Subject: Construction Hoist Hoistway Door Interlocks, Z185 Clause 7.5

1.0 Hoistway Door Interlocks per Clause 7.5 of Z185

Per the requirements of clause 7.5 of Z185 “Safety Code for Personnel Hoists” (published in 1987 and reaffirmed in 2001), hoistway doors must be secured with interlocks meeting the following requirements;

7.5 Hoistway Door Interlocks

7.5.1 Hoistway doors shall be provided with interlocks.

7.5.2 If the hoistway door at the lowest landing is locked automatically when closed with the car at the landing, it shall be provided with means to unlock it from the landing side to permit access to the car. The means provided shall be accessible only to authorized persons.

7.5.3 Interlock contacts shall be positively opened by the locking member or by a member connected to and mechanically operated by the locking member, and the contacts shall be maintained in the open position by the action of gravity or by a restrained compression spring, or by both, or by means of the opening member.

7.5.4 The interlock shall hold the door in the locked position by means of gravity or by a restrained compression spring, or by both, or by means of a positive linkage.

7.5.5 The interlock shall lock the door in the closed position before the drive machine can be operated. Devices that permit operation of the driving machine by the normal operating device when the door is closed, but before it is locked, are not permitted. *

*Such devices are known as “lock and contact” and are not true interlocks.

2.0 Enforcement

Unlike interlocks used for elevating devices regulated under ASME A17.1/CSA B44, construction hoist interlocks per Z185 are not required to be evaluated, tested and marked by certifying organizations prior to being allowed for use on a construction hoist. Given the gap of not having a certification agency evaluate interlocks used on construction hoists, TSSA is looking to ensure that the locking devices being provided meet the intent of the requirements of clause 7.5 before registering design submissions for future construction hoist installations.

3.0 Action by Contractors

The construction hoist industry is advised to begin a review of the interlocks that they currently use on their construction hoist entrances, in order to determine if they are in compliance with the interlock requirements.

Effective immediately and prior to any new site specific installations being processed via a design submission, contractors will first need to demonstrate compliance of their interlock arrangement so that TSSA can independently gage compliance to the requirements of clause 7.5.

This documentation should include photo’s, conformance write-ups, evaluation of strength, etc, to explain how compliance to clause 7.5 is achieved, and how this equipment is arranged to secure hoistway landing doors.
If the interlocks being provided are branded with a make / model and are compliant to requirements of clause 7.5, that make / model shall be included in all future submission where that interlock is being used.

If the locks are not branded, TSSA will issue a component filing number to compliant devices, and that component filing number shall be referenced on all future submissions.

4.0 Background

Despite design submissions indicating “interlock” in response to the submission entry for “door locking device type”, TSSA is observing installations where the devices used to secure hoistway landing doors are not in full compliance with the requirements of clause 7.5.

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This Bulletin has been developed in consultation with the Construction Hoist Industry.