



FEO Initiation Devices



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Enforcement Protocol

1. TSSAct
2. Ontario Regulation 209/01
3. Code Adoption Document (CAD)
4. Director's Orders
5. Applicable Code
 1. Sub Codes (NBCC, CEC)

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A17/B44 Code

- Code harmonization took place in 2000
- Current Code enforced in Ontario for new construction or altered devices;
 - ASME A17.1-2010/CSA B44-10

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Current Enforcement in Ontario

- A17/B44 Code with exceptions in CAD for some sections of code
- Section 2.27.3.2.2 is one exception from code and replaced with that in the CAD this was done in order to help owners better comply with existing systems

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Existing Device VS Existing Building

- Existing Building with Existing Elevator and elevator being ungraded comply to CAD 2.27.3.2.2 a thru h
- New or Existing Building with new device elevator must comply to CAD 2.27.3.2.2 a thru c

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New Elevator/New Building

- **2.27.3.2.2** In jurisdictions enforcing the NBCC, the requirements of (a) through (c) are applicable to new installations:

- (a) smoke detectors, or heat detectors in environments not suitable for smoke detectors (fire alarm initiating devices), used to initiate Phase I Emergency Recall Operation, shall be installed in conformance with the requirements of the NBCC, and shall be located
 - (1) at each floor served by the elevator (lobby)
 - (2) in the associated elevator machine room, machinery space containing a motor controller or electric driving machine, control space, or control room, and
 - (3) in elevator and dumbwaiter shafts per,
 - (i) O. Reg. 350/06 Article 3.2.4.10.(e) if a fire alarm system is required by O. Reg. 350/06 Article 3.2.4.1, except as provided in O. Reg. 350/06 Article 3.2.4.15., or
 - (ii) O. Reg. 332/12 Article 3.2.4.11.(e) if a fire alarm system is required by O. Reg. 332/12 Article 3.2.4.1, except as provided in O. Reg. 332/12 Article 3.2.4.16.

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New Elevator/New Building cont'd

- (b) alternate floor recall required by 2.27.3.2.4 is not required if the floor area containing the recall level is sprinklered. (ref O.Reg 350/06 article 3.2.4.14.(3) or O. Reg. 332/12 article 3.2.4.15.(3)).
 - Note: If fire detectors are provided in the hoistway at or below the lowest landing of recall, an alternate (upper) recall shall be provided in accordance with 2.27.3.2.3(d).

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New Elevator/Existing Building

- (c) where a building fire alarm system is not required by OBC or where an alteration is being performed and the existing building fire alarm system does not provide suitable signaling, the devices referred to in 2.27.3.2.2(a) shall be installed and shall be connected to a Dedicated Function Fire Alarm (DFFA). The installation of this control panel shall conform to the following:

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New Elevator/Existing Building

- (1) in a building with an existing fire alarm system, the building fire alarm system and the Dedicated Function Fire Alarm system shall be interconnected. [CAD Amendment-261/13]
- (2) in a building without an existing fire alarm system, the Dedicated Function Fire Alarm control panel used to initiate elevator recall shall be permanently identified as “Elevator Recall Control and Supervisory Control Unit” in lettering not less than 6mm (0.25in.) in height.
- (3) the installation or alteration of any fire alarm systems or DFFA system must be installed in accordance with CAN/ULC-S524 (Installation of Fire Alarm Systems), and
- (4) where a DFFA has been installed to serve as an Elevator Recall Control and Supervisory Control Unit, the system shall be subject to inspection and testing in accordance with CAN/ULC-S536 (Inspection and Testing of Fire Alarm Systems). For these systems the owner or contractor shall provide written confirmation of testing at the initial inspection, and confirmation of annual testing shall be available to an inspector upon request.

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New Elevator/Existing Building

- NOTE(S):
 - 1. (2.27.3.2.2(a) (b) and (c)): Smoke and heat detectors (fire alarm initiating devices) are referred to as fire detectors in the NBCC. Pull stations are not deemed to be fire detectors.
 - 2. The installation or alteration of a fire alarm system, including dedicated function fire alarm systems require permits and installation by qualified personnel.
 - 3. See 8.6.11.1 for notes related to DFFA testing.
 - This requirement is for monthly testing of fire system

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Existing Elevator/Existing Building

- (d) for alterations **8.7.2.16, 8.7.3.17 (change in type of service)** and **8.7.2.27.6, 8.7.3.31.7 (operation control)**, that require conformance to 2.27,
 - (1) requirements 2.27.3.2.2(a)(1), 2.27.3.2.2(a)(2) and 2.27.3.2.2(c) do not apply within a floor area if the floor area is sprinklered and the sprinkler system is electrically supervised in conformance with O. Reg. 350/06 Sentence 3.2.4.9.(2). The activation of the electrically supervised system shall cause automatic recall.
 - (2) requirements 2.27.3.2.2(a)(3) does not apply.

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Existing Elevator/Existing Building

- (e) for alterations **8.7.2.27.4 and 8.7.3.31.5 (controllers)**, if firefighters' emergency operation was required or provided at the time of the original installation, or required or provided by a subsequent alteration, the requirements of (1) below apply, otherwise the requirements of (2) below apply:
 - (1) requirements, 2.27.3.2.2(a), 2.27.3.2.2(b) and 2.27.3.2.2(c)
 - (2) the installation shall as a minimum conform to the requirements of 2.27.3.1 (manual recall), unless the introductory exemption in 2.27.3 applies.

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Existing Elevator/Existing Building

- (f) for alterations **8.7.2.27.5** and **8.7.3.31.6 (motion control)**, emergency operation and signaling devices where required by NBCC at the time of the original installation, or required or provided by a subsequent alteration, the requirements of (1) below apply, otherwise the requirements of (2) below apply:
 - (1) requirements of 2.27.3.2.2(a), 2.27.3.2.2(b) and 2.27.3.2.2(c)
 - (2) the installation shall as a minimum conform to the requirements of 2.27.3.1 (manual recall), unless the introductory exemption in 2.27.3 applies.

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Existing Elevator/Existing Building

- (g) for alterations under **8.7.2.28** or **8.7.3.31.8 (emergency operation and signaling devices)** or **8.7.2.28♦2** or **8.7.3.31♦9 (fire code retrofit)** that Require conformance to all or part of 2.27 the requirements of 2.27.3.2.2(a), 2.27.3.2.2(b) and 2.27.3.2.2(c) apply.

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Question #1

- So if I have a brand new building that an elevator is being installed in what do I need?

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Answer to Question #1

- As a minimum you will need;
 - smoke detectors, or heat detectors in environments not suitable for smoke detectors in
 - every elevator lobby
 - elevator machine room, machinery space containing a motor controller or electric driving machine, control space, or control room
 - elevator shafts

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Additional Information to Question #1

- You may have to install a separate detector if the recall level is not sprinkled in order to send the elevator to a different landing

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Question #2

- If a new elevator is installed in an old building to I have to replace the existing fire alarm system, and do I still need smoke/heat detectors?

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Answer to Question #2

- No you do not have to replace the existing system as long as the DFFA (Dedicated Function Fire Alarm) will tie into it
- Yes you will still need smoke/heat detectors in the designated areas

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Question #3

- Can a sprinkler pressure switch be used instead of a smoke detector to recall the elevators?

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Answer to Question #3

- The pressure switch cannot be used instead of smoke detectors on a new elevator however on an existing elevator with an existing fire alarm system it may be used.

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Question #4

- If an elevator company installs a new controller do I have to do anything to the fire alarm system or if it does not have one does one have to be installed?

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Answer to Question #4

- If the device has an existing fire alarm system smoke/heat detectors will have to be installed in the elevator lobby's, machine room, machinery space etc and the elevator shaft
- If the device did not have an existing system then as a minimal you will have to have manual recall

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Summary

- The key for a fire alarm company is to work with the elevator company as the fire system on an existing building may vary depending on what part of the elevator was changed.

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QUESTIONS



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