# CSA B44.1:25/ASME A17.5-2025

# Elevator and escalator electrical equipment

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## *CSA B44.1:25/ASME A17.5-2025*

## *Elevator and escalator electrical equipment*






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# Preface

This is the seventh edition of CSA B44.1/ASME A17.5, *Elevator and escalator electrical equipment*. It supersedes the previous editions published in 2019, 2014, 2011, 2004, 1996, and 1991.

The purpose of this Standard is to reduce the risk of injury and property damage from fire and electrical shock. To this end, it is a safety standard for the design and construction of equipment to be used in conformity with the rules of the applicable elevator and electrical codes (i.e., ASME A17.1/CSA B44 and CSA C22.1, or NFPA 70).

This Standard arose from the need to have identical Canadian and U.S. requirements for this equipment, thereby enabling manufacturers to have their products certified by an approved testing laboratory in Canada or the United States and to have the certification ratified for acceptance in either country.

In 1986, an ad hoc committee on the certification of electrical equipment consisting of jurisdictional authorities, representatives of Canadian and U.S. testing laboratories, and Canadian and U.S. manufacturers began to develop a draft for submission to the ASME A17 Standards Committee on Elevators and Escalators and the CSA Technical Committee on the Elevator Safety Code. Its initial investigation consisted of a review of the industrial control standards CSA C22.2 No. 14 and ANSI/UL 508. These standards could not be used as such, due to the differences in the application of industrial control equipment and elevator equipment. It was recognized that industrial control equipment normally operates continuously for a low number of operations (about 3000/year) and at full-load current. In contrast, elevator control equipment operates intermittently for a high number of operations (about 500 000/year), and at up to 200% to 250% of full-load current in order to accelerate a mass. Further, elevator equipment is usually protected by either a locked machine room or a hoistway. The applicable portions of CSA C22.2 No. 14 and ANSI/UL 508 were then reviewed and adapted to elevator equipment. (Grateful acknowledgement is made to Underwriters Laboratories Inc. for the use of ANSI/UL 508.) Where there were differences between the UL and CSA Group standards, the more stringent requirements were used.

The following are the major changes to this edition:

a) update to Clause 1, Scope;
b) update to Clause 2.1, Reference publications;
c) update to Clause 2.2, Definitions;
d) addition of Clause 3.4, Battery powered platform lifts and stair lifts for barrier-free access;
e) addition of Clause 3.5, Short-circuit current rating;
f) update to Clause 4.2.3, Exceptions to minimum thickness requirements;
g) update to Clause 5.3, Equipment accessible to general public (AGP);
h) updates to Clauses 6.3.3, and 6.3.4, Flame Text A & Flame Test B;
i) update to Clause 16.2, When transient voltages are unknown and controlled;
j) update to Clause 16.27.4, Guidelines when using CSA C22.2 No. 0.2 or ANSI/UL 840;
k) update to Clause 19.1, General;
l) update to Clause 19.2.3, Where elevator duty is not required;
m) update to Clause 19.4.11.1, General;
n) update to Clause 20.22, Controllers for platform lifts and chair lifts;
o) addition of Clause 20.26, Controllers for platform lifts or stair lifts for barrier-free access with an emergency power supply;