IN THE MATTER OF:

Technical Standards and Safety Act 2000, S.O. 2000, c. 16

- and -

Ontario Regulation 209/01 (Elevating Devices)

Re: Requirements for Transport Platforms

Under the authority of s. 36(3)(a) of the Technical Standards and Safety Act, 2000, the Director for the purposes of O. Reg. 209/01 (Elevating Devices) hereby orders that:

Transport platforms used in Ontario shall comply with the following requirements:

1.1 Standard for Transport Platforms

Transport platforms shall conform with the design requirements of ANSI A92.10 - 2009 Standard for Transport Platforms.

1.2 Additional Requirements

1.2.1 Definitions

"transport platform" means a temporarily installed elevating device equipped with a car or platform that moves vertically in guides, is tied to the building or structure that is used for hoisting, lowering or otherwise moving authorized persons or materials and necessary tools to various access levels on a building or structure for construction, renovation, alteration, maintenance, demolition or other types of work of a building or structure.

1.2.2 General

In addition to the design requirements in section 1.1, transport platforms and their operation shall also conform to the following CAD requirements:

a) Requirements 6.2 to 6.4, 6.6 to 6.8.1 and 6.11 to 6.19 of CAD 261/13-r1 Note: A reference to construction hoist in section 6 of the CAD shall be replaced with transport platform
b) Requirement 2.2 of CAD 261/13-r1 and all electrical equipment shall be CSA approved.
c) Maximum speed shall be as per ANSI A92.10 requirement 1.1c), 0.2 m/s (40 fpm)
d) The distance from the moving platform to the building or any structure, including loading ramps shall be as per ANSI A92.10 requirement 1.1d), 460mm (18 in.).
e) Only persons authorized by the owner, licensee or lessee are permitted to operate and ride transport platforms
f) The maximum number of authorized persons permitted on the platform shall be as per ANSI A92.10 1.1b)
g) Platform signage shall be provided to display the platform capacity in kg, and the maximum number of authorized persons.
h) Habitable space below the hoist and footings shall be provided with shoring. A Professional Engineer shall design all shoring and drawings of any shoring requirements and shall be submitted with the design submission.
i) Landings and platform shall have a minimum 50 lx of light at floor level when in active use.
j) The top rack section shall be either milled or a manufacturer recommended means shall be provided to prevent travelling beyond mast top.

k) No operation shall be permitted when wind speeds exceed manufacturer recommendations.

l) Landing communication devices are not required.

m) The platform mast shall be electrically grounded.

n) A ground fault interrupter shall be provided for electrical protection.

o) The braking system shall hold and stop up to 125% load moving in the down direction.

p) A full load safety test shall be performed during initial inspection, when fully extended, and after every 90 days. For transport platforms that do not have an overspeed safety device and use two or more independent and identical direct drive units fitted to each mast, each brake shall be tested separately at 110% load. With the platform running at full speed, each brake shall stop and hold the platform with 110% load.

q) Electrical redundancy procedure of critical components is required on each Design Submission.

r) Grounding of the safety circuit shall stop the device.

s) Unenclosed disposal chutes shall not be located within 7m (25 ft.) of the hoist mast, and garbage containers shall not be located within 2m (6.5 ft.) of the hoist mast.

t) Acoustic warning devices used during platform descent are not mandatory where fencing enclosures meet 1.2.3

1.2.3 Fencing Enclosures

a) A fence a minimum of 2 m (6.5 ft.) high shall be around the hoist base.

b) Fencing shall be located a minimum of 460 mm (18 in.) from any moving components.

c) If openwork fencing is used, it shall reject a 25 mm (1 in.) ball.

d) The fencing entrance to the platform shall be locked when platform is moving.

e) Fence heights may be reduced to minimum 1070 mm (42 in.) in areas where materials are loaded from a loading platform.

1.2.4 Loading Platforms

a) If a loading platform is used, overhead protection is required above the loading platform.

b) The loading platform shall be located a minimum of 460 mm (18 in.) from any moving components and be surrounded by fencing a minimum 1070 mm (42 in.) high.

c) If fencing is openwork, it shall reject a 25 mm (1 in.) ball.

d) Stairs with handrails shall be provided to the loading platform. The entry to the stair shall be outside the fencing enclosure.

e) If a loading platform is located inside the fencing enclosure, no workers shall be permitted to stand on the loading platform when the transport platform is moving.

f) If the loading platform contains a minimum of 2 m (6.5 ft.) high solid fencing on the side adjacent to the transport platform, persons may remain on the loading platform provided that:

i) the fencing contains a landing gate a minimum 2 m (6.5 ft.) high to provide access for loading the transport platform that is mechanically locked and unlocked by the action of the car gate/ramp (where the ramp is not be retractable until the landing safety gate is in the closed position);

ii) the landing gate contains a mechanical lock openable from the Transport platform;

iii) if the landing gate is openwork, it rejects a 25 mm (1 in.) ball; and

iv) if a solid landing door is used, it is provided with a vision panel opening having a width not exceeding 150 mm (6 in.) and an area not exceeding 500 cm² (80 in²), and the vision panel is covered with wire mesh having openings that rejects a 25 mm (1 in.) ball, and made of steel wire at least 1.6 mm (No. 16 steel wire gauge).

1.2.5 Landing Safety Gates (Landing Doors)

Landing safety gates shall:
a) Have a minimum height of 2 m (6.5 ft). The hoistway enclosure does not need to be enclosed above the landing gates.
b) Not exceed the width of the car platform opening
c) Be equipped with side guards extending 600 mm (24 in.) horizontally on both sides to a minimum height of 2m (6.5 ft.)
d) Landing doors shall be so supported and braced that when they are subjected to a force of 450 N (100 lbf.) applied horizontally at any 50 x 50 mm (2 in. x 2 in.) area of the enclosure, the deflection will not exceed 2% of width of the enclosure.
e) Landing doors, if of openwork, shall reject a 25 mm (1 in.) ball; and be made of steel wire of at least 1.6 mm diameter (No. 16 steel wire gauge).
f) Solid doors, where used, shall be provided with a vision panel opening having a width not exceeding 150 mm (6 in.) and an area not exceeding 500 cm² (80 in²). The vision panel shall be covered with wire mesh having openings that reject a ball not greater than 25 mm (1 in.) diameter and made of steel wire of at least 1.6 mm diameter (No. 16 steel wire gauge).
g) Be mechanically locked and unlocked by the action of the car gate/ramp. The ramp shall not be retractable until the landing safety gate is in the closed position.
h) The mechanical landing door lock shall be accessible from the hoistway side only.
i) Fold down ramps when in the lowered position shall address fall hazards with no horizontal gaps greater than 100 mm (4 in.).
j) The fold down ramp must overlap building slab by not less than 100 mm (4 in.) or the manufacturer’s recommended overlap, whichever is greater.
k) The door shall open inward to building.
l) No landing door electrical contact is required.
m) Landing doors types shall be approved by TSSA before being registered.
n) Standard construction hoist landing doors with interlocks with electrical contacts and meeting the requirements of CSA Z185-2001 “Safety Code for Personnel Hoists” shall be permitted.

1.2.6 Overhead Protection Requirements

a) Overhead protection shall be provided above the transport platform.
b) It shall be non-perforated and capable of supporting a load of at least 2.4 kilonewtons per square metre without exceeding the allowable unit stress for the material used.
c) It shall have an unobstructed height of not less than 2 m (6.5 ft) above the platform.
d) All operators and attendants shall remain under platform protective overhead structure during transport.
e) If the overhead protection on the transport platform has an emergency exit, it shall be provided with an electrical protective device that will prevent operation of the transport platform if the exit is opened more than 50 mm (2 in.). It shall be positively opened and manually reset, after the cover is closed.

Any person involved in an activity, process or procedure to which this document applies shall comply with this document.

This order is effective December 5, 2014 and expires December 5, 2017, unless revoked or superseded earlier.

DATED this 5th day of December, 2014

Original Signed By

John Marshall
Director, O. Reg. 209/01 (Elevating Devices)
Background

A. General
Transport platforms are currently not associated with a specific standard adopted within TSSA’s Elevating Devices Code Adoption Document (ED-CAD). As permitted by section 36.(3)(a) of the Technical Standards and Safety Act, 2000, transport platforms that meet the definition of an elevating device in Ontario Regulation 209/01 shall be subject to the requirements listed herein to ensure consistency of use and application.

B. Definitions
“elevating device” means a non-portable device for hoisting, lowering or otherwise moving persons or freight and includes any machine room, hoistway and hoistway enclosure, supporting structure, terminals and runway associated with the device.

“elevator” means an elevating device that is equipped with a car that moves vertically in guides and that serves two or more floors of a building or structure;

“transport platform” means a temporarily installed elevating device equipped with a car or platform that moves vertically in guides, is tied to the building or structure that is used for hoisting, lowering or otherwise moving authorized persons or materials and necessary tools to various access levels on a building or structure for construction, renovation, alteration, maintenance, demolition or other types of work of a building or structure.

“worker-positioning platform” means an elevating device that put workers and their equipment in position to work on the interior or exterior of buildings or other structures.
Note: this device is explicitly exempt from requirements of O.Reg 209/01.

C. Application of Use
“Elevating devices”, as defined above, come under TSSA jurisdiction if they are non-portable and move persons or freight.

Non-Portable applies if an elevating device is permanently anchored or tied into a building or structure along its rise, however Ontario regulation 209/01 s.2.(3)(u) exempts worker positioning platforms. The exemption for worker positioning platforms applies whether these devices are tied into a building or not.

As per the definitions, worker positioning platforms put workers in a position to work on the interior or exterior of a building while remaining on the platform. If materials or persons are moved from the platform into the building, the application of use is no longer “worker/material positioning”.

Once materials, persons, freight or tools are moved from the platform into the building the “application of use” changes from a worker positioning platform to an elevating devices that is regulated by TSSA.
Any Worker Positioning Platform that TSSA finds or that is operated as such shall be removed from service as it is an unlicensed elevating device.

D. Alternative to a Construction Hoist
Transport Platforms have become a recognized alternative to lower rise construction hoists. These devices however are not currently addressed by the requirements of the CSA Z185-2001 “Safety Code for Personnel Hoists”.

At this time, there is no Canadian code for Transport Platforms, however the American National Standards Institute (ANSI) currently publish ANSI A92.10 Standard for Transport Platforms.

Distribution: Posted to TSSA website and distribution through EDAC, FAC and the Construction Hoist Industry working group.