Expert Commentary on BS 9999:2017, Fire safety in the design, management and use of buildings — Code of practice

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Summary

BS 9999 was first published in 2008 and is a code of practice to design fire safety in buildings. The standard brought together and replaced all but one of the 12 parts of BS 5588, the remaining part being replaced in 2011 by BS 9991 (itself updated in 2015).

Fire safety regulations differ from one country to another and, while BS 9999 can be used in any jurisdiction that accepts it, this standard has been drafted to meet the functional requirements of the building regulations for England and Wales. They deliver life safety to the level deemed acceptable there and do not necessarily deliver property protection. BS 9999 sits between prescriptive regulatory guidance and full fire engineering design using BS 7974 and the parts of PD 7974. In England and Wales the prescriptive regulatory guidance has not been updated since the publication of BS 9999 in 2008 and for certain risks, such as shopping centres and the protection of atria, it still refers to parts of BS 5588 which have been superseded by this standard. Fire safety regulators in England, Scotland, Wales and Northern Ireland have been consulted and involved in the preparation of this standard. None objected to this revised edition.

In the absence of research to support changes, most of the detailed design guidance in the many tables in BS 9999 is unchanged in the 2016 edition. The standard has seen many changes for clarification and to assist users, including the provision of a flowchart to guide users through the standard and of revised flowcharts in the Annex on atria. Management thinking has evolved and so section 4 on designing for the management of fire risk has been rewritten, reducing the number of management system levels to two and making references to PAS 7, which was not available in 2008.

The structure of the standard is unchanged, with topics covered in the same order as in 2008. To help users of this standard to apply it to a project, a flowchart matching sequential parts of a fire safety design with the RIBA Plan of Work and referencing relevant sections of the standard has been introduced as Figure 1 in the introduction. To help users of this standard select the correct fire growth rate, the Table on risk profiles for common occupancies has been deleted and instead more guidance given on fire growth rates in Table 3.

The scope in 1 has been revised to exclude buildings covered by BS 9991. Specific guidance in the 2008 edition for assembly buildings has been revised to remove this term and replace it with a risk profile.

Watermist systems - for which a standard was unavailable in 2008 - are now an alternative to sprinkler systems to alter the risk profile. More guidance for voice alarm systems - for which a standard was unavailable in 2008 - is included in the 2016 edition with a new recommendation in buildings designed for phased evacuation.