



**SLOVENSKI STANDARD**  
**kSIST FprEN 12210:2015**  
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**Okna in vrata - Odpornost proti obremenitvam z vetrom - Klasifikacija**

Windows and doors - Resistance to wind load - Classification

Fenster und Türen - Widerstandsfähigkeit bei Windlast - Klassifizierung

Fenêtres et portes - Résistance au vent - Classification

**Ta slovenski standard je istoveten z: FprEN 12210**

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**ICS:**

91.060.50      Vrata in okna                      Doors and windows

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**FINAL DRAFT**  
**FprEN 12210**

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Will supersede EN 12210:1999

English Version

## Windows and doors - Resistance to wind load - Classification

Fenêtres et portes - Résistance au vent - Classification

Fenster und Türen - Widerstandsfähigkeit bei Windlast  
- Klassifizierung

This draft European Standard is submitted to CEN members for formal vote. It has been drawn up by the Technical Committee CEN/TC 33.

If this draft becomes a European Standard, 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.

This draft European Standard was established by CEN 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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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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

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## European foreword

This document (FprEN 12210:2015) 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 is currently submitted to the Formal Vote.

This document will supersede EN 12210:1999.

The revision of this European Standard clarifies only the classification and does not affect existing evidence of EN 12211.

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

In comparison with EN 12210:1999, the following significant changes were made:

- a) Clause 4: Class 0 deleted;
- b) Sub-clause 6.1 inserted;
- c) Sub-clause 6.2: Revision of the whole paragraph: Guidance NB-CPD/SG06/11/079 from Group of Notified Bodies for the Construction Products Directive 89/106/EEC included.

## FprEN 12210:2015 (E)

## 1 Scope

This European Standard defines the classification of test results for completely assembled windows and doors of any materials after testing in accordance with EN 12211.

## 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 referenced, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 1026, *Windows and doors — Air permeability — Test method*

EN 12207, *Windows and doors — Air permeability — Classification*

EN 12211, *Windows and doors — Resistance to wind load — Test method*

EN 12519, *Windows and pedestrian doors — Terminology*

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 12519 and EN 12211 apply.

## 4 Classification

EN 12211 describes a method of test to determine the limits (P1, P2 and P3) for the test specimen. These limits are expressed in Pascals (Pa). The relationships between the limits are:

- $P2 = 0,5 P1$ ;
- $P3 = 1,5 P1$ .

Classification shall be according to the results of wind resistance tests to positive and negative test pressures. Test pressures are given in Table 1.

NOTE This classification can be used with other relevant standards or codes of practice and can thus be used to provide correlation with actual exposure requirements.

**Table 1 — Classification of wind load**

Class	P1 Pa	P2 <sup>a</sup> Pa	P3 Pa
1	400	200	600
2	800	400	1200
3	1200	600	1800
4	1600	800	2400
5	2000	1000	3000
E xxxx <sup>b</sup>	xxxx		

<sup>a</sup> This pressure having been repeated 50 times.

<sup>b</sup> Test specimen tested with wind loading above class 5, where xxxx is the actual test pressure P1 (e.g. 2350).

## 5 Classification of relative frontal deflection

The relative frontal deflection of the most deforming framing member of the test specimen measured at test pressure P1 shall be classified as in Table 2.

**Table 2 — Classification of relative frontal deflection**

Class	Relative frontal deflection
A	$\leq 1/150$
B	$\leq 1/200$
C	$\leq 1/300$

## 6 Requirements

### 6.1 General

The following requirements shall also be met in order that the product can be classified.

### 6.2 Due to wind pressure P1 and P2

No visible failures (e.g. opening of the test specimen, loosening of the sash/casement or leaf, separation of hardware or glazing beads) when viewed by normal or corrected vision at a distance of 1 m in natural light.

The test specimen shall remain functional and the air permeability after tests P1 and P2 shall not exceed the upper limits of the claimed air permeability class as specified in EN 12207 by more than 20 %.

The claimed air permeability class can be determined by means of the air permeability test preceding the wind load test. Before the resistance to wind load test according to EN 12211, the air permeability test according to EN 1026 shall be completed. The results of the air permeability test determine the initial classification. When the air permeability is measured again after the wind loads P1 and P2 have been applied, the measured values for the repeated air permeability test shall not exceed the upper limits of the class for the air permeability claimed by the manufacturer by more than 20 % (following the previous classification rules used). However, if the upper limits of the class determined by the initial classification are exceeded by more than 20 %, the manufacturer may claim a lower air permeability class than that achieved in the initial classification. In these circumstances, the report shall state that if the manufacturer wishes to claim a class for the air permeability for the product, combined with a class for resistance to wind load, only the air permeability class achieved in relation to the wind load test may be claimed.

### 6.3 Due to wind pressure P3

Failures such as bending and/or twisting of any building hardware and splitting or cracking of framing members shall be permitted provided that no parts become detached and the test specimen remains closed. However if glass breaks it is permitted for it to be replaced and the test to be repeated once more.

If building hardware bends, twists or breaks leading to a failure (e.g. opening of the test specimen, loosening of the sash/casement or leaf, separation of hardware or glazing beads), the defective part may be replaced, but the full test has to be repeated.

## 7 Classification for resistance to wind load

Wind loads and relative frontal deflection shall be combined into one overall classification as indicated in Table 3.

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Only the greatest test deflection obtained from testing with positive and negative pressure at each pressure step requested by the manufacturer shall be used for overall classification. Therefore it is not permissible to take an average of the different results obtained from testing with positive and negative pressure.

**Table 3 — Resistance to wind load — Classification**

Wind load class	Relative frontal deflection		
	A	B	C
1	A1	B1	C1
2	A2	B2	C2
3	A3	B3	C3
4	A4	B4	C4
5	A5	B5	C5
Exxxx	AExxxx	BExxxx	CExxxx

NOTE In the resistance to wind load classification the number refers to the letter to the relative frontal deflection, see Table 2 and the wind load class, see Table 1.