

## **Adhesives - Wood adhesives for non-structural applications - Determination of tensile shear strength of lap joints**

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## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 205:2003 sisaldab Euroopa standardi EN 205:2003 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 15.04.2003 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 205:2003 consists of the English text of the European standard EN 205:2003.</p> <p>This document is endorsed on 15.04.2003 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p><b>Käsitlusala:</b></p> <p>This European Standard describes tests for adhesives for wood and derived timber products for the assessment of their resistance to hot and cold water. It can be used for the assessment of the strength of bonds with a thin or thick bond-line. It does not apply to adhesives for structural use or to the manufacture of particle boards, fibreboard's and plywood. It does not replace tests on finished products</p>	<p><b>Scope:</b></p> <p>This European Standard describes tests for adhesives for wood and derived timber products for the assessment of their resistance to hot and cold water. It can be used for the assessment of the strength of bonds with a thin or thick bond-line. It does not apply to adhesives for structural use or to the manufacture of particle boards, fibreboard's and plywood. It does not replace tests on finished products</p>
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ICS 83.180

**Võtmesõnad:** adhesive-bonded joints, adhesiveness, adhesives, bonding, components, dimensions, endurance testing, fatigue tests, permanent load, rigidity, strength tests, tensile testing, test atmospheres, testing, wood, wood products, woodbased sheet materials, wooden boards

English version

**Adhesives - Wood adhesives for non-structural applications -  
Determination of tensile shear strength of lap joints .**

Adhésifs - Colles pour bois à usages non structuraux -  
Détermination du pouvoir adhésif des collages  
longitudinaux par l'essai de cisaillement

Klebstoffe - Holzklebstoffe für nichttragende Anwendungen  
- Bestimmung der Klebfestigkeit von Längskleblagen im  
Zugversuch

This European Standard was approved by CEN on 21 November 2002.

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 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION  
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## Foreword

This document (EN 205:2003) 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 September 2003, and conflicting national standards shall be withdrawn at the latest by September 2003.

This document supersedes EN 205:1991.

Annex A is informative.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and the United Kingdom.

## Introduction

European Standards giving a common classification with respect to durability classes for wood adhesives will allow considerable improvement in consumer protection in any future product liability system with regard to properties guaranteed by the adhesive manufacturer.

The methods described in this standard are suitable for the following and other applications:

- assessing the usability and quality of adhesives for wood and derived timber products;
- classifying these adhesives into the durability classes D1 to D4 of EN 204 (thermoplastic adhesives) and C1 to C4 of EN 12765 (thermosetting adhesives);
- assessing effects on the bond strength resulting from the bonding conditions chosen, the various conditioning sequences and the treatment of the test pieces before and after bonding;

## 1 Scope

This European Standard describes tests for adhesives for wood and derived timber products for the assessment of their resistance to hot and cold water. It can be used for the assessment of the strength of bonds with a thin or thick bond-line. It does not apply to adhesives for structural use or to the manufacture of particle boards, fibreboard's and plywood. It does not replace tests on finished products.

## 2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 204, *Classification of thermoplastic wood adhesives for non-structural applications*.

EN 923:1998, *Adhesives — Terms and definitions*

EN 12765, *Classification of thermosetting wood adhesives for non-structural applications*

ISO 5893, *Rubber and plastics test equipment — Tensile, flexural and compression types (constant-rate-of-traverse) — Specification*.

## 3 Terms and definitions

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

### 3.1

#### **thin bond line**

close contact adhesive joint where the adhesive layer is nominally 0.1 mm thick

### 3.2

#### **thick bond line**

gap filled joint where the adhesive layer is  $(1,0 \pm 0,1)$  mm thick

## 4 Principle

A symmetrical bonded single lap joint between two symmetrical wooden adherends subjected to specified conditioning treatments and strained to rupture by a tensile force parallel to the grain.

## 5 Safety

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

This 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 health and safety practices and to ensure compliance with any European or national regulatory conditions.