

Memo-Servicing & Technical Info

From: The National Office

Date: Jan 2018

Number 89

BS 5839-1: 2017 Fire detection and fire alarm systems for buildings
Zone Plan references within the amended Standard

Section 1: General

3 Terms and definitions

3.68 zone plan

diagrammatic representation of a building, showing specific topographic information and the division of the building into detection zones

6 Exchange of information and definition of responsibilities

6.2 Recommendations

The following recommendations are applicable.

Before an order is placed for the system, the responsibility for each of the following stages should be clearly defined and documented: 1) system design;

2) installation;

3) commissioning.

One of these stages should include the provision of a zone plan [see 23.2.2e)].

Section 2: Design considerations

13 Detection zones

13.1 Commentary

In order to direct those responding to a fire alarm signal, particularly the fire and rescue service, to the area of a fire, all buildings, other than very small buildings, need to be divided into detection zones (see 3.16). Detection zones need to be small enough for a fire to be located quickly.

Even if the system is addressable (see 3.1), detection zone indication needs to be provided, as this often provides a quicker, albeit less specific, indication of the location of a fire than typical addressable text displays. Zone indicators also provide a simple “at a glance” overview of the extent of fire or smoke spread.

If the alarm is raised by a manual call point, as opposed to an automatic detector, detection zone indication might be misleading; on discovery of a fire a person might operate a manual call point that is a considerable

distance from the fire. The benefits of zoning in a Category M system are, therefore, less significant.

If a detector is concealed in a relatively inaccessible area (such as a floor or ceiling void), it is normally desirable to provide a remote indication of its operation. In an addressable system, the provision of an individual remote indicator might not be necessary provided that the location of each fire detector is clearly indicated at the CIE.

13.2.4 Additional recommendations applicable to detection zones containing addressable automatic fire detectors

The following recommendations are applicable.

Zone indication should be given at the CIE even if addressable text information is also available (see **23.2.2**).

The recommendations of **13.2.3** apply, except that **13.2.3b**) does not apply if: 1) clear addressable text display of the location of, at least, the first detector to respond to a fire is available at the CIE, without manual intervention; and

2) the display, if necessary in conjunction with other information on, or adjacent to, the CIE, would enable firefighters, unfamiliar with the building, to proceed to the location of the fire.

NOTE For example, the CIE might provide a text indication of room number, and a plan adjacent to the CIE might show the location of the room.

23 Control and indicating equipment

23.1 Commentary

In at least one multiple-fatality fire, it has been determined that some or all of the deaths could have been avoided if a diagrammatic representation of the premises (commonly described as a zone plan) had been provided in close proximity to the CIE. Accordingly, it is important to ensure that a suitable zone plan is provided adjacent to all CIE (including any repeat control and/or indicating equipment), unless the CIE incorporates a suitable display (e.g. an illuminated mimic diagram). The objective is to ensure that those responding to a fire alarm signal (including staff on the premises and firefighters) are given unambiguous information as to the location of a fire.

23.2.2 The following recommendations apply to the facilities provided for visual indication of fire signals.

On or adjacent to indicating equipment, there should be a diagrammatic representation of the building, showing at least the building entrances, the main circulation areas and the division into zones. The diagrammatic representation may comprise any of the following:

- 1) an illuminated mimic diagram;
- 2) a VDU with an appropriate back up; or
- 3) a printed, correctly orientated, zone plan (see **3.68**).

NOTE 3 In some complex premises, e.g. shopping centres, additional information, such as occupier names, might be of value to those who are unfamiliar with the premises. This could be provided by a supplementary list that, for example, enables a unit number on a zone plan to be related to the occupier name, such as the name of a retailer in a shopping centre. Where such information is provided, it is important that it is kept up-to-date.

Section 5: Commissioning and handover

39 Commissioning

39.2 Recommendations

The following recommendations are applicable to new systems, and to modifications and additions to systems.

c) At commissioning, the entire system should be inspected and tested to ensure that it operates satisfactorily and that, in particular:

18) there is a suitable diagrammatic representation of the premises that satisfies the recommendations of **23.2.2e**);

Section 6: Maintenance

45 Inspection and servicing

45.4 Recommendations for inspection and test of the system over a 12 month period

In addition to the work recommended in **45.3**, the following work should be carried out every year.

q) A check should be made to determine whether a suitable zone plan (or other suitable diagrammatic representation) of the premises is provided on or adjacent to all CIE and repeat indicating equipment.

NOTE 12 Where repeat indicating equipment relates to only part of the premises, the adjacent zone plan need only relate to that part of the premises.

Section 7: User's responsibilities

47 Premises management

47.2 Recommendations

A single, named member of the premises management should be appointed to supervise all matters pertaining to the fire detection and fire alarm system. This person should normally be the keeper of the documentation as described in Clause **40**, and should be given sufficient authority to carry out the following duties.

i) Ensuring that, where necessary, a suitable zone plan is displayed and is kept up-to-date [see **23.2.2e**].