

## Smoke Alarm Home Installation

### Alberta's Safety System

Alberta Municipal Affairs works in partnership with the Safety Codes Council, municipalities, corporations, agencies, and other organizations, to deliver effective community-focused public safety programs and services to Albertans.

**Once a fire starts it can spread rapidly. In as little as three minutes, a small fire can erupt into a “flashover” (when a room gets so hot everything suddenly bursts into flames).**

**Your chances of surviving a home fire may be significantly increased if a working smoke alarm is present in your home. Smoke alarms, when properly installed, tested and maintained, provide an early warning of smoke and fire danger, which can increase your chance of escape.**

### Required Smoke Alarms

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

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

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Smoke alarms shall be installed in conformance with *CAN/ULC-S553*, “*Installation of Smoke Alarms*” and:

- be installed with permanent connections to an electrical circuit; and
- have no disconnect switch between the overcurrent device and the smoke alarm.

### Importance of permits

The *Safety Codes Act* requires that permits in Alberta be obtained prior to commencing work on any buildings covered by the Alberta Building and Fire Codes, the Canadian Electrical Code, the Gas Code, or the National Plumbing Code.

Permits are part of a process to access compliance to a minimum standard of construction safety for the benefit of all Albertans. If construction projects are undertaken without required permits, the owner may be subject to penalties and extra costs incurred to bring a project into compliance.

As the property owner, you are responsible to obtain all necessary permits. A contractor can look after this on your behalf; however, you should specify in writing, who will get the required permits. Some jurisdictions may require a letter of authorization before a contractor can apply for permit(s) on your behalf.

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**IMPORTANT:** In the case where regular power supply to the smoke alarm is interrupted, the smoke alarm shall be provided with a battery as an alternative power source that can continue to provide power to the smoke alarm for a period of no less than 7 days in the normal condition, followed by 4 minutes of alarm.

### Smoke Alarm Maintenance and Care

The manufacturer's specifications should be reviewed for the required maintenance and replacement of batteries. 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.

### Location of Smoke Alarms

Sufficient smoke alarms shall be installed so that:

- there is at least one smoke alarm on each storey, including basements.
- on any storey of a home containing sleeping rooms, a smoke alarm must be installed:
  - in each sleeping room; and
  - in a location between the sleeping rooms and the remainder of the storey, and if the sleeping rooms are served by a hallway, the smoke alarm shall be located in the hallway.

**NOTE:** Smoke alarms within homes shall be installed on or near the ceiling. Refer to the manufacturer's installation instructions.

### Benefits of getting a permit

When you get a permit, certified safety codes officers (inspectors) will:

- give you expert advice,
- review your plans to find any potential problems,
- inspect your project, and
- make sure your project meets the Alberta Building Code.

Making changes at the planning stage can save you money, rather than making costly corrections after construction. Certified safety codes officers will give you an inspection report(s) and follow-up on deficiencies to make sure your project is safe and in compliance.

### Where do you get a permit?

Permits are available through municipalities that administer the *Safety Codes Act* and through agencies that provide inspection services on behalf of municipalities or the province. If you don't know whether your municipality issues permits, contact the Alberta Safety Codes Authority (ASCA) at 1-888-413-0099 or visit [safetycodes.ab.ca/ASCA](http://safetycodes.ab.ca/ASCA).

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Where a choice arises as to where on a storey 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.

### Interconnection of Smoke Alarms

Where more than one smoke alarm is required in a home, the smoke alarm shall be wired so that the activation of one alarm will cause **all** alarms within the home to sound.

Smoke alarms in a house with a secondary suite shall be wired so that the activation of any one smoke alarm causes **all** smoke alarms within 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 as each level does not count as a separate storey. You may determine the number of storeys in a split-level home and which levels are part of which storey as follows:

- 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 2 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 is required to be installed in each storey, preferably on the upper level of each one. As noted above, 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.

### Applying for a building permit

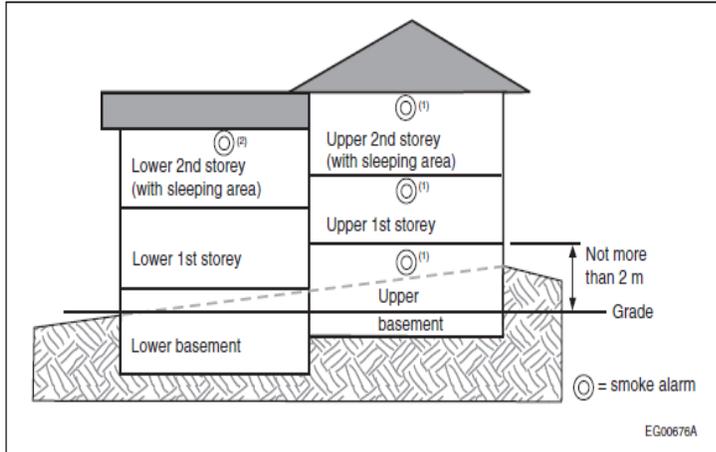
When applying for a building permit, you must submit the following information to your local authority:

- details of the project or occupancy to be covered by the permit.
- details of the land on which the project will be located, including a description that will easily identify and locate the building lot.
- plans, specifications and other documents showing, in detail, the proposed occupancy of all parts of the building, state the value of the proposed project.
- state the names, addresses and phone numbers of the project owner, designer and contractor.

### Hire qualified tradespeople

Specific trades such as electricians, plumbers and gasfitters must be certified to work in Alberta. To find out if the tradespeople you are hiring need to be certified in Alberta or to verify an individual's status, you may contact *The Apprenticeship and Industry Training* office by calling 310-0000.

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## Existing Homes

Redevelopment of an existing 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 operated alarm. Any replacement must be of a type comparable to the original or better.
- Smoke alarms installed in addition to hardwired alarms are permitted to be battery operated.

**Please contact your local Building Safety Codes Officer for further information related to redevelopment requirements for the installation of smoke alarms in any existing dwelling unit.**

## Nuisance alarms

- **Improper location:** Installing an alarm in the kitchen or other high smoke or steam area will induce a nuisance activation of the alarm.
- **Wear and tear:** A smoke alarm may wear out, regardless of type or quality. Smoke alarms should be replaced every 10 years or as per the manufacturer's recommendations.

*These brochures may be updated periodically. They have no legal status and cannot be used as an official interpretation of the various bylaws, codes and regulations currently in effect.*

### More information:

#### Alberta Municipal Affairs

Community & Technical Support  
16<sup>th</sup> Floor, Commerce Place  
10155 - 102 Street  
Edmonton, Alberta T5J 4L4



Toll-free: 1-866-421-6929



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



[municipalaffairs.gov.ab.ca](http://municipalaffairs.gov.ab.ca)

#### Safety Codes Council

Suite 500  
10405 Jasper Avenue  
Edmonton, Alberta T5J 3N4



Toll-free within Alberta:

1-888-413-0099

1-888-424-5134



[webmaster@safetycodes.ab.ca](mailto:webmaster@safetycodes.ab.ca)



[safetycodes.ab.ca](http://safetycodes.ab.ca)

#### Alberta Safety Codes Authority (ASCA)



Toll-free within Alberta:

1-888-413-0099



[askasca@safetycodes.ab.ca](mailto:askasca@safetycodes.ab.ca)

### Call (or click) before you dig!

**Alberta One Call** will locate utility lines on your property. Call or click before you start any project that involves digging in your yard. Alberta One Call will locate gas, water, electricity, drainage, telephone and cable TV lines. Allow at least two full working days for Alberta One Call to locate your utility lines.