



NSAI
Standards

Irish Standard
I.S. EN 12390-3:2009

Testing hardened concrete - Part 3: Compressive strength of test specimens

I.S. EN 12390-3:2009

Incorporating amendments/corrigenda/National Annexes issued since publication:
EN 12390-3:2009/AC:2011

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I.S. xxx: Irish Standard – national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation - recommendation based on the consensus of an expert panel and subject to public consultation.

SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

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English version
Version Française
Deutsche Fassung

Testing hardened concrete - Part 3: Compressive strength of test specimens

Essais pour béton durci - Partie 3:
Résistance à la compression des
éprouvettes

Prüfung von Festbeton - Teil 3:
Druckfestigkeit von Probekörpern

This corrigendum becomes effective on 31 August 2011 for incorporation in the three official language versions of the EN.

Ce corrigendum prendra effet le 31 août 2011 pour incorporation dans les trois versions linguistiques officielles de la EN.

Die Berichtigung tritt am 31. August 2011 zur Einarbeitung in die drei offiziellen Sprachfassungen der EN in Kraft.

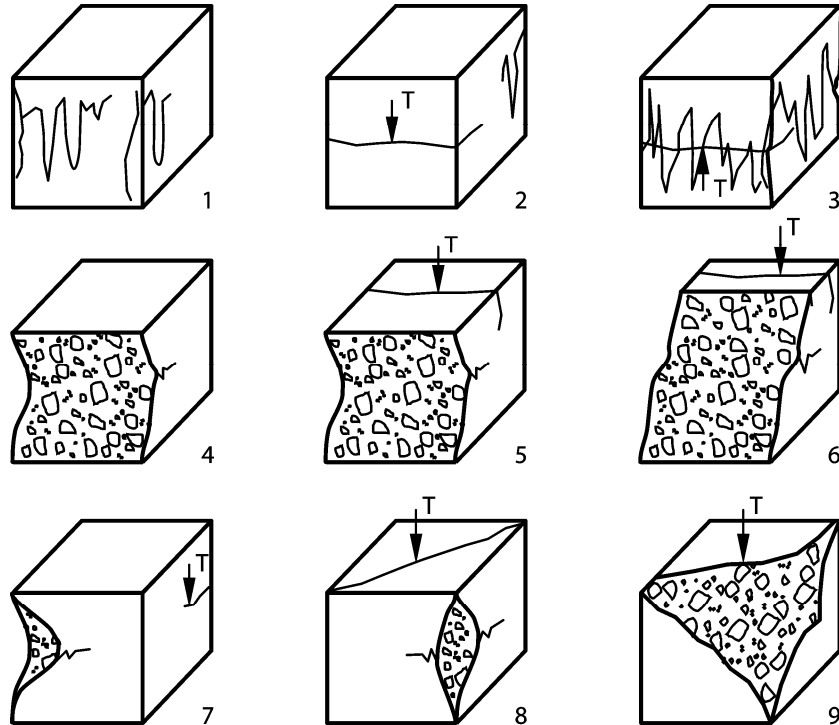


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1 Modification to Clause 6 "Test report"

Replace the existing Figure 2 with the following: "



".

2 Modification to Clause 9 "Precision"

Replace the existing Table 2 with the following: "

Table 2 — Precision data for measurements of the compressive strength of hardened concrete, expressed as percentages of the mean of the three cylinder strengths whose differences are to be compared with repeatability (*r*) or reproducibility (*R*)

Test method	Repeatability conditions		Reproducibility conditions	
	<i>s_r</i> %	<i>r</i> %	<i>s_R</i> %	<i>R</i> %
cylinder (160 mm diameter, 320 mm height)	2,9	8,0	4,1	11,7

NOTE 1 The precision data were determined in France as part of a Round Robin Test carried out in 1992. They are based on the results obtained by 89 laboratories which had participated in the test.

NOTE 2 The concretes were made using CPA55 cement (CEMI), Seine river sand and 20 mm aggregate. The average value was 38,87 MPa.

NOTE 3 The precision data only includes the procedure of testing for compressive strength.

".

English Version

Testing hardened concrete - Part 3: Compressive strength of test specimens

Essais pour béton durci - Partie 3: Résistance à la compression des éprouvettes

Prüfung von Festbeton - Teil 3: Druckfestigkeit von Probekörpern

This European Standard was approved by CEN on 27 December 2008.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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Foreword

This document (EN 12390-3:2009) 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 August 2009, and conflicting national standards shall be withdrawn at the latest by August 2009.

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

This document supersedes EN 12390-3:2001.

It is recognised good practice to include measurement of density prior to the determination of compressive strength.

The methods for adjusting the ends of test specimens, given in Annex A, have been validated in a laboratory inter-comparison, part-funded by the EC under the Measurement and Testing Programme; contract MATI-CT-94-0043.

This standard is one of a series concerned with testing concrete.

The series EN 12390 includes the following parts:

EN 12390 Testing hardened concrete –

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.

The following amendments have been made to the 2001-12 edition of this standard:

- editorial revision
- the compressive strength to be expressed to the nearest 0,1 MPA (N/mm²) instead of 0,5 MPA (N/mm²)
- the loading rate has been changed from between 0,2 MPA/s and 1,0 MPA/s to $0,6 \pm 0,2$ MPA/s
- the allowable tolerance for specimens which do not meet the tolerance given in EN 12390-1 for designated size has been increased

I.S. EN 12390-3:2009

EN 12390-3:2009 (E)

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, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

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