IV CE-PASSPORT CF 77

IV.1 GENERAL EXPLANATION ABOUT CLASSIFICATIONS

The different characteristics have been determined in accordance with EN 14351-1 (Windows and doors - Product standard, performance characteristics - Part 1: Windows and external pedestrian doorsets without resistance to fire and/or smoke leakage characteristics).

The numbers in the following tables (e.g. 4.2; 4.3,…) refer to the different chapters from EN 14351-1 which describe the different performance characteristics.

The classifications given in the next tables give the most general classifications and the test reports which are used to declare these characteristics. Other dimensions and/or other classifications are sometimes possible. When other requirements are necessary, please contact your Reynaers office.

It is evident that lower (worse) values than those indicated can be declared without further testing.

E.g. when wind load was tested till 1600Pa (class C4) also class C3 (1200Pa) or lower can be declared.

The tests were carried out in collaboration with Notified Bodies as indicated in EN 14351-1.

In IV.2 details about the Notified Bodies are given.

The different configurations are indicated in the table in chapter 3.

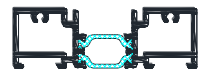
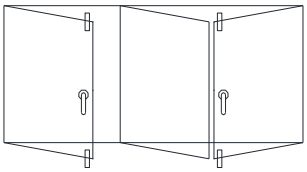
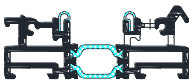
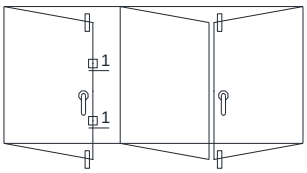
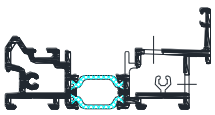
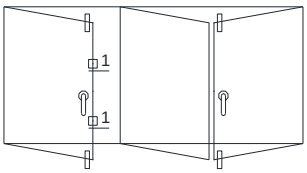
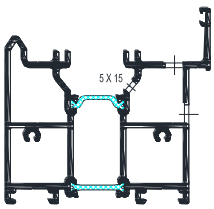
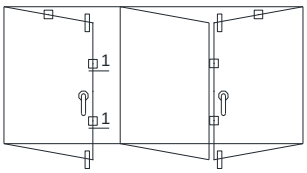
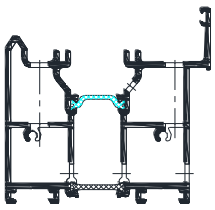
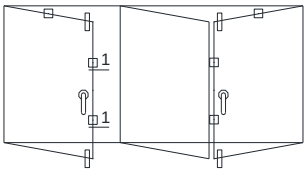
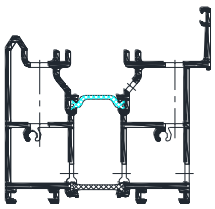
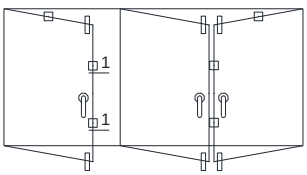
IV.2 NOTIFIED BODIES

SKG – notified body nr.0960
Nieuwe Kanaal 9F
Wageningen
Netherlands

BBRI – notified body nr. 1136
Rue du Lombard 42 Lombardstraat 42
1000 BRUXELLES-BRUSSEL
Belgium

IV.3 Opening type

In and outward opening

			Covered variants
 108.0934.XX	L1 		1-1-0 2-0-2/2-1-1/2-2-0 3-0-3/3-1-2/3-2-1/3-3-0 4-0-4/4-1-3/4-2-2/4-3-1/4-4-0 5-0-5/5-1-4/5-2-3/5-3-2/5-4-1/5-5-0 6-0-6/6-1-5/6-2-4/6-3-3/6-4-2/6-5-1/6-6-0 7-0-7/7-1-6/7-2-5/7-3-4/7-4-3/7-5-2/7-6-1/7-7-0 8-0-8/8-1-7/8-2-6/8-3-5/8-4-4/8-5-3/8-6-2/8-7-1/8-8-0
 108.1935.XX	L2 		1-1-0 2-0-2/2-1-1/2-2-0 3-0-3/3-1-2/3-2-1/3-3-0 4-0-4/4-1-3/4-2-2/4-3-1/4-4-0 5-0-5/5-1-4/5-2-3/5-3-2/5-4-1/5-5-0 6-0-6/6-1-5/6-2-4/6-3-3/6-4-2/6-5-1/6-6-0 7-0-7/7-1-6/7-2-5/7-3-4/7-4-3/7-5-2/7-6-1/7-7-0 8-0-8/8-1-7/8-2-6/8-3-5/8-4-4/8-5-3/8-6-2/8-7-1/8-8-0
 108.0945.XX	L3 		1-1-0 2-0-2/2-1-1/2-2-0 3-0-3/3-1-2/3-2-1/3-3-0 4-0-4/4-1-3/4-2-2/4-3-1/4-4-0 5-0-5/5-1-4/5-2-3/5-3-2/5-4-1/5-5-0 6-0-6/6-1-5/6-2-4/6-3-3/6-4-2/6-5-1/6-6-0 7-0-7/7-1-6/7-2-5/7-3-4/7-4-3/7-5-2/7-6-1/7-7-0 8-0-8/8-1-7/8-2-6/8-3-5/8-4-4/8-5-3/8-6-2/8-7-1/8-8-0
 108.0946.XX	L4 		1-1-0 2-0-2/2-1-1/2-2-0 3-0-3/3-1-2/3-2-1/3-3-0 4-0-4/4-1-3/4-2-2/4-3-1/4-4-0 5-0-5/5-1-4/5-2-3/5-3-2/5-4-1/5-5-0 6-0-6/6-1-5/6-2-4/6-3-3/6-4-2/6-5-1/6-6-0 7-0-7/7-1-6/7-2-5/7-3-4/7-4-3/7-5-2/7-6-1/7-7-0 8-0-8/8-1-7/8-2-6/8-3-5/8-4-4/8-5-3/8-6-2/8-7-1/8-8-0
 108.0946.XX	L5 		1-1-0 2-0-2/2-1-1/2-2-0 3-0-3/3-1-2/3-2-1/3-3-0 4-0-4/4-1-3/4-2-2/4-3-1/4-4-0 5-0-5/5-1-4/5-2-3/5-3-2/5-4-1/5-5-0 6-0-6/6-1-5/6-2-4/6-3-3/6-4-2/6-5-1/6-6-0 7-0-7/7-1-6/7-2-5/7-3-4/7-4-3/7-5-2/7-6-1/7-7-0 8-0-8/8-1-7/8-2-6/8-3-5/8-4-4/8-5-3/8-6-2/8-7-1/8-8-0
 108.0946.XX	L6 		1-1-0 2-0-2/2-1-1/2-2-0 3-0-3/3-1-2/3-2-1/3-3-0 4-0-4/4-1-3/4-2-2/4-3-1/4-4-0 5-0-5/5-1-4/5-2-3/5-3-2/5-4-1/5-5-0 6-0-6/6-1-5/6-2-4/6-3-3/6-4-2/6-5-1/6-6-0 7-0-7/7-1-6/7-2-5/7-3-4/7-4-3/7-5-2/7-6-1/7-7-0 8-0-8/8-1-7/8-2-6/8-3-5/8-4-4/8-5-3/8-6-2/8-7-1/8-8-0

IV.4 CHARACTERISTICS/CLASSIFICATIONS

Classifications for L1

No	Characteristic	Classification	Notified body - Report	Limits (mm)
4.2	Resistance to wind load (EN 12210)	**B2** (800Pa) Only for AP version	**SKG – 10.1155REV B**	**Vent: WxH≤1200x3000**
4.4	Reaction to fire	**Npd**		
4.5	Watertightness (EN 12208)	**Npd**		
4.6	Dangerous substances	In the materials delivered by Reynaers, no dangerous substances as indicated in EN14351-1 are used		
4.7	Impact resistance (EN 13049)	**Npd**		
4.8	Loadbearing capacity of safety devices (EN 14609)	**Npd**		
4.9	Heigth and width	**Heigth:** **Width:**	For definition: see Rule for definition of clear opening height and width	
4.11	Acoustic performance (EN ISO 140-3 & EN ISO 717-1)	**Npd**		
4.12	Thermal transmittance (EN ISO 10077-1)	Ud to be calculated in function of the project. Uf-values are calculated under certification of BCCA. Certificate BPCD-420-072-EN 10077-2 REYN-01, see separate U-value table.		
4.13	Radiation properties (EN 410)	These properties must be evaluated by the CE-label of the glass		
4.14	Air permeability (EN 12207)	**Npd**		
4.16	Operating forces (EN 12217)	**Npd**		
4.17	Mechanical strength (EN 1192)	**Npd**		
4.18	Ventilation	**Npd**		
4.19	Bullet resistance (EN 1522)	**Npd**		
4.20	Explosion resistance (EN 13123-1 & EN 13123-2)	**Npd**		
4.21	Resistance to repeated opening and closing (EN 12400)	**Npd**		
4.22	Behaviour between different climates (ENV 13420)	**Npd**		
4.23	Burglar resistance (EN 1627)	**RC 2**	**BBRI – CAR 10237-1 & 2 CAR 11294 Locking points: see catalogue**	**Vent: WxH≤1200x3000**

IV.4 CHARACTERISTICS/CLASSIFICATIONS

Classifications for L2

No	Characteristic	Classification	Notified body - Report	Limits (mm)
4.2	Resistance to wind load (EN 12210)	**B2** (800Pa)	**SKG – 10.1155REV B**	**Vent: WxH≤1200x3000**
4.4	Reaction to fire	Npd		
4.5	Watertightness (EN 12208)	**4A** (150Pa)	**SKG – 10.1155REV B**	**Vent: WxH≤1200x3000**
4.6	Dangerous substances	In the materials delivered by Reynaers, no dangerous substances as indicated in EN14351-1 are used		
4.7	Impact resistance (EN 13049)	**Class3**	**SKG – 11.186**	**Vent: WxH>1000x2250**
4.8	Loadbearing capacity of safety devices (EN 14609)	Npd		
4.9	Heigth and width	**Heigth:** **Width:**	For definition: see Rule for definition of clear opening height and width	
4.11	Acoustic performance (EN ISO 140-3 & EN ISO 717-1)	Npd		
4.12	Thermal transmittance (EN ISO 10077-1)	Ud to be calculated in function of the project. Uf-values are calculated under certification of BCCA. Certificate BPCD-420-072-EN 10077-2 REYN-01, see separate U-value table.		
4.13	Radiation properties (EN 410)	These properties must be evaluated by the CE-label of the glass		
4.14	Air permeability (EN 12207)	**2**	**SKG – 10.1155REV B**	**Vent: WxH≤1200x3000**
4.16	Operating forces (EN 12217)	**1**	**SKG – 10.1155REV B**	**Vent: WxH≤1200x3000**
4.17	Mechanical strength (EN 1192)	4	**SKG – 10.1155REV B**	**Vent: WxH≤1200x3000**
4.18	Ventilation	Npd		
4.19	Bullet resistance (EN 1522)	Npd		
4.20	Explosion resistance (EN 13123-1 & EN 13123-2)	Npd		
4.21	Resistance to repeated opening and closing (EN 12400)	**3** (20000)	**SKG – 09.1159**	**Vent: WxH≤754x2112**
4.22	Behaviour between different climates (ENV 13420)	Npd		
4.23	Burglar resistance (EN 1627)	**RC 2**	**BBRI – CAR 10237-1 & 2 CAR 11294 Locking points: see catalogue**	**Vent: WxH≤1200x3000**

Classifications for L3

No	Characteristic	Classification	Notified body - Report	Limits (mm)
4.2	Resistance to wind load (EN 12210)	**B2** (800Pa)	**SKG – 10.198**	**Vent: WxH≤1200x3000**
4.4	Reaction to fire	Npd		
4.5	Watertightness (EN 12208)	**5A** (200Pa)	**SKG – 10.198**	**Vent: WxH≤1200x3000**
4.6	Dangerous substances	In the materials delivered by Reynaers, no dangerous substances as indicated in EN14351-1 are used		
4.7	Impact resistance (EN 13049)	**Class3**	**SKG – 11.186**	**Vent: WxH>1000x2250**
4.8	Loadbearing capacity of safety devices (EN 14609)	Npd		
4.9	Heigth and width	**Heigth:** **Width:**	For definition: see Rule for definition of clear opening height and width	
4.11	Acoustic performance (EN ISO 140-3 & EN ISO 717-1)	Glass $R_w(C;C_{tr})$ / door $R_w(C;C_{tr})$ 35(-2;-6) ➔ 34(-2;-5) 45(-2;-6) ➔ 39(-1;-4) 50(-3;-8) ➔ 40(-1;-4)	**SKG – 11.167**	**Vent: 990x2246, other dimensions, see extrapollation rules**
4.12	Thermal transmittance (EN ISO 10077-1)	Ud to be calculated in function of the project. Uf-values are calculated under certification of BCCA. Certificate BPCD-420-072-EN 10077-2 REYN-01, see separate U-value table.		
4.13	Radiation properties (EN 410)	These properties must be evaluated by the CE-label of the glass		
4.14	Air permeability (EN 12207)	**2**	**SKG – 10.198**	**Vent: WxH≤1200x3000**
4.16	Operating forces (EN 12217)	**1**	**SKG – 10.1155REV B**	**Vent: WxH≤1200x3000**
4.17	Mechanical strength (EN 1192)	4	**SKG – 10.1155REV B**	**Vent: WxH≤1200x3000**
4.18	Ventilation	Npd		
4.19	Bullet resistance (EN 1522)	Npd		
4.20	Explosion resistance (EN 13123-1 & EN 13123-2)	Npd		
4.21	Resistance to repeated opening and closing (EN 12400)	**3** (20000)	**SKG – 09.1159**	**Vent: WxH≤754x2112**
4.22	Behaviour between different climates (ENV 13420)	Npd		
4.23	Burglar resistance (EN 1627)	**RC 2**	**BBRI – CAR 10237-1 & 2 CAR 11294 Locking points: see catalogue**	**Vent: WxH≤1200x3000**

Classifications for L4

No	Characteristic	Classification	Notified body - Report	Limits (mm)
4.2	Resistance to wind load (EN 12210)	**C2** (800Pa)	**SKG – 11.153**	**Vent: WxH≤1200x2500**
4.4	Reaction to fire	Npd		
4.5	Watertightness (EN 12208)	**7A** (300Pa)	**SKG – 11.153**	**Vent: WxH≤1200x2500**
4.6	Dangerous substances	In the materials delivered by Reynaers, no dangerous substances as indicated in EN14351-1 are used		
4.7	Impact resistance (EN 13049)	**Class3**	**SKG – 11.186**	**Vent: WxH>1000x2250**
4.8	Loadbearing capacity of safety devices (EN 14609)	Npd		
4.9	Heigth and width	**Heigth:** **Width:**	For definition: see Rule for definition of clear opening height and width	
4.11	Acoustic performance (EN ISO 140-3 & EN ISO 717-1)	Glass $R_w(C;C_{tr})$ / door $R_w(C;C_{tr})$ 35(-2;-6) ➔ 34(-2;-5) 45(-2;-6) ➔ 39(-1;-4) 50(-3;-8) ➔ 40(-1;-4)	**SKG – 11.167**	**Vent: 990x2246, other dimensions, see extrapollation rules**
4.12	Thermal transmittance (EN ISO 10077-1)	Ud to be calculated in function of the project. Uf-values are calculated under certification of BCCA. Certificate BPCD-420-072-EN 10077-2 REYN-01, see separate U-value table.		
4.13	Radiation properties (EN 410)	These properties must be evaluated by the CE-label of the glass		
4.14	Air permeability (EN 12207)	**3**	**SKG – 11.153**	**Vent: WxH≤1200x2500**
4.16	Operating forces (EN 12217)	**1**	**SKG – 10.1155REV B**	**Vent: WxH≤1200x3000**
4.17	Mechanical strength (EN 1192)	4	**SKG – 10.1155REV B**	**Vent: WxH≤1200x3000**
4.18	Ventilation	Npd		
4.19	Bullet resistance (EN 1522)	Npd		
4.20	Explosion resistance (EN 13123-1 & EN 13123-2)	Npd		
4.21	Resistance to repeated opening and closing (EN 12400)	**3** (20000)	**SKG – 09.1159**	**Vent: WxH≤754x2112**
4.22	Behaviour between different climates (ENV 13420)	Npd		
4.23	Burglar resistance (EN 1627)	**RC 2**	**BBRI – CAR 10237-1 & 2 CAR 11294 Locking points: see catalogue**	**Vent: WxH≤1200x3000**

Classifications for L5

No	Characteristic	Classification	Notified body - Report	Limits (mm)
4.2	Resistance to wind load (EN 12210)	**C2** (800Pa)	**SKG – 11.169**	**Vent: WxH≤1200x2500**
4.4	Reaction to fire	Npd		
4.5	Watertightness (EN 12208)	**8A** (450Pa)	**SKG – 11.169**	**Vent: WxH≤1200x2500**
4.6	Dangerous substances	In the materials delivered by Reynaers, no dangerous substances as indicated in EN14351-1 are used		
4.7	Impact resistance (EN 13049)	**Class3**	**SKG – 11.186**	**Vent: WxH>1000x2250**
4.8	Loadbearing capacity of safety devices (EN 14609)	Npd		
4.9	Heigth and width	**Heigth:** **Width:**	For definition: see Rule for definition of clear opening height and width	
4.11	Acoustic performance (EN ISO 140-3 & EN ISO 717-1)	Glass $R_w(C;C_{tr})$ / door $R_w(C;C_{tr})$ 35(-2;-6) ➔ 34(-2;-5) 45(-2;-6) ➔ 39(-1;-4) 50(-3;-8) ➔ 40(-1;-4)	**SKG – 11.167**	**Vent: 990x2246, other dimensions, see extrapollation rules**
4.12	Thermal transmittance (EN ISO 10077-1)	Ud to be calculated in function of the project. Uf-values are calculated under certification of BCCA. Certificate BPCD-420-072-EN 10077-2 REYN-01, see separate U-value table.		
4.13	Radiation properties (EN 410)	These properties must be evaluated by the CE-label of the glass		
4.14	Air permeability (EN 12207)	**4**	**SKG – 11.169**	**Vent: WxH≤1200x2500**
4.16	Operating forces (EN 12217)	**1**	**SKG – 10.1155REV B**	**Vent: WxH≤1200x3000**
4.17	Mechanical strength (EN 1192)	4	**SKG – 10.1155REV B**	**Vent: WxH≤1200x3000**
4.18	Ventilation	Npd		
4.19	Bullet resistance (EN 1522)	Npd		
4.20	Explosion resistance (EN 13123-1 & EN 13123-2)	Npd		
4.21	Resistance to repeated opening and closing (EN 12400)	**3** (20000)	**SKG – 09.1159**	**Vent: WxH≤754x2112**
4.22	Behaviour between different climates (ENV 13420)	Npd		
4.23	Burglar resistance (EN 1627)	**RC 2**	**BBRI – CAR 10237-1 & 2 CAR 11294 Locking points: see catalogue**	**Vent: WxH≤1200x3000**

Classifications for L6

No	Characteristic	Classification	Notified body - Report	Limits (mm)
4.2	Resistance to wind load (EN 12210)	**B3** (1200Pa) **C2** (800Pa)	**SKG – 11.176**	**Vent: WxH≤1200x2500**
4.4	Reaction to fire	Npd		
4.5	Watertightness (EN 12208)	**9A** (600Pa)	**SKG – 11.176**	**Vent: WxH≤1200x2500**
4.6	Dangerous substances	In the materials delivered by Reynaers, no dangerous substances as indicated in EN14351-1 are used		
4.7	Impact resistance (EN 13049)	**Class3**	**SKG – 11.186**	**Vent: WxH>1000x2250**
4.8	Loadbearing capacity of safety devices (EN 14609)	Npd		
4.9	Heigth and width	**Heigth:** **Width:**	For definition: see Rule for definition of clear opening height and width	
4.11	Acoustic performance (EN ISO 140-3 & EN ISO 717-1)	Glass $R_w(C;C_{tr})$ / door $R_w(C;C_{tr})$ 35(-2;-6) ➔ 34(-2;-5) 45(-2;-6) ➔ 39(-1;-4) 50(-3;-8) ➔ 40(-1;-4)	**SKG – 11.167**	**Vent: 990x2246, other dimensions, see extrapollation rules**
4.12	Thermal transmittance (EN ISO 10077-1)	Ud to be calculated in function of the project. Uf-values are calculated under certification of BCCA. Certificate BPCD-420-072-EN 10077-2 REYN-01, see separate U-value table.		
4.13	Radiation properties (EN 410)	These properties must be evaluated by the CE-label of the glass		
4.14	Air permeability (EN 12207)	**4**	**SKG – 11.176**	**Vent: WxH≤1200x2500**
4.16	Operating forces (EN 12217)	**1**	**SKG – 10.1155REV B**	**Vent: WxH≤1200x3000**
4.17	Mechanical strength (EN 1192)	4	**SKG – 10.1155REV B**	**Vent: WxH≤1200x3000**
4.18	Ventilation	Npd		
4.19	Bullet resistance (EN 1522)	Npd		
4.20	Explosion resistance (EN 13123-1 & EN 13123-2)	Npd		
4.21	Resistance to repeated opening and closing (EN 12400)	**3** (20000)	**SKG – 09.1159**	**Vent: WxH≤754x2112**
4.22	Behaviour between different climates (ENV 13420)	Npd		
4.23	Burglar resistance (EN 1627)	**RC 2**	**BBRI – CAR 10237-1 & 2 CAR 11294 Locking points: see catalogue**	**Vent: WxH≤1200x3000**

Rule for definition of clear opening height and width

The clear opening height g and clear opening width a are defined as indicated in following sketches out of EN 12519:2004

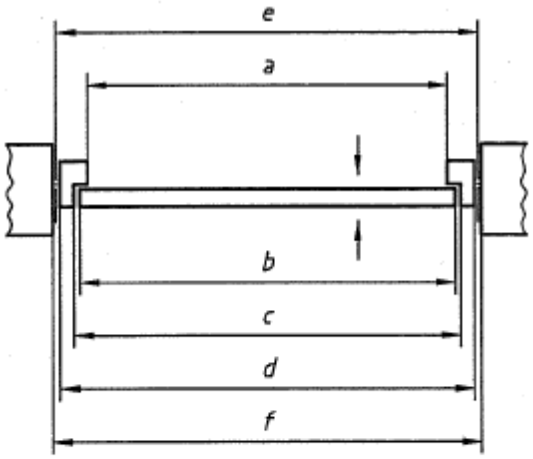


Figure 1/Figure 1/Bild 1

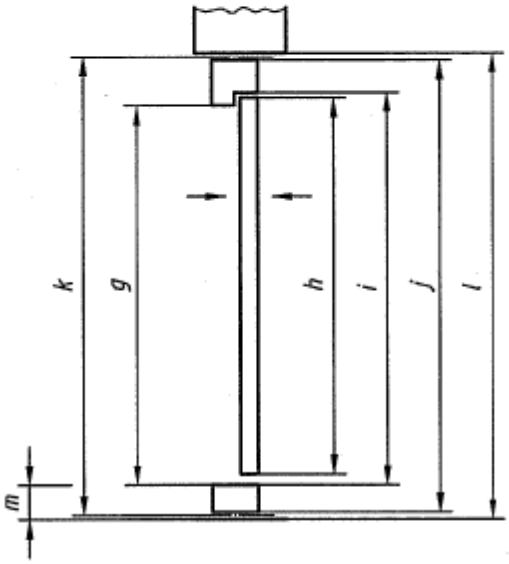


Figure 2/Figure 2/Bild 2

Extrapollation rules for acoustical values

For windows with other dimensions than indicated in the test dimensions, the measured values must be corrected with the values as indicated in following table

Size range	Sound insulation for window
-100% to +50% of test specimen overall area	Rw and Rw + Ctr as tested
+50% to +100% of test specimen overall area	Correct Rw and Rw + Ctr with -1 dB
+100% to +150% of test specimen overall area	Correct Rw and Rw + Ctr with -2 dB
>150% of test specimen overall area	Correct Rw and Rw + Ctr with -3 dB