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Curtain walling - Air permeability - Test method

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

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English Version

## Curtain walling - Air permeability - Test method

Façades rideaux - Perméabilité à l'air - Méthode d'essai

Vorhangfassaden - Luftdurchlässigkeit - Prüfverfahren

This European Standard was approved by CEN on 5 June 2023.

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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 12153:2023) 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of an identical text or by endorsement, at the latest by January 2024, and conflicting national standards shall be withdrawn at the latest by January 2024.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 12153:2000.

The main changes compared to the previous edition are listed below:

- added a new test of air permeability at negative pressure and re-adapted the details of test report accordingly;
- editorial modifications to definitions, in order to make them compliant with the definitions of EN 12152.

This document contains a bibliography which provides for the inclusion of additional information in the expression of the test results.

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

This document forms part of a series of curtain walling performance requirements as defined in the product standard 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 defines the method to be used to determine the air permeability of curtain walling, both its fixed and openable parts. It describes how the specimen shall be tested under positive and negative air pressure.

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

## 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 13119, *Curtain walling - Terminology*

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 13119 and the following apply.

ISO and IEC maintain terminology 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, expressed in pascals (Pa)

### 3.2 positive pressure

when outer face is subjected to higher air pressure than the inner face

### 3.3 negative pressure

when the outer face is subjected to lower air pressure than the inner face

### 3.4 air permeability

passage of air through the construction of the curtain walling when subjected to air pressure

Note 1 to entry: The volume being expressed as a rate in cubic metres per hour ( $\text{m}^3/\text{h}$ ), this rate being related to the overall area of the curtain walling. Alternatively, the rate can be related to the metre length of joint.

### 3.5 fixed joint

all joints except those between openable parts of the curtain wall (see Figure 3)