

BS 4422:2024



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Fire – Vocabulary

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Contents

Page

Foreword

III

1 Scope

1

2 Normative references

1

3 Terms and definitions

1

Bibliography

32

Summary of pages
This document comprises a front cover, an inside front cover, pages I to IV, pages 1 to 32, an inside back cover and a back cover.

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Foreword

Publishing information

This British Standard is published by BSI Standards Limited, under licence from The British Standards Institution, and came into effect on 31 October 2024. It was prepared by Technical Committee FSH/9, *Fire terminology*. A list of organizations represented on this committee can be obtained on request to the committee manager.

Supersession

This British Standard supersedes [BS 4422:2005](#), which is withdrawn.

Information about this document

This is a full revision of the document, and introduces the following principal changes:

- realignment of terms and definitions with British Standards published since BS 4422 was last revised in 2005;
- inclusion of new terms and concepts that have been introduced in other British Standards published since 2005;
- removal of terms that are outdated or no longer used; and
- removal of terms relating to specialist disciplines.

The terms and definitions in this British Standard are focused on fire. Some high-level concepts from other disciplines are included where these are of particular relevance, but many of the specific terms have been removed, and the relevant definitions can be found instead in standards published by the relevant committees. This includes both specialist fire disciplines (e.g. firefighting equipment, fire and rescue service operations) and other disciplines that are related to fire (e.g. lifts, emergency lighting).

In addition, this British Standard has not duplicated the fire safety vocabulary content of [BS EN ISO 13943](#) unless where absolutely necessary to provide clarity for users.

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Presentation conventions

The definitions in this document are presented in roman (i.e. upright) type.

Commentary, explanation and general informative material is presented in smaller italic type, and does not constitute a normative element.

Terms appearing within a definition that are themselves defined elsewhere in the document are presented in **bold type**.

Where words have alternative spellings, the preferred spelling of the *Shorter Oxford English Dictionary* is used (e.g. “organization” rather than “organisation”).

Terms marked as “deprecated” are synonyms of the preferred term that are no longer in use or whose use is discouraged.

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1 Scope

This British Standard defines terms relating to fire safety in the built environment. Fire safety engineering and fire testing terms are covered in [BS EN ISO 13943](#).

This British Standard does not include terms where the standard dictionary definition is applicable. Neither does it include terms and definitions that are unique to any specialized discipline within fire safety.

2 Normative references

There are no normative references in this document.¹⁾

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1 ablative material

material that gradually erodes under the influence of heat and can be used to insulate and/or protect adjacent elements

3.2 access level

level used for routine access to a building that either incorporates, or leads directly to, a **place of ultimate safety**

3.3 access panel

panel used to gain access to service ducts and shafts

NOTE An access panel might or might not be **fire-resisting**.

3.4 access room

room that forms the only **escape route** from an **inner room**

3.5 accessible and adaptable housing

housing that provides a basic level of access and adaptability to accommodate people's changing needs over their lifetime

NOTE For example, an installed level access shower or stairs that accommodate a stairlift.

accommodation stair

see **accommodation stairway** (3.6)

3.6 accommodation stairway

stairway, additional to that or those required for **escape**, provided for the convenience of occupants

3.7 active fire curtain barrier assembly

assembly manufactured from flexible materials, not hinged or pivoted, provided for the passage of people, air and objects, which, together with its frame as installed in a building, is intended (when closed) to resist the passage of fire

¹⁾ Documents that are referred to solely in an informative manner are listed in the Bibliography.

3.8 active fire curtain barrier assembly with smoke rating

assembly manufactured from flexible materials, not hinged or pivoted, provided for the passage of people, air and objects, which, together with its frame as installed in a building is intended (when closed) to resist the passage of fire and gaseous **products of combustion**

3.9 addressable system

fire detection and fire alarm system in which signals from **manual call points** or any other devices are individually identified at the **control and indicating equipment**

AHJ

see **authority having jurisdiction (3.21)**

3.10 air release

means by which pressurized air is able to discharge from a nominally unpressurized space to external air

NOTE This is not to be confused with air release through the air release valve of a dry rising main.

3.11 air transfer grille

fixed grille not connected to the ductwork system allowing the free transfer of air between adjacent rooms and/or spaces

3.12 alarm receiving centre (ARC)

continuously staffed premises, remote from those in which a **fire detection and fire alarm system** is fitted, where the information concerning the state of the **fire detection and fire alarm system** is displayed and/or recorded, so that the **fire and rescue service** can be summoned

3.13 alarm zone

geographical subdivision of premises covered by a **fire detection and fire alarm system**, in which a **fire alarm** warning can be given separately, and independently, of a **fire alarm** warning in any other subdivision of the premises

3.14 alert signal

signal intended to alert occupants to a fire signal without any immediate requirement to evacuate

alternative escape routes

see **escape routes, alternative (3.70)**

alternative exit

see **exit, alternative (3.87)**

3.15 analogue detector

fire detector that gives an output signal representing the value of the sensed phenomenon

NOTE This can be a true analogue signal or a digitally encoded equivalent of the sensed value.

3.16 ancillary area, non-residential

part of a building that is ancillary to the main use of the building and under the control of the management of the overall premises

3.17 ancillary area, residential

part of a building that is ancillary to the dwelling(s)

NOTE Examples of ancillary areas include rooms associated with engineering services, common amenity areas, refuse rooms and covered car parks.

anti-panic lighting

see **open area lighting** (3.217)

ARC

see **alarm receiving centre** (3.12)

ASET

see **available safe escape time** (3.25)

3.18 aspirating smoke detection system

smoke detection system in which a sample of the atmosphere in the **protected** space is drawn by a fan or pump into a **detector** that can be remote from the **protected** space

3.19 atrium (plural: atria)

space within a building, not necessarily vertically aligned, passing through one or more **compartment floors**

3.20 atrium base

horizontal floor area that is vertically open to the **atrium** roof, bounded by lines projected down from the edge of the floor slab immediately above

3.21 authority having jurisdiction (AHJ)

organization, office or individual responsible for enforcing the requirements of legislation or standards, or for approving equipment, materials, installations or procedures

auto-ignition

see **ignition, spontaneous** (3.185)

3.22 automatic door release mechanism

device that can be used for retaining a door in the open position, against the action of a **self-closing device**, and automatically releasing under specified conditions

NOTE An automatic door release mechanism could be, for example, electro-mechanical or electro-magnetic.

automatic fire detection and fire alarm system

see **fire detection and fire alarm system** (3.109)

3.23 automatic fire signal

fire alarm originated by an automatic device

automatic release mechanism

see **automatic door release mechanism** (3.22)

3.24 automatic water fire suppression system (AWFSS)

system designed to control or extinguish fires without human intervention

available safe egress time

see **available safe escape time** (3.25)

3.25 available safe escape time (ASET)

calculated time available between ignition of a fire and the estimated time at which tenability criteria are exceeded in a specified space in a building

AWFSS

see **automatic water fire suppression system** (3.24)

3.26 balcony approach, residential

design in which each dwelling is approached externally via an open common walkway

3.27 basement

storey with a floor that at some point is more than 1.2 m below the highest level of ground adjacent to the outside walls

3.28 box, inlet

box, installed in (or within the boundaries of the site of) a building, containing the inlets of foam pipes or water mains

3.29 box, outlet

box, installed in a building, containing the landing valves of water mains

breakable smoke outlet

see **smoke outlet, breakable** (3.258)

3.30 bridgehead

part of a building from which firefighting teams can be safely committed to attack a fire

3.31 cavity

concealed space enclosed by elements of a building (including a suspended ceiling) or contained within an element, but not a room, cupboard, circulation space, **protected shaft** or space within a flue, chute, duct, pipe or conduit

3.32 cavity barrier

construction provided to close a **cavity** against penetration of smoke or flame, or provided to restrict the movement of smoke or flame within such a space

3.33 ceiling jet

flow under a ceiling arising from the deflection of a rising plume of hot gas and smoke from a fire

3.34 ceiling void

cavity between a structural floor or roof and the suspended ceiling below, through which building services can pass

central commercial alarm centre

see **alarm receiving centre** (3.12)

central fire alarm station

see **alarm receiving centre** (3.12)

central monitoring station

see **alarm receiving centre** (3.12)

3.35 channelling screen

vertical subdivision to create an obstacle to lateral flow of smoke and fire gases

3.36 chimney effect

upward movement of hot fire effluent caused by convection currents confined within an essentially vertical enclosure

NOTE This usually draws more air into the fire.

CIE

see **control and indicating equipment (CIE)** (3.43)

3.37 clean agent

electrically non-conducting, volatile or gaseous **extinguishing medium** that does not leave a residue upon evaporation

3.38 coincidence detection

detection method in which an alarm condition is obtained only when at least two independent **fire detectors** sense the presence of fire

combustion product

see **product of combustion** (3.236)

common balcony escape

see **escape, common balcony** (3.67)

3.39 common corridor

protected corridor serving more than one flat or occupancy

3.40 compartment floor

fire-resisting floor used to separate one **fire compartment** from another

3.41 compartment wall

fire-resisting wall used to separate one **fire compartment** from another

compartment, fire

see **fire compartment** (3.105)

3.42 compartmentation

division of a building into **fire compartments** for the purpose of containing a fire within the compartment of fire origin

3.43 control and indicating equipment (CIE)

equipment through which **fire detectors** can be supplied with power and that is:

- a) used to accept a detection signal and trigger a **fire alarm signal**;
- b) able to pass on the fire detection signal; and
- c) used to monitor automatically the correct functioning of the system

control equipment

see **control and indicating equipment (CIE)** (3.43)

3.44 controlled fire load

fire load that is limited by means of management controls on the quantities of combustible material that are present or where the **fire load** is limited by an effective automatic suppression system

3.45 corridor access, residential

design in which each dwelling is approached via a common horizontal internal access or circulation space

damper, fire

see **fire damper** (3.107)

damper, smoke

see **smoke control damper** (3.251)

3.46 dead end

area from which **escape** is possible in one direction only

3.47 deck approach, residential

design in which each dwelling is approached externally via a wide approach common external walkway that has guarding only at the edges and otherwise is completely open to the atmosphere

defend in place (deprecated)

see **stay put strategy** (3.272)

3.48 depressurization

method of **smoke control** using pressure differentials between the **protected** space and the unprotected space by creating a lower pressure in the unprotected space

[SOURCE: BS EN 12101-6:2022, 3.1.3, modified – “method of” added and “with” changed to “by creating”]

3.49 design concentration

concentration of gaseous **extinguishing medium** necessary to extinguish a particular fuel, with a specified safety factor

design density

see **sprinkler design density** (3.265)

3.50 design fire

hypothetical fire with specified criteria and characteristics to serve as the basis of design

3.51 detection time

interval between the onset of combustion and its detection

NOTE Where a decision that a fire has been detected involves a human response, detection is the end result of a process whereby different cues to the existence and severity of a fire are considered to require an evacuation alarm or warning to be issued.

detector

see **analogue detector** (3.15), **fire detector** (3.112), **multi-sensor detector** (3.212)

3.52 direct distance

shortest distance between two points within a building, ignoring walls, partitions and fittings other than **fire-resisting** walls and partitions

3.53 discharge rate

number of people that can pass through one unit of **exit** width in a given time

distance of travel

see **travel distance** (3.280)