

Smoke alarms

Overview

The 10-year phased rollout of interconnected photoelectric smoke alarms in Queensland will happen over three specific periods.

To comply with legislation, interconnected photoelectric smoke alarms are required:

- From 1 January 2017: in all new dwellings and substantially renovated dwellings (this applies to building applications submitted from 1 January 2017).
- From 1 January 2022: in all domestic dwellings leased and sold.
- From 1 January 2027: in all other domestic dwellings.



Check your smoke alarm each month. If your alarm is greater than 10 years old – you must comply to the new laws.

Questions and Answers with Queensland Fire & Emergency Services

Bodies corporate are not mentioned in the Fire and Emergency Services Act. In which way does the Act lay any responsibility onto schemes i.e. bodies corporate?

Responsibility for complying with domestic smoke alarm legislation is the responsibility of the owner of a dwelling, not a body corporate.

'Dwellings' in the Act are houses, townhouses (Class 1A) and units (Class 2)?

This is correct. The new smoke alarm legislation refers to all private homes, including Class 1A (houses) and Class 2 (units).

The Act refers to 'owner' or 'landlord' as the person who is responsible for meeting the smoke alarm obligations. Is this correct?

This is correct. The owner or landlord of a dwelling is the responsible identity.

The interconnection requirement in the Act means that each of the smoke alarms have to be interconnected within the same house/unit. This would place the responsibility on the owner of the individual dwelling/unit. Is this correct?

This is correct. The owner or landlord of a dwelling is the responsible identity.

Are the lots intended to be interconnected given there are multiple owners in a strata scheme?

Smoke alarms are only required to be interconnected within individual dwellings.

If the body corporate designs a system where all of the smoke alarms were interconnected through common property and the body corporate exercised control over that system, then it is likely that the body corporate would be responsible for maintenance of the smoke alarms in the individual lots. Is that the intention of the Act?

There is no provision in the act regarding a body corporate electing to design a system. As such the body corporate would be making that decision outside of the requirement of the smoke alarm legislation.

Smoke alarms

There are two basic types of early warning fire systems available.

a. "Stand-alone detectors" – are confined to warning the occupants of the residential unit only. These do not alert other units of report to a central building monitoring board or alert QFES. Does the Act place responsibility on the unit owner for the installation/upgrading of these?

The owner of a sole occupancy unit is responsible for the installation of smoke alarms, not smoke detectors as part of an addressable smoke detection system.

QFES may have advised to some bodies corporate that the body corporate should manage the installation, collecting the funds etc. to achieve a consistent complaint result at the best possible cost. This has not been publicly advised, hence there is some confusion in the sector.

A body corporate may elect to manage the upgrading of smoke alarms within a strata complex to achieve consistency, however, this would be achieved via the bodies corporate normal business processes.

b. "Hard-wired addressable detectors" – in certain buildings these are installed throughout the common property and may also be installed within the residential unit and report to a central monitoring board and in most cases to QFES. Provided these comply with the applicable standard they do not require additional works but are required to be correctly maintained. These systems are the responsibility of the body corporate to maintain correctly and in entirety. Part of this maintenance is the periodic testing and possible replacement of detectors within the residential units. Issues often arise where the contractor cannot gain access to some units in order to conduct this maintenance. Who is the party responsible to gain access? Is it the fire contractor, the lot owner or the body corporate?

The body corporate is responsible for the maintenance of fire detection systems required by the Building Codes Australia (BCA). There should be no change to the current arrangements that a body corporate has in place to gain entry.

If this testing does not occur, is the body corporate or the lot owner in breach of the Act?

The body corporate is the responsible identity and would be in breach.

On that topic, the same issue has been found with the requirements for sprinklers and even more so for servicing of fire-rated entry doors where the requirement is 100% of fire doors every year in residential buildings. Who is the party responsible to gain access to service the sprinklers? Is it the fire contractor, the lot owner or the body corporate? If the sprinklers are not serviced as required is the body corporate or the lot owner in breach of the Act?

The body corporate as the managing agent would be responsible for the maintenance and testing of a prescribed fire safety system such as a sprinkler system.

Are the fire doors, if within an individually owned lot, and where the lot owner does not give access, the liability of the body corporate or the lot owner?

The body corporate as the managing agent would be responsible for the maintenance and testing of a prescribed fire safety system such as a fire door. The body corporate is given regulatory powers to manage and maintain the common property. Fire doors to sole occupancy units are considered to be part of the common property and as such the body corporate is responsible for their maintenance and testing.

Summary

As the owner of your unit you are responsible for your Smoke Alarms (unless those alarms are part of a much bigger smoke detection system).

For example, some high-rise apartments have fully integrated system that services all units, common property that is connected to a large fire panel in the lobby and that fire panel is then often connected directly to the Fire Department.

While in theory it is possible for the body corporate to manage the upgrade process, in reality this is very unlikely, as often owners have already replaced their smoke alarms because they have expired.

WHAT IF I AM A LANDLORD?

You are required by law to install and maintain smoke alarms in your rental property.

- The minimum legal requirement is an alarm in accordance with the smoke alarm Australian Standard. This can be met by a 9-volt battery operated smoke alarm, with a one-year battery for dwellings built before 1997. However, a good quality 10-year battery alarm or hard-wired alarm is more reliable and may be more effective in the long term. Homes built after 1997 must have hard-wired alarms fitted.
- You must test and clean each smoke alarm within 30 days before the start of a tenancy agreement.
- In addition you must replace, in accordance with the manufacturer's instructions, each battery in the smoke alarm that is flat or that you or your agent is aware is almost flat within 30 days before the start of a tenancy.
- You must replace the smoke alarm unit before it reaches the end of its service life. Service life of a smoke alarm is usually indicated by the warranty offered by its manufacturer.
- If your smoke alarm reaches the end of its service life, you must replace it immediately.
- Where notified by a tenant that a smoke alarm is not operating, you should have the smoke alarm checked by a competent professional, and as required, repaired or replaced.

Insurance – Property Owners

- Industry figures show that people underinsure.
- Adequate insurance cover can provide peace of mind if your home and belongings are damaged or lost to fire.
- Most insurance companies offer specific landlord policies.
- As a property owner your home insurance policy could be affected by whether you have a smoke alarm installed.
- Check with your specific insurance provider.

WHAT IF I AM A TENANT?

If your property is managed by an agent, they may be able to arrange for this to be done to ensure your legislative requirement is met.

- You are required by law to test and clean each smoke alarm in the dwelling at least once every 12 months. QFES recommends smoke alarms are tested once a month.
- You are required by law to replace, in accordance with the information statement (RTA Form 17a) provided to you, each battery that is flat or is almost flat during your tenancy.
- If you become aware that a smoke alarm in the rental property is not working, other than because the battery is flat or almost flat, you must advise the landlord or agent as soon as practicable.
- Your landlord is only required by law to test and clean smoke alarms at the start of each new tenancy agreement. If the property is managed by an agent, they may arrange for this to be done.
- Please note that for public housing tenants the State Government has already installed hard-wired smoke alarms in all public housing dwellings.

Insurance – Tenants

- Research indicates that nearly half of all renters do not have insurance of any kind.
- To protect your personal possessions you should have your own contents insurance.

HOW ARE SMOKE ALARMS ENFORCED?

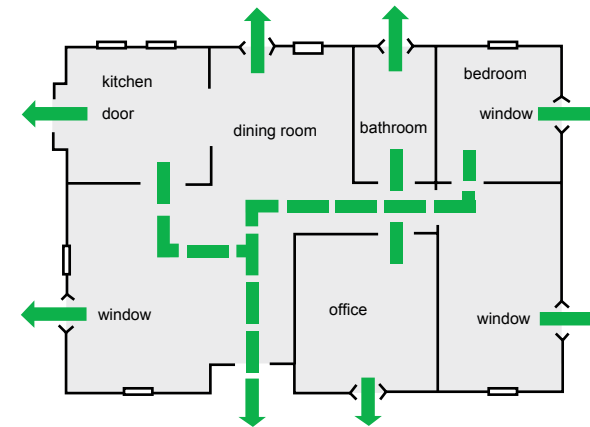
On the sale of a property, the vendor must lodge a form with the Queensland Land Registry (www.dnrm.qld.gov.au) stating that smoke alarms are installed in the property and the purchaser has been informed smoke alarms are installed. Fire Officers will also investigate complaints received. Fines apply for failing to install or interfering with the operation of smoke alarms.

DO I NEED A FIRE ESCAPE PLAN?

Queensland Fire and Emergency Services recommend that all residential accommodation have an escape plan.

A smoke alarm will alert you to a fire, but what you do next is a matter of life and death. To survive it is essential you have a fire escape plan.

1. Draw your escape plan on a sheet of paper or visit www.qfes.qld.gov.au.
2. Plan two ways out of every room.
3. Pick a meeting place outside the home, such as the letterbox.
4. Ring the fire service on 000 (Triple Zero).
5. Practise your fire escape plan regularly, at night, with the lights off.
6. Practise your escape on hands and knees.



**Wake up to
photoelectric
smoke alarms**

QFES 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.**

WHY?

Of the dozens of Australians who die in residential house fires each year, most die in fires that start at night when they are asleep. Instead of waking you, smoke and toxic gases from a fire can quickly numb your senses and put you into an even deeper sleep.

Working photoelectric smoke alarms are an effective way to warn you of a developing fire and give you time to escape.

The more working photoelectric smoke alarms installed, the greater your chance of survival.

Photoelectric Smoke Alarms

Research by the Australasian Fire and Emergency Service Authorities Council indicates that photoelectric smoke alarms provide the best detection across a range of fires and are more likely to alert occupants in time to escape safely. For both flaming fires and smouldering fires, photoelectric smoke alarms are more likely to alert occupants in time to escape safely.

Interconnected

When one smoke alarm is activated, all interconnected smoke alarms are activated. This means that the time occupants have to escape is increased.

WHAT DO I HAVE TO DO?

All homes in Queensland must have a working smoke alarm. It's the law.

	Minimum Requirements
Homes built prior to 1997	One 9-volt battery operated smoke alarm on each level of living space
Homes built during and after 1997	Hard-wired smoke alarms
Homes approved on or after 1 May 2014	Hard-wired and interconnected smoke alarms

- Only use smoke alarms that comply with Australian Standards - look for these marks.



- The number of alarms and their placement is set down under the National Construction Code (NCC), formerly the Building Code of Australia (BCA).
- At the Certifier's discretion of certifiable building works, existing homes having undertaken major renovations or extensions since 1997, may need to include the installation of hard-wired smoke alarms.
- Hard-wired or long-life battery types are recommended for better protection.

Smoke Alarms for the Deaf and Hard of Hearing Community

QFES provides a subsidy scheme to assist people who are deaf or hard of hearing to purchase special smoke alarms. This initiative is managed by Deaf Services Queensland.

Email: smokealarms@deafsq.org.au

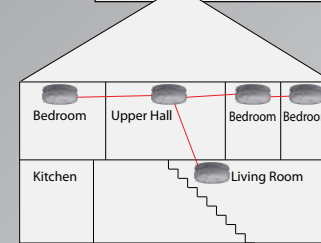
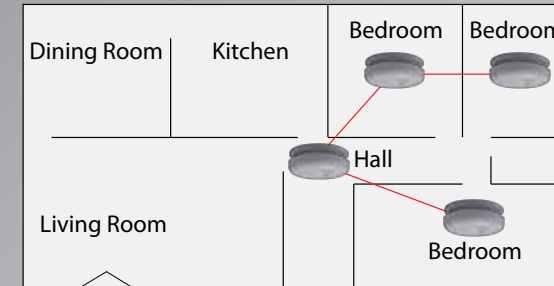
Phone: (07) 3892 8500

TTY: (07) 3892 8501



WHERE DO THEY NEED TO GO?

QFES Recommendation



Inside each bedroom, in the hallway, and connected together. Near bedrooms and on every storey of a multi-level house. Where people commonly and usually sleep.

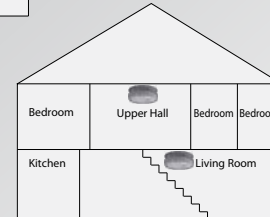
Basic protection required by law



Between the bedrooms and the rest of the house.



Additional alarms are needed in homes with separated sleeping areas.



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

Refer to the National Construction Code for more detailed information on installation requirements.

WHAT ABOUT MAINTENANCE?

- Test smoke alarms once a month using the test button.
- Check that the battery is working once a month. Replace batteries at least once a year.
- Clean the grill of your smoke alarm once a month using a vacuum cleaner or soft brush.
- Do not hinder the device (e.g. Smoke alarms must never be painted).
- If activated from cooking/steam, use the 'hush' button (if fitted) or disperse the smoke/steam (e.g. wave a towel near the alarm).
- All types of smoke alarms have a limited life-span and need to be replaced according to manufacturer's instructions – normally every 10 years. Look for the year of manufacture sticker or stamp.

FOR MORE INFORMATION

Additional information on smoke alarms is available at www.qfes.qld.gov.au/communitysafety/smokealarms/:

- legislation;
- types;
- installation; and
- maintenance/replacement.



safehome

Safehome is a FREE service provided by the Queensland Fire and Emergency Services to householders in an urban fire service area. Local firefighters will come to your home to assist you to recognise fire and safety hazards in and around the home. Once the hazards are identified you can then take steps to eliminate them. A visit should take no longer than 45 minutes.

You will receive advice on correct positioning and installation of smoke alarms, a safety pack and checklist. Proudly Supported by



Call 13 QGOV (13 74 68) for a Safehome visit.



NEW SMOKE ALARM LEGISLATION

Glossary of Terms*

Dwellings - houses, townhouses (Class 1A) and units (Class 2).

Photoelectric - the method the device uses to detect smoke.

Hardwired - connected to the domestic dwelling's electricity supply.

Interconnected - if one smoke alarm sounds all the other smoke alarms will also sound. Interconnection can be wired or wireless.

Substantial - work carried out under a building development approval or the total building works equals 50% of the dwelling over 3 years.

Storey - a space within a building which is situated between one floor level and the floor level or roof above.

* Refer to specific legislation for full definitions.

If you have a specific question or require further clarification, please email SmokeAlarm@qfes.qld.gov.au.

Source documents

- Fire and Emergency Services (Domestic Smoke Alarms) Amendment Bill 2016
- *Building Fire Safety (Domestic Smoke Alarms) Legislation Amendment Regulation 2016*
- National Construction Code 2016
- Australian Standard (AS) 3786
- *Land Title Act 1994*

FOR EXISTING DWELLINGS

From 1 January 2017

When replacing smoke alarms, they must be of a *photoelectric* type which complies with Australian Standard (AS) 3786.

Replacing smoke alarms

Existing smoke alarms manufactured more than ten years ago must be replaced. (Note: Smoke alarms should have the date of manufacture stamped on them.)

Smoke alarms that do not operate when tested must be replaced immediately.

Existing *hardwired* smoke alarms that need replacement must be replaced with a *hardwired* smoke alarm.

From 1 January 2027

Smoke alarms in all *dwellings* must:

- be *photoelectric* (AS 3786); and
- not also contain an ionisation sensor; and
- be less than 10 years old; and
- operate when tested; and
- be *interconnected* with every other smoke alarm in the *dwelling* so all activate together.

Smoke alarms must be installed on each *storey*:

- in each bedroom; and
- in hallways which connect bedrooms and the rest of the *dwelling*; or
- if there is no hallway, between the bedrooms and other parts of the *storey*; and
- if there are no bedrooms on a *storey* at least one smoke alarm must be installed in the most likely path of travel to exit the *dwelling*.

Smoke alarms must be either hardwired or powered by a non-removable 10-year battery.

DWELLINGS BEING SOLD, LEASED OR AN EXISTING LEASE IS RENEWED

From 1 January 2017

Requirements as for existing *dwelling*s.

Existing landlord's and tenant's obligations regarding the installation and testing of smoke alarms continue.

Property sellers must lodge a Form 24 with the Queensland Land Registry Office stating the requirements of the new smoke alarm legislation have been met.

From 1 January 2022

Smoke alarms in the *dwelling* must:

- i) be *photoelectric* (AS 3786); and
- ii) not also contain an ionisation sensor; and
- iii) be less than 10 years old; and
- iv) operate when tested; and
- v) be *interconnected* with every other smoke alarm in the *dwelling* so all activate together.

Smoke alarms must be installed on each *storey*:

- i) in each bedroom; and
- ii) in hallways which connect bedrooms and the rest of the *dwelling*; or
- iii) if there is no hallway, between the bedrooms and other parts of the *storey*; and
- iv) if there are no bedrooms on a *storey* at least one smoke alarm must be installed in the most likely path of travel to exit the *dwelling*.

Smoke alarms must be *hardwired* or powered by a non-removable 10-year battery.

NEW DWELLINGS AND DWELLINGS BEING SUBSTANTIALLY RENOVATED

From 1 January 2017

The development approval process for new *dwelling*s and *substantial* renovations will ensure that building works approved after this date will bring *dwelling*s into compliance with the new laws.

Smoke alarms in the *dwelling* must:

- i) be *photoelectric* (AS 3786); and
- ii) not also contain an ionisation sensor; and
- iii) be *hardwired* to the mains power supply with a secondary power source (i.e. battery); and
- iv) be *interconnected* with every other smoke alarm in the *dwelling* so all activate together.

Smoke alarms must be installed on each *storey*:

- i) in each bedroom; and
- ii) in hallways which connect bedrooms and the rest of the *dwelling*; or
- iii) if there is no hallway, between the bedrooms and other parts of the *storey*; and
- iv) if there are no bedrooms on a *storey* at least one smoke alarm must be installed in the most likely path of travel to exit the *dwelling*.

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;
- 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 will be explained in the *Building Fire Safety Regulation 2008*.

If it is impracticable for the prescribed location requirements to be met, the owner may put the alarm at another location that will provide a warning to occupants of the *dwelling*.



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

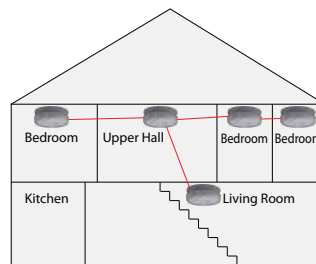
A 10-year lithium cell battery can be used in smoke alarms that are stand-alone or connected to a home's electrical system.

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

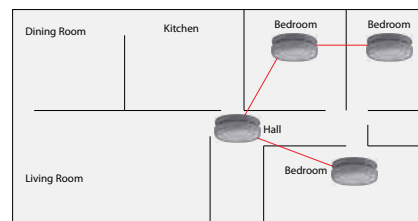
9-Volt Smoke Alarms

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.



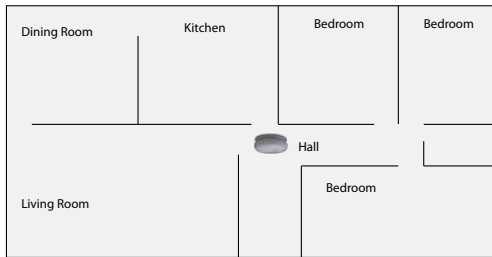
Every residence is different and you will need to assess your home.

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.

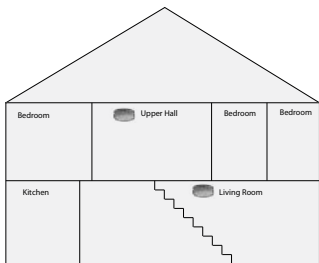
Number required by law

Between the bedrooms and the rest of the house.



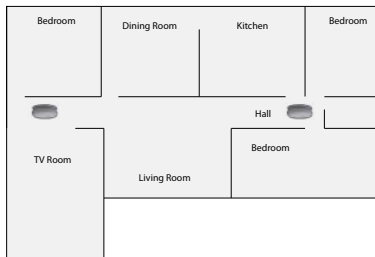
* Minimum by law from 1 July 2007.

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.



SMOKE ALARM LEGISLATION

Legislation requiring the installation of smoke alarms in all domestic dwellings, including rental properties, came into effect on 1 July 2007.

Houses approved for construction on or after 1 May 2014 must have the additional requirement of interconnected smoke alarms.

The legislation also details the ongoing smoke alarm maintenance obligations of lessors and tenants. In summary, the legislation requires that:

- smoke alarms complying with Australian Standard 3786-1993 be installed in houses and units (Class 1a and 2 buildings under the Building Code of Australia) by 1 July 2007. Smoke alarms are readily available from major hardware stores and retailers;
- smoke alarms are located outside sleeping areas and one on each level of the dwelling. These location requirements are the same as those that apply for homes built since July 1997. This means that if you live in a property built since July 1997 the property should already have the correct type and number of smoke alarms installed;
- existing homes that have undergone certain renovations may require, at the Certifier's discretion, an upgrade to hard-wired smoke alarms;
- lessors install alarms and replace them before the end of their service life (smoke alarms are required to have a recommended service life of at least 10 years under normal conditions of use);
- lessors test and clean smoke alarms and replace batteries where they are spent, within 30 days before the start of a tenancy (including the renewal of an existing tenancy);
- tenants test and clean smoke alarms at least once every 12 months during a tenancy and replace spent batteries during the tenancy; and
- landlords have a right of entry to install smoke alarms under the *Residential Tenancies and Rooming Accommodation Act 2008* - Section 192.

Further information on smoke alarms is available on other Queensland Fire and Emergency Services Information Sheets. Failure to comply with legislative requirements can result in prosecution.

For more information regarding landlord and tenant responsibilities, visit www.qfes.qld.gov.au and download the "[Wake up to photoelectric smoke alarms](#)".

Queensland Fire and Emergency Services' Recommendation

The QFES recommendation exceeds the minimum legislative requirements but does provide better safety.

- **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.**



SMOKE ALARM MAINTENANCE AND REPLACEMENT

Queensland Fire and Emergency Services' Recommendation

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MAINTENANCE

How do I keep my smoke alarms working?

Smoke alarms can only save lives if they are well maintained and work properly.

Steps to remember:

- Read the manufacturer instructions.
- Once a month check the battery by pressing the test button. If you cannot reach the button easily, use a broom handle.
- Keep them clean. Dust and debris can interfere with their operation, so vacuum over and around your smoke alarm regularly.
- Replace the batteries at least once a year. Pick a memorable day (e.g. April Fool's Day, anniversary or your birthday) and replace the batteries each year on that day. In most models when batteries are low the detector will sound a short 'BEEP' every minute or so. This is your reminder to replace the battery.
- Smoke alarms powered by a 10-year lithium battery are tamper proof. Batteries cannot be replaced.
- Smoke alarms must never be painted.
- If cooking smoke sets off the alarm, do not disable it. Turn on the range fan, open a window or wave a towel near the alarm until the alarm stops beeping; or use the hush button (if fitted).
- Do not remove the batteries from your smoke alarm.
- All types of smoke alarms have a limited life-span. They should be replaced prior to the expiry date on the manufacturer's warranty.



For more information, relating to the maintenance responsibilities in rental properties, refer to the Queensland Fire and Emergency Services “[Wake up to photoelectric smoke alarms](#)” brochure.

REPLACEMENT

Why do I need to replace my smoke alarm?

- Both hard-wired and battery operated smoke alarms are manufactured to have a recommended service life of at least 10 years under normal conditions of use (AS 3786).
- Smoke alarms with 10-year lithium batteries are tamper proof. The entire smoke alarm must be replaced after 10 years from the manufacture date.
- After 10 years smoke alarms may malfunction and their efficiency compromised with accumulated dust, insects, airborne contaminants and corrosion of the electrical circuitry.
- A smoke alarm constantly monitors the air 24 hours a day. At the end of 10 years, it has gone through millions of monitoring cycles. After so much use, components may become less reliable. This means that as the smoke alarm gets older, the potential of failure increases.
- Most smoke alarms have an expiry or replace by date stamped/printed on them.
- Contact the smoke alarm supplier for more detailed advice.

How do I dispose of a smoke alarm I've replaced?

Individual or small numbers of ionisation or photoelectric 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. Contact your local council for more information.

Queensland Fire and Emergency Services recommend that all smoke alarms be replaced after 10 years.



PHOTOELECTRIC SMOKE ALARMS

Queensland Fire and Emergency Services' Recommendation

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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.

