

ELEVATOR AND PASSENGER-ELEVATING DEVICES

PURPOSE

This variance has been developed regarding the use of a passenger elevator where a lift for persons with physical disabilities (LPPD) that conforms to the CSA-B355 standard would suffice to meet the requirements of a barrier free path of travel.

DISCUSSION

Elevators are designed and constructed to ASME A17.1/CSA B44-13, "Safety Code for Elevators and Escalators" and not to the CAN/CSA-B355 "Lifts for Persons with Physical Disabilities." Some instances in the past, safety codes officers questioned the use of an elevator that does not meet the size requirements to accommodate a stretcher when substituted for a lift, as the National Building Code-2019 Alberta Edition (NBC(AE)) has a separate requirement that passenger elevators be large enough to accommodate a stretcher. Not all elevator car sizes listed in Table E-1 "Minimum Dimensions of Elevator Cars" in Appendix E of ASME A17.1/CSA B44 have the space requirements to handle a stretcher.

One of the stipulations in the CSA-B355-09, "Lifts for Persons with Physical Disabilities" standard is that a lift would be restricted to a maximum rise of 7000 mm.

CODE REFERENCES

1. Articles 3.5.4.1 and 3.8.3.5. states:

3.5.4.1. Elevator Car Dimensions

1) If one or more elevators are provided in a *building*, all *storeys* shall be served by at least one elevator which has inside dimensions that will accommodate and provide adequate access for a patient stretcher 2 010 mm long and 610 mm wide in the prone position. (See Note A-3.5.4.1.(1).)

3.8.3.7. Passenger-Elevating Devices

1) Where passenger elevators are used in a *barrier-free* path of travel, features described in Appendix E of ASME A17.1/CSA B44, "Safety Code for Elevators and Escalators" shall be included in their design and construction.

2) A platform-equipped passenger-elevating device used in a *barrier-free* path of travel shall conform to the elevating devices regulations made pursuant to the Safety Codes Act.

Note: the above reference to a platform-equipped elevating-device is a reference to a type of "Lift" under CSA-B355-09, "Lifts for Persons with Physical Disabilities".

Unless stated otherwise, all Code references in this STANDATA are to Division B of the National Building Code-2019 Alberta Edition

Issue of this STANDATA is authorized by
the Provincial Building Administrator

[Original Signed]
Paul Chang

The logo for the province of Alberta, featuring the word "Alberta" in a stylized, cursive font with a small blue square at the end of the word.

2. CSA-B355-09 “Lifts for Persons with Physical Disability” states:

Lift — a generic term covering all classes of special lifts for persons with physical disabilities...

4.2.1 Travel

The travel of a vertical platform lift shall not exceed the following:

- (a) 2500 mm for unenclosed type; or
- (b) 7000 mm for enclosed type.

APPLICATION

This variance only applies to buildings where an elevator is substituted for a lift.

VARIANCE

This variance provides approximately equivalent or greater safety performance with respect to persons and property as that provided for by the Safety Codes Act and the NBC(AE).

Where an passenger elevator is used instead of a lift conforming to CSA-B355 “Lifts for Persons with Physical Disability”, the elevator car dimensions are not required to conform to Sentence 3.5.4.1.(1) of the NBC(AE) provided:

- a) the elevator is restricted to a maximum rise of 7000 mm, and
- b) the elevator car dimensions are not less than the minimum as set-out in Table 1 of the CSA-B355 standard.

If you are installing an elevating device as a substitute for a Lift for Persons with Physical Disabilities refer to [STANDATA ED-2009-005-R1](#) Elevating Devices Codes Regulation (New Installations).

All new automatic elevators must have Firefighters’ Emergency Operation (FEO) except where the travel does not exceed 7000 mm

Currently under the NBC(AE) , FEO is not required for Lifts for Persons with Physical Disabilities (LPPD) that have a travel of 7000 mm or less. Therefore, an elevator that is substituted for LPPD would not require FEO.

This VARIANCE is applicable throughout the province of Alberta.