

2018 British Columbia Fire Code Public Review of Proposed Changes



PROPOSED CHANGE: Smoke Alarm Standard

CHANGE NUMBER: 2018-BCFC-03-Smoke Alarms

CODE REFERENCE: 2015 National Fire Code - Division B – Table 1.3.1.2., Article 2.1.3.3.

DESCRIPTION OF THE PROPOSED AMENDMENT:

It is proposed to further clarify that the British Columbia Fire Code (BCFC) is not intended to retroactively apply current requirements for smoke alarms to existing buildings.

PROBLEM/BACKGROUND:

The BCFC is based substantially on the model National Fire Code of Canada (NFC). The NFC is updated about every five years and British Columbia adopts most of the NFC requirements into the next edition of the BCFC. The 2018 BCFC will be based on the 2015 NFC with some changes specific to British Columbia.

The wording of this BCFC requirement has caused some confusion regarding the application of the BCFC to existing buildings.

The code language shown below is the proposed final code language that will appear in the 2018 BCFC. Comments submitted should focus on the changes noted. Changes from the 2012 BCFC to the 2015 NFC are not identified.

2018 PROPOSED BRITISH COLUMBIA CODE LANGUAGE (~~Deleted text~~ / ~~Added text~~):

Table 1.3.1.2. Documents Referenced in the British Columbia Fire Code Forming Part of Sentence 1.3.1.2.(1)			
Issuing Agency	Document Number⁽¹⁾	Title of Document⁽²⁾	Code Reference
ULC	CAN/ULC-S531-14	Smoke Alarms	2.1.3.3.(1)
ULC	CAN/ULC-S553-14	Installation of Smoke Alarms	2.1.3.3.(3)

2.1.3.3. Smoke Alarms

(See Note A-2.1.3.3.)

1) *Smoke alarms* ~~conforming to CAN/ULC-S531, "Smoke Alarms," shall be installed in each dwelling unit and, except for care, treatment or detention occupancies required to have a fire alarm system, in each sleeping room not within a dwelling unit.~~ ~~and the installation of smoke alarms shall conform to the British Columbia Building Code.~~

~~2) Reserved. *Smoke alarms within dwelling units shall be installed between each sleeping area and the remainder of the dwelling unit, and where the sleeping areas are served by hallways, the smoke alarms shall be installed in the hallways.*~~

~~3) Reserved. *Smoke alarms shall be installed in conformance with CAN/ULC S553, "Installation of Smoke Alarms."*~~

4) *Smoke alarms* are permitted to be battery operated in

- a) a *building* that is not supplied with electrical power,
- b) a *dwelling unit* permitted to be constructed before March 31, 1979, or
- c) locations within a *dwelling unit* where *smoke alarms* were not required by the British Columbia Building Code at the time of construction or alteration of the *dwelling unit*.¹

A-2.1.3.3.

It is not intended that existing buildings or their systems and components be upgraded with each new edition of the British Columbia Building Code, unless the requirements apply per Article 1.1.1.1. of Division A of the British Columbia Building Code. For example, newly installed or replaced smoke alarms must conform to the requirements of the current edition of the British Columbia Building Code, but other existing smoke alarms that complied when the building was constructed or previously altered are not necessarily required to be replaced as a result. The extent to which the British Columbia Building Code applies in such circumstances will be determined based on the effect of newly installed or replaced smoke alarms in relation to the existing smoke alarms.

RATIONALE FOR CHANGE:

To clarify the application of the BCFC's requirements for smoke alarms.

JUSTIFICATION/EXPLANATION:

The BCFC points to the British Columbia Building Code (BCBC) (Article 1.1.1.1. of Division A) to determine when requirements for smoke alarms apply. It is not intended that these requirements be applied retroactively to existing buildings that do not conform to the current edition of the BCBC, unless the BCBC applies per Article 1.1.1.1. of Division A. Typically, this is when the building is renovated or is subject to an addition, or when building systems and components are voluntarily replaced.

However, Sentence 2.1.3.3.(1) as written, has been misinterpreted to apply to, and require the upgrading of existing smoke alarms. The proposed changes clarify:

- that Article 1.1.1.1. of Division A of the BCBC determines when requirements apply to existing buildings;
- it is not the intent of the BCFC to require existing smoke alarms be removed and replaced to current standards;

¹ Sentence (2) is unique to the British Columbia Fire Code and is intended to be carried over in to the 2018 edition. This sentence has been included for reference, but is not subject to this public review.

- the BCBC contains the requirements for smoke alarms and their installation. The BCBC references the CAN/ULC S531 standard for smoke alarms and CAN/ULC S553 standard for their installation. The BCBC also defines where smoke alarms are required. This is repeated in the BCFC, but not completely, which may cause confusion on where smoke alarms are required;
- the intent of the BCFC is to ensure the effectiveness of smoke alarms, whether they conform to the current or previous editions of the BCBC.

Proposed Code Change