Curtain walling - Resistance to wind load - Performance requirements

FFSTI STANDARDI FFSSÕNA

NATIONAL FORFWORD

See Eesti standard EVS-EN 13116:2024 sisaldab Euroopa standardi EN 13116:2024 ingliskeelset teksti.

Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.

Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 14.02.2024.

Standard on kättesaadav Eesti Standardimis-ja Akrediteerimiskeskusest.

This Estonian standard EVS-EN 13116:2024 consists of the English text of the European standard EN 13116:2024.

This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.

Date of Availability of the European standard is 14.02.2024.

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EUROPEAN STANDARD NORME EUROPÉENNE

EN 13116

EUROPÄISCHE NORM

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Supersedes EN 13116:2001

English Version

Curtain walling - Resistance to wind load - Performance requirements

Façades rideaux - Résistance au vent - Exigences de performances

Vorhangfassaden - Widerstand gegen Windlast -Leistungsanforderungen

This European Standard was approved by CEN on 24 December 2023.

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.

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

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European foreword

This document (EN 13116:2024) 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 August 2024, and conflicting national standards shall be withdrawn at the latest by August 2024.

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

This document supersedes EN 13116:2001.

This document forms part of a series of European Standards dedicated to curtain walling products as defined in the curtain walling product standard EN 13830.

This document complements a series of curtain walling standards for performance requirements and methods of test as defined in the product standard EN 13830.

In comparison with the previous edition EN 13116:2001, the following modifications have been made:

- normative references updated;
- alignment of the deflection limits in accordance with EN 13830.

Any feedback and questions on this document should be directed to the users' national standards body. A complete listing of these bodies can be found on the CEN website.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

1 Scope

This document specifies the structural performance requirements of curtain walling under wind load, both its fixed and openable parts, under positive and negative static pressure.

This document applies to any curtain walling product as defined in EN 13830.

NOTE Due to the many diverse elevational layouts and dimensional variations which are accommodated by curtain walling installations, it is not practical to structurally classify the large variety of curtain walling systems and purpose designed constructions.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 12152, Curtain walling — Air permeability — Performance requirements and classification

EN 12179, Curtain walling — Resistance to wind load — Test method

EN 13830, Curtain walling — Product standard

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 12152 and the following apply. ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at https://www.iso.org/obp
- IEC Electropedia: available at https://www.electropedia.org/

3.1

test pressure

differential pressure between the two faces of the test specimen

Note 1 to entry: The test pressure is expressed in pascals (Pa).

3.2

positive static pressure

when outer face is subjected to higher pressure than inner face

3.3

negative static pressure

when inner face is subjected to higher pressure than outer face

3.4

design wind load

load represented in this test with positive and negative test pressures on the test specimen

Note 1 to entry: The design wind load is calculated following the procedure specified within Eurocode EN 1991-1-4.

3.5

increased wind load (safety wind load)

1,5 times design wind load