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NSAI Standards

Irish Standard
I.S. EN 12390-1:2012

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

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This document replaces:
EN 12390-1:2000

This document is based on:	*Published:*
EN 12390-1:2012	21 September, 2012
EN 12390-1:2000	18 October, 2000

This document was published under the authority of the NSAI and comes into effect on:
21 September, 2012

ICS number:
91.100.30

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 12390-1

September 2012

ICS 91.100.30

Supersedes EN 12390-1:2000

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

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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of an identical text or by endorsement, at the latest by March 2013, and conflicting national standards shall be withdrawn at the latest by March 2013.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.

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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.

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