



TOPIC: Accessible Design - IBC/11/#5

CODE: Structural Specialty Code: 2014 Edition

REVISED: October 13, 2014 *[Paul L. Scarlett]*, Director

REFERENCE: Chapter 11 – Structural Specialty Code

SUBJECT: Elevators, Accessible Parking, and Type A and Type B Dwelling Units in Apartment Buildings

QUESTIONS:

1. When are elevators required in apartment buildings?
2. How many accessible parking spaces are required in apartment buildings and where should they be located?
3. How are the minimum required number of Type A and Type B dwelling units determined, and how must they be dispersed among the various classes of dwelling units in a building?

RESPONSES:

1. Elevators are generally required when there are accessible spaces or elements on different levels of an apartment building.
2. Accessible parking must be provided when there is on-site parking and there are accessible elements within a building.
3. The minimum number and locations of type A and B units depend on several factors including the total number of dwelling units in an apartment building, and locations of accessible entrances.

Overview:

This guide provides a partial overview of the Oregon Structural Specialty Code (OSSC) requirements for elevators, accessible parking, and Type A and B dwelling units in Occupancy Group R-2 apartment buildings. This guide is not intended to reduce or waive any requirements of the OSSC, and must be used in conjunction with the OSSC.

The designer should also be familiar with federal Americans with Disabilities Act (ADA) requirements in addition to those of the OSSC, and should be aware that a person may seek accommodations and/or removal of barriers to accessibility through

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the US Department of Justice or federal courts in accordance with the ADA even if a project is in full compliance with the OSSC.

Code background:

Chapter 11 of the OSSC is mostly a scoping document, whereas most of the specific technical code provisions are found in the ICC/ANSI A117.1. Chapter 11 was completely revised on March 1, 2012 to correspond with the 2012 International Building Code (IBC) which was updated in response to the newly adopted 2010 ADA Standards for Accessible Design. The revised OSSC Chapter 11 is essentially the same as the IBC's Chapter 11, with limited Oregon amendments.

General information:

Condominiums: The OSSC regulates condominium dwelling units the same as apartments. All references to apartment buildings in this guide include condominiums.

Accessible dwelling units: Accessible dwelling units are not required in apartment buildings, but may be required in other residential-use buildings such as dormitories, hotels and institutional occupancies. Only Type A and B units are required in apartment buildings.

Existing apartment buildings: Existing buildings are not required to have Type A and Type B Units.

Live/work units: Live/work units must comply with the accessibility requirements for apartment buildings, except the nonresidential portions of a dwelling unit are subject to the accessibility provisions applicable to the designated use of that area.

Definitions:

Accessible element: An architectural or mechanical component of a building or site that may be specifically required to be provided by the OSSC, for example: clustered mailboxes, an accessible entry, an accessible parking space or an accessible ramp.

Accessible space: An area of a building or site that is required to meet the accessibility provisions of the OSSC, for example: Type A and Type B units, a common-use exercise room, or a manager's office.

- A. Elevator requirements in multi-level apartment buildings:** Multi-level apartment buildings are not required to have an elevator if there are no accessible spaces or elements located on levels without an accessible route, and an accessible route connects all accessible spaces and elements within the building and on the site. For example, a common-use exercise room is required to be an accessible space. Therefore, an accessible route is required to connect it with any other accessible spaces and elements in the building or on the site, such as Type A and Type B dwelling units or accessible parking. Note that when an accessible route is required, it must be in the same general area as a common circulation path. Consequently, when a common circulation path between levels is within a building, the accessible route must also be within the building. The apartment building design and locations of accessible spaces and elements determine whether an elevator is required. An apartment building may be constructed without any elevator, or it may be built with an elevator serving only those lower levels containing accessible spaces or elements.
- B. Accessible parking:** Below are some of the requirements for accessible on-site parking for apartment buildings. Refer to the OSSC for all accessibility requirements; the Zoning Code for parking requirements on private property; and Portland Bureau of Transportation for driveway curb cut requirements.
1. At least two percent, but not less than one space, of each type of parking space provided on the site of an apartment building containing Type A or B units must be an accessible parking space.
 2. An accessible route, in the same general area as a common circulation path, must connect on-site parking facilities to Type A and B unit entries.
 3. The accessible parking spaces must be located on the shortest practical route to the Type A and B unit entries.
 4. When on-site parking is provided within or under an apartment building, the accessible parking must also be located within or under the building.
 5. When covered parking is provided, such as under a carport, covered accessible parking must be provided.
 6. One of every six accessible parking spaces, but not less than one, must be a van-accessible space.
 7. Van-accessible spaces, the access aisles serving them, and vehicular routes to van parking spaces and from van parking spaces to the vehicular exit must have at least 98 inches vertical clearance.

C. Requirements for Type A and Type B dwelling units:

- 1. Differences between Type A and Type B dwelling units:** Type A and B units are similar to “Adaptable dwelling units” in previous editions of the OSSC. There are more provisions for accessibility in Type A units than for Type B units, such as clearances at appliances, interior doors and bathrooms, and limitations on the height of the kitchen sink. The designer may provide accessible units in lieu of Type A units, and Type A units in lieu of Type B units.

- 2. Minimum number of Type A dwelling units in apartment buildings:** At least two percent but not less than one dwelling unit on a site containing more than 20 new R-2 dwelling units are required to be Type A units. All proposed new R-2 units on a site must be counted to determine the minimum number of Type A units, even those units on floors without an accessible route or in separate buildings located on the same site. Buildings with less than three dwelling units are classified as R-3 and are not counted; pre-existing dwelling units on the site are also not counted. For example, a proposed 10-story apartment building has ground level parking, (7) studio units and (5) one-bedroom units on levels 2 through 9, and (8) two-bedroom units on level 10 for a grand total of 104 dwelling units. At least 3 units must be Type A units ($0.02 \times 104 = 2.08$. Note that we don't round 2.08 down to 2 because that would be less than 2 percent of the total number of units.)

- 3. Dispersal of Type A dwelling units among the various classes of dwelling units in a building:** The OSSC does not define “class” of units. However, according to an International Code Council opinion, the main characteristics to consider are: number of bedrooms and bathrooms; overall square footage; and major amenities, such as a study or a large deck. The intent is to allow for persons who want a Type A unit to have a choice of options. Looking at items such as view, decoration, adjacency to other amenities, and what might be considered the ‘best’ location are subjective, and therefore cannot be uniformly enforced by the building code official. Keep in mind that a person may seek accommodation through the US Department of Justice or federal courts in accordance with the ADA even though a project is in full compliance with the OSSC.

Using the example in item #2 above, at least one of each of the three different unit classes must be a Type A unit. An elevator is required to serve all levels of the building because there must be an accessible route to the two-bedroom Type A unit on level 10.

If there were more classes of units than the minimum number of Type A units required, there is no requirement to provide additional Type A units. For instance, if studio, one-, two- and three-bedroom units are proposed but only three Type A units are required, it is acceptable to have one class of unit that is not a Type A unit. In this case, it is the designer's choice which of the classes will be Type A.

- 4. Minimum number of Type B dwelling units in apartment buildings:** There are three basic criteria to determine the minimum number of Type B units:
- a. Apartment buildings with four or more dwelling units must have Type B units;
 - b. At least one story containing dwelling units must have an accessible entrance; and
 - c. All of the dwelling units located on a story with an accessible entrance must be Type B units.

For example, a two-story building has ground floor retail and four dwelling units on the second floor. Since the only floor with dwelling units is on the second floor, an elevator or other accessible route in the same general area as a common circulation path must be provided to that floor, and all of the units must be Type B units. Alternatively, if one or more of the dwelling units are located on the ground floor, only the ground floor units are required to be Type B units, and no elevator or Type B units are required on the second floor.

- d. Sloping sites can provide additional opportunities for accessible routes to stories in non-elevator buildings. The OSSC requires these stories to have accessible entrances and all dwelling units on those stories to be Type B units where all of the following conditions occur:
 - (1.) Where the slopes of the undisturbed site are 10 percent or less, measured between a planned building entrance and all planned pedestrian vehicular arrival points located within 50 feet or less; and
 - (2.) Where the slopes of the planned finished grade are 10 percent or less, measured between the planned building entrance and all pedestrian vehicular arrival points located within 50 feet or less.

Where no such arrival points are within 50 feet, as described in 4. d. (1). and (2.) above, the closest arrival point shall be used unless that arrival point serves another story with Type B units in the same building.

- 5. Buildings on sloping lots:** The minimum number of required Type B units may be reduced on sites containing two or more non-elevator buildings to a percentage equal to the percentage of the entire site with grades less than 10 percent prior to development, provided all of the following conditions are met (see the OSSC for exact language):
- a. At least 20 percent of the dwelling units on the site are Type B units with accessible entrances;
 - b. All dwelling units on stories that have slopes between the pedestrian or vehicular arrival points and the building entrance that are less than 8.33 percent are Type B units;
 - c. All dwelling units on stories with a building entrance connected to a pedestrian or vehicular arrival point by a planned elevated walkway with slopes not more than 10 percent are Type B units; and
 - d. All dwelling units on stories served by an elevator are Type B units. (Note that this condition would require at least three buildings on the site: two non-elevator buildings and one building with an elevator serving two or more stories.)

There are no reductions to the minimum number of Type A units required in apartment buildings due to sloping lots.

- 6. Design flood elevation exemption:** Apartment buildings restricted by design flood elevation (as defined in the OSSC) are exempt from providing Type A and B units under the following conditions:
- a. The building has no elevator; and
 - b. The lowest horizontal structural members or the lowest floor is at or above design flood elevation; and
 - c. The difference between the required minimum floor elevation at the primary entrances and vehicular and pedestrian arrival points within 50 feet exceeds 30 inches; and
 - d. The slope between the required minimum floor elevation at the primary entrances and vehicular and pedestrian arrival points within 50 feet exceeds 10 percent.

Where no such arrival points are within 50 feet of the primary entrance, as described in 6. c. and d. above, the closest arrival points shall be used.

- 7. Multi-storied units:** Multi-storied units in a non-elevator building are exempt from providing Type B units. However, if there are more than 20 new dwelling units on the site, at least 2 percent of the units must be Type A units, dispersed among the various classes. An elevator or platform lift is required within multi-story Type A units, but not multi-story Type B units. Where a multi-story unit has external elevator service to only one floor, the floor provided with elevator service must be the primary entry to the unit, comply with the requirements for Type B units, and have a toilet facility on that floor.
- 8. Grab bar backing in Type A unit bathrooms:** Grab bars are not required, but backing for future grab bar installation must be provided in bathrooms, except those that contain only a toilet and a lavatory, unless that is the only toilet room on the level. Walls must be located behind and beside a toilet with the toilet centered 16 to 18 inches from the sidewall. The walls must be configured such that a minimum 36-inch grab bar can be installed behind the toilet, except where a lavatory encroaches into this space, backing for a 24-inch grab bar may be provided. The sidewall adjacent to the toilet must accommodate a 42-inch grab bar.
- 9. Grab bar backing in Type B unit bathrooms:** Grab bars are not required, but backing for future grab bar installation must be provided in bathrooms, except those that contain only a toilet and a lavatory, unless that is the only toilet room on the level. Where walls are located behind and beside a toilet, the toilet must be centered 16 to 18 inches from the sidewall. The walls must be configured such that a minimum 24-inch grab bar can be installed behind the toilet. If the sidewall adjacent to the toilet will not accommodate a 42-inch grab bar, backing for a grab bar 24 inches minimum length located 12 inches maximum from the rear wall must be provided, or backing for one or two swing-up grab bars must be provided.