

**BRITISH STANDARD**

# **Building and civil engineering – Vocabulary**

## **Part 5: Civil engineering – Water engineering, environmental engineering and pipelines**

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# Foreword

## Publishing information

This part of BS 6100 is published by BSI and came into effect on 1 January 2009. It was prepared by Technical Committee B/500, *Basic data*. A list of organizations represented on this committee can be obtained on request to its secretary.

## Supersession

This part of BS 6100 supersedes BS 6100-2.5:1991, BS 6100-2.6:1991 and BS 6100-2.7:1992, which are withdrawn.

## Relationship with other publications

BS 6100 consists of the following parts.

- *Part 0: Introduction and index.*
- *Part 1: General.*
- *Part 2: Spaces, building types, environment and physical planning.*
- *Part 3: Civil engineering – General.*
- *Part 4: Civil engineering – Transport.*
- *Part 5: Civil engineering – Water engineering, environmental engineering and pipelines.*
- *Part 6: Construction parts.*
- *Part 7: Services.*
- *Part 8: Work with timber and wood-based panels.*
- *Part 9: Work with concrete and plaster.*
- *Part 10: Contract terms.*
- *Part 11: Performance characteristics, measurement and joints.*
- *Part 12: Plant, equipment and persons.*

## Information about this document

BS 6100 has been completely restructured and compiled on different principles than previously. Consequently, this part of BS 6100 represents a full revision of the standard.

A general introduction to and explanation of the BS 6100 vocabulary is given in BS 6100-0, which provides an alphabetical index of all the terms in all parts of BS 6100. It is intended that individual parts of BS 6100 are used in conjunction with BS 6100-0 because they do not contain indexes themselves.

BS 6100-1 reproduces verbatim ISO 6707-1 and provides a vocabulary of general terms for the building and civil engineering industry. It is essential that individual parts of BS 6100 are read in conjunction with BS 6100-1.

BS 6100 does not repeat (or provide alternatives for) terms defined in other standards or in other parts of BS 6100. However, it does refer to where definitions can be found and includes a bibliography of all referenced standards.

### **Presentational conventions**

Details of the structure, layout and presentational conventions used in this part of BS 6100 are given in Clause 2.

### **Contractual and legal considerations**

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

**Compliance with a British Standard cannot confer immunity from legal obligations.**

# 1 Scope

This part of BS 6100 defines terms for civil engineering that relate to:

- a) water engineering;
- b) inland waters, coastal and maritime engineering;
- c) public health and environmental engineering;
- d) pipelines and ducts.

# 2 Vocabulary structure

This part of BS 6100 does not contain its own index. Instead, a comprehensive index of terms is given in BS 6100-0. As a result, it is intended that this part of BS 6100 is used in conjunction with BS 6100-0.

The layout of this vocabulary is designed in accordance with ISO 10241 with terms arranged in a classified order and numbered in accordance with ISO 2145.

Each term has an individual number consisting of seven digits in two parts, the first of two digits, the second of five. Each number tells the following information about the term.

- a) The first two digits represent which part of BS 6100 the term belongs to.
- b) The third digit represents which group of terms it belongs to within the part.
- c) The fourth digit represents which subgroup of terms it belongs to within the group, as follows
  - 1) Works
  - 2) Parts
  - 3) Materials
  - 4) Activities
  - 5) Processes
  - 6) Plant, equipment and documentation
  - 7) Properties
  - 8) Spaces
  - 9) Miscellaneous.
- d) The fifth to seventh digits determine the location of the term within the subgroup.

Bold words within a definition indicate terms that are defined elsewhere in this part of BS 6100, other parts of BS 6100 or other standards. Reference to where the term is defined is given in parenthesis after the bold word.

*NOTE 1* References to terms defined in BS 6100-1 are shown giving only the part number, e.g. (01); references to terms defined in all other parts of BS 6100 are shown using their full reference number, e.g. (07 59005).

*NOTE 2* Where more than one definition source could be referred to, the reference containing the definition of most general applicability is given.

Alternative terms are given in medium type below preferred terms which are given in bold type. All alternative terms have the status of being deprecated. Abbreviations are given in bold type below the terms to which they relate.

In the vocabulary, terms of more than one word are written in their natural word order, e.g. pedestal elbow, and the word order is not inverted, e.g. elbow, pedestal. However, inverted forms of a term are included in the index in BS 6100-0.

Terms are only given in the singular form, even when the plural form is more common (unless the term is only found in the plural form).

### 3 Water engineering (05 1xxxx)

#### 3.1 Works (05 11xxx)

- 05 11001 impounding reservoir**  
**reservoir** (01) that collects **surface water** (01) from an open area of **land** (01)  
*NOTE Usually in the upper reaches (BS EN ISO 772) of a watercourse (01).*
- 05 11002 pumped storage reservoir**  
 high level (01) **reservoir** (01) in a **pumped storage** (05 11034) system
- 05 11003 millpond**  
**impounding reservoir** (05 11001) that serves a watermill
- 05 11004 embankment dam**  
**dam** (01) formed as an **embankment** (01)
- 05 11005 earth dam**  
 earth fill dam  
**embankment dam** (05 11004) constructed with **soil** (01)
- 05 11006 gravity dam**  
**dam** (01) that relies on its **weight** (11 27002) for stability
- 05 11007 arch dam**  
**dam** (01) arched horizontally to resist the thrust of the water, the **force** (01) being transmitted to **abutments** (01)
- 05 11008 gravity arch dam**  
**dam** (01) arched horizontally to resist the thrust of the water, but also relying on its own **weight** (11 27002) for stability
- 05 11009 buttress dam**  
**dam** (01) that consists of a watertight **wall** (01), supported by **buttresses** (01) at intervals on the downstream side
- 05 11010 rock fill dam**  
**embankment dam** (05 11004) constructed mainly of **rock** (03 23027)
- 05 11011 hydraulic fill dam**  
**embankment dam** (05 11004) constructed of **hydraulic fill** (05 12032)



- 05 11012 mine tailings dam**  
**dam** (01) constructed with **waste** (01) from mining operations
- 05 11013 constant radius arch dam**  
**arch dam** (05 11007) that, in every horizontal cross-section, has approximately the same radius of curvature
- 05 11014 constant angle arch dam**  
**arch dam** (05 11007) in which the angle subtended by any horizontal cross-section is constant throughout the **height** (01)
- 05 11015 double curvature arch dam**  
**arch dam** (05 11007) that is curved both horizontally and vertically
- 05 11016 arch buttress dam**  
multiple arch dam  
**buttress dam** (05 11009) in which the upstream part consists of a series of **arches** (01)
- 05 11017 flat slab buttress dam**  
**buttress dam** (05 11009) in which the upstream part is a relatively thin inclined **flat slab** (01)  
*NOTE The flat slab (01) is usually of reinforced concrete (09 33032).*
- 05 11018 solid head buttress dam**  
**buttress dam** (05 11009) in which the upstream ends of all the **buttresses** (01) are enlarged symmetrically to meet those adjacent, thereby forming a continuous **structure** (01)
- 05 11019 prestressed dam**  
**dam** (01) the stability of which depends in part on the **tension** (03 15002) in vertical steel wires, **cables** (01) or **rods** (01) that pass through the **dam** (01) and are anchored into the **foundation** (01) **rock** (03 23027)
- 05 11020 fabridam**  
**dam** (01) made of flexible membrane anchored to a **river** (BS EN ISO 772) **bed** (05 22001) that can be inflated with water or air, or both, and is completely collapsible
- 05 11021 gabion dam**  
**gravity dam** (05 11006) constructed with **gabions** (05 21079)
- 05 11022 crib dam**  
**gravity dam** (05 11006) constructed with crossed pieces of **timber** (01) and **fill** (01)
- 05 11023 bellmouth spillway**  
morning glory spillway  
**spillway** (01) that consists of a vertical **shaft** (01) with a **bellmouth** (05 32059) inlet
- 05 11024 ski jump spillway**  
**spillway** (01) with a **chute** (05 12154), at the bottom of which is a **flip bucket** (05 12061) that throws water up into the air to dissipate **energy** (01) at a safe distance from the bottom of the **spillway** (01)
- 05 11025 siphon spillway**  
**spillway** (01) that operates on the **siphon** (05 19008) principle