



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

Title: Risk Category
(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:

3. Designated Contact Person:

Name: Nathalie Boeholt

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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

Enforceable code language must be used.

Amend section to read as follows:

TABLE 1604.5
RISK CATEGORY OF BUILDINGS AND OTHER STRUCTURES

RISK CATEGORY	NATURE OF OCCUPANCY
I	[no change]
II	[no change]
III	<p>Buildings and other structures that represent a substantial hazard to human life in the event of failure, including but not limited to:</p> <ul style="list-style-type: none"> • Buildings and other structures whose primary occupancy is public assembly with an occupant load greater than 300. • Buildings and other structures containing one or more public assembly spaces, each having an occupant load greater than 300 and a cumulative occupant load of the public assembly spaces of greater than 2,500. • Buildings and other structures containing Group E or Group I-4 occupancies or combination thereof, with an occupant load greater than 250. • Buildings and other structures containing educational occupancies for students above the 12th grade with an occupant load greater than 500. • <u>Group I-2, Condition 1 occupancies with 50 or more care recipients.</u> • <u>Group I-2, Condition 2 occupancies not having emergency surgery or emergency treatment facilities.</u> • Group I-3, Condition 1 occupancies. • Any other occupancy with an occupant load greater than 5,000.^a • Power-generating stations, with individual power units rated 75 MW_{AC} (megawatts, alternating current) or greater, water treatment facilities for potable water, wastewater treatment facilities and other public utility facilities not included in Risk Category IV. • Buildings and other structures not included in Risk Category IV containing quantities of toxic or explosive materials that: <ul style="list-style-type: none"> • Exceed maximum allowable quantities per control area as given in Table 307.1(1) or 307.1(2) or per outdoor control area in accordance with the International Fire Code; and • Are sufficient to pose a threat to the public if released.^b

IV	<p>Buildings and other structures designated as essential facilities, and buildings where loss of function represents a substantial hazard to occupants or users, including but not limited to:</p> <ul style="list-style-type: none"> • Group I-2, <u>Condition 2</u> occupancies <u>having emergency surgery or emergency treatment facilities</u>. • Ambulatory care facilities having emergency surgery or emergency treatment facilities. • Group I3 occupancies other than Condition 1. • Fire, rescue, ambulance and police stations and emergency vehicle garages • Designated earthquake, hurricane or other emergency shelters. • Designated emergency preparedness, communications and operations centers and other facilities required for emergency response. • Public utility facilities providing power generation, potable water treatment, or wastewater treatment. • Power-generating stations and other public utility facilities required as emergency backup facilities for Risk Category IV structures. • Buildings and other structures containing quantities of highly toxic materials that: <ul style="list-style-type: none"> • Exceed maximum allowable quantities per control area as given in Table 307.1(2) or per outdoor control area in accordance with the International Fire Code; and • Are sufficient to pose a threat to the public if released.^b • Aviation control towers, air traffic control centers and emergency aircraft hangars. • Buildings and other structures having critical national defense functions. • Water storage facilities and pump structures required to maintain water pressure for fire suppression.
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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 changes reverse a model code change that places all Institutional Group I-2 facilities in Risk Category IV. This includes all foster care, detoxification facilities, hospice care, hospitals, nursing homes and psychiatric hospitals regardless of the number of care recipients and presence of emergency care.

In the 2021 IBC and earlier editions, Group I-2, Condition 1 occupancies with 49 or less care recipients could be Risk Category II and with 50 or more care recipients, could be Risk Category III. In the 2021 IBC and earlier editions, Group I-2, Condition 2 occupancies not having emergency care could be Risk Category III. Only Group I-2, Condition 2 occupancies having emergency care were required to be Risk Category IV.

The model code change, requiring all nursing homes, foster care and medical care facilities to design and retrofit their buildings to a Risk Category IV level regardless of their number of care recipients or the inclusion of emergency care, will be a significant cost impact. This will prevent such facilities from spending their limited budgets on more essential upgrades such as emergency generators, potable and clear water supplies, medical supplies, emergency planning and operations, etc. As stated above, large hospitals are already required to be designed for Risk Category IV so this change will mostly impact the small to medium size foster care, detoxification, nursing homes, medical and hospice care facilities.

The model code change will also trigger significant structural and non-structural components upgrades in existing facilities, or new facilities moving into existing buildings because the IEBC has provisions for higher snow and wind loads (IEBC 506.5.2) and higher seismic loads (IEBC 503.11, 506.5.3) when the Risk Category increases. This could also affect adjacent structures that give access to a facility that gets categorized into Risk Category IV per IEBC 506.5.4.

Another impact of the model code change will be the requirement for special inspections of non-structural components that become designated seismic systems due to being within a Risk Category IV building and having an I_p of 1.5.

This code proposal reverses the categorization of all I-2 facilities into Risk Category IV to prior code editions, keeping them in RC II, RC III and RC IV based on specific conditions, which has historically been adequate. This will prevent hindering the development, upgrades and creation of these much-needed facilities in our communities.

Note that the ICC Committee vote was 8-6, so not unanimous and they also expressed concerns on how this change may impact smaller facilities.

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:

This proposal reverses the economic impact of the model code change.

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.