

Q. The March 2002 forum addressed rated "lids" on the bottoms of private balconies (R-1 occupancy), particularly in Type-V One-Hour construction. It was determined that Section 705 allows these balconies to be of unprotected construction. However, some jurisdictions are still requiring a one-hour dwelling-unit separation at the exterior balconies, as required by 310.2.2, for both Type-VN and Type-V One-Hour construction. The argument is that an elevated patio with "roofed area" creates floor space below. If floor space is created, then a dwelling unit separation is typically required. An example would be a multi-family building with two or more "flat" apartments stacked such that the private balconies are aligned vertically through the building. The building's balcony, creating a "roofed area." Moisture is a concern for enclosed (rated) wood-balcony construction. Horizontal venting, if permitted, would sacrifice the integrity of any fire protection and defeats the purpose of providing a fire-rated floor system. Should floor/ceiling separation assemblies be required to extend outside of the exterior walls of the dwelling unit?

A. This will be deferred to the state for formal interpretation. (*Tri-County Building Code Forum, May 22, 2003*)

Q. Can't there be one standard for closed-finished soffits in Type-V One-Hour or VN?

A. No, this panel cannot make one standard for closed-finished soffits. (*Tri-County Building Code Forum, May 22, 2003*)

Q. Green/sustainable proponents seek greater use of fly ash in concrete. Canada and some European countries allow up to 50 percent fly ash content. Some jurisdictions allow some fly ash; others do not. Can we get a decision allowing up to 50 percent fly ash in concrete slabs, sidewalks, footings, and structural members?

A. Fly ash content is subject to approval from a jurisdiction's building official. It is not in the best interest of jurisdictions to mandate the use of specific building products, which could expose the jurisdiction to liability if the product were to be used incorrectly. It should be up to the owners and the architect/engineer of the project to decide which product to use and discuss it with the jurisdiction. (*Tri-County Building Code Forum, May 22, 2003*)

Q. Six-unit multi-family dwelling with separate doors to each entry, Many of which have stairs/landings up to the door: Some jurisdictions interpret each entry to be public entry, thus threshold of door must meet ADA height (despite stairs). Can clarification be made to determine appropriate interpretation? Also, it was

determined that sidewalks on the property (private) are public right-of-way and must be 5 feet wide.

A. When multi-family dwellings are not required to be accessible, the door thresholds are not required to be accessible. The panel knows of nothing in the building code that requires 5-foot-wide sidewalks on private property. This could be a planning or transportation issue. (*Tri-County Building Code Forum, May 22, 2003*)

Q. When replacing roofs on older existing masonry buildings, City of Portland guidelines require a step-wise assessment of the building to conform to Title 24.85 of the code. Compliance with FEMA-178 Appendix C is required by the title when applicable to URMs (un-reinforced masonry buildings) (The limiting condition is "un-reinforced masonry buildings.")

FEMA-178 addresses URMs, but contains the additional qualification of applying only to "bearing wall buildings."

Does Portland's Title 25 apply to all URM buildings, or only those with "bearing walls?"

A. Seismic upgrade is required in case of a typical URM building where URM walls are bearing. If the building has only non-load-bearing URM walls such as brick veneer, interior partition wall, etc., then the City requirements are not applicable. Portland requires seismic upgrade when the roof is supported on the bearing un-reinforced masonry walls. Answer provided by David O'Longaigh with the City of Portland Bureau of Building and Development Services. (*Tri-County Building Code Forum, September 18, 2003*)

Q. It is our understanding that when an "engineered" lateral bracing design is provided, the Oregon Structural Specialty Code (the 1997 UBC) is used to provide the design criteria, including wind speed and exposure factor. All of our homes are designed by an engineer. We have recently come across a jurisdiction that does not recognize anything outside The International Residential Code's prescriptive-path method. Nothing in the IRC provides criteria or methodology for preparing "engineered" designs. Is the assumption of the 1997 UBC correct? If so, is there documentation? If this is all correct, how do I show a jurisdiction that 80mph/exposure B is sufficient to a 100 mph 3-second gust, when all they see is 100 mph?

A This is a common confusion because of the two systems of designating wind speeds in two codes. Oregon Structural Specialty Code designates wind speeds based on the "fastest mile" wind velocities, whereas the new dwelling code designates wind speeds based on 3-second-gust velocities. A structure located in a 100 mph 3-second gust zone can be designed to an 80 mph "fastest mile" wind load under the OSSC because the wind

loads according to both methods are similar. Section R301.2.1.3 Wind Speed Conversion in the dwelling code provides clear direction: “When referenced documents are based on fastestmile wind speeds, the three second gust wind velocities of Figure R301.2(4) shall be converted to fastest mile wind velocities using Table R301.2.1.2.” (*Tri-County Building Code Forum, September 18, 2003*)

Q. Background: I am seeking a clarification on the requirements for exterior walls in a Type III-N building according the OSSC 1998 (UBC 1997) with 10/01/00 and 10/01/01 amendments.

Given a B-occupancy office building of construction Type III-N, I am trying to understand what fire resistance is required of its exterior wall, which is 15 feet from the property line.

In trying to figure this out, I have considered the following sections: 304.3 Location on Property (for B occ.), 503.2.1 General Fire Resistance of Walls, Table 5-A - B/III-N, 604.3.1 Exterior Walls (for III-N), and Table 6-A. I have also considered section 101.3 Scope (of the code). Note that Tables 5-A and 6-A differ in the respective fire rating requirements.

My specific questions:

a: Is the respective wall required to be of 4-hour fire resistance construction because of the above-mentioned code sections, specifically because of Section 101.3: “Where, in any specific case, different sections of this code specify different materials, methods of construction or other requirements, the most restrictive shall govern” and Table 6-A?

b: Or is the respective wall required to be of 2-hour fire resistance construction because of the above-mentioned code sections, specifically because of Section 101.3: “Where there is a conflict between a general requirement and specific requirement, the specific requirement shall be applicable” and Table 5-A?

c: Or do other code sections govern in this respect, and what are they and their requirements?

A Two-hour fire-resistance construction is required for the exterior wall of Type III-N, B-occupancy buildings located 15 feet of property lines. This is because Table 5-A of the OSSC provides specific requirements in reference to distance of the exterior wall from the property line, whereas Table 6-A provides only general requirements irrespective of the distance of the exterior walls from the property lines. (*Tri-County Building Code Forum, September 18, 2003*)

Q. Is the extinguishing system under a type 1 hood required to be interconnected to the building alarm system in a fully sprinklered building, or in a building provided with an approved alarm system?

A. Yes. The Oregon Mechanical Specialty Code references NFPA 72 3-8.3.2.5.1 as a recognized standard. This standard establishes a requirement to tie the hood fire suppression system to a building alarm or sprinkler system when one is present. Additionally, NFPA 96 7-6.1 further establishes that when a building is not provided with a fire alarm system or automatic fire sprinkler system, an audible alarm or visual indicator shall be provided to show that the automatic fire extinguishing system has activated. For further information see also NFPA 96 7-6.2. (*Tri-County Building Code Forum, February 20, 2003*)

Q. Define what constitutes a local structural emergency?

A. The code does not currently define a local structural emergency. This forum was unable to arrive at a formal definition that encompasses every possible scenario. (*Tri-County Building Code Forum, February 20, 2003*)

Q. To what extent can an engineer supervise a project without first securing a building permit?

A. There is a code change submittal being reviewed by the Building Codes Structures Board relating to emergency replacement and repair. (*Tri-County Building Code Forum, February 20, 2003*)

Q. Is there a clear distinction when plan submittals or permits are required, i.e. minor alterations and equipment installations?

A. Permits are required for all work regulated by the code, except as exempted by OSSC Section 106. See OSSC Section 106.3.2 for plan submittal requirements. This section allows the building official to waive the submission of plans if it is found that the nature of the work is such that reviewing of plans is not necessary to obtain compliance with the code. (*Tri-County Building Code Forum, February 20, 2003*)

Q. If you have a cross hallway door, do the spaces between the doors constitute additional intervening rooms?

A. Yes. See OSSC Section 1004.3.3 hallways and OSCC Section 1004.3.4 corridors. See also OSSC Section 1004.2.2 for travel through intervening rooms. (*Tri-County Building Code Forum, February 20, 2003*)

Roll-down Gates

Q. There is some inconsistency throughout the Tri-County area regarding the use of roll-down gates in portions of retail stores, such as with the Fred Meyer Jewelry centers located in most of the Fred Meyer's stores in the area. These gates are typically used to enhance security after hours but in so doing, create problems regarding exiting from the secured spaces.

Using the method prescribed in Chapter 10 and Table 10-A, occupant loads for the spaces under consideration easily exceed 10 persons. However, the store designers / owners / operators maintain that those occupant loads are only realistic during normal hours of operation. Furthermore, they maintain that only small numbers of employees (typically 1-3 persons) occupy these spaces when the gates are secured.

Section 1003.3.1.3 of the OSSC says that every required exit door serving an occupant load of 10 or more persons must be 3'-0" x 6'-8". Thus, some building departments have been requiring a man-door for exiting out of the jewelry centers in addition to the roll-down gates.

Questions:

Which occupant load should be considered in the design of the exit system – the load during normal business hours or the after-hours occupant load?

A. Both should be considered. First and foremost the occupant load during normal hours of operation should be the primary consideration for the exit system. However, it's also appropriate to consider the occupant load after business hours and allow modifications accordingly.

Should a man-door be required in addition to the roll-down gates?

A. No, a man-door would not be required unless the calculated occupancy requires two exits. (*Tri-County Building Code Forum, December 4, 2003*)

Accessibility for a Church Baptistry

Q. This question concerns a full immersion baptistry in which the pastor may stand in the water and the individual is then baptized in the water. Usually the baptistry is similar to a spa tub but is only used in the church during a baptismal ceremony and only for a member of the church.

Question:

Does the State of Oregon or Tri-County require OSSC Chapter 11 Accessibility to a Baptistry? My understanding is the ADA does not.

A. Refer to *Oregon Interpretive Ruling 95-10 : Disabled access to church baptisteries.*

Ruling:

1. Church baptisteries are not included as one of the spaces or facilities listed as exempt from access in Section 3106 (a) 1.
2. Baptisteries are regulated by Section 3108 (d) as a "spa or similar facility" and require access to the edge of this facility. Such access to the edge of the baptistry would be by ramp, elevator or platform lift. (*Tri-County Building Code Forum, December 4, 2003*)

Q. Is it allowable to enclose an employee work area for fewer than 10 employees (such as a food or beverage service bar) with a fixed counter in which access and egress are through an opening in countertop?

A. Code section reference: 1003.3.1.3 Width and Height. Every exit doorway serving an occupant load of 10 or more shall be of a size to permit the installation of a door not less than 3 feet in nominal width and not less than 6 feet 8 inches in nominal height.

This method of access and egress would not meet code requirements. The code panel recommends checking with the local jurisdictions regarding reasonable alternate methods. *(Tri-County Building Code Forum, February 18, 2004)*

Q. When constructing a new building on a property under a single ownership consisting of two parcels with an interior platted property line separating them, is the interior property line the one to use to determine the exterior wall and opening protection for the new building?

A. Yes. An alternative way to deal with this issue would be to combine parcels into one tax lot. *(Tri-County Building Code Forum, February 18, 2004)*

Q. Changes to established property lines due to demolition or new projects: How is compliance achieved when an existing building that determines the property line is torn down, and the new building will not match the property lines?

A. The panel recommends to working out alternate means of compliance with the local jurisdiction. *(Tri-County Building Code Forum, February 18, 2004)*

Q. Is it possible to add to a property line by doing a lot line adjustment? There is an existing large parcel of land with unlimited building space. The existing building is fully sprinklered. The current project calls for building a smaller building attached to the existing building, similar to a strip mall.

A. Yes. Such an adjustment would require the approval of an alternate method that would satisfy the "unlimited area" approval of the existing building as well as any issues germane to the new building. It is assumed that a proposed alternate would incorporate fire wall separations between buildings. As with any alternate method, all aspects of the proposal should be well documented, including methods for access and egress, construction details, and any recorded restrictive covenants. *(Tri-County Building Code Forum, February 18, 2004)*

Q. What are the square-footage requirements for an exercise room that will be used only for that purpose?

A. The panel concluded that 15 square feet for a multi-purpose exercise room — or 50 square feet if the room includes exercise equipment — seemed reasonable, but agreed that the question should be submitted to the statewide code-interpretation committee for further discussion. *(Tri-County Building Code Forum, February 18, 2004)*