



Your Questions Answered

What do smoke alarm laws in Queensland require?

Since July 1997, all new and significantly renovated homes and units have been required to have mains-powered smoke alarms installed at the time of construction or alteration.

A more recent law inclusion also requires owners of older (pre 1997) homes and units (Class 1 and sole occupancy units in class 2 buildings) to install and maintain smoke alarms.

This law requires homes and units that do not already have working smoke alarms installed to install smoke alarms.

To make sure that everyone complies with the law, a person selling a property must lodge a form with the Queensland Land Registry stating that operational smoke alarms are installed in the property. Compliance is monitored via a check of these forms.

Why are smoke alarms important?

Smoke alarms are very important domestic safety devices. The risk of death from fire in a home is up to three times higher in homes without smoke alarms when compared to homes with smoke alarms.

In Queensland, about three-quarters of all home fire deaths happen in homes without smoke alarms and nearly half of deaths occur between 12am- 8am when people are sleeping.

Research also shows that the average time occupants have to escape, once they become aware of a fire, is only about three minutes. Residential fires of today burn faster and kill quicker because the contents of modern homes (furnishings etc) burn faster and more intensely.

Why are smoke alarms compulsory?

Smoke alarms aim to give an early warning of fire, thereby providing occupants with a greater chance of escape.

No matter where they live, Queenslanders will have greater protection from the dangers of fire, at a relatively low cost because of these compulsory laws.

Do smoke alarms provide property protection?

The early warning provided by a smoke alarm can allow fires to be put out at an early stage, thereby minimising property loss. QFRS statistics support the position that smoke alarms do result in some measure of property protection through early detection of fire.

However the main purpose of a smoke alarm is to protect occupant safety so that they are provided with an early warning of fire, thereby allowing them to take action to avoid loss of life and injury.

What does the community think about the smoke alarm law?

Independent research shows strong community appreciation of the value of smoke alarms.

How does the latest Queensland law compare with other states?

Smoke alarms are compulsory in New South Wales, Victoria, South Australia and Western Australia. Queensland law (for pre-1997 homes) is similar to New South Wales and Victoria where householders are allowed to install any smoke alarm that complies with Australian Standards.

How is the smoke alarm law policed?

If you sell a property in Queensland, the vendor is required to lodge a Form 24 with the Queensland Land Registry, stating that smoke alarms are installed, and notify the purchaser.

This means that checking of smoke alarm installations is part of buying and selling residences in Queensland.

Fire Officers can investigate complaints received about residential non-compliance and prosecution may result. Currently, the maximum penalty is \$500 for failing to install and maintain smoke alarms.





How are new homes affected?

Since July 1997, all new and significantly renovated homes and units have been required to have mains-powered smoke alarms installed at the time of construction or alteration.

All rented houses and units, whether built before or after 1 July 1997 are required to be maintained on a regular basis. Penalties apply for non-compliance.

What effect does compulsory smoke alarms have on domestic household insurance?

The Insurance Council of Australia advises that it is a matter for individual insurance companies to determine what attitude they will take in the event of a fire claim where no smoke alarm had been fitted, in contravention of the mandatory smoke alarm requirement. The council says, "From our experience it is unlikely that an insurer would decline a claim in these circumstances".

However, you should understand that this does not preclude insurance companies from adopting an approach to a claim, depending on the circumstances. Persons who are concerned about this should check with their insurer.

Why allow any smoke alarm, rather than specify more reliable 10-year battery alarms or mains-powered alarms?

The law makes smoke alarms compulsory but leaves it to the householder to select what type of alarm to install. Smoke alarms with longer-life batteries are more expensive, but are becoming more affordable as their production increases. Retrofitting hard-wired smoke alarms in older homes can cost up to \$1,000.

The minimum acceptable alarm is a one-year battery alarm that meets the applicable Australian Standard. This type of alarm provides a reasonable level of protection if batteries are replaced regularly and the alarm is regularly tested. The Queensland Fire and Rescue Service promotes changing smoke alarm batteries yearly.

The level of protection increases with number, quality and type of smoke alarm installed. The fire service encourages the installation of alarms above the minimum standard. For instance, it is recommended that hard-wired alarms be installed, that alarms be installed in bedrooms and that photoelectric smoke alarms be installed instead of ionisation smoke alarms. However these are recommendations, not legal requirements.

Information about different types of alarms available for purchase is located on the Queensland Fire and Rescue Service website. (www.fire.qld.gov.au).

The fire service will run an annual campaign to encourage householders to check the batteries in their alarms and change them once a year.

How often should I replace my smoke alarm?

Queensland Fire and Rescue Service recommends the smoke alarm be replaced prior to the end of its service. The Australian Standard requires that smoke alarms have a recommended service life of 10 years under normal conditions of use.

What is the difference between ionisation smoke alarms and photoelectric smoke alarms?

There are 2 main types of smoke alarms. Ionisation smoke alarms and photoelectric smoke alarms. These alarms differ in the way they detect smoke and other products of fire.

Photoelectric (Optical) smoke alarms

These 'see' the smoke (optical). This type detects **visible** particles of combustion e.g. smouldering cigarette smoke. They respond to a wide range of fires, but they are particularly responsive to smouldering fires and smoke given off by foam filled furnishings or overheated PVC wiring.

Research indicates that photoelectric smoke alarms are the better technology, and Queensland Fire and Rescue Service recommends the purchase of this type of alarm.

Ionisation smoke alarms

They 'feel' the smoke. This type detects **invisible** particles of combustion e.g. from cooking toast. They activate more quickly for fast, flaming fires and little visible smoke.

I have purchased smoke alarms and they seem to be malfunctioning, what do I do?

If the smoke alarm is still within the warranty period, return to the place of purchase or the supplier and immediately install a replacement. You should also check that your smoke alarm has been placed in a location where it is not unduly affected by things such as cooking fumes and air born dust.





Should I be concerned about the radioactive material in ionisation smoke alarms?

There are two main types of household smoke alarms –

- *Ionisation*, which contain a very small amount of radioactive material; and
- *Photoelectric*, which do not contain any such material.

Ionisation smoke alarms are completely safe under all normal conditions they may encounter, including a fire, and pose no threat to people or the environment.

The Australian Radiation Protection and Nuclear Safety Agency (ARPANSA), Queensland Fire and Rescue Service (QFRS), and Queensland Health, advise that in relation to *ionisation* types:

- the radiation dose to occupants of a house from a domestic *ionisation* smoke alarm is very small compared to naturally occurring radiation;
- the dose rate to the hands when handling an *ionisation* smoke alarm is higher but still less than one tenth of that from naturally occurring radiation;
- the temperature in a fire may be high enough to melt the radioactive material, but not to vaporise it. So, there is no inhalation danger during a fire or afterwards;
- individual or small numbers of *ionisation* smoke alarms can be safely disposed of in household rubbish; and
- the amount of the same type of radioactivity in normal soils is equivalent to a dozen or more ionisation smoke alarms in every cubic metre. Therefore, the dispersal of *ionisation* smoke alarms, even in large numbers, through refuse land-fill sites, is not of concern.

For people with philosophical concerns about the radiation in *ionisation* alarms, the alternative is *photoelectric* smoke alarms which are highly recommended by all Australian fire services because of their better smoke detection qualities. These are particularly good at detecting fires that start without immediate flames and only small amounts of smoke.

Photoelectric smoke alarms, which do not contain any radioactive material, are also safe for disposal through normal household rubbish disposal methods.

In a body corporate situation, who is responsible for installing smoke alarms?

The individual lot owner (unit owners) is responsible for inside the four walls of the unit. The body corporate is responsible for installing smoke alarms in the common areas of the building. The new laws only apply to alarms inside units.

Is it compulsory to install smoke alarms in mobile homes and caravans/motor homes within Queensland?

The new legislation applies to mobile homes but not to caravans and motor homes. However, they are highly recommended for caravans and motor homes due to the relatively confined space and limited escape routes available. QFRS recommends photoelectric smoke alarms be used as these are less likely to cause false alarms than ionisation alarms.

Who is licensed to install a smoke alarm? Do you need a licence to install a battery operated smoke alarms?

No licence is required to install a battery operated smoke alarm.

A licensed electrician is required to install an alarm that is connected to mains power.

What is the definition of testing / checking the smoke alarm (hard wired and/or battery operated)?

Under Australian Standard (AS 3786-1993) a smoke alarm (hardwired and battery) must contain a self test facility that mechanically or electronically simulates the presence of smoke in the sensing assembly. In most cases this is a button on the alarm that is depressed for a short period – if it sounds then the test is positive. Use of canned smoke is an additional test that can be used for additional assurance. Some agents and contractors use this method as well as the button test, but this is in addition to the legal requirements.





How many smoke alarms are required per property?

The location requirements for smoke alarms mirror the location requirements for smoke alarms contained in the Building Code of Australia for new homes. This requires that, at a minimum, there be one alarm outside sleeping areas and one alarm on each level of the home. It is estimated that the laws will require the typical home to install one or two alarms.

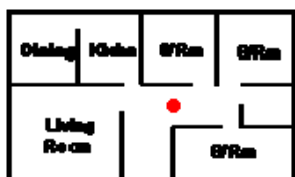
The laws allow some flexibility about location where it is not practicable to locate alarms as stated above (e.g. because of nuisance alarms caused by cooking). In this case the alarm can be located where it will provide a warning to occupants.

The owner can install a heat alarm in lieu of a smoke alarm where installation of the alarm in that location is likely to result in unwanted alarms (e.g. near a kitchen or bathroom). Heat alarms activate at a certain temperature and will operate more slowly than smoke alarms. The risk with heat alarms is that it may be too late to evacuate by the time a heat alarm activates. For this reason there should always be at least one smoke alarm.

Details of where to locate smoke alarms and how to test, clean and generally maintain smoke alarms is contained in instructions pre-packaged with the alarms. Information on these matters is also available on the Queensland Fire and Rescue Service website. (www.fire.qld.gov.au).

QFRS recommends that for better protection more alarms than the minimum be installed. A house plan showing the location of legally required and recommended alarms is set out below;

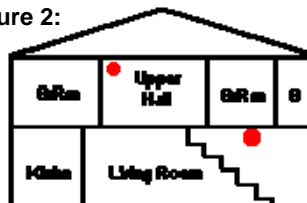
Figure 1:



Between the bedrooms and the rest of the house

**** Minimum by law**

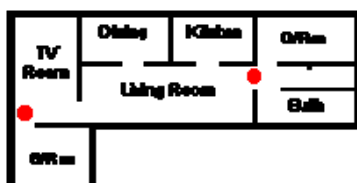
Figure 2:



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

**** Minimum by law**

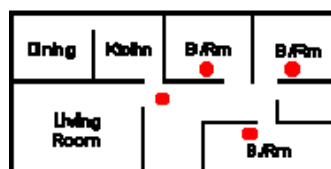
Figure 3:



Additional alarms are needed in homes with separated sleeping areas

**** Minimum by law**

Figure 4:



Inside the bedroom if you are a heavy sleeper or if you close the door

Additional recommendation for added safety (not law)

I have just raised my home. Does that mean I need smoke alarms downstairs?

- Alarms are not required to be installed where the new level is predominantly open, such as the basement level of a highset house, which is used for car-parking or laundry, and not sleeping or living.
- Alarms are not required for a unit in a level containing only sanitary facilities or parking.





What does the smoke alarm law mean for tenants?

The law places the following obligations on tenants

A) Obligations to do

- **Test** each smoke alarm every **12 months** by
 - Pressing a button or other device to check that the alarm is capable of detecting smoke. This is the most common way of testing to see if a smoke alarm will detect smoke. There are some alarms that can be tested in other ways- for instance by shining a torch on the alarm
 - Otherwise as stated in the Rental Rules booklet (RTA Information Statement, Form 17a), - currently the booklet refers to the QFRS website that has a section dealing with the maintenance of smoke alarms.
- **Clean** each smoke alarm in the way stated in the information statement every **12 months**. This usually requires cleaning with a vacuum cleaner or broom to remove debris (e.g. dust and cobwebs) that would restrict smoke entering the alarm
- **Replace** each battery that is spent, or that he/she is aware is almost spent, in accordance with the Information Statement provided to him/her at the commencement of the tenancy. The Australian Standard that regulates smoke alarms requires that an alarm produce a distinctive fault signal at least once every minute over 7 days to warn that the battery is about to fail. Often this is a chirping sound.
- **Advise** the lessor as soon as practicable if the alarm fails or is about to fail other than by reason of the failure of the battery. If the lessor is advised that an alarm has failed or is about to fail than the lessor must replace it.

B) Do not

- Remove a smoke alarm;
- Remove the battery (otherwise than to replace it);
- Do anything to reduce the effectiveness of the alarm (e.g. paint it).

The smoke alarm maintenance obligations on tenants to test and clean must be done every 12 months. What does this mean for shorter tenancies?

There are two types of tenancy agreements in Queensland - fixed term and periodic term. Fixed term agreements have a definite start and a definite end date, whereby periodic agreements have a definite start and no end date.

Tenant obligations to clean and test smoke alarms in the rental home only apply to tenancies of 12 months or longer or periodic tenancies that are 12 months or longer in duration.

Tenants who have tenancies of less than 12 months or hold a periodic tenancy of less than 12 months will not be required to clean and test the alarms.

Public housing tenants - please note that the State Government installs hard-wired smoke alarms in all public housing dwellings.

How will tenants know about these obligations?

The obligations are referred to on the QFRS website (www.fire.qld.gov.au), the RTA website ([RTA: Achieving fair rental outcomes in Queensland](#)) and will be included in the rental rules.

It is a matter for owners/agents how they might help tenants to beware of their obligations. Some agents will provide additional best practice statements to the tenant when they are signing a new agreement. They will also provide awareness and compliance information to tenants during the tenancy at the renewal of agreements and when conducting inspections of the property. To assist Agents and owners to accurately advise tenants about their obligations the QFRS has prepared a checklist that can be given to tenants advising of their obligations.





What do owners/lessors have to do?

- **Install** smoke alarms;
- **Test and clean** the alarm in accordance with the manufacturers instructions within 30 days prior to the start of the tenancy (this obligation includes renewals) ;
- **Replace** each battery that is spent or is almost spent;
- **Replace** the alarm before the end of its service life, or if it reaches the end of its service life, replace it immediately. Under the Australian Standard a smoke alarm should have a service life of 10 years, under normal conditions of use. In order to reduce the maintenance burden QFRS recommends that:
 - Higher quality alarms with longer warranties (e.g. 10 years) be purchased;
 - Hardwired alarms with long lasting back up battery supply or 10 year battery alarms are installed.
 - Alarms that include a “tamperproof” feature that makes the battery difficult to remove be purchased.

A table with some cost comparisons is included below.

Hardwired alarms are the standard for new houses and provide a more reliable level of protection but are more expensive. 10 year Lithium battery alarms are cheaper over the long term and provide an increased level of reliability than a 1 year alarm, especially if they include a tamperproof feature.

1 year battery alarms	10 year Lithium Battery Tamperproof Battery Alarms	Hardwired Alarms
Single Household - Initial Cost for 2 alarms = \$20-\$60 Batteries = \$10 per annum Individual householder cost over 10 years- \$120-\$160 NB cheaper alarms may need to be replaced within 10 years.	Single Household - Initial Cost for 2 alarms @\$35-\$75 ea = \$70 - \$150 Batteries = NIL per annum Individual householder cost over 10 years @\$35- \$75 per alarm= \$70-\$150 NB- A tamperproof alarm is recommended as reduces the risk of removal of the battery.	Single Household - Initial Cost for 2 alarms = \$325-\$420 (includes installation) Batteries = \$10 per annum Individual householder cost over 10 years \$425 -\$520 (if one year back up batteries)

Notes

- Prices vary and the above are indicative only
- The prices for the 1 year battery and 10 year lithium alarms do not include contractor installation or maintenance costs as these alarms are usually DIY installed. Some persons/agents may choose to arrange this commercially;
- “Tamperproof” features vary in effectiveness- for commercial level alarms the battery cannot be removed without destroying the alarm. Others include features that hinder rather than make impossible battery removal.
- Commercial level tamperproof alarms may not be readily available in usual retail outlets.

Does the lessor have to clean and test the alarm, and replace the battery if they become aware that the battery is flat or almost flat at the time of cleaning and testing?

Yes. The lessor obligations include tenancy renewals. For example; if the tenant starts a 6 month tenancy, the lessor must clean and test the alarm within 30 days before the start of that tenancy. If at the end of the 6 month tenancy, the lessor offers a new tenancy agreement to the tenant, and the tenant accepts a new lease offer, the lessor must clean and test the alarm within 30 days before the start of the renewal tenancy agreement. The start of a new tenancy agreement includes renewing existing agreements.

What happens if the fixed term agreement rolls over to a periodic agreement?

If a fixed term agreement is not renewed, the Residential Tenancies Act allows for the agreement to rollover to a periodic agreement. Because this agreement is rolled over, as opposed to a new agreement, the lessor’s obligations to clean and test the alarm are not required to be met.

If the periodic agreement is renegotiated and a new fixed term agreement is offered to the tenant, the lessor’s obligation must again be met. If there is not an offer of a new agreement, and the tenant remains on a periodic term, the tenant’s obligations have to be met if the agreement lasts 12 months or more.





What should an agent do if they become aware that a tenant is not meeting their obligations under the laws?

Strictly speaking there is no obligation to do anything. A person is not generally obliged to either stop someone else breaking the law or, indeed, to report it.

However this approach is not very helpful or practical. Suggested approaches include:

- a) Advise the tenant of their obligations, perhaps using the QFRS developed checklist;
- b) If the breach includes damage to the smoke alarm (e.g. smashing the alarm) a notice to remedy process may be available;
- c) Report the suspected breach to QFRS. The QFRS can investigate suspected breaches, though its powers in this respect are limited in that QFRS personnel have no right to enter a dwelling, except at the time of a fire.

When reporting a matter to QFRS, please provide as much information as possible (e.g. photo of a smoke alarm with the battery removed or of a smoke alarm that is taken down). The QFRS can issue infringement notices for breaches, but will only do so where there was sufficient evidence of a breach.

The Real Estate Institute of Queensland (REIQ) recommends that special terms are added to the tenancy agreement to outline smoke alarm obligations.

The suggested terms are:

The tenant must:

- (a) test each smoke alarm in the premises:
 - (i) at least once every 12 months; or
 - (ii) if a fixed term tenancy is of less than 12 months duration, but is held over under a periodic tenancy of 12 months or more, at least once in the 12 month period:
 - A. For an alarm that can be tested by pressing a button or other device to indicate whether the alarm is capable of detecting smoke - by pressing the button or other device;
 - B. Otherwise, by testing the alarm in the way stated in the Information Statement provided to him/her at the commencement of the tenancy.
- (b) Replace each battery that is spent, or that he/she is aware is almost spent, in accordance with the Information Statement provided to him/her at the commencement of the tenancy;
- (c) Advise the lessor as soon as practicable if he/she becomes aware that a smoke alarm in the premises has failed or is about to fail (other than because the battery is spent or almost spent); and
- (d) Clean each smoke alarm in the premises in the way stated in the information statement provided to him/her at the commencement of the tenancy:
 - (i) At least once every 12 months; or
 - (ii) If a fixed term tenancy is of less than 12 months duration, but is held over under a periodic tenancy of 12 months or more, at least once in the 12 month period.

In the event that the tenant engages a contractor/tradesperson (as listed in Item 17) to meet his/her obligations listed in (a) to (d) herein, such engagement shall be at his/her own cost and expense."

I have existing tenants on a lease agreement, and one of the tenants is moving out. Does that become a new agreement, and do smoke alarms have to be checked again?

This situation is deemed to not be a new tenancy and is only an amendment to an existing agreement. The smoke alarm obligations of the lessor will not be required to be met until renewal of the agreement.

What happens if the tenant breaks their lease agreement? Who is responsible for cleaning and testing the alarm when and if new tenants are secured to take over the lease agreement?

As with any new lease agreement the lessor is responsible to **Test and clean** the alarm, in accordance with the manufacturer's instructions, within 30 days prior to the start of the tenancy (this obligation includes renewals) as it is a new tenancy. However, it will depend on the individual circumstances of each case and the reasons for breaking of the lease. The Residential Tenancies Act allows for the tenant to be liable to pay the reasonable costs incurred by the lessor in reletting the premises. The lessor may require the tenant to pay any costs that may be incurred for smoke alarm maintenance in this situation.





As a real estate agent managing properties I have been advised by the lessor that they will check smoke alarms.

How do I monitor that?

As a best practice recommendation, agents should confirm the instruction in writing with the lessor. Ask the lessor to advise your agency in writing each time the alarm is cleaned and tested, and the battery is replaced. Agents should ensure that systems are in place to ensure that confirmation from the lessor is received accordingly.

If the lessor/agent is unsure when the smoke alarm was installed, or how old the alarm is, what should be done?

Under Australian Standards, alarms should have a manufacturer date stated on them. If the date cannot be found on the alarm, or there is uncertainty, it is recommended that the smoke alarm be replaced. Agents should make this recommendation in writing to the lessor and seek confirmation in writing from the lessor of their instruction.

As a property owner I do not feel comfortable with installing and testing the alarm myself?

If agents or property owners do not feel comfortable with attending to smoke alarm installation and testing, there are a number of companies that will undertake the work for a fee.

What if my property is a holiday rental?

Because of the definition of "tenant" in the legislation, tenants of short holiday tenancies (6 weeks or less) are not covered by the requirements of the law. Therefore, the lessor of such a premises is not required to test, change spent batteries and clean within 30 days of a tenancy that is 6 week or less. However, the lessor is still required to install alarm/s, and it is in their best interests to protect their property as much as possible.

Landlords of holiday rentals that are less than 6 weeks are advised to make sure alarms are generally maintained as there may well be a general civil duty of care to maintain such alarms. Further information about this general duty is a matter for the landlord to take up with their legal advisers.

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