INTERNATIONAL STANDARD

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Second edition
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Testing of concrete —

Part 6: Sampling, preparing and testing of concrete cores

Essais du béton —

Partie 6: Échantillonnage, préparation et essais sur des carottes de béton

Reference number
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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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 71, *Concrete, reinforced concrete and prestressed concrete*, Subcommittee SC 1, *Test methods for concrete.*

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

This second edition cancels and replaces the first edition (ISO 1920-6:2004), which has been technically revised.

The main changes compared to the previous edition are as follows:

— requirements of compressive testing machine have been included and defined;

— Clause 5 has been redrafted;

— accuracy requirements at the time of measuring core diameter, core length have been redefined;

— tolerances of the prepared test specimen have been redefined;

— the curing of test specimens under tropical climate has been included and defined.

A list of all parts in the ISO 1920 series can be found on the ISO website.

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Testing of concrete —

Part 6:
Sampling, preparing and testing of concrete cores

1 Scope

This document specifies a method for taking cores from hardened concrete, their examination, preparation for testing and determination of compressive strength.

This document does not give guidance on the decision to drill cores or on the locations for drilling and does not provide procedures for interpreting the core strength results.

It is recommended that before coring, full agreement should be reached by all parties on the need for core testing and how the results should be interpreted.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 1920-4, *Testing of concrete — Part 4: Strength of hardened concrete*

ISO 1920-5, *Testing of concrete — Part 5: Density and water penetration depth*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

3.1
core strength
compressive strength of the cored specimen, as determined by the test defined in this document

4 Apparatus

4.1 Core drill, capable of extracting cores from the hardened concrete to the dimensions specified in 5.3 with the tolerances specified in Clause 7.

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