

1.2. Types of Smoke and Fire Detectors

1.2.11. Optical Beam-Type Smoke Detector

A smoke detector comprising a light source and a receiver to detect the obscuration of light as a result of smoke along a line. The transmitter and receiver may be at opposite ends or they may be incorporated into a single housing with a reflector at the opposite end.

1.2.12. Rate-of-Rise Detector

A device that responds when the temperature rate of rise is more than a predetermined level.

1.2.13. Smoke Detector

A device used for detecting visible and invisible particles of smoke resulting from combustion. Several operating principles are used for detection; examples include; photoelectrical and Ionization spot-type detectors, Air-sampling type and optical beam-type smoke detectors.

1.2.14. Spot-Type Smoke Detector

A device in which sensitive element is fixed in a certain location.

1.2.15. Gas Detector

A device that detects the presence of a specified gas concentration. Gas detectors can be either spot-type or line-type detectors.

1.2.16. Multi-sensor Detector

A device that contains multiple sensors that separately respond to physical stimulus such as heat, smoke, or fire gases, or employs more than one sensor to sense the same stimulus. A device capable of generating multiple alarm signals from any one of the sensors employed in the design, independently or in combination. The sensor output signals are mathematically evaluated to determine when an alarm signal is warranted. The evaluation can be performed either at the detector or at the control unit. This device has listings for each sensing method employed.

1.2.17. Radiant Energy sensing Fire Detector

A device that detects radiant energy, such as ultraviolet, visible, or infrared, that is emitted as a product of combustion reaction and obeys the laws of optics.