

Glossary of

Building and civil engineering terms —

Part 2: Civil engineering —

Section 2.6 Inland waters, coastal and
maritime engineering

Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the Basic Data and Performance Criteria for Civil Engineering and Building Structures Standards Policy Committee (BDB/-) to Technical Committee BDB/3, upon which the following bodies were represented:

- Association of Builders' Hardware Manufacturers
- Association of Building Component Manufacturers
- Brick Development Association
- British Precast Concrete Federation Ltd.
- British Standards Society
- Building Employers' Confederation
- Building Services Research and Information Association
- Chartered Institution of Building Services Engineers
- Concrete Society
- Contract Flooring Association
- Department of the Environment (Building Research Establishment)
- Department of the Environment (Property Services Agency)
- Federation of Civil Engineering Contractors
- Fibre Building Board Organisation (FIDOR)
- Gypsum Products Development Association
- Incorporated Association of Architects and Surveyors
- Institution of Civil Engineers
- Institution of Highways and Transportation
- Institution of Structural Engineers
- Institution of Water and Environmental Management
- National Council of Building Material Producers
- National Federation of Roofing Contractors
- National House-building Council
- Royal Institute of British Architects
- Stone Federation
- Timber Trade Federation
- Water Companies Association
- Water Services Association of England and Wales

The following bodies were also represented in the drafting of the standard, through subcommittees and panels:

- British Railways Board
- Department of Transport
- National Rivers Authority

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Foreword

This Section of Part 2 of BS 6100 has been prepared under the direction of the Basic Data and Performance Criteria for Civil Engineering and Building Structures Standards Policy Committee.

A general introduction to and explanation of this glossary is given in Part 0 of BS 6100, which itemizes the Parts, Sections and Subsections into which this glossary is divided and provides a general alphabetical index of all the terms in the Sections and Subsections already published. Those using individual Sections and Subsections of this glossary are urged to consult Part 0 when doing so.

The other Sections of this Part are as follows:

- 2.1 Structural design and elements
- 2.2 Substructures. Earthworks. Foundations. Tunnels
- 2.3 Superstructures. Bridges. Large span structures
- 2.4 Highway and railway engineering
- 2.5 Hydraulic engineering and construction work
- 2.7 Public health. Environmental engineering
- 2.8 Pipelines and ducts

Terms are listed alphabetically in the index and are referred to by numbers which are found against the terms in the body of the Subsection. They are arranged in a classified order, each term having an individual number consisting of seven digits in two parts, the first of three digits, the second of four. The first three digits represent the number of the Part, Section and Subsection. The fourth digit represents the group of terms, the fifth digit represents the subgroup of terms, and the last two digits represent the place within the subgroup.

Alternative terms are given in medium type below the preferred terms with their status indicated by “deprecated”. These terms are not individually numbered but are included in the index with a reference to the preferred term. Terms of more than one word, e.g. “brushwood fender” are written in a direct style, not as “fender, brushwood”. The inverted term is included in the index with reference to the direct term.

Italicized words indicate terms that are defined elsewhere in this Subsection.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

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Summary of pages

This document comprises a front cover, an inside front cover, pages i to iv, pages 1 to 32 and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

No.	Term	Definition
260 1 Base terms		
260 1001	precipitation	Water derived from atmospheric vapour and deposited on a surface as mist, <i>rain</i> , hail, sleet and snow or dew.
260 1002	watercourse	Route, usually in the form of a natural depression, along which water flows by gravity.
260 1003	channel	Natural or man-made open passage to convey or contain water.
260 1004	drainage	Removal of surplus water.
260 1005	drain	Pipeline or similar conduit, usually underground, or <i>channel</i> that conveys foulwater, waste water, <i>surface water</i> or other unwanted liquids.
260 1006	discharge	Volumetric flow rate.
260 1007	headworks	Intake and associated works at the upstream end of a water engineering scheme.
260 1008	irrigation	Artificial distribution of water to land, usually for growing crops.
260 1009	canal	<i>Channel</i> constructed to carry water, usually for <i>navigation</i> (2), water power or <i>irrigation</i> .
260 1010	lock	Enclosure on a <i>river</i> , <i>canal</i> or at the entrance to a non-tidal <i>dock</i> , with movable watertight gates through which vessels pass and proceed from one water level to another.
260 1011	bank	Strip of land that forms the edge of a <i>river</i> , <i>canal</i> or reservoir.
260 1012	bed	Nominally horizontal or slightly sloping portion of a <i>watercourse</i> or area of ground under a body of water that is for most or all of the time covered by water.
260 1013	berth	Place where a vessel can be moored, usually for loading and unloading cargo or passengers.
260 1014	dock	<i>Basin</i> for shipping.
260 1015	harbour	Natural or artificially sheltered area of water where ships can lie.
260 1016	wave	Oscillation of water level propagated along the surface.
260 1017	tide	Periodic rising and falling of water that results from the gravitational attraction of the moon and the sun and other astronomical bodies acting upon the rotating earth.
260 1018	aqueduct (1)	Conduit for conveying water over long distances.
260 1019	well	Hole, usually vertical, excavated or drilled into the ground for the extraction or observation of water, oil or gas.

260 2 Surface water and groundwater

260 21 Precipitation

260 2101	rain	<i>Precipitation</i> in the form of liquid water drops that have a diameter greater than 0.5 mm.
260 2102	rainfall	Amount of <i>precipitation</i> expressed as a depth usually related to a particular time of aggregation, for example daily <i>rainfall</i> .
260 2103	intensity of rainfall	Rate of <i>precipitation</i> expressed as a depth in unit time, for example, millimetres per hour.
260 2104	isohyet	Line on a map joining places with equal <i>rainfall</i> .

No.	Term	Definition
260 2105	interception	Process by which <i>precipitation</i> is retained by and later evaporated from a structure or vegetation and is thus prevented from reaching the ground.
260 22 Surface water		
260 2201	run-off	Discharge of <i>surface water</i> that results from <i>precipitation</i> .
260 2202	storm run-off	<i>Run-off</i> due to <i>rain</i> .
260 2203	snow melt	<i>Run-off</i> due to melting snow.
260 2204	frazil ice slush ice <i>deprecated</i>	Ice formed, as colloidal crystals, in a <i>watercourse</i> when the temperature of the entire body of water flowing along it is reduced to 0 °C.
260 2205	base flow dry weather flow <i>deprecated</i>	That part of the <i>discharge</i> in a <i>watercourse</i> not directly derived from <i>run-off</i> .
260 2206	peak flow	Maximum <i>discharge</i> during a particular flood event or over a specified period of time or a fluctuating flow.
260 2207	design storm	Rainstorm parameters adopted for the design of water engineering construction works.
260 2208	design flood	Flood parameters adopted for the design of water engineering construction works.
260 2209	spate freshet <i>deprecated</i>	Sudden short-lived increase in <i>discharge</i> .
260 2210	catchment area	Area of land that drains naturally to a given point on a <i>river</i> .
260 2211	sewage catchment	Area of land that drains to a single sewage treatment works or outfall.
260 2212	subcatchment area	Component part of a <i>catchment area</i> .
260 2213	watershed divide <i>deprecated</i>	Boundary between <i>catchment areas</i> .
260 2214	spring	Natural outflow of water from the ground.
260 2215	lake mere, loch, lough, linn, tarn <i>regional</i>	Large inland body of water.
260 2216	pond	Small shallow inland body of <i>fresh water</i> .
260 2217	coastal lagoon	Shallow body of water close to the <i>sea</i> and usually with a shallow restricted inlet from the <i>sea</i> .
260 2218	sea	Body of salt water that usually forms a delineated part of an ocean.
260 2219	swallow hole	Natural shaft, due to geological features, down which water can flow into an <i>aquifer</i> or underground <i>watercourse</i> .
260 2220	hydrography	Applied science concerned with the study and measurement of <i>seas</i> , <i>lakes</i> and other waters where volume is more important than the rate of flow.
260 2221	hydrology	Science of the occurrence and movement of water over and below the surface of the earth from the moment of <i>precipitation</i> to the moment of entry into the ocean or of evaporation into the atmosphere.
260 2222	hydrometry	Measurement and analysis of the flow of water.
260 2223	hydrograph	Relationship, or graph, that shows the variation with time of the level, discharge or velocity of water in a <i>watercourse</i> or channel.

No.	Term	Definition
260 2224	unit hydrograph	Theoretical <i>hydrograph</i> that would result from a storm of unit <i>intensity of rainfall</i> and unit duration.
260 2225	mass diagram	Graph that shows cumulative flow quantities such as the integration of a time-flow curve.
260 2226	time of concentration	Time taken for a droplet of surface water that falls on the most remote part of a <i>catchment area</i> to flow to a given point under investigation.
260 2227	flood detention area	Area of land to impound water from <i>river</i> flood flow in excess of the downstream capacity.
260 2228	surface water	Water that flows over, or rests on, the surface of buildings, other structures or the ground.
260 23 Groundwater		
260 2301	soil water	Water present in <i>soil belt</i> .
260 2302	soil belt	Upper soil layer, constantly affected by evaporation and plant transpiration, that is partially saturated with percolating water.
260 2303	intermediate water (1)	Water present in <i>intermediate belt</i> .
260 2304	intermediate belt	Partially saturated soil layer between <i>soil belt</i> and <i>capillary fringe</i> .
260 2305	capillary water	Water held in the <i>capillary fringe</i> .
260 2306	capillary fringe capillary zone <i>deprecated</i>	Soil layer above <i>water table</i> in which water is raised by capillary action.
260 2307	held water vadose water <i>deprecated</i>	<i>Pellicular water</i> , gravitational and <i>capillary water</i> suspended in partially sealed interstices in the <i>aeration zone</i> .
260 2308	aeration zone	Zone between ground surface and <i>water table</i> that comprises the <i>soil belt</i> , <i>intermediate belt</i> and <i>capillary fringe</i> .
260 2309	groundwater phreatic water <i>deprecated</i>	Water within <i>saturation zone</i> .
260 2310	saturation zone	Zone below <i>water table</i> and above <i>rock flow zone</i> throughout which all fissures are filled with water under hydrostatic pressure.
260 2311	free water	<i>Groundwater</i> in interconnected interstices in <i>saturation zone</i> , that extends down to the first impervious barrier and moves under the influence of gravity in the direction of the slope of the <i>water table</i> .
260 2312	internal water	Water present in <i>rock flow zone</i> .
260 2313	rock flow zone	Zone of the earth's crust into which water cannot permeate and below the upper limit of which water cannot exist in a free state since all interstices have been closed by plastic flow of the rock.
260 2314	hygroscopic water	Water, in soil, that is in equilibrium with atmospheric water vapour pressure and that is essentially water in which attraction between water molecules can hold against evaporation.
260 2315	pellicular water adhesive water <i>deprecated</i>	Water, retained in soil by attraction between water and soil molecules and that forms a coating around the particles and that may move from one particle to another.
260 2316	water table	Surface of <i>groundwater</i> in saturated soil or rock.

No.	Term	Definition
260 2317	phreatic water	Water in the zone below the <i>water table</i> .
260 2318	phreatic surface	Surface to which <i>groundwater</i> would rise in an open ended pipe.
260 2319	phreatic zone	Zone below the <i>phreatic surface</i> .
260 2320	recharge	Flow of water to <i>groundwater</i> storage from <i>precipitation</i> , infiltration from surface <i>streams</i> and other sources.
260 2321	aquifer	Water-bearing formation of permeable rock, sand or gravel capable of yielding significant quantities of water.
260 2322	underflow	<i>Groundwater</i> movement in an <i>aquifer</i> .
260 2323	specific yield	Ratio of the volume of water yielded by unit volume of permeable rock or soil when drained by gravity under specified conditions after being saturated to unit volume.
260 2324	specific retention	Ratio of the volume of water retained against gravity by unit volume of rock or soil that has been saturated and allowed to drain completely to a remote body of mobile water by way of continuous capillary interstices to unit volume.
260 2325	specific storage	Ratio of the volume of water that unit volume of a vertical column of an <i>aquifer</i> releases from storage as the head within the column declines unit distance to unit volume.
260 2326	storage coefficient	Ratio of the volume of water that a vertical column of an <i>aquifer</i> of unit cross-sectional area releases from storage as the head within the column declines unit distance to unit volume.
260 24 Miscellaneous		
260 2401	water cycle	Complete natural cycle of water circulation from the atmosphere to the earth and return to the atmosphere through various stages or processes such as <i>precipitation</i> , <i>run-off</i> and evaporation.
260 2402	shallow well	<i>Well</i> less than 15 m deep.
260 2403	deep well	<i>Well</i> equal to or more than 15 m deep.
260 2404	borehole	Hole, usually vertical, bored to determine ground conditions, for extraction of water or measurement of <i>groundwater</i> level.
260 2405	culvert	Covered <i>channel</i> or large pipe that forms a <i>watercourse</i> below ground level, usually under a road or railway.
260 2406	box culvert	<i>Culvert</i> of rectangular cross section.
260 2407	safe yield	Maximum rate at which water may be extracted from an <i>aquifer</i> over a period without depleting the supply or causing a deterioration in quality.
260 2408	rain gauge	Instrument that collects and measures <i>precipitation</i> falling on it.
260 2409	flood routing	Determining at successive points along a <i>river</i> the timing and form of the <i>hydrograph</i> of a flood.
260 2410	infiltration	Passage of water through the soil surface into the soil or from the ground into a conduit.
260 2411	transmissivity	Rate of flow of <i>groundwater</i> through a vertical strip of unit width of an <i>aquifer</i> , the strip extending the full saturated depth under unit hydraulic gradient at a fixed temperature.
260 2412	leaching	Removal of soluble constituents from soil or other material by percolating liquid.

No.	Term	Definition
260 2413	return period	Average interval of time between a number of events that equal or exceed a particular magnitude, calculated from the probability of recurrence of such events.
260 3 Watercourses		
260 31 General		
260 3101	river	Water flow along a large <i>watercourse</i> .
260 3102	stream beck, bourne, brook, burn, gill, rhine, rife, rill, runnel, spur <i>regional</i>	Water flow along a small <i>watercourse</i> .
260 3103	estuary firth, frith, kyle <i>regional</i>	Mouth of a <i>river</i> connected to the <i>sea</i> where the <i>tide</i> meets the <i>river</i> current.
260 3104	creek	Small inlet on coast or <i>estuary</i> .
260 3105	feeder	<i>Stream</i> or conduit that supplies water to a <i>canal</i> , reservoir or <i>pond</i> .
260 3106	pen	Stretch of water between successive weirs or <i>locks</i> in a <i>river</i> .
260 3107	leat	Artificial <i>channel</i> that takes water from a natural <i>watercourse</i> and conveys it at a shallower gradient than the <i>watercourse</i> for supply or power purposes.
260 3108	cut	Excavated <i>channel</i> that forms part of a <i>river</i> or <i>navigation (2)</i> system.
260 3109	tidal length of river tidal river <i>deprecated</i>	Part of a <i>river</i> within the influence of <i>tides</i> .
260 32 Topography and regime		
260 3201	headwater (1)	Source or upper <i>reach</i> of a <i>stream</i> or <i>river</i> .
260 3202	regime (1)	Dynamic equilibrium between <i>accretion</i> and <i>erosion</i> in an open <i>channel</i> system or a coastal environment where the balance existing between the two may vary over a time span from days to tens or even hundreds of years.
260 3203	regime (2)	State in which a <i>river</i> or <i>canal</i> has adjusted its slope and cross section to an equilibrium condition.
260 3204	reach	Stretch of water between two features alongside or across a <i>river</i> or <i>stream</i> .
260 3205	left bank	Left side of a <i>watercourse</i> looking downstream.
260 3206	right bank	Right side of a <i>watercourse</i> looking downstream.
260 3207	low flow channel dry weather channel <i>deprecated</i>	That part of a multistage <i>channel</i> that is designed to carry <i>base flow</i> .
260 3208	two stage channel	<i>Channel</i> in which normal flow is contained in the lower part of a wider main <i>channel</i> .
260 3209	flood channel (1)	<i>Channel</i> that carries excess water during flood conditions.
260 3210	flood channel (2)	<i>Channel</i> made in an <i>estuary</i> by the rising <i>tide</i> .
260 3211	ebb channel	<i>Channel</i> made in an <i>estuary</i> by the falling <i>tide</i> .
260 3212	navigation channel	<i>Channel</i> for <i>navigation (2)</i> .

No.	Term	Definition
260 3213	flood plain	Area of land that borders a <i>river</i> and is partly or wholly covered with water during floods.
260 3214	washland	Low land adjacent to a <i>river</i> or <i>drain</i> used for storage of flood water.
260 3215	salting outmarsh, saltmarsh <i>deprecated</i>	Area of land periodically covered by saline water and that usually supports vegetation.
260 3216	meander	Deviation of a <i>river</i> from a straight course caused by <i>erosion</i> of outside bends by impinging currents and <i>accretion</i> on inside bends.
260 3217	bar	Silt, sand or <i>shingle</i> deposit at a <i>river</i> mouth, usually across the <i>channel</i> .
260 33 Legal		
260 3301	navigation (1)	Part of a <i>river</i> , usually canalized, over which there is a legal right to navigate.
260 3302	slack-water navigation still-water navigation <i>deprecated</i>	<i>Navigation (1)</i> with no current or a very slight current, made possible in a <i>river</i> by maintaining the water level with weirs.
260 3303	riparian owner	Owner of part of the <i>bed</i> or <i>bank</i> of a <i>river</i> .
260 3304	riparian right	Legal right of a <i>riparian owner</i> concerning the <i>river</i> .
260 3305	main river	Length of <i>river</i> so designated by statute.
260 3306	enmaining	Process of adopting a new length of <i>river</i> as <i>main river</i> .
260 34 Miscellaneous		
260 3401	flow duration curve	Graph that shows the frequency with which the <i>discharge</i> in a <i>watercourse</i> is equalled or exceeded during a given period.
260 3402	rating curve	Graph that shows the relationship between depth and <i>discharge</i> in a <i>channel</i> or over a weir.
260 3403	training works	Structure designed to influence the location, flow, scouring or <i>silting</i> capacity of a <i>river</i> .
260 3404	cutwater	Streamlined end of a bridge pier shaped to deflect water flowing past the bridge pier with minimum turbulence.
260 3405	retention board	Board used as a weir in a small <i>watercourse</i> .
260 3406	tidal sluice	Structure to prevent tidal flow from occurring in an upstream direction whilst allowing flow to occur in the downstream direction at <i>low water</i> .
260 3407	tidal door	Hinged gate in a <i>tidal sluice</i> operated by the flow of water.
260 3408	pointing door	One of a pair of <i>mitre gates</i> in a <i>tidal sluice</i> operated by the flow of water.
260 3409	penning	Action of forming a <i>pen</i> .
260 3410	brushing	Cutting and removal of weed and bush growth in a <i>watercourse</i> .
260 3411	barge bed	Place where barges can moor and rest on a soft <i>bed</i> at <i>low water</i> levels near the <i>bank</i> of a <i>river</i> .
260 3412	camp shedding	Protection on the <i>bed</i> of tidal water to enable a vessel to rest safely at <i>low water</i> levels.
260 3413	headwater (2)	Water upstream of a structure.