

STN	Malty a lepidlá na obkladové prvky Časť 2: Skúšobné metódy	STN EN 12004-2 72 2461
------------	---	--

Adhesives for ceramic tiles - Part 2: Test methods

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 07/17

Obsahuje: EN 12004-2:2017

Oznámením tejto normy sa ruší
STN EN 12002 (72 2467) z apríla 2009

STN EN 12003 (72 2468) z mája 2009

STN EN 1308 (72 2460) z januára 2008

STN EN 1323 (72 2462) z januára 2008

STN EN 1324 (72 2463) z januára 2008

STN EN 1346 (72 2464) z januára 2008

STN EN 1348 (72 2466) z januára 2008

124820

Úrad pre normalizáciu, metrológiu a skúšobníctvo Slovenskej republiky, 2017
Podľa zákona č. 264/1999 Z. z. o technických požiadavkách na výrobky a o posudzovaní zhody a o zmene a doplnení niektorých zákonov v znení neskorších predpisov sa slovenská technická norma a časti slovenskej technickej normy môžu rozmnožovať alebo rozširovať len so súhlasom slovenského národného normalizačného orgánu.

EUROPEAN STANDARD

EN 12004-2

NORME EUROPÉENNE

EUROPÄISCHE NORM

February 2017

ICS 83.180; 91.100.10; 91.100.30

Supersedes EN 12002:2008, EN 12003:2008, EN
1308:2007, EN 1323:2007, EN 1324:2007, EN
1346:2007, EN 1348:2007

English Version

Adhesives for ceramic tiles - Part 2: Test methods

Colles à carrelage - Partie 2 : Méthodes d'essai

Mörtel und Klebstoffe für Fliesen und Platten - Teil 2:
Prüfverfahren

This European Standard was approved by CEN on 15 July 2016.

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.

EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

Contents	Page
European foreword.....	4
1 Scope.....	5
2 Normative references.....	5
3 Sampling.....	6
4 Test conditions.....	6
5 Test materials.....	6
5.1 General.....	6
5.2 Ceramic tiles.....	6
5.3 Test substrate.....	6
5.3.1 Concrete slab.....	6
5.3.2 Other substrates.....	6
6 Mixing of the adhesive.....	7
7 Test report.....	7
8 Test methods.....	8
8.1 Determination of open time.....	8
8.1.1 Test materials.....	8
8.1.2 Apparatus.....	8
8.1.3 Procedure.....	8
8.1.4 Evaluation and expression of results.....	9
8.1.5 Test report.....	9
8.2 Determination of slip.....	9
8.2.1 Test materials.....	9
8.2.2 Apparatus.....	9
8.2.3 Procedure.....	10
8.2.4 Test report.....	10
8.3 Determination of tensile adhesion strength for cementitious adhesives (C).....	11
8.3.1 Test materials.....	11
8.3.2 Apparatus.....	11
8.3.3 Procedure.....	12
8.3.4 Evaluation and expression of results.....	13
8.3.5 Test report.....	14
8.4 Determination of shear adhesion strength of dispersion adhesives (D).....	14
8.4.1 Test materials.....	14
8.4.2 Apparatus.....	14
8.4.3 Procedure.....	17
8.4.4 Evaluation and expression of results.....	19
8.4.5 Test report.....	19
8.5 Determination of shear adhesion strength of reaction resin adhesives (R).....	19
8.5.1 Test materials.....	19
8.5.2 Apparatus.....	19
8.5.3 Procedure.....	20
8.5.4 Evaluation and expression of results.....	22
8.5.5 Test report.....	22
8.6 Determination of transverse deformation of cementitious adhesives (C).....	22
8.6.1 Principle.....	22
8.6.2 Test materials.....	22

8.6.3	Apparatus	23
8.6.4	Procedure	25
8.6.5	Test report	26
Annex A (normative) Concrete slab for test		27
A.1	General information	27
A.2	Test conditions	27
A.3	Apparatus	27
A.4	Concrete slab	27
A.4.1	Manufacture of the concrete slab	27
A.4.2	Conditioning of the concrete slab	28
A.4.3	Water absorption at the surface	28
A.4.4	Tensile adhesion strength	28
A.4.5	Data recorded	28
Annex B (normative) Failure patterns		31
B.1	Adhesion failure (AF-S or AF-T)	31
B.2	Cohesive failure within the adhesive (CF-A)	32
B.3	Cohesive failure in the substrate or in the tile (CF-S or CF-T)	33
Bibliography		35

European foreword

This document (EN 12004-2:2017) has been prepared by Technical Committee CEN/TC 67 “Ceramic tiles”, 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 August 2017, and conflicting national standards shall be withdrawn at the latest by August 2017.

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

This document supersedes EN 1308:2007, EN 1323:2007, EN 1324:2007, EN 1346:2007, EN 1348:2007, EN 12002:2008, EN 12003:2008.

EN 12004, Adhesives for tiles, is composed with the following parts:

- Part 1: Requirements, evaluation of conformity, classification and designation;
- Part 2: Test methods.

According to the CEN-CENELEC Internal Regulations, the national standards organisations 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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This European Standard specifies the methods for determining characteristics for adhesives used in internal and external installation of ceramic tiles.

This European Standard does not contain performance requirements or recommendations for the design and installation of ceramic tiles.

The following test methods are described:

- determination of open time (8.1);
- determination of slip (8.2);
- determination of tensile adhesion strength for cementitious adhesives (8.3);
- determination of shear adhesion strength of dispersion adhesives (8.4);
- determination of shear adhesion strength of reaction resin adhesives (8.5);
- determination of transverse deformation of cementitious adhesives (8.6).

NOTE Ceramic tile adhesives can be used also for other kinds of tiles (natural and agglomerated stones, etc.), if they do not adversely affect the stones.

WARNING — This European Standard can involve hazardous materials and operations. Persons using this standard should be familiar with normal laboratory practice. This European Standard does not purport to address all the safety problems, if any, associated with its use. It is the responsibility of the user to establish appropriate safety and health practices and to ensure compliance with any European and national regulatory conditions.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 196-1:2016, *Methods of testing cement — Part 1: Determination of strength*

EN 459-2, *Building lime - Part 2: Test methods*

EN 1067, *Adhesives - Examination and preparation of samples for testing*

EN 12004-1, *Adhesives for ceramic tiles - Part 1: Requirements, assessment and verification of constancy of performance, classification and marking*

EN 14411, *Ceramic tiles - Definition, classification, characteristics, assessment and verification of constancy of performance and marking*

EN ISO 15605, *Adhesives - Sampling (ISO 15605)*

koniec náhľadu – text ďalej pokračuje v platenej verzii STN