Heat Detectors in Dwellings

Heat Detectors

Example:

Mains Thermistor Heat Alarm with
Alkaline Battery Back Up

Heat alarms are used in rooms where smoke or mist are frequently parts of the normal atmosphere, such as kitchens or garages, and consequently ionisation or optical smoke detectors would not be effective. Heat alarms ought to be interconnected with other smoke alarms on escape routes to give full protection.

Heat Detector

Smoke alarms in homes can go off whenever there's smoke present. If a person smokes cigarettes, burns food or lights incense, a smoke alarm might go off. A heat detector, on the other hand, is indifferent to how much or what type of smoke is in the air. It will only react when it detects a change in heat, associating that heat change with the possibility of a fire in the area.

Photoelectric Sensors

Most heat detectors function off of photoelectric sensors. They can be powered by the electricity in a home, from a battery, or in some cases from both sources, with the battery being a backup. A heat detector's sensor is geared to take readings of the ambient heat in a room and to test that heat against a predetermined number in its inner workings. Once the heat in an area reaches that predetermined number, the heat detector sends a signal. The signal might set off an alarm, or it might move through a to warn those monitoring for dangers. Sometimes, both of those events occur.

Temperature

With heat detectors, it's about the temperature. According to firesnoop.com, many heat detectors come with a built in number of 120 degrees Fahrenheit. Once the ambient temperature of a room reaches that degree, the signal goes out and the alarm goes off. Heat detectors might have these numbers changed by the owner to lower levels. Say for instance that a heat detector wasn't meant to monitor for fire, but rather to be sure that a cold room for storage doesn't rise above a certain temperature. This will trigger an alarm and inform people that the cold room is no longer serving its purpose.

There are two different types of heat detectors. The first is called a rate of rise detector, and the second is a fixed detector. The most expensive and complex heat detectors actually combine both types of detectors so the alarm will go off if either condition is met. However, these

combination detectors are not always the best option, so don't always assume that you should buy them over the single type detectors.

Rate of rise heat detectors, commonly referred to ROR detectors, go off when they detect a sudden change in temperature. You can set the rate of temperature increase at which the alarm goes off, and any sudden temperature change that raises the temperature quickly will set off the alarm. You can also set the alarm to go off whenever the temperature rises at a steady rate. For example, if the alarm is set to go off if the temperature suddenly raises 15 degrees but the temperature starts raising by only 10 degrees every minute, the heat detector will register that this is an unusual change and go off after a few minutes.