



TOPIC: Corridor Alcoves - OSSC/10/#9

CODE: Oregon Structural Specialty Code - 2014 Edition

REVISED: January 19, 2018 [Rebecca Esau], Director

REFERENCE: Oregon Structural Specialty Code Chapter 10

SUBJECT: Equipment and Furniture Allowances in Fire-Rated Corridors

QUESTION: The Oregon Structural Specialty Code (OSSC) requires fire-rated corridors to be continuous and uninterrupted by intervening uses or rooms, except foyers or lobbies, from the point of entry into the corridor to an exit. There is often a desire to locate equipment or furniture in areas adjacent to and open to corridors. The spaces can be large or small, and can include furniture, telephones or vending machines. Are these spaces, or interruptions, allowed in fire-rated corridors, and if so, are there any restrictions on the types and amounts of equipment and furniture?

RESPONSE: This code guide applies to alcoves in fire-rated corridors where equipment and furnishings are provided for use by the building occupants. The following corridor interruptions (alcoves) will be allowed to be open to fire-rated corridors under the conditions listed below. Proposed alcoves not complying with the provisions of this code guide must be approved on a case-by-case basis through the administrative appeals process.

The alcoves allowed in this code guide have been placed into three categories – Level 1 Alcoves, Level 2 Alcoves and Equipment-Only Alcoves.

Level 1 Corridor Alcoves

1. Level 1 alcoves are 500 square feet or less; and
2. Level 1 alcoves are allowed in buildings that are sprinkled throughout by an automatic sprinkler system meeting the requirements of NFPA 13 R.

Level 2 Corridor Alcoves

1. Level 2 alcoves are 750 square feet or less; and
2. Level 2 alcoves are allowed in buildings that are equipped throughout with an automatic sprinkler system meeting the requirements of NFPA 13.

Equipment-Only Corridor Alcoves

1. Equipment-only alcoves are shallow recessed alcoves open to the corridor to house drinking fountains, telephone booths, vending machines, mailboxes and other similar amenities for the exclusive use of the occupants of the building; and
2. Equipment-only alcoves are allowed in buildings that are equipped throughout with an automatic sprinkler system meeting the requirements of at least NFPA 13R.

A. Level 1 and Level 2 Alcoves

The following allowances and requirements apply to all Level 1 and Level 2 corridor alcoves.

1. **Maximum number allowed.** A maximum of two alcoves are allowed per floor level. Where the floor level has been divided into separate areas by a fire barrier constructed as required for a horizontal exit, two alcove areas are allowed for each divided area.
2. **Physical separation.** Where more than one alcove is provided per floor or floor area as described in item A.1, the alcove areas must be separated from one another by physical space or, if located immediately adjacent to each other, by a physical barrier resistant to the passage of smoke.
3. **Egress Path.** The egress path must meet the following conditions:
 - a. The egress path must be shown on the submitted plans;
 - b. The required exit width shall be maintained outside of the alcove area, except as allowed in Condition A.3.c below;
 - c. In a corridor serving uses other than dwelling units, not more than one enclosed room containing a primary occupancy may have its egress path pass directly through an alcove to the corridor. Where more than one means of egress is required from an enclosed room, not more than one of those means of egress may pass through an alcove area. The required exit width shall be free of any amenities and furniture;

- d. The egress path shall be reasonably direct and unobstructed by equipment and furniture; and
- e. The egress paths shall be designed to the satisfaction of the City of Portland Fire Marshal's Office.

4. Equipment and Furniture

a. **Equipment.** Equipment allowed in Level 1 and Level 2 alcoves are limited to the following:

- 1) Vending machines
- 2) Telephones
- 3) Automated teller machines
- 4) Water fountains or water coolers
- 5) Ice machines
- 6) Mailboxes
- 7) Entertainment and recreational equipment such as television, pool table, video games, or computers
- 8) Enclosed, listed, non-solid fuel burning fireplaces and gas-fired vented room heaters
- 9) Bicycle storage with end walls sufficient to protect the visually impaired

b. **Furniture.** Furniture located in the alcoves is limited to tables, chairs, sofas, plants and lamps. All furniture located in the alcoves must meet the California flame spread standard established in Technical Bulletin #133.

B. Equipment-Only Alcoves. The following allowances and requirements apply to all equipment-only corridor alcoves.

1. **Size of Alcoves.** Equipment-only alcoves shall be not more than four feet deep from the face of the corridor wall. Length shall be as determined by the amenities placed in the alcove.

2. **Equipment.** Equipment allowed in equipment-only alcoves are limited to the following:

- a. Vending machines
- b. Telephones
- c. Automated teller machines
- d. Water fountains or water coolers
- e. Ice machines
- f. Mail boxes

3. **Placement of Equipment.** The equipment must be placed within the alcove so that it does not protrude more than four inches into the corridor, but in no case shall equipment protrude into the required minimum width of the corridor.
4. **Egress Path.** The egress path must meet all of the following conditions:
 - a. The egress path must be shown on the submitted plans;
 - b. The required exit width shall be maintained outside of the alcove area, except as allowed in c below;
 - c. In a corridor serving uses other than dwelling units, not more than one enclosed room containing a primary occupancy may have its egress path pass directly through an alcove to the corridor. Where more than one means of egress is required from an enclosed room, not more than one of those means of egress may pass through an alcove area. The required exit width shall be free of any amenities and furniture; and
 - d. The egress paths shall be designed to the satisfaction of the City of Portland Fire Marshal's Office.
5. **Maximum number allowed.** A maximum of five equipment-only alcoves are allowed per floor level. Where the floor level has been divided into separate areas by a fire barrier constructed as required for a horizontal exit, five equipment-only alcove areas are allowed for each divided area.