

# PHOTOELECTRIC SMOKE ALARMS

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## Photoelectric Smoke Alarms

Photoelectric smoke alarms, also known as optical or photo-optical, detect visible particles of combustion. Research indicates that these types of smoke alarms are generally more effective across a wider range of fires experienced in homes. They respond quicker to smouldering fires and the dense smoke given off by foam filled furnishings or overheated PVC wiring.

### Advantages

- Good for smouldering fire and dense smoke
- Not as prone to cooking nuisance alarms
- Contain no radioactive material
- Suitable for general use

Your protection against fire increases with the quality and type of smoke alarm that is installed.

### What to look for?

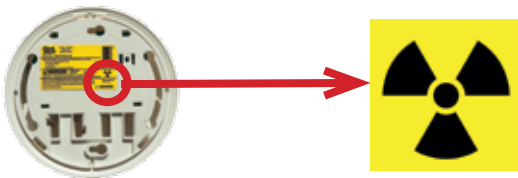
When purchasing smoke alarms, they must comply with the Standard AS 3786-2014. The following labels will appear when smoke alarms comply with this Standard.



For further information go to CSIRO's Activfire website ([www.activfire.gov.au/smokeAlarms.asp](http://www.activfire.gov.au/smokeAlarms.asp)) which provides consumers and fire safety advisers with details of smoke alarms that have been verified as conforming with requirements of Australian Standard AS 3786-2014.



## Non-compliant Replacement Smoke Alarms



Smoke alarms with this symbol are not photoelectric and do not meet the 2017 legislative requirements for replacement.

Individual or small numbers of these smoke alarms can be safely disposed of in household rubbish. The small amount of radioactive material in a domestic ionisation smoke alarm is insufficient to cause harm to people or the environment.

## Other Smoke Alarm Options

These include:

- alarms for deaf and hearing-impaired people; or
- alarms with emergency lights or heat sensors.

### Common features in smoke alarms

- Test button - to ensure correct operation.
- Tested by Scientific Services Laboratories to comply with AS 3786-2014.
- Some models have 'hush' buttons to stop nuisance alarms.
- Interconnection allows all smoke alarms to sound simultaneously should any one alarm activate. All occupants are alerted, maximising the opportunity for escape.

### Unwanted activations

Photoelectric smoke alarms are less likely to false alarm. There are five main reasons that smoke alarms would activate for no apparent reason.

1. They are near or past their ten year life.
2. The backup battery requires replacement.
3. The wrong type of smoke alarm has been selected for the location.
4. They have a build-up of dust, insects or other particulates.
5. They are in the wrong location (e.g. too close to cooking fumes from the kitchen or steam from the shower).

The latest Australia Standard 3786-2014 Smoke Alarms, called up by the new legislation, have additional features that should further reduce the chance of false alarms. This includes a finer gauze to prevent insect infestation. They also include an indicator light to allow quick identification of which alarm has initially activated when they are interconnected with other smoke alarms.