

Types of fire alarm

The British Standard for fire alarms is published in a guide called BS5839. There are two parts which define the types of alarm required in buildings: part 1 deals with all non-domestic and part 6 deals with domestic buildings.

What type of fire alarm do I need?

Alarms for life safety are graded L1 to L5 – with L1 being the most comprehensive and L5 being for custom situations.

Categories of fire alarm

Category	Definition
Type M	Means a manual system, with no automatic fire detectors
Type L	Means automatic fire detection system intended for the protection of life
	L1: detection throughout the building but excluding toilets, shower rooms, bathrooms and small cupboards of less than 1m ²
	L2: detection installed in escape routes, rooms adjoining those routes plus any other high risk rooms (server rooms, boiler rooms). Small rooms (less than 4m length) opening on to corridors can be excluded
	L3: detection installed in escape routes plus rooms adjoining those routes (bedrooms, living rooms, office and other rooms)
	L4: detection in escape routes only (stairs, corridors and any other route)
	L5: custom category for all other situations such as automatic detection linked to fixed extinguishing equipment (sprinklers and automist systems)
Type P	Means automatic fire detection intended for the protection of property

Your fire risk assessment is concerned with the protection of life, and therefore your premises will be graded L or M (for low risk premises such as offices, shops and pubs).

The table below will help you decide which system you have and whether you need to upgrade it. It must be stressed that just because you have no automatic detection does not mean you need a fire alarm

for the purposes of the fire safety order. However, asset protection is another matter and your insurer may insist on detection (and provide a premium according to the level of detection present). If in doubt contact us.

Wherever there is a sleeping risk such as converted flats, guest houses and hotels the system must be a graded either a L2 or L3 system.

Please note that this also applies to communal (landlords) areas for converted flats. No detection is required in the communal areas of purpose built flats, however large blocks may have smoke vents installed - these being operated silently (the block will almost certainly have a stay-put fire policy – a communal sounding alarm would therefore contradict this).

Flats - staying put when there is a fire

Purpose built blocks of flats do not require alarms in the communal areas for the purposes of early warning. These buildings are designed to protect occupants in those flats. This is known as fire compartmentation. Only occupants affected by fire in the flat itself must escape. Therefore the flats themselves need automatic fire detection. Again, there are different guidelines for buildings converted to flats, and the fire compartmentation cannot be determined.

The table below taken from the BS5839 part 1 (2013) guide on fire detection for buildings:

Type of premises	Typical category of system	Comments
Common places of work: offices, shops, factories, warehouses and restuarants	M L1 L2 L3	Normally satisfies the requirments of legislation. L1 L2 L3 usually required for protection of assets and business interuption
Hostels, guest houses, hotels	L1 L2	As fire anywhere in the building could pose a threat to life L2 is the required minimum. In practise as few areas are left unprotected the category is effectively L1.
Large public houses (no residential	M L2	Normally satisfies the requirements of legislation.



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accommodation)	L3	L2 or L3 may be required for protection of assets and business interruption
Public houses with residential accommodation	L2	All means of escape and rooms adjoining plus high risk areas
Places of assembly (less than 300 persons)	M L3	L3 may be a requirement for insurance purposes (asset protection) only
Hospitals	L1	All rooms, spaces, corridors
Inner rooms	L5	If escape is only possible by passing through another (access) room