



National Standards Authority of Ireland

IRISH STANDARD

I.S. EN 1926:2006

ICS 73.020
91.100.15

**NATURAL STONE TEST METHODS -
DETERMINATION OF UNIAXIAL
COMPRESSIVE STRENGTH**

National Standards
Authority of Ireland
Glasnevin, Dublin 9
Ireland

Tel: +353 1 807 3800
Fax: +353 1 807 3838
<http://www.nsai.ie>

Sales
<http://www.standards.ie>

*This Irish Standard was
published under the
authority of the National
Standards Authority of
Ireland and comes into
effect on:
7 February 2007*

**NO COPYING WITHOUT NSAI
PERMISSION EXCEPT AS
PERMITTED BY COPYRIGHT
LAW**

© NSAI 2006

Price Code G

Údarás um Chaighdeán Náisiúnta na hÉireann

EUROPEAN STANDARD

EN 1926

NORME EUROPÉENNE

EUROPÄISCHE NORM

December 2006

ICS 73.020; 91.100.15

Supersedes EN 1926:1999

English Version

Natural stone test methods - Determination of uniaxial compressive strength

Méthodes d'essai des pierres naturelles - Détermination de la résistance à la compression uniaxiale

Prüfverfahren für Naturstein - Bestimmung der einachsigen Druckfestigkeit

This European Standard was approved by CEN on 9 November 2006.

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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, 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.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: rue de Stassart, 36 B-1050 Brussels

Contents

page

Foreword.....	3
1 Scope	4
2 Normative references	4
3 Principle.....	4
4 Terms and Definitions	4
5 Symbols	4
6 Apparatus	5
7 Preparation of specimens.....	5
7.1 Sampling.....	5
7.2 Test specimens.....	5
7.3 Surface preparation.....	5
7.3.1 General.....	5
7.3.2 Capping with mortar.....	6
7.4 Conditioning of specimen before testing.....	6
8 Procedure	6
8.1 Measuring the specimen.....	6
8.2 Placing the specimen in the testing machine.....	6
8.3 Loading.....	6
9 Expression of results	6
10 Test report	7
Annex A (normative) Determination of the compressive strength of armourstone	9
A.1 Scope	9
A.2 Normative references	9
A.3 Principle.....	9
A.4 Definitions and symbols	9
A.5 Apparatus	9
A.6 Preparation of specimens.....	9
A.6.1 Sampling.....	9
A.6.2 Test specimens.....	9
A.6.3 Surface preparation.....	10
A.6.4 Conditioning of specimen before testing.....	10
A.7 Procedure	10
A.8 Expression of results	10
A.9 Test report	10
Annex B (informative) Determination of the point load strength index of natural stone.....	12
B.1 General.....	12
B.2 Background	12
B.3 Correlation data	12
Annex C (normative) Statistical evaluation of the results	13
C.1 Scope	13
C.2 Symbols and definitions	13
C.3 Statistical evaluation of test results	14
Annex D (informative) Bibliografy related to Annex B.....	16
Bibliography	17

Foreword

This document (EN 1926:2006) has been prepared by Technical Committee CEN/TC 246 “Natural stones”, the secretariat of which is held by UNI.

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 June 2007, and conflicting national standards shall be withdrawn at the latest by June 2007.

This document supersedes EN 1926:1999.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, 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.

EN 1926:2006 (E)

1 Scope

This European standard specifies a method for determining the uniaxial compressive strength of natural stones.

2 Normative references

The following referenced documents are indispensable for the application 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.

EN 197-1, *Cement – Part 1: Composition, specifications and conformity criteria for common cements*

EN 12390 (all parts), *Testing hardened concrete*

EN 12670:2001 *Natural stone - Terminology*

EN 13383-1:2002, *Armourstone - Part 1: Specification*

3 Principle

The specimens, after mechanical preparation of surfaces or, if needed, after capping, are laid and centred on the plate of a testing machine. A uniformly distributed load is applied and increased continuously until failure occurs.

4 Terms and Definitions

For the purposes of this document, the terms and definitions given in EN 12670:2001 apply.

5 Symbols

h height of the specimen, in millimetres;

\bar{l} mean value of the lateral dimension, i.e. the distance between opposite vertical faces of the specimen (if cubic), in millimetres;

\bar{d} mean value of the diameter of the specimen (if cylindrical), in millimetres;

A cross-sectional area of the specimen before testing, in square millimetres;

F failure load, in Newtons;

R uniaxial compressive strength of the specimen, in Megapascals;

\bar{R} mean value of the uniaxial compressive strength, in Megapascals;

s standard deviation;

v coefficient of variation.

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

-
- [Looking for additional Standards? Visit Intertek Inform Infostore](#)
 - [Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation](#)
-