Adhesives for load-bearing timber structures - Test methods - Part 7: Determination of the conventional working life

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 302-7:2004 sisaldab Euroopa standardi EN 302-7:2004 ingliskeelset teksti. Käesolev dokument on jõustatud 26.10.2004 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN 302-7:2004 consists of the English text of the European standard EN 302-7:2004. This document is endorsed on 26.10.2004 with the notification being published in the official publication of the Estonian national standardisation organisation. The standard is available from Estonian standardisation organisation.

Käsitlusala: This part of EN 302 specifies a method for determining the conventional working life for adhesives for loadbearing timber structures, by a viscosity test. This method is not suitable for determining the conventional working life of a multi-component adhesive whose actual working life is very short.	**Scope:** This part of EN 302 specifies a method for determining the conventional working life for adhesives for loadbearing timber structures, by a viscosity test. This method is not suitable for determining the conventional working life of a multi-component adhesive whose actual working life is very short.

ICS 83.180

Võtmesõnad: aminoplasts, components, definitions, durability, glue, life, life (durability), life test, phenol, phenolic plastics, polycondensation products, structural timber, test equipment, testing, timber construction, wood, wooden structural part

EUROPEAN STANDARD

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EN 302-7

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ICS 83.180

English version

Adhesives for load-bearing timber structures - Test methods - Part 7: Determination of the conventional working life

Adhésifs pour structures portantes en bois - Méthodes d'essai - Partie 7 : Détermination de la durée conventionnelle d'utilisation

Klebstoffe für tragende Holzbauteile - Prüfverfahren - Teil 7: Bestimmung der Gebrauchsdauer

This European Standard was approved by CEN on 16 April 2004.

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

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

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Contents

Foreword

This document (EN 302-7:2004) 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 January 2005, and conflicting national standards shall be withdrawn at the latest by January 2005.

No existing European Standard is superseded.

This document is one of a series dealing with adhesives for use with timber structures, and is published in support of Eurocode No. 5 “Common unified rules for timber structures”. The series consists of a classification and performance requirements for two types of phenolic and aminoplastic adhesives for use in different climatic conditions (EN 301), four test methods (EN 302 Parts 1 to 4) used to assess the performance of adhesives after specified heat and humidity treatments, and three test methods (ENV 302-5 and EN 302 Parts 6 and 7) to characterise the working properties of the adhesive.

EN 301 and EN 302 Parts 1 to 4 and Parts 6 and 7 have the following titles.

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

EN 302 *Adhesives for lead-bearing timber structures — Test methods —*

Part 1: *Determination of bond strength in longitudinal tensile shear strength*

Part 2: *Determination of resistance to delamination*

Part 3: *Determination of the effect of acid damage to wood fibres by temperature and humidity cycling on the transverse tensile strength*

Part 4: *Determination of the effects of wood shrinkage on the shear strength*

Part 6: *Determination of the conventional pressing time*

Part 7: *Determination of the conventional working life*

ENV 302-5:2001 has the title *'Adhesives for load-bearing timber structures — Test methods —* Part 5: *Determination of the conventional assembly time*'.

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, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

1 Scope

This part of EN 302 specifies a method for determining the conventional working life for adhesives for load-bearing timber structures, by a viscosity test.

This method is not suitable for determining the conventional working life of a multi-component adhesive whose actual working life is very short.

This document is only intended for obtaining a reliable basis for comparison between adhesives. The method gives results which cannot be applied to the safe manufacture of timber structures without modifications for the influences of factory temperature and relative air humidity.

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 923:1998, *Adhesives — Terms and definitions*

EN ISO 2555:1999, *Plastics — Resins in the liquid state or as emulsions or dispersions — Determination of apparent viscosity by the Brookfield test method (ISO 2555:1989)*

3 Terms and definitions

For the purposes of this document , the terms and definitions given in EN 923:1998 and the following apply.

3.1
conventional working life
period of time at 20 °C during which an adhesive, prepared for application, increases in apparent viscosity to 25 000 mPa·s

NOTE The test procedure is that described in this document.

4 Principle

The viscosity of a specified volume of adhesive at 20 °C is monitored using a Brookfield type viscometer, until it reaches 25 000 mPa·s.

5 Safety

Persons using this document shall be familiar with normal laboratory practice.

This document does not purport to address all the safety problems, if any, associated with its use.

It is the responsibility of the user to establish safety and health practices and to ensure compliance with any European or national regulatory conditions.