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Skiffer- och stenprodukter för tak och fasader – Del 2: Provningsmetoder

Slate and stone for discontinuous roofing and external cladding – Part 2: Methods of test for slate and carbonate slate

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Europastandarden EN 12326-2:2011 gäller som svensk standard. Detta dokument innehåller den officiella engelska versionen av EN 12326-2:2011.

Denna standard ersätter SS-EN 12326-2, utgåva 1 och SS-EN 12326-2/A1:2004, utgåva 1.

The European Standard EN 12326-2:2011 has the status of a Swedish Standard. This document contains the official English version of EN 12326-2:2011.

This standard supersedes the Swedish Standard SS-EN 12326-2, edition 1 and SS-EN 12326-2/A1:2004, edition 1.

Upplysningar om sakinnehållet i standarden lämnas av SIS, Swedish Standards Institute, telefon 08-555 520 00. Standarder kan beställas hos SIS Förlag AB som även lämnar allmänna upplysningar om svensk och utländsk standard.

Information about the content of the standard is available from the Swedish Standards Institute (SIS), telephone +46 8 555 520 00. Standards may be ordered from SIS Förlag AB, who can also provide general information about Swedish and foreign standards.

Standarden är framtagen av kommittén för Takprodukter och takskydd, SIS/TK 193.

Har du synpunkter på innehållet i den här standarden, vill du delta i ett kommande revideringsarbete eller vara med och ta fram andra standarder inom området? Gå in på www.sis.se - där hittar du mer information.

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 12326-2

June 2011

ICS 91.100.15

Supersedes EN 12326-2:2000

English Version

Slate and stone for discontinuous roofing and external cladding - Part 2: Methods of test for slate and carbonate slate

Ardoises et pierres pour toiture et bardage extérieur pour pose en discontinu - Partie 2: Méthodes d'essais pour ardoises et ardoises carbonatées

Schiefer und Naturstein für überlappende Dachdeckungen und Außenwandbekleidungen - Teil 2: Prüfverfahren für Schiefer und carbonathaltige Schiefer

This European Standard was approved by CEN on 19 May 2011.

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-CENELEC 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-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, 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

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Foreword

This document (EN 12326-2:2011) has been prepared by Technical Committee CEN/TC 128 “Roof covering products for discontinuous laying and products for wall cladding”, the secretariat of which is held by NBN.

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 December 2011, and conflicting national standards shall be withdrawn at the latest by December 2011.

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 12326-2:2000.

The most important changes in this version of the standard concern:

- Clause 10 "Determination of the modulus of rupture, and characteristic modulus of rupture";
- Clause 12 "Freeze-thaw test";
- Clause 13 "Determination of the apparent calcium carbonate and non carbonate carbon content by catalytis thermal decomposition";
- a new informative Annex B has been added "Petrographic examination of origin and identification of slate".

EN 12326 consists of the following parts:

— *Part 1: Product specification*;

— *Part 2: Methods of test for slate and carbonate slate*.

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, 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.

1 Scope

This European Standard specifies test methods for slate and carbonate slate for roofing and wall cladding. It is applicable to natural roofing products as defined in EN 12326-1:2004 used for assembly into discontinuous roofs and external wall cladding.

NOTE Where the term "slate" is used in this document it means slate and carbonate slate unless otherwise indicated.

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 12326-1:2004, *Slate and stone products for discontinuous roofing and cladding — Part 1: Product specification*

3 Terms, definitions and symbols

3.1 Terms and definitions

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

3.1.1
test piece (of slate)
piece sawn from a slate and prepared for testing as defined by the relevant test procedure

3.1.2
powdered test piece (of slate)
piece or pieces of a slate or slates prepared for testing by grinding to a powder of a defined particle size

3.1.3
sampling
process of selecting a slate or a set of slates for testing

3.1.4
constant mass
mass achieved when two successive weightings taken 24 h apart do not differ by more than 0,001 g (or 0,01 % of the weight of the test piece)

3.1.5
modulus of rupture
maximum stress sustained by a slate test piece when a bending moment is applied

NOTE In this European Standard the geometry of the test is three point bending.

3.2 Symbols

Symbol	Physical quantity	Unit
A_w	water absorption	%
a	rate of application of stress in the bend strength test	$(N/mm^2)/s$

b	width of a slate or a test piece	mm
C'_a	apparent mass percentage calcium carbonate in slate	%
C_c	carbonate carbon content of slate	%
$\overline{C}_c$	mean carbonate carbon content of a slate	%
C_d	carbon dioxide content of a test piece or standard preparation	%
C_T	total carbon in a slate	%
C_{nc}	non-carbonate carbon in a slate	%
e	thickness of a slate	mm
e_m	mean of three thickness measurements used to determine the rate of application of load in the bend strength test	mm
e_{max}	maximum of four thickness measurements carried out on one slate test piece	mm
$\overline{e}$	mean thickness of a slate test piece or series of test pieces	mm
$\overline{e}_i$	mean of 8 thickness measurements in the modulus of rupture test	mm
E_d	maximum deviation of the thickness of a slate from the mean thickness	%
e_s	thickness of the softened layer in the SO_2 exposure test	mm
e_{1A} to e_{4A}	individual thickness measurements in the SO_2 exposure test	mm
E_1	conductivity reading for total carbon	S/m
E_2	conductivity reading for non-carbonate carbon	S/m
f	gas volume reduction factor of the pump in the determination of non-carbonate carbon content by coulometry	-
f'	gas volume reduction factor of the pump in the blank determination of non-carbonate content by coulometry	-
$f_1 f_2$	means of three dial gauge readings in the flatness test	mm
f_d	deviation from flatness of a slate	mm
F_d	deviation from flatness of a slate as a percentage of its length	%
I	number of pulses recorded in the determination of non-carbonate carbon content by coulometry	-
I'	number of pulses recorded in the blank determination of non-carbonate carbon content by coulometry	-
k	proportionality factor specific to the apparatus in the determination of non-carbonate carbon content by coulometry	-