

BS 1881-129:2011



BSI Standards Publication

Testing concrete

**Part 129: Method for determination
of density of partially compacted
semi-dry fresh concrete**

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Summary of pages

This document comprises a front cover, an inside front cover, pages i to iv, pages 1 to 8, an inside back cover and a back cover.

Foreword

Publishing information

This part of BS 1881 has been published by BSI and came into effect on 31 August 2011. It was prepared by 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

This part of BS 1881 supersedes BS1881-129:1992 which is withdrawn.

Relationship with other publications

BS 1881 contains test methods for concrete currently used in the United Kingdom which are not covered by BS EN 12350, BS EN 12390 or BS EN 12504. Reference is made to the relevant part of BS EN 12350, BS EN 12390 and BS EN 12504 where appropriate. These test methods may be used in conjunction with BS EN 206-1.

BS 1881 is published in the following parts:

- Part 113, Method for making and curing no-fines cubes;
- Part 119, Method for determination of compressive strength using portions of beams broken in flexure (equivalent cube method);
- Part 122, Method for determination of water absorption;
- Part 124, Methods for analysis of hardened concrete;
- Part 125, Method for mixing and sampling fresh concrete in the laboratory;
- Part 128, Method for analysis of fresh concrete;
- Part 129, Method for the determination of density of partially compacted semi-dry fresh concrete;
- Part 204, Recommendations on the use of electromagnetic covermeters;
- Part 206, Recommendations for determination of strain in concrete;
- Part 207, Recommendations for the assessment of concrete strength by near-to-surface tests;
- Part 208, Recommendations for the initial surface absorption of concrete;
- Part 209, Recommendations for the measurement of dynamic modulus of elasticity of concrete;
- DD 216, Method for the determination of chloride content of fresh concrete.

Information about this document

This part of BS 1881 has been revised to reflect the change from British to European standard test methods. It describes a method of test for determining the density of partially compacted semi-dry fresh concrete. The density of compacted fresh concrete can be measured by the method described in BS EN 12350-6 but that method is not applicable to concrete that cannot be compacted by vibration alone.

Semi-dry concrete has a very low workability, with a slump generally not more than 10 mm when measured in accordance with BS EN 12350-2.

The method developed for this type of concrete relies on compacting it by tamping, as used in the method for making no-fines concrete test cubes described in BS 1881-113.

The type of concrete tested by this method would typically be used in applications such as kerb backing, pipe haunching and blinding.

Tests in accordance with this Part of BS 1881 are not applicable to lean concrete for road bases and other fully compacted very low workability concretes which have their own methods of density measurement included in their specifications, e.g. the Highways Agency Specification for Highway Works [1] in respect of hydraulically bound material for roadbase and sub-base.

Hazard warnings

CAUTION — When cement is mixed with water, alkali is released. Take precautions to avoid dry cement entering the eyes, mouth and nose whilst mixing concrete. Prevent skin contact with wet cement or concrete by wearing suitable protective clothing. 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.

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.

Presentational conventions

The provisions of this standard are presented in roman (i.e. upright) type. Its requirements are expressed in sentences in which the principle 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 of British Standards are responsible for their correct application.

Compliance with a British Standard cannot confer immunity from legal obligations.