

**The importance of installing a working smoke alarm in your property cannot be underestimated. Statistics show that you are twice as likely to die in a house fire if you don't have a smoke alarm.**

There are three kinds of smoke alarm – Optical, Ionisation and Combined. Here are the key differences:

## **Optical**

Sometimes known as photo-electronic alarms, optical smoke alarms are highly effective in detecting slow-burning fires.

In the initial stages of a smouldering fire, such as those originating from overheated wiring, very little heat is produced. However, this type of fire does produce large particles of smoke - which optical alarms can detect thanks to light sensors.

Optical models tend to be more expensive than other types of alarm.

## **Ionisation**

Ionisation smoke alarms can cost as little as £3 or £4, but could be the best money you ever spend. While they are marginally less sensitive to slow-burning fires, they are quick to detect hot, flaming fires such as chip pan fires.

One of the most common causes of a domestic blaze, chip pan fires generate incredible heat but surprisingly small particles of smoke. Ionisation alarms work by detecting the heat (ions) from the flames, reacting before the smoke gets too thick.

## **Combined**

Combined smoke alarms feature the benefits of both optical and ionisation alarms, but are less commonly available.

## **Inter-connectable**

If you own a particularly large property, it's a good idea to buy smoke alarms which are inter-connectable. They can be fitted to different areas of your property, yet smoke detected by any one of them will trigger the alarm at all others.

## **Where to fit them?**

As a minimum, you should look to install one alarm for each floor of your property - preferably in a central location. Kitchens and bathrooms aren't ideal as cooking fumes and shower steam can cause frequent false alarms.

Smoke alarms should be fitted onto the ceiling, rather than on shelving units or a side wall. Smoke rises straight up – so an alarm on the ceiling has the best chance of detecting it quickly.

While the vast majority of people appreciate just how crucial smoke alarms are, less people understand the differences between various alarm types.

## Maintenance

Battery-powered smoke alarms should be checked once a week, and standard batteries will need to be replaced every twelve months. Alarms are designed to 'chirp' intermittently when the battery is weak, but don't rely entirely upon this.

Some models come fitted with 10 or 15 year batteries, but these still need testing in the same way as a regular alarm.

Alarms powered at the mains are also available. Mains-powered alarms eliminate the need to constantly check the battery, but it's wise to install a battery-powered alarm as a back-up in the event of a power cut. (Find out more about dealing with a power cut).

Whichever kind of smoke alarms you opt for, always make sure they carry the British Standards kite mark.



# Fire Safety Checklist

**Ideally, you should be able to answer 'yes' to each of these questions...**

- Do you have smoke alarms fitted on each floor of your home?
- Have you made an escape plan so that everyone in your home knows what to do and how to get out, if there is a fire?
- Do you keep all doorways in your home clear so that people can escape if there is a fire?
- Do you take extra care in the kitchen? - Never leave young children alone in the kitchen!
- Do you take extra care when cooking with hot oil?
- Do you make sure candles are in secure holders and are away from any materials that could burn?
- Do you take special care when you are tired or when you've been drinking?
- Do you stub out cigarettes properly, dispose of them carefully and never smoke in bed?
- Are you into the habit of closing all doors at night?
- Do you have only one plug in each electrical socket?
- Do you keep matches and lighters where children cannot see or reach them?
- Do you always switch off and unplug electrical appliances rather than leave them on standby?