

# INFORMATION SHEET



Ver 03/15

## SMOKE ALARM INSTALLATION

### 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.**

### Interconnected

Interconnected smoke alarms is when one smoke alarm is activated, all interconnected smoke alarms are activated. The connecting of smoke alarms can be done wirelessly (via RF module) or hard-wired. The time occupants have to escape is increased.

### Power supply options for smoke alarms

You can buy smoke alarms from hardware stores, electrical retailers, or through your electrician. There are two power supply options for smoke alarms - battery or hard-wired.

### Hard-wired Smoke Alarms

A hard-wired smoke alarm is connected to a home's electrical system and has battery back-up power supply.

- Considered more reliable in the longer term.
- Uses a battery to provide back-up power if the AC power fails. Back up batteries can be either 9-volt or built-in and tamper proof rechargeable lithium.
- Power-on indicator.

### 10-year Lithium Cell Battery

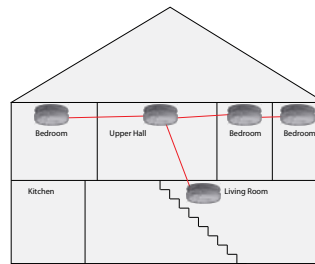
A 10-year lithium cell battery can be used in smoke alarms that are stand-alone or connected to a home's electrical system.

- Easy to install.
- Has long term reliability.
- Battery cannot be removed.
- Less expensive than hard-wired.

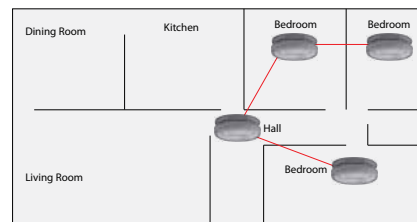
### 9-Volt Smoke Alarms

A 9 volt smoke alarm, also called battery operated smoke alarms, are stand alone and operated only by a battery. These are the minimal legal requirement and do not provide the best safety for occupants.

### Ideal Locations



Inside each bedroom, in the hallway and living areas, and connected together.



### INSTALLATION - Where do they need to go?

Hard-wired smoke alarms are required in all new and significantly renovated homes and units built since July 1997. These need to be installed by a licensed electrician, in line with BCA standards.

Because smoke rises, smoke alarms should be placed on the ceiling out of the corner (dead air space). If that is not possible, it may be positioned high on a wall, according to the manufacturer's instructions.



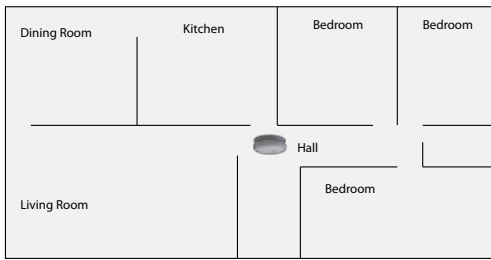
Every residence is different and you will need to assess your home.

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 of the bathroom as steam may cause nuisance alarms.
- In kitchens. If there is no alternative, a photoelectric type is preferred.
- In insect infested areas, as insects flying into the alarm could cause nuisance alarms.

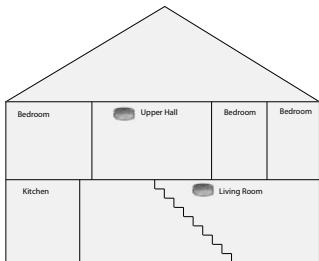
## Number required by law

Between the bedrooms and the rest of the house.



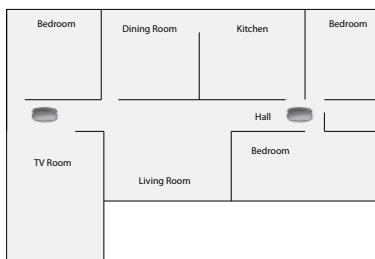
\* Minimum by law from 1 July 2007.

Near bedrooms and on every storey of a multi-level house.



\* Minimum by law from 1 July 2007.

Additional alarms are needed in homes with separated sleeping areas.



\* Minimum by law from 1 July 2007.

For advice on the selection, placement and maintenance of smoke alarms contact your local Queensland Fire and Emergency Services fire station or a reputable fire protection company.

