

Australian Standard<sup>®</sup>

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**Fire — Glossary of terms**

**Part 2: Fire protection and  
firefighting equipment**

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This Australian Standard was prepared by Committee FP/10, Terms and Definitions. It was approved on behalf of the Council of Standards Australia on 2 November 1990 and published on 28 March 1991.

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The following interests are represented on Committee FP/10

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**STANDARDS AUSTRALIA**  

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**RECONFIRMATION**  
**OF**  
**AS 2484.2—1991**  
**Fire—Glossary of terms**  
**Part 2: Fire protection and firefighting equipment**  

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Technical Committee FP-018 has reviewed the content of this publication and in accordance with Standards Australia procedures for reconfirmation, it has been determined that the publication is still valid and does not require change.

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Approved for reconfirmation in accordance with Standards Australia procedures for reconfirmation on 18 November 2015.

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## NOTES

# Australian Standard<sup>®</sup>

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## Fire — Glossary of terms

### Part 2: Fire protection and firefighting equipment

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## PREFACE

This Standard was prepared by the Standards Australia Committee on Terms and Definitions (relating to fire protection and firefighting equipment) to supersede AS 2484.2—1985. This edition has been expanded to add terms to each of the sections existing and to include a new section containing terms on explosion detection and suppression. Some of the terms and definitions in existing Australian Standards for fire protection and firefighting equipment are now included in this Standard.

Wherever possible the committee has endeavoured to align terms and definitions with the recommendations of ISO/TC 21/SC1, Terminology, Symbols, Signs and Classification of Fire.

As mentioned in the Preface to the first edition of this Standard, a number of commonly used terms were considered by the committee, but were rejected, the principal reasons for their exclusion being —

- the term is self-evident and does not need defining
- the dictionary meaning is sufficient
- the term represents a grammatical extension or alternative to an included term
- the term is not used in Australia.

The aim of this Standard is to provide a glossary of simple basic definitions each of which is capable of extension for specific purposes for use by the specialist.

- 1 Preferred terms are in boldface type.
- 2 Non-preferred terms are in roman type, listed alphabetically under the corresponding preferred term.
- 3 Deprecated terms are in roman type with 'deprecated' after them and within parenthesis. The terms are listed alphabetically under the corresponding preferred term or non-preferred terms, if any.
- 4 Units are not part of a definition (except where the item being defined is actually a unit). Units are put into a 'Note' beneath the definition.

Reference was made to numerous Australian Standards relevant to fire during the preparation of this Standard. In addition, reference was made to the following ISO documents and assistance received therefrom is acknowledged:

ISO

3941 Classification of fires

DP 8421 Fire protection — Terminology

DP 8421.1 Part 1: General terms and phenomena

DP 8421.2 Part 2: Structural fire protection

DP 8421.3 Part 3: Fire detection and alarm

DP 8421.4 Part 4: Fire extinction equipment

DP 8421.5 Part 5: Smoke control

DP 8421.6 Part 6: Evacuation and means of escape

DP 8421.7 Part 7: Explosion detection and suppression means

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## STANDARDS AUSTRALIA

## Australian Standard

## Glossary of terms relating to fire protection and firefighting equipment

## SECTION 1 GENERAL TERMS AND PHENOMENA OF FIRE

| <i>No.</i> | <i>Term</i>                                                                          | <i>Definition</i>                                                                                                                                                                                                     |
|------------|--------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.001      | <b>fire authority</b>                                                                | The authority responsible for fire prevention and extinction in the area concerned.                                                                                                                                   |
| 1.002      | <b>combustible</b>                                                                   | See AS 2484.1.                                                                                                                                                                                                        |
| 1.003      | <b>fire point (chemical)</b>                                                         | The lowest temperature at which a substance gives off sufficient flammable vapour in air to produce sustained combustion after the removal of the ignition source. <i>See also auto-ignition temperature</i> (1.036). |
| 1.004      | <b>lower flammability limit (LFL)</b>                                                | The lowest percentage concentration by volume of flammable vapour or gas in air which will burn with a flame under specified conditions.                                                                              |
| 1.005      | <b>upper flammability limit (UFL)</b>                                                | The highest percentage concentration by volume of flammable vapour or gas in air which will burn with a flame under specified conditions.                                                                             |
| 1.006      | <b>flammability range</b>                                                            | The range of percentage of vapour or gas concentration by volume in air between the upper and lower limits of flammability.                                                                                           |
| 1.007      | <b>chimney effect</b>                                                                | The upward thrust of hot gases in a vertical enclosure, due to the buoyancy of the confined gases. <i>See also stack pressure effect</i> (5.014).                                                                     |
| 1.008      | <b>mushroom effect</b>                                                               | A horizontal spread of hot gases at a ceiling or roof level due to the vertical restriction of upward currents.                                                                                                       |
| 1.009      | <b>fire load</b>                                                                     | The heat energy potential of the whole contents contained in a space, including the facings of the walls, partitions, floors, and ceilings.<br><br>NOTE: Fire load is expressed in joules.                            |
| 1.010      | <b>fire load density</b>                                                             | The fire load divided by floor area.<br><br>NOTE: Fire load density is expressed in joules per square metre.                                                                                                          |
| 1.011      | <b>spread of flame index</b>                                                         | A classification index of materials according to numbers which indicate the rate at which flame spreads over their surfaces, in accordance with AS 1530.3.                                                            |
| 1.012      | <b>inhibition</b>                                                                    | A process of fire extinguishment by the use of an agent which interrupts the chemical reactions in the flame.                                                                                                         |
| 1.013      | <b>inhibitory factor</b>                                                             | The minimum percentage in air of a gaseous extinguishing agent that will achieve extinction by inhibiting combustion.                                                                                                 |
| 1.014      | <b>fire-resistance level (FRL)</b><br>(fire-resistance rating<br><i>deprecated</i> ) | See AS 2484.1.                                                                                                                                                                                                        |
| 1.015      | <b>ignitability</b>                                                                  | See AS 2484.1.                                                                                                                                                                                                        |
| 1.016      | <b>high-rise building</b>                                                            | A multistorey building with a height of 25 m or more, measured from the lowest floor giving natural egress from the building to the floor of the topmost storey of the building.                                      |
| 1.017      | <b>regulatory authority</b>                                                          | A Minister of the Crown, a government department, or other public authority having power to issue regulations, orders, or other instructions in respect of any subject covered by this Standard.                      |

| <i>No.</i> | <i>Term</i>                                                                                | <i>Definition</i>                                                                                                                                                                                                                                                                                                                                                                |
|------------|--------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.018      | <b>ignitable mixture</b><br>flammable mixture                                              | A mixture including gases, vapours, mists and dusts in combination with combustion-sustaining gas(es), that can be ignited.                                                                                                                                                                                                                                                      |
| 1.019      | <b>arson</b>                                                                               | The deliberate setting on fire of a property for a profit.                                                                                                                                                                                                                                                                                                                       |
| 1.020      | <b>incendiarism</b>                                                                        | The malicious setting on fire of a property.                                                                                                                                                                                                                                                                                                                                     |
| 1.021      | <b>fire classification</b>                                                                 | The standardized system of classifying fires in terms of the nature of the fuel:<br>Class A — fires involving solid materials, usually of an organic nature, in which combustion normally takes place with the formation of glowing embers.<br>Class B — fires involving liquids or liquefiable solids.<br>Class C — fires involving gases.<br>Class D — fires involving metals. |
| 1.022      | <b>fire integrity</b>                                                                      | The ability of a separating element of a building construction, when exposed to fire on one side, to prevent the passage through it of flames and hot gases or the occurrence of flames on the unexposed side, for a stated period of time in a standard fire resistance test in accordance with AS 1530.4.                                                                      |
| 1.023      | <b>fire prevention</b>                                                                     | Precautions to prevent the outbreak of a fire or to limit its effects.                                                                                                                                                                                                                                                                                                           |
| 1.024      | <b>fire protection</b>                                                                     | Provisions to fight a fire or to limit its effects.                                                                                                                                                                                                                                                                                                                              |
| 1.025      | <b>fire safety</b>                                                                         | Safety against a fire, including fire protection, fire prevention and fire fighting.                                                                                                                                                                                                                                                                                             |
| 1.026      | <b>fire emergency planning</b>                                                             | Preplanning of human and material means to be put into action in the event of fire.                                                                                                                                                                                                                                                                                              |
| 1.027      | <b>fire risk</b>                                                                           | See AS 2484.1.                                                                                                                                                                                                                                                                                                                                                                   |
| 1.028      | <b>fire safety inspection</b>                                                              | A check of the fire prevention and fire protection arrangements.                                                                                                                                                                                                                                                                                                                 |
| 1.029      | <b>inerting</b>                                                                            | Suppressing or neutralizing the ability of an atmosphere to support combustion.                                                                                                                                                                                                                                                                                                  |
| 1.030      | <b>oxidizing agent</b><br>oxidizer                                                         | A compound whose combination with a combustible substance may lead to combustion.                                                                                                                                                                                                                                                                                                |
| 1.031      | <b>products of combustion</b>                                                              | See AS 2484.1.                                                                                                                                                                                                                                                                                                                                                                   |
| 1.032      | <b>pyrolysis</b>                                                                           | See AS 2484.1.                                                                                                                                                                                                                                                                                                                                                                   |
| 1.033      | <b>hazardous location</b>                                                                  | An area where a flammable atmosphere may be present continuously or intermittently, or be present due to an abnormal or transient condition.<br><br>NOTE: A classification system for hazardous locations in relation to flammable gases is given in AS 2430.1.                                                                                                                  |
| 1.034      | <b>design concentration (gas)</b>                                                          | The concentration by volume, including a safety factor, of a gaseous extinguishing agent necessary to extinguish a fire of a particular fuel.                                                                                                                                                                                                                                    |
| 1.035      | <b>self-induced ignition</b><br>(auto-ignition <i>deprecated</i> )                         | See AS 2484.1.                                                                                                                                                                                                                                                                                                                                                                   |
| 1.036      | <b>self-induced ignition temperature</b><br>(auto-ignition temperature <i>deprecated</i> ) | The temperature at ignition where combustion is initiated by exothermic reactions within the material.                                                                                                                                                                                                                                                                           |
| 1.037      | <b>static pressure</b>                                                                     | The pressure in a piping system when there is no flow or discharge of water.                                                                                                                                                                                                                                                                                                     |
| 1.038      | <b>fire hazard</b>                                                                         | See AS 2484.1.                                                                                                                                                                                                                                                                                                                                                                   |

## SECTION 2 STRUCTURAL PROTECTION AGAINST FIRE

| <i>No.</i> | <i>Term</i>                         | <i>Definition</i>                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|------------|-------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2.001      | <b>compartmentation</b>             | The division of a building into compartments by fire-resistant elements of a building construction in order to contain a fire within the compartment of origin.                                                                                                                                                                                                                                                                                   |
| 2.002      | <b>fire isolation</b>               | The isolation of a part of a building by a fire-resistant construction.                                                                                                                                                                                                                                                                                                                                                                           |
| 2.003      | <b>fire stop</b>                    | A physical barrier designed to restrict the spread of a fire in cavities within and between elements of a building construction.                                                                                                                                                                                                                                                                                                                  |
| 2.004      | <b>fire-resistant partition</b>     | A partition, either loadbearing or non-loadbearing, capable of satisfying, for a stated period of time, the required structural adequacy, integrity, thermal insulation or other expected duty, when tested in accordance with AS 1530.4.                                                                                                                                                                                                         |
| 2.005      | <b>fire-resistant wall</b>          | A wall, either loadbearing or non-loadbearing, capable of satisfying, for a stated period of time, the required structural adequacy, integrity, thermal insulation or other expected duty, when tested in accordance with AS 1530.4.<br><br>NOTE: For the purpose of AS 2118, the fire-resistant wall means a wall having a fire-resistance level as may be required by the regulatory authority.                                                 |
| 2.006      | <b>fire damper</b>                  | A movable closure in a duct or an opening for the passage of air, which operates automatically to restrict the passage of fire or products of combustion past it.                                                                                                                                                                                                                                                                                 |
| 2.007      | <b>fire door</b>                    | A doorset, single or multileaf, with a specified fire-resistance level to prevent the passage of fire past it.                                                                                                                                                                                                                                                                                                                                    |
| 2.008      | <b>doorset</b>                      | A complete assembly comprising —<br>(a) the door leaf or leaves with glazing, if any, and hardware or other in-built features;<br>(b) the door frame, if any, with its fixings to the wall and, for a sliding door, with all guides and their respective fixings to the lintel, wall or sill; and<br>(c) any approved heat-actuated devices and the closing mechanism for an automatic fire door or the door closer for a self-closing fire door. |
| 2.009      | <b>bund</b>                         | An enclosure around plant or tanks to contain leakage or spillage.                                                                                                                                                                                                                                                                                                                                                                                |
| 2.010      | <b>catchpit</b>                     | An enclosure, normally below ground level to contain leakage or spillage of a flammable liquid safely, which may be filled with granite or other chemically non-reactive chippings.                                                                                                                                                                                                                                                               |
| 2.011      | <b>exposure hazard</b>              | An object or a substance which represents a fire danger by way of radiated heat.                                                                                                                                                                                                                                                                                                                                                                  |
| 2.012      | <b>fire break</b>                   | A defined strip or an area from which combustible materials have been removed to separate a structure, facility, or other property from an adjacent fire hazard.                                                                                                                                                                                                                                                                                  |
| 2.013      | <b>firefighting access lobby</b>    | A protected and permanently ventilated lobby, suitable for use as a means of access for firefighting purposes.                                                                                                                                                                                                                                                                                                                                    |
| 2.014      | <b>permanently ventilated lobby</b> | A protected lobby provided with permanent ventilation to the open air.                                                                                                                                                                                                                                                                                                                                                                            |
| 2.015      | <b>protected lobby</b>              | A lobby having an adequate degree of protection from products of combustion and forming a part or whole of the horizontal component of an escape route, or affording an additional protection to an escape route.                                                                                                                                                                                                                                 |

| <i>No.</i> | <i>Term</i>                                                                     | <i>Definition</i>                                                                                                                                                                                                     |
|------------|---------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2.016      | <b>ventilated lobby</b>                                                         | A protected lobby provided with means of ventilation to the open air for use when required.                                                                                                                           |
| 2.017      | <b>fire lift</b>                                                                | A lift installed in a building and available for normal purposes but provided with a fire lift priority switch, enabling it to be brought under the exclusive control of authorized personnel.                        |
| 2.018      | <b>enclosed stairway</b>                                                        | A stairway in a building, enclosed by walls, or partitions.                                                                                                                                                           |
| 2.019      | <b>open stairway</b>                                                            | A stairway in a building, which is not enclosed.                                                                                                                                                                      |
| 2.020      | <b>fire-isolated stairway</b><br>fire-isolated ramp<br>fire-isolated passageway | A fire-isolated part of the means of egress.                                                                                                                                                                          |
| 2.021      | <b>automatic fire shutter</b>                                                   | A fire shutter that closes automatically through the operation of an integral heat-actuated device.<br><br>NOTE: There may be other sensing and activating devices in addition to the integral heat-activated device. |
| 2.022      | <b>protected external stairway</b>                                              | A stairway in the open, which is fire-separated from a building.                                                                                                                                                      |
| 2.023      | <b>stairway, pressurized, fire-separated</b>                                    | A fire-isolated stairway supplied with fresh air above normal pressures designed to prevent ingress of smoke.                                                                                                         |
| 2.024      | <b>fire separation</b><br>fire separated                                        | The separation of parts of a building by a fire-resistant construction.                                                                                                                                               |
| 2.025      | <b>smoke-spill</b>                                                              | The action of an air-handling plant in exhausting the products of combustion from a building in the event of fire.                                                                                                    |
| 2.026      | <b>fire shutter</b><br>fire-resistant roller shutter                            | An assembly with a fire-resistance level, to close an opening in a wall with a fire-resistance level.                                                                                                                 |

## SECTION 3 FIRE DETECTION AND ALARM

| <i>No.</i> | <i>Term</i>                                                                  | <i>Definition</i>                                                                                                                                                                                                   |
|------------|------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 3.001      | <b>fire detector</b>                                                         | A device which gives a signal in response to a predetermined change in one or more ambient conditions in the vicinity of or within the range of the detector, due to a fire.                                        |
| 3.002      | <b>actuating detector</b>                                                    | A fire detector, not necessarily part of a fire alarm and detection system, used to actuate ancillary control functions.                                                                                            |
| 3.003      | <b>line detector</b>                                                         | A form of detector which responds to a particular phenomenon, such as heat or smoke, detected anywhere along its length.<br><br>NOTE: This includes optical beam forms.                                             |
| 3.004      | <b>multipoint detector</b>                                                   | A form of detector which responds to a particular phenomenon, such as heat or smoke, detected at any one of several fixed points.                                                                                   |
| 3.005      | <b>self-contained detector</b>                                               | A detection device containing in one housing all the components (with the possible exception of the energy source) necessary to detect a fire and sound an audible alarm.                                           |
| 3.006      | <b>single-point detector</b>                                                 | A form of detector which responds to a particular phenomenon, such as heat or smoke, detected at a fixed point.                                                                                                     |
| 3.007      | <b>gas detector</b>                                                          | A detector which responds to, and will give warning of, a predetermined concentration of a particular gas.                                                                                                          |
| 3.008      | <b>heat detector</b><br>(thermal detector <i>deprecated</i> )                | A detector which responds to abnormal temperatures or rate of a temperature rise or temperature differences.                                                                                                        |
| 3.009      | <b>radiation detector</b>                                                    | A detector which responds to electromagnetic radiation emitted by a fire or heat source.                                                                                                                            |
| 3.010      | <b>infrared radiation detector</b>                                           | A detector which responds to infrared radiation.                                                                                                                                                                    |
| 3.011      | <b>ultraviolet radiation detector</b>                                        | A detector which responds to ultraviolet radiation.                                                                                                                                                                 |
| 3.012      | <b>ionization smoke detector</b><br>(combustion detector <i>deprecated</i> ) | A detector which responds to combustion products capable of affecting currents of ionization within the detector.                                                                                                   |
| 3.013      | <b>optical smoke detector</b>                                                | A detector which responds to combustion products capable of affecting the absorption or scattering of radiation in the infrared, visible, or ultraviolet region of the electromagnetic spectrum.                    |
| 3.014      | <b>flame detector</b>                                                        | A detector which responds to certain wavelengths of electromagnetic radiation emitted by a flame.                                                                                                                   |
| 3.015      | <b>flame detector cone of vision</b>                                         | The cone produced by the viewing angle and distance from the detector within which the detector maintains an acceptable sensitivity.                                                                                |
| 3.016      | <b>sampling detection system</b>                                             | A detection system installed throughout a given location whereby the atmosphere is continually or selectively sampled.                                                                                              |
| 3.017      | <b>rate-of-rise actuation</b>                                                | A mode of operation of a detector which is initiated by specified rates of a temperature rise of a heat-sensitive element.                                                                                          |
| 3.018      | <b>fixed temperature actuation</b>                                           | A mode of operation which is initiated when the temperature of a heat-sensitive element exceeds a specified value.                                                                                                  |
| 3.019      | <b>heat-released link</b><br>thermally released link                         | A connection link designed to part at a specified temperature. The parting action may be initiated by the melting of a eutectic alloy, by the shattering of a bulb, or by any other reaction to thermal conditions. |
| 3.020      | <b>fire alarm system</b>                                                     | An arrangement of components and apparatus for giving an audible, visible or other perceptible alarm of fire which may also initiate other actions.                                                                 |