

## **Understanding Elevator Enclosure Projects**

Projects involving the interior or enclosure of an elevator car (referred to as the *car cab*) are often described using terms such as:

- Modernization
- Modification
- Upgrade
- Refurbishment
- Alteration
- Some Repairs and Replacements

While these terms may suggest cosmetic or minor improvements, AEDARSA classifies this work as a Major Alteration due to this type of work appearing in the Alteration Section of the Code (8.7.2.14 and 8.7.3.13).

When an elevator project is considered a Major Alteration, it must comply with regulatory requirements to ensure that safety and operational integrity are maintained. These requirements include:

- · Engineering review and approval
- Submission of an Application to AEDARSA
- Permitting
- Installation work performed by individuals qualified under the *Designated Trades and Restricted Activities Regulation AR 161/2022*
- Acceptance testing and review witnessed by an authorized Safety Codes Officer

Even projects that appear simple, such as a basic upgrade or refurbishment, must follow these mandatory safety processes before the elevator is returned to normal service. This ensures that the work does not negatively impact elevator performance or create hazards for passengers.

## **Major Alteration** — Who Determines?

Question: Who makes the determination of a Major Alteration?

**Answer**: The determination is made by a Safety Codes Officer, as defined by:

ELEVATING DEVICES, PASSENGER ROPEWAYS AND AMUSEMENT RIDES PERMIT REGULATION AR 28/2012 section 1(k):

"major alteration" means an alteration that, in the opinion of a safety codes officer, significantly changes the structural or operational characteristics of the original design, layout drawings, data or any other information submitted in support of an application for a permit for the elevating device, passenger ropeway or fixed amusement ride.

AR 28/2012 section 3(s):

An owner or an owner's agent must(a) obtain a certificate of alteration permit before undertaking a major alteration of an elevating device...



## **Permits and Professional Engineer Involvement**

Question: Who decides when a project requires a Professional Engineer's involvement?

Answer: New Construction and Alterations require the involvement of a Registered Engineering Professional, or if, in the opinion of a Safety Codes officer, the size or complexity of a project gives rise to safety concerns as defined in:

- 1) ELEVATING DEVICES, PASSENGER ROPEWAYS AND AMUSEMENT RIDES PERMIT REGULATION AR 28/2012 section 5(3)
  - Application for construction or alteration permit
  - (3) In addition to the requirements set out in section 4, an application under this section must be accompanied by plans that are signed and stamped or sealed by a professional engineer as required by the Engineering and Geoscience Professions Act.
- 2) ADMINISTRATIVE ITEMS REGULATION AR 16/2004 section 18(1)(2) *Seals and Stamps* 
  - 18(1) If, in the opinion of a safety codes officer, the size or complexity of a project may give rise to safety concerns, the safety codes officer may require that all plans and specifications, or any part of them, for the project's (c) elevating devices be imprinted with a seal or stamp affixed in accordance with the Engineering and Geoscience Professions Act for engineering work, or the Architects Act for architectural work.
  - (2) If, in the opinion of a safety codes officer, the size or complexity of a project may give rise to safety concerns, the safety codes officer may require that the construction of any or all of the project's (c) elevating devices be reviewed during construction in accordance with the Engineering and Geoscience Professions Act or the Architects Act.

## **Acceptance Inspections and Testing**

Question: If certain projects are not specifically identified as requiring testing in the code, why is an acceptance inspection required, and what authority does a Safety Codes Officer have to request testing?

Answer: New Construction Permits and Alteration Permits require Acceptance Inspections. Additionally, Safety Codes Officers may perform, review or request any test they consider necessary as defined in:

ELEVATING DEVICES, PASSENGER ROPEWAYS AND AMUSEMENT RIDES PERMIT REGULATION AR 28/2012 section 6(1)(2)

Acceptance inspections

- 6(1) If a certificate of construction permit or a certificate of alteration permit is required under this Regulation, the elevating device, passenger ropeway or fixed amusement ride that is the subject of the permit may not be put in service until an acceptance inspection is successfully completed.
- (2) The owner or the owner's agent must apply to a delegated person on completion of the construction or major alteration for the acceptance inspection.
- 1) Safety Codes Act section 34(4)
  - (4) In carrying out an inspection, review, examination or evaluation under this Act, a safety codes officer may...
  - (b) review, perform or require to be performed any tests and evaluations the safety codes officer considers necessary on any thing, process or activity to which this Act applies and remove any thing, if necessary, for the purpose of having tests or evaluations performed.