

**Interconnection of Smoke Alarms in Existing Secondary Suites**

**Issue:**

The Chief Fire Administrator has been made aware of the potential difficulty and cost to install and interconnect hard-wired smoke alarms in some existing secondary suites.

**Background:**

When requirements for existing secondary suites were being compiled it was determined that a reliable power source (110 volt hard wired) and interconnection of smoke alarms were two items of major concern that could not be compromised. It was additionally recognized that the currently available battery powered radio frequency interconnected smoke alarms did not meet the intent of Alberta Fire Code (AFC), Division B, Article 2.16.2.15, for use in existing secondary suites in that the power source may be removed by the occupant thus reducing or eliminating this life safety component from some or all of the building.

Since the introduction of the existing secondary suite requirements 110 volt hard wired smoke alarms with radio frequency interconnect, certified to conform with CAN/ULC S531, "Smoke Alarms", are now available on the market with many having battery backup. These devices provide the reliability of power supply and the convenience of radio frequency interconnection which meets the intent of the AFC to ensure compliance of existing secondary suites.

**Code Requirements:\***

**Section 2.16. Secondary Suites**

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**2.16.2.15. Smoke Alarms\***

1) *Smoke alarms* conforming to CAN/ULC-S531, "Smoke Alarms," installed in accordance with Subsection 9.10.19. of Division B of the Alberta Building Code 2006 shall be provided in each *dwelling unit*.

2) *Smoke alarms* shall be installed by permanent connections to an electrical circuit and wired so that activation of one *smoke alarm* will cause all alarms within both *dwelling units* to sound.

3) *Smoke alarms* shall be installed in areas that are common to both *dwelling units* and connected in conformance with Sentence (2).

**2.16.2.16. Inspection, Testing and Maintenance of Smoke Alarms**

1) *Smoke alarms* required by this Section shall be inspected, tested and maintained in conformance with the manufacturer's instructions.

\*All references are to the Alberta Fire Code, Division B, unless otherwise stated

**Intent:**

The appropriate installation of interconnected hard wired smoke alarms meeting the requirements of CAN/ULC-S531, "Smoke Alarms," in a building with an existing secondary suite in consultation and discussion with the authority having jurisdiction, and maintaining them in accordance with the Alberta Fire Code, Division B, Article 2.16.2.16., will result in the owner meeting the intent of the Alberta Fire Code 2006 regarding smoke alarms for this application.

The interconnection of the above smoke alarms may be hard wired or wireless.

Requests for further information can be obtained by calling 1-866-421-6929 or visit [www.municipalaffairs.alberta.ca](http://www.municipalaffairs.alberta.ca)