

Glossary

Accelerant	Material (usually a flammable liquid) that is used to increase the spread of fire.
Arson	Intentional or reckless damage of property by fire or explosive.
Auto-ignition	The initiation of combustion by heat but without a spark or flame.
Backdraft	The explosive force from the rapid burning of super-heated flammable gases resulting from the introduction of oxygen (air) into a confined oxygen-deprived area.
Char	The solid material that remains of carbonaceous material (e.g. wood), during the initial stage of combustion. It has a blackened appearance.
Charring	The char patterns that form on burned wood, sometimes referred to as 'alligatoring' due to the ridge bumps that resemble the skin of an alligator.
Clean burn	A fire pattern on a surface where soot has been burned away.
Conduction	The transfer of heat to another body or within a body by direct contact (e.g. a pot on an electric stove).
Convection	The transfer of heat by the circulation or movement of the heated molecules of a liquid or gas (e.g. boiling liquid in a kettle).
Combustible	A substance capable of burning under normal conditions of ambient temperature and pressure.
Combustion	A chemical reaction that occurs between a fuel and an oxidising agent (such as oxygen in air) that produces energy, usually in the form of heat and light.
Combustible liquid	A liquid that will ignite if it reaches its flash point and is provided with an ignition source. Combustible liquids have flashpoints between 37.8°C and 93.3°C (200°F).
Dead load	The weight of the structure and any equipment and appliances permanently attached to it.
Device	Any means used to start a fire.
Direct burning	Where flames impinge directly onto a surface.
Drop down	The spread of fire by burning objects that drop or fall. Also referred to as 'fall down'.
Fire	Rapid oxidation, usually with the production of heat and light.
Fire load	The total amount of fuel that might be involved in fire as measured by the amount of heat that would evolve from its combustion (expressed in units of heat e.g. kilowatts /metre ²).

Flame	Flammable gaseous material as a product of combustion, emitting radiant heat energy and light.
Flammable	A combustible material that is capable of burning with a flame.
Flammable liquid	A liquid that will ignite if it reaches its flash point and is provided with an ignition source. Flammable liquids have a flash point below 37.8°C (100°F) and can typically ignite at room temperature.
Flammable limit	The upper and lower percentage of air/gas mixture in which combustion will be supported.
Flashover	A transition phase in the development of a compartment fire in which surfaces exposed to radiated heat ignite almost simultaneously resulting in total involvement of the compartment.
Flash point	The lowest temperature at which a liquid produces enough vapour to form an ignitable mixture that will support a momentary flame across its surface. Liquids with low flash points pose the greatest danger.
Free-burning fire	A fire with enough heat to generate flames which, in turn, heat the area around the fire.
Fuel load	All combustibles in a defined space, whether they be part of the structure, finish, or furnishings quantified in heat units or in its equivalent weight in wood.
Heat transfer	The transfer of heat by convection, conduction, radiation, and/or direct burning.
Ignition	The process of initiating self-sustained combustion.
Ignition temperature	The minimum temperature at which a substance will ignite.
Impact load	A load delivered in a short period of time.
Incendiary fire	A fire that was deliberately set with intent to damage, or where the person knew the fire should not have been ignited.
Incipient fire	The early stage of a fire, in which there is no flame, smoke, or soot.
Interview	Conversation with someone in order to gain information.
Live load	Any load in a building except a dead load (includes machinery, lifts, wind, firefighting activities, water etc.).
Non-flammable	Material that will not burn under most conditions.
Occupant	The person who lives in, uses, or otherwise has possession of the premises.
Overhaul/turnover	A term used to cover or describe the operation of looking for a hidden flame or embers that may rekindle the fire.

Pyrolysis	The chemical decomposition of matter through the action of heat.
Radiation	The transfer of heat through space.
Salvage	Covering or removing the contents of a building or space to protect them from further damage from fire, firefighting, or weather.
Self-ignition	The minimum temperature at which self-heating properties of a material lead to ignition.
Smouldering fire	A slow, normally low-temperature fire that has no flame because there is not enough heat or air for combustion to complete.
Suspicious fire	An unlawfully deliberately lit fire where, given the known information and based on the balance of probabilities, the investigator considers that the fire was a result of malicious or willful intent or wanton disregard for others and property, to cause unlawful damage.
Trailers	Fire patterns created by combustible or flammable materials used to spread fire(s) from one point to another.
Vapour density	The ratio of a given volume of gas to an equal volume of air (air = one).

Acronyms

AOO	Area of origin
BA	Breathing apparatus
COF	Cause of fire
FAIP	Fire awareness intervention programme
OIC	Officer in charge
POI	Point of ignition
PPE	Personal protective equipment
PPV	Positive pressure ventilation
SMS	Station management system