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T E C H N I C A L B U L L E T I N

Code Effective Date: **January 1, 2008** **U P D A T E D**

Source Document: **19NYCRR 1221 - *Building Code of New York State***
19NYCRR 1226 - *Property Maintenance Code of New York State*

Topic: **Elevators and Conveyances**

The Uniform Fire Prevention and Building Code and its referenced standards have specific requirements for elevators and conveying systems. Conveying systems includes escalators, dumbwaiters, moving walks, material lifts, and dumbwaiters with automatic transfer device. In order to insure uniformity in administering the code, clarifications of the requirements for the following subject areas are provided.

Terminology:

Uniform Code -	The Uniform Fire Prevention and Building Code
BCNYS -	*Building Code of New York State*
PMCNYS -	*Property Maintenance Code of New York State*
AHJ -	Authority Having Jurisdiction
Codes Division -	New York State Department of State, Division of Code Enforcement and Administration
ASME A17.1-	*Safety Code for Elevators and Escalators*, 2004 edition With addendum A17.1a - 2005 and supplement A17.1s - 2005 (BCNYS *Referenced Standard)*
Elevators -	any elevator and/or conveyance as provided for in the referenced standard
FEO -	Firefighters' Emergency Operation as defined in the referenced standard

Periodic Inspection of Existing Elevators:

PMCNYS Section 606, Elevators, Escalators and Dumbwaiters, requires that "elevators, dumbwaiters and escalators shall be maintained to sustain safely all imposed loads, to operate properly, and to be free from physical and fire hazards." Section 606.1.1 requires:

> *Elevators, dumbwaiters, escalators and platform lifts shall be maintained and meet schedule of inspections in accord with Building Code of New York State §3001, and* ***Appendix N, Table-1*** *of ASME A17.1 and ASME A18.1.*

Additionally, the most current certificate of inspection is required to be on display or available at all times. Note that the "certificate of inspection" referred to in PMCNYS section 606.1 is the report prepared by the QEI inspector and may be filed in the building manager's office.

BCNYS Section 3001.2, Referenced standards, states in part, "the design, construction, installation, alteration, repair and maintenance of elevators and conveying systems and their components shall

conform to ASME A17.1." Section 8.10, Acceptance Inspections and Tests, subsection 8.10.1.1.3 and section 8.11, Periodic Inspections and Tests, subsection 8.11.1.1 state "the inspector shall meet the qualification requirements of the ASME QEI-1. Inspectors and inspection supervisors shall be certified by an organization accredited by ASME in accordance with the requirements of ASME QEI-1. Information about such is on the ASME website www.asme.org.

Retroactive Hydraulic Cylinder and Escalator Skirt Requirements:
Section 8.6.5.8 of ASME A17.1 states that single bottom cylinders shall be replaced or that safeties shall be provided to guard against failure of the hydraulic cylinder. However, this provision is in conflict with Chapter 707 of The Laws of 1981 under which the building codes are promulgated and is therefore unenforceable.

Similarly, Section 8.11.4.2.19 which establishes a step/skirt performance requirement for existing escalators and Section 8.6.1.6.3 which requires up-to-date wiring diagrams for existing conveying systems covered in the scope of ASME A17.1 are unenforceable because they also conflict with Chapter 707 of the Laws of 1981.

Existing Elevator Requirements:
Installation requirements shall be in accordance with ASME A17.1 at the time of installation. Periodic inspection and testing shall be to determine compliance with the edition of ASME A17.1 that was in effect at the time of the elevator installation and the code effective as applicable to and for each alteration, as follows:

ASME A17.1, 1981 edition with addendum A17.1a - 1982	1/1/84 through 6/3/88
ASME A17.1, 1987 edition	6/30/88 through 7/26/95
ASME A17.1, 1993 edition	7/26/95 through 1/1/03*
ASME A17.1, 2000 edition	7/3/02* to 1/1/08
ASME A17.1, 2004 edition with addendum A17.1a - 2005 and supplement A17.1s - 2005	1/1/08** to present

* Between 7/3/02 and 1/1/03, the 1993 edition of ASME A17.1 applied to construction regulated under Title 9B, NYCRR and the 2000 edition of ASME A17.1 applied to construction regulated under BCNYS.

**Between 10/3/07 and 1/1/08, the 2000 edition of ASME A17.1, applied to construction regulated under the 2000 edition of BCNYS and the 2004 edition with addendum and supplement applied to construction regulated under the 2007 edition of BCNYS.

Elevator Pit Drain:
Section 2.2.2.5 of the ASME A17.1 requires that a drain or sump pump be provided in all elevator pits for elevators that have Firefighters' Emergency Operation. FEO is required in all new elevators that penetrate a floor as per BCNYS Section 3003.2 and ASME A17.1. MCNYS Section 802.2 requires the drain or sump pump to discharge into the sanitary or storm drainage system through an indirect connection. The drain or sump pump is not required to include an oil separator.

Sprinkler Protection of Hoistways and Machine Rooms:
The referenced standard for sprinkler systems is NFPA 13, Installation of Sprinkler Systems, 2002 edition. For sprinkler protected buildings, Section 8-14.5 of this standard requires a sprinkler head at the bottom of the hoistway (not more than 2 ft. above the pit floor) for equipment using a combustible hydraulic fluid or where the hoistway is combustible. A sprinkler head is also required at the top of

combustible hoistways and freight elevator hoistways. Section 8-14.5 also requires sprinkler protection for all machine rooms in sprinkler protected buildings.

The supplement for elevators (section 2.8.3.3.2) imposes a requirement to automatically disconnect the main line power supply...upon or prior to the application of water where the application of water could cause unsafe operation. The disconnection is required to be independent of the elevator control and non self-resetting.

Hoistway Enclosures:
Except in certain covered mall and atrium locations, hoistway shafts are required to be fire-resistance-rated in accordance with BCNYS Section 707 with nominal ratings of:

One hour for shafts connecting up to three stories, or
Two hours for shafts connecting four or more stories.

Door assemblies for elevators in fire-resistance-rated shafts must have a fire protection rating of either one hour or 1-1/2 hours, respectively, as provided in Table 715.2 of the BCNYS.

Smoke protection is also required, with few exceptions, at elevator entrances that would otherwise open into a fire-resistance-rated corridor. BCNYS Section 707.14.1 may require a lobby or an approved alternative under these circumstances. Additionally, venting of hoistways is required in accordance with BCNYS Section 3004.

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