

Mandatory Smoke Detectors

We have all heard a fair amount about the smoke alarm laws having that came into effect March 1, 2006. In Ontario it is now the law that all residential buildings have working fire alarms on every level and violators are facing some pretty stiff penalties.

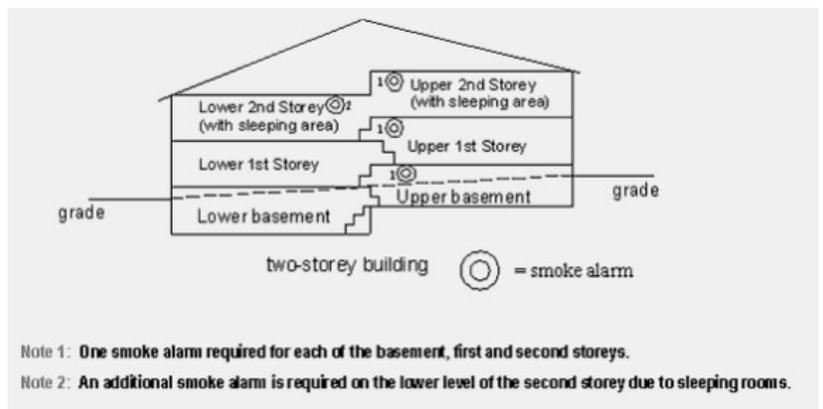
There are a few items to keep in mind with this law:

- It is still recommended by Elementary Property Inspections that smoke detectors are installed within 5 feet of bedroom doors – all bedroom doors, homeowners should add additional detectors if one or two doors are further than this.
- As we all know, smoke rises– so these detectors should be on or near the ceiling (CO detectors ideally at around knee or plug in level)
- There are 2 types of detectors – ionization and photoelectric – both are very effective in providing early warning of the smoke
- Detectors are now required to be installed on each storey of the home – According to the Office of the Ontario Fire Marshall split level homes do not require an alarm on each level, only each storey (plus all areas with bedrooms). The office defines a storey as follows: “To determine the number of storeys in a dwelling unit, and thus determine the number of smoke alarms required, it is necessary to first identify the “first storey” of the dwelling unit.

The Fire Code defines the “first storey” as meaning the storey with its floor closest to grade and having its ceiling more than 1.8 meters above grade. Once the first storey has been identified, it is then possible to identify the basement.

As illustrated below, a storey can consist of more than one level. Only one smoke alarm is required to be installed in each storey (see note 1). However, when a dwelling unit contains multiple sleeping areas, a smoke alarm must be installed to protect each separate sleeping area. This may necessitate additional smoke alarms on some levels of a split-level home (see note 2).

The following illustrated example of a split-level dwelling unit is provided for clarification." It is recommended that when a storey includes 2 levels, the alarm be placed on the higher ceiling of the two.



- Smoke detectors have a life span – the units themselves should be replaced every 10 years
- Homeowners are not allowed to replace hard wired detectors with battery powered units – as these units may have been required by the Building code at the time of installation. All units to be replaced must be replaced with equal or better units. It is possible, however, to supplement (or add) detectors with battery powered units.
- Crawl spaces do not require detectors (if there is no finished floor)
- It is the landlord’s responsibility to install and maintain any smoke detectors – to this end, it is illegal for tenants to remove the batteries or otherwise dismantle the units

It is expected that first time offences will be treated with leniency and issued a \$235 ticket. However, this is not guaranteed, and individuals can be fined up to \$50,000 and up to a year in jail. Corporations can face up to \$100,000 in fines. This is a hot topic for upcoming inspections, remember to be sure all detectors are within 5 feet of bedroom doors, there is no real downside to being extra cautious here.

SMOKE ALARM FACTS:

- Over 90% of residential fires in Ontario are preventable.
- An injury is reported in 1 out of every 17 preventable home fires, and not all injuries are reported.
- 1 out of every 100 preventable residential fires is a fatal fire. Research from 1995 to 2004 regarding preventable, fatal residential fires in Ontario indicates:
 - 35% of fires – a smoke alarm was present and operated.
 - 25% of fires – a smoke alarm was present and did not operate.
 - 21% of fires – no smoke alarm was present.
 - 19% of fires – smoke alarm operation was undetermined.



This research pertains to 609 fatal fires that occurred in Ontario from 1995 to 2004. In about 50 per cent of fatal home fires, there was no smoke alarm warning. In the majority of these fatal home fires, it was determined a dead battery or no battery installed was the reason for the smoke alarm failing to activate.

Statistics also indicate the holiday season between November and the end of January to be the highest point of the year for fires and related fatalities. From November 1, 2004 to January 31, 2005, alone there were 35 fire fatalities in Ontario. This highlights the need to exercise extra caution during the holiday season when we may be most distracted. (Statistical Source: Office of the Ontario Fire Marshal)