

**CHAPTER 4**  
**OREGON AMENDMENTS**  
2007 OSSC

**406.2.2 Clear height.** The clear height of each floor level in vehicle and pedestrian traffic areas shall not be less than 7 feet (2134 mm). Vehicle and pedestrian areas accommodating van-accessible parking required by Section 1106.5 shall conform to ICC A117. 1. **shall comply with Section 1104.4.**

**407.8 Emergency and standby power.** Automatic emergency power and/or standby power supplies shall be provided for all health care facilities, as defined in NFPA 99. The approved alternative power supply shall maintain operating energy to the facility for a period of not less than 90 minutes. Emergency and standby power supplies shall be installed as required in the *Oregon Electrical Specialty Code* and in accordance with NFPA 99.

**408.1.1 Definitions.** For the purpose of this chapter, certain terms are defined as follows:

**CELL is a housing unit in a detention or correctional facility for the confinement of not more than two residents.**

**CELL COMPLEX is a cluster or group of cells in a jail, prison or other detention facility, together with rooms used for accessory purposes, all of which open into the cell complex, and are used for functions such as dining, counseling, exercise, classrooms, sick call, visiting, storage, staff offices, control rooms or similar functions, and interconnecting corridors all within the cell complex.**

**CELL, DORMITORY is a housing area in a detention or correctional facility designated to house three or more residents.**

**CELL TIERS are cells, dormitories and accessory spaces. Cell tiers are located one level above the other, and do not exceed two levels per floor. A cell tier shall not be considered a story or mezzanine.**

**DAY ROOM is a room which is adjacent to a cell, or cell tier, or dormitory and which is used as a dining, exercise or other activity room for residents.**

**HOUSING UNIT is an area intended to lodge residents on a 24-hour basis where accommodations are provided for sleeping.**

**RESIDENT HOUSING AREA includes any cell, cell complex, cell dormitory, cell tier, day room or housing unit.**

**RESTRAINT shall mean the physical retention of a person within a room, cell or holding facility by any means, or within a building by means of locked doors.**

**SALLYPORT (SECURITY VESTIBULE) means a compartment provided with two or more doors where the intended purpose is to prevent continuous and unobstructed passage by allowing the release of only one door at a time.**

**408.3.1 General. Where security operations necessitate the locking of required means of egress, as allowed in Occupancy Conditions 2, 3, 4 and 5, provisions shall be made for the release of occupants at all times.**

**Means of egress from detention and correctional facilities that traverse through various other use areas shall, at a minimum, conform to requirements for detention and correctional occupancies.**

**Exception: It is permissible to exit through a horizontal exit conforming to Section 1022, into other contiguous occupancies which do not conform to detention and correctional occupancy egress provisions but which do comply with requirements set forth in the appropriate occupancy, as long as the occupancy is not a kitchen, storeroom, restroom, closet or a Group H Occupancy.**

**408.3.1 2 Door width.** Doors to resident sleeping units shall have a clear width of not less than 28 inches (711 mm).

**408.3.2 3 Sliding doors.** Where doors in a means of egress are of the horizontal-sliding type, the force to slide the door to its fully open position shall not exceed 50 pounds (220 N) with a perpendicular force against the door of 50 pounds (220 N).

**408.3.3 4 Spiral stairs.** Spiral stairs that conform to the requirements of Section 1009.8 are permitted for access to and between staff locations. **The maximum area limitation of Section 1009.9 does not apply.**

**408.3.4 5 Exit discharge.** Exits are permitted to discharge into a fenced or walled courtyard. Enclosed yards or courts shall be of a size to accommodate all occupants, a minimum of 50 feet (15 240 mm) from the building with a net area of 15 square feet (1.4 m<sup>2</sup>) per person.

**Exception: If a gate, complying with Section 408.3.6 is provided from the fenced enclosure, it need not comply with the minimum area.**

**408.3.5 6 Sallyports.** A sallyport shall be permitted in a means of egress where there are provisions for continuous and unobstructed passage through the sallyport during an emergency egress condition.

**408.3.6 7 Exit enclosures.** One of the required exit enclosures in each building shall be permitted to have glazing installed in doors and interior walls at each landing level providing access to the enclosure, provided that the following conditions are met:

1. The vertical exit enclosure shall not serve more than four floor levels.
2. Vertical exit enclosure doors shall not be less than 3/4 -hour fire doors complying with Section 715.2.

3. The total area of glazing at each floor level shall not exceed 5,000 square inches (3.23 m<sup>2</sup>) and individual panels of glazing shall not exceed 1,296 square inches (0.84 m<sup>2</sup>).

4. The glazing shall be protected on both sides by an automatic fire sprinkler system. The sprinkler system shall be designed to wet completely the entire surface of any glazing affected by fire when actuated.

5. The glazing shall be in a gasketed frame and installed in such a manner that the framing system will deflect without breaking (loading) the glass before the sprinkler system operates.

6. Obstructions, such as curtain rods, drapery traverse rods, curtains, drapes or similar materials shall not be installed between the automatic sprinklers and the glazing.

#### **408.3.8 Cell tier exiting.**

**408.3.8.1 Two exits are required from the cell tier above the first level if the occupant load exceeds 10.**

**408.3.8.2 Two exits are required from the cell tiers above the second level.**

**408.3.8.3 Cell tier exit balconies may not have any dead end exceeding 20 feet in length.**

**408.5 Vertical openings.** Vertical openings shall be enclosed in accordance with Section 707.

**Exception:** A floor opening between floor levels of residential housing areas is permitted without enclosure protection between the levels, provided that both of the following conditions are met:

1. The entire normally occupied areas so interconnected are open and unobstructed so as to enable observation of the areas by supervisory personnel.

2. Means of egress capacity is sufficient to provide simultaneous egress for all occupants from all interconnected levels and areas.

—The height difference between the highest and lowest finished floor levels shall not exceed 23 feet (7010 mm). Each story, considered separately, has at least one half of its individual required means of egress capacity provided by exits leading directly out of that story without traversing another story within the interconnected area.

#### **Exceptions:**

**1. A day room opening between floor levels of cell tiers is permitted without enclosure protection between the levels, provided the following conditions are met:**

**1.1 The entire day room is open and unobstructed so as to enable observation of the day room by supervisory personnel, and**

**1.2. Means of egress capacity is sufficient to provide simultaneous egress for all occupants from all interconnected levels and areas.**

**2. Housing areas designed as atriums in accordance with Section 404.**

**Mechanical chases serving cell tiers within a single cell complex are not required to comply with Section 707.**

**408.7 Subdivision of resident housing areas.** ~~Sleeping areas and any contiguous day room, group activity space or other common spaces where residents are housed shall be separated from other spaces in accordance with Sections 408.7.1 through 408.7.4.~~

**Group I, Division 3, Occupancy Condition 5 sleeping areas and any contiguous day rooms, group activity space or other common spaces where residents are housed shall be separated from other spaces in accordance with Sections 408.7.1 through 408.7.1.2.**

**408.7.1 Occupancy Condition 5. Each sleeping area in Occupancy Condition 5 shall be separated from adjacent sleeping areas, corridors and common spaces by a solid partition. Additionally, common spaces shall be separated from the exit access corridor by a smoke barrier.**

**408.7.1.1 Door openings. The aggregate area of openings in a sleeping room door in Occupancy Condition 5 shall not exceed 120 square inches (77 419 mm<sup>2</sup>). The aggregate area shall include all openings including door undercuts, food passes and grilles. Openings shall be not more than 36 inches (914 mm) above the floor. The openings shall be closable from the day room side.**

**408.7.1.2 Smoke-tight doors. Doors in partitions required to be smoke tight shall be a 1<sup>3</sup>/<sub>4</sub>-inch (45 mm) solid wood or security grade metal. Gaskets, latches and door closers are not required on cell doors.**

~~**408.7.1 Occupancy Conditions 3 and 4. Each sleeping area in Occupancy Conditions 3 and 4 shall be separated from the adjacent common spaces by a smoke tight partition where the travel distance from the sleeping area through the common space to the exit access corridor exceeds 50 feet (15 240 mm).**~~

~~**408.7.2 Occupancy Condition 5. Each sleeping area in Occupancy Conditions 5 shall be separated from adjacent sleeping areas, corridors and common spaces by a smoke tight partition. Additionally, common spaces shall be separated from the corridor by a smoke tight partition.**~~

~~**408.7.3 Openings in room face. The aggregate area of openings in a solid sleeping room face in Occupancy Conditions 2, 3, 4 and 5 shall not exceed 120 square inches (77 419 mm<sup>2</sup>). The aggregate area shall include all openings including door undercuts, food passes and grilles. Openings shall be not more than 36 inches (914 mm) above the floor. In Occupancy Condition 5, the openings shall be closeable from the room side.**~~

~~**408.7.4 Smoke-tight doors. Doors in openings in partitions required to be smoke tight by Section 408.7 shall be substantial doors, of construction that will resist the passage of smoke. Latches and door closures are not required on cell doors.**~~

~~**408.8 Windowless buildings. For the purposes of this section, a windowless building or portion of a building is one with nonopenable windows, windows not readily breakable or with out windows. Windowless buildings shall be provided with an engineered smoke control system to provide ventilation (mechanical or natural) in accordance with Section 909 for each windowless smoke compartment.**~~

## **408.8 Fire Protection Systems**

**408.8.1 Smoke detectors. An approved automatic smoke detection system shall be installed throughout resident housing areas, including sleeping areas and contiguous**

day rooms, group activity spaces and other common spaces normally accessible to residents.

Exception: Other approved smoke detection arrangements providing equivalent protection, such as placing detectors in exhaust ducts from cells or behind protective grilles, are allowed for sleeping rooms with 4 or fewer occupants.

408.8.2 Emergency Ventilation. Group I, Division 3 resident housing areas shall be equipped with smoke and heat venting by one of the following:

1. A manually operated mechanical system capable of at least 6 air changes per hour of exhaust with mechanical or natural make-up air.

Roof vents capable of being manually operated, installed in accordance with their listing and 910.3.2. The maximum center-to-center spacing between vents shall be 100 feet (45 720 mm) and the venting ratio of effective area of vent openings to floor area shall be 1:150.

**412.2.3 Floor surface.** Floors shall be graded and drained to prevent water or fuel from remaining on the floor. Floor drains shall discharge through an oil separator to the sewer or to an outside vented sump.

**Exceptions:**

1. Aircraft hangars with individual lease spaces not exceeding 2,000 square feet (186 m<sup>2</sup>) each in which servicing, repairing or washing is not conducted and fuel is not dispensed shall have floors that are graded toward the door, but shall not require a separator.

**2. Where a written containment plan is provided that has been approved by both the Fire official and the Building official and addresses the containment, storage and disposal of fuel, the requirements of this section do not apply.**

**412.2.6 Fire suppression.** Aircraft hangars shall be provided with fire suppression as required in NFPA 409.

**Exceptions:**

1. Group II hangars as defined in NFPA 409 storing private aircraft without major maintenance or overhaul are exempt from foam suppression requirements.

**2. Group 1 hangars as defined in NFPA 409 which exceed 40,000 ft<sup>2</sup> but have an aircraft access door height less than 8.5 m (28 ft), and do not have provisions for housing aircraft with a tail height over 8.5 m (28 ft), and without major maintenance or overhaul are exempt from foam suppression requirements if they have automatic sprinkler protection with a density of 0.25 gal/min.**

## **SECTION 421**

### **PIERS AND WHARVES**

**421.1 Scope. This section shall apply to piers and wharves constructed in whole or in part of combustible materials and to piers and wharves constructed of noncombustible material having less than two-hour fire-resistive protection of the structural elements or pier deck.**

**421.2 Definitions. For the purpose of this section, certain terms are defined as follows:**

**PIER.** A structure, usually of greater length than width and projecting from the shore into a body of water with direct access from land that can be either open deck or provided with a superstructure.

**SUPERSTRUCTURE.** That portion of the construction of a pier or wharf above the deck.

**WHARF.** A structure at the shoreline having a platform built along and parallel to a body of water that may have an open deck or be provided with a superstructure.

**421.3 Fire-extinguishing systems.** Automatic fire-extinguishing systems shall be installed as specified in Section 903.

**421.4 Physical protection.** Where sprinkler piping and fire-extinguishing equipment are subject to damage by floating debris, barriers shall be provided to exclude or protect against such debris.

Protection from corrosion and freezing shall be provided where necessary.

**421.5 Subdivision of substructures.** All substructures of piers shall have the under-deck area subdivided by:

1. Transverse fire walls at intervals not exceeding 450 feet (137 169 mm) and a maximum area of 50,000 square feet (4625 square meters) extending from the low water line to the deck. Where superstructures bridge a required fire wall, the fire wall shall extend to the roof of the superstructure as required for an area separation wall.

2. Transverse fire stops located between fire walls, spacing between fire walls and fire stops shall not exceed 1550 feet (47 720 mm). Fire stops shall fit tightly against the pier deck and around any structural members of pipes that pass through the fire stop so that an effective barrier to fire and draft is maintained. Fire stops shall extend to the water line. Where aprons or platforms are built along the sides of a pier, fire stops shall extend to the outside edge of such aprons or platforms.

**421.6 Detailed requirements.** Fire walls shall be of reinforced concrete having a fire-resistance rating of four hours, or other materials of equivalent stability and fire resistance. Fire stops shall be constructed of wood planking built up to a thickness of 4 inches (102 mm) and securely fastened to the structural frame, or other construction having equivalent stability and fire resistance.

**421.7 Superstructures.** Except as provided in this section, superstructures located on piers and wharves shall be classified for occupancy and type of construction and constructed according to this code.

## **SECTION 422**

### **MAUSOLEUMS AND COLUMBARIUMS**

**422.1 Mausoleums and columbariums.** For the purposes of this section, certain terms are defined as follows:

**COLUMBARIUM.** A permanent structure consisting of niches.

**COMPANION CRYPT.** A permanent chamber for containment of human remains of not more than four individuals.

**CRYPT.** A permanent chamber for containment of human remains.

**MAUSOLEUM.** A permanent structure consisting of crypts.

**NICHE. A permanent chamber for containment of cremated human remains of one or more individuals.**

**422.1.1 Materials. Materials of construction of mausoleums and columbariums shall be as set forth in this code for Type I or II buildings without use of combustible materials.**

**Exception: Interior doors and frames and interior frames for glass screens may be constructed of wood.**

**422.1.1.1 Construction. All crypt walls and crypt floor slabs shall be constructed of poured-in-place reinforced concrete, without honeycombs.**

**Exception: Crypt opening slabs and the separation slabs between upper and lower spaces of a companion crypt may be installed after entombment and shall be of concrete or mineral-type material.**

**After entombment, the crypt opening shall be sealed in a manner to be odor tight. Crypt walls and floor slabs shall be not less than 3 inches (76 mm) thick.**

**422.1.1.2 Loading. Each crypt, including each crypt in companion crypts, shall be designed for a minimum total live load of 600 pounds (272 kg) for each individual human remains. No crypt shall contain more than four individual human remains.**

**422.1.1.3 Other methods and materials. Other methods and materials may be considered as set forth in Section 104.11, provided they have similar qualities of permanence, odor tightness and fire resistance as those identified in this subsection.**

**422.1.1.4 Other occupancies. Areas used for assembly shall be classified and constructed as required in this code.**

**Exception: Occupancy separations are not required between mausoleums/columbariums and other occupancies.**

**422.1.1.5 Pressure relief. A pressure-relief passage shall be provided leading from each crypt to the roof above the structure. This pressure-balancing shaft shall be located near the rear of each crypt and shall be sealed until the time of entombment and then opened before the crypt is sealed. The rooftop opening shall not be located less than 10 feet (3048 mm) from any cemetery property line. This pressure-relief passage shall be continued to a gravel sump below the lowest crypt slab.**