

STANDATA interpretation 19-EDI-004

Elevating Devices

BRAKE MAINTENANCE

Date Issued: November 2022

Page 1 of 2

Purpose

This interpretation clarifies maintenance requirements for elevator driving-machine brakes as permitted in American Society of Mechanical Engineers (ASME) A17.1/CSA B44 8.6.4.6 Brakes.

Discussion

In Alberta, brakes on elevators are identified as a critical element for safety by industry stakeholders. Past incidents and evidence of lacking brake maintenance supported by in-service inspection reports, has led to reviewing clause 8.6.4.6.1.

Code References

ASME A17.1/CSA B44 8.6.4.6 Brakes

8.6.4.6.1 The driving-machine brake shall be maintained to ensure proper operation, including, but not limited to, the following:

- (a) residual pads (antimagnetic pads)
- (b) lining and running clearances
- (c) pins and levers
- (d) springs

Unless stated otherwise, all Code references in this STANDATA are to ASME A17.1-2019/CSA B44:19

Issued by the Provincial Elevating Devices Administrator

[Original Signed]

Dean Bruce

Alberta Municipal Affairs – Technical and Corporate Services
Phone: 1-866-421-6929 Email: safety.services@gov.ab.ca

To sign up for our List Subscription Service: municipalaffairs.gov.ab.ca/am_list_subscription_services

alberta.ca/elevator-codes-standards.aspx

©2022 Government of Alberta | Published: November 2022 | Municipal Affairs



- (e) sleeves and guide bushings
- (f) disks and drums
- (g) brake coil and plunger

Application

This interpretation applies to all elevating devices regulated under the A17.1/CSA B44 safety code for elevators and escalators.

Driving-machine brake maintenance has been interpreted to include dismantling, along with all other requirements under clause 8.6.4.6.

Interpretation

Examination and Maintenance of Driving-Machine Brakes

The driving machine brakes must be:

- a) dismantled, cleaned and all components checked;
- b) tested to ensure the car decelerates from rated speed when the power is removed from the driving machine brake, while an empty car is travelling in the up direction at rated speed.

NOTE: It is recommended that methods other than the disconnect switch are used to remove power. Any rate of deceleration is acceptable, all factors considered e.g. heat dissipation.

This Interpretation is applicable throughout the Province of Alberta.