



## Buyer's Guide: Commercial Fire Alarms

An SS Systems Buyer's Guide for customers purchasing a BS (British Standard) Compliant Fire Alarm System, with questions, suggestions, key considerations, challenges and best practices.

### Buyer's Guide: BS Compliant Fire Alarm System

#### Overview

A BS Compliant Fire Alarm System ensures your premises are protected and meet the legal and safety standards set out in BS 5839-1:2017 for non-domestic premises and BS 5839-6:2019 for domestic dwellings. Whether for a commercial building, HMO, school, or warehouse, choosing the right fire alarm system is critical for life safety, legal compliance, and insurance coverage.

This guide is designed to help you make informed decisions, ask the right questions, understand system types, and avoid common pitfalls.

#### Key Considerations Before Buying

1. Understand the Type of Premises
  - Commercial, industrial, residential (HMO), mixed-use?
  - Size and layout (multiple floors, open spaces, concealed areas)
  - Occupancy type and vulnerability (e.g., elderly, disabled, sleeping risk)
2. BS Standards to Follow
  - BS 5839-1:2017 – For commercial/non-domestic premises
  - BS 5839-6:2019 – For residential/domestic properties
3. Fire Risk Assessment
  - Legal requirement under the Regulatory Reform (Fire Safety) Order 2005



- Assesses the level of risk and informs the Category of System required (e.g., L1, L2, L3, M, P1, P2)

#### 4. System Categories

- L Category (Life protection):
  - L1: Maximum coverage – detectors everywhere
  - L2/L3: Strategic coverage – escape routes and high-risk areas
  - M: Manual only – break glass call points (no automatic detection)
- P Category (Property protection):
  - P1: Full building coverage
  - P2: Specific risk areas

#### 5. Type of System

- Conventional: Suitable for smaller premises
- Addressable: Ideal for large/complex buildings (can pinpoint exact device)
- Wireless: Flexible installation, especially for heritage or complex sites

#### 6. Detection & Alarm Devices

- Smoke detectors
- Heat detectors
- Multi-sensor detectors
- Manual call points
- Sounders and beacons (visual alarms)

#### 7. Power Supply & Battery Backup

- Ensure mains supply with battery backup (as per BS standards)

For critical systems, consider UPS or backup generators



## Common Challenges

Challenge	How to Tackle It
Confusion about system category	Conduct a professional Fire Risk Assessment
Outdated equipment	Ensure all components meet current BS standards
Installation in heritage sites	Use wireless systems or surface trunking to avoid damage
Inadequate coverage	Ensure full detection coverage matches your system category
False alarms	Use multi-sensor detectors and regular maintenance
Non-compliant installers	Use BAFE-certified or third-party accredited suppliers

## Best Practices

- Always get a Fire Risk Assessment before system design
- Hire competent, third-party certified installers, check BAFE website for accreditation
- Use maintenance contracts – regular testing and servicing is mandatory
- Involve your insurance provider early – they may have specific requirements
- Maintain logbooks and test records for compliance
- Provide staff training on fire alarm procedures and testing
- Consider integration with other systems (e.g., sprinklers, access control)



## Key Questions to Ask Suppliers or Installers

1. Do we need a fire alarm?
2. Do we need to connect the fire alarm to other equipment i.e. lifts etc..?
3. What signage do we need?
4. Do we need a drawing indicating the location of devices & cables?
5. Do we need an O&M manual?
6. How long will the installation take?
7. Are the installers certified to work on our property? (Schools etc..)
8. If we decide hardwired, where will the cables be installed?
9. What BS category does my building require?
10. Is your company BAFE or other third-party accredited?
11. Will you conduct or require a fire risk assessment?
12. What type of system is most suitable – addressable, conventional, or wireless?
13. How scalable is the system if the premises expand?
14. What warranty and maintenance services are included?
15. Will the system be tested and commissioned to BS 5839 standards?
16. What is the procedure in the event of false alarms?



## Fire Alarm System Buyer's Checklist

Task/Consideration	Complete
Fire Risk Assessment carried out	YES / NO
Determine system category (L1, L3...)	YES / NO
Choose appropriate system type	YES / NO
Installer is third-party certified	YES / NO
All devices BS EN54 compliant	YES / NO
Commissioning and testing scheduled	YES / NO
Maintenance plan in place	YES / NO
Logbook and records ready	YES / NO
Staff trained on alarm procedures	YES / NO

## Summary of Key Points

- BS 5839-1 and BS 5839-6 govern UK fire alarm compliance
- Conduct a Fire Risk Assessment to determine system category
- Choose the right system type: conventional, addressable, or wireless
- Work with qualified, accredited installers
- Plan for ongoing maintenance and false alarm reduction
- Ensure full documentation and user training

## Final Advice

Don't treat fire alarms as a box-ticking exercise. A well-designed, properly maintained fire alarm system saves lives, protects property, and ensures compliance with the law. Use this guide as a conversation starter with professionals, and don't cut corners on safety.