



# SMOKE ALARMS FOR YOUR HOME

Find out why you need smoke alarms in your home, what kind you need, and where to put them.

## Smoke alarms save lives

Your chances of surviving a home fire may be significantly increased if you have working smoke alarms.

Fires can spread quickly. In as little as three minutes, a small fire can erupt into a big fire called a flashover – when a room gets so hot everything suddenly bursts into flames.

Smoke alarms give an early warning of smoke and fire danger, which can increase your chance of escape.

Smoke alarms should be properly installed, tested and maintained.

## OVERVIEW

### Standards and locations

Smoke alarms must conform to CAN/ULC-S531, “Smoke Alarms,” and must be provided in:

- each home
- each bedroom or sleeping room ancillary spaces
- common spaces in a house with a secondary suite

If power supply to the smoke alarm is cut, the smoke alarm should have a battery to provide power to the smoke alarm for up to seven days in the normal condition, followed by four minutes of alarm.

### Installation of smoke alarms

Smoke alarms must:

- be installed in conformance with CAN/ULC-S553, “Installation of Smoke Alarms”
- be installed with permanent connections to an electrical circuit
- have no disconnect switch between the overcurrent device and the smoke alarm



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### LOCATION OF SMOKE ALARMS

Smoke alarms within homes must be installed on or near the ceiling. Refer to the manufacturer's installation instructions.

Sufficient smoke alarms must be installed so that there is at least one smoke alarm on each storey, including basements.

A smoke alarm must be installed on any storey of a home, in every sleeping room and in a location between the sleeping rooms and the remainder of the storey. If the sleeping rooms are served by a hallway, the smoke alarm must be located in the hallway.

Where a choice arises about where to locate the required smoke alarm or alarms, one should be located as close as possible to a living area, provided the requirements to bedrooms are also satisfied.

### INSTALLATION OF SMOKE ALARMS

#### Interconnection of smoke alarms

If more than one smoke alarm is required in a home, it should be interconnected so if one alarm sounds, others will be activated, too.

Smoke alarms in a house with a secondary suite should be interconnected so that activation of one alarm causes all alarms in the house with a secondary suite to sound.

#### Two-storey split-level home

A smoke alarm is not required on each level in a split-level home because each level does not count as a separate storey. Determine the number of storeys in a split-level home and which levels are part of which storey:

- establish grade, which is the lowest of the average levels of finished ground adjoining each exterior wall of the house
- identify the first storey, which is the uppermost storey, having its floor level not more than two m above grade
- identify the basement, which is the storey or storeys located below the first storey
- identify the second storey and, where applicable, the third storey

As a minimum, one smoke alarm must be installed in each storey, preferably on the upper level of each one. However, when the home contains more than one sleeping area, an alarm must be installed to serve each area.

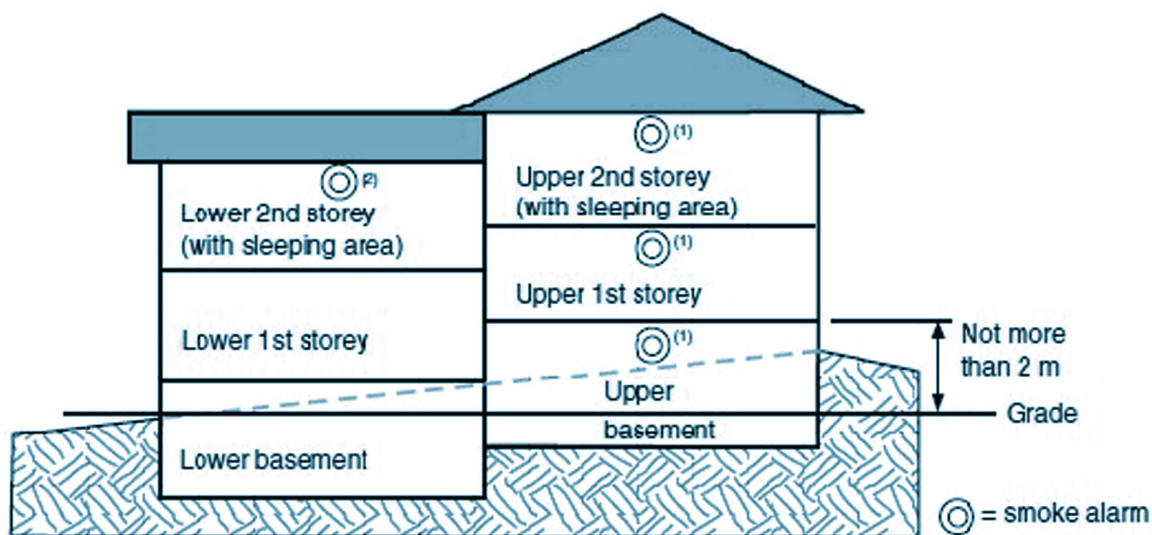
Where the sleeping areas are on two levels of a single storey in a split-level home, an additional smoke alarm must be installed so that both areas are protected.



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### Existing homes

Redevelopment of your home may require the installation of additional smoke alarms that may have to be permanently wired to the home electrical system.

Homes that have existing smoke alarms hardwired to an electrical circuit, as required above, cannot be replaced with a battery-powered alarm. Any replacement must be comparable to the original or better.

Smoke alarms installed in addition to hardwired alarms may to be battery operated.

Contact your local municipality development office or building safety codes officer for more information related to redevelopment requirements for the installation of smoke alarms in any existing dwelling unit. Permits may be required.

### MAINTENANCE AND NUISANCE ALARMS

Where instructions are necessary to describe the maintenance and care required for smoke alarms, instructions shall be posted in a location where they will be readily available to the occupants for reference.

Sometimes a smoke alarm may sound if there is no smoke for a few reasons:

- Improper location – installing an alarm in the kitchen or other high-smoke or steam- area will lead the alarm to sound.
- Wear and tear – a smoke alarm may wear out. Smoke alarms should be replaced every 10 years or as per the manufacturer's recommendations.
- Low battery power – a warning may sound if batteries run low in an alarm. The manufacturer's specifications should be reviewed for the required maintenance and replacement of batteries.



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### Contact

**Community and Technical Support branch of Municipal Affairs:**

Hours: 8:15 am to 4:30 pm (open Monday to Friday, closed statutory holidays)

Email: [safety.services@gov.ab.ca](mailto:safety.services@gov.ab.ca)

Toll free: 1-866-421-6929

**Please contact your local Fire Department for any questions regarding this Safety Tip.**

