

Elevator Acceptance Inspections

Prior to requesting a final inspection for a newly constructed, installed, or altered elevator, the elevator contractor should verify the following:

1. All installations are 100% complete and pretested.
2. Fire initiating devices are 100% complete and pretested.
3. Emergency power provided to elevators are pretested.
4. All building related requirements are completed before an inspector arrives on the job site to perform an acceptance inspection.

Failure to complete these requirements will result in a “failed” inspection and a re-inspection will have to be scheduled when all requirements are met.

A 24-hour notice is required to cancel a scheduled acceptance inspection or re-inspection.

All requests for acceptance inspections and re-inspections will be scheduled based upon inspector availability.

Please contact us with any questions:

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The following items are the most cited violations which result in a “failed” inspection:

- Plumbing systems shall not be in an elevator shaft or elevator equipment room. Exception: floor drains, sumps and sump pumps shall be permitted at the base of the shaft, if they are indirectly connected to the plumbing system. **IPC 301.6; IBC 3002.9**
- Elevators provided with Firefighters Emergency Operation shall be provided with a pump/drain that has the capacity to remove a minimum of 3,000 GPH per elevator. **A17.1, 2.2.2.5**
(Verify capacity at discharge head)
- A sump pump required by **A17.1, 2.2.2.5** with a control that stops pump operation when oil is detected is not allowed. **A17.1, 2.2.2.3**
Reference: A17.1 Standards Committee Inquiry 09-12 (NOTE) A pump with a sensor that cycles between oil and water is acceptable.
- Control boxes, disconnects, and high-water alarms for pumps located in hydraulic elevator pits are not to be installed in elevator hoistways, pits, or machine room spaces per **A17.1, 2.8.1**.
Reference: A17.1 Standards Committee Inquiry 10-1496.
- Sumps and pumps located in the pit shall be covered. Cover to be secured and level with pit floor. **A17.1 2.2.2.6**
- An oil separator is not required on traction elevators. The IPC does not reference this installation on traction elevators. It only addresses hydraulic elevators.
Reference: International Plumbing Code 1003.4.
- Cords for pit pumps are to be hard usage oil resistant type, shall not exceed exposed lengths of 6 feet, and shall meet the requirements of **NEC 70 620.21(A)(1)(d)**.
- Receptacle for pumps located in the pit shall be a single non-GFCI and shall be located 6 inches above the lowest landing. **NEC 70 620.85**
- Smoke detectors to recall elevators on Phase I recall are required to be located on each landing, machine /control room, machine/ control space, and hoistway overhead (AHJ). If the elevator has front and rear openings, detectors are required on each side. In parking garages and outside locations, 135- degree heat detectors are allowed in lieu of smoke detectors to initiate phase 1 recall. **A17.1, 2.27.3.2 NFPA 72, 21.3**
- Smoke detectors to recall elevators on Phase I recall are not required to be in the elevator pit. **NFPA 72, 21.3.6**
- The sprinkler required at the bottom of the elevator hoistway by NFPA 13, 8.14.5.2 shall not be required for enclosed, noncombustible elevator shafts that do not contain combustible hydraulic fluids. **NFPA13, 8.15.5.2**
- Sprinklers required in the pit shall be located no more than 24 inches from the pit floor. If the sprinkler is no more than 24 inches above the pit floor no means to automatically disconnect main line power is required per **A17.1, 2.8.2.3.2**

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- When a sprinkler is present in the hoistway or pit area, all electrical conduit and wiring located less than 48 inches from the pit floor shall be enclosed in NEMA-4 and shall be identified for use in wet locations per **A17.1, 2.8.2.3.4**.
- The sprinkler at the top of the elevator shaft shall not be required where the hoistway is noncombustible and the car enclosure materials meet the requirements of **A17.1, NFPA13, 8.15.5.6** (Exception) Elevators that use non fired rated suspension belts shall meet the requirements of **NFPA 13, 8.15.5.7** for sprinkler location at the top and bottom of the hoistway.
- Sprinklers located in elevator machine /control rooms and hoistways shall be rated at 212 degrees. AHJ (Agency having Jurisdiction) requirement
- All sprinkler risers and returns shall be located outside the hoistway, machine room/space or control room/space. **A17.1, 2.8.2.3.1**. Each sprinkler branch line shall terminate in the elevator machine room/control room or hoistway. A monitored control valve shall be installed at each branch line outside the machine/control room/space or hoistway. AHJ requirement
- Power shunt trip operation. Power shall be removed from the main line disconnect prior to the application of water from the sprinkler located in the hoistway overhead or machine room /control room per **A17.1, 2.8.2.3.2, IBC 3005.5**.
- The shunt trip breaker shall be located outside the elevator machine room, control room, machine space, or control space. AHJ requirement
- Heat detectors used to shunt elevator power that are in the machine /control rooms or hoistway shall be rated at 190 degrees. AHJ requirement
- Shunt control 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 at the alarm panel per **NFPA 72, Section 6.15.4.4**.
- All non-elevator related piping and equipment are prohibited from entering or passing through the machine/control room. **A17.1, 2.8.1 and 2.8.2**
- All glass installed in elevator cabs shall meet **A17.1, 2.14.1.8** requirements. Z97.1 marking is required to be permanently etched on each glass panel. **A17.1, 2.14.1.8**
- All glass used in hoistway enclosure shall be laminated and be marked with ASME Z97.1. The marking shall be permanently etched on every panel. **A17.1, 2.1.1.2.2(d)**
- Access to machinery spaces, machine rooms, control spaces and control rooms shall meet the requirements of **A17.1, 2.7.3**. Hatch covers as a means of access to roofs shall not be permitted. Passage through a machine/control room to the roof, other building equipment or other spaces is prohibited. An "Authorized Personnel Only" sign is required on each machine room/space or control room/space access door.

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- Alternating tread devices are not allowed. Reference: **A17.1 Standards committee Inquiry 06-25**
- In machine room/space and control room/space, means shall be provided to keep the ambient air temperature and humidity in the range specified by the elevator equipment manufacturer. The temperature and humidity range shall be permanently posted in the machine room, control room, control space, or where specified by the equipment manufacturer, in the machinery space. **A17.1, 2.7.9.2. IBC 3005.2**
- A lockable/fusible disconnect shall be located within sight of the elevator controller. **NFPA 620-51**. The preferred site for electrical disconnects is near the jamb side of the machine/control room door or located per the approved permit application. If a non-self-resetting circuit breaker is used it shall have the locking means built on the breaker itself. Electrical clearances shall meet the requirements of **NFPA 70, 110.26**.
- Electrical distribution panels shall not be located in elevator machine/control rooms or spaces.
- A separate branch circuit shall supply the car lights, receptacle, Auxiliary lighting power source and ventilation on each car. **NFPA 70, 620.22(A)**. Lockable, Fusible disconnect required, located in the machine/control room.
- A separate branch circuit shall supply the machine room, control room/machinery space or control space lighting and receptacles. **NFPA 70, 620.23(A)**. Over-current protection shall be located outside the machine/control room.
- A separate branch circuit shall supply the hoistway pit lighting, and receptacles. **NFPA70, 620.24(A)** Over current protection shall be located outside the machine/control room.
- A single receptacle supplying power to a permanently installed sump pump shall not require ground fault circuit interrupter protection. Receptacle to be located above the first floor/pit level. **NFPA 70 620.85**
- On MRL traction applications, lights and GFCI receptacles shall be installed in the overhead. **A17.1, 2.7.9.1.**
- Emergency lighting shall be installed in the machine room, control room /space. AHJ requirement
- Flexible metal conduit, flexible nonmetallic conduit and hard service cords shall be permitted in lengths not to exceed 6 foot in machine rooms, control rooms, hoistways, and car tops. **NFPA 70 620**
- All fire alarm device wiring, telephone wiring and external security wiring connections located in the hoistway or the machine /control room shall be run in conduit. AHJ requirement
- Elevators provided with emergency or standby power shall meet requirements of: **A17.1, 2.27.2.**

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- Hoistway enclosures shall have flush surfaces on the hoistway sides. Offsets or recess within the hoistway greater than 4 inches shall be tapered to not less than 75 degrees. **A17.1, 2.1.6.** Drywall screws penetrating the hoistway shall be broken off flush with the walls.
- Where fire resistive construction is required for machinery/control spaces and machinery/control room enclosures located outside the hoistway, the requirements of the IBC shall be met. **A17.1, 2.7.1.1** Enclosures shall be permanently labeled with the enclosure's rating.
- Where fire resistive construction is required, hoistways shall be enclosed in conformance with the requirements of the IBC. **A17.1, 2.1.1.1** Enclosures shall be permanently labeled with the enclosure's rating
- Building lobby finished floors shall be flush with hoistway door sills.
- Elevator cab floor shall be flush with car door sill.
- Passenger car enclosures shall meet the requirements of **A17.1, 2.14.2.1.1**. Materials in their end use shall conform to the requirements based on test conducted in accordance with the requirements of **ASTM E 84 or ANSI/UL 723**. (1) Flame spread rating of 0 to 75 (2) Smoke development of 0 to 450.
- Elevators being modified - having counterweights that run between elevators - shall have a permanent safety barricade installed meeting the requirements of **A17.1, 2.3.2.3. AHJ requirement**
- Only single, properly fire rated doors will be accepted for use for control spaces, control rooms, or machine rooms. The door will be self-closing, self-locking, and remain locked. (No double doors will be accepted.) **A17.1 & AHJ**