SLOVENSKI STANDARD
SIST EN 302-8:2017

01-april-2017

Nadomešča:
SIST EN 15416-2:2008

Lepila za nosilne lesene konstrukcije - Preskusne metode - 8. del: Preskus statične obremenitve preskušancev z več lepljenimi spoji pri tlačni strižni obremenitvi

Adhesives for load-bearing timber structures - Test methods - Part 8: Static load test of multiple bond line specimens in compression shear

Klebstoffe für tragende Holzbauteile - Prüfverfahren - Teil 8: Statische Belastungsprüfung an Prüfkörpern mit mehreren Klebstofffugen bei Druck-Scherbeanspruchung

Adhésifs pour structures portantes en bois - Méthodes d'essai - Partie 8 : Essai de charge statique sur des éprouvettes à joints multiples en cisaillement par compression

Ta slovenski standard je istoveten z: **EN 302-8:2017**

ICS:

83.180	Lepila	Adhesives
91.080.20	Lesene konstrukcije	Timber structures

SIST EN 302-8:2017 **en,fr,de**

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 302-8

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ICS 83.180

Supersedes EN 15416-2:2007

English Version

Adhesives for load-bearing timber structures - Test methods - Part 8: Static load test of multiple bond line specimens in compression shear

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This European Standard was approved by CEN on 30 October 2016.

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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.

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Ref. No. EN 302-8:2017 E

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European foreword

This document (EN 302-8:2017) has been prepared by Technical Committee CEN/TC 193 “Adhesives”, the secretariat of which is held by AENOR.

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of an identical text or by endorsement, at the latest by July 2017, and conflicting national standards shall be withdrawn at the latest by July 2017.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 15416-2:2007.

Compared to EN 15416-2:2007, the following modifications have been made:

a) title has been changed;

b) EN 301 and EN 16254 are included in the scope;

c) introduction of (50 ± 2) °C and (90 ± 2) °C in Table 1, climate 1, with reference to EN 15425;

d) layout has been made in line with EN 302-1:2013 to EN 302-7:2013;

e) new drawings of the test jig with some adjusted part dimensions are included.

This document is one of a package dealing with adhesives for use with timber structures, and is published in support to EN 1995, *Eurocode 5: Design of timber structures* (all parts).

The package consists of

— three classification and performance requirements for adhesives for load-bearing timber structures; phenolic and aminoplastic adhesives (EN 301), one component polyurethane adhesives (EN 15425) and emulsion polymerized isocyanate adhesives (EN 16254), and

— twelve test methods (EN 302 parts 1 to 8, EN 15416 parts 1, 3, 4 and 5).

These European Standards have the following titles:

— EN 301, *Adhesives, phenolic and aminoplastic, for load-bearing timber structures — Classification and performance requirements*

— EN 15425, *Adhesives — One component polyurethane (PUR) for load-bearing timber structures - Classification and performance requirements*

— EN 16254, *Adhesives — Emulsion polymerized isocyanate (EPI) for load-bearing timber structures — Classification and performance requirements*

— EN 302-1, *Adhesives for load-bearing timber structures — Test methods — Part 1: Determination of longitudinal tensile shear strength*

— EN 302-2, *Adhesives for load-bearing timber structures — Test methods — Part 2: Determination of resistance to delamination*

- EN 302-3, *Adhesives for load-bearing timber structures — Test methods — Part 3: Determination of the effect of acid damage to wood fibres by temperature and humidity cycling on the transverse tensile strength*
- EN 302-4, *Adhesives for load-bearing timber structures — Test methods — Part 4: Determination of the effects of wood shrinkage on the shear strength*
- EN 302-5, *Adhesives for load-bearing timber structures — Test methods — Part 5: Determination of maximum assembly time under referenced conditions*
- EN 302-6, *Adhesives for load-bearing timber structures — Test methods — Part 6: Determination of the minimum pressing time under referenced conditions*
- EN 302-7, *Adhesives for load-bearing timber structures — Test methods — Part 7: Determination of the working life under referenced conditions*
- EN 302-8, *Adhesives for load-bearing timber structures — Test methods — Part 8: Static load test of multiple bond line specimens in compression shear*
- EN 15416-1, *Adhesives for load bearing timber structures other than phenolic and aminoplastic — Test methods — Part 1: Long-term tension load test perpendicular to the bond line at varying climate conditions with specimens perpendicular to the glue line (Glass house test)*
- EN 15416-3, *Adhesives for load bearing timber structures other than phenolic and aminoplastic — Test methods — Part 3: Creep deformation test at cyclic climate conditions with specimens loaded in bending shear*
- EN 15416-4, *Adhesives for load bearing timber structures other than phenolic and aminoplastic — Test methods — Part 4: Determination of open assembly time under referenced conditions*
- EN 15416-5, *Adhesives for load bearing timber structures other than phenolic and aminoplastic — Test methods — Part 5: Determination of minimum pressing time under referenced conditions*

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.

Introduction

Safety statement

Persons using this European Standard should be familiar with the normal laboratory practice, if applicable. This European Standard cannot address all of 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 regulatory conditions.

Environmental statement

It is understood that some of the material permitted in this European Standard may have negative environmental impact. As technological advantages lead to better alternatives for these materials, they will be eliminated from this European Standard to the extent possible.

At the end of the test, it is recommended that the user of this European Standard take care to carry out an appropriate disposal of the wastes, according to local regulation.

1 Scope

This European Standard specifies a method of determining the ability of adhesive bonds to resist static load. It is applicable to adhesives used in load bearing timber structures.

It is suitable for the following applications:

a) for assessing the compliance of adhesives according to EN 301, EN 15425 and EN 16254;

b) for assessing the suitability and quality of adhesives for load-bearing timber structures;

c) for assessing the effect on the bond strength resulting from constant load at different climate conditions.

This method is intended primarily to obtain performance data for the classification of adhesives for load bearing timber structures according to their suitability for use in defined climatic environments.

This method is not intended to provide data for structural design, and does not necessarily represent the performance of the bonded member in service.

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 301:2013, *Adhesives, phenolic and aminoplastic for load-bearing timber structures — Classification and performance requirements*

EN 15425:2017, *Adhesives — One component polyurethane (PUR) for load-bearing timber structures — Classification and performance requirements*

EN 16254:2013+A1:2016, *Adhesives — Emulsion polymerized isocyanate (EPI) for load-bearing timber structures — Classification and performance requirements*

3 Principle

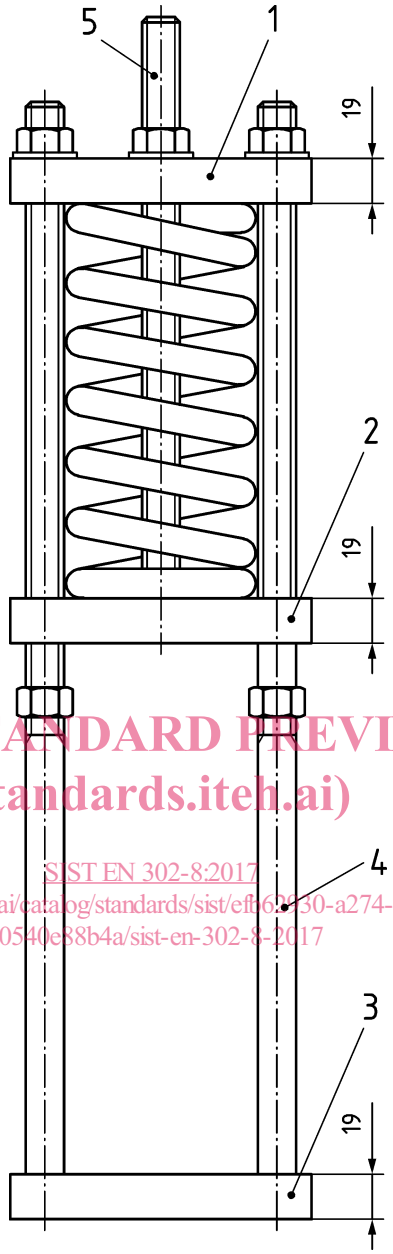
Bonded test pieces are subjected to a constant compression shear load under a series of three different climates. Number of failures and the amount of deformation is measured after the end of the last climate cycle.

4 Apparatus

4.1 Test jig

The test Equipment is shown in Figure 1 and Figure 2.

Dimensions in millimetres



Key

1 top plate
2 spacer plate
3 base plate
4 tension rod
5 centre rod

Figure 1 — Test jig