.8.2.
	Fed From Sign	All disconnecting means shall be provided with a sign to Identify the location of the supply side over current protective device. Per NFPA 70 620.54/ 620.53/620.51(D)
	Machine Room Electric Source	A separate branch circuit shall supply the machine/control room/space, lighting/GFCI receptacle(s). Not less than 19ftc at the floor per NFPA 70 620.23 and A17.1 - 2.7.9
	Workman Like Manner/Conduit	All electrical conduit shall be properly secured and routed in a workman like manner. See NFPA 70- 620.21.

Elevator Pit

Elevator pit: The portion of a hoistway extending from the sill level of the bottom terminal landing to the floor at the bottom of the hoistway

	Pit Access Door	Pit access doors shall be provided when pit floor is more than 120 inches and conform to the requirements of per A17.1 - 2.2.4
	Pit Refuge	A pit refuge area of not less than 24 or 42 inches in height is required when the car is at rest on a fully compressed buffer depending on the pit design and available floor space per A17.1 - 2.4.1. LULA elevators shall conform to A17.1 - 5.2.1.2 and - 5.2.1.4.
	Pit Ladder	For pits greater than 35 inches in depth, a pit ladder (retractable is permitted) shall be provided with a handrail at least 48 inches above the landing, the rungs are to have at least 4 ½ inches of clearance and be not less than 16 inches in width (9" if obstructions exist) with a 12-inch separation between rungs. The ladder shall be non-combustible and **within 39 inches from the egress door** per ASME A17.1 - 2.2.4.
	Drain or Sump Pump	Drains or sump pump shall be provided for all passenger, freight and LULA elevators. All sump pumps are to discharge the fluid outside of the hoistway. The sump pump is intended to assist in maintaining elevator service during a fire emergency. ASME A17.1 -2.2.2.4 and published ASME A17.1 interpretations. Pits are to be constructed to prevent ground water from entering the pit. All footing and building drains are prohibited from being connected to the pit sump pump.
	Oil and High Water Monitor	If installed high water/oil alarm controls are not permitted in the pit/hoistway or machine room/space. Per ASME A17.1 - 2.8.1, no device shall deactivate the operation of the sump pump. Per A17.1 - 2.2.2.3
	Sump Cover	Sumps and sump pumps in pits where provided, shall be covered. The cover shall be secured and level with the pit floor. Per A17.1 - 2.2.2.6
	Sprinkler Head in Pit	Sprinkler heads located in the pit area shall not be located more than 2 feet above the pit floor per NFPA 13 - 8.15.5. Smoke, water flow switch or heat detectors are permitted for Phase 1 recall. NFPA 72 - 21.3.3. Sprinklers shall not be installed on fire service access or OEO Elevators Per OBC 3007, 3008
	Pit Source/light	A separate branch circuit shall supply the hoistway pit lighting and GFCI receptacle(s). Provide 10ftc of lighting at the pit floor or pit platform. The switch shall be near the stop switch. The light shall be guarded per ASME A17.1 - 2.2.5. Per NFPA 70 620.24 (A)
	Sump Receptacle	Receptacles for sump pumps shall conform to NFPA 70 620.85. Single non-GFCI outlet.
	NEMA-4	When a sprinkler is present in the hoistway or pit area, all electrical conduits shall be enclosed in NEMA-4 and wiring shall be identified for use in wet locations per ASME A17.1 - 2.8.3.3.4.

Elevator Hoistway

Elevator hoistway (shaft): An opening through a building or structure for the travel of elevators, dumbwaiters, or material lifts, extending from the pit floor to the roof or floor above.

☐	**10 ftc at Landing**	Illumination at the landing sill shall be not less than 10 ftc per A17.1 - 2.11.10.2.
☐	**Top and Bottom Clearances**	Top and bottom car and counterweight runby and vertical clearances shall meet the requirements of A17.1 - 2.4 for traction/drum elevators and ASME A17.1- 3.4 for hydraulic elevators or 5.2.1.4.3 for LULA elevators.
☐	**Sprinklers Hoistway**	Only branch lines shall be permitted to serve the hoistway, and the line may not serve more than one level per A17.1 - 2.8.3. Sprinklers provided in the hoistway, (if required by the NFPA 13), shall not to interfere with the required clearances on top of the elevator car or the moving equipment within the hoistway per A17.1 - 2.8.3. Sprinklers shall not be installed on fire service access or OEO elevators per OBC 3007, 3008
☐	**Offsets or Ledges**	All offsets or ledges within the hoistway greater than 4 inches shall be tapered to not less than 75 degrees per ASME A17.1 - 2.1.6.
☐	**Z97.1 Glass**	All glass used in construction of the hoistway and cab enclosure shall be laminated. All laminated glass sections/panels shall be marked with the proper labeling indicating compliance per A17.1 - 2.14.1.8
	Inside the Car	
☐	**Light source**	A separate branch circuit shall supply the car lights, receptacle(s), auxiliary lighting power source and ventilation on each elevator car. Per NFPA 70 620.22
☐	**Displays**	Visual displays shall have edges beveled or rounded and shall not project greater than 1.5 inches. Per A17.1 - 2.14.1.9.1.(d)
☐	**In Car Lights**	The minimum illumination shall not be less than 5ftc for passenger/2.5 ftc for freight and shall not be less than 2 lamps. Per A17.1 - 2.14.7
☐	**Guard Lights**	Light bulb and tubes within the car shall be equipped with guards. Per A17.1 -2.14.7.4
☐	**Two-way 24-hour communication**	Two-way 24-hour voice communication and line monitor shall be provided from the elevator car to a location that can take action per ASME A17.1 - 2.27 and previous ASME interpretations. Advisory: Refer to the "ADAAG" guidelines for additional requirements for “hands free “telephone operation per OBC Chapter 11.
☐	**Flame Spread**	Materials used on floor and walls of an elevator car enclosure shall adhere to the flame spread and smoke density requirement of ASME A17.1 - 2.14.2.1. The materials shall be certified and tested by the manufacturer for their end use configuration including adhesives.
	Life Safety - Fire Service/Shunt trip	
	**It is important to define the space in which the following devices are installed, for example: controls, drives and other equipment that are typically installed in a traditional machine room are now being installed in the pits and top of hoistways and those areas are now defined as machine/control spaces which would require elevator recall devices. NFPA 72 - 21.3.	
☐	**Location of Smoke Detectors**	Fire-service initiating devices (smoke detectors) shall be properly located in the enclosed elevator lobbies and machine/ control room/space. Initiating devices are required in the hoistway when a sprinkler head is located in the hoistway. See ASME A17.1- 2.27.3.2 and NFPA 72 for specific requirements for wiring methods and detector placement.
☐	**Smoke Detectors**	Smoke and not heat shall activate the fire-service initiating device unless approved by the authority having jurisdiction per NFPA 72 and ASME A17.1 published interpretations.
☐	**“Shunt Trip” within 2’**	Power shall be removed from the main line disconnect prior to the application of the sprinkler *that could affect the safe operation of the elevator equipment*. The device shall be located within 2 feet of each sprinkler head. Smoke detectors shall not be used to activate shunt trip devices. See A17.1 - 2.8.3 and NFPA 72- 21, OBC 3005.5
☐	**Control Circuits (Shunt Trip)**	Control circuits to shutdown elevator power shall be monitored for presence of operating voltage. Loss of voltage to the control circuit for the disconnecting means shall cause a supervisory signal to be indicated at the control unit and required remote enunciators per NFPA 72 - 21.4.4, 5
☐	**Flashing Hat**	Either the fire alarm initiating device in the machine / control room / space or hoistway shall cause the visual signal in the car to illuminate intermittently per A17.1 - 2.27.3.2.6.
☐	**Firefighter’s Service**	Firefighter service shall function properly per A17.1 - 2.27.3
☐	**Keys and maintenance records**	Once an elevator has received a certificate of operation and is placed into service, a key for the elevator equipment room is required to be maintained on the premises and be accessible at all times. An emergency door release key and a fire service key must also be available for authorized personnel. A monthly fire service operation testing log is required to be maintained, as well as the appropriate maintenance logs and Maintenance Control Program per ASME A17.1 - 8.6
☐	**Bldg Without Fire Alarm System**	In facilities without a building fire alarm system, these smoke detectors shall be connected to a dedicated fire alarm system control unit that shall be designated as “elevator recall control and supervisory panel. The elevator recall control and supervisory panel shall receive input and monitor the smoke detectors within the dedicated fire alarm system and be located in a visible area for monitoring purposes per NFPA 72 - 21.3.2

city of CINCINNATI
BUILDINGS & INSPECTIONS

Issues Relating to the Ohio Building Code

All requirements within the standards referenced in "Table 4101:5-3-01" of rule 4101:5-3-01 of the Administrative Code related to the construction of the building and the building service equipment located within an elevator hoistway enclosure, hoistway, machine room, machine space, control room and control space such as, but not limited to, requirements for wall materials, wall fire resistance ratings, fire and/or smoke dampers, means of egress doors and hardware, ladders, air conditioning systems, ventilation systems, fire protection systems, lighting systems, electrical power supply to the elevator controls, lighting switches, electrical disconnects and selective coordination of overcurrent protective devices (OCPD), plumbing, sanitary piping, and sump pits shall be enforced by the building official having jurisdiction as determined in division (A)(1) of section 3791.04 of the Revised Code.

☐	**"In case of Fire" Signs**	**Advisory:** A pictograph sign is required to be posted over each elevator call station that reads "IN CASE OF FIRE, ELEVATORS ARE OUT OF SERVICE USE STAIRS" as required by OBC 3002 and as recommended by A17.1 (See OBC 3002.3 for exceptions)
☐	**Ambulance Stretcher**	**Advisory**: Where elevators are provided in buildings four or more stories above, or four or more stories below, grade plane, not fewer than one elevator shall be provided for fire department emergency access to all floors Per OBC 3002
☐	**Fire Rated Hoistway**	**Advisory:** All holes in the enclosure are to be filled to maintain the fire rating of the hoistway. Entrance frames installed in drywall or masonry hoistways must be properly interfaced to maintain a proper fire rating per OBC 3006. The hoistway is to have a fire rating according to the Ohio Building Code.
☐	**Pressurization of Hoistway**	**Advisory:** Required for all un-enclosed elevator lobbies more than 3 stories. Exceptions: Enclosed lobby, parking, garages, open air exit, smoke curtain with sprinklers, street level with sprinklers (open main lobby), fully sprinkled building no overnight stay or less than 75' (high-rise building 75'). Per OBC 909.21, 3005.3 elevator inspectors will verify operation via lobby smokes, elevator door operations at all floors, overall performance of the elevator during pressurization. Per A17.1 – 2.1.4
☐	**Enclosed lobby**	**Advisory:** Required when one or more of the following are true: **1)** More than 3 stories and no sprinklers –or overnight stay –or high rise building >75', **2)** Underground lobby with no ground level exit, OBC-405.4.3, **3)** Lobby is deemed area of refuge, OBC-1009.6, Requires firemen's phone with in lobby, **4)** Fire service elevator, OBC-3007.6, ASME A17.1,**5)** Occupant evacuation elevator, OBC-3008.6, ASME A17.1, 2.27.11. **Exceptions:** Open parking garage,and open atriums/observation elevators. Exit of discharge with sprinklers. Exterior exits.
☐	**Prohibited doors**	**Advisory**: Doors, other than hoistway doors and the elevator car door, shall be prohibited at the point of access to an elevator car unless such doors are readily openable from the car side without a key, tool, special knowledge or effort. Per OBC 3002.6 elevator inspectors will verify the following: Openable from the elevator, no keys or tools or special knowledge, no occupied space between doors, visual required when closed, not attached to hoistway doors or frame unless listed as a complete assembly. Per A17.1 – 2.11.6.3
☐	**Plumbing and mechanical systems**	**Advisory:** Plumbing and mechanical systems shall not be located in an elevator shaft. **Exception:** Floor drains, sumps and sump pumps shall be permitted at the base of the shaft provided they are indirectly connected to the plumbing system *in accordance with the plumbing code*. Per OBC 3002.9.
☐	**Fire Rated Machine Rooms and Doors**	**Advisory:** Machine/control room/space and their doors are to be fire rated when necessary according to the Ohio Building Code 3005 and A17.1 -2.7.1 for traction/drum elevators and A17.1 - 3.7 for hydraulic elevators. Holes around piping and structure penetrations in the machine room are to be properly filled to maintain a fire rated enclosure and fire stop per NFPA 70 300-21.
☐	**Fire Service Elevator**	**Advisory:** Required In buildings with an occupied floor more than 120 feet (36 576 mm) above the lowest level of fire department vehicle access, no fewer than two fire service access elevators, or all elevators, whichever is less, OBC 403.6.1, 3007
☐	**Occupant Evacuation OEO**	**Advisory:** Where elevators are to be used for occupant self-evacuation during fires, all passenger elevators for general public use shall comply with OBC 3008. (**Eliminates stairway, 420' building height OBC 403.5.2)**

This form must be received at least 3 business days prior to the scheduled inspection date.

Within the scope of my company's responsibilities, I have verified completion for each item listed above. To the best of my knowledge the conveyance is ready to pass inspection.

GENERAL CONTRACTOR (PRINT NAME) _____ ELEVATOR CONTRACTOR (PRINT NAME) _____

GENERAL CONTRACTOR (SIGN NAME) _____ ELEVATOR CONTRACTOR (SIGN NAME) _____

DATE _____ DATE _____