

Specification for

Lightweight aggregates for masonry units and structural concrete

Committees responsible for this British Standard

The preparation of this British Standard was entrusted by the Cement Gypsum Aggregates and Quarry Products Standards Policy Committee (CAB/-) to Technical Committee CAB/2, upon which the following bodies were represented:

- Aggregate Concrete Block Association
- Association of Consulting Engineers
- Association of Consulting Scientists
- Association of Lightweight Aggregate Manufacturers
- Brick Development Association
- British Aggregate Construction Materials Industries
- British Cement Association
- British Ceramic Research Ltd
- British Civil Engineering Test Equipment Manufacturers' Association
- British Geological Sciences
- British Precast Concrete Federation Ltd.
- British Ready Mixed Concrete Association
- British Steel Industry
- Building Employers Confederation
- Calcium Silicate Brick Association Limited
- Chartered Institute of Building
- Concrete Society
- County Surveyors' Society
- Department of the Environment (Building Research Establishment)
- Department of the Environment (Property Services Agency)
- Department of Transport
- Department of Transport (Transport and Road Research Laboratory)
- Electricity Supply Industry in England and Wales
- Federation of Civil Engineering Contractors
- Institute of Concrete Technology
- Institution of Civil Engineers
- Institution of Highways and Transportation
- Institution of Structural Engineers
- Institution of Water and Environmental Management
- Mortar Producers Association Limited
- Sand and Gravel Association Limited
- Society of Chemical Industry

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Foreword

This British Standard has been prepared under the direction of the Cement, Gypsum, Aggregates and Quarry Products Standards Policy Committee and is a revision of BS 3797-2:1976 which is withdrawn. In this revision the opportunity has been taken to include foamed or expanded blastfurnace slag previously covered by BS 877, and clinker and furnace bottom ash aggregates previously covered by BS 1165, which are now withdrawn. The methods of sampling and testing of lightweight aggregates previously described in BS 3681 have either been incorporated into appendices of this standard or covered by reference to an appropriate Part of BS 812 and therefore BS 3681 is also withdrawn.

In order to classify materials as lightweight aggregate suitable for concrete mixes or masonry, maximum and minimum bulk density limits have been specified. Requirements for grading, sulphate content and loss-on-ignition have also been given where applicable.

Some clinkers derived from lump coal burnt in older types of furnaces should be used with discretion as they may contain nodules of free lime which, should they become damp, could cause local expansion. If the presence of unhydrated lime is suspected a water slake test may be appropriate.

The use of clinker and furnace bottom ash with a high loss-on-ignition is not recommended in reinforced concrete or concrete required to have a high durability.

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 and ii, pages 1 to 6, 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.