

SMOKE ALARM INSTALLATION



Under Queensland Legislation, smoke alarms must be installed in all homes. The implementation of new smoke alarm legislation is a staged approach. For detailed information, please refer to the [Smoke Alarm Legislation](#) information sheet located on the Queensland Fire and Emergency Services (QFES) website.

Prescribed locations for installing smoke alarms

Where practicable smoke alarms must be placed on the ceiling. Smoke alarms **must not** be placed:

- i) within 300mm of a corner of a ceiling and a wall;
- ii) within 300mm of a light fitting;
- iii) within 400mm of an air-conditioning vent; or
- iv) within 400mm of the blades of a ceiling fan.

There are special requirements for stairways, sloping ceilings, and ceilings with exposed beams. Specific requirements are explained in the *Building Fire Safety Regulation 2008*.

If impracticable for the prescribed location requirements to be met (e.g. may be affected by steam from shower or fumes from cooking), the owner may put the alarm at another location that will provide a warning to occupants of the dwelling.

Reasons behind prescribed locations

Every residence is different and you will need to assess your home. To maximise smoke alarm operation, avoid installation in the following positions:

- » In dead air space. This is an area in which trapped hot air will prevent smoke from reaching the alarm. This space generally occurs at the apex of cathedral ceilings, the corner junction of walls and ceilings, and between exposed floor joists.
- » Near windows, doors, fans or air conditioners. Excessive air movement may prevent smoke and gases from reaching the smoke alarm or cause nuisance alarms.
- » In or outside the bathroom as steam may cause nuisance alarms.
- » In insect infested areas, as insects flying into the alarm could cause nuisance alarms.

Why interconnected?

When one interconnected smoke alarm is activated, all interconnected smoke alarms are activated. This early warning increases the time occupants have to escape. The connecting of smoke alarms can be done wirelessly (e.g. via short radio frequency) or hardwired.

Power supply options for smoke alarms

You can buy smoke alarms from hardware stores, electrical retailers, or through a qualified electrician. There are two power supply options for existing dwellings (approved prior to 1 January 2017) - battery or hardwired.

Hardwired

A hardwired smoke alarm is connected to a home's mains power supply with a battery back-up. These alarms are considered more reliable in the longer term, and use a battery to provide back-up power if the AC power fails. Note: if an existing hardwired smoke alarm is being replaced, it must be replaced with another hardwired smoke alarm.

Battery

9-volt removable batteries are legal until 1 January 2022 for rentals or home sales and until 1 January 2027 for owner occupied residences (unless the initial building approval required otherwise). Replacement smoke alarms must comply with Australian Standard AS 3786 -2014.

