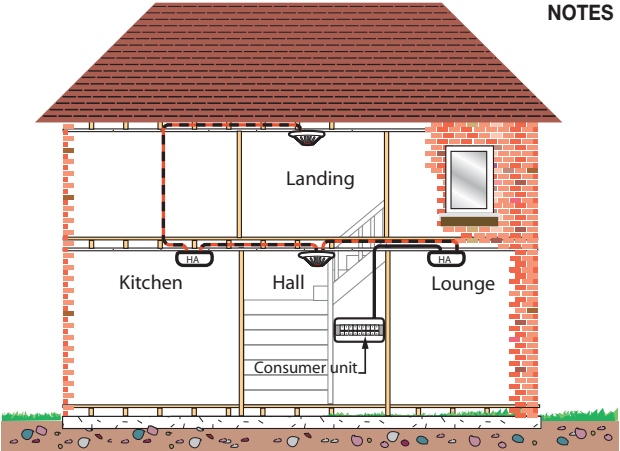


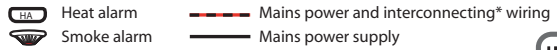


# FIRE ALARMS IN DWELLINGS



## NOTES

- (1) This guide addresses some of the recommendations in *BS 5839-6: 2004 – Fire detection and alarm systems for buildings, Code of practice for the design, installation and maintenance of fire detection and fire alarm systems in dwellings*.
- (2) The minimum standard of protection recommended in the 2004 edition of *BS 5839-6* is, for new dwellings, that **smoke alarms** should be provided within the circulation areas of most single-family dwellings and small houses in multiple occupation (HMOs), and that **heat alarms** should be provided in the kitchen and the principal habitable room (eg, the lounge).
- (3) The Standard recommends that smoke alarms and heat alarms installed within new single-family dwellings and small HMOs are mains powered with, in addition, a standby power supply in the form of a battery or capacitor.
- (4) There are six Grades of system in the Standard. The Grades identify the equipment incorporated. Grades A, B and C are systems that include fire detectors, alarm devices and central control equipment. Grades D and E are mains-powered smoke alarm systems (as summarised in Table 1). A Grade F system includes a battery-powered smoke alarm.
- (5) Categories of system (used to describe the principles of operation) in the Standard are summarised in Table 2.
- (6) In the context of fire detection and alarm systems in dwellings, attention is drawn to the relevant requirements of national building regulations and, in the case of small HMOs, to the relevant housing legislation.
- (7) Guidance on fire alarm requirements in building regulations is given in *Approved Document B* in England and Wales, the *Technical Standards* that support the relevant building regulations in Scotland, and in *Technical Booklet E* in Northern Ireland.



\* Interconnection provided, so that all devices give a warning if a fire is detected

**Example of a Grade D or E, Category LD2 fire detection and alarm system**



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# FIRE ALARMS IN DWELLINGS

Table 1 - BS 5839-6: 2004 Grade D and E systems

Grade of system	Summary of equipment incorporated
Grade D	A system of one or more mains-powered smoke alarms, each with an integral standby supply. (The system may, in addition, incorporate one or more mains-powered heat alarms, each with an integral standby supply.)
Grade E	A system of one or more mains-powered smoke alarms with no standby supply. (The system may, in addition, incorporate one or more heat alarms, with or without standby supplies.)

Table 2 - BS 5839-6: 2004 Categories of system

Category of system	Principles of operation
Category LD	A fire detection and fire alarm system intended for the protection of life.
Category PD	A fire detection and fire alarm system intended for the protection of property.
Note: the above Categories are further subdivided, risk for example LD2	An LD2 system incorporates detectors in all circulation spaces that form part of the escape routes from the dwelling, and in all rooms or areas that present a high fire risk to the occupants.