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NORME EUROPÉENNE  
EUROPÄISCHE NORM

**EN 301**

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Supersedes EN 301:1992

English Version

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

Adhésifs de nature phénolique et aminoplaste, pour  
structures portantes en bois - Classification et exigences de  
performance

Klebstoffe für tragende Holzbauteile - Phenoplaste und  
Aminoplaste - Klassifizierung und Leistungsanforderungen

This European Standard was approved by CEN on 16 March 2006.

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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

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## Contents

Page

Foreword .....	3
1 Scope.....	4
2 Normative references .....	4
3 Terms and definitions.....	5
4 Classification .....	5
5 Requirements .....	6
5.1 General .....	6
5.2 Tensile shear test.....	6
5.3 Delamination test .....	7
5.4 Fibre damage test .....	7
5.5 Shrinkage test .....	7
6 Working properties of the adhesive.....	7
6.1 General.....	7
6.2 Physical properties of adhesive prepared for use .....	7
6.3 Use of the adhesive .....	7

## Foreword

This document (EN 301:2006) 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of an identical text or by endorsement, at the latest by December 2006, and conflicting national standards shall be withdrawn at the latest by December 2006.

This document supersedes EN 301:1992.

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 load-bearing timber structures — Test methods —*

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

Part 2: *Determination of resistance to delamination (Laboratory method)*

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

## **1 Scope**

This European Standard establishes a classification for phenolic and aminoplastic polycondensation adhesives according to their suitability for use for load-bearing timber structures in defined climatic exposure conditions, and specifies performance requirements for such adhesives for the manufacture of load-bearing timber structures only.

The performance requirements of this standard apply to the adhesive only, not to the structure. This standard does not primarily cover the performance of adhesives for the production of wood-based panels.

This standard is primarily intended for the use of adhesive manufacturers and for the use in timber structures bonded with adhesives, to assess or control the quality of adhesives. This standard only specifies the performance of an adhesive for use in an environment corresponding to the defined conditions.

Such an adhesive meeting the requirements of this standard for its type is adequate for use in a load-bearing structure, provided that the bonding process has been carried out according to an appropriate product standard.

## **2 Normative references**

The following referenced documents are indispensable for the application of this European Standard. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 302-1, *Adhesives for load-bearing timber structures - Test methods - Part 1: Determination of bond strength in 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 302-6, *Adhesives for load-bearing timber structures — Test methods — Part 6: Determination of the conventional pressing time*

EN 302-7, *Adhesives for load-bearing timber structures — Test methods — Part 7: Determination of the conventional working life*

EN 923:2005, *Adhesives — Terms and definitions*

EN 1245, *Adhesives — Determination of pH — Test method*

EN 1995-1-1, *Eurocode 5: Design of timber structures - Part 1-1: General - Common rules and rules for buildings*

EN 12092, *Adhesives — Determination of viscosity*

ENV 302-5, *Adhesives for load-bearing timber structures — Test methods — Part 5: Determination of the conventional assembly time*

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