

# Building Safety: The Rule of Three

Science fanatics and engineers alike can attest to the power of nature's strongest shape, the triangle. In building construction, triangles are utilized as a supportive shape – in many cases, making the difference between a soaring tower and a flattened pile of metal.

For the building industry, codes and standards provide this same support – maintaining the strength and safety of modern environments.

**For NEII, there are three pillars on which safety rests:**

## CODE DEVELOPMENT

Every elevator and escalator is held to the same standard of safety, and codes drive this standardization. During code development, insights are gathered from hundreds of industry stakeholders, ultimately ensuring that the people using elevators and escalators every day are safe.

### IN 1921

the first elevator safety code was published<sup>1</sup>

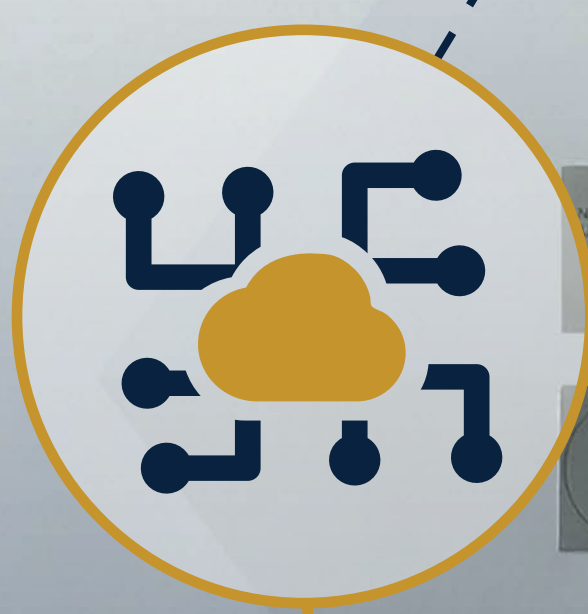


### 300

elevator stakeholders representing all aspects of the elevator industry are integral in reviewing code changes and updating requirements

### 3 YEARS

The ASME A17.1/CSA B44 Safety Code for Elevators and Escalators is updated every 3 years<sup>2</sup>



## INNOVATION

The latest building technologies are powered by the insights from data, Artificial Intelligence, and the Internet of Things. Building codes are capable of safely unleashing the power of these innovations and enabling the buildings of tomorrow to reach greater heights.

### IN 2019

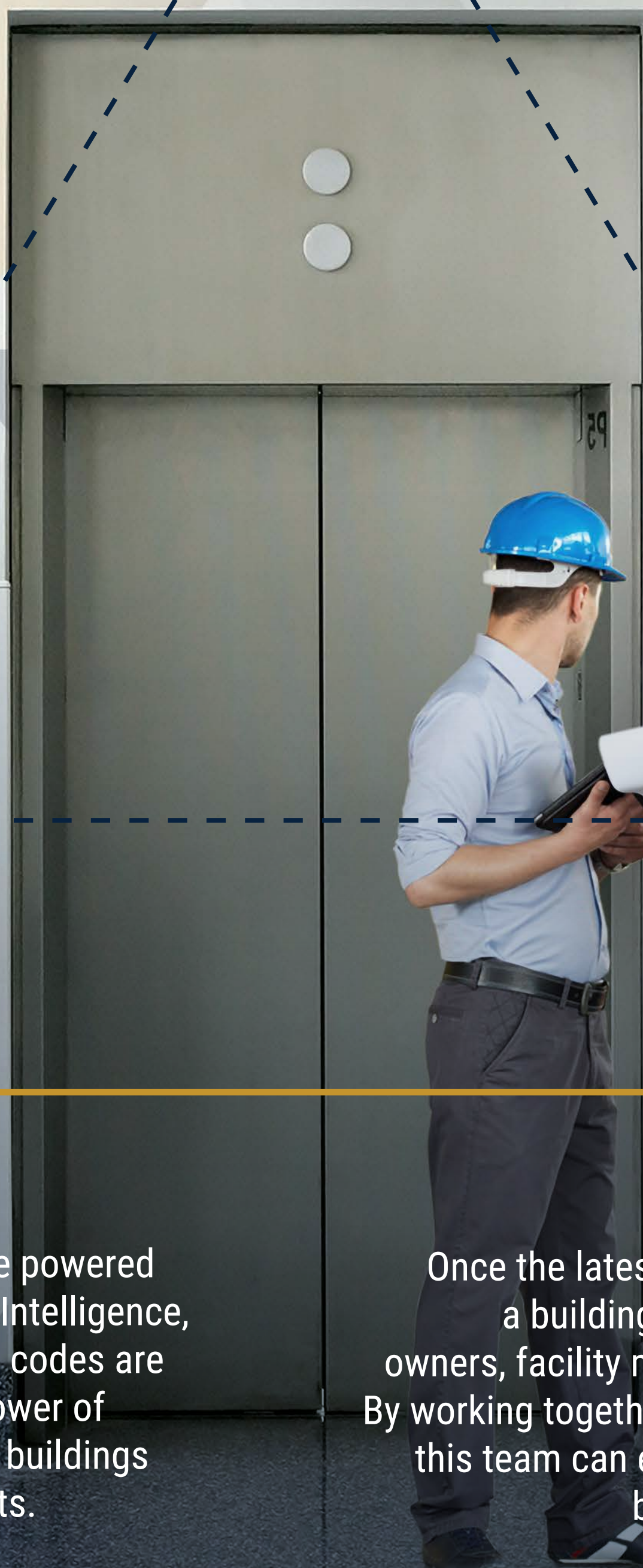
NEII introduced the first Elevator and Escalator Industry Cybersecurity Best Practices<sup>3</sup>

### 50%-80%

energy savings with MRL elevators as compared to conventional hydraulic and geared traction machines<sup>4</sup>

### THE 1<sup>ST</sup>

building with Occupant Evacuation Operation via Elevators, a protocol that optimizes evacuation via elevators in an emergency, opened in San Francisco in 2018



## RELIABILITY

Once the latest equipment has been installed, a building's reliability rests upon building owners, facility managers and service providers. By working together to adhere to the latest codes, this team can ensure occupants move through buildings seamlessly and safely.

### ~30,000

field employees service and enable the safety of equipment across the U.S.<sup>5</sup>

### ANNUALLY

The frequency which most jurisdictions require witnessed inspections.<sup>2</sup>

### 125+

components of elevators and escalators are evaluated by QEI-certified technicians during inspection

Discover this year's Building Safety Month initiative and how the building industry is rallying together to making buildings safer, more resilient, and more equitable, at the International Code Council (ICC) website.

Learn more about how NEII contributes to safe vertical transportation at [www.neii.org](http://www.neii.org)

#### Sources:

<sup>1</sup>Heavy Lifting: The History of the Elevator Code, ASME, ASME.org, 2011

<sup>2</sup>ASME A.17.1/CSA B44 Safety Code for Elevators and Escalators, 2016

<sup>3</sup>Elevator and Escalator Industry Cybersecurity Best Practices, NEII, 2019

<sup>4</sup>NEII Inventory Research Project, Andrew Chang & Company, LLC, 2019

<sup>5</sup>IUEC, IUEC.org, 2019

All information not cited comes from NEII internal data.

National Elevator Industry, Inc.  
5003 Westfields Blvd.  
PO Box 231137  
Centreville, VA 20120  
[www.neii.org](http://www.neii.org) | [info@neii.org](mailto:info@neii.org)  
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