

## **Windows - Determination of the resistance to static torsion**

Windows - Determination of the resistance to static  
torsion

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 14609:2004 sisaldab Euroopa standardi EN 14609:2004 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 23.09.2004 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 14609:2004 consists of the English text of the European standard EN 14609:2004.</p> <p>This document is endorsed on 23.09.2004 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 specifies the determination of resistance to static torsion of an open casement, expressed as loads and the resulting maximum and residual deformations. This European Standard applies to the opening modes specified in Figures A.1 to A.5 and included in EN 12519. This European Standard is not applicable to the sashes of sliding windows.</p>	<p><b>Scope:</b></p> <p>This European Standard specifies the determination of resistance to static torsion of an open casement, expressed as loads and the resulting maximum and residual deformations. This European Standard applies to the opening modes specified in Figures A.1 to A.5 and included in EN 12519. This European Standard is not applicable to the sashes of sliding windows.</p>
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**ICS** 91.060.50

**Võtmesõnad:**

English version

## Windows - Determination of the resistance to static torsion

Fenêtres - Détermination de la résistance à la torsion  
statique

Fenster - Ermittlung der Widerstandsfähigkeit gegen  
statische Verwindung

This European Standard was approved by CEN on 1 September 2003.

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.

CEN members are the national standards bodies of 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.



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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## Foreword

This document (EN 14609:2004) has been prepared by Technical Committee CEN/TC 33 “Doors, windows, shutters, building hardware and curtain walling”, the secretariat of which is held by AFNOR.

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 2004, and conflicting national standards shall be withdrawn at the latest by December 2004.

It is part of a series of standards for windows.

This document supersedes 8.2.1 Warping of EN 107:1980.

Annex A is normative.

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 the United Kingdom.

## 1 Scope

This European Standard specifies the determination of resistance to static torsion of an open casement, expressed as loads and the resulting maximum and residual deformations.

This European Standard applies to the opening modes specified in Figures A.1 to A.5 and included in EN 12519.

This European Standard is not applicable to the sashes of sliding windows.

## 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 12519, Windows and pedestrian doors – Terminology.

## 3 Terms and definitions

For the purposes of this European Standard, the terms and definitions given in EN 12519 apply, together with the following:

### 3.1 static torsion

twist induced in a casement by the application of a static load to an extreme free corner edge of that casement and normal to its plane when an adjacent corner edge is secured

## 4 Apparatus

A surrounding substantial steel frame with movable steel supports<sup>1)</sup> into which the sub-frames containing test specimens of various dimensions can be mounted.

Means for the application of forces with an accuracy of 5 % uniformly and without shock.

An analogue or digital measuring instrument for determining measurements with an accuracy of 0,1 mm.

## 5 Test specimen

The test specimen shall be supplied in a fully operable condition. It shall be suitable for fixing into the surround frame in accordance with the manufacturer's published recommendations or standardized instructions.

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1) A suitable frame would, for example, be of such stiffness that the mid span deflection of any member of the frame does not exceed 1/500 of its unsupported length under the action of a force of 1 kN applied at any point or direction perpendicular to the length of that member.