Department of Industrial Relations Division of Occupational Safety and Health ELEVATOR UNIT HQS 6980 Santa Teresa Boulevard, Suite 130 San Jose, CA 95119 Phone: 408.362.2120 Fax: 408.362.2131



May 18, 2010

CIRCULAR LETTER E-10-02

TO: Installers, Manufacturers of Conveyances and Related Equipment and, Other Interested Parties

SUBJECT: Retractable Pit Ladders

The division believes that a hazard can be created by the installation of these devices and is issuing this special order pursuant to California Labor Code 7318.

The Division of Occupational Safety and Health will allow the use of Retractable Pit Ladders in elevator pits subject to the following conditions.

The division shall be notified in writing of the intent to alter an elevator prior to the installation of the Retractable pit Ladder.

The division shall be notified that the installation of the ladder is complete, and that the installation is ready for inspection prior to resumption of elevator service.

Key operated hoistway access is required where a retractable pit ladder is installed.

Installation and Operational Requirements

- 1. In the extended position, the ladder shall meet all requirements applicable to a pit ladder for the Title 8 code group of the elevator at the time the elevator was installed.
- 2. In the retracted position, the car to ladder clearances shall be maintained in accordance with the applicable code at the time the elevator was installed.
- 3. Clear access to required electrical devices such as pit stop switches or pit light switches shall be maintained in both the retracted and extended positions.
- 4. The addition of an electrical protective device required by this letter shall not negate the requirement of any other electrical protective device required by the Elevator Safety orders.
- 5. Electrical Code requirements applicable at the time of the ladder installation shall apply.

6. A retractable ladder that does not maintain the applicable code clearances while in the extended position shall have an electrical protective device that will cause power to be removed to the drive motor and brake of an electric elevator, and the drive machine of a hydraulic elevator unless the ladder is in the fully retracted position. The electrical protective device, if required, shall have a contact which is positively opened by a device attached to and operated by the ladder. The device shall not utilize mercury switches.

- 7. The electrical protective device, if required, shall meet the requirements for EQUIPEMENT IN THE HOISTWAY as addressed in the applicable edition of ASME A17.1 at the time of the installation of the ladder.
- 8. A retractable ladder shall be capable of being extended, retracted, and mechanically secured and unsecured from the access door.
- 9. A retractable ladder shall require a force not to exceed 50 lbf to extend, retract, or secure.
- 10. A retractable ladder shall be mechanically secured in both the retracted and extended positions.
- 11. A retractable ladder in the extended and mechanically secured position shall remain in that position when subjected to a horizontal force not to exceed 500 lbf.
- 12. A retractable pit ladder shall not be installed to provide access to an elevator pit where keyed hoistway access is not provided.

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