

Public Meeting – 2016 ASME A17.1 Code Adoption

November 12, 2019

Harrisburg, Pa

Good morning, my name is Michael Walsh. I am here today as a certified third party Inspector for the Commonwealth of Pennsylvania Certification # 06166. I am also a Qualified Elevator Inspector that has fulfilled the requirements of ASME QEI- 1, Certification #E001066. I have over 30 years experience as an Elevator Constructor in Philadelphia and currently sit on 4 ASME Code Committees. I have attached a copy of my Resume for reference, at the end of this document.

I want to commend the Commonwealth for considering this adoption of the 2016 ASME A17.1 Safety Code for Elevators and Escalators. Since the adoption of the 2000 code that we are currently under, there have been over 1500 changes within the code. While I personally have not reviewed all of these changes I would hope our vested authority has carefully reviewed and considered these changes to ensure the safety of the people for the common good. Our AHJ, comprised of The Department of Labor and Industry, its Elevator Safety Board and ultimately Inspectors like myself and others acting on behalf of the Commonwealth need objective, safe codes to enforce.

Please consider focusing your efforts on the following areas I have thoroughly reviewed. My concerns are warranted, as they may impact the safety of the riding public and your constituents.

Within Section 2.7.6.3, which pertains to the Location of Equipment, section 2.7.6.3.2 states the following:

The motor controller shall be located in a machinery space, machine room, control space, or control room. A motor controller shall be permitted to be located outside the specified spaces, provided it is enclosed in a locked cabinet. The locked cabinet shall be:

- (a) readily accessible for maintenance and inspection at all times.
- (b) provided with cabinet door(s) or panel(s) that are not self-closing, that are self-locking, and that shall be kept closed and locked. Keys shall be Group 1 Security (see Section 8.1).
- (c) lit by permanently installed electric lighting with a lighting intensity of at least 200 lx (19 fc) at the floor level.
- (d) located in a space that is provided with natural or mechanical means to keep the ambient air temperature and humidity in the range specified by the elevator equipment manufacturer to ensure safe and normal operation of the elevator. The temperature and humidity range shall be permanently posted on the cabinet.
- (e) labeled/marked "AGP" in accordance with the requirements of CSA B44.1/ASME A17.5 (see 2.26.4.2).
- (f) provided with a sign in conformance with the requirements of ANSI Z535.2 or CAN/CSA-Z321, that shall be prominently posted on the inside of the motor controller cabinet door indicating in letters not less than 25 mm (1 in.) high, "DOOR TO BE CLOSED AND LOCKED WHEN ELEVATOR PERSONNEL ARE NOT PRESENT AT THIS CONTROLLER."

NOTE (2.7.6.3.2): For electrical clearance requirements, see NFPA 70 or CSA C22.1, whichever is applicable (see Part 9).

I would like to comment on the following 2 areas within this section of the requirement: 2.7.6.3.2(e) and 2.7.6.3.2(f)

2.7.6.3.2(e) states -

labeled/marked "AGP" in accordance with the requirements of CSA B44.1/ASME A17.5 (see 2.26.4.2).

The above refers over to the requirements of 2.26.4.2 which are as follows:

2.26.4.2 Electrical equipment shall be listed/certified and labeled/marked. CSA B44.1/ASME A17.5 defines the scope and applicable requirements for this listing/certification.

NOTE: 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.

My concerns with this requirement as written are the following:

The State of Pennsylvania, under the "UCC Construction Standards Utilized", does not appear to have adopted ASME A17.5.

I would recommend adopting A17.5 within the UCC Standards to promote coordination of this code as written. There are many instances within this adoption that need consideration with regard to the coordination of other codes.

ASME A17.1 2016 and previous versions do not define "AGP" - or Accessible to the General Public within Section 1.3 Definitions.

Without truly defining what AGP means it, is left open for individual interpretation.

AGP/Accessible to the General Public, needs to be clearly defined before adopting this code. Defining it is essential for the safety of the General Public.

2.7.6.3.2(f)

Provided with a sign in conformance with the requirements of ANSI Z535.2 or CAN/CSA-Z321, that shall be prominently posted on the inside of the motor controller cabinet door indicating in letters not less than 25 mm (1 in.) high, "DOOR TO BE CLOSED AND LOCKED WHEN ELEVATOR PERSONNEL ARE NOTPRESENT AT THIS CONTROLLER."

This sign should be prominently posted on the outside or on both sides of the controller door for all to see. This ensures that both the General Public and elevator personnel are aware the door should be closed and locked at all times, when elevator personnel are not at the controller. This will also alert the General Public of an unsafe condition if they observe the door opened or unlocked.

The concern here is for the Public Safety. The Public, along with elevator personnel, need to know that the Controller Cabinet door should be closed and locked when elevator personnel are not present. Putting this sign inside serves no purpose as a warning. When the General Public come upon a controller with a partially closed door, not locked, how are they to know the door should be closed and locked? If the General Public opens the unlocked door it now becomes an unsafe and potentially fatal condition.

Another matter, is that each manufacturer has their own controller and door. Certain manufacturers have non-hinged doors on their controllers. When elevator personnel remove the door, they cannot see the warning on the inside of the door. Other manufacturers have controllers within the door buck itself. They have keyed access and are hinged, but again, the General Public would not be able to see the warning until opening a potentially unlocked door putting themselves into an unsafe condition.

Thank You for your consideration on this matter.

Next, I would like to address Section 2.12.7 which is for Hoistway Access Switches. Section 2.12.7.2 addresses the location and design of the switches.

2.12.7.2 Location and Design.

Hoistway access switches shall conform to 2.12.7.2.1 through 2.12.7.2.5.

2.12.7.2.1 The switch shall be installed a minimum of 1 200 mm (48 in.) and a maximum of 1 825 mm (72 in.) above the floor measured to the centerline of the switch, adjacent to or part of the hoistway entrance at the landing with which it is identified, and in one of the following locations:

- (a) on the wall outside of the hoistway within 300mm (12 in.) of the entrance frame
- (b) on the hoistway entrance frame or jamb
- (c) on the sight guard

Recommendation is to exclude 2.12.7.2.1(c) from adoption.

The sight guard is attached to the landing door. These sight guards, along with doors are under constant contact with the riding public. The sight guard is one of the weakest parts of the moving door. Installing the Access Switch to the sight guard presents numerous areas of safety concerns. Most sight guards are affixed to the landing door utilizing self tapping screws. Over time, from being hit, the sight guard, tends to bend and/or loosen. Sight guards alone, have caused many an elevator to be damaged as a result of the sight guard falling off. Introducing the Access Switch to an already known hazard just increases the potential for injury. Hoistway Access switches have been part of the code for many years. Installing them in the door buck or adjacent to the door has been an effective installation method for many years.

Introducing an electrical switch to a moving door creates a potential hazard of the cord being damaged or caught by the moving elevator or door and torn off. This is an active circuit, that, if exposed, creates an electrocution hazard if the riding public were to come in contact with the live wiring. This switch mounted on the sight guard also presents the possibility for nuisance shutdowns and ground faults if the wiring were to become exposed.

For the elevator personnel operating the hoistway access switch mounted on the sight guard there is the risk of being struck by the moving elevator while operating the key switch. From the sight guard to the moving elevator is approximately 2 inches. The average width of the human hand is 3 inches. When you turn the key in either direction the elevator personnel are constantly at risk of injury from the moving elevator. Introduce those keys along with others on a key ring and the risk of getting the keys or ring caught on components attached to the moving car are greatly increased.

While considering removing 2.12.7.2.1(c) from adoption, please remove 2.12.7.2.2 as well as it only pertains to mounting the access switch on the sight guard.

2.12.7.2.2 Where the switch is located on the sight guard, the sight guard shall accommodate and support the load of the switch and its wiring.

Thank You for you time and consideration in considering these recommended changes. If additional information or comment are needed my contact information is included on my resume.