STATE BUILDING CODE INTERPRETATION NO. 13-14


SECTION: 903.2.3, Exceptions 1 and 2

2012 IBC/IFC Section 903.2.3:

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 clusters 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. Group E occupancies with an occupant load of 50 or less, calculated in accordance with Table 1004.1.2.

QUESTION 1: IFC 903.2.3 Exception #1 allows an exception for fire sprinklers for “clusters” of portable classrooms when the cluster is equal to or less than 5,000 square feet. Is it the intent of this code section to aggregate any portable classrooms that are not separated by the minimum separation requirements of the IBC, and the resulting square footage be used to calculate whether fire sprinklers are required?

ANSWER 1: Yes.

QUESTION 2: Is a cluster then defined as any combination of portable classrooms that are not separated by the minimum separation required by the IBC?

ANSWER 2: Yes.
QUESTION 3: Is the space between the portable classrooms included in the area calculation, or just the actual area of each portable classroom?

ANSWER 3: Exception 1 sets the maximum aggregate area of any cluster of portables at 5000 square feet; the reference is to the floor area of the portable and does not include the space between the portables.

QUESTION 4: If the minimum separation distance required in the IBC is provided for any portable classroom (or cluster of classrooms) would this portable classroom (or cluster of portables) be included in an aggregate calculation of square footage to determine whether fire sprinklers are required?

ANSWER 4: No, the 5000 square foot maximum threshold is calculated for any cluster of portables; any portable with the required separation would not be counted in the aggregate area.

QUESTION 5: A question has risen concerning the intent to include portable classrooms in the application of exception #2, and whether the occupant load is for the building or each classroom. Are portable classrooms with an occupant load of greater than 50 required to have fire sprinklers? (Subject to Question 7)

ANSWER 5: Yes, according to the 2012 amendment. However under the 2009/2003 amendment, consistent with the original amendment in 1991, portables were provided an exception from the Group E occupant load designation. The exception provided an aggregate area limit of 5000 square feet.

1991 UBC Language:
State amendment to meet the requirements of SSB5261:

Automatic fire extinguishing systems Section 3802(a) Where required. An automatic fire extinguishing system shall be installed in the occupancies and locations as set forth in this section.

Section 3802 (e) Group E Occupancies.

3. Division 1. An automatic fire-extinguishing system shall be installed in all newly constructed buildings classified as E-1 Occupancies constructed after July 1, 1992.

Exception: Portable school classrooms, provided;
A. Aggregate area of clusters of portable school classrooms does not exceed 5,000 square feet; and
B. Clusters of portable school classrooms shall be separated as required in Chapter 5 of the Building code.
QUESTION 6: Does exception #2 apply to portable classroom buildings?

ANSWER 6: No. Exception #1 is specific to portables. The 2012 amendment requires both that the occupant load (for each portable) is 50 or less, as in exception #2, and that a cluster of portables does not exceed 5000 square feet. Previous amendments required only that 5000 sq ft “aggregate area of clusters” not be exceeded. The original amendment implies that a cluster is more than one portable, but a minimum size was not identified. The SBCC created the definition in 1991 based on a typical portable unit of that era. The State Board of Education, Fire Protection Policy Board and the OSPI reviewed the amendment and agreed. The definition was taken from the Board of Education rules.

QUESTION 7: Is the occupant load of individual classrooms aggregated within one portable building?

ANSWER 7: For a situation in which more than one portable classroom is connected together, the separation of the resulting construction can be accomplished using fire barriers (as allowed per IFC 901.4.3) to reduce the occupant loads so that fire sprinklers are not required. It should be noted that this creates a “cluster” in itself so that the total of all of the area in one cluster cannot exceed 5,000 square feet with fire sprinklers being required.

SUPERSEDES: None

REQUESTED BY: Redmond Fire Department