

CHERIE BERRY COMMISSIONER THOMAS M. CHAMBERS BUREAU CHIEF ELEVATOR AND AMUSEMENT DEVICE BUREAU

2017 Annual Elevator Company Meeting

March 16, 2017 * 9:00am-11:30am Embassy Suites – Crabtree, Raleigh NC Scribe: Carrie Boring

- I. Tommy Petty, Deputy Bureau Chief
 - i. Service is slacking and needs to be brought up to par.
 - ii. Review of service quality issues picture examples of what inspectors have found:
 - Ring gear gear is crooked/excess oil.
 - Rusted metal in pit.
 - Door restrictor tied so that it cannot work (this is a safety device, subject to fines).
 - Tattered wiring.
 - Mats to soak up oil left behind.
 - Dirty pits containing rags, leaves, etc.
 - Wires running on the exterior of the conduit.
 - Indication of water sitting in pit.
 - Excess rouging
 - Office desk set-up inside of machine room.
- II. Jeff Cole, Supervisor of Inspections
 - i. Please call Jeff Cole at (919) 807-2782 or email jeff.cole@labor.nc.gov, with any questions regarding codes and code changes.
 - ii. A17.-2016 changes become *effective May 30th, 2017*. Changes include:
 - The use of elastomeric buffers have been approved and added
 - 2.7.5.3.3 working platform standard railing paragraph revised and reworded
 - 2.12.1 General paragraph added
 - For passenger elevators, the unlocking zone from the landing floor level shall be not less than 75 mm (3 in.) nor more than 175 mm (7 in.). For freight elevators with vertically sliding doors, the unlocking zone from the landing floor level shall be not less than 75 mm (3 in.) nor more than 450 mm (18 in.).

- **2.12.6.2.5** -The unlocking device keyway and locked panel changed to The hoistway door unlocking device keyway and locked panel.
- 2.12.7.3.3 (c) hoistway access switches regarding movement of car paragraph changed in its entirety
- 2.14.1.7.1 and 2.14.1.7.2 Railing and equipment on car top enclosure verbiage change in both of these paragraphs
- 2.14.5.10 Folding car doors revised and redesignated to 2.14.6.4 (code number change).
- **2.15.6.3** Requirements for metals other than steel the word *sound* replaces the word *good* engineering practices (note: this word was replaced throughout the book for same).
- 2.18.6.2 Last sentence of this paragraph has been changed
- 2.20.8.2 Broken suspension member- on site documentation (see 8.6.1.2.2(b)(5) has been added.
- 2.22.4.5.1 is now under 2.22.4.5 plunger return requirements.
- Section 2.22.5-2.22.5.6 added to address elastomeric buffers.
- **2.25.2.1.2** added (i.e., those devices used for sensing relative changes in car position) this section is under Normal terminal stopping devices.
- 2.26.2.5 Emergency stop switch (b) *have red operating buttons of the push-to-stop configuration* changed from saying have red operating red operating handles or buttons.
- 2.26.4.2 Electrical equipment and wiring-note added: Enclosures for motor controllers installed outside the specified spaces listed in 2.7.6.3.2 will require the additional marking "AGP" (Accessible to General Public) to indicate that the equipment enclosure is suitable for this application.
- 2.26.4.3.1 Note was added: NOTE: Positive opening is achieved when all the contact-breaking elements are brought to their open position and when for a significant part of the travel there are no resilient members (e.g., springs) between the moving contacts and the part of the actuator to which the actuating force is applied. An example of this is a contact complying with the requirements of IEC 60947-5-1:2004, Annex K.
- 2.27.2.4.4 Paragraph revised in its entirety dealing with emergency or standby power system.
- 2.27.3.1.6(c) Paragraph revised (reworded)-phase 1 emergency recall operation.
- 2.27.3.2.1 Phase 1 emergency recall operation by fire alarm initiating device a note has been added to this section.
- 2.27.3.2.2(b) Note added.
- **2.27.3.3.8** Phase 11 emergency in car operation last sentence in this paragraph has been revised.
- 2.29.1 Identification of equipment has been revised and reworded in its entirety.
- 3.6.3(c) Buffer types- elastomeric buffers added
- **3.27.2** Phase 1 emergency recall operation prior to device actuation 1st paragraph has been revised.

- **3.27.4** Device actuation with phase 11 emergency in car operation in effect the words *an upward traveling and a downward traveling car* was added.
- SPECIAL APPLICATION ELEVATORS- PART 5- Please review changes as per the front of the book and any paragraphs marked (16).
- 6.1.13.10.1 Design factors of safety>shall conform to ANSI/ AISC 360-05 added.
- 6.1.3.10.2 Editorial change to this paragraph.
- **6.1.5.3.2** Main drive shaft braking paragraph has been revised and separated(a) and (b)whole extra paragraph has been added.
- 6.1.6.3.4 Drive-chain device paragraph revised.
- 6.1.6.7 Escalator braking-distance monitor this section and code number has been added in.
- **6.1.7.4.3** Electric equipment and wiring this paragraph has been added to and revised.
- **6.2.3.11.1** Design factors of safety dealing with trusses and all supporting structures this paragraph has editorial changes.
- 6.2.6.8 Moving walk braking-distance monitor this section and code number has been added.
- **DUMBWAITERS AND MATERIAL LIFTS PART 7** please see changes for this section in front of the book and each paragraph with (16) beside it.
- **8.5** Escalator and moving walk seismic requirements changed, added and revised.
- **8.6.1.2.2** On site Documentation (5) this paragraph was added and section revised.
- **8.6.1.7.5** Devices not covered in section 8.6 this code number and section was added.
- 8.6.3.6.1 and 8.6.3.6.2 Replacement of speed governor added to and revised.
- 8.6.3.8 Replacement of door reopening device paragraph revised and added to.
- 8.6.3.15 Added replacement of car doors and gates.
- 8.6.4.4.1 Buffers revised.
- 8.6.4.4.2 Elastomeric buffers added.
- **8.6.4.13.2** Kinetic energy and force limitation for automatic closing, horizontal sliding car and hoistway doors or gates- Where a data plate conforming to 2.13.4.2.4 is not required, see nonmandatory appendix Z. (this sentence was added).
- **8.6.4.19.2** Safeties- the following sentence was added-Test the function and operation of the switch operated by the safety.
- **8.6.4.19.8** Power operation of door system- The following was added. Where a data plate conforming to 2.13.4.2.4 is not required, see nonmandatory appendix Z.

- 8.6.4.19.5 Emergency communications the following was added- A written checkout procedure shall be provided by the manufacture of the communications means or the person or firm maintaining the equipment.
- 8.6.4.19.17 Earthquake operation- This section has been added.
- **8.6.4.20.11** Emergency brake this paragraph has been added to and revised.
- 8.6.4.22.1 and 8.6.4.22.2 Now reads seismic detection device instead of seismic switch.
- 8.6.5.14.6 Power operation of door system- last sentence added.
- 8.6.5.14.8 Earthquake operation- this section was added.
- 8.6.6.1 Rack and pinion elevators- revised and added on to.
- 8.6.6.1.1 Revised for rack and pinion elevator periodic test.
- 8.6.8.15.1 Machine room and truss interior paragraph revised.
- **8.6.11.15** Presence of elevator personnel when motor controllers are located in public places- added.
- 8.7.2.14.5 thru 8.7.2.14.5.2 Addition of car top railing- this section has been added.
- 8.7.2.17.2 Increase in speed- revised and reworded.
- 8.7.2.21.1 Change in suspension members- revised and reworded.
- **8.7.2.21.4** Suspension means monitoring and protection- revised and reworded.
- **8.7.2.28** Emergency operations and signaling (a) and (c) paragraphs reworded.
- 8.7.3.2.2 Pits revised and reworded.
- 8.7.3.22.1 Increase or decrease in rise- (c) paragraph reworded.
- **8.7.3.31.8** Emergency operation and signaling devices (a) paragraph reworded.
- 8.7.6.1.18 Addition of escalator speed variation- added.
- 8.7.6.2.17 Addition of moving walk speed variation-added.
- 8.9.3 Material and construction- last sentence added.
- 8.10.1.7 Devices not covered in section 8.10-this paragraph was added.
- THERE ARE MORE EDITORIAL AND CODE NUMBER CHANGES THROUGHOUT A17.1 2016. TAKE TIME TO REVIEW THIS MATERIAL TO ENSURE YOUR UNIT IS CODE COMPLIANT.
- iii. **NFPA 70 (NEC)** changes from 2014 edition to 2017 edition became *effective August 24th, 2016.* Changes include:
 - **110.5** Aluminum conductors.
 - **110.14(D)** Installation torque requirements for electrical connections with a calibrated tool.
 - 110.25 Lockable disconnecting means.
 - 110.26 Working clearances.
 - **110.3(c)** Listing of a device.
 - **110.26(D)** Illumination.

- **240.24** Location in or on premises (A) accessibility of switches containing fuses readily accessible.
- 250.118 Types of equipment- grounding conductors.
- 250.119(c) Flex cord grounding.
- 300.19 Supporting conductors in a vertical raceway.
- 348.30 Securing/support of flexible metal conduit.
- 430.109 (c) Motors 2hp or less.
- 620.51(c) (4) Disconnect required on platform lift.
- 620.5 working clearances.
- **620.11** Hoist way door interlock wiring (type SF wire/ physically protected.
- 620.21 Wiring methods flexible cables/cords.
- 620.51- I.D. numbers for machine disconnects.
- 620.23 Separate branch circuits.
- 620.37(B) Lighting protection/bonding.
- 620.42 Hazardous conditions.
- 620.51 Disconnecting means with in sight.
- 620.61(c)(d) Line side of disconnect feeder.
- iv. Permit Applications:
 - When sending permit applications into the office, provide the name of the building in the subject line. This helps both the elevator company and our office staff in finding a permit application quicker.
 - If your office can't confirm receipt of a permit, please call our office (919-807-2770) to inquire before sending in a duplicate. A lot of duplicate applications are coming through.
 - Our system only allows 1 permit for 1 single state # / unit at a time. You cannot send in 2 separate scopes of work for the same state # / unit. The first scope of work would have to be closed out and inspected before the 2nd scope of work for that unit may be applied for.
 - Upon approval, all permits are required to be posted on the job site prior to beginning work, and are to remain up until that unit is inspected and certified by the inspector.
 - Permits expire 2 years after approval date.
- v. Bureau Memos:
 - Memos are continuously posted to our website (http://www.nclabor.com/elevator/memos_elev.htm)
 - November 18, 2016 Updated 10 item checklist for new equipment must be signed by both elevator contractor and building contractor.
 - August 8, 2016 Applications for permits must include electrical license number for that branch office and name of who holds license. Also, NCDOL must be notified if that person who holds that license goes to a different branch or company.
 - May 17th 2016 Inspection requirements for permitted work- equipment must stay down until inspected and certified.

- December 12th 2016 Non-operational/damaged fire alarm systems require a permit not to operate until inspected and certified.
- December 12th 2016 Electronic drive units-permit required.
- February 7th 2017 Permits required for software changes made.
- III. Tom Chambers, Bureau Chief
 - i. Customers are paying for elevator maintenance service, elevator companies need to deliver.
 - Elevator owners are calling NCDOL complaining of lacking service.
 - The industry is getting service contracts, but are not performing full maintenance. It seems that there are too many elevators and not enough maintenance men.
 - ii. By law, it is the responsibility of the owner to notify NCDOL in writing, or online, within 60 days of violation that it has been abated.
 - If owner fails to contact NCDOL within 60 days, they are subject to a compliance inspection with a fee of \$200, and can be reinspected every 60 days.
 - iii. Effective immediately if an inspector shows up and sees a condition such as overdue critical testing, the elevator will be shut down immediately.
 - iv. 10-item checklist must be completed before inspection. If not done, the inspector will leave immediately. This can be found on our website (Memo from 11/18/16).
 - v. By law, all requests for elevator inspection must be done 5 days in advance.
- IV. Wesley Tart, Supervisor Eastern Area A
 - i. New and alteration inspections are priority. *Reinspections are not priority*. Please make wise use of your first inspection.