

Elevating and Amusement Devices Safety Program

Ref. No.: 275 / 18

Date:

August 31, 2018

ADVISORY

Subject: Emergency Brake - Brake Lining Replacement

Distribution: TSSA website

This advisory is to inform that the replacement of emergency brake linings, including rope gripper pad replacement requires testing to confirm the effectiveness the new linings.

On passenger elevators, this would require testing of the elevating devices in both directions; under Empty car up, and 125% loaded car down conditions.

Supporting Materials:

This advisory is supported by the following A17.1/B44 requirements:

8.6.4 Maintenance and Testing of Electric Elevators

8.6.4.6.3 If any part of the emergency brake is changed or adjusted that can affect the holding capacity or decelerating capacity of the emergency brake when required (see 2.19.3), it shall be adjusted and checked by means that will verify its proper function and holding capacity.

The proper function and holding capacity requires:

2.19.2 Unintended Car Movement Protection

2.19.2.2.(b) upon detection of unintended car movement, stop and hold the car, with any load up to rated load [see also 2.16.8(h)], by applying an emergency brake conforming to 2.19.3. The stopped position of the car shall be limited in both directions, to a maximum of 1 220mm (48 in.) as measured from the landing sill to the car sill.

and testing to reference 2.16.8.(h) per above requires 125% of rated load.

2.16.8 Additional Requirements for Passenger Overload in the Down Direction

2.16.8.(h) requirement 2.19.2.2(b), except that 125% of the rated load shall be used in place of the rated load.

Testing without load is deemed alternative testing and requires the use of a method acceptable to the Director.*

The testing requirements for emergency brake lining replacement (detailed above) are consistent with the requirements following a change or adjustment to the holding capacity of driving-machine brake (see below)

8.6.4.6.2 If any part of the driving-machine brake is changed or adjusted that can affect the holding capacity or decelerating capacity of the brake when required (see 2.24.8.3), it shall be adjusted and checked by means that will verify its proper function and holding capacity. A test complying with 8.6.4.20.4 shall be performed.

* Note: A17.1/B44-2013 to 2016, requirement 8.6.11.10 recognizes alternative testing for driving-machine brakes. A proposal is before the A17.1/B44 committee to extend this permission to emergency brakes as it was overlooked during the development of alternative testing language.