

Appendix B: Common Variance Requests for Elevators, Escalators, Platform Lifts, and Stair Lifts

There are some variance requests that are submitted more frequently. The following information is provided as a general guide to help applicants understand the conditions when a specific variance might not be granted and the minimum requirements it must meet to be considered for review.

There may be established terms and conditions that are typically applied. However, depending on the specific details of a given request, additional or modified conditions may still be included.

Important:

This information does **NOT** waive the requirement to obtain an approved variance before deviating from any applicable code clause or regulatory requirement. Even if your proposed solution aligns with one of the examples provided, you must still submit a formal application and receive written approval **before** operating equipment under a varied requirement.

Variance applicants are encouraged to propose alternate methods that meet or exceed the intent of the original code requirement. The examples listed do not limit what can be proposed, nor do they guarantee approval. Each variance application is reviewed on a case-by-case basis and evaluated independently.

Common Variance Applications:

- **Glass/mirror in elevators for construction use (5.10 elevator)**
In elevators used for construction, glass shall not be used in elevator cars (see CSA B44 Code, clause 5.10.1.10.5).
A variance to 5.10.1.10.5 would not be granted to an elevator without a permanent car cabin.
- **Statutory right of ways (SRW) - access and egress to machine room and hoistway through private landing**
Refer to [IB-ED 2024-03](#) “Statutory Right of Way – Access and Egress to Machine Room and Hoistway Through Private Landing” for details.
- **Upgrade or addition of the firefighters’ emergency operation (FEO)**
Refer to [IB-ED 2020-08](#) “Major Alteration Inspection FEO Testing Requirements” for details.
- **Reduced maintenance frequency**
Reduced maintenance frequency variance requests, related to [Elevating Devices Safety Regulation \(EDSR\) Section 21\(4\)](#), are typically due to low equipment usage at the site.
 - **Platform lifts, stair lifts, chair lifts, and equipment covered by CSA B355 Code**
 - Maintenance shall not be less frequent than the manufacturer’s recommended maintenance frequency, or 2 maintenance visits per year are required at intervals not to exceed 6 months, whichever is more frequent.



- Maintenance shall comply with the requirements of appendix B of the adopted edition of the CSA B355 Code.
 - **Wind turbine tower elevators**
 - Maintenance shall comply with the requirements of section 3 of the ASME A17.8-2021/CSA B44.8:21.
 - Maintenance shall not be less frequent than the manufacturers recommended maintenance frequency.
 - A minimum of 1 maintenance visit per year is required at intervals not to exceed 12 months.
- **Pit drain**

Where a new elevator is being installed in an existing hoistway or building and the addition of a pit drain is not possible, a variance to clause 2.2.2.5 is often required.

 - This variance is not applicable to alterations; It only applies to the installation of a new elevator in an existing hoistway or building.
 - This variance does not waive the requirement 2.2.2.3. Accumulation of groundwater in the pit shall be prevented.
 - Code clause 2.2.2.4 of the CSA B44 Code requires drains and sump pumps, where provided, to comply with the applicable plumbing code (refer to CSA B44 clause 2.2.2.4 for additional requirements).
See rule 2.4.3.6 of the BC Plumbing Code 2018 (and 2012), and rule 7.4.3.6 of the BC Building Code 2006. The BC Plumbing Code requires drains serving elevator pits, where provided,
 - a) it shall be connected directly to a sump located outside the elevator pit; and
 - b) the drain pipe that connects the sump to the drainage system shall have a backwater valve.
Refer to the most recent adopted edition of BC Plumbing Code and BC Building Code for any additional requirements.
 - Code clause 2.2.2.5 of the CSA B44 Code requires a drain or sump pump in elevators provided with FEO. The sump pump must be located outside the elevator pit as required by the BC Plumbing Code.
 - A variance request to install a sump pump inside the pit would require confirmation and approval from the authority having jurisdiction over the plumbing code, specific to this particular building.
- **Pipe in machine room**

Equipment not directly related to the operation of the elevator/lift, including pipes (water, sewage, rainwater, firefighting system, etc.), is not allowed to be placed inside the machine room (see CSA B44 Code clause 2.8.1).
Where, in an existing elevator, there is piping in the machine room, a variance must be requested only if removal of the piping to outside the machine room is not possible. For new installations, a variance would likely not be granted.
- **Bollards installed within escalators and moving walks' safety zone**

Technical Safety BC does not grant a variance to install bollards inside the safety zone, if they can be installed outside on the perimeter of the safety zone required by clauses 6.1.3.6.4 or 6.2.3.8.4 of the CSA

B44 code. In order to avoid relevant hazards, it is recommended to install multiple bollards outside the perimeter of the safety zone.

- **Equipment with AECO certification**

Equipment with an AECO certificate (such as TÜV or Liftinstituut certification) showing compliance with CSA B44.7 or other adopted code(s) would not require a variance for its installation and operation. If a company has equipment that is not CSA B44 Code compliant, they may pursue an AECO certificate showing compliance with B44.7, in which case they would not require a variance for that specific non-compliance. AECO applicable equipment/components are to be listed on the design registration application and must include the documentation. Read more about AECO here:

<https://anab.ansi.org/product-certification/sector-programs>