

BC Fire Code Requirements for Smoke Alarms



On March 25, 2010, Minister of Housing Rich Coleman announced new BC Fire Code requirements related to smoke alarms to increase public safety and more closely harmonize with the National Fire Code of Canada.

Smoke alarms are cost effective devices that can alert occupants of fire at its early stages, which saves lives and prevents injuries. Smoke alarm requirements were introduced into the BC Building Code in 1979, and have been mandatory in all dwellings and sleeping accommodation rooms (i.e. hotels, motels) since then. BC's building code requirements are the same as those found in the model National Building Code of Canada. However, the requirements for smoke alarms in the BC Fire Code differ from those in the National Fire Code of Canada in the scope of application. Until now, the BC Fire Code required smoke alarms in all existing hotels and public buildings, but did not require them in all existing dwelling units, such as private homes. Improving public safety by extending the BC Fire Code smoke alarm requirements to private dwellings, including those constructed before March 31, 1979, will more closely harmonize the BC Fire Code with the National Fire Code of Canada.

The National Fire Code allows for battery-operated smoke alarms. BC will allow battery operated smoke alarms in limited circumstances. Battery-operated smoke alarms may be less reliable than alarms which are hard wired to a building's electrical system because they require occupant maintenance and are more easily disabled intentionally or inadvertently. However, the significant cost of installing smoke alarms integrated with a building's electrical system is likely to discourage their installation in older buildings. Compliance would be difficult to monitor and occupants may continue to be at greater risk. The change permits battery operated smoke alarms in those dwelling units constructed prior to the BC Building Code's mandatory requirement for their installation in dwelling units built before March 31, 1979. Battery operated smoke alarms will also be permitted in buildings that are not connected to electrical power.

Revisions to section 2.1.3.3 of the British Columbia Fire Code

1. *Smoke alarms* conforming to CAN/ULC-S531, "Smoke Alarms," shall be ~~provided in all hotels and public buildings as defined in the Act, where required by and in conformance with the British Columbia Building Code~~ **installed in each dwelling unit and, except for care or detention occupancies required to have a fire alarm system, in each sleeping room not within a dwelling unit.**
2. *Smoke alarms* ~~may be battery operated where permitted by the authority having jurisdiction~~ **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. *Smoke alarms* shall be installed in conformance with CAN/ULC S-553, "Installation of Smoke Alarms".
4. *Smoke alarms are permitted to be battery operated in*
 - a) a dwelling unit constructed before March 31, 1979, or
 - b) an existing building not supplied with electrical power.

The Changes to the BC Fire Code will require an amendment to the BC Building Code, Division A, Section 1.1.1.1.k) to avoid a conflict between the two codes.

ADD

Division A, 1.1.1.1 Application of this Code

2) This Code does not apply to:

i) *smoke alarms installed in conformance with Division C, section 2.1.3.3 of the British Columbia Fire Code.*

The new requirements in the BC Fire Code come into effect on May 1, 2010. Owners of dwelling units built before March 31, 1979 are encouraged to install smoke alarms in accordance with the new requirements by that date in order to increase occupant safety.