

# Smoke Alarm Legislation

## Frequently Asked Questions



### **Is it law for residential properties to have mains powered smoke alarms installed?**

Residential properties that are subject to sale, rent or hire are required under the Building Regulations 2012 to install mains powered smoke alarms. This includes Class 1a, Class 1b, Class 2 and Class 4 buildings, as defined under the *Building Code of Australia*.

### **When did the smoke alarm regulations commence?**

The requirement came into effect on 1 October 2009.

## **SELLING OR BUYING A PROPERTY**

### **I am planning to sell my home. It does not have any hard wired (mains powered) smoke alarms installed. What am I required to do?**

You are required to install mains powered smoke alarms prior to the transfer of ownership (settlement).

### **I am thinking of buying a new house to live in. Who has to fit the smoke alarms?**

It is the responsibility of the vendor (seller) to install smoke alarms prior to the transfer of ownership.

### **I am thinking of buying a house. How do I know if the smoke alarms fitted are compliant?**

When purchasing a home, buyers should check that the smoke alarms are:

- Permanently connected to mains power
- Are less than 10 years old
- Are correctly placed (please see [DFES Smoke Alarm Fact Sheet for correct placement](#))

A mains powered smoke alarm will usually have a LED indicator. Look for terms such as Mains or AC next to the LED indicator.

### **I have recently taken ownership of a house and it does not have smoke alarms fitted. What can I do?**

Contact the seller and ask them to rectify the situation. Alternatively, you can install the smoke alarms to meet the requirements and, if the transfer of ownership has occurred within the last 12 months, recover reasonable costs in court from the previous owner [Regulation 57(2)].

In addition action can be taken against the previous owner by your local government and an infringement notice

issued or prosecution action taken. [Regulation 56]. A fine of up to \$5,000 can be imposed.

As the new owner, if there are no smoke alarms installed when you take ownership of the property you will be required to fit smoke alarms within 12 months otherwise you will be in breach of the regulations. [Regulation 57]

The best advice is to check with the vendor (seller) and confirm that smoke alarms have been installed prior to the transfer of ownership.

## **RENTING**

### **I am a landlord. What are my legal responsibilities in respect to smoke alarms?**

You must ensure, to an extent practicable, that each smoke alarm installed in your property is:

- Maintained in working order
- Permanently connected to the mains power supply; exceptions are:
  - Where the use of a battery powered smoke alarm has been approved by the local government under Regulation 61
  - Where the battery powered smoke alarm is allowable under Regulation 60(2)(d)(ii) in circumstances where there is no hidden space in which to run the electrical wiring and there is no appropriate alternative location (local government approval is not required in this instance)
  - Where a battery powered smoke alarm is approved or allowable (a) or (b) above, they must have a 10 year non-removable battery
- Not more than 10 years old and/or has not reached its expiry date (if provided on the alarm) [Regulation 62]

The Regulations do not specify what is required in order to maintain a smoke alarm in working order. The Department of Fire and Emergency Services (DFES) recommends the following smoke alarm maintenance routine for property owners / landlords:

- Check the alarm(s) are firmly secured in the correct location as per the Building Code of Australia requirements (double sided tape is not acceptable)

# Smoke Alarm Legislation

## Frequently Asked Questions



- Check the required power source is connected and operating. Where a mains powered smoke alarm is installed, alarms will have a visual display/light to indicate that mains power is connected and this should be easily seen when standing beneath the alarm
- Test the smoke alarm during routine inspections or at least every six months
- Check the smoke alarm(s) for a build-up of dust and cobwebs
- Vacuum around the smoke alarm vents with a soft brush at least every 6 months
- Use a surface insect spray around the smoke alarm to prevent insects nesting inside
- Check the smoke alarms are within their service life. Smoke alarms require replacement every 10 years. The date for replacement is often located on the unit
- Replacing batteries annually, where appropriate. Mains powered smoke alarms have back-up batteries – this can either be a 9V battery which requires to be changed annually while some models have a rechargeable non removable battery which does not need to be changed during the life of the unit.  
*\* Always refer to the manufacturer's guide when selecting batteries and following testing procedures*

This maintenance routine should be done at each inspection or at intervals otherwise stated. Please note, a licensed electrical contractor is required to disconnect or install mains powered smoke alarms. All other smoke alarm maintenance does not require a licensed electrical contractor.

DFES recommends the following maintenance routine be included in the Tenant's Responsibilities:

- Regular testing of the alarm (suggested monthly so tenants are familiar with the alarm sound)
- Not to tamper with alarm(s) or place any obstruction to restrict airflow to the alarm(s), including paint

### **I am a tenant moving into a rental property and observe there are no smoke alarms fitted. What should I do?**

Speak to your landlord. The laws in Western Australia require owners to have mains powered smoke alarms

installed in all residential properties that are subject to sale, rent or hire.

If this does not resolve the situation, you should speak to your local government who can inspect the property, issue a rectification notice, infringement notice or prosecute for any breaches with a fine up to \$5,000.

### **WHERE ARE SMOKE ALARMS REQUIRED AND WHAT TYPE SHOULD BE FITTED?**

#### **How many smoke alarms will have to be fitted to my house?**

The number of smoke alarms you will require will depend on the design of your property, in particular the number of bedrooms, how far they are separated and how many levels in your house.

Class 1a, Class 2 & Class 4 dwellings (including single and multi-storey dwellings, duplexes, town houses, terrace houses, villa units or chalets, apartments and residential units inside a building of another class e.g. a caretaker's residence) require smoke alarms to be installed on or near the ceiling in:

- Any storey containing bedrooms
  - Between the bedrooms and the remainder of the dwelling; and
  - Where bedrooms are served by a hallway, in THAT hallway; and
- Any other storey not containing bedrooms, in the area of the stairway (exit path) between each level

Class 1b dwellings (hostels/guest houses/bed and breakfast premises) require smoke alarms to be installed on or near the ceiling:

- In every bedroom; and
- In every corridor or hallway associated with a bedroom; and
- Any other storey not containing bedrooms, in the area of the stairway (exit path) between each level

See DFES Fact Sheet relating to installation.

#### **What type of smoke alarms are the best to use?**

Any smoke alarm used must conform to AS 3786. DFES recommends you install photo-electric smoke alarms. Research indicates this type of alarm consistently provides

# Smoke Alarm Legislation

## Frequently Asked Questions



sufficient time for occupants to escape from smouldering and flaming fires, provided the alarms are properly installed and maintained and occupants hear them.

DFES also recommends that owners purchase smoke alarms with the following features:

- Hush (Silence) function
- Test function
- Rechargeable back-up battery

### **THERE ARE SMOKE ALARMS INSTALLED, DO THEY MEET THE REQUIREMENTS?**

**There are more than two hard wired smoke alarms installed and they have been fitted at different dates. What date should I use?**

The date the first smoke alarm was installed should be used.

**The house has mains powered security system installed which has a smoke detection function incorporated. The system has a battery back-up fitted at each smoke detector. Does this meet the requirements of the regulations?**

Smoke alarms connected as part of a security system are acceptable as long as they conform to the following requirements:

- Smoke alarms must comply with Australian Standard 3786
- Smoke alarms must be permanently connected (hard-wired) to the mains power and not able to be isolated from mains power if the security system is switched off. The supplier or manufacturer would be best placed to confirm whether the security system meets these requirements
- The location of the smoke alarms must comply with the requirements of the Building Code of Australia
- The smoke alarms must be less than 10 years old.

### **How often should smoke alarms be replaced?**

All smoke alarms need to be replaced every 10 years [Regulation 60(2)(b)] – smoke alarms don't last forever even if they are 240 volt mains powered!

Smoke alarms are manufactured to a standard that requires them to perform for 10 years. After that time

smoke alarms may malfunction and their efficiency may be compromised with accumulated dust, insects, airborne contaminants and corrosion of electrical circuitry.

The limited lifespan of smoke alarms applies to ALL smoke alarms regardless of power source (battery or 240 volt) or the type of smoke alarm (ionisation or photo-electric/photo-optical).

### **IT IS NOT PRACTICAL TO INSTALL A MAINS POWERED SMOKE ALARM**

**There is no mains power available. Do I still have to install smoke alarms?**

A smoke alarm powered by a 10 year life non-removable battery is to be used. When mains power is supplied to the dwelling then a hard wired (mains powered) smoke alarm must be installed.

**I am selling an apartment in a block where the ceiling is solid concrete. Do I have to install a hard wired (mains powered) smoke alarm?**

In dwellings where the construction of the building does not permit a space to conceal the wiring and there is no appropriate alternative location to install a mains powered smoke alarm (such as the wall) then a smoke alarm powered by a 10 year life non-removable battery is to be used.

**Do I require a Licensed Electrical Contractor to install a smoke alarm powered by a 10 year non removable battery?**

These smoke alarms do not require a licensed electrical contractor to install, as they are not connected to the mains power.

**I am an owner or a landlord and installing a mains powered smoke alarm and there are other reasons of a structural nature that make this impractical? Do I have to install smoke alarms?**

You will require local government approval to install a smoke alarm powered by a 10 year life non-removable battery.

Application for approval to install a smoke alarm powered by a 10 year life non-removable battery must be made to your local government. They will review the circumstances.

# Smoke Alarm Legislation

## Frequently Asked Questions



You will need to follow the local government process and this may involve paying a fee no greater than \$170 to process your application. [Regulation 61].

### **I am selling a house that is likely to be demolished after the transfer of the property. Do I have to install mains powered smoke alarms?**

If a vendor expects a property will be demolished after sale because of its condition or circumstances of the sale, and if there is mutual agreement between the vendor and purchaser that the property will be demolished shortly after sale, smoke alarms may not have to be installed.

However the vendor must understand that a purchaser's intention to demolish the house does not remove their responsibilities under the Regulations if the building is not demolished and/or is occupied after sale. This means irrespective of any agreement or condition of sale or promises from purchasers, the vendor will be in breach of the Regulations if they have not installed smoke alarms and the building is occupied after transfer of ownership.

## **SMOKE ALARM MAINTENANCE**

### **How do you maintain smoke alarms so they continue to work effectively?**

Smoke alarms require regular testing and cleaning to provide effective protection. You should consult the manufacturer's guide.

DFES recommends the following smoke alarm maintenance routine:

- Test the smoke alarm monthly to ensure the alarm sounder is operating
- Replace batteries annually, where appropriate. Mains powered smoke alarms have back-up batteries – this can either be a 9V battery which requires annual replacement of the battery, while some models have a rechargeable non-removable battery which does not need to be changed during the life of the unit. *\* Always refer to the manufacturer's guide when selecting batteries*
- Check the required power source is connected and operating. Where a mains powered smoke alarm is installed, alarms will have a visual display/light to indicate that mains power is connected and this should

be easily seen when standing beneath the alarm

- Check the smoke alarm(s) for a build-up of dust and cobwebs
- Vacuum around the smoke alarm vents with a soft brush at least every 6 months
- Use a surface insect spray around the smoke alarm to prevent insects nesting inside at least once a year
- Check the smoke alarms are within their service life. Smoke alarms require replacement every 10 years. The date for replacement is often located on the unit

When maintaining your smoke alarm it is also important to note the following:

- Generally smoke alarms will sound a regular warning 'beep' if the battery needs replacing. Refer to manufacturer's guide for exact warning details
- Smoke alarms should never be painted
- Contact the manufacturer or supplier with any queries regarding your smoke alarm

Smoke alarm maintenance may require you to use a ladder. Please take care.

Please note, a licensed electrical contractor is required to disconnect or install mains powered smoke alarms. All other smoke alarm maintenance does not require a licensed electrical contractor.

## **MAINS POWER SMOKE ALARMS AND POWER FAILURE**

### **How long will the back-up battery last upon failure of the mains power?**

Australian Standard Smoke Alarms 3786-1993 specifies that the stand-by power supply (that is provided to energise the smoke alarm upon failure of the mains power) must be capable of powering the smoke alarm without a fault signal for at least 7 days, followed by 3 days with a battery fault signal and then also be capable of producing an alarm signal for at least 4 minutes. This is the minimum standard and many manufacturers state that their batteries are able to provide more substantial periods of back-up on mains power failure.

Consumers should be aware of the manufacturer's

# Smoke Alarm Legislation

## Frequently Asked Questions



instructions for all smoke alarms and that rechargeable batteries may require a few days to charge after the smoke alarm is first being connected to the mains. During this time an alarm fault signal may sound (i.e. a short beep) every 40 seconds for up to 2 hours whilst it is charging. This condition may also apply to batteries that have been totally depleted during a period of mains power failure.

### **Do I need to replace batteries in mains powered smoke alarms after extended periods of mains power outage?**

#### **Rechargeable lithium batteries**

If a smoke alarm is subjected to many power failures for extended periods of time over the life of the smoke alarm, the rechargeable lithium cells may degrade and become inoperable. A low battery fault signal will operate to alert occupants that there is an issue with the battery. In this case it is not possible to change the battery and you will require an electrical contractor to replace the entire smoke alarm.

Many manufacturers provide a limited warranty on their smoke alarms, that may allow for repair or replacement of the smoke alarm if a low-battery / battery-fault alarm occurred within this warranty period if the unit had regular mains power connected. Other manufacturers exclude batteries from their warranty. Consumers should be aware of the limitations of the warranty prior to purchase and installation.

#### **Non-rechargeable 9V alkaline battery**

Smoke alarms which use a 9V alkaline battery as its stand by power source require the battery to be replaced each year (DFES suggests the 1 April) and when the low battery indicator (chirp) sounds. In most models the audible chirping sound will also be accompanied with a flashing LED signal. In replacing these batteries, use only 9V alkaline batteries specified by the manufacturer. Use of a different battery may have a detrimental effect on operation or may cause the battery to explode resulting in injury or fire.