

BS EN 12390-1:2012



BSI Standards Publication

Testing hardened concrete

Part 1: Shape, dimensions and other requirements for specimens and moulds

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National foreword

This British Standard is the UK implementation of EN 12390-1:2012. It supersedes BS EN 12390-1:2000 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee B/517/1, Concrete production and testing.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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English Version

**Testing hardened concrete - Part 1: Shape, dimensions and
other requirements for specimens and moulds**

Essai pour béton durci - Partie 1 : Forme, dimensions et
autres exigences aux éprouvettes et aux moules

Prüfung von Festbeton - Teil 1: Form, Maße und andere
Anforderungen für Probekörper und Formen

This European Standard was approved by CEN on 13 July 2012.

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Foreword

This document (EN 12390-1:2012) has been prepared by Technical Committee CEN/TC 104 “Concrete and related products”, the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by March 2013, and conflicting national standards shall be withdrawn at the latest by March 2013.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights other than those identified above. CEN [and/or] CENELEC shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 12390-1:2000.

This standard is one of a series on testing concrete.

EN 12390, *Testing hardened concrete*, consists of the following parts:

- *Part 1: Shape, dimensions and other requirements for specimens and moulds;*
- *Part 2: Making and curing specimens for strength tests;*
- *Part 3: Compressive strength of test specimens;*
- *Part 4: Compressive strength — Specification for testing machines;*
- *Part 5: Flexural strength of test specimens;*
- *Part 6: Tensile splitting strength of test specimens;*
- *Part 7: Density of hardened concrete;*
- *Part 8: Depth of penetration of water under pressure;*
- *Part 9: Freeze-thaw resistance — Scaling (technical specification);*
- *Part 10: Determination of the relative carbonation resistance of concrete (technical specification);*
- *Part 11: Determination of the chloride resistance of concrete, unidirectional diffusion (technical specification).*

The following amendments have been made to the former edition:

- editorial revision;
- increases in the allowable tolerances for the dimensions of the specimens which reflect current industry practice.

This standard recognises alternative approaches towards obtaining test specimens of the correct sizes and shapes. The first is to use moulds whose life is limited and to measure the specimens to ensure conformity. The second is to cast specimens in calibrated metal moulds which meet tighter tolerances than for specimens. The use of calibrated moulds allows relaxation on the requirement for measuring the specimens.

Annex A gives the application of EN ISO 1101 to measuring the shapes of concrete test specimens and moulds.

Annex B gives a method to measure the flatness of specimens and moulds.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.