INTERNATIONAL STANDARD

Second edition 2009-05-01

Cement — Test methods — Determination of strength

Ciments — Méthodes d'essai — Détermination de la résistance mécanique



Reference number ISO 679:2009(E)

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Contents

Page

Forewo	ord	iv
1	Scope	1
2	Normative references	1
3	Principle	1
4	Apparatus	2
5	Mortar constituents	11
6	Preparation of mortar	13
7	Preparation of test specimens	13
8	Conditioning of test specimens	14
9	Testing procedures	15
10	Results	16
11	Validation testing of ISO standard sand and of alternative compaction equipment	17
Annex	A (normative) Alternative vibration compaction equipment and procedures validated as equivalent to the reference jolting compaction equipment and procedure	24
Bibliog	Jraphy	29

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 679 was prepared by Technical Committee ISO/TC 74, Cement and lime.

This second edition cancels and replaces the first edition (ISO 679:1989), which has been technically revised as follows, based on comments received by the Secretariat.

- a) The testing procedure has been revised with respect to hardness and surface texture of moulds (4.6.3) and compression strength testing machine platens (4.6.6) as supplied; suitability of mould oil (4.6.3); frequency of operation of jolting apparatus (4.6.4); and the inclusion and accuracy of a balance (4.6.8); deionized water (5.3) is now permitted; procedures for mixing mortar (6.2) and the moulding (Clause 7) and conditioning (Clause 8) of test specimens have been revised to reflect current best practice.
- b) Test results (Clause 10) are now reported in megapascals, replacing newtons per square millimetre. (One megapascal is equivalent to one newton per square millimetre.)
- c) The use of a flexural strength testing machine (4.6.5) is now optional.
- d) Estimates of the precision for compressive strength testing (10.2.3) have been revised to include both short- and long-term repeatability together with reproducibility data for laboratories of "normal" performance and an indication of precision data for "expert" laboratories.
- e) The procedure for validation testing of ISO standard sand (11.2) includes initial qualification testing, validation criteria, verification testing and annual confirmation testing.
- f) The procedure for validation testing of alternative compaction equipment (11.3) has been revised and a normative annex (Annex A) has been introduced detailing two alternative vibration compaction equipments which have been validated.