BS 8500-2:2015+A1:2016

BSI Standards Publication

Concrete – Complementary British Standard to BS EN 206

Part 2: Specification for constituent materials and concrete

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Publishing and copyright information

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Date	Text affected
May 2016	A.1 See Foreword

Contents

Summary of pages

This document comprises a front cover, an inside front cover, pages i to iv, pages 1 to 42, an inside back cover and a back cover.

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BS 8500-2:2015+A1:2016 supersedes BS 8500-2:2015, which will be withdrawn on 16 July 2016.

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 Amendment No. 1 is indicated in the text by tags [A1] 〈A1〉. 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.

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.

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.

Introduction

The requirements in this part of BS 8500 are given for defined materials with an established or accepted adequate performance in the conditions found in the United Kingdom. These requirements might not be appropriate for use in exposure conditions different from the United Kingdom, particularly in hot climates. The use of constituents not listed in this standard should be by agreement between the producer and specifier on a case-by-case basis.

BS 8500 and BS EN 206 take account of the distinct and different technical responsibilities of the specifier, producer and user. Where a body is responsible for more than one of these roles, internal procedures within that body should allocate responsibilities for the various actions.

1 Scope

This part of BS 8500 specifies constituent materials and concrete. This part of BS 8500 complements BS EN 206. It provides United Kingdom national provisions where required or permitted by BS EN 206. It also covers materials, methods of testing and procedures that are outside the scope of BS EN 206, but within national experience.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

Standards publications

BS 812-104, *Testing aggregates – Part 104: Method for qualitative and quantitative petrographic examination of aggregates*

BS 812-123, *Testing aggregates – Part 123: Method for determination of alkali-silica reactivity – Concrete prism method*

BS 1704, *Specification for solid-stem general purpose thermometers*

BS 1881-124, *Testing concrete – Part 124: Method for analysis of hardened concrete*

BS 1881-129, *Testing concrete – Part 129: Method for determination of density of partially compacted semi-dry fresh concrete*

BS 6068-2.37, *Water quality – Part 2: Physical, chemical and biochemical methods – Section 2.37: Method for the determination of chloride via a silver nitrate titration with chromate indicator (Mohr's method)*

BS 6068-2.42, *Water quality – Part 2: Physical, chemical and biochemical methods – Section 2.42: Determination of sodium and potassium: determination of sodium by atomic absorption spectrometry*

BS 6068-2.43, *Water quality – Part 2: Physical, chemical and biochemical methods – Section 2.43: Determination of sodium and potassium: determination of potassium by atomic absorption spectrometry*

BS 6068-2.44, *Water quality – Part 2: Physical, chemical and biochemical methods – Section 2.44: Determination of sodium and potassium: determination of sodium and potassium by flame emission spectrometry*

BS 7943, *Guide to the interpretation of petrographical examinations for alkali-silica reactivity*

BS 7979, *Specification for limestone fines for use with Portland cement*