

**Windows - Soft and heavy body impact -
Test method, safety requirements and
classification**

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 13049:2003 sisaldab Euroopa standardi EN 13049:2003 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 16.05.2003 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 13049:2003 consists of the English text of the European standard EN 13049:2003.</p> <p>This document is endorsed on 16.05.2003 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>Käsitlusala: This European Standard specifies the test method, safety requirements and classification when determining the effect on a window impacted with a soft and heavy body. Any secondary moving sashes, casements or fixed lights which may be mounted internally to the main casements or sashes, shall also be similarly tested</p>	<p>Scope: This European Standard specifies the test method, safety requirements and classification when determining the effect on a window impacted with a soft and heavy body. Any secondary moving sashes, casements or fixed lights which may be mounted internally to the main casements or sashes, shall also be similarly tested</p>
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ICS 91.060.50

Võtmesõnad: classifications, glass fo, impact force, impact tests, materials testing, mechanical testing, quality assurance, safety, safety requirements, sliding windows, specification (approval), specifications, test equipment, test specimens, testing, testing devices, windows

ICS 91.060.50

English version

Windows - Soft and heavy body impact - Test method, safety requirements and classification

Fenêtres - Choc de corps mou ou lourd - Méthode d'essai, prescriptions de sécurité et classification

Fenster - Belastung mit einem weichen, schweren Stoßkörper - Prüfverfahren, Sicherheitsanforderungen und Klassifizierung

This European Standard was approved by CEN on 17 January 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 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.



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Foreword

This document (EN 13049:2003) 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 October 2003, and conflicting national standards shall be withdrawn at the latest by October 2003.

This European Standard is one of a series of standards for windows.

No existing European Standard is superseded.

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.

1 Scope

This European Standard specifies the test method, safety requirements and classification when determining the effect on a window impacted with a soft and heavy body. Any secondary moving sashes, casements or fixed lights which may be mounted internally to the main casements or sashes, shall also be similarly tested.

The test applies to all infill of whatever materials including glass. It is not intended to evaluate the strength of the glass when used as an infill. It is intended to assess the interactions between all components of a window with particular regard to safety in use.

The test has been devised to suit all window types, configurations and materials.

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).

ENV 1630, *Windows, doors and shutters — Burglar resistance — Test method for the determination of resistance to manual burglary attempts*

prEN 12519, *Doors and windows — Terminology*

EN 12600, *Glass in building — Pendulum test — Impact test method and classification for flat glass*

3 Terms and definitions

For the purposes of this European Standard, the terms and definitions in prEN 12519 apply.

4 Apparatus

The apparatus shall consist of a rigid surround frame into which the complete specimen can be mounted using the fixing system and devices provided by the manufacturer.

The impactor as specified in EN 12600 shall be mounted on a horizontal or vertical axis, as best befits the requirements of access to the impact point. In addition wires, pulleys, hooks and suitable height adjusting devices are needed, as specified in EN 12600.

5 Test specimen

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

The test specimen shall be provided with the most unfavourable glazing bead profile with infill to fit.

Storage and testing shall be carried out in a non-destructive environment within the ranges of 10 °C to 30 °C and 25 % to 75 % relative humidity.