

Glossary of

Building and civil engineering terms —

Part 6: Concrete and plaster —

Section 6.6 Products, applications and
operations —

Subsection 6.6.1 Concrete and mortar

Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the Technical Sector Board for Building and Civil Engineering (B/-) to Technical Committee B/500, Basic data, upon which the following bodies were represented:

- Building Employers' Confederation
- Consumer Policy Committee of BSI
- Convention of Scottish Local Authorities
- Department of Education and Science
- Department of the Environment
- Incorporated Association of Architects and Surveyors
- Meteorological Office
- National Building Specification Ltd.
- National Council of Building Material Producers
- National House-building Council
- Royal Institute of British Architects
- Society of Chief Architects of Local Authorities

The following bodies were also represented in the drafting of the standard, through subcommittee B/500/4, Terminology:

- Association of Builders Hardware Manufacturers
- Brick Development Association
- British Cement Association
- British Waterways Board
- Chartered Institution of Building Services Engineers
- Clay Pipe Development Association Limited
- Department of the Environment (Property Services Agency)
- Department of Transport
- Federation of Civil Engineering Contractors
- Federation of Plastering and Drywall Contractors
- Glass and Glazing Federation
- Guild of Architectural Ironmongers
- Gypsum Products Development Association
- Institution of Civil Engineers
- Royal Institution of Chartered Surveyors
- Timber Trade Federation

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Foreword

This Subsection of Part 6 of BS 6100, which has been prepared under the direction of Technical Committee B/500, Basic data, should be read in conjunction with BS 6100-6.1. It supersedes BS 6100-6.6.1:1991, which is withdrawn.

This edition introduces technical changes but it does not reflect a full review or revision of the standard which will be undertaken in due course.

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:

- 6.1 *Binders*
- 6.2 *Concrete*
- 6.3 *Aggregates*
- 6.4 *Admixtures*
- 6.5 *Formwork*

The other Subsection of this Section is as follows:

- 6.6.2 *Plaster*

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, e.g. “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. “accelerated set”, are written in a direct style, not as “set, accelerated”. 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.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 20, an inside back cover 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
661 1 Base terms		
661 1001	concrete batch	Quantity of concrete mixed in one cycle of operations of a <i>batch mixer</i> , or the quantity of concrete conveyed ready-mixed in a vehicle or the quantity discharged during a stated period from a <i>continuous mixer</i> .
661 1002	reinforcing bar	Steel bar, usually of circular cross section, that forms an element of reinforcement.
661 1003	concrete cover	Distance between concrete surface and surface of reinforcement or duct of <i>prestressing tendon</i> .
661 1004	concrete bond	Transfer of force between concrete and reinforcement at their interface.
661 2 Materials, products and elements		
661 21 Materials		
661 2101	designed mix	<i>Concrete mix</i> for which the purchaser is responsible for specifying the required performance and the producer is responsible for selecting the mix proportions to produce it.
661 2102	prescribed mix	<i>Concrete mix</i> for which the purchaser is responsible for specifying the proportions of the constituents and for ensuring that the proportions prescribed will produce a concrete with the performance required.
661 2103	dry mix	<i>Concrete mix</i> that has a very low <i>water content</i> of concrete.
661 2104	mortar	Mixture of binder, fine aggregate and water, that hardens.
661 2105	cement paste	Mixture of hydraulic binder and water.
661 2106	neat cement grout	Grout that consists of <i>cement paste</i> .
661 2107	colloidal grout	Neat cement grout mixed with special equipment in such a way as to reduce subsequent separation of the binder.
661 2108	asbestos cement	<i>Cement paste</i> reinforced with asbestos fibres.
661 2109	fibre reinforced cement	Binder paste reinforced by dispersed or organized fibres, that hardens.
661 2110	plum	Large piece of stone embedded in concrete during placing.
661 2111	separating layer	Layer of material to prevent adhesion between a hardened and a freshly placed material such as a subfloor and screed.
661 2112	bonding layer	Layer of <i>mortar</i> or other material spread on hardened concrete to improve the bond with fresh concrete placed upon it.
661 2113	butter coat	Soft final <i>render</i> coat to which <i>dry dash</i> is applied.
661 2114	splatterdash	Mix of hydraulic binder, coarse sand and water thrown on, as an initial coating, usually to provide a <i>key</i> for a <i>render</i> .

No.	Term	Definition
661 2115	concrete casing	Concrete protective covering to structural steel.
661 2116	curing compound	Material applied to the surface of green concrete to diminish evaporation.
661 2117	Leighton Buzzard sand	Sand that complies with a specified grading and is used for testing, obtained from the Woburn sands of the Lower Greensand in the Leighton Buzzard area.
661 2118	bedding mortar	<i>Mortar</i> for bedding masonry units and bearings.
661 2119	concrete mix	Physical or theoretical combination of materials required to make concrete.
661 22 Products		
661 2201	cast stone reconstructed stone <i>deprecated</i>	Precast concrete in which the finished surface resembles that of natural stone.
661 2202	edge panel	<i>Panel</i> that has at least one <i>free edge of concrete</i> .
661 2203	standard concrete cube	Moulded cubical specimen of concrete of the size specified in the relevant standard. NOTE A relevant standard is BS 1881-108.
661 2204	standard concrete cylinder	Moulded cylindrical specimen of concrete of the size specified in the relevant standard.
661 23 Elements		
661 2301	cellular raft	Raft foundation in which intersecting beams or walls form compartments.
661 2302	monolithic screed	Screed laid immediately following, or within a short time of, laying the floor base, and bonding to it.
661 2303	column strip	Portion of a flat slab panel, of total width usually half of the panel width, that extends over and between the column heads.
661 2304	effective width of slab	Width of concrete slab assumed for design purposes.
661 2305	drop	Thickening of a concrete slab in the region of a column.
661 2306	middle strip	Portion of flat slab, of width usually half the panel width, located symmetrically about the centreline of the panel and extending throughout the entire length of the panel in the direction for which bending moments are being considered.
661 2307	L-beam	Concrete beam with a cross section in the form of an L or inverted L.
661 2308	haunching	Tapering increase in depth of concrete beam or slab near the support, to increase its strength.
661 2309	key	Roughness that assists in the bonding of two surfaces by providing a degree of physical interlock.
661 2310	dummy joint (1)	Purpose-made partial joint for <i>crack control</i> .
661 2311	dummy joint (2)	Surface feature for visual purposes to give the appearance of a joint.
661 2312	hearting concrete	Concrete that forms the central core of a large structure, such as a dam, and that is of lower quality than that on the faces.

No.	Term	Definition
661 2313	facing concrete	Concrete of higher quality than <i>hearting concrete</i> placed outside it and poured so as to be monolithic with it.
661 2314	integral facing face mix <i>deprecated</i>	Concrete or <i>mortar</i> facing of a different quality from the main body of concrete, cast so as to be monolithic with it.
661 2315	backing concrete	Concrete that gives support to an <i>integral facing</i> .
661 2316	concrete bay	Area of concrete bounded by joints or <i>free edges of concrete</i> .
661 2317	free edge of concrete	Edge of an area of concrete that is not in contact with the edge of another slab.
661 2318	rendering background	Structure to which the first coat of <i>render</i> is applied.
661 2319	water stop	Jointing section, usually in the form of a profiled strip of elastomeric material, that is cast into concrete on both sides of a joint to prevent water passing through the joint.

661 3 Properties, behaviour and conditions

661 31 Properties

661 3101	cube strength	Compressive strength of a <i>standard concrete cube</i> , obtained in accordance with the relevant standard. NOTE A relevant standard is BS 1881-116.
661 3102	estimated in situ cube strength	Compressive strength of concrete at a location in a structural member estimated by indirect means and expressed in terms of <i>cube strength</i> .
661 3103	cylinder strength	Compressive strength of a <i>standard concrete cylinder</i> .
661 3104	core strength	Compressive strength of a concrete core sample, obtained in accordance with the relevant standard. NOTE A relevant standard is BS 1881-120.
661 3105	tensile splitting strength indirect tensile strength <i>deprecated</i>	Tensile strength determined indirectly by splitting a cylindrical, cubical or prismatic specimen.
661 3106	bond strength	<i>Bond stress</i> at the instant before failure of <i>concrete bond</i> .
661 3107	bond stress	Shear stress created by bond, at the interface between reinforcement and concrete, grout or <i>mortar</i> .
661 3108	initial stress	Stress imposed in the concrete or steel of a prestressed member when it is first fully stressed, and before creep or plastic yield occurs.
661 3109	local bond stress	<i>Bond stress</i> at a particular point on reinforcement.
661 3110	average bond stress	Maximum force in a length of embedded <i>reinforcing bar</i> divided by the product of the perimeter and the length of the bar under consideration.
661 3111	water/cement ratio	Ratio of mass of water to binder in concrete, <i>mortar</i> or grout.
661 3112	cement/water ratio	Reciprocal of <i>water/cement ratio</i> .
661 3113	total water/cement ratio	<i>Water/cement ratio</i> in which the mass of water is the total mass of water in the concrete or mortar including the water absorbed by the aggregate.

No.	Term	Definition
661 3114	free water/cement ratio	<i>Water/cement ratio</i> in which the mass of water is the total mass of water in the concrete or mortar less the water absorbed by the aggregate.
661 3115	aggregate/cement ratio	Ratio of mass of aggregate to mass of hydraulic binder in concrete or mortar.
661 3116	air void air pocket <i>deprecated</i>	Void in hardened concrete formed by <i>entrained air</i> or <i>entrapped air</i> .
661 3117	voids ratio	Ratio of the volume of voids in a material to the combined volume of the material and voids.
661 3118	grade of concrete	Number that is the specified <i>characteristic cube strength</i> in newtons per square millimetre.
661 3119	nominal concrete mix proportions	Proportions of dry materials in a <i>concrete mix</i> expressed in volumetric terms.
661 3120	water content of concrete	Mass of water in unit volume of concrete.
661 3121	air content of concrete	Ratio of total volume of air to unit volume of concrete, usually expressed as a percentage.
661 3122	entrained air	Air incorporated into concrete by the use of air entraining admixture.
661 3123	entrapped air	Unwanted air that remains in concrete after <i>compacting</i> .
661 3124	cement content	Mass of hydraulic binder contained in unit volume of concrete.
661 3125	yield of concrete	Volume of compacted fresh concrete produced by given mix masses or volumes of individual constituents.
661 3126	nailable concrete	Concrete into which nails may be driven using a hand tool.
661 3127	set	Measure of the stiffening of a hydraulic binder/water mix on hydration.
661 3128	water void	Space in hardened concrete occupied or formed by surplus water.
661 3129	harsh concrete mix	Fresh concrete that is difficult to place and work.
661 3130	compacting factor	Measure of the workability of concrete expressed as the ratio of the mass of fresh concrete that fills a container of standard size and shape when allowed to fall into it under standard conditions of test to the mass of fully compacted concrete that fills the same container.
661 3131	concrete slump	Vertical distance through which the top of a moulded sample of fresh concrete sinks on removal of the mould, under standard conditions of test.
661 3132	accelerated set	Increase in rate of stiffening of a mix.
661 3133	retarded set	Decrease in rate of stiffening of a mix.
661 3134	flash set	Stiffening of a mix that occurs very quickly after mixing with water.
661 3135	false set	Premature stiffening of a binder in a concrete immediately after mixing that can be corrected.