



O&M manuals - operation and maintenance manuals provided by the services engineering contractors after setting up a new installation of electrical/mechanical/hydraulic/fire protection services for a facility setting out requirements for operation and maintenance for the installed equipment.

objectionable effluent - unwanted airborne constituents that may reduce the acceptability of air.

objective - means a statement contained in the BCA which is considered to reflect community expectations.
[BCA Vols 1 & 2 terminology]

objective sound - See: *sound, objective*

oblique junction (pipe) - See: *pipe junction, oblique*

obscured glass - See: *glass, obscured*

observation panel - glazed door panel set into flush doors to allow observation, such as in hospitals or institutions.

See Also: *standing panel; vision panel*

obsolescence - impairment of the functionality, level of service, maintainability or usefulness of an asset resulting from economic, legislative, social, environmental, physical or technological changes.

obsolete - condition of an asset when the degree of its obsolescence has become such that it needs to be refurbished or replaced.

obstacle - part preventing unintentional direct contact, but not preventing direct contact by deliberate action.

obstruction (wind flow) - natural or man-made objects which generate turbulent windflow, ranging from single trees to forests and from isolated small structures to closely spaced multi-storey buildings.

obvert - See: *soffit (surface)*

occupancy - manner in which a building or dwelling is occupied by its users or residents.

See Also: *dual occupancy; owner occupancy*

occupancy cost - total of costs incurred by an entity to provide space for operations.

It includes net rent, operating costs (outgoings), capital costs, taxes, insurances and depreciation allowances.

occupancy rate - number of persons per accommodation unit.

For example, 'dwelling occupancy rate' for a dwelling, or 'room occupancy rate' for bedrooms.

occupant churn rate - measure of annual occupant turn over; calculated by dividing the total of all moves made during a year by the total number of occupants and multiplying by 100.

occupant load factor - factor used in calculating the population density when planning the means of escape from a building or a part of a building.

occupied area - area which is readily accessible for occupation, transit or service.

octave - interval between two sound frequencies having a ratio of 2:1.

See Also: *frequency band*

off-form concrete - See: *concrete, off-form*

office - space within a building used principally for administrative or clerical work.

See Also: *office building*

office block - large office building in a city or urban area.

office building - building used principally for administrative or clerical work.

See Also: *office block*

off-peak storage heating - storage heating system in which water heaters or air heating units are supplied with energy during an off-peak period of demand at a reduced tariff, with the heat stored in the heating medium or a heat sink until required for use.

off-premises workplace - workplaces that are remote from an organisation's head office, eg satellite offices, virtual offices, telecommuting.

offset - pipe and fittings used to provide continuity between pipes whose axes are parallel but not in line. Flat offset is obsolete and today use the term 'graded offset'.

offset (piping) Fig 70 - pipe and fittings used to provide directional continuity between pipes whose axes are parallel but not in line by introducing a double bend; sometimes used to allow pipes to pass over other in the same plane.

See Also: *offset, graded (plumbing); offset, steep (plumbing)*

offset (surveying) - horizontal distance measured at right angles to a survey line to locate a point or area off the line.

An oblique offset is a distance from a survey line measured at an angle other than a right angle.

offset (walling) - recession or set-back of the walling material, often sloping with a projecting drip mould at the lower edge.

offset, graded (plumbing) - stack offset which changes direction at an angle less than 45° from the horizontal.

Also Called: *flat offset* (obsolete)

offset, steep (plumbing) - stack offset which changes direction at an angle of 45° or more from the horizontal.

off-street parking - parking area which is not part of, and located away from, a road.

ogee arch - See: *arch, ogee*

ogee gutter - See: *gutter, ogee*

ogee moulding - See: *moulding, ogee*

ohm - electric resistance between two points of a conductor when a constant potential difference of one volt produces a current of one ampere. Symbol: Ω .

The derived SI unit of electric resistance, named after the German physicist Georg Simon Ohm (1787-1854). ($\Omega = V/A$)

oil - See: *fuel oil*

oil canning - minor elastic distortion in the form of waviness or out-of-flatness in a preformed sheet, normally caused by local buckling of the sheet metal.

oil paint - See: *paint, oil*

oil stain - stain containing drying oils, oleo-resinous varnishes, or alkyd resins.

oil trap - interceptor trap to prevent oil entering the drainage system.

See Also: *petrol trap*

older-persons unit - unit specifically designed to meet the general needs of older persons.

They are usually grouped either as single-storey (generally attached) units, or in high-rise blocks with lifts.

oleo-resins - varnishes or paints, the binder of which is composed of vegetable oils in conjunction with either natural or synthetic resins.

on centre - See: *centre-to-centre*

one pipe hot water heating system - See: *space heating system, one-pipe hot water*

one-coat work - plasterwork using one coat only where the background is sufficiently true and provides uniform suction.

one-way action - flexural action significant in one direction only.

one-way slab - See: *slab, one-way*

onion dome Fig 76 - pointed and bulbous dome of a distinctive onion-like shape, used on top of Eastern European churches and church towers.

The dome is not structurally a true dome; it is not vaulted but is wood or metal framed and covered with a skin.

on-site stormwater detention tank (OSD) - tank for the temporary storage of stormwater to reduce the peak flow to the stormwater drainage network.

on-site work - productive activity taking place at the building site.

open air - location outside the extremities of a building and where air circulation is unhindered by any other nearby object.

open caisson - caisson that is open both at the top and at the bottom.

open drain - See: *drain, open*

open floor - floor that has no ceiling covering its underside.

Also Called: *exposed floor (US)*

open joists and exposed common rafters - series of members (including purlins) spaced not more than 600 mm apart, measured from centre-to-centre of members.

open outlet - outlet which discharges water to atmosphere and which is not intended to withstand a static water pressure.

See Also: *fixture outlet; free water outlet; spray outlet; waste outlet*

open plan - design of interior building spaces with a minimum of dividing partitions between areas designed for different uses.

Also Called: *open planning*

open porch - porch that is only partially enclosed.

open roof - roof without ceiling in which the form of construction is visible from the space below.

Also Called: *exposed roof*

See Also: *ceiling, cathedral*

open rooted plant - See: *plant, open rooted*

open space¹ - area of land at ground level either reserved in its natural state or paved or landscaped, and usually accessible to the public (public open space) and available for recreational use.

If it is privately owned, open space may be non-accessible or have access limitations.

open space² - means a space on the allotment, or a roof or similar part of a building adequately protected from fire, open to the sky and connected directly with a public road.

[BCA Vol 1 terminology]

open space, private - area of unencumbered open space set aside for the sole use of the occupants of the building or dwelling to which it abuts.

open space, public - land used, or available, for outdoor recreational purposes by the public, including parks, public gardens, recreational reserves, sports grounds, playgrounds, and pedestrian and cyclist accessways.

open space, unencumbered - public open space that is unaffected by any lease, easement, or other condition which would limit its use or availability for use by the public.

open spectator stand - means a tiered stand substantially open at the front.

[BCA Vol 1 terminology]

open sprinkler head - See: *sprinkler head, open*

open string - outer, cut string of a stair that faces, or is open to, the well.

See Also: *cut string; outer string*

open system (piping) - water piping system for air-conditioning equipment in which expansion of the water takes place at atmospheric pressure in an open expansion tank.

open tender - See: *tender, open*

open time - time available to close the joints to be bonded after mixing of the resin and hardener components.

This is a function of the reactivity of the components and of the ambient temperature at which the adhesive is being used.

open wiring - system of fixed electrical wiring in which unsheathed cables are installed unconcealed and without further protection.

open yard - designated area in industrial or commercial premises which may be used for combustible storage or processing of any kind and having an area greater than 500 m².

Refer to AS 1940 for areas used for bulk storage of flammable and combustible liquids.

open-deck carpark - means a carpark in which all parts of the parking storeys are cross-ventilated by permanent unobstructed openings in not fewer than 2 opposite or approximately opposite sides, and- (a) each side that provides ventilation is not less than 1/6 of the area of any other side; and (b) the openings are not less than 1/2 of the wall area of the side concerned.

[BCA Vol 1 terminology]

open-frame girder - See: *girder, Vierendeel*

opening (access) - See: *access opening*

opening, clear - dimensions of the unobstructed opening for access, in service.

Removable supporting beams shall be removed for the calculation of clear opening.

opening lining - lining of an opening.

opening, rough - opening in a wall, sized to receive prefabricated door or window unit.

open-vented hot-water system - hot water system which has an unobstructed venting to atmosphere with the highest point of the vent being not greater than 5 m above the lowest point of the system.

operable light - section of glazing that is designed to be opened.

See Also: *fixed light*

operable walls - walls or partitions which can be moved and used in various ways to create flexible areas.

operating cost - costs associated with the function or component nominated, comprising total fixed costs, being both the explicit costs of fixed inputs and implicit costs associated with the firm's operations such as rent, etc, plus total variable costs, being variable inputs to the process such as direct salaries, less any deductions available such as tax concessions.

operating cost, deduction - deductions available such as tax concessions.

operating cost, total fixed cost - explicit costs of fixed inputs and implicit costs associated with the firm's operations such as rent.

operating cost, total variable cost - variable inputs to the process such as direct salaries.

operating costs, recoverable - recoverable outgoings are total operating costs minus non-recoverable operating costs.

operating energy - energy involved in providing services (such as heating, cooling or lighting).

operating profit - operating revenue less operating expenses and does not include any abnormal adjustments.

It may be expressed either before or after tax.

operating revenue - revenue achieved after allowing for deductions, taxes, monies collected on behalf of a third party and consists of income from the primary business function plus any other income.

operation - See: *continuous operation; intermittent operation*

operational maintenance - See: *maintenance, operational*

operational system - set of activities undertaken in pursuit of a business objective.

Operational systems range from business processes through to the provision of access for people with disabilities, emergency egress and maintenance facility.

opportunity cost - costs to an individual or enterprise of the alternatives foregone as the result of a decision to carry out a specific action.

opposed blade damper - damper comprising two or more blades, with adjacent blades moving in opposite rotation.

optical smoke detector - photo-electric smoke detector that responds to combustion products which affect the absorption or scattering of radiation in the infrared, visible, or ultraviolet region of the electromagnetic spectrum.

The sensing assembly usually includes the light source, the scatter chamber, and the light sensor.

optimum moisture content (soil) - moisture content of a soil or granular material which, when closely packed under specified conditions, will produce the greatest dry density.

option (property) - right given for a consideration to purchase property on or before a fixed date, on terms previously agreed upon.

An option entitles, but does not oblige, the person having the option to make the purchase. Options also appear in many leases, referring to a further term of tenancy. Many leases contain a clause giving the option of renewal for a further period, at a rent to be mutually agreed. In the event of disagreement, the rent would be determined by a valuer appointed by the President of the Institute, whose opinion shall become binding to both parties.

orange peel - paint defect caused by to the failure of a sprayed film to flow out to a level surface in the form of a uniform pockmarked appearance resembling the surface of an orange.

orders (architecture) Figs 72; 73; 74 - design and arrangement of columns (base, shaft and capital), entablature (architrave, frieze and cornice) and pediment according to a particular order.

See Also: *attic order; composite order; Corinthian order; Doric order; Ionic order; superimposed order; Tuscan order*

In classical architecture there are five orders: Doric, Ionic, Corinthian, Tuscan and Composite. The Greeks developed three orders: Doric, Ionic and Corinthian. The Romans added the Tuscan order and the Composite order (also known as Roman), while using the Greek orders in modified form. The orders were revived during the Renaissance and, with numerous variations, have played a prominent part in architectural design until the twentieth century.

ordinance - See: *building regulation; planning scheme ordinance*

ordinary annealed glass - See: *glass, ordinary annealed*

ordinary brick - See: *brick, common*

ordinary hazard - See: *hazard, ordinary*

organic coating - protective coating, based on one or more organic resins, in liquid or powder form, applied to the substrate.

organic insulation material - See: *insulation material, organic*

organosol - stabilized dispersion of finely divided thermoplastic resin particles, usually with added pigments, in an organic liquid that is wholly or partially volatile.

See Also: *plastisol*

On heating after application an organosol coating forms a coherent film.

oriel - part of an upper storey projecting from the outer face of a wall, supported by brackets or corbels, and containing an oriel window or windows.

oriel window - window that projects from the face of a building and is supported on brackets or cantilevers.

See Also: *window, bay*

orientation (angle) - direction a collector (or a building) faces, expressed as the azimuth angle of the horizontal projection of the surface normal.

orientation (facility) - a) siting of a building or building component in relation to prevailing weather conditions, air movement, solar exposure, and outlook. b) planning of buildings in relation to points of the compass.

For example in relation to (b) most European churches have an east-west axis.

orientation (solar collector) - angle between true north and the horizontal projection of the normal to the surface of the collector, measured from 0° to 360° in a clockwise direction.

orifice plate - See: *restrictor (orifice)*

O-ring - sealing ring circular in shape, generally of natural or synthetic rubber.

O-ring joint - See: *pipe joint, O-ring*

orsat - device for measuring the percentage of carbon dioxide, oxygen, and carbon monoxide in flue gases.

orthogonal lines - lines that are mutually perpendicular, that is, at right angles to each other.

OSD (abbr) - See: *on-site stormwater detention tank*

other property¹ - means all or any of the following- (a) any building, whether or not on the same or an adjoining allotment; and (b) any adjoining allotment; and (c) a road.

[BCA Vol 2 terminology]

other property² - means all or any of the following- (a) any building on the same or an adjoining allotment; and (b) any adjoining allotment; and (c) a road.

[BCA Vol 1 terminology]

other than rock (excavation) - material which can be excavated by hand or mechanical means without the use of a ripper.

outbuilding - detached building such as a carport, private garage, shed or the like.

outdoor air¹ - means air outside the building.

[BCA Vols 1 & 2 terminology]

outdoor air² Fig 61 - air outside the building.

outdoor air intake - opening through which outdoor air is admitted to an air-handling system of a building.

outdoor conditions - external dry bulb and wet bulb temperatures of a region which are used as the basis for the calculation of heat losses or heat gains.

See Also: *indoor comfort conditions*

outer string Fig 32 - string of a timber stair furthest from a wall.

Also Called: *face string (US) or outside string*

See Also: *open string*

outfall¹ - part of the disposal system receiving surface water or sewage (foul) water from the drainage system.

outfall² - means that part of the disposal system receiving surface water from the drainage system and may include a natural water course, kerb and channel, or soakage system.

[BCA Vols 1 & 2 terminology]

outgoings - recoverable costs, including maintenance and repair costs (both fixed and variable), administrative costs, management fees, labour costs, rates, taxes, insurances, light, power, fuel, security, cleaning and all costs associated with grounds and car parking.

outlet (drainage) Fig 69 - opening in a sanitary fixture, appliance or container to discharge the contents.

See Also: *fixture outlet; free water outlet; spray outlet; waste outlet*

outlet (electrical) - See: *general purpose outlet; portable power outlet; power outlet; shaver outlet; socket-outlet; special purpose outlet*

outlet box - metal or impact resistant plastic box placed at the end of a conduit, where fixed electrical wiring is accessible for connection.

Also Called: *wall box*

See Also: *general purpose outlet; power outlet*

It may include the socket outlet where the outlet box acts as the seat for the socket assembly.

outlet, combination switch and socket - electrical accessory for the connection of portable electrical appliances, with single switch and socket-outlet, or multiple switches and sockets.

Also Called: *combination switch plug*

See Also: *general purpose outlet; power outlet*

outlet connection - connection made at the outlet of an appliance, fixture or fitting.

out-of-plane loading - loading for which the design forces or bending moments result in design action effects normal to the plane of the connection.

outrigger Figs 19; 23; 24 - short, partially cantilevered horizontal timber member in a projecting gable roof, supported by the raking plate and fixed to a common rafter at the closed end, and supporting the verge rafter and soffit lining (if any) at the free end.

See Also: *soffit rafter*

outside air - See: *fresh air; outdoor air*

outside foundation line - line which indicates the location of the outside of the foundation wall for a new building.

Also Called: *foundation line*

outside sash lining - board fixed to the outer edge of stiles or mullions, which forms the outer face of the window frame in double hung windows and also keeps the top sash(es) from moving outwards.

outside string - See: *outer string*

outsourcing - changing a source of service provision to achieve a specified outcome from resources within the organisation to resources outside the organisation.

See Also: *contracting out*

oval-head wood screw - See: *screw, oval-head wood*

ovality (out-of-roundness) - difference between the maximum outside diameter and the minimum outside diameter, measured in the same cross-section.

oven - appliance for baking, roasting or heating, or for drying with the aid of heat, which may be freestanding or built into a wall.

See Also: *stove; wall oven*

overage rent - rent computed as a percentage of actual retail sales in excess of an established threshold (breakpoint), paid by tenants in addition to contract rent.
Also Called: percentage rent

overall heat transfer - heat transfer through a composite building element, which is the quotient of the steady-state rate of heat flow (J/s or W) per unit area (m^2) normal to a plane element and the difference between the air temperatures (K or $^{\circ}\text{C}$) on either side of the element, expressed in the SI unit watt per square metre kelvin ($\text{W}/\text{m}^2\cdot\text{K}$).
Also Called: overall thermal transmittance

overall heat transfer coefficient - heat transfer coefficient which is specific to a particular composite building element, usually determined by experiment or calculation, and involving a series of conduction and convection coefficients.

The overall heat transfer coefficient, or U-value, is the reciprocal of the sum of all resistances of the individual parts of the element, or the overall thermal resistance, and is expressed in the SI unit watt per square metre kelvin ($\text{W}/\text{m}^2\cdot\text{K}$).

overall mean temperature - mean of all the average test package temperatures taken over a time long enough to contain at least two maxima, and in any case, not less than 12 h.

Where a defrost period forms part of an operating cycle, maximum temperatures during defrost will normally be the maximum used for determining overall mean temperature.

overall rate of return - See: *rate of return, modified internal*

overall thermal resistance - thermal resistance to the passage of heat provided by an element of construction, such as a roof, wall or floor.

See Also: *R-value*

It is the sum of the surface resistances on each side of the element of construction plus and the thermal resistances of each of the components and any cavities which make up the element, and is expressed in the SI unit square metre kelvin per watt ($\text{m}^2\cdot\text{K}/\text{W}$).

overall thermal transmittance - See: *overall heat transfer*

overflashing - flashing which is built into a wall and is dressed over an upturned apron flashing.

overflow - a) flow from an overfilled vessel, sanitary appliance, or chamber. b) that part of a sanitary drain vessel, sanitary appliance, or chamber through which overflow is intended to take place. c) the level of the rim of a fixture or the invert level of an overflow pipe.

See Also: *overflow level; overflow, standing*

overflow (relief gully) - See: *gully, overflow*

overflow level - level at which liquid in a vessel will first start to overflow, either through the overflow pipe if any, or over the top edge.

overflow spout (gutter) - piece of pipe projecting laterally from a roof gutter to prevent internal overflow by allowing the free discharge of rainwater in the event of excessive quantities of rainwater or blocked downpipes.
Also Called: rainwater spout; spitter

overflow, standing - overflow pipe, consisting of a vertical tube, standing in a vessel and passing through its base.

overhang - part of a component, element or structure which projects past its support.

See Also: *cantilever*

overhang (roof) - projection of a roof beyond the line of the wall which carries it, including any fascia but excluding any gutter.

overhaul - comprehensive examination and restoration of an item, or a major part of an item, to an acceptable condition.

overhead door - See: *door, overhead*

overhead value analysis - identification of the cost of overhead activities which can be attributed to a project, either directly or by apportionment.

overlay zone - area extending around the outside of the pipe to the tops of the last placed side zone, haunch zone, or bed zone as appropriate, and which has a breadth of not less than 150 mm at any point measured radially from the outside of the pipe.

Overlay material protects the pipe from damage and provides a means of distributing superimposed loads.

overloading - placing an excessive load on a beam, column or floor which may lead to deformation, cracking, buckling and, in the extreme case, collapse.

ovolo moulding - See: *moulding, ovolo*

owner - person, firm or entity holding legal title to an asset, or purchasing it on terms through a lender who holds the legal title.

See Also: *proprietor; purchaser; title*

owner occupancy - occupation of a building or dwelling by its legal owner.

oxidizing agent (oxidizer) - compound whose combination with a combustible substance generally leads to combustion.

oxy-acetylene burner - device for obtaining a high-temperature flame (about 3300°C) for welding or cutting steel, by burning a mixture of oxygen and acetylene in a special jet.

oxy-acetylene welding - See: *welding, oxy-acetylene*

oxygen cutting - thermal cutting using the heat of chemical reaction between oxygen and the material to be cut which has been raised to ignition temperature.

See Also: *flame cutting*

Gas cutting is deprecated.

oylet - small hole or perforation; an eyelet.

P

package - complete product of the packaging operation, consisting of the packaging and its contents prepared for transport.

packaged (air-conditioner) - See: *air-conditioner (packaged)*

packaging group (PG) - one of three hazard groups into which dangerous goods (of other than Classes 1, 2, 6.2 and 7) are designated in the ADG Code, in decreasing order of hazard, by the Roman numerals 'I' (great danger), 'II' (medium danger) and 'III' (minor danger). The ADG Code provides criteria for the assignment of Packaging Groups, and a list of those already assigned. All organic peroxides have been assigned by the ADG Code to Packaging Group II.

packing Fig 39 - timber batten or strip placed between a structural section and a facing material to maintain a level or perpendicular surface.

Also Called: packing; packing batten

packing (pile) - pad of resilient material contained in the pile helmet directly on top of the pile to prevent the pile head from being damaged during pile driving.

See Also: *pile helmet*

pad bolt - See: *bolt, pad*

pad footing - See: *footing, pad*

padlock - detachable lock, mainly for use with hasps and staples or pad bolts, having a movable shackle that passes through a staple, eye or similar device. The shackle is locked into and released from the case of the padlock by a key operated bolt. In the spring-shackle padlock the shackle springs open when the key is turned, and the shackle may be locked without the use of a key when pushed into the closed position.

padstone - loadbearing stone or precast concrete block, placed under the end of a heavily loaded beam or girder to distribute the load over a larger bearing area of a loadbearing wall.

paint - pigmented product in liquid form which is applied to a surface by brushing, rolling, spraying, dipping, or pouring, to form an opaque film when dry.

See Also: *distemper; kalsomine; paint coat; sealer; whitewash*

Paints may be specially formulated for particular decorative or protective purposes.

paint, acrylic - coating material manufactured with acrylic resins as the main base.

paint aeration - incorporation of air bubbles in paint during stirring, shaking or application.

paint, aerosol - specially formulated paint stored under pressure in a spray can, with a highly volatile dispersing agent that produces an atomized spray upon depressing a valve on top of the can.

paint, alkyd - coating material manufactured with alkyd resins as the main base.

Also Called: enamel

See Also: *paint, enamel; paint, solvent-borne*

paint, aluminium - coating material that includes particles or flakes of aluminium to form a silvery metallic finish.

paint, anti-condensation - coating material specifically formulated to minimize the effects of condensation of moisture under recurring dry and humid conditions, usually rough textured.

Also Called: condensation resisting paint

Some anti-condensation paints contain finely ground cork or other heat insulating material as a filler to increase the insulation of the coating.

paint, anti-corrosive - coating material designed to retard the corrosion of metals, especially the rusting of iron or steel.

Also Called: anti-corrosive coating

paint, anti-fouling - coating material specially formulated to prevent the growth of marine organisms on underwater surfaces.

paint, anti-graffiti - specially formulated coating material to resist defacement by graffiti or facilitate graffiti removal without damaging the coating or substrate.

Also Called: graffiti-resisting paint

paint, bituminous - thick black or dark brown coating material for use in exposed situations such as roofs, formulated with bitumen as binder dissolved in organic solvents, and often containing pigments and inorganic fillers.

Aluminium pigmented types of bituminous paint are also produced.

paint brush - painting tool composed of bristles set into a handle.

See Also: *fitch*

Bristles may be natural materials, such as sable or hogs hair, or synthetic materials. Paint brushes with synthetic bristles are suitable for the application of solvent-borne paints to rough surfaces.

paint, cement-based - paint base in dry powder form, containing portland cement and other materials, which is mixed with water just before use.

Also Called: cement paint

Nowadays rarely used.

paint, coal tar epoxy - paint consisting mainly of a coal tar, an epoxy resin base, polyamide or other hardeners, and appropriate pigments and solvents.

Due to the highly toxic nature of coal tar compounds, paint and coatings based on them are no longer in common manufacture. Care should be taken with existing stocks of these products.

paint coat - layer of dried film, resulting from a single application of a coating material.

paint coat, barrier - material used to isolate a subsequent coat from the preceding coats or substrate to prevent adverse physical or chemical interaction.

See Also: *bleeding (paintwork)*

paint coat, finish - final coat in a paint system.

Also Called: finish coat or top coat

paint coat, glaze - translucent or clear coat applied over a previous finish, to protect, modify or enrich that finish and increase its specular gloss.

Also Called: glaze coat

paint coat, ground - base coat in an antique or graining finish system that is applied before the graining, glaze or other finishing coat.

paint coat, mist - very thin continuous or discontinuous sprayed coat of paint or varnish to enhance the adhesion of subsequent coats.

paint coat, priming - initial coat of a coating system applied to a substrate; designed to bind subsequent coats to the substrate and to inhibit its surface deterioration.

Also Called: prime coat; primer coat

See Also: *paint coat, spot priming*

paint coat, sealing - preparatory coat in a coating system which inhibits excessive absorption of a subsequent or finishing coat into an absorbent substrate, prevents a reaction of the substrate with incompatible finishing coats, and blocks harmful or unsightly substrate materials from bleeding through to the surface.

Also Called: sealer coat

paint coat, spot priming - priming of small, localized areas of a previously painted surface to protect an exposed substrate or where additional protection is required due to rusting or peeling.

paint coat, tie - coat, usually unpigmented, which is applied over a previous coat to soften the dry film and thus improve the adhesion of a subsequent or potentially incompatible coat.

paint coat, undercoat - intermediate coat in a multi-coat paint system to prepare a primed, previously painted or otherwise treated surface for the finishing coat.

paint defect - breakdown or blemish in the paint film that renders it functionally or visually defective.

See Also: *blistering (paint)*; *chalking (paint)*; *cheesiness (paint)*; *cissing (paint)*; *cracking (paint)*; *flaking (paint)*; *mudcracking (paint)*; *peeling (paint)*; *run (paint)*

paint drier - See: *drier (paint)*

paint, enamel - paint that gives a very smooth, hard surface finish.

Also Called: enamelized paint

See Also: *paint, alkyd*

Nowadays, the term 'enamel paint' is used to cover a wide variety of conventional solvent-borne alkyd or oleo-resinous paints ranging from flat to full gloss which simulate flow, smoothness and appearance of a vitreous enamel. Some modern products are marketed as acrylic enamels when they are in fact acrylic paints. This is because it is claimed they simulate enamel-like properties in a water-based paint. They should not be confused with true acrylic (solvent-based) enamels.

paint, epoxy - coating material consisting of a pigmented or clear epoxy resin binder and a hardener which are mixed on site, with or without the addition of a solvent.

paint film - continuous applied layer of paint; generally synonymous with coat (of paint).

See Also: *dry film thickness*

paint finish - See: *paint coat, finish*

paint finish, antique - coating system for use on woodwork, metal surfaces, or furniture to simulate the effect of old age or mellowness.

See Also: *graining*; *marbling*

paint finish, baked - finish obtained by drying and hardening a paint film at temperatures above 100°C.

Also Called: stoved finish; stoving

Heating may be within temperature-controlled convection ovens or by radiant heat from groups of infrared lamps.

paint finish, clear - clear or translucent finishing coat obtained with a varnish or a relatively quick-drying formulation based on alkyd, polyurethane or polyester resins.

See Also: *varnish*

Clear finishes are used where a hard and transparent finish is required, such as on counter tops, panelling, trim or floors.

paint finish, fire-retarding - finishing material formulated to form a chemical barrier to ignition and spread of flame.

See Also: *paint, intumescent*

paint finish, flat - painted surface which absorbs or scatters most of the light falling on it so as to be substantially free from gloss or sheen.

Also Called: matt finish

See Also: *gloss units*; *specular gloss*

A flat finish has a very low specular gloss reading of less than 5 gloss units.

paint finish, full-gloss - surface finish with a very high specular gloss and a gloss reading above 85 gloss units.

Also Called: high gloss finish

See Also: *gloss units*; *specular gloss*

paint finish, gloss - surface finish with a high specular gloss, with a gloss reading between 50 and 85 gloss units.

See Also: *gloss units*; *specular gloss*

paint finish, hammertone - paint finish similar in appearance to hammered metal, obtained with specially formulated coating materials.

Also Called: hammer finish

paint finish, low-gloss - surface finish with a low specular gloss, such as a reading between 5 and 20 gloss units.

Also Called: eggshell finish

See Also: *gloss units*; *specular gloss*

paint finish, polychromatic - painted surface that has a metallic lustre and gives an iridescent effect, with variations in colour, when viewed from different angles.

paint finish, semi-gloss - surface finish with a 'satin' appearance and a surface reflectance between low gloss and gloss indicated by a reading in the range from 20 to 50 gloss units.

Also Called: satin finish

See Also: *gloss units*; *specular gloss*

paint, fire-retardant - paint that significantly reduces the rate of flame spread on a surface or delays ignition of the paint film or substrate at high temperatures.

Most fire retardant paints are intumescent paints.

paint flow - See: *flow (paint)*

paint, fungicidal - coating material containing fungicidal additives which inhibit the growth of fungi, mould or mildew on the dry film.

Also Called: anti-mould paint; mould resisting paint

paint, high-build - specially formulated paint, usually with an epoxy or vinyl resin base, that allows a relatively thick film to be applied in a single coat without running or sagging.

Also Called: high build coating

paint, intumescent - fire-retardant coating which swells up when subjected to heat or flame to form a protective layer or crust that delays ignition of the paint film, insulates the substrate, and significantly reduces the rate of flame spread at high temperatures.

paint, latex - pigmented water emulsion incorporating a synthetic latex resin, such as polyvinyl acetate or acrylate, as the main binder.

Also Called: plastic paint

paint, lead based - traditional but obsolete finishing paint which includes lead-based pigments and is poisonous, even after application in the dried paint film.

Also Called: lead paint

Nowadays, the lead content of paints is strictly controlled by legislation.

paint, light-bodied - paint of low consistency and high flow.

See Also: *body (paint)*

paint, low-lead - paint that has a content of lead-based pigments below the level specified in legislation.

paint, marine - coating material specially formulated to resist immersion in water and exposure to a marine atmosphere, including salt attack, which is used in the protection of marine vessels, harbour installations and offshore construction works.

paint, metallic - class of paints which incorporates fine flakes of metal and, on application, produces a film with an iridescent and/or metallic appearance.

See Also: *paint finish, polychromatic; paint, aluminium*

paint, micaceous iron oxide (MIO) - paint whose pigment content includes micaceous iron oxide as a major component, and which retains its lamellar form in the paint film.

paint, oil - paint with a drying oil as the basic medium.

paint, paving - durable, usually solvent-borne paint with an abrasion resistant finish, specially formulated to cover paved surfaces.

To make them non-slip, some paving paints have particulate matter added.

paint, polyester - paint manufactured with polyester resins as the main base.

paint, polyurethane - clear finish manufactured with polyurethane resins as the main base and available in interior or exterior grades.

paint remover - compound for application to a coated surface to soften old paint, lacquer or varnish and allow the ready removal of loosened material by scraping, hosing with water, or other mechanical means.

Also Called: paint stripper

Paint removers are manufactured in 'solvent' or 'chemical' types.

paint, roofing - latex or solvent-borne paint, specially formulated for service in roof situations where high resistance to moisture and temperature changes is required.

paint, solvent-borne - coating material made up of resins dissolved in appropriate solvents that evaporate during drying.

paint stripper - See: *paint remover*

paint system - sum of the various coats of the coating materials that have been, or are to be, applied to a substrate.

A paint system usually consists of several coats applied in a predetermined order at suitable intervals to allow for drying; for example, a three-coat system is usually specified as primer, undercoat, and finishing coat.

paint, textured - thick coating material which, by virtue of its composition and method of application by heavy brush, roller or trowel, can produce a variety of rough, sandy, patterned or textured finishes.

paint, two-pack - coating material which consists of two parts that have to be mixed in correct proportions before use.

It is often supplied in the correct proportions in two containers.

paint, vinyl - paint manufactured with vinyl resins as the main base.

paint, water-borne - paint in which the greater portion of the medium is water, which can be thinned by water, and which allows brushes and rollers to be cleaned in water.

Also Called: water paint

pale - See: *picket*

paling (fence) - piece of rough sawn or split timber, 15- to 20-mm thick, for use in paling fences.

See Also: *picket*

Palladian window - archway or window with three openings, the central one arched and wider than the others.

Also Called: serliana; Venetian window

Made popular by the Italian architect Palladio (1508-1580).

pan (metal sheet) - flat, or curved portion between the ribs in a pan-type preformed sheet.

pan (water closet) - See: *water closet pan*

pan bend - See: *pipe fitting, pan bend*

pan connector - a) short straight soil pipe with a socket at one end to receive the outlet spigot of a WC pan or soil fixture. b) plastics or rubber fitting for connecting a WC pan or soil fixture to a soil pipe.

Also Called: pan socket

pan extension - soil pipe fitting comprising a straight section, terminating in a socket to receive the outlet spigot of a P or S trap WC pan or soil fixture.

pan socket - See: *pan connector*

pane - single plate of glass, or other transparent material, cut to size ready for glazing or installed.

See Also: *windowpane*

panel - distinct proportion or division.

See Also: *door panel; fence panel; infill panel; truss panel; partition panel*

panel door - See: *door, panelled*

panel heating - system of heating in which the heating units are concealed in special panels, or built into the walls or ceiling.

panel pin - See: *nail, hardboard*

panel point - centring point on a truss or girder chord where a vertical or inclined member meets the chord; or a junction of members in a lattice tower.

Also Called: node

panel radiator - heating unit which is either installed flush with a flat surface, mounted directly upon it with minimum projection, or placed as a 'free standing' appliance.

panel wall¹ - non-loadbearing external wall for multistorey buildings, composed of separate infill panels each supported by the adjacent structural members.

See Also: *curtain wall*

The difference between a panel wall and a curtain wall is that a panel wall is supported at each storey, and a curtain wall is not.

panel wall² - means a non-loadbearing external wall, in frame or similar construction, that is wholly supported at each storey.

[BCA Vol 1 terminology]

panelled door - See: *door, panelled*

panelling - wooden or other material made into panels.

panhead screw - See: *screw, panhead*

panic bolt - latch set for an emergency exit door, which can be opened by pressure on a horizontal bar fixed at waist height to single or double door installations.

Also Called: panic latch

The bolt secures the door(s) at top and bottom by vertical shoots.

panic latch - See: *panic bolt*

pantile - See: *roofing tile, pantile*

pantry - storage room or large cupboard for food and other provisions.

parabolic arch - See: *arch, parabolic*

parallel chord truss - See: *truss, parallel chord*

parallel pipe - See: *pipe (parallel)*

parapet - construction that bounds an elevated surface such as a roof, external balcony, internal balcony, terrace, bridge or embankment.

parapet gutter - See: *gutter, parapet*

parasol roof - See: *roof, umbrella*

parge coat - coarse coat of plasterwork applied over masonry as a protective or base coat.

See Also: *paring (render)*

pargeting - decorative plasterwork, with raised, indented or tooled patterns, applied to external walls.

Also Called: pargetting; parching (US)

paring (render) Fig 17 - mortar lining applied to a surface.

The internal surfaces of a chimney flue are parged so as not to impede the flow of smoke.

paring (termite) - method of joining a physical termite barrier to the substrate material or an adjacent area of

the barrier, to provide a strong, durable bond that is termite resistant.

This term is generally applicable to woven mesh or sheet material barriers.

park - public open space intended for outdoor recreation, either left in its natural state or landscaped, with plants providing both character and amenity.

Also Called: parkland

parking aisle - area used by vehicles to gain access to, and to manoeuvre into and out of parking spaces.

parking module Fig 60 - parking aisle together with a single row of parking spaces on one or both sides, but excluding any ramps or circulation roadways which take off within the module.

parking ratio - ratio of the number of car-parking spaces required to be provided for any development per unit of built up space, eg per m² of built area/per number of apartments/per number of hotel rooms/per m² of site area.

parking space - area assigned for the parking of a single car.

Also Called: parking space (US); parking stall (US)

parliament hinge - See: *hinge, parliament*

parlour - See: *living room*

parol contract - oral or unwritten contract.

parquetry - flooring of matching small pieces of wood, laid in geometric patterns and glued to a wood or concrete subfloor; usually hard and highly polished.

Also Called: wood block floor; parquet flooring

partial shear connection - condition for which the moment capacity of the cross-section of the composite beam is governed by the strength of the shear connection.

partial utilization - use, by the owner, of a substantially completed part of the work prior to substantial completion of all of the work.

partially reinforced masonry - See: *masonry wall, partially reinforced*

particle density - mass of the oven-dried particles divided by their saturated surface-dried volume.

Previously known as bulk density.

particle size fraction - fraction of aggregate passing the larger of two sieves and retained on the smaller.

particleboard - wood-based panel product manufactured under pressure from particles of wood or other lignocellulosic materials and a binder.

Also Called: chipboard; pineboard; flakeboard (US); strandboard (US)

It is also produced with decorative veneered finishes or laminates for joinery work, and with glued edging strips for shelving. Particleboard is designated 'FT' if it includes fungicide treatment and 'TT' if it includes termiticide treatment.

particleboard flooring - generic term used to describe a product, manufactured from ligno-cellulosic material (usually wood) and an adhesive, that complies with the requirements for particleboard specified in AS/NZS 1859.1.

particleboard FT - particleboard panel that undergone fungicide treatment.

particleboard nail - See: *nail, particleboard*

particleboard screw - See: *screw, particleboard*

particleboard TT - particleboard that has undergone termiticide treatment.

parties concerned - See: *stakeholder*

parting bead Fig 39 - thin moulding with a rounded outer edge which is sunk into the frame of a double-hung window to separate the sliding sashes.

Also Called: parting strip

parting slip - See: *pendulum strip*

parting strip - See: *parting bead*

partition - internal non-loadbearing vertical construction that bounds or subdivides a space.

Partition systems are usually assembled from prefabricated components, with or without frame, and include demountable, semi-demountable or non-demountable solid or glazed panels, doors, other accessories, and trim.

partition (demountable) - See: *partition, fully demountable; partition, non-demountable; partition, semi-demountable*

partition cap - head or top of a partition wall.

partition covering - material or materials used to cover the face of partitions, such as timber panelling, plywood, veneered particle board, hardboard, insulating board, plasterboard, sheet metal, or other suitable facing.

partition, double stud - non-demountable partition in which two parallel rows of studs, with individual sill and top plates, and an air space or insulated cavity between them, form a discontinuous construction for sound insulation purposes, or to provide a cavity for a sliding door.

Also Called: hollow partition

See Also: *partition, staggered stud*

partition, dwarf - partition which is not carried up to ceiling height.

partition, framed - partitioning system in which each panel, or the partition lining, is supported by a separate structural frame.

See Also: *partition panel*

Partly framed partitions have structural framing at specific locations only, such as a doorways.

partition, frameless - partitioning system without support frames.

Individual panels, including glazed panels, are joined at their edges by splines, tongues and grooves, adhesive jointing, and the like, and fixed to the building structure at head and foot only.

partition, fully demountable - partition system in which any component may be demounted without damage, using only small hand tools, and subsequently reassembled without cutting, trimming or refinishing.

See Also: *system furniture*

It generally leaves no permanent depression on floor coverings.

partition, non-demountable - partition system in which major components, such as panels or linings, are likely to be damaged during removal and may require cutting, trimming or structural repair before reuse.

Some non-demountable partitions include designated panels that may be removed and reused.

partition panel - panel between vertical supports in demountable partition system.

partition, semi-demountable - partition system in which the major components are designed to be removed and re-used but panels or linings, which are likely to be damaged during removal, are not.

partition, solid - internal partition wall constructed of solid materials without a cavity.

partition, staggered stud - non-demountable partition in which the studs are alternatively aligned with the opposite faces of oversized top and bottom plates and a sound-deadening material is woven through the intersitial space.

See Also: *partition, double stud*

partly enclosed switchgear - See: *switchgear, partly enclosed*

partnering - formal process of cooperation between the client, the design team, the contractor(s) and suppliers to achieve a more efficient outcome in a construction project and minimize or eliminate disagreements or disputes, based on mutual understanding of each other's expectations and values and joint benefit from any resultant economies.

A partnering agreement which sets out the objectives is usually drawn up following the award of the contract.

party structure - partition wall or floor used for the purpose of separating storeys or rooms in separate occupancies.

party wall - wall separating two separately owned properties and located partly on each.

See Also: *common wall*

pascal - pressure or stress that arises when a force of one newton is applied uniformly over an area of one square metre. Symbol: Pa.

For small pressures, the prefixed units millipascal (mPa) and micropascal (μPa) are used, while for larger pressures and stresses the prefixed multiples kilopascal (kPa), megapascal (MPa) and gigapascal (GPa) are used.

passage - space providing access between the different rooms of a house.

Also Called: hall; hallway

passageway - narrow circulation space bounded on both sides, sometimes covered, intended for pedestrians

passenger lift - See: *lift, passenger*

passing rent - current rental being paid by the lessee as specified by the terms of the lease.

passive solar design - design approach in which thermal energy is collected and stored by natural means.

It exploits the orientation of building spaces, the placement of building elements, and the choice of materials in relation to solar radiation to modify the indoor climate and thermal comfort, and reduce the building energy requirements. Passive solar design concentrates on the admission of desirable radiation, the prevention of heat losses, and the storage of excess energy for subsequent use.

passive system - system of heating and/or cooling for buildings by natural energy sources without any electrical or mechanical assistance.