



- Notified body No. 1390
- Certification body No. 3048
- Testing laboratory of physical properties of materials, structures and buildings

Váš dopis zn.:

Naše značka: 603/Hel/02/16

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**WALFER spol. s r.o.**

**756 03 Halenkov 051**

Subject: **Classification of windows**

I confirm the following classification of windows:

**Timber windows and casement doors type EURO IV-68**

Watertightness - Single-light casement windows - Class 9A – without water penetration into 600 Pa

Other windows and casement doors - Class 8A - without water penetration into 450 Pa

Resistance to wind load – Windows and casement doors - Class C3 – see Table 1, Table 2 and Table 3

**Timber windows and casement doors type EURO IV-78**

Watertightness - Windows - Class 9A – without water penetration into 600 Pa

Casement doors - Class 8A - without water penetration into 450 Pa

Resistance to wind load - Windows and casement doors - Class C4 – see Table 1, Table 2 and Table 3

**Table 1 — Classification of wind load**

Class	P1 Pa	P2 <sup>a</sup> Pa	P3 Pa
0	NOT TESTED		
1	400	200	600
2	800	400	1 200
3	1 200	600	1 800
4	1 600	800	2 400
5	2 000	1 000	3 000
E xxxx <sup>b</sup>	x xxx		

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

<sup>b</sup> Specimen tested with wind loading above class 5, Classified Exxxx – where xxxx is the actual test pressure P1 (e.g. 2 350 Pa etc.).

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

Class	Relative frontal deflection
A	≤ 1/150
B	≤ 1/200
C	≤ 1/300

**Table 2 — 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 wind load class, see Table 1 and the letter to the relative frontal deflection, see Table 2.

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).

For the purpose of these tests, three sets of test pressure are defined:

- P1 applied to measure deflections of parts of the test specimen;
- P2 pulsating pressure applied for 50 cycles to assess performance under repeated windloads;
- P3 applied to assess the safety of the test specimen under extreme conditions.

The values of P1, P2, P3 are related as follows:  $P2 = 0,5 P1$  and  $P3 = 1,5 P1$ .

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

Best regards

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