



Subject: Replacement of Elevator Wire Rope Suspension Means

Issue: When must wire elevator hoist ropes be replaced?

Background:

1. The current Alberta regulation Elevating Devices Codes Regulation (AR 192/2015) adopted the ASME A17.1-2013/CSA B44-13 Safety Code for Elevator and Escalators
2. The ASME A17.1-2013/CSA B44-13 by reference adopts the ASME A17.6 Standard for Elevator Suspension, Compensation and Governor Systems Part-1 includes general information on the different types of wire rope used by the elevator industry.
3. Initial Installation of wire rope must take into consideration as follows:
 - a. Correct type and size of wire rope.
 - b. Proper tensioning.
 - c. Avoid rope twist.
 - d. Correct installation of wire rope shackles.
 - e. Correct placement or alignment of wire ropes to sheaves and shackles.
4. The ASME A17.1-2013/CSA B44-13 clause 8.6.3.2 requires that rope replacement must the requirement of ASME A17.6. Also see Alberta Municipal Affairs STANDATA ED-2017-001 and AEDARSA Information Bulletin IB16-001 proper wire rope gauge.
5. The ASME A17.6 Section 1.10 sets out replacement criteria of wire rope that the owners and elevator service providers must follow and replace all the ropes in a group that do not meet that criteria as soon as the ropes indicate replacement.

Action Plan: In Alberta, the requirements for wire rope replacement are:

1. Elevator owners and their Elevating Device Service Provider (EDSP) must replace ropes within 3-months, or the elevator must be removed from service, if the replacement criteria as set out ASME A17.6 indicate replacement. However, if the evaluation of the wire ropes indicates excessive wear beyond the ASME A17.6 the elevator will be removed from service immediately.

TYPE: Information	DESCRIPTION: Wire Rope Suspension Means Replacement	REGULATION: Elevating Devices Code
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2. Every elevator must have the ropes inspected at least every year as required by Alberta Elevating Device Codes Regulation ASME17.1/CSA B44-13 clause 8.11.2.1.3 (cc).
3. Elevator mechanic must receive proper training to be able to properly assess when the elevator wire ropes require replacement.
4. If a Safety Codes Officer finds elevator wire ropes that indicate wire ropes replacement, in accordance with ASME A17.6 criteria, is warranted, the SCO will issue a deficiency notice that the elevator wire ropes must be replaced within three (3) months. However, if the evaluation of the wire ropes indicate excessive wear beyond the ASME A17.6 the elevator will be removed from service immediately.

*It is **recommended** that Elevator owners and their EDSP keep an up-to-date log of the condition of the wire rope to monitor for replacement when required.*

Implementation:

This information bulletin becomes effective **June 1, 2021**.

Original signed by:

Dean McKernon,
AEDARSA VP Operations

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