

Why are smoke alarms important?

People seem to forget just how important smoke alarms are. These alarms can provide an early warning by detecting smoke from a fire so that people can get out of a fire affected residence safe and unharmed. Without these devices present and functioning properly, the chances of injury and fatalities increase dramatically.

What type of smoke alarms are required in existing dwellings?

The smoke alarm that a property is required to have depends on the age or purchase date of that property.

If the date of purchase occurred **before the first of February 1998** then you need a smoke alarm with a replaceable battery.

If the date of purchase occurred anytime **after the first of February 1998** then a hard wired smoke alarm must be installed no more than 6 months after the transfer of the title.

The smoke alarm must be a smoke alarm that is mains powered with 240 volts or a battery powered smoke alarm with a lifespan of 10 years that is permanently connected.

Finally, if a home was built in **January of 1995** or any time after that then it needs to have a smoke alarm that is mains powered with 240 volts.

Where there are two or more smoke detectors required they must be interconnected.

What types of buildings (building classifications) are required to have smoke alarms?

Class 1: a single dwelling being;

- (a) a detached house; or
- (b) one of a group of two or more attached dwellings, including a row house, terrace house, town house or villa unit; or
- (c) a boarding house, guest house, hostel or the like— with a total area of all floors not exceeding 300 m² and in which not more than 12 persons would ordinarily be resident;

Class 2: a building containing 2 or more sole-occupancy units each being a separate dwelling.

Class 3: a residential building, other than a building of Class 1 or 2, which is a common place of long term or transient living for a number of unrelated persons, including—

- (a) a boarding house, guest house, hostel, lodging house or backpackers accommodation; or
- (b) a residential part of a hotel or motel; or school; or
- (c) accommodation for the aged, children or people with disabilities.

Class 4: a dwelling in a building that is Class 5, 6, 7, 8 or 9 if it is the only dwelling in the building.

Note: Larger buildings of these types will require a commercial type fire alarm system.

What are the requirements for smoke alarms in new building work?

As of the **1 May 2014**, The Building Code of Australia, requires where more than one smoke alarm is installed throughout new Class 1 dwellings, within sole-occupancy units of Class 2 or 3 buildings and in a Class 4 part of a building (domestic houses, apartments, flats etc), that these smoke alarms be compliant with AS 3786 and where more than one is installed that they are interconnected.

This means that when one alarm is activated, it will activate all other alarms in the occupancy.

Where and how should these smoke alarms be installed?

From 1 May 2014, smoke alarms will be required to be interconnected in all new Class 1 dwellings, within sole-occupancy unit of a Class 2 or 3 building and in a Class 4 part of a building. Smoke alarms installed to comply with the BCA provisions are required to be located in strategic positions such as hallways serving bedrooms, in order to facilitate an early response by occupants to a fire within a dwelling.

In some circumstances, the size or layout of the dwelling necessitates the installation of more than one smoke alarm within that dwelling. For example, a two-storey dwelling requires at least one smoke alarm to be installed on each storey (even if there are no bedrooms located on one of those storeys).

Multiple smoke alarms must be interconnected within all new Class 1 dwellings, within sole-occupancy units of Class 2 or 3 buildings and in a Class 4 part of a building.

What about smoke detectors in additions/extensions?

From 1 May 2014 an addition/extension that requires more than one smoke alarm will have to interconnect those smoke alarms in order to comply with the BCA. However, they are not required to be interconnected with any other smoke alarms in the existing dwelling.

Any subsequent addition/extension which requires a smoke alarm must interconnect with any other smoke alarm previously installed as part of any other extension/addition that was lodged for building rules consent after 1 May 2014.

Some general considerations:

- The smoke alarms should be positioned to protect the escape routes from the bedrooms. In a passage way the alarm should be between the living area and the first bedroom.
- If bedrooms are located in separate parts of the dwelling the escape route from each sleeping area should be protected by at least one smoke alarm.
- If the dwelling is two- or multi-storeyed, in addition to the above considerations, smoke alarms should be located on each level in the vicinity of the stairs to ensure early warning of fire outbreak on a level not currently occupied.
- Where more than one smoke alarm is required, they will be interconnected. Interconnected alarms sound simultaneously when one of them senses smoke thus warning occupants in all parts of the dwelling. Note: Not all smoke alarms are able to be interconnected, ensure that you buy inter-connectable alarms for this purpose