BC BUILDING CODE INTERPRETATION COMMITTEE

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

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| Interpretation Date: | January 27, 2015 |
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| Building Code Edition: | BC Building Code 2012 |
| Subject: | Silencing of Interconnected Smoke Alarms |
| Keywords: | Interconnected smoke alarm, silencing, dwelling unit, secondary suite |
| Building Code Reference(s): | 9.10.19.1., 9.10.19.5, 9.10.19.6.(1), 9.37.2.19 |

Question:

All smoke alarms within a dwelling unit are required to be interconnected and each of the smoke alarm shall have an automatic resettable silencing feature (hush button).

- 1. When the silencing button of the activated smoke alarm is pressed, is it required to silence all the smoke alarms on that interconnection?
- 2. Can the alarm be silenced from any one of interconnected smoke alarms?
- 3. Should the interconnected photoelectric smoke alarms as required by Article 9.37.2.19 between the principal dwelling and the secondary suite be silenced from any one of the two?

Interpretation:

1. Yes.

Sentence 9.10.19.1.(1) requires that smoke alarms conforming to CAN/ULC-S531 shall be installed in a dwelling unit.

Sentence 9.10.19.5.(1) requires all the smoke alarms within a dwelling unit be interconnected so that the activation of one alarm will cause all alarms within the dwelling unit to sound.

Sentence 9.10.19.6.(1) requires each interconnected smoke alarm to have manually operated device (hush button) to silence the signal emitted by the smoke alarm for a period of not more than 10 minutes and after which the smoke alarm will reset and sound again if the level of smoke in the vicinity is sufficient to re-actuate it.

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.

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If the smoke continues to build from a real fire while the alarm is in hush mode, the smoke will override the silence feature and the smoke alarm will resound. This is a convenient way to deal with nuisance alarms, such as those caused by burning toast or opening smoky ovens, and avoid having to disabling the alarm by disconnecting the power source.

There is no language in the code to address the silencing of all the smoke alarms on that interconnection; however, the intent is to be able to silence all the smoke alarms on the same interconnection if the hush button of the activated smoke alarm is pressed.

Generally the green LED on the smoke alarm is on constantly on standby mode. When a smoke alarm is activated by smoke the green LED will flash red and it sends a 9 volt signal to activate the alarm on all the interconnected smoke alarms. The remaining interconnected smoke alarms will sound but the green LED would not turn red.

When the hush button is pressed on the activated smoke alarm the flashing red LED will turn green. The hush feature has the capability of temporarily desensitizing the smoke alarm circuit and the green LED will flash for about 10 minutes. It will silence the rest of the interconnected smoke alarms. When the unit returns to normal operation after being in hush mode, it will sound the alarm again if smoke is still present.

2. No.

If the smoke alarm in the basement is activated by smoke pressing the hush button of the non-initiated smoke alarms on the interconnection (say at the top storey) would not silence all the alarms. This will prevent the occupants on the other floors away from the fire origin to silence the entire alarm system without knowing the fire situation.

3. No.

The above interpretations should apply to the two interconnected photoelectric smoke alarms in the principal dwelling and in the secondary suite as required by Article 9.37.2.19. If the photoelectric smoke alarm in the principal dwelling is activated the other photoelectric smoke alarm in the secondary suite will also sound. Pushing the hush button on the activated alarm located in the principal dwelling should silence both alarms. Pushing the hush button on the alarm in the secondary suite should not be able to silence both alarms since the occupants in the secondary suite would not know the fire condition in the principal dwelling.

R. J. Light, Committee Chair

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