BC BUILDING CODE INTERPRETATION COMMITTEE

A joint committee with members representing AIBC, APEGBC, BOABC, POABC

File No: 12-0041 INTERPRETATION Page 1 of 2

| Interpretation Date: | September 16, 2014 |
|-----------------------------|--|
| Building Code Edition: | BC Building Code 2012 |
| Subject: | Fire Separation of Service Room containing life safety equipment |
| Keywords: | Fire separation, service room |
| Building Code Reference(s): | 3.2.4.11.(2)(b), 3.6.2.1.(1) to (8) |

Question:

If service equipment, such as sprinkler valves and fire alarm components, are located in a service room within a floor area that is sprinklered throughout, is a fire separation required for such a service room?

Interpretation:

No.

Sentences 3.6.2.1.(1) to (6) determine when a service room is required, and when the perimeter walls of a service room require a fire separation based on the hazard presented by the equipment located within the service room. The requirements in these sentences apply to both sprinklered and unsprinklered floor areas.

Sentence 3.6.2.1.(7) states that in a storey that is not sprinklered throughout, a fire separation with a 1 hour fire resistance rating is required around a service room containing equipment other than that addressed in Sentences (1) to (6); however, Sentence 3.6.2.1.(8) waives the requirement for such a fire separation if the service room contains a limited quantity of service equipment, and the service equipment neither constitutes a fire hazard nor is essential to the operation of fire safety systems in the building. Both sentences only apply to service rooms in a storey that is not sprinklered throughout.

In a storey that is sprinklered throughout, a service room containing equipment essential to the operation of fire safety systems in the building, and such equipment is not listed in Sentences (1) to (6), no fire separation is required. If the fire safety equipment is listed in Sentences (1) to (6), such as a diesel emergency power generator or dialectric liquid-filled electrical equipment, a 1 hour fire separation is required.

It is concluded that in a floor area that is sprinklered throughout, the perimeter walls of a service room containing service equipment such as sprinkler valves and fire alarm components, need not be constructed as fire separations.

R. J. Light, Committee Chair

The views expressed are the consensus of the joint committee with members representing AIBC, APEGBC, BOABC, and POABC, which form the BC Building Code Interpretation Committee. The purpose of the committee is to encourage uniform province wide interpretation of the BC Building Code. These views should not be considered as the official interpretation of legislated requirements based on the BC Building Code, as final responsibility for an interpretation rests with the local *Authority Having Jurisdiction*. The views of the joint committee should not be construed as legal advice.

1107875 / 2014-09-20

BC BUILDING CODE INTERPRETATION COMMITTEE

A joint committee with members representing AIBC, APEGBC, BOABC, POABC

File No: 12-0041 INTERPRETATION Page 2 of 2

If an electrical room is unsprinklered as permitted by NFPA 13, the following provisions are required:

- · The room is dedicated to electrical equipment only,
- Only dry-type electrical equipment is used,
- Equipment is installed in a 2-hour fire-rated enclosure including protection of penetrations, and
- No combustible storage is permitted to be stored in the room.

If such electrical room is unsprinklered, Clause 3.2.4.11.(2)(b) would require a fire detector within such room. This is commonly achieved with a smoke detector with separate annunciation at the fire alarm annunciator panel.

Note – this is an update to Interpretation 06-0043 to specifically address unsprinklered electrical rooms.

R. J. Light, Committee Chair

The views expressed are the consensus of the joint committee with members representing AIBC, APEGBC, BOABC, and POABC, which form the BC Building Code Interpretation Committee. The purpose of the committee is to encourage uniform province wide interpretation of the BC Building Code. These views should not be considered as the official interpretation of legislated requirements based on the BC Building Code, as final responsibility for an interpretation rests with the local *Authority Having Jurisdiction*. The views of the joint committee should not be construed as legal advice.