

RIPPFASSAADID. LÖÖGIKINDLUS. TOIMIVUSNÕUDED

Curtain Walling - Impact resistance - Performance requirements

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

See Eesti standard EVS-EN 14019:2016 sisaldab Euroopa standardi EN 14019:2016 ingliskeelset teksti.	This Estonian standard EVS-EN 14019:2016 consists of the English text of the European standard EN 14019:2016.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 22.06.2016.	Date of Availability of the European standard is 22.06.2016.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile [standardiosakond@evs.ee](mailto:standardiosakond@evs.ee).

ICS 91.060.10

Standardite reprodutseerimise ja levitamise õigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonsesse süsteemi või edastamine ükskõik millises vormis või millisel teel ilma Eesti Standardikeskuse kirjaliku loata on keelatud.

Kui Teil on küsimusi standardite autorikaitse kohta, võtke palun ühendust Eesti Standardikeskusega:  
Koduleht [www.evs.ee](http://www.evs.ee); telefon 605 5050; e-post [info@evs.ee](mailto:info@evs.ee)

The right to reproduce and distribute standards belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without a written permission from the Estonian Centre for Standardisation.

If you have any questions about copyright, please contact Estonian Centre for Standardisation:

Homepage [www.evs.ee](http://www.evs.ee); phone +372 605 5050; e-mail [info@evs.ee](mailto:info@evs.ee)

English Version

## Curtain Walling - Impact resistance - Performance requirements

Façades rideaux - Résistance au choc - Prescriptions de performance

Vorhangfassaden - Stoßfestigkeit - Leistungsanforderungen, Prüfverfahren und Klassifizierung

This European Standard was approved by CEN on 29 April 2016.

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 CEN-CENELEC 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 CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION  
COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

<b>Contents</b>	<b>page</b>
<b>European foreword</b> .....	<b>3</b>
<b>1 Scope</b> .....	<b>4</b>
<b>2 Normative References</b> .....	<b>4</b>
<b>3 Terms and definitions</b> .....	<b>4</b>
<b>4 Failure criteria</b> .....	<b>4</b>
<b>5 Impact load positions</b> .....	<b>5</b>
<b>6 Test Method</b> .....	<b>6</b>
<b>7 Classification</b> .....	<b>7</b>
<b>8 Test report</b> .....	<b>8</b>
<b>Annex A (informative) Examples of test assembly and drop height</b> .....	<b>9</b>
<b>Annex B (informative) Correlation between impact classes (drop height and energy) and exposure categories – Application guidelines</b> .....	<b>11</b>
<b>Bibliography</b> .....	<b>12</b>

## European foreword

This document (EN 14019:2016) 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 document supersedes EN 14019:2004.

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 2016, and conflicting national standards shall be withdrawn at the latest by December 2016.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

The revision of this European Standard clarifies requirements, impact positions and the test method, but it does not affect existing test evidence of EN 14019. Two informative annexes have been added.

This European Standard is part of a series of European Standards dedicated to curtain walling products.

This European Standard forms part of a series of curtain walling tests as defined in the product standard EN 13830.

According to the CEN/CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

## 1 Scope

This European Standard defines performance requirements of curtain walling under impact load.

The mode of breakage of the glass has to be already assessed according to EN 12600.

Its criteria are targeted to safety in use and integrity of curtain walling in the event of sudden impact forces on the curtain wall surfaces. Compliance with the performance requirement is determined by the laboratory test.

It applies to those areas of curtain walling which face onto areas of human activity, either internally or externally and takes account of accidental impacts brought on by people going about their normal daily activities and impacts brought about by equipment and similar devices for maintenance, cleaning, repair and similar occasional activities.

It does not set out to define performance requirements of impact under exceptional circumstances such as acts of vandalism, vehicular collision, firearm projectiles, etc.

This standard will have no bearing whatsoever on any National Building / Health and Safety regulations which may exist and whose requirements have to apply separately and in parallel with these test performance requirements.

## 2 Normative References

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 1630, *Pedestrian doorsets, windows, curtain walling, grilles and shutters - Burglar resistance - Test method for the determination of resistance to manual burglary attempts*

EN 13119, *Curtain walling - 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 document, the terms and definitions given in EN 13119 and the following apply.

**3.1 component dislodgement**  
breaking away of any curtain wall component from the main construction, to the extent that the whole or part component falls off

## 4 Failure criteria

4.1 The curtain wall shall safely absorb the impact loads and shall retain its function in fulfilling the following criteria:

4.1.1 no part exceeding the mass of 50g shall fall down;

4.1.2 no holing shall occur permitting a test block E2 according with EN 1630 (ellipse) to be passed through it;