

Methods of testing cement —

Part 3: Physical tests —

Section 3.1 Introduction

IMPORTANT NOTE. It is recommended that this Section be read in conjunction with the information in the “General introduction” to BS 4550, which is issued separately.

UDC 666.94.01:620.1:53

Foreword

This British Standard has been prepared under the direction of the Cement, Gypsum, Aggregates and Quarry Products Standards Committee. It brings together and revises the physical test methods described in appendices to the following British Standards:

BS 12-2:1971, *Portland cement (ordinary and rapid-hardening)*.

BS 146-2:1973, *Portland-blastfurnace cement*.

BS 915-2:1972, *High alumina cement*.

BS 1370-2:1974, *Low heat Portland cement*.

BS 4027-2:1972, *Sulphate-resisting Portland cement*.

BS 4246-2:1974, *Low heat Portland-blastfurnace cement*.

BS 4248:1974, *Supersulphated cement*.

BS 5224:1976, *Specification for masonry cement*.

Part 0 of BS 4550 is a general introduction; Part 1 lays down methods of sampling cement; Part 2 describes methods of chemical testing of cement; Part 4 specifies the standard coarse aggregate for concrete cubes; Part 5 specifies the standard sand for concrete cubes and Part 6 specifies the standard sand for mortar cubes. Publication of BS 4550 enables the standards listed in the previous paragraph to be revised by deletion of the relevant appendices. This will avoid repetition in the expanding range of cement standards and ensure that, if changes are made in any of the test methods, the standards remain in step.

It is anticipated that the mortar cube test will be deleted on the first revision of this Part of this standard.

The ISO mortar prism test has not been included as a standard method of test, since the method is at an advanced stage of revision under the direction of CEN and publication is expected in the near future.

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 and 2, 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.

Amendments issued since publication

Amd. No.	Date of issue	Comments

This British Standard, having been prepared under the direction of the Cement, Gypsum, Aggregates and Quarry Products Standards Committee, was published under the authority of the Executive Board on 30 June 1978

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The following BSI references relate to the work on this standard:
Committee reference CAB/1
Draft for comment 73/10751 DC

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1 Scope

This Part of this British Standard specifies methods for the physical testing of cement. The methods of test are issued separately as follows:

- 3.2 Density test
- 3.3 Fineness test
- 3.4 Strength tests
- 3.5 Determination of standard consistence
- 3.6 Test for setting times
- 3.7 Soundness test
- 3.8 Test for heat of hydration

2 References

The titles of the publications referred to in this Section are given on the inside back cover.

3 Definitions

For the purposes of this Part of this British Standard, the definitions given in BS 4627 apply.

4 Sampling

Test samples for use in the following tests shall be obtained in accordance with BS 4550-1. The test sample shall be mixed thoroughly and a sample of the specified size for the required test shall be taken from it.

Publications referred to

BS 4550, *Methods of testing cement.*

BS 4550-1, *Sampling.*

BS 4627, *Glossary of terms relating to types of cements, their properties and components.*

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