August 28, 2014

To Illinois Licensed Elevator Contractor and Mechanics:

After experiencing uncertainty with the door restrictors this past year, the goal of this document is to provide insight to the next round of upgrades and to assist in compliance procedures. Per the Elevator Safety and Regulation Act (225 ILCS 312/35), the six (6) required OSFM upgrades are due by January 1, 2015. Please refer to the OSFM website for further information.

Note: If you have questions regarding the permit and inspection requirement, please feel free to contact Robert Capuani, Director of Elevator Safety, Office of the State Fire Marshal.

PERMITS REQUIRED FOR 2015 UPGRADES - YES

Per ASME A17.1 (2010) Section 8.7 Alterations, all 2015 upgrades will require a permit by the AHJ and a permit inspection. Please refer to ASME 17.1 (2010) Section 8.7.1.3-Testing -Where alterations are made, acceptance inspections and tests shall be conducted as required by 8.10.2.3 for electric elevators, 8.10.3.3 for hydraulic elevators, or 8.10.4.2 for escalators and moving walks.

Note: Pit Ladders requiring only a minor modification, as outlined below, will not require a permit; however, the pit ladder shall be in compliance with A17.1 (2007) Section 2.2.4.2.

Local Programs: a plan submittal of proposed work and permit shall be obtained along with the permit inspection per the Local Program process/procedures.

Open Territory/Non-Local Programs: follow the OSFM guidelines for permit processing on the OSFM website.

(ii) CAR ILLUMINATION (A17. 3-2005 SECTION 3.4.5 / Hydraulic Reference Section 4.2.3)

- Passenger and Freight Elevators shall be provided with interior lighting
- Minimum of 2 lamps is required
- A minimum foot candle is 5fc for passenger / 2.5fc for freights with gate/car door closed as measured at the car threshold.
- Emergency battery lighting is required on all passenger elevators and not required, however, strongly recommended, on all freight elevators
- Protection of light bulb and tubes in accordance with ASME A17.3-2005 Section 3.4.6 is also strongly recommended; however, not required.

(iii) CAR EMERGENCY SIGNALING DEVICES (A17. 3-2005 SECTION 3.11.1 / Hydraulic reference Section 4.78)

- Elevators with no phones shall install a new ADA voice message phone.
- Existing phones without voice message or old handsets fulfill the requirement.
  - However, must provide at least 4 hour of operation on power loss as specified in Section 3.11.1 (a)(3). Replacement is required if existing phone cannot meet the requirement.
- Alarm Bells are to be installed if not present in Elevators (pre ASME A17.1 2007 CDPs) as required by Section 3.11.1(a)(1).

(iv) PHASE REVERSAL AND FAILURE PROTECTION (ASME A17.3-2005 SECTION 3.10.6)

- This requirement only applies to electric elevators as it is not referenced in ASME A17.3-2005 Part 4-Hydraulic Elevators

Note: on Hydraulic Elevators where “Soft Start” line starters or reverse phase relays are installed, a permit and permit inspection is required per ASME A17.1 (2010) Section 8.7.3.31.11. *This is not a State required upgrade; however, if this work occurs a permit is required as it is an Alteration (ASME A17.1 (2010) Section 8.7)
(v) DOOR RE-OPENING DEVICE (ASME A17.3-2005 Section 2.8.2 / Hydraulic Reference Section 4.1)

An automatic door re-opening device is to be provided. Existing electric eyes set at 5 and 29 inches off of sill with a safety edge fulfills this requirement. ASME A17.3 (2005) does not require guarding of the vertical face of the door/gate.

- If a new door screen /sensor are installed, it cannot be powered by the car lighting circuit.
- If the car is equipped with Phase 1 Fire Service either by key switch or alarm initiating devices, the sensor edge must be overridden.
- Reduced speed closing (nudging) must be provided when the device is rendered inoperative

(vi) STOP SWITCH PITS (ASME A17.3 2005-SECTION 2.3.3)

- A stop switch conforming to the requirements of ASME A17.3-2005 Section 3.10.4(e) shall be provided in the pit of every elevator. The switch shall be located adjacent to the normal pit access.
- Recommend installing at maximum 18 inches above sill. If pit is greater than 67 inches in depth, install a second pit switch at 47 inches off the pit floor adjacent to the pit access ladder.

(vii) PIT LADDERS (ASME A17.1 2007-SECTION 2.2.4.2)

2.2.4.2 There shall be installed in the pit of each elevator, where the pit extends more than 900mm(35 in.) below the sill of the pit access door (lowest hoistway door or separate pit access door), a fixed vertical ladder of noncombustible material, located within reach of the access door. The ladder is permitted to be retractable or nonretractable. Nonretractable ladders, where provided, shall conform to 2.2.4.2.1 through 2.2.4.2.6. Retractable ladders, where provided, shall conform to 2.2.4.2.1 through 2.2.4.2.3 and 2.2.4.2.5 through 2.2.4.2.8. When in the extended position, retractable ladders shall conform to 2.2.4.2.4.

- Ladders must have 4 ½ inches (foot clearance) from the pit wall and 4 ½ inches clearance on the side rails or grab bars to the nearest permanent obstruction. Rungs must be non-slip. Ladder width to be 16 inches. In the case of obstructions, ladder can be reduced to minimum 9 inches in width. The pit ladder must extend to a height of 48 inches above the lowest level hoistway door or separate pit access door.

NEW PIT LADDER-brand new or replacement due to inability to comply

A good number of existing pit ladders will need to be replaced altogether because of their inability to comply (i.e. clearance issues for foot space or side rails) with the requirements set forth in ASME A17.1 -2007 Section 2.2.4.2.

EXISTING PIT LADDERS - existing pit ladders that only need the following minor modifications will not require permit; however, those existing pit ladders still need to comply by January 1, 2015, and would not pass inspection until in compliance:

1. Installation of grab bar(s) or extensions on existing side rails to achieve 48 inches above the lowest level landing sill.
2. Application of a nonslip coating to rungs that leaves a dimpled finish or wrapping rungs with a nonslip, adhesive type material to achieve the required nonslip rungs.
3. Shimming ladder out to achieve the required 4 ½ inches of foot space from wall or relocating ladder to achieve the 4 ½ inches clearance on the side rails or grab bars to the nearest permanent obstruction or to make the ladder accessible from pit access door.