



Elevator Safety Division Newsletter

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T H E U P S A N D D O W N S

SPECIAL NO-TICE'S

- Elevator Safety Review Board to meet in regular session in April. No date set as yet.
- Under the Open Meetings Act, The Secretary of States' website: (www.sos.state.al.us) posts all public board meeting dates.
- The Open meetings Act further requires at least eleven days notice of the boards planned meeting in most cases.

This Edition

Elevator Pit Access

INDUSTRY BULLITIN:

PIT Shut-off Valve

Danger

Remember ...

Safety is no

Accident !!

ELEVATOR PIT ACCESS

Hello once again. Some of you may have noticed we have not ran a news letter in some time. After no feedback from licenses, we felt maybe there was not enough interest in continuing this quarterly.

In talking with many of you, and getting some of the same questions and concerns, I felt perhaps another try to get the word out might be in order.

In that spirit, I have noticed a rash of phone calls from elevator installers and inspectors concerning missing pit ladders. It seems many are telling the elevator owners to install a pit ladder. There are 2 separate codes that determine the requirements for installation of pit ladders. ANSI/ASME A17.1 code for NEW construction, and the ANSI/ASME A17.3 code of EXISTING installations. The pit ladder requirements for each code is drastically different.

The A17.1 code for NEW construction states in part:

2.2.4 Pit Access "Safe and convenient access shall be provided to all pits, and shall conform to 2.2.4.1 through 2.2.4.6. Access shall be by means of the lowest hoistway door or by means of a separate pit access door. There shall be installed in the pit of each elevator, where the pit extends more than 900 mm (35 in.) below the sill of the pit access door (lowest hoistway door or separate pit

access door), a fixed vertical ladder of noncombustible material, located within reach of the access door. The ladder is permitted to be retractable or non-retractable". It goes on to say "The ladder shall extend not less than 1 200 mm (48 in.) above the sill of the access door or handgrips shall be provided to the same height.

The ladder rungs, cleats, or steps shall be a minimum of 400 mm (16 in.) wide. When obstructions are encountered, the width shall be permitted to be decreased to less than 400 mm (16 in.). The reduced width shall be as wide as the available space permits, but not less than 225 mm (9 in.).

The ladder rungs, cleats, or steps shall be spaced 300 mm (12 in.) ± 13 mm (+ 0.5 in.) on center, shall be provided to not less than the height of access door sill, and shall be designed to minimize slipping (e.g., knurling, dimpling, coating with skid-resistant material, etc.).

A clear distance of not less than 115 mm (4.5 in.) from the centerline of the rungs, cleats, or steps to the nearest permanent object in back of the ladder shall be provided.

Side rails, if provided, shall have a clear distance of not less than

115 mm (4.5 in.) from their centerline to the nearest permanent object. The ladder and its attachments shall be capable of sustaining a load of 135 kg (300 lb).

A17.3 code applies to those elevators in existence when Alabama's law went into effect (June 21, 2004). It reads in part:

Section 2.3 "Means of access for authorized personnel shall be provided to all pits". It goes on to discuss access doors and keys but as to the ladder itself, that is all that is mentioned.

Its pretty clear lots of latitude is given by this code concerning access to pits for existing elevators, as opposed the new installations.

This difference can be seen in several other areas as well. Such as water lines, equipment not associated with the elevator that have been located in the equipment rooms, and hoistways., cooling and venting, etc.

Other "codes and confusion" topics can be discussed in future editions. As always I strongly encourage everyone to send suggestions for topics that we can cover in this publication. —Regards—

The industry bulletin below was discussed at the last Elevator Safety Review Board meeting. As you can see, it originated in the state of Florida. Please read its contents carefully. We strongly urge everyone to comply with the safety precautions detailed within. If you have any questions, please contact me.

Business Professional	INDUSTRY BULLETIN <i>for Florida's Elevator Industry</i>	
SUBJECT: Pit Shut Off Valve Dangers		Number: 2010-01 Date: 01/11/2010
<p>This bulletin is provided to aid in compliance with Florida law, and is not intended as legal advice. While care has been taken to ensure its accuracy, in the event of any conflict the actual statute or administrative rule will control.</p>		
<p>The Bureau of Elevator Safety ("the Bureau") believes that Hydraulic Supply Shutoff Valves ("HSSV Valves"), which function as the pit manual shut-off valves for many 1970's era elevators, are unstable and pose a safety hazard to those who work on hydraulic elevators. HSSV Valves are located at the base of an elevator shaft and are commonly referred to as "knock style cut off valves" because technicians typically strike them with a hammer in order to loosen the valves. However, if an HSSV Valve is loosened too much, then the stem and hydraulic fluid will be released causing a loss of pressure, and that loss of pressure will lead to the elevator car falling. Anyone working in the elevator shaft will almost certainly be killed by the falling car unless proper safety precautions are taken. While exact numbers for Florida are not available at this time, as many as 4,000 HSSV Valves may have been installed in the 1970's and it is estimated that at least 200 are still in service.</p>		
<p>The Bureau's conclusion regarding the danger HSSV Valves pose to those working in elevator shafts is corroborated by others. For instance, the eight-member Florida Elevator Safety Technical Advisory Council ("the Council") is required by Florida Law to provide technical assistance to the Bureau "in support of protecting the health, safety, and welfare of the public . . ." In a technical advisory issued on December 8, 2009, the Council stated that HSSV Valves "may pose a significant risk" and advised that "[w]hen replacing line valves and working in the pit, follow safety precautions to secure elevators and equipment from falling and minimize personal risk when performing repair and replacement of parts that may contribute to a sudden loss of pressure in the line."</p>		
<p>Moreover, Thyssen-Krupp issued an alert earlier this year mandating that its employees "should under no circumstances work on this type of valve without the elevator being secured on pipe stands or suspended, and the oil line being relieved of pressure. This includes removal of the U-bolt clamp. No U-bolt clamp should be removed without landing or suspending the car." The alert also stated that "[s]imply putting a wrench to the valve in an attempt to close it can cause the valve to break and the complete loss of pressure."</p>		
<p>Also, Florida has adopted standards for elevator inspection promulgated by the American Society of Mechanical Engineers ("ASME") which has mandated through A17.1 2005 Rule 8.6.1.2.2 that "where a defective part directly affecting the safety of the operation is identified, the equipment shall be taken out of service until the defective part has been adjusted, repaired, or replaced." Because of the foregoing, several jurisdictions have already required that HSSV Valves be replaced.</p>		
<p>Accordingly, the Bureau urges every certified elevator inspector, certified elevator technician, and elevator helper to take precautions while constructing, installing, inspecting, maintaining, or repairing any elevator. At a minimum, those precautions should include: (a) securing the elevator car through the use of pipe stands placed in the coil springs at the bottom of the elevator shaft; (b) securing the elevator car through the use of rail clamps; or (c) with any similar means as provided in your company safety program.</p>		
<p>This Advisory is part of the Bureau's effort to notify every certified elevator inspector, certified elevator technician, and elevator helper of the danger posed by HSSV Valves. In addition, the Bureau is giving strong consideration to initiating standard rulemaking proceedings in order to adopt a rule requiring the immediate replacement of HSSV Valves.</p>		
<p>Extensive information regarding inspections, licensing and a number of forms is available on our website at www.MvFloridaLicense.com/dbpr or by calling 850.487.1395.</p>		
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Charlie Crist, <i>Governor</i>	Division of Hotels and Restaurants	Charlie Liem, <i>Interim Secretary</i>
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