

Structural adhesives - Characterisation of a surface by measuring adhesion by means of the three point bending method

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 1966:2003 sisaldab Euroopa standardi EN 1966:2002 ingliskeelset teksti.	This Estonian standard EVS-EN 1966:2003 consists of the English text of the European standard EN 1966:2002.
Käesolev dokument on jõustatud 18.02.2003 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.	This document is endorsed on 18.02.2003 with the notification being published in the official publication of the Estonian national standardisation organisation.
Standard on kättesaadav Eesti standardiorganisatsioonist.	The standard is available from Estonian standardisation organisation.

Käsitlusala: This European standard describes a test method to determine ability of a cured adhesive (possibly with a primer) to adhere to a substrate which has had a certain surface finish or with a specific surface preparation by using the "three point bending method"	Scope: This European standard describes a test method to determine ability of a cured adhesive (possibly with a primer) to adhere to a substrate which has had a certain surface finish or with a specific surface preparation by using the "three point bending method"
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Võtmesõnad: area, ben, characteristics, definitions, evaluations, finishes, joining materials, materials testing, measurement, properties, structural adhesives, surface inspections, surface properties, surfaces, testing, testing devices, three- point methods, three-point loading

English version

**Structural adhesives - Characterisation of a surface by
measuring adhesion by means of the three point bending
method**

Adhésifs structuraux - Caractérisation d'une surface par
mesure de l'adhésion au moyen de la méthode de la
flexion en trois points

Strukturklebstoffe - Charakterisierung einer Oberfläche
durch Messung der Adhäsion nach dem Dreipunkt-
Biegeverfahren

This European Standard was approved by CEN on 16 October 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, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, 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 1966:2002) 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 May 2003, and conflicting national standards shall be withdrawn at the latest by May 2003.

This document supersedes ENV 1966:1995.

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, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This European Standard describes a test method to determine ability of a cured adhesive (possibly with a primer) to adhere to a substrate which has had a certain surface finish or with a specific surface preparation by using the "three point bending method".

It is only used for quality assurance and the substrate should be rigid or resistant enough to bending such as steel or aluminium alloys. For other substrates the thickness should be adjusted to the modulus of elasticity or a suitable stiffener should be used.

The adhesive should be polymerisable (curable) without pressure in order to obtain the thickness needed to provide sufficient rigidity, otherwise, a bonded reinforcing piece of the same type and same thickness as the substrate can be substituted for the bloc of adhesive.

It is not suitable for film adhesives.

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 923, *Adhesives — Terms and definitions*.

EN 10025, *Hot rolled products of non-alloy structural steels — Technical delivery conditions*.

EN 29142, *Adhesives — Guide to the selection of standard laboratory ageing conditions for testing bonded joints (ISO 9142:1990)*.

prEN 13887, *Structural adhesives — Guidelines for surface preparation of metals and plastics prior to adhesive bonding*

EN ISO 291, *Plastics — Standard atmospheres for conditioning and testing (ISO 291:1997)*.

EN ISO 10365, *Adhesives — Designation of main failure patterns (ISO 10365:1992)*.

EN 20286-1, *ISO system of limits and fits — Part 1: Bases of tolerances, deviations and fits (ISO 286-1:1998)*

3 Terms and definitions

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

3.1

interfacial zone

zone where the physical, chemical and mechanical properties are different from those of substrate, the adhesive or any coating applied before bonding