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PHOTOELECTRIC SMOKE ALARMS

Queensland Fire and Emergency Services' Recommendation

- *All residential accommodation be fitted with photoelectric type smoke alarms.*
- *Smoke alarms either hard-wired or powered by a 10-year lithium battery.*
- *Smoke alarms located -*
  - ☑ *on each level of living space;*
  - ☑ *outside each bedroom; and*
  - ☑ *in every bedroom*
- *All smoke alarms should be interconnected.*
- *Every home should have a practised escape plan.*

Photoelectric Smoke Alarms

This type, also known as optical or photo-optical, detects visible particles of combustion. They respond to a wide range of fires, but they are particularly responsive 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. Research indicates that photoelectric smoke alarms are generally more effective across a wider range of fires experienced in homes. For this reason, **QFES recommends that photoelectric smoke alarms** be installed. If you already have smoke alarms installed, QFES recommends that you supplement the existing alarms with photoelectric types, especially in sleeping areas and exits from your home (e.g. hallways); and at the end of the service life of existing smoke alarms, replace them with photoelectric types.

What to look for?

QFES strongly recommends, when purchasing smoke alarms, you check that it complies with the Standard AS 3786-1993. 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) which provides consumers and fire safety advisers with details of smoke alarms that have been verified as conforming with requirements of Australian Standard AS 3786-1993.

Other Smoke Alarm Options

These include:
- alarms for deaf and hearing-impaired people;
- alarms with emergency lights , heat sensors or different power sources;
- special models for kitchens and caravans; and
- interconnectable models that sound alarms in all connected units - hard-wired or wireless.
- ionisation alarms - not recommended.

Common features in smoke alarms

- Test button - to ensure correct operation.
- Tested by Scientific Services Laboratories to comply with AS3786-1993.
- Some models have 'hush' buttons to stop nuisance alarms.
- Some smoke alarms can be interconnected which sound alarms in all connected units.
  - Interconnection allows all smoke alarms to sound simultaneously should any one alarm activate. All occupants are alerted, maximising the opportunity for escape.

Queensland Government