



**ELEVATOR INSPECTION SERVICES INC.**  
EST.1976

## How to Apply for a Pit Ladder Variance



*This advisory addresses the pit ladder, compliance requirements and the procedure to obtain a variance.*

The 2015 code requires a minimum sized pit ladder see [diagram](#) to be in place to meet code compliance.

EIS has been instructed by the Office of the State Fire Marshal (OSFM), that by State Law, any conveyance not meeting the code standard would be in violation and fail inspection as of 1/1/15. However, in the event our inspector observes a situation where a replacement ladder of correct size is unable to be accommodated, he/she will advise the building owner/manager that the condition may be eligible for a variance.

### **Variations/Exceptions (FOR PIT LADDER IN OPEN AREA)**

#### **What is a Variance?**

A variance is a deviation from the specific Codes adopted by the Elevator Safety Review Board

#### **What is an Exception?**

An exception is a request for something that is not covered by the Codes.

#### **How do I obtain a Variance or an Exception for my conveyance?**

You must submit an Application for Conveyance Variance form along with a processing fee in the amount of \$200.00 per conveyance to the Chicago Office. Applications are available on the Elevator Safety website at [www.sfm.illinois.gov](http://www.sfm.illinois.gov) under the Elevator Safety link, Applications and Forms. Public Act 096-0054 states the following: The Administrator or Local Administrator shall have the authority to grant exceptions and variances from the literal requirements of applicable State codes, standards, and regulations in cases where such variances would not jeopardize the public safety and welfare. The Administrator has the right to review and object to any exceptions or variances granted by a Local Administrator. The Elevator Safety Review Board shall have the authority to hear appeals, for any denial by the Local Administrator or for any denial or objection by the Administrator. The Board shall hold hearings, and decide upon such within 30 days of the appeal.

#### **Is any other information needed to be included with my application?**

Yes, you must submit the following along with your application:

- Evidence that the proposed or existing conveyance is not in compliance with the code or regulation;
- Evidence that strict compliance with the code or regulation would entail practical difficulty or unnecessary hardship or is otherwise found unwarranted;
- Evidence that any requested variance/exception does not jeopardize the safety and health of those who would use the conveyance or work on the conveyance and that the methods, means, or practices proposed provide equal protection of the public's safety and health.

### **Permits/Alterations**

#### **When is a Permit required?**

A permit is required for any alteration or installation of a new conveyance or lift device and must be submitted by the elevator contractor to the Chicago Office of the Office of the State Fire Marshal, Elevator Safety Division, for municipalities that do not have an agreement with the State. If the alteration or new installation is within a municipality that has an agreement with the State, you would apply to that municipality for the permit.

#### **What is an alteration?**

"Alteration" means any change to the equipment including its parts, components, or subsystems, other than maintenance, repair or replacement of the equipment, including its parts, components and subsystems.

**Is there a fee associated with applying for a Permit?**

Yes, the application fee for a Permit is \$200.00 per conveyance and must be submitted along with the application.

**Where do I find the Application for Permit form?**

The Application for Conveyance Permit is located on the Elevator Safety website under the [Applications and Forms link](#).

**Additional Information****What is the difference between a “hydro” and a “traction” elevator?**

A “hydro” or “hydraulic” elevator utilizes a motor and a pump to raise the piston out of the ground pushing the elevator up and down the shaft. It uses an electric valve to control the direction and speed of the piston. A “traction” elevator uses sheaves and cables to move an elevator up and down the shaft. It utilizes a counterweight that balances out the load so that the motor does not have to work as hard. The motors can be either AC or DC depending on the type of drive or generator the elevator uses to convert building power into controllable power to move the elevator.

**In what year was a double bottom cylinder required?**

1972 and later.

**What upgrades are required by 2015?**

Section 35 of Public Act 096-0054 requires the following:

- Restricted opening of hoistway doors or car doors on passenger elevators;
- Car illumination;
- Emergency operation and signaling devices;
- Phase reversal and failure protection;
- Reopening device for power operated doors or gates;
- Stop switch pits; and
- Pit ladder installation in accordance with Section 2.2.4.2 of ASME A17.1-2007

**What does V/T/C stand for on the inspection forms?**

Village/Town/City.

**Where do I find information on developing an Emergency Evacuation Plan?**

ANSI A17.4 can be purchased from ASME.org. Please review the Emergency Evacuation Plan guidelines on the Elevator Safety Division website ([link](#)).

**If I had a hydraulic elevator with a cylinder installed prior to 1972, and had it replaced, is this acceptable?**

Yes, with proof of replacement documentation.

**Do I have to replace my hydraulic cylinder?**

It does not have to be replaced unless there is an alteration, the equipment fails, or failing to replace the equipment jeopardizes the public safety and welfare as determined by the Local Administrator or the Board.

**If my elevator has a single bottom cylinder, what are my options to ensure compliance with the Code?**

You have three options:

- Replace with a double bottom cylinder
- Install plunger grippers
- Install care safety device(s) on the elevator

**If I select one of the options rather than replacing the single bottom cylinder will this prevent me from ever having to replace the single bottom cylinder?**

No, choosing to install the plunger grippers or the safety devices will not prevent the single bottom jack from eventually failing. The options are simply a temporary fix.

**How do I know if I have a single bottom cylinder?**

This may be hard to determine, but your maintenance provider may be able to assist you in determining this.

**Contact Information****How can I contact the Elevator Safety Division?**

If your question was not answered, or you would like additional information, please email: [SFM.Elevators@illinois.gov](mailto:SFM.Elevators@illinois.gov)

Or write: Office of the State Fire Marshal                      Main phone number: 312-814-1325  
Elevator Safety Division  
James R. Thompson Center  
100 West Randolph Street, Suite 4-600  
Chicago, Illinois 60601

The Director of Elevator for the State of Illinois has the authority to grant a variance when such a condition is present. However, the municipality's Authority Having Jurisdiction (**EIS**) and local Building Department must also agree to the variance - all three must be in agreement and the procedure below must be followed.

**To apply for a variance**, follow this step by step procedure:

1. *After our initial 2015 inspection*, you must comply with what is possible (e.g., anti slip rungs, extentions, etc.)
2. Contact your elevator service provider to have all possible alterations completed.
3. EIS will re-inspect to ensure all that possible alterations were satisfactorily completed.
4. Compose a letter (*sample below*) or an e-mail to your local building department with the following information:
  - A. Give the name of the building, the address, and the State I.D. tag #;
  - B. List the items that have been amended with corresponding code numbers (e.g., ladder extensions were added to comply with code 2.2.4.2.1; anti-slip coatings were added to the ladder rungs in compliance with code 2.2.4.2.3, etc.) refer to diagram for code numbers;
  - C. Provide a short description of which ladder code cannot meet code requirement(s) and why.
5. The Local Building official (*ONLY*) on your behalf, will forward your request to robert.capuani@illinois.gov for OSFM approval. *Note: Mr. Capuani will respond within seven (7) days. If accepted, your variance will go on record with the state.*
6. When a variance is granted by the OSFM, you must notify EIS to complete the process.
7. **Building Owner** must laminate or place proof of variance in a protective sleeve and affix to **each** elevator controller to avoid future inspection failures.

**EXAMPLE:**

Dear City/Municipality Building Official,

RE: 1234 S. North Street, ABC Building, Pit Ladder Variance for unit(s) H001966

We have made the following corrections: An anti-slip coating was applied to the ladder rungs in accordance with ASME A17.1-2010, Section 2.2.4.2.3 and extensions have been properly installed to comply with ASME A17.1-2010, Section 2.2.4.2.1.

Due to an electrical duct mounted behind the pit ladder that cannot be moved, please accept this correspondence as notification of a variance request per ASME A17.1-2010, Section 2.2.4.2.4 for the existing pit.

Thank you for your consideration,  
John Doe  
Building Manager/Owner