


# Smoke Alarms & Home Fire Safety

Over the past 7 years, there have been legislative and standard changes which have resulted in a shift from ionisation smoke alarms to photoelectric smoke alarms. With these changes, the risk of nuisance alarms has increased largely due to the differing detection methods used between the two device types.


The widespread adoption of photoelectric technology for smoke alarms has come about as a result of modern households having a greater number of synthetic materials. Materials such as plastics, nylon, polyester, and rubber can be found in furnishings, bedding, construction materials, and general household goods. These synthetic materials ignite more readily, and burn faster than natural materials like hardwood timber, cotton, and wool. The need for faster responding smoke alarms drove the adoption of photoelectric technology.

Photoelectric alarms work by aiming a light source (LED) through a sensing chamber to a receiver. When particles enter the chamber, changes to the light pattern are detected by the receiver, which in turn triggers an alarm.

Regular maintenance of your smoke alarms can help reduce the probability of nuisance alarms occurring and ensure the longevity of your device. Refer to these handy tips for guidance.

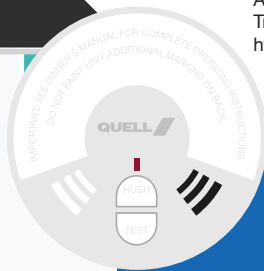
 **Regular Cleaning:** Prevent dirt and debris from entering the smoke alarm chamber by regularly cleaning your alarm.



 **Battery Replacement:** Alarms with 9V batteries should have the battery replaced at least once a year.



 **Proper Installation:** Install smoke alarms in suitable locations, avoiding areas of high airflow, dead air space, or where steam or high humidity may be present.



A full range of How-to and Troubleshooting videos can be found at <https://quell.com.au/video-tutorials>



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