Adhesives for load bearing timber structures - Test methods - Part 2: Static load test of multiple bondline specimens in compression shear

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# **EESTI STANDARDI EESSÕNA**

# NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 15416-2:2008 sisaldab Euroopa standardi EN 15416-

2:2007 ingliskeelset teksti.

This Estonian standard EVS-EN 15416-2:2008 consists of the English text of the European standard EN 15416-2:2007.

Standard on kinnitatud Eesti Standardikeskuse 28.01.2008 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

This standard is ratified with the order of Estonian Centre for Standardisation dated 28.01.2008 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 12.12.2007.

Date of Availability of the European standard text 12.12.2007.

Standard on kättesaadav Eesti standardiorganisatsioonist.

The standard is available from Estonian standardisation organisation.

ICS 83.180

Võtmesõnad:

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# EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN 15416-2

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ICS 83,180

#### **English Version**

# Adhesives for load bearing timber structures other than phenolic and aminoplastic - Test methods - Part 2: Static load test of multiple bondline specimens in compression shear

Adhésifs pour charpentes en bois portantes, de type autre que phénolique et aminoplaste - Méthodes d'essai - Partie 2 : Essai de charge statique des éprouvettes à plan de joint multiple en cisaillement par compression

Klebstoffe für tragende Holzbauteile ausgenommen Phenolharzklebstoffe und Aminoplaste - Prüfverfahren -Teil 2: Statische Belastungsprüfung an Prüfkörpern mit mehreren Klebstofffugen bei Druck-Scherbeanspruchung

This European Standard was approved by CEN on 10 November 2007.

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.



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

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# **Foreword**

This document (EN 15416-2:2007) 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 June 2008, and conflicting national standards shall be withdrawn at the latest by June 2008.

This European Standard is one of a series dealing with test methods for adhesives for use in load bearing timber structures. The standard is published in support of Eurocode 5, Common unified rules for timber structures. The series consist of six test methods to assess the performance of adhesives after specified heat and humidity treatments (EN 302, Parts 1 to 4, EN 15416-2 and EN 15416-3) and two test methods to characterize the working properties of the adhesive (EN 15416-4 and EN 15416-5). Requirements for the adhesives are stated in other standards, for instance requirements for one component polyurethane adhesives for load bearing timber structures are given in prEN 15425.

#### Safety statement

Persons using this document should be familiar with the normal laboratory practice, in applicable. This document does not purport to 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.

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 United Kingdom.

# 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 prEN 15425;
- b) for assessing the suitability and quality of adhesives for load-bearing timber structures.

This test 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 for use to provide numerical design data and does not necessarily represent the performance of the bonded member in service. It is not applicable to assessment of the suitability of adhesives for the manufacture of wood-based panels.

#### 2 Normative references

Not applicable.

# 3 Principle

Glued 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 test specimens have passed through all the climate cycles.

## 4 Apparatus

#### 4.1 Test jigs

The test equipment is in principle similar to that described in ASTM D 3535–07a, with the exception of the spring characteristics (Figure 1 and Figure 2).