

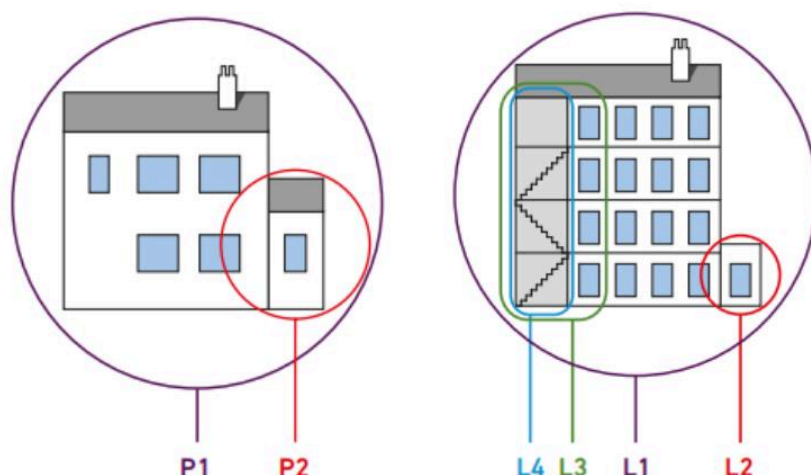
Subject: What are the different Fire Alarm Categories in BS5839 Part 1 2025?

Fire Alarm System categories specify the level of protection that a system provides according to the recommendations of British Standard BS 5839-1:2025 .

Categories can be grouped into three: Manual, Life Safety and Property Protection.

Fire alarm systems should meet the requirements of the BS 5839-1:2025 based on the relevant category to be compliant.

The British Standard BS5839-1:2025 grades systems according to the level of Automatic Fire Detection (AFD) as follows:



At the most basic level, it is normal to protect escape routes and areas deemed to be of higher risk/value albeit the responsibility for specifying the Category usually rests with the Insurer, Fire Risk Assessor or both.

Whilst the typical approach is to install the minimum specification it should be noted that the more fire detection is installed, the earlier a fire will be detected and the consequences of eg building damage reduced. On this account, there is a clear business case for installing additional fire detection beyond what may be specified.

BS 5839-1:2025 splits Fire Alarm Systems into 3 system design categories:

Category P Systems – Property Protection Fire Alarm Systems

Category L Systems – Life Protection Fire Alarm Systems

Category M Systems – Manual Operation Systems

Property Protection Fire Systems

Under BS 5839-1:2025, Property Protection systems (Category P) are used when the primary objective is to minimise damage to property, rather than protect life (which is the goal of Category L) or rely on manual activation (Category M).

Category P may apply when insurance or asset-protection criteria require early detection of fire to limit damage and downtime, and to detect fires before they spread beyond valuable areas, e.g., server rooms, archives, plant rooms.

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Category 'P' type systems are usually specified by Insurers.

- 'P': Automatic Fire Detection (AFD) designed primarily to protect property
- P1: AFD installed throughout all areas
- P2: AFD is installed only in defined areas

Life Protection Fire Systems

Under BS 5839-1:2025, Category L fire detection systems are designed specifically for life protection, i.e., systems installed to protect building occupants by providing early warning of fire to enable safe evacuation. These are used where human life safety is the priority, either due to the nature of the building (e.g., sleeping risk) or based on fire risk assessments.

Typically, you can expect premises to fall under category L such as in buildings where people sleep (hotels, care homes, student housing), public or commercial buildings with high occupancy, premises with vulnerable or immobile occupants, or where a fire risk assessment or regulations (e.g. the Fire Safety Order) indicate a legal duty to protect occupants.

Category 'L' type systems are usually specified by Fire Risk Assessors.

- 'L': Automatic Fire Detection (AFD) is designed to primarily protect Human Life.
- L1: AFD installed throughout all areas, and smoke, combustion gas or multi-sensor detectors required where rooms are occupied (i.e. where people sleep).
- L2: AFD installed in defined areas in addition to L3 with the additional objective of affording early warning of fire to occupants of rooms in which people sleep, and in specified areas of high fire hazard level and/or high fire risk.
- L3: Installed in escape routes and rooms or areas opening onto these routes.
- L4: AFD installed in escape routes comprising circulation areas and spaces such as corridors and stairways, and at the top of any flue-like structure (i.e. lift shaft, hoist)
- L5: Applies to a non – prescriptive system in which protected areas and/or the location of detectors is designed to satisfy a specific fire risk objective – other than that of L1 to L4.

M: No Automatic Fire Detection - System designed to be operated manually

Category M fire alarm systems under BS 5839-1:2025 are Manual fire alarm systems, meaning all fire detection and alarm activation are manual, via manual call points (MCPs) like break-glass units.

Manual systems mean there is no automatic fire detection (like smoke or heat detectors). They rely entirely on people discovering the fire and activating an alarm manually and this is usually combined with alarm sounders which are installed throughout the building to warn occupants.

Since they incorporate no Automatic Fire Detection (AFD), and are primarily for Life Safety, Category 'M' type systems are usually only specified by Fire Risk Assessors.

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Alarm Receiving Centres

In order to automatically alert the Fire Brigade and key holders in the event of activation of the system outside of office hours, consideration should be given to connecting the system to an Alarm Receiving Centre (ARC).

In Category L systems, the fire signal should be received at the ARC within 90 secs. A Catastrophic (total) failure, whereby no signals can be transmitted should be indicated at the ARC and on CIE within 3 mins.

In Category P systems, the fire signal must reach ARC in 120 seconds. A Catastrophic or total failure is to be shown within 31 minutes.

Where AFD is provided with means of automatic transmission of alarm signals to an ARC, a label should be fitted to the CIE or adjacent to it to avoid false activations.

Have a question about Fire Alarms? Need a Fire Safety Risk Assessment? Get in touch today.

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