

**Liimid. Painduv-jäiga liimühendusega
teimikeha rebiteim. Osa 1: Rebimine 90-
kraadise nurga all**

Adhesives - Peel test for a flexible-bonded-to-rigid
test specimen assembly - Part 1: 90° peel

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 28510-1:2000 sisaldab Euroopa standardi EN 28510-1:1993 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 11.01.2000 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 28510-1:2000 consists of the English text of the European standard EN 28510-1:1993.</p> <p>This document is endorsed on 11.01.2000 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>Käsitlusala: See EN 28150 osa määrab kindlaks 90-kraadise nurga all rebimise teimi, määramaks spetsiaalsetel tingimustel rebimistugevust pötkliitega liimühenduses kahe substraadi vahel, millest vähemalt üks substraat on painduv.</p>	<p>Scope:</p>
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Võtmesõnad: liimid, liimühendused, plastid, rebiteimid

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English version

Adhesives

Peel test for a flexible-bonded-to-rigid test specimen assembly.

Part 1: 90° peel
(ISO 8510-1 : 1990)

Adhésifs; essai de pelage pour un
assemblage collé flexible-sur-rigide.
Partie 1: Pelage à 90° (ISO 8510-1 : 1990)

Klebstoffe; Schälprüfung für flexibel/
starr geklebte Proben. Teil 1: 90°-
Schälversuch (ISO 8510-1 : 1990)

This European Standard was approved by CEN on 1993-02-12 and is identical to the ISO Standard as referred to.

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CEN

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1 Scope

This part of ISO 8510 specifies a 90° peel test for the determination, under specified conditions, of the peel resistance of a bonded assembly of two adherends where at least one adherend is flexible. If a normal tensile testing machine is used for the test, the peel angle will not be constant at exactly 90°. If a constant angle of exactly 90° is required, a roller peeling device is used (see 4.1).

The 90° peel test is particularly suitable for use with less flexible adherends for which a 180° peel test is not suitable because the adherends crack, break or delaminate.

A 180° peel test is described in ISO 8510-2.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO 8510. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO 8510 are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 291:1977, *Plastics — Standard atmospheres for conditioning and testing*.

ISO 4588:1989, *Adhesives — Preparation of metal surfaces for adhesive bonding*.

ISO 5725:1986, *Precision of test methods — Determination of repeatability and reproducibility for a standard test method by inter-laboratory tests*.

3 Principle

A bonded assembly of two adherends is prepared using the adhesive under test. The adherends are then pulled apart at a substantially steady rate, starting at the open end of the bond, in such a way that separation occurs progressively along the length of the bonded adherends. The force is applied approximately normal to the plane of the bond, through the separated part of the flexible adherend.

4 Apparatus

4.1 Tensile testing machine (incorporating a roller peeling device if a constant peel angle of exactly 90° is required), capable of supplying a tensile force with a constant rate of grip separation. The machine shall be equipped with a force-measuring system complete with an indicator and/or a recorder. The indicated force shall not differ from the true applied force by more than 2 %. The response time of the machine shall be short enough not to affect the accuracy with which the force applied at the time of rupture can be measured. The force at rupture of the specimen shall lie in the range between 10 % and 80 % of the full-scale reading.

4.2 Grips, one of which shall be suitable for firmly clamping the rigid adherend (see 5.1.1), while the other shall be suitable for holding the flexible adherend (see 5.1.2), as shown in figure 1. The latter grip shall be self-aligning, so that the force will be exerted normal to the plane of the bond, and linked