ENB-15.35 - Accessible Routes: Elevator Exemptions; Raised Floor Area; Stairways; Ramps and Exits - UBC/11/#3

ACCESSIBLE ROUTES: ELEVATOR EXEMPTIONS; RAISED FLOOR AREA; STAIRWAYS; RAMPS AND EXITS
Administrative Rule Adopted by Bureau Pursuant to Rule-Making Authority
ARB-ENB-15.35

TOPIC: Accessible Design - UBC/11/#3

CODE: Structural Specialty Code: 1998 Edition

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REFERENCE: Sections 1106, 1107, 1108 and 1109 Structural Specialty Code

SUBJECT: Accessible Routes: Elevator Exemptions; Raised Floor Area; Stairways; Ramps and Exits

SUMMARY: This code guide addresses several issues related to providing access to portions of buildings. The issues include:

1. Buildings that are exempt from providing an elevator;
2. Accessible facilities within elevator exempt buildings;
3. Exterior routes connecting interior spaces;
4. "Accessible" Stairways;
5. Ramp design;
6. Handrails on stairways and ramps;
7. Raised and lowered floor areas in restaurants;
8. Raised areas in churches; and
9. Accessible exits.

QUESTION: 1. When are elevators required in a building?

RESPONSE: 1. The answer to this question depends on the occupancy of the building and the number of stories (including basements).

A. Hotels and motels (Group R, Division 1)
In hotels and motels of three or more stories, an elevator is always required.

In hotels and motels of two stories, an elevator is required unless:

1. all of the common facilities and all of the required accessible guest rooms are located on a fully accessible ground floor, or
2. another type of an accessible route such as a ramp or grade level access is provided.

For example, if registration, the restaurant, conference and meeting rooms, the pool and athletic facility and all the accessible guest rooms are on one floor, an elevator isn't required to upper floors containing other guest rooms. Likewise, if an accessible ramp is provided to the second story of a two story hotel an elevator would not be required.

B. Apartment houses (Group R, Division 1)
In most cases, an elevator is not required regardless of the number of stories. However, there are two design choices that can result in the need to include an elevator:

1. Apartments mixed with other uses, including parking
In a building designed with apartments starting on an upper level, an elevator, lift or a ramp, must be provided to the lowest level of apartments. The lower level can be businesses, or can even just be parking for the apartments. The elevator, lift or ramp only has to go to the first level of apartments, even if there are more levels above. Simply putting one apartment unit on the ground floor would eliminate the elevator requirement if the design complies with B.2, below.

2. Apartments with common facilities
If the apartment building includes common facilities such as a recreation room, fitness area, pool or common laundry, these need to be accessible. If they are on a different level than the adaptable dwelling units, then an elevator or ramp must provide access to that level.

C. Shopping Centers (Group M)
A shopping center is defined as having 5 or more retail tenant spaces in a building or complex of buildings. If there is more than one level, an elevator is required. If a building only has 4 or fewer retail spaces and also has spaces for offices or restaurants, etc, which would bring the total tenant spaces to 5 or more, the building is not a shopping center. See also the

requirements in Item F, below.

D. Doctors offices and other health care providers (Group B or I)
All offices of health care providers including doctors, dentists, and psychiatrists which are in buildings of more than one level (2 stories or 1 story and a basement), must have an elevator.

E. Government buildings
If the building has more than 1 story (including 1 story and basement), an elevator must be provided. This includes those owned or leased by a government agency including schools, public universities, parks as well as city buildings.

F. Other retail and offices (Group B and M)
Other offices and businesses not covered by answers C, D, or E must have an elevator unless one of the following exceptions applies:

1. 3,000 square feet floor area
If a second story (or a basement) is less than 3,000 square feet, an elevator is not required. However, only the elevator requirement is waived. All other features must meet accessible design. A three story (level) building must have an elevator in all cases, including those buildings with two stories and a basement.

2. Access by ramp
A second level can be larger than 3,000 square feet, and no elevator need be provided when an accessible ramp provides access to that level. A three story (level) building must have an elevator in all cases.

G. Public Schools, Colleges & Universities
All schools of more than one story (or one story and a basement) must have an elevator except where there are only two levels and the second level is accessed by a ramp.

H. Restaurants
All multi-level restaurants must have an elevator unless the second level is a mezzanine and contains no more than 25% of the seating of the entire restaurant. The term "mezzanine" does not include raised or lowered floor areas, but applies to areas which are nearly a full story higher and have usable space underneath. Raised and lowered floor areas are not mezzanines and must be accessible. If a restaurant is in a building with an elevator, even a mezzanine must be accessible.

I. Dormitories, Group homes
Dormitories and group homes will be treated the same as hotels and motels. See Item A.

J. Storage, industrial, manufacturing
If the building has three stories or more (including 2 stories and a basement) an elevator is required. If it is only 2 stories, no elevator is required unless another occupancy is involved. If another occupancy is mixed with the storage, industrial or manufacturing, the elevator exemption depends on how much of the other occupancy is on the second level. For example, a large two story warehouse also has 2,000 square feet of office space on the second floor and 14,000 square feet of storage; an elevator is not required. If, on the other hand, the office portion of the 2nd floor exceeds 3,000 square feet, an elevator is needed.

QUESTION: 2. If a building is exempt from having an elevator, do facilities located on an inaccessible level have to be repeated or duplicated on the accessible level? For example, the second floor is the only location planned for restrooms. If no elevator is required or provided, do restrooms need to be built on the first floor, too?

RESPONSE: 2. No. But there are two words of caution:

A. The elevator exception is only an elevator exception; no other standards are waived or reduced. As examples, an accessible route must be provided to all rooms on the second floor, even though there is a break in the accessible route between the first and second floors; any toilet room must meet accessible standards; room identification and directional signs must meet accessible standards; and lever hardware must be provided. These accessible features are required because not all people with disabilities are wheelchair users, therefore the standards presume some use by such people. Secondly, it also allows that in the event an elevator is ever installed, the facility is then fully accessible without additional, and generally more expensive, retrofitting.

B. Although not required by the Structural Code, nor directly required by the ADA construction standards, building owners and employers may wish to duplicate facilities in case an existing or potential employee might need access to such a facility. For example if the only employee lunch room is on an inaccessible 2nd level, an employee who uses a wheelchair might require the lunchroom to be moved or replicated on the accessible level as part of a reasonable accommodation to maintain their employment. The same could be said about not having a toilet room on the accessible level.

QUESTION: 3. If the only accessible route connecting floor levels of a building is a ramp or walkway outside of the building, does that ramp or walkway have to be covered or enclosed?

RESPONSE: 3. Neither the Oregon Structural Specialty Code, nor the Americans with Disabilities Act or Fair Housing guidelines require accessible routes to be enclosed. This is true even if there are non-accessible routes which are interior to

the building. Even though this appears to be unequal treatment, it has been the judgement so far that forcing an enclosed route is excessive.

QUESTION: 4. Which stairways are required to comply with the design provisions for "accessible stairways" (Sec. 1109.8), including handrail extensions, nosings and prohibition of open risers?

RESPONSE: 4. Stairways are particularly confusing when considering accessibility standards. Most people, when thinking about accessibility requirements, assume the standards are for wheelchair users. While most of the standards are intended to address the needs of wheelchair users, some standards, such as stairs and visual alarms, are aimed at people with other disabilities. Stairways can not be in an accessible route (Sec. 1109.4.5).

"Accessible stairways" are only those mentioned in Sec. 1106.2.3. They are the stairways that connect levels which are not connected by ramp or elevator. In other words, if a multi-level building is exempt by Section 1108.3 from having an elevator, then the stairways in that building must be "accessible stairways". Only these stairways must meet the design standards of Section 1109.8. For example, a retail store has a second story of only 2,000 square feet. An elevator is not required, but the stairway(s) to the second story must have handrail extensions, closed risers and rounded nosings.

A further word of caution. The exemption from providing an elevator does not exempt such levels from any other accessibility standard. All corridors, hardware, toilet rooms, etc, must be accessible.

QUESTION: 5. In the design of accessible ramps:

A. What slopes are allowed?
B. When are handrails required?
C. If handrails are not required, how about curbs or guardrails?
D. What size landings are required where there are doors at the landing?

RESPONSE: 5. Section 1109.7 provides most of the standards for ramps which are part of an accessible route. Ramps are defined by Section 1102 as having a slope of 1 in 20 or greater. Parts of an accessible route with slopes less than 1 in 20 are not ramps. Such portions, which could be called sloped walkways, do not need to comply with Section 1109.7, but do need to comply with Section 1109.4 which contains the standards for accessible routes.

A. Ramps are not allowed to exceed a slope of 1 in 12 (1109.7.2). Any single ramp run can have a maximum rise of 30 inches. There is no minimum, but any thing less than 1 in 20 isn't a ramp.

B. Ramps must have handrails. The handrails must be on both sides. There must be 36 inches of clear width between the handrails. Sloped walkways (less than 1 in 20) do not have to have handrails.

C. Ramps with a 6 inch or greater drop off along their edges (or the edges of landings) must have one of the edge protections described in Section 1109.7.7. This can be either a wall or curb; the required handrail with an intermediate rail below; or full fledged guardrails described in Sec. 509. An acceptable combination could be a handrail and a curb. For either ramps or sloped walkways where there is a drop of 30 inches or more to an adjoining surface a guardrail is required. Otherwise, sloped walkways do not have to have any edge protection.

D. Ramp landings must comply with both Sections 1109.7.5 and 1003.3.4.4. Landings have to be at least 60 inches long in the direction of travel. Thus if a route turns at a landing, then it must be 60 inches in both dimensions. Landings at the bottom of a series of ramps must be at least 6 feet long. Where doors swing over a landing, Section 1003.3.4.4 requires that the doors can't reduce the width to less than 42 inches (when in any position) nor can they reduce the width by more than 3 1/2 inches when fully open. These standards for landing width at doors apply to all ramps regardless of whether they are there for Chapter 11 accessibility reasons, or when part of an exit path.

QUESTION: 6. In order to comply with the accessibility standards, do handrails on stairways and ramps have to be round or can they be "graspable" (gripable) as allowed by Chapter 10 â€“ Means of Egress?

RESPONSE: 6. It is intended that Section 1109.10.11.2 specifying handrail dimensions and the provisions in Chapter 10 (Means of Egress) at Section 1003.3.3.6 work together. A round dimension is not essential but Chapter 10 requires an "equivalent gripping surface". This is the identical words used in Section 4.26.2 of the Americans with Disabilities Act which addresses the size and space of handrails.

QUESTION: 7. Do all raised and lowered floor areas of a restaurant have to be accessible?

RESPONSE: 7. The answer is a qualified yes. Since there is no overt exemption for such areas, and the ADA only allows exemptions in existing restaurants, the Bureau will require such areas in new restaurants to be accessible.

The Oregon Structural Specialty Code does not address this issue directly. While there is no express exemption for raised or lowered floor areas; there is a very express exception applying to mezzanines within a restaurant. Such mezzanines need not be accessible if they contain less than 25% of all the seating in the restaurant and as long as the same services and amenities are available in the accessible area (Section 1106.1.3). In the building code, mezzanine is very specifically defined. To qualify as a mezzanine there has to be at least 7 feet of clear head room above and below the mezzanine

(Section 507). In most cases raised or lowered areas that are a few steps up or down from the rest of the seating area do not qualify as a mezzanine.

QUESTION: 8. Do all areas of a church sanctuary including the altar area need to be provided with an accessible route?

RESPONSE: 8. There is only one exception provided for church sanctuaries. That exception essentially allows mezzanines (balconies) not to have an elevator (or ramp) to them where the mezzanine has no more than 25% of the total seating of the assembly area. This is the same exception which applies to restaurants. There is no exception for other raised or lowered areas of the sanctuary. Therefore choir areas, raised alter areas, and baptismal areas must all have accessible routes to them.

The code provisions on platform lifts (Sec. 1108.3.3) allows use of lifts in a variety of places which could be applied to churches. It allows lifts to be used to access performance areas or areas of limited occupant load not open to the public. We will allow lifts to be used to provide access to choir areas, organ lofts, pulpits, baptismals, altars and similar "performance areas" within a church.

There are two other provisions which specifically apply to churches which both address elevator requirements. In churches which have floor levels of less than 4,000 square feet, elevators need not be provided to such levels. Also, if a church addition is less than 4,000 square feet, no matter how big the existing church is, no elevator is required because of the addition.

QUESTION: 9. When are accessible exits required? How many are required?

RESPONSE: 9. In new construction, for each required exit, there must also be an accessible "exit" (Sec. 1107.1). If Chapter 10 says a space must be provided with two required exits, Chapter 11 requires two "accessible" exits. If Chapter 10 requires three exits, then there must be three accessible exits. Existing buildings are exempt from having to provide areas of rescue assistance.

Accessible exits can be provided in three ways:

A. An exit path at grade level, which meets all the standards of an accessible route. For example there is an accessible route from each interior space that leads to an exterior door at grade. The door must meet accessible standards and then there is an accessible route from the door to the public way. There can be no steps in this path, not even one at an exterior landing.

B. A horizontal exit from one portion of a building to the next, which meets accessible route standards.

C. An area of rescue assistance for each non-accessible exit. Areas of rescue assistance must meet specific design standards contained in Section 1107.2 including space for the refuge, signage, two-way communication, and a wider stairway.

A building can have a mixture of these solutions. There can be simple accessible routes as exits on the ground floor, with areas of rescue assistance on upper levels. Sloping sites might result in a direct exit on one side of the building and an area of rescue assistance on the same floor at the other side of the building.

Exception: The code provides only one exception to providing accessible exits in new construction. The exception requires the building to be sprinklered. There must also be an evacuation plan approved by the Bureau of Buildings and the Fire Bureau. The Fire Bureau has a guideline to help you prepare an acceptable evacuation plan.

HISTORY
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