**15-006**

**1. State Building Code to be Amended:**

🗷 International Building Code  State Energy Code

ICC ANSI A117.1 Accessibility Code  International Mechanical Code

International Existing Building Code  International Fuel Gas Code

International Residential Code  NFPA 54 National Fuel Gas Code

🗷 International Fire Code  NFPA 58 Liquefied Petroleum Gas Code

Uniform Plumbing Code  Wildland Urban Interface Code

**Section(s): 903.2.3**

**Title: Group E daycare sprinklers**

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

**Proponent: Washington Association of Building Officials Technical Code Development Committee**

**Title: Committee Chairman**

**Date: February 11, 2015**

**3. Designated Contact Person:**

**Name: Lee Kranz**

**Title: Plan Review Supervisor**

**Address: 450 110th Ave. NE – Bellevue, WA 98004**

**Office Phone: 425-452-2732**

**Cell: 206-915-5835**

**E-Mail address: lkranz@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. (Examples on the SBCC [website](https://fortress.wa.gov/ga/apps/sbcc/Page.aspx?nid=191))

**Code(s)** IFC & IBC **Section(s)** 903.2.3

Enforceable code language must be used; see an example [by clicking here](https://fortress.wa.gov/ga/apps/SBCC/File.ashx?cid=1803).

Amend section to read as follows:

**903.2.3 Group E.** An automatic sprinkler system shall be provided for Group E Occupancies.

EXCEPTIONS:

1. Portable school classrooms with an occupant load of 50 or less calculated in accordance with Table 1004.1.2, provided aggregate area of any cluster or portion of a cluster of portable school classrooms does not exceed 5,000 square feet (1465 m2); and clusters of portable school classrooms shall be separated as required by the building code.

2. An automatic sprinkler system is not required in Group E daycare occupancies with an occupant load within the Group E daycare of 50 or less, calculated in accordance with Table 1004.1.2.

1. **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.

**Reason statement**

This code change clarifies that the floor area used to determine the occupant load for a Group E daycare falls within the area of the Group E daycare occupancy only and does not include adjoining areas, as would be the case if “fire area” were included in the code text. This is reasonable because otherwise even very small daycare occupancies in a mixed occupancy building would typically have to either provide two-hour fire barrier separation from adjacent occupancies or the building would have to be retrofitted with an automatic sprinkler system throughout. This would be due to having to include the occupant load of the adjacent spaces as specified in the definition of “fire area”. The separation or sprinkler protection would be a requirement even if the building complied as a non-separated occupancy building per IBC Section 508.3.

The occupant load threshold of 50 for sprinkler protection for Group E occupancies was initially established after adoption of RCW 19.27.113 (see attached). The RCW specified sprinkler protection of E-1 occupancies only which, in the 1991 UBC, applied only to new buildings used for educational purposes through the 12th grade by 50 or more persons for more than 12 hours per week or four hours in any one day. The RCW did not include E-2 (similar to E-1 but < 50 persons) or E-3 (daycare occupancies). The 2003 IBC and subsequent editions of the IBC classify all educational occupancies as E and does not differentiate as the UBC did.

It is important to understand that the original legislation intended that only new K-12 schools with an occupant load of 50 or more persons be provided with sprinkler protection and did not include daycare occupancies. Also, consider that the un-amended IBC does not require fire barrier separation or sprinkler protection for daycare occupancies until the fire area exceeds 12,000 SF. This is approximately 12 times more conservative then what the IBC currently requires. All other aspects of the code must still be met for daycare occupancies (i.e. egress/exiting, fire alarms, maximum allowable area, type of construction, barrier-free access, etc.).

1. **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 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.

1. **Is there an economic impact:**  Yes      No

Explain:

If there is an economic impact, use the Table below to estimate the costs and savings of the proposal on construction practices, users and/or the public, the enforcement community, and operation and maintenance. If preferred, you may submit an alternate cost benefit analysis.

**Alternate cost benefit analysis.**

To require 2 hour fire barriers or sprinkler protection throughout all buildings containing Group E daycare occupancies will add significant cost to small business. Many spaces in mixed use buildings that would otherwise be functional for small daycare operations would not be able to be used due to the additional cost to install fire barriers or sprinkler systems. The cost to install a new sprinkler system in an existing building varies widely but would be approximately $3 per SF. This does not include the cost related to business interruption due to installation of such as system. Adding the need to install new underground water supply will significantly add to the overall cost of compliance.

Fire barriers cost approximately $8.50 per SF and may be more due to interruption of adjacent established businesses. Loss of rent revenue from vacant tenant spaces due to excessive construction costs would also be significant.

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| Building Type | Construction[[1]](#footnote-1) | | Enforcement[[2]](#footnote-2) | | Operations & Maintenance[[3]](#footnote-3) | |
| Costs | Benefits[[4]](#footnote-4) | Costs | Benefits4 | Costs | Benefits4 |
| Residential |  |  |  |  |  |  |
| Single family |  |  |  |  |  |  |
| Multi-family |  |  |  |  |  |  |
| Commercial/Retail |  |  |  |  |  |  |
| Industrial |  |  |  |  |  |  |
| Institutional |  |  |  |  |  |  |

Please send your completed proposal to: [sbcc@ga.wa.gov](mailto:sbcc@ga.wa.gov)

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

1. $ / square foot of floor area or other cost. Attach data. **Construction** costs are costs prior to occupancy, and include both design and direct construction costs

   that impact the total cost of the construction to the owner/consumer. [↑](#footnote-ref-1)
2. Cost per project plan. Attach data. **Enforcement** costs include governmental review of plans, field inspection, and other action required for enforcement. [↑](#footnote-ref-2)
3. Cost to building owner/tenants over the life of the project. [↑](#footnote-ref-3)
4. Measurable benefit. [↑](#footnote-ref-4)