

3. Types of Fire Detection Systems

3.1. The various types of Fire Detectors that can be incorporated into Fire Detection and Alarm systems are as follows.

3.1.1. Smoke Detectors

- a. Ionization Smoke Detectors (Banned in many jurisdictions now, including UAE)
- b. Photoelectric Smoke Detectors
- c. Optical Smoke Detectors
- d. Aspiration Type Air Sampling smoke Detectors
- e. Beam Type Smoke Detectors
- f. Video Type smoke Detectors

3.1.2. Heat Detectors

- a. Spot Type Heat Detectors
- b. Line Type Heat Detectors
- c. Fusible Link Heat Detectors

3.1.3. Radiant Energy Detectors

- a. Ultraviolet Flame Detectors
- b. Infrared Flame Detectors
- c. Video Type Flame Detection
- d. Spark and Ember Flame Detection

3.1.4. Multi-sensing Detectors

- a. Heat-Smoke Multisensing Detectors
- b. Combination of Gases Detectors

3.1.5. Manual Detectors

- a. Manual Break Glass Call Point
- b. Manual push button Call Point
- c. Manual Pull Station

3.1.6. Supervisory Detectors

- a. Water Flow Switch Detectors (Sprinkler System, Deluge System etc.)
- b. Pressure Switch Detectors (Pre-action Systems,
- c. Supervisory Signal Detectors (Pump, Water low level , automatic Door Close/Open, elevator status etc.)

3.1.7. Gas Detectors

- a. Carbon Monoxide (CO) Detectors
- b. LP Gas Detectors
- c. Flammable Gas and Vapor Detectors

3.2. The various types of Control Mechanisms to monitor the Detectors and Sensors are as follows.

- a. Addressable Fire Control Systems
- b. Conventional Fire Control Systems
- c. Wired Fire Control Systems