

Testing concrete —

Part 206: Recommendations for determination of strain in concrete

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- Association of Lightweight Aggregate Manufacturers
- Association of Metropolitan Authorities
- British Aggregate Construction Materials Industries
- British Civil Engineering Test Equipment Manufacturers' Association
- British Precast Concrete Federation
- British Ready Mixed Concrete Association
- Building Employers' Confederation
- Cement Admixtures Association
- Cement and Concrete Association
- Cement Makers' Federation
- Concrete Society
- County Surveyors' Society
- Department of the Environment (Building Research Establishment)
- Department of the Environment (Property Services Agency)
- Department of Transport (Highways)
- Department of Transport (Transport and Road Research Laboratory)
- Electricity Supply Industry in England and Wales
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- Greater London Council
- Institute of Concrete Technology
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- Institution of Highways and Transportation
- Institution of Structural Engineers
- Institution of Water Engineers and Scientists
- Royal Institution of Chartered Surveyors
- Sand and Gravel Association
- Society of Chemical Industry

The following bodies were also represented in the drafting of the standard, through subcommittees and panels:

- British Nuclear Fuels Limited
- United Kingdom Atomic Energy Authority

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Contents

	Page
Committees responsible	Inside front cover
Foreword	ii
1 Scope	1
2 Definitions	1
3 General guidance	1
4 Common types of strain gauge and their use	1
5 Choice of device	5
6 Report	5
Figure 1 — Types of device for measuring strain	2
Publications referred to	Inside back cover

Foreword

This Part of BS 1881 has been prepared under the direction of the Cement, Gypsum, Aggregates and Quarry Products Standards Committee. It supersedes BS 4408-2:1969, which is withdrawn. All aspects of testing concrete are being included as Parts of BS 1881, from sampling fresh concrete to assessing concrete in structures. Part 201 gives general guidance on the choice of non-destructive test methods.

This Part describes several well-tried and accepted methods of measuring strain in concrete. There are other methods of measuring strain, some of which were described in BS 4408-2. These include: semiconductor element electrical resistance; piezoresistance semiconductor; photoelastic gauges, fibre optics; micrometers, etc. While these methods may have special applications, they are not suitable for general use with concrete and so are not discussed in this standard.

There is a tendency for results obtained from a strain gauge to be accepted without question. The warning applies generally that it is often necessary to measure stress induced strains of the same order as those produced by changes in ambient temperature. Consideration should be given to the characteristics and limitations of the various devices and systems to ensure valid results.

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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.