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Wichita-Sedgwick County Metropolitan Area Building and Construction Department

MABCD DIRECTIVE #15-E5 (ELEVATOR DIRECTIVE)

ISSUE: 1- Year Safety Tests on Escalators and Moving Walks

EFFECTIVE DATE: Immediately

The Following procedures which are outlined in ASME A17.2 as required by ASME A17.1 shall be followed when performing 1 year safety tests on Escalators and Moving Walks. These procedures are not all inclusive, can be performed in any order and other tests may need to be performed when visual evidence warrants more action.

*** Note two steps minimum must be removed for the following tests.**

Escalator Skirt Obstruction Devices Test – item 7.11.1 - Req 8.11.4.1(k) (Rule 1007.2k)

- With the escalator running, have the devices manually tripped. (All four devices must be tested).

Machine Space Stop Switch Test – item 8.2 and 10.2 - Req 8.6.8.15.2

- Test operation and condition of machine space stop switches.

Broken Drive Chain Switch Test – item 8.6 and 10.6 - Req 8.6.8.15.6

- Have the device manually tripped and attempt to start the unit (it should not run).

Broken Step Chain Device Test – item 8.8 and 10.8 - Req 8.6.8.15.8

- Have the device manually tripped and attempt to start unit (it should not run).

Escalator Step Upthrust Device Test – item 8.9 - Req 8.6.8.15.9

- Visually inspect the condition of the step-upthrust-device-switch, while manually moving the mechanism. If the device is operated by tabs on the steps inspect the condition of the tabs on each step.

Missing Step Or Pallet Device Test – item 8.10 and 10.10 - Req 8.6.8.15.10

- Have the unit operated and observe that it stops before the gap resulting from the missing step or pallet emerging from the combplate. (test at both ends).

Step Level Device Test – item 8.11 - Req 8.6.8.15.11

- Visually examine the step level device at each end and both sides of the escalator step.
- Manually operate the device and attempt to start the unit (it should not run).

Steps or Pallet Chain and Trusses Inspection – item 8.12 and 10.12 - Req 8.6.8.15.12

- With as many steps removed as required to facilitate interior inspection, visually inspect the following:
 - a. Drip pans.
 - b. Wiring conduits.
 - c. Trusses.
 - d. Roller tracks
 - e. Chains.
 - f. Handrails
 - g. Interior of balustrades, Skirts and Newels.
 - h. Steps and Pallets (for type “A” and “B” cracks).

Combplate Impact Devices Test – item 7.7 and 9.7 - Req 8.6.8.15.18

- With the unit off, have the forces applied to places on the combplate independently as follows:
 - a. Vertical force applied upward in the center of the combplate.
 - b. Horizontal force applied in the direction of travel in the center and on each side separately.
 - c. With the force applied for each of the four tests, (three horizontal and one vertical), the unit should not run.
 - d. Both vertical and direction-of-travel forces must be checked separately.

Handrail Inlet Device Test – item 7.3 - Req 8.6.8.15.13

- With the escalator running have the devices manually tripped.(All four devices must be tested).

Escalator Step/Skirt Clearance and Performance Index Test – item 7.17 - Req 8.11.4.2.19 and 8.10.4.1.1(t) (Rule 1008.2s) Loaded Gap – Req 8.6.8.15.19 and 8.6.8.15.20

- Test as specified in the requirements and instructions with the test instrument.
- See step/skirt performance index table for requirements of various code editions.
- See step/skirt clearance table for requirement of various code editions.

Other tests that may be performed. (At the discretion of the Inspector).

- Egress Restriction (rolling shutter device).
- Speed Test and speed governors (speed monitoring)
- Stopped handrail device and Handrail speed monitoring device.
- Driving machine brake test.
- Disconnected motor safety device.
- Reversal stop switch.
- Response to smoke detectors.
- Heaters (where units are installed outdoors).

Tom Kerschen
Chief Electrical/Elevator Inspector –
MABCD
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