

Initial Elevator Inspection Guidelines

The following are items, which are required to be completed Prior to scheduling an Elevator Inspection

1.	Applications and Plans are required to be approved Prior to commencing work. Approved plans shall be available on the job site Prior to commencing work.
2.	Elevator machine rooms and machinery spaces shall be enclosed with fire barriers with a fire-resistance rating not less than the required rating of the hoistway enclosure served by the machinery.
3.	Hoistway enclosures shall have a fire-resistance rating of not less than 2 hours where connecting four stories or more, and not less than 1 hour where connecting less than four stories. The number of stories connected by the shaft enclosure shall include any basements but not any mezzanines.
4.	Hoistways of elevators and dumbwaiters penetrating more than three stories shall be provided with a means for venting smoke and hot gases to the outer air in case of fire. For exceptions see IBC Section 3004 The area of the vents shall not be less than 3 1/2 percent of the area of the hoistway nor less than 3 square feet (0.28 m ²) for each elevator car, and not less than 3 1/2 percent nor less than 0.5 square foot (0.047 m ²) for each dumbwaiter car in the hoistway, whichever is greater. Of the total required vent area, not less than one-third shall be of the permanently open type unless all vents activate upon detection of smoke from any of the elevator lobby smoke detectors.
5.	Glass in elevator hoistway enclosures shall be laminated glass conforming to ANSI Z97.1 or 16 CFR Part 1201. Markings as specified in the applicable standard shall be on each separate piece of glass and shall remain visible after installation.
6.	Where elevators are provided in buildings four or more stories above grade plane or four or more stories below grade plane, at least one elevator shall be provided for fire department emergency access to all floors. The elevator car shall be of such a size and arrangement to accommodate a 24-inch by 84-inch (610 mm by 1930 mm) ambulance stretcher in the horizontal, open position and shall be identified by the international symbol for emergency medical services (star of life). The symbol shall not be less than 3 inches (76 mm) high and shall be placed inside on both sides of the hoistway door frame at the recall level.
7.	In buildings where a required accessible floor is four or more stories above or below a level of exit discharge, at least one required accessible means of egress shall be an elevator complying with IBC Section 1007.4. Standby power shall be provided for elevators that are part of an accessible means of egress in accordance with IBC Section 1007.4.
8.	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.
9.	A drain or sump pump complying with Comm 82.33 and 82.36 shall be provided in the pit. Connection of these drains and sumps to a sanitary system is prohibited. The sump pump/drain shall have the capacity to remove a minimum of 11.4 m ³ /h (3,000 gal/h) per elevator.
10.	When sprinklers are installed not more than 600 mm (24 in.) above the pit floor, elevator electrical equipment and wiring in the hoistway located less than 1200 mm (48 in.) above the pit floor, and on the exterior of the car at the point where the car platform sill and the lowest landing hoistway door sill are in vertical alignment. Elevator electrical equipment shall be weatherproof (Type 4 as specified in NEMA 250). Elevator wiring, except traveling cables, shall be identified for use in wet locations in accordance with the requirements in NFPA 70.
11.	Only machinery, equipment, electrical wiring, raceways, cables, coaxial wiring, and antennas used directly in connection with the elevator, including wiring for signals, for communication with the car, for lighting, heating, air conditioning, and ventilating the car, for fire detecting systems, for pit sump pumps, and for heating and lighting the hoistway and/or the machinery space machine room, control space, or control room shall be permitted to be installed inside the hoistway, machinery space, machine room, control space, or control room.
12.	Access to machine rooms, control rooms, machinery spaces, and control spaces for elevators shall not be through any toilet room, sleeping room or private room or space.
13.	Access doors to machine rooms, control rooms, machinery spaces, and control spaces shall be self-closing and self-locking, provided with a spring-type lock arranged to permit the doors to be opened from the inside without a key, and kept closed and locked.

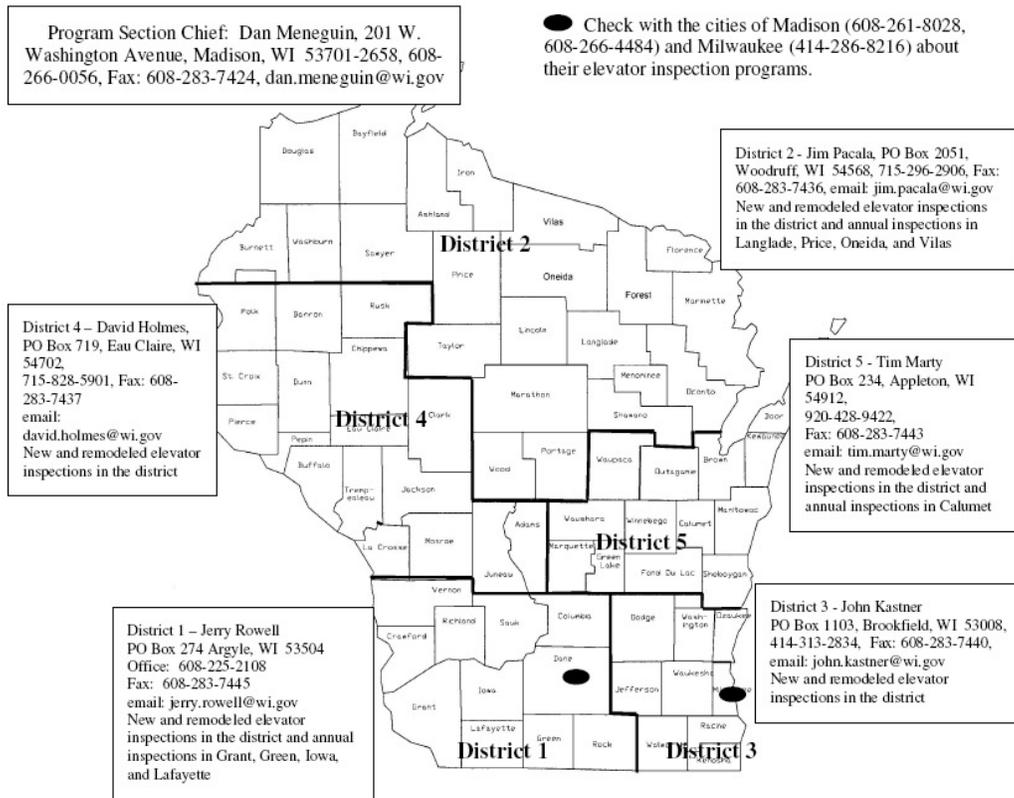
14.	A clear path of not less than 450 mm (18 in.) shall be provided to all components that require maintenance. A clearance of not less than 450 mm (18 in.) shall be provided in the direction(s) required for maintenance access.
15.	Elevator machine rooms that contain solid-state equipment for elevator operation shall be provided with an independent ventilation or air-conditioning system to protect against the overheating of the electrical equipment. The system shall be capable of maintaining temperatures within the range established for the elevator equipment.
16.	Where standby power is connected to elevators, the machine room ventilation or air conditioning shall be connected to the standby power source.
17.	Sprinklers, where required by the Building Code, shall be installed in accordance with NFPA 13/13R.
18.	Fire alarm initiating devices shall be installed in accordance with NFPA 72. If sprinkler protection is provided heat detectors are required to activate the shunt trip circuit breaker prior to the application of water.
19.	In any area in the pit, outside the refuge space, where the vertical clearance is less than 1100 mm (43 in.), that area shall be clearly marked on the pit floor. The marking shall consist of alternating 100 mm (4 in.) diagonal red and white stripes. All Electric Traction and Hydraulic elevators.
20.	For electric traction elevators any area outside the refuge space where the vertical clearance between the top of the car enclosure and the overhead structure or other obstructions is less than 1100 mm (43 in.), the top of the car enclosure shall be clearly marked.
21.	Standard guard railings and toe board shall be provided on the outside perimeter of the car top on all sides where the distance between the edges of the car top and the adjacent hoistway enclosure exceeds 300 mm (12 in.) horizontal clearance.
22.	If provided, equipment access panels in the elevator car for maintenance and inspection of equipment shall, be of hinged type, open only into the car, be provided with a lock so arranged that the door shall be openable from inside the car only by a specially shaped removable key, be provided with electric contacts that shall cause power to be removed from the driving-machine motor and brake, and be of the same material and construction as required for the car enclosure.
23.	Each elevator shall be provided with lighting and a duplex receptacle fixture on the car top. The lighting shall be permanently connected, fixed, or portable, or a combination thereof, to provide an illumination level of not less than 100 lx (10 fc).
24.	A two-way communications device between the car and a location staffed by authorized personnel shall be provided. When the two-way communications location is not staffed 24 h a day, by authorized personnel who can take appropriate action, the means of two-way communications shall automatically be directed within 30 s to an additional on- or off-site location, staffed by authorized personnel, where an appropriate response can be taken. Where the elevator rise is 18 m (60 ft) or more, a two-way voice communication device within the building accessible to emergency personnel shall be provided..
25.	The emergency or standby power system where provided, shall be capable of operating the elevator(s) with rated load, at least one at a time, unless otherwise required by the building code. The transfer between the normal and the emergency or standby power system shall be automatic. An illuminated signal marked "ELEVATOR EMERGENCY POWER" shall be provided in the elevator lobby at the recall level. Where the emergency or standby power system is not capable of operating all elevators simultaneously, a selector switch(es) shall be provided.
26.	The key switches required for standby power and Firefighters Emergency Operation for all elevators in a building shall be operable by the same key. This key shall be of a tubular, 7 pin, style 137 construction and shall have a biting code of 6143521. The key shall be coded "FEO-K1."
27.	In buildings with more than one elevator, each elevator in the building shall be assigned a unique alphabetical or numerical identification.
28.	Overspeed valves, where provided, shall be constructed, installed, and adjusted to ensure that the elevator obtains the required performance. Field-adjustable overspeed valves shall be sealed after field setting.
29.	National Electrical Code requires 3 separate branch circuits. Car light circuit (overcurrent device shall be in Machine Room), machine room light and receptacle, and the pit light and receptacle.

Please note:

The installation shall be complete and ready for an inspection to be scheduled. All test equipment on-site at the time the inspection is scheduled for. Any persons responsible for other systems used in connection with the elevator shall be present for the inspection. If the equipment is not complete and ready at the time of the scheduled inspection, the inspection will not be made and a cancellation fee will be assessed in accordance with ch. Comm. 2, and a reinspection will be scheduled

Safety and Buildings Division Elevator Inspector Districts Map

August 18, 2009



See S&B Elevator Program Web page to read about responsibilities of state and agent inspectors - <http://commerce.wi.gov/SB/SB-ElevatorSystemsProgram.html#Seven0807>

Annual inspections are conducted by a contractor, NEIS, Inc. (unless noted in state inspector district boxes, above) or through customer arrangements with a private inspection companies - Wisconsin NEIS 262-560-6220, email: wineis.mail@bureauveritas.com