

DRIVING MACHINE BRAKE - ELECTRIC ELEVATORS**Date of Issue: October 1, 2021****No: SO-L1 110225 4 REV.2**

This safety order is issued pursuant to section 31 of the Safety Standards Act. A person affected by this safety order may appeal this order in writing to the Safety Standards Appeal Board within 30 days. The appeal process is set out on the Safety Standards Appeal Board's website at www.gov.bc.ca/safetystandardsappealboard.

Failure to comply with a safety order is an offence under section 72 of the Safety Standards Act.

Part 1: Details of Regulated Work or Regulated Product

This safety order is issued to all licensed elevating devices contractors and asset owners or their agent, and applies to all DRIVING MACHINE BRAKES of all makes and models maintained in conformance to section 8.6 of the A17.1/ B44-2016 Safety Code for Elevators and Escalators.

Part 2: Requirement(s) of this Safety Order

All licensed elevating devices contractors and asset owners or their agent are jointly responsible for meeting the requirements of this safety order. This safety order requires that all driving machine brake maintenance requirements conform to items 1 to 5 below:

1. Examination and Testing of Brakes:

All licensed elevating devices contractors that maintain elevators with driving machine brakes shall examine, maintain, and inspect all driving machine brakes to meet the following requirements every 12 months:

- a) Ensure adjustment to the torque shown on the data plate, where provided.
- b) The driving-machine brakes shall be **dismantled and cleaned annually** to ensure safe and proper operation, including, but not limited to, the following components.
 - i) residual pads (antimagnetic pads)
 - ii) lining and running clearances
 - iii) pins and levers
 - iv) springs
 - v) sleeves and guide bushings
 - vi) discs and drums
 - vii) brake coil and plunger

Note: *Where brakes are not possible to dismantle by design, the manufacturer's maintenance procedures shall be followed (see A17.1/B44-2016 section 8.6.1.2.2 on-site documentation)*

- c) Ensure full contact of the friction material on the braking surface. Means shall be provided to protect the braking surfaces from contamination caused by any driving machine fluid leak.
- d) The driving-machine brake shall be tested:
 - i) to ensure that the car will decelerate from rated speed when power is removed from the driving machine and will brake while an empty car is travelling in the up direction at rated speed.

Note: *It is recommended that means other than the disconnect switch be used to remove the power.*

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- ii) The device shall comply with section 8.6.4.6.2 of the A17.1/ B44-2016 code if any part of the driving machine brake is changed or adjusted that can affect the holding capacity or decelerating capacity of the brake.

2. Brake Declarations:

- a) The completed tests and all required test values shall be documented in the logbook and shall be reported annually using the excel spreadsheet included as part of the requirements of Annual Contractor Reporting Directive D-ED 2020-02.
- b) The brake inspection information and test results as required by the Elevating Devices Safety Regulation shall be retained by the maintaining contractor on file in hard copy and electronic format for a minimum of **5 years** and shall be provided to Technical Safety BC immediately upon request.

3. Maintenance records:

Maintenance records shall be updated accordingly and shall comply with the requirements A17.1/B44-2016 section 8.6.1.4.1 except as modified in the Elevating Devices Safety Regulation and shall be viewable on site at all times as required by A17.1/B44-2016 section 8.6.1.2.

Details of Ordering Safety Manager or Safety Officer – Please read following page

I certify that I am authorized to issue this safety order in accordance with section 15 (d) of the Safety Standards Act or that I have been delegated this power under section 15 (g) of the Safety Standards Act.

Nav Chahal
Manager – Transportation

Safety Orders

- 31 (1) To prevent, avoid or reduce risk of personal injury or damage to property, a provincial safety manager may, in writing, issue a safety order.
- (2) A safety order may be issued to any person in relation to any of the following:
 - (a) regulated work or regulated products generally;
 - (b) a specific class of regulated product or regulated work;
 - (c) a specific regulated product or regulated work.
- (3) For certainty, a safety order issued under this section may apply to
 - (a) regulated work that meets the requirements under this Act,
 - (b) regulated work that previously met the requirements under this Act or a former Act but does not meet the current requirements under this Act,
 - (c) regulated products that meet the requirements under this Act, or
 - (d) regulated products that previously met the requirements under this Act or a former Act but do not meet the current requirements under this Act, including a regulated product that bears a certification mark.
- (4) A safety order may specify any requirement that is intended to prevent, avoid or reduce the risk of personal injury or damage to property and may include any of the following orders:
 - (a) that an existing regulated work or regulated product must be made safe in compliance with the safety order;
 - (b) that a regulated product must be
 - (i) disconnected from a power source,
 - (ii) uninstalled, or
 - (iii) modified before continued use;

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- (c) that a regulated product must be operated, installed, manufactured or disposed of only as specified or that a regulated product must not be moved;
 - (d) that current or future regulated work or a regulated product must conform to the terms or conditions of the order;
 - (e) that a person take or refrain from taking any action that a safety manager considers necessary to prevent, avoid or reduce a risk of personal injury to persons or damage to property;
 - (f) that the manufacturer make reasonable efforts to recall the regulated product.
- (5) The provincial safety manager must give written notice of the safety order to the following persons:
- (a) the manufacturer of the regulated product;
 - (b) an owner of the regulated product if the identity of the owner is known to the provincial safety manager;
 - (c) the person in charge of the regulated work.
- (6) The notice must state the reasons for the decision and that the person has the right to appeal the decision to the appeal board.
- (7) Despite section 54, a safety order may not be stayed during an appeal.

References:

Safety Standards Act

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