

BS 8500-2:2015+A2:2019



BSI Standards Publication

Concrete – Complementary British Standard to BS EN 206

Part 2: Specification for constituent materials and concrete

bsi.

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Foreword

Publishing information

This part of BS 8500 is published by BSI Standards Limited, under licence by the British Standards Institution, and came into effect on 31 May 2016. It was prepared by Working Group B/517/1/WG20, *Specification drafting*, under the authority of Subcommittee B/517/1, *Concrete production and testing*, and Technical Committee B/517, *Concrete and related products*. A list of organizations represented on these committees can be obtained on request to their secretary.

Supersession

BS 8500-2:2015+A1:2016 superseded BS 8500-2:2015, which was withdrawn on 16 July 2016.

BS 8500-2:2015+A2:2019 supersedes BS 8500-2:2015+A1:2016, which is withdrawn.

Relationship with other publications

BS 8500 contains additional United Kingdom provisions to be used in conjunction with BS EN 206. Together they form a complete package for the specification, production and conformity of fresh concrete.

BS 8500 is published in two parts:

- Part 1, *Method of specifying and guidance for the specifier*; and
- Part 2, *Specification for constituent materials and concrete*.

Information about this document

Text introduced or altered by Amendments No. 1 and No. 2, respectively is indicated in the text by tags **A1** and **A2**. Minor editorial changes are not tagged.

BS 8500-2:2015 was a full revision of the standard, and introduced the following principal changes:

- changes necessary to align with the publication of BS EN 206:2013;
- changes resulting from new or revised European Standards published since 2006;
- alignment with conformity assessment and accreditation policy in the United Kingdom;
- introduction of designated cement-bound concrete;
- modification of requirements for concrete to resist freezing and thawing;
- corrections and minor clarifications;
- a new Annex ([Annex D](#)) has been added which sets out where to find the BS 8500 provisions that cover BS EN 206 requirements that defer to provisions in the place of use; and
- all references have been updated.

A2 The changes are predominantly concerned with the increased range of cementitious materials covered. These include: natural pozzolana, natural calcined pozzolana or high reactivity natural calcined pozzolana as an addition, Portland-pozzolana and pozzolanic cements, as well as a range of ternary cements which include up to 20% limestone fines. The recommendations for the use of natural, natural calcined and high reactivity natural calcined pozzolana, as part of cement or combination, are based on the assumption that their performance in concrete is similar to fly ash. The recommendations for ternary cements, which include up to 20% limestone fines, are for applications where their use is considered safe and durable. The option to use the equivalent concrete performance concept (ECPC) to demonstrate equivalence for the use of additions is clarified.

Additional guidance is provided on the preparation and transport of cube specimens for strength testing. Minor editorial changes are not tagged, such as the change of nomenclature from N/mm² to MPa for stress. ^{A2}

Hazard warnings

WARNING. Where skin is in contact with fresh concrete, skin irritations are likely to occur owing to the alkaline nature of cement. The abrasive effects of sand and aggregate in the concrete can aggravate the condition. Potential effects range from dry skin, irritant contact dermatitis, to – in cases of prolonged exposure – severe burns. Take precautions to avoid dry cement entering the eyes, mouth and nose when mixing mortar or concrete by wearing suitable protective clothing. Take care to prevent fresh concrete from entering boots and use working methods that do not require personnel to kneel in fresh concrete. Unlike heat burns, cement burns might not be felt until some time after contact with fresh concrete, so there might be no warning of damage occurring. If cement or concrete enters the eye, immediately wash it out thoroughly with clean water and seek medical treatment without delay. Wash wet concrete off the skin immediately. Barrier creams may be used to supplement protective clothing but are not an alternative means of protection.

Use of this document

It has been assumed in the preparation of this British Standard that the execution of its provisions will be entrusted to appropriately qualified and experienced people, for whose use it has been produced.

The requirement for third-party certification has been approved by the Standards Policy and Strategy Committee.

Presentational conventions

The provisions of this standard are presented in roman (i.e. upright) type. Its requirements are expressed in sentences in which the principal auxiliary verb is “shall”.

Commentary, explanation and general informative material is presented in smaller italic type, and does not constitute a normative element.

Where words have alternative spellings, the preferred spelling of the Shorter Oxford English Dictionary is used (e.g. “organization” rather than “organisation”).

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.