



STATE OF WASHINGTON
STATE BUILDING CODE COUNCIL

May 2018
Log No. _____

1. State Building Code to be Amended:

- ☒ International Building Code
- ☐ ICC ANSI A117.1 Accessibility Code
- ☐ International Existing Building Code
- ☐ International Residential Code
- ☐ International Fire Code
- ☐ Uniform Plumbing Code

- ☐ International Mechanical Code
- ☐ International Fuel Gas Code
- ☐ NFPA 54 National Fuel Gas Code
- ☐ NFPA 58 Liquefied Petroleum Gas Code
- ☐ Wildland Urban Interface Code

For the Washington State Energy Code, please see specialized [energy code forms](#)

Section(s): 1604.5.1
(e.g.: Section: R403.2)

Title: Multiple Occupancies Risk Category Assignment
(e.g: Footings for wood foundations)

2. Proponent Name (Specific local government, organization or individual):

Proponent: Washington Association of Building Officials Technical Code Development Committee
(Micah Chappell, chair; Jonathan Siu, technical consultant)

Title:

Date: September 10, 2024

3. Designated Contact Person:

Name: Julius Carreon PE SE

Title: Structural Engineer/ City of Bellevue

Address: 450 110th Ave NE, Bellevue, WA 98004

Office Phone: (425 452-4197)

Cell: ()

E-Mail address: jcarreon@bellevuewa.gov

4. Proposed Code Amendment. Reproduce the section to be amended by underlining all added language, striking through all deleted language. Insert new sections in the appropriate place in the code in order to continue the established numbering system of the code. If more than one section is proposed for amendment or more than one page is needed for reproducing the affected section of the code, additional pages may be attached.

Clearly state if the proposal modifies an existing amendment or if a new amendment is needed. If the proposal modifies an **existing amendment**, show the modifications to the existing amendment by underlining all added language and striking through all deleted language. If a new amendment is needed, show the modifications to the **model code** by underlining all added language and striking through all deleted language.

Code(s) IBC Section(s) 1604.5.1

Enforceable code language must be used.

Amend section to read as follows:

1604.5.1 Multiple occupancies. Where a building or structure is occupied by two or more occupancies not included in the same *risk category*, it shall be assigned the classification of the highest *risk category* corresponding to the various occupancies. Where buildings or structures have two or more portions that are structurally separated, each portion shall be separately classified. Where a separated portion of a building or structure provides required access to, required egress from or shares life safety systems, designated seismic systems, emergency power systems, or emergency and egress lighting systems with another portion having a higher *risk category*, or provides required electrical, communications, mechanical, plumbing or conveying support to another portion assigned to *Risk Category IV*, both portions shall be assigned to the higher *risk category*.

5. Briefly explain your proposed amendment, including the purpose, benefits and problems addressed. Specifically note any impacts or benefits to business, and specify construction types, industries and services that would be affected. Finally, please note any potential impact on enforcement such as special reporting requirements or additional inspections required.

The proposed amendment to Section 1604.5.1 aims to address potential unintended consequences arising from the application of updated defined terms. These terms, highlighted in yellow, replace the phrase “life safety components” used in the previous code cycle.

In the 2024 edition of the IBC, the term “life safety components” has been revised to align better with existing defined terms in Chapter 2. It is now replaced by a more detailed list: life safety systems, designated seismic systems, emergency power systems, and emergency and egress lighting systems. While aligning with defined terminologies can benefit users, including the term “life safety systems” can be problematic. This term encompasses passive systems and devices, such as fire doors. For instance, a fire door in a shared firewall could trigger the entire building to be designed to a higher risk category, which was not the intent for shared life safety components when determining risk categories.

We believe that the defined term “designated seismic systems” already captures the intended application of the section. Therefore, this proposal recommends omitting the term “life safety systems” from the list.

Per ASCE 7 Section 13.1.3, the following list are considered *designated seismic systems*:

1. The component is required to function for life-safety purposes after an earthquake, including fire protection sprinkler systems and egress stairways.
2. The component conveys, supports, or otherwise contains toxic, highly toxic, or explosive substances where the quantity of the material exceeds a threshold quantity established by the Authority Having Jurisdiction and is sufficient to pose a threat to the public if released.

3. The component is in or supported by a Risk Category IV structure or permanently connected by mechanical or electrical systems to a Risk Category IV structure, and the component is required for the continued operation of a structure designated an Essential Facility, or its failure would impair the continued operation of a structure designated an Essential Facility.
4. The component conveys, supports, or otherwise contains hazardous substances and is attached to a structure or portion thereof classified by the Authority Having Jurisdiction as a hazardous occupancy.

IBC Chapter 2 Definitions:

LIFE SAFETY SYSTEMS. Systems, devices and equipment that enhance or facilitate evacuation, smoke control, compartmentation and isolation.

DESIGNATED SEISMIC SYSTEM. Those nonstructural components that require design in accordance with Chapter 13 of ASCE 7 and for which the component importance factor, I_p , is greater than 1 in accordance with Section 13.1.3 of ASCE 7.

6. Specify what criteria this proposal meets. You may select more than one.

- ☐ The amendment is needed to address a critical life/safety need.
- ☒ The amendment clarifies the intent or application of the code.
- ☐ The amendment is needed to address a specific state policy or statute.
- ☐ The amendment is needed for consistency with state or federal regulations.
- ☐ The amendment is needed to address a unique character of the state.
- ☐ The amendment corrects errors and omissions.

7. Is there an economic impact: ☐ Yes ☒ No

If no, state reason:

The code change proposal will not increase or decrease the cost of construction since this is intended to clarify the proper application of the code.

If yes, provide economic impact, costs and benefits as noted below in items a – f.

- a. **Life Cycle Cost.** Use the OFM Life Cycle Cost [Analysis tool](#) to estimate the life cycle cost of the proposal using one or more typical examples. Reference these [Instructions](#); use these [Inputs](#). Webinars on the tool can be found [Here](#) and [Here](#)). If the tool is used, submit a copy of the excel file with your proposal submission. If preferred, you may submit an alternate life cycle cost analysis.

- b. **Construction Cost.** Provide your best estimate of the construction cost (or cost savings) of your code change proposal.

\$[Click here to enter text.](#)/square foot

(For residential projects, also provide \$[Click here to enter text.](#)/ dwelling unit)

Show calculations here, and list sources for costs/savings, or attach backup data pages

- c. **Code Enforcement.** List any code enforcement time for additional plan review or inspections that your proposal will require, in hours per permit application:

- d. **Small Business Impact.** Describe economic impacts to small businesses:

- e. ***Housing Affordability.*** Describe economic impacts on housing affordability:
- f. ***Other.*** Describe other qualitative cost and benefits to owners, to occupants, to the public, to the environment, and to other stakeholders that have not yet been discussed:

Please send your completed proposal to: sbcc@des.wa.gov

All questions must be answered to be considered complete. Incomplete proposals will not be accepted.