Why Updated Building Transportation Codes Matter

For Building Owners and Passengers

If you’re reading this Insider article, you must care about upholding the consistently high standards of safety we’ve all come to expect. Elevator and escalator manufacturers undertake painstaking efforts to design, test and produce the safest, most efficient equipment on the market. Responsible building owners employ top-of-the-line elevator maintenance programs to ensure the highest levels of safety and efficiency for their tenants and visitors. The industry’s elevator inspectors triple-check and fine-tune dozens of checklist items to guarantee each piece of equipment under their care is running at peak safety and performance.

So how can it be that the most crucial component of safety in today’s buildings may not be up to the same standard? The answer is simple: outdated codes.

The most effective way to ensure the safety of the riding public, as well as elevator personnel, is through the adoption of the latest version (2010) of the Safety Code for Elevators and Escalators, ASME A17.1/CSA B44.

The ASME/CSA publishes new editions of the ASME A17.1/CSA B44.1 every three years as part of a thorough, consensus-building code development process to account for in-depth examination of the latest safety issues. Any pitfalls or shortcomings are fully addressed prior to publication.

This state-of-the-art code represents the optimum in safety. It is developed and refined by hundreds of experienced experts representing all aspects of the elevator industry, from enforcing authorities, mechanical and electrical engineering and design experts, inspectors, consultants, labor authorities, building and facility owners, and installation and maintenance specialists.

Yet, right now in buildings across North America, elevator and escalator equipment is installed, inspected and maintained by different standards depending on which version of the code a particular jurisdiction has adopted. For example, an elevator in Chicago is subject to different safety standards than an elevator just across the border in Indiana.

Adoption of the 2010 version of the ASME A17.1/CSA B44 code without modification in all jurisdictions ensures a uniform, high level of safety throughout North America. NEII encourages every jurisdiction to adopt ASME A17.1-2010/CSA B44-10 which includes important enhancements not included in the 2007 version. Some examples are:
• Allowances for variable speed escalators and moving walks that increase energy efficiency for building owners and contribute to a “greener” environment.

• Improved elevator emergency communications monitoring requirements.

• Advanced safety for power operated vertical sliding doors and gates, including requirements to detect objects of various sizes and shapes to cause the doors to reverse direction.

• Standardized location of firefighter service panels, improving access to emergency personnel and other upgrades to firefighter operations that increase safety for first responders.

• Requirements for state-of-the-art suspension systems, including steel wire ropes, coated steel belts and aramid fiber ropes.

• References to ASME A17.6, a unique standard addressing mechanical properties and manufacturing, as well as quality control requirements for various suspension systems; comprehensive replacement criteria for all suspension systems; and requirements for governor ropes.

• Additional seismic requirements for roped hydraulic elevators.

It should be noted that the 2007 and 2010 editions of ASME A17.1/CSA B44 incorporate adoption of the ASME A17.7/CSA B44.7 performance-based code (PBC) for elevators and escalators. Advances in technology continue to lead to remarkable feats of architecture and engineering. Progress within the building transportation industry is no exception. The PBC provides jurisdictions with the necessary tools to assure the safety of new technology, subjecting it to the rigorous oversight of a third-party certification organization. The PBC also facilitates innovations in accessibility and green technology that can benefit both building occupants and the community at large. The result for jurisdictions is the utmost in safety and energy efficiency through implementation of the most advanced technologies. NEII encourages the adoption of ASME A17.7/CSA B44.7 in conjunction with the adoption of ASME A17.1-2010/CSA B44-10 to clarify its recognition across the state.

NEII is committed to public and building transportation personnel safety and is ready to support jurisdictions in understanding the latest version of the code and assist in its adoption. NEII has representation on technical advisory groups within the regulatory structure of states and is actively involved in the code development process. We offer information and training on the code and related issues using webinars and podcasts, and are happy to set up appointments to work with interested parties. In addition, NEII representatives are willing to meet with state or local officials to discuss these comments and any other elevator and escalator code issues.

Quite simply, NEII strongly encourages the adoption of the 2010 edition of the codes for elevators and escalators (i.e., ASME A17.1-2010/CSA B44-10) in all jurisdictions. This will ensure the most advanced safety processes and procedures for the riding public and elevator personnel.
Have a comment or question for the experts? Want to submit a topic for a future issue of the newsletter? Send us your thoughts at theinsider@NEII.org to keep the conversation going!

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