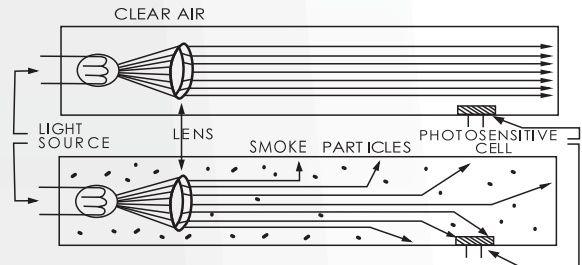


SMOKE ALARMS

TECHNOLOGY

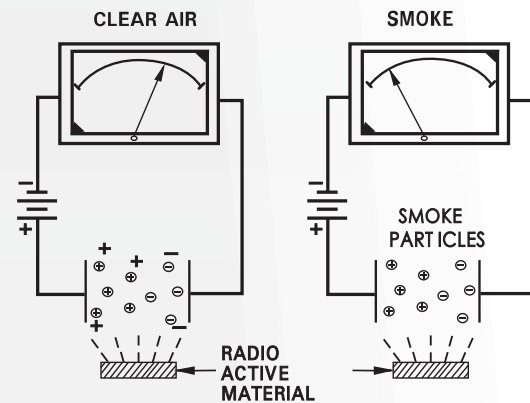
PHOTOELECTRIC

Smoke alarms with photoelectric sensing technology use a light transmission source and a photosensitive receiver in this design. When smoke or dust enters the light path, some light is scattered or absorbed. The result of a reduction of light falling upon the photosensitive receiver will cause an alarm. Photoelectric smoke alarms are best for detecting smouldering fires. Photoelectric smoke alarms are the preferred smoke alarms by the Fire Department and Fire Protection Association. Ideally, photoelectric smoke alarms should be installed in living areas and near kitchens.



IONISATION

Smoke alarms with ionisation sensing technology use a man-made radio-active element, Americium 241. This element ionises the air around it and as a result, excellent conductivity is possible. (refer to illustration showing 'Clear Air'). Current would pass through the gap with ease without causing any alarm. However, in the event of particles arising from combustion or dust particles (refer illustration showing 'Smoke') entering the Sensing Chamber, it encapsulates the ionised air. This interaction causes an increased resistance to conductivity. When this occurs, the alarm is activated. Ionisation type smoke alarms are best for detecting flaming fires. Ideally, ionisation smoke alarms should be installed in bedroom areas.



LOCATION GUIDE

PSA strongly recommend that both ionisation and photoelectric smoke alarms be installed to help insure maximum detection of the various types of fires that can occur within the home.

