

Testing concrete —

Part 120: Method for determination of the compressive strength of concrete cores

UDC 666.972.017:691.32:620.1

NO COPYING WITHOUT BSI PERMISSION EXCEPT AS PERMITTED BY COPYRIGHT LAW



Document Sharing Hub

Cooperating organizations

The Cement, Gypsum, Aggregates and Quarry Products Standards Committee, under whose direction this British Standard was prepared, consists of representatives from the following:

- Association of Consulting Engineers
- Association of County Councils
- Association of District Councils
- Association of Metropolitan Authorities
- Autoclaved Aerated Concrete Products Association
- British Precast Concrete Federation Ltd.*
- British Quarrying and Slag Federation*
- British Railways Board
- British Ready Mixed Concrete Association
- British Steel Industry*
- Cement Admixtures Association
- Cement and Concrete Association*
- Cement Makers' Federation*
- Chemical Industries Association
- Concrete Society Limited*
- County Surveyors' Society*
- Department of the Environment (Building Research Establishment)*
- Department of the Environment (PSA)*
- Department of the Environment (Transport and Road Research Laboratory)*
- Department of Transport*
- Federation of Civil Engineering Contractors*
- Gypsum Products Development Association
- Institute of Quarrying
- Institution of Civil Engineers*
- Institution of Highway Engineers*
- Institution of Municipal Engineers*
- Institution of Public Health Engineers
- Institution of Structural Engineers*
- Institution of Water Engineers and Scientists*
- National Federation of Building Trades Employers*
- Natural Environment Research Council (Institute of Geological Science)
- Royal Institute of British Architects*
- Royal Institution of Chartered Surveyors*
- Sand and Ballast Hauliers and Allied Trades Alliance
- Sand and Gravel Association Limited*
- Society of Chemical Industry*
- Stone Federation

The organizations marked with an asterisk in the above list, together with the following, were directly represented on the Technical Committee entrusted with the preparation of this British Standard:

- British Civil Engineering Test Equipment Manufacturers' Association
- Electricity Supply Industry in England and Wales
- Greater London Council
- Institute of Concrete Technology
- Coopted member

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 Standards Board and comes into effect on 31 January 1983.

© BSI 12-1998

ISBN 0 580 12957 8

Amendments issued since publication

Amd. No.	Date of issue	Comments
6109	July 1989	Indicated by a sideline in the margin

Contents

	Page
Cooperating organizations	Inside front cover
Foreword	ii
1 Scope	1
2 Definitions	1
3 Apparatus	1
4 Test specimens	1
5 Preparation of cores	2
6 Procedure	5
7 Calculation and expression of results	5
8 Test report	6
Figure 1 — Actual size photographs of cores of different voidages masked to give a standard area of 125 mm × 80 mm in each case	4
Publications referred to	Inside back cover

Foreword

This Part of this standard, prepared under the direction of the Cement, Gypsum, Aggregates and Quarry Products Standards Committee, is a revision of clause 3 of BS 1881-4:1970. Together with Parts 115, 116, 117, 118 and 119, this Part of BS 1881 supersedes BS 1881-4:1970, which is withdrawn.

This Part includes methods of sampling, drilling, preparation of specimens and testing of cores from concrete. The results of the test are given as the measured core strength or the estimated in-situ cube strength which are without allowance for the effect of curing history, or age, or degree of compaction.

The relationship between core and cube strengths is complex and will vary with particular conditions.

Planning of core testing and the interpretation of results should be based on information and advice from the specialist literature, e.g. BS 8110, BS 6089 and The Concrete Society Technical Report No. 11.

The photographs in Figure 1 are reproduced by permission of The Concrete Society from Technical Report No. 11.

No estimate of repeatability or reproducibility is given in this Part of this British Standard. Reference should be made to BS 5497-1 for further information on the determination of repeatability and reproducibility.

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.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

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.