

Memo-Servicing & Technical Info

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New Edition of BS5839-1 : Principal Changes

Summary of main changes in the new version of BS5839-1:2017

This part of BS 5839 supersedes BS 5839:2013, which is withdrawn.

Information about this document

This is a full revision of the standard, and introduces the following:

a) In Clause 2:

1) BS 8591, Remote centres receiving signals from alarm systems – Code of practice replaces the reference to BS 5979, which has been withdrawn; and 2) references have been added to:

- BS EN 54-21, Fire detection and fire alarm systems – Part 21: Alarm transmission and fault warning routing equipment;
- BS EN 54-29, Fire detection and fire alarm systems – Multi-sensor fire detectors – Point detectors using a combination of smoke and heat sensors;
- BS EN 54-30, Fire detection and fire alarm systems – Multi-sensor fire detectors – Point detectors using a combination of carbon monoxide and heat sensors; and
- BS EN 54-31, Fire detection and fire alarm system – Part 31: Multi-sensor fire detectors – Point detectors using a combination of smoke, carbon monoxide and optionally heat sensors.

b) In Clause 3, the definition of “critical signal path” has been expanded to include transmission equipment for the routing signals to alarm receiving centres and the definition of “false alarm” has been changed to refer to “environmental false alarms”.

c) In Section 3 a new definition of “unwanted fire signal (UwFS)” has been added, taking into account the effect on the fire and rescue service.

d) In 8.2 the multi-sensor detectors are now considered as one of the detection options for Categories L3 and L4 systems and in escape routes for Category L1 systems. An informative note explains the process of designing Category L2 systems.

e) In 11.2 and 20.2b), it is now recommended that a protective cover is fitted to a Type A manual call point to help prevent false alarms.

f) 11.2 now recommends that alarm transmission and fault warning routing equipment should conform to the requirements specified in BS EN 54-21.

g) 15.2 now recommends that alarm receiving centres to which fire alarm signals are relayed should conform to BS 8591 and have in place an agreement with the appropriate fire and rescue service to pass on fire signals from fire alarm systems at the monitored property

h) 15.2 also includes a new recommendation that, where fire alarm signals are routed via the routing equipment of an intruder alarm system, the standby power supplies for the routing equipment should conform to 25.4.

i) In 19.2.2, it is acknowledged that, in premises, other than residential care homes, that generate a high number of unwanted fire alarm signals, automatic transmission of a signal to an alarm receiving centre may be delayed pending investigation of alarm signals from these devices.

j) A new sub-clause, 21.1.7 has been introduced specifically addressing video fire detectors, re-grouping text which was in different sub-clauses in the 2013 edition of the code.

k) New text in 21.1.8 commentary explains detection principle choices involving single sensor detectors and multi-sensor detectors.

l) Attention is drawn in Clause 22 to the need to consider field testing of hard-to-access detectors when designing the system.

m) In 22.9 and Table 3, it is now recommended that the limits specified for ceiling heights should only be used as guidance for vertical or flue-like structures, such as lift shafts and stairwells.

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n) In 25.2, the recommendation to provide double pole isolation has been replaced with a recommendation to provide local safe isolation. An informative note explains what is meant by “special tool”.

o) In 26.2, the recommendations for cables, wiring and other interconnections have been updated to reflect the currently available standards: BS EN 60702-1, BS EN 60702-2, BS 7629-1 and BS 7846. In addition, the duration of survival of cables has been referred to the tests in BS EN 50200 and BS 8434-2.

p) The heading of Clause 29, “Electrical safety”, has been replaced by the new heading “Electrical Earthing”.

q) Section 3 has been expanded and introduces the concept of “unwanted fire alarm signals”. To minimize the risk of false alarms and unwanted fire alarm signals, it recommends that manual call points should be fitted with protective covers and that systems that incorporate connection to an alarm receiving centre should have this connection disabled during the soak period.

r) In Clause 45, recommendations have been added for:

- 1) measuring the battery voltage;
- 2) testing of multi-sensor fire detectors;
- 3) for using different types of devices when carrying system tests; and
- 4) checking whether a suitable zone plan has been provided.

s) There is a new Annex E (informative), which gives advice regarding selection and application of fire detectors.

t) Annex F in the 2013 edition, which gave guidance on visual alarm device illumination characteristics, has been removed as it duplicated the information in the referenced code: LPS CoP 0001 [1].