

# CS 77 Doors

PRODUCT PASS

Date: **08-06-2023**

Language: **English**

**VITRUM**  
WINDOWS & DOORS



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## 1 GENERAL EXPLANATION

The following paragraphs indicate the performances which can be declared on the Declaration of Performance (DoP) in accordance with Regulation (EU) no. 305/2011 of the European Parliament and of the Council of 9 March 2011.

The listed characteristics are the essential characteristics for external pedestrian doorsets according to hEN 14351-1:2006+A2:2016 Windows and doors - Product standard, performance characteristics - Part 1: Windows and external pedestrian doorsets.

All essential characteristics should be mentioned on the DoP. Where no performance is required, NPD (No Performance Declared) can be used.

The mentioned performances are performances which can be achieved for the given dimensions when the product is fabricated following the Reynaers instruction manual (catalogue). The performances as mentioned will meet the requirements of the majority of projects.

Higher performances for smaller dimensions or lower performances for larger dimensions might be possible. In this case contact your Reynaers office. For AWW performances, the maximum dimensions indicated in the system catalogue must be respected.

It is obviously allowed to declare lower performances than those mentioned in the product pass. E.g. when resistance to wind load of 1600 Pa was tested, also 1200 Pa can be declared.

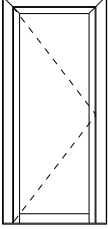
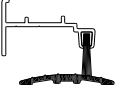

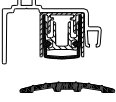
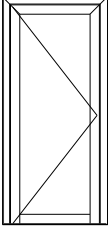
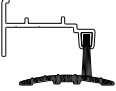

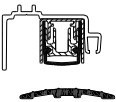
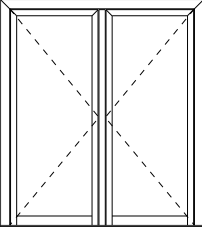
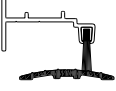

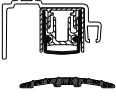
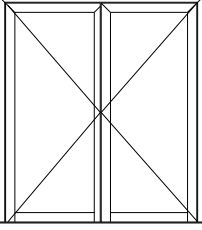
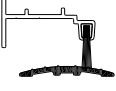

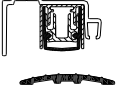
In the second part of the table the non-essential characteristics are indicated. These are the characteristics which give information about the performance of a product, but which are not legally required in any European country and thus not mandatory to declare.

## 2 NOTIFIED BODIES

ID	Name	Address	Country
0074	CENTRE D'EXPERTISE DU BÂTIMENT ET DES TRAVAUX PUBLICS	Domaine De Saint-Paul – 102, Route de Limours 78471 Saint-Remy-Les-Chevreuse Cedex	France
0432	MATERIALPRÜFUNGSAMT NORDRHEIN-WESTFALEN	Auf den Thränen 2 59597 Erwitte	Germany
0679	CENTRE SCIENTIFIQUE ET TECHNIQUE DU BÂTIMENT	84, Avenue Jean Jaurès Champs-sur-Marne F-77447 Marne-la-Vallée Cedex 2	France
0744	SOCOTEC	Les Quadrants – 3,Avenue du Centre – Guyancourt 78182 St-Quentin en Yvelines	France
0749	BELGIAN CONSTRUCTION CERTIFICATION ASSOCIATION	Aarlenstraat 53 1040 Brussel	Belgium
0757	IFT ROSENHEIM	Theodor-Gietl-Strasse 7-9 83026 Rosenheim	Germany
0845	DANISH INSTITUTE OF FIRE AND SECURITY TECHNOLOGY	Jernholmen, 12 2650 Hvidovre	Denmark
0960	SKG-IKOB	Poppenbouwing 56 4191 NZ Geldermalsen	Netherlands
1136	BELGIAN BUILDING RESEARCH INSITUTE	Lombardstraat 42 1000 Brussel	Belgium
1234	EFFECTIS NEDERLAND	Brandpuntlaan Zuid 16, Postbus 554 2665 ZN Bleiswijk	Netherlands
1288	WINTech ENGINEERING LIMITED	Halesfield 2 Telford,Shropshire TF7 4QH	United Kingdom
1309	PRÜFINSTITUT SCHLÖSSER UND BESCHLÄGE, VELBERT	Wallstrasse 41 42551 Velbert	Germany
1488	INSTYTUT TECHNIKI BUDOWLANEJ	ul. Filtrowa 1 00-611 Warszawa	Poland
1671	PEUTZ	Lindenlaan 41, Molenhoek PO Box 66 6585 ZH MOOK	Netherlands
1749	TNO DEFENCE, SECURITY AND SAFETY	Lange Kleiweg 137, Postbus 45 2280 AA Rijswijk	Netherlands
1769	UNIVERSITY OF GENT	Sint-Pietersnieuwstraat 41 9000 Gent	Belgium
2211	INSTITUTO DE INVESTIGAÇÃO E DESENVOLVIMENTO TECNOLÓGICO PARA A CONSTRUÇÃO, ENERGIA, AMBIENTE E SUSTENTABILIDADE	Rua Pedro Hispano Pólo II da Universidade de Coimbra 3030-289 Coimbra	Portugal

### 3 VARIANTS

Different variants have been grouped based on similar design and following the guidelines of the harmonised standard

Opening type	Covered variants		
 Single-inward opening	 5.1	 5.2	 5.3
 Single-outward opening	 5.4	 5.5	 5.6
 Double-inward opening	 5.7	 5.8	 5.9
 Double-outward opening	 5.10	 5.11	 5.12

Remark: the pictures shown of the different bottom solutions do not always represent the real bottom solution for this series, but are just a general sketch to give an indication which type of bottom solution is meant

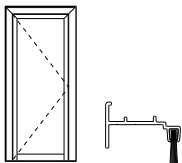
### 4 EXPLANATIONS AND SYMBOLS

- H: Element Height
- B: Element Width
- Fh: Vent Height
- Fb: Vent Width
- npd: No Performance Declared
- CWFT: Classification Without Further Testing

<sup>(1)</sup> Impact resistance only valid with tubular or L-shaped glazing beads

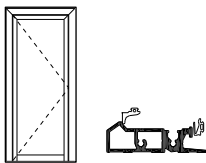
## 5 PERFORMANCE

### 5.1 Flush doors / Single-inward opening / Brush



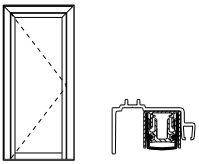
Characteristic		Performance	Notified body - Report	Limits (mm)	
<b>Essential characteristics</b>					
EN 14351-1	4.2	Resistance to wind load	<b>C2</b> (800 Pa)	[0960] - SKG/HRU/cbo/10.0106-1	FbxFh < 1352x2204
	4.5	Watertightness	<b>4A</b> (150 Pa)	[0960] - SKG/HRU/cbo/10.0106-1	FbxFh < 1352x2204
	4.6	Dangerous substances	In the materials delivered by Reynaers, no dangerous substances as indicated in hEN 14351-1 are used.		
	4.7	Impact resistance	<b>5</b> <sup>(1)</sup>	[0960] - 09.1170	FbxFh > 604x1739
	4.8	Load-bearing capacity of safety devices	<b>Pass</b>	[0960] - 12.1060 rev A	FbxFh < 1076x2600
	4.9	Height and Width	See 6		
	4.11	Acoustic performance	Doors: <b>23 (-1;-2)</b>	[0757] - 12-000113-PR02	FbxFh < 891x2068 ~ 1304x2942
	4.12	Thermal transmittance	Ud to be calculated in function of the project. Pre-calculated U-values for dimensions 1230x2180mm can be found in the Uf-value tables. Uf-values are calculated under certification of BCCA: certificate BPCB-420-72-10077/2.		
	4.13	Radiation properties	These properties must be evaluated by the CE-label of the glass		
	4.14	Air permeability	<b>2</b>	[0960] - SKG/HRU/cbo/10.0106-1	FbxFh < 1352x2204
<b>Non-essential characteristics</b>					
EN 14351-1	4.4.1	Reaction to fire	Anodized: <b>A1</b> Painted: <b>A2</b> Gaskets: <b>E</b>	EC decision 96/603/EC certificate EFR-21-001664A [0432] - 230006500-6	
	4.16	Operating forces	<b>2</b>	[0960] - 12.1060 rev A	FbxFh < 1076x2600 129 kg
	4.17	Mechanical strength	<b>4</b>	[0960] - 12.1060 rev A	FbxFh < 1076x2600 129 kg
	4.18	Ventilation	npd		
	4.19	Bullet resistance (BP version) (BP version)	<b>FB4</b> <b>FSG</b> <b>Kalashnikov</b>	ES-210614a ES-210722b ES-210722a	Remark: classes S or NS depending on ammunition
	4.20	Explosion resistance	npd		
	4.21	Resistance to repeated opening and closing	<b>6</b> (200 000)	[0960] - 12.1060 rev A	FbxFh < 1076x2600 129 kg
	4.22	Behaviour between different climates	npd		
	4.23	Burglar resistance (AP version) (AP version)	<b>RC2</b> <b>WK2/RC2</b> <b>RC3</b>	[0960] - SKGIKOB.0837.0285.06 [1309] - 22-27/10.122 [1136] - CAR 17266	See report

## 5.2 Flush doors / Single-inward opening / Bottom profile



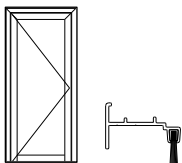
Characteristic		Performance		Notified body - Report	Limits (mm)	
<b>Essential characteristics</b>						
EN 14351-1	4.2	Resistance to wind load	<b>C2</b> (800 Pa)		[0960] - 15.00090	FbxFh < 1400x2600
	4.5	Watertightness	<b>7A</b> (300 Pa)		[0960] - 15.00090	FbxFh < 1400x2600
	4.6	Dangerous substances	In the materials delivered by Reynaers, no dangerous substances as indicated in hEN 14351-1 are used.			
	4.7	Impact resistance	<b>5</b> <sup>(1)</sup>		[0960] - 09.1170	FbxFh > 604x1739
	4.8	Load-bearing capacity of safety devices	<b>Pass</b>		[0960] - 12.1060 rev A	FbxFh < 1076x2600
	4.9	Height and Width	See 6			
	4.11	Acoustic performance	Glass: <b>34 (-1;-4)</b> <b>41 (-2;-4)</b> <b>50 (-2;-8)</b>	Doors: <b>36 (-2;-5)</b> <b>37 (-2;-4)</b> <b>41 (-1;-4)</b>	[0757] - 12-000113-PR02	FbxFh < 891x2068 ~ 1304x2942
	4.12	Thermal transmittance	Ud to be calculated in function of the project. Pre-calculated U-values for dimensions 1230x2180mm can be found in the Uf-value tables. Uf-values are calculated under certification of BCCA: certificate BPCB-420-72-10077/2.			
	4.13	Radiation properties	These properties must be evaluated by the CE-label of the glass			
	4.14	Air permeability	<b>4</b>		[0960] - 15.00090	FbxFh < 1400x2600
<b>Non-essential characteristics</b>						
EN 14351-1	4.4.1	Reaction to fire	Anodized: <b>A1</b> Painted: <b>A2</b> Gaskets: <b>E</b>	EC decision 96/603/EC certificate EFR-21-001664A [0432] - 230006500-6		
	4.16	Operating forces	<b>2</b>		[0960] - 12.1060 rev A	FbxFh < 1076x2600 129 kg
	4.17	Mechanical strength	<b>4</b>		[0960] - 12.1060 rev A	FbxFh < 1076x2600 129 kg
	4.18	Ventilation	npd			
	4.19	Bullet resistance (BP version) (BP version)	<b>FB4</b> <b>FSG</b> <b>Kalashnikov</b>		ES-210614a ES-210722b ES-210722a	Remark: classes S or NS depending on ammunition
	4.20	Explosion resistance	npd			
	4.21	Resistance to repeated opening and closing	<b>6</b> (200 000)		[0960] - 12.1060 rev A	FbxFh < 1076x2600 129 kg
	4.22	Behaviour between different climates	npd			
	4.23	Burglar resistance (AP version) (AP version)	<b>RC2</b> <b>WK2/RC2</b> <b>RC3</b>		[0960] - SKGIKOB.0837.0285.06 [1309] - 22-27/10.122 [1136] - CAR 17266	See report

### 5.3 Flush doors / Single-inward opening / Automatic bottom seal



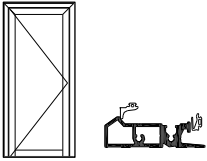
Characteristic		Performance		Notified body - Report	Limits (mm)	
<b>Essential characteristics</b>						
EN 14351-1	4.2	Resistance to wind load	<b>C2</b> (800 Pa)		[0960] - SKG/HRU/cbo/11.0635	FbxFh < 1352 x 2500
	4.5	Watertightness	<b>3A</b> (100 Pa)		[0960] - SKG/HRU/cbo/11.0635	FbxFh < 1352 x 2500
	4.6	Dangerous substances	In the materials delivered by Reynaers, no dangerous substances as indicated in hEN 14351-1 are used.			
	4.7	Impact resistance	<b>5</b> <sup>(1)</sup>		[0960] – 09.1170	FbxFh > 604x1739
	4.8	Load-bearing capacity of safety devices	<b>Pass</b>		[0960] - 12.1060 rev A	FbxFh < 1076x2600
	4.9	Height and Width	See 6			
	4.11	Acoustic performance	Glass: <b>34 (-1;-4)</b> <b>41 (-2;-4)</b> <b>50 (-2;-8)</b>	Doors: <b>33 (-2;-5)</b> <b>34 (0;-2)</b> <b>36 (0;-2)</b>	[0757] – 12-000113-PR02	FbxFh < 891x2068 ~ 1200x2942
	4.12	Thermal transmittance	Ud to be calculated in function of the project. Pre-calculated U-values for dimensions 1230x2180mm can be found in the Uf-value tables. Uf-values are calculated under certification of BCCA: certificate BPCB-420-72-10077/2.			
	4.13	Radiation properties	These properties must be evaluated by the CE-label of the glass			
	4.14	Air permeability	<b>2</b>		[0960] - SKG/HRU/cbo/11.0635	FbxFh < 1352 x 2500
<b>Non-essential characteristics</b>						
EN 14351-1	4.4.1	Reaction to fire	Anodized: <b>A1</b> Painted: <b>A2</b> Gaskets: <b>E</b>		EC decision 96/603/EC certificate EFR-21-001664A [0432] – 230006500-6	
	4.16	Operating forces	<b>2</b>		[0960] - 12.1060 rev A	FbxFh < 1076x2600 129 kg
	4.17	Mechanical strength	<b>4</b>		[0960] - 12.1060 rev A	FbxFh < 1076x2600 129 kg
	4.18	Ventilation	npd			
	4.19	Bullet resistance (BP version) (BP version)	<b>FB4</b> <b>FSG</b> <b>Kalashnikov</b>		ES-210614a ES-210722b ES-210722a	Remark: classes S or NS depending on ammunition
	4.20	Explosion resistance	npd			
	4.21	Resistance to repeated opening and closing	<b>6</b> (200 000)		[0960] - 12.1060 rev A	FbxFh < 1076x2600 129 kg
	4.22	Behaviour between different climates	npd			
	4.23	Burglar resistance (AP version) (AP version)	<b>RC2</b> <b>WK2/RC2</b> <b>RC3</b>		[0960] – SKGIKOB.0837.0285.06 [1309] - 22-27/10.122 [1136] – CAR 17266	See report

#### 5.4 Flush doors / Single-outward opening / Brush



Characteristic		Performance	Notified body - Report	Limits (mm)	
<b>Essential characteristics</b>					
EN 14351-1	4.2	Resistance to wind load	<b>C2</b> (800 Pa)	[0960] - SKG/HRU/cbo/10.0106-1 FbxFh < 1352x2204	
	4.5	Watertightness	<b>4A</b> (150 Pa)	[0960] - SKG/HRU/cbo/10.0106-1 FbxFh < 1352x2204	
	4.6	Dangerous substances	In the materials delivered by Reynaers, no dangerous substances as indicated in hEN 14351-1 are used.		
	4.7	Impact resistance	<b>5</b> <sup>(1)</sup>	[0960] – 09.1170 FbxFh > 604x1739	
	4.8	Load-bearing capacity of safety devices	<b>Pass</b>	[0960] – 15.00320 FbxFh < 1408x3008	
	4.9	Height and Width	See 6		
	4.11	Acoustic performance	Doors: <b>23 (-1;-2)</b>	[0757] – 12-000113-PR02 FbxFh < 891x2068 ~ 1304x2942	
	4.12	Thermal transmittance	Ud to be calculated in function of the project. Pre-calculated U-values for dimensions 1230x2180mm can be found in the Uf-value tables. Uf-values are calculated under certification of BCCA: certificate BPCB-420-72-10077/2.		
	4.13	Radiation properties	These properties must be evaluated by the CE-label of the glass		
	4.14	Air permeability	<b>2</b>	[0960] - SKG/HRU/cbo/10.0106-1 FbxFh < 1352x2204	
<b>Non-essential characteristics</b>					
EN 14351-1	4.4.1	Reaction to fire	Anodized: <b>A1</b> Painted: <b>A2</b> Gaskets: <b>E</b>	EC decision 96/603/EC certificate EFR-21-001664A [0432] – 230006500-6	
	4.16	Operating forces	<b>2</b>	[0960] – 15.00320 FbxFh < 1408x3008 255 kg	
	4.17	Mechanical strength	<b>4</b>	[0960] – 15.00320 FbxFh < 1408x3008 255 kg	
	4.18	Ventilation	npd		
	4.19	Bullet resistance (BP version) (BP version)	<b>FB4</b> <b>FSG</b> <b>Kalashnikov</b>	ES-210614a ES-210722b ES-210722a	Remark: classes S or NS depending on ammunition
	4.20	Explosion resistance	npd		
	4.21	Resistance to repeated opening and closing	<b>8</b> (1.000.000)	[0960] – 15.00320 FbxFh < 1408x3008 255 kg	
	4.22	Behaviour between different climates	npd		
	4.23	Burglar resistance (AP version) (AP version)	<b>RC2</b> <b>WK2/RC2</b> <b>RC3</b>	[0960] – SKGIKOB.0837.0285.06 [1309] - 22-27/10.122 [1136] – CAR 17266	See report

5.5 Flush doors / Single-outward opening / Bottom profile

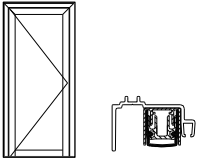


Characteristic		Performance		Notified body - Report	Limits (mm)	
<b>Essential characteristics</b>						
EN 14351-1	4.2	Resistance to wind load	<b>C3</b> (1200 Pa) <b>C2</b> (800 Pa)	[0960] – 12.1063 [0960] – 23.00580	FbxFh < 1400x3000 FbxFh < 1086x2360	
	4.5	Watertightness	<b>4A</b> (150 Pa) <b>9A</b> (600 Pa)	[0960] – 12.1063 [0960] – 23.00580	FbxFh < 1400x3000 FbxFh < 1086x2360	
	4.6	Dangerous substances	In the materials delivered by Reynaers, no dangerous substances as indicated in hEN 14351-1 are used.			
	4.7	Impact resistance	<b>5</b> <sup>(1)</sup>	[0960] – 09.1170	FbxFh > 604x1739	
	4.8	Load-bearing capacity of safety devices	<b>Pass</b>	[0960] – 15.00320	FbxFh < 1408x3008	
	4.9	Height and Width	See 6			
	4.11	Acoustic performance	Glass: <b>34 (-1;-4)</b> <b>41 (-2;-4)</b> <b>50 (-2;-8)</b>	Doors: <b>36 (-2;-5)</b> <b>37 (-2;-4)</b> <b>41 (-1;-4)</b>	[0757] – 12-000113- PR02	FbxFh < 891x2068 ~ 1304x2942
	4.12	Thermal transmittance	Ud to be calculated in function of the project. Pre-calculated U-values for dimensions 1230x2180mm can be found in the Uf-value tables. Uf-values are calculated under certification of BCCA: certificate BPCB-420-72-10077/2.			
	4.13	Radiation properties	These properties must be evaluated by the CE-label of the glass			
	4.14	Air permeability	<b>4</b>	[0960] – 12.1063 [0960] – 23.00580	FbxFh < 1400x3000 FbxFh < 1086x2360	
<b>Non-essential characteristics</b>						
EN 14351-1	4.4.1	Reaction to fire	Anodized: <b>A1</b> Painted: <b>A2</b> Gaskets: <b>E</b>	EC decision 96/603/EC certificate EFR-21-001664A [0432] – 230006500-6		
	4.16	Operating forces	<b>2</b>	[0960] – 15.00320	FbxFh < 1408x3008 255 kg	
	4.17	Mechanical strength	<b>4</b>	[0960] – 15.00320	FbxFh < 1408x3008 255 kg	
	4.18	Ventilation	npd			
	4.19	Bullet resistance (BP version) (BP version)	<b>FB4</b> <b>FSG</b> <b>Kalashnikov</b>	ES-210614a ES-210722b ES-210722a	Remark: classes S or NS depending on ammunition	
	4.20	Explosion resistance	npd			
	4.21	Resistance to repeated opening and closing	<b>8</b> (1.000.000)	[0960] – 15.00320	FbxFh < 1408x3008 255 kg	
	4.22	Behaviour between different climates	npd			
	4.23	Burglar resistance (AP version) (AP version)	<b>RC2</b> <b>WK2/RC2</b> <b>RC3</b>	[0960] – SKGIKOB.0837.0285.06 [1309] - 22-27/10.122 [1136] – CAR 17266	See report	

<sup>(2)</sup> Air permeability only valid for positive pressure

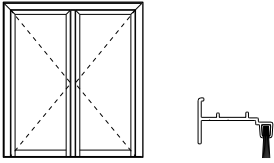


5.6 Flush doors / Single-outward opening / Automatic bottom seal



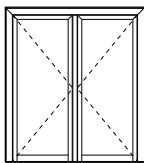
Characteristic		Performance		Notified body - Report	Limits (mm)	
<b>Essential characteristics</b>						
EN 14351-1	4.2	Resistance to wind load	<b>C2</b> (800 Pa)		[0960] - SKG/HRU/cbo/11.0635	FbxFh < 1352x2500
	4.5	Watertightness	<b>3A</b> (100 Pa)		[0960] - SKG/HRU/cbo/11.0635	FbxFh < 1352x2500
	4.6	Dangerous substances	In the materials delivered by Reynaers, no dangerous substances as indicated in hEN 14351-1 are used.			
	4.7	Impact resistance	<b>5</b> <sup>(1)</sup>		[0960] – 09.1170	FbxFh > 604x1739
	4.8	Load-bearing capacity of safety devices	<b>Pass</b>		[0960] – 15.00320	FbxFh < 1408x3008
	4.9	Height and Width	See 6			
	4.11	Acoustic performance	Glass: <b>34 (-1;-4)</b> <b>41 (-2;-4)</b> <b>50 (-2;-8)</b>	Doors: <b>33 (-2;-5)</b> <b>34 (0;-2)</b> <b>36 (0;-2)</b>	[0757] – 12-000113-PR02	FbxFh < 891x2068 ~ 1200x2942
	4.12	Thermal transmittance	Ud to be calculated in function of the project. Pre-calculated U-values for dimensions 1230x2180mm can be found in the Uf-value tables. Uf-values are calculated under certification of BCCA: certificate BPCB-420-72-10077/2.			
	4.13	Radiation properties	These properties must be evaluated by the CE-label of the glass			
	4.14	Air permeability	<b>2</b>		[0960] - SKG/HRU/cbo/11.0635	FbxFh < 1352x2500
<b>Non-essential characteristics</b>						
EN 14351-1	4.4.1	Reaction to fire	Anodized: <b>A1</b> Painted: <b>A2</b> Gaskets: <b>E</b>	EC decision 96/603/EC certificate EFR-21-001664A [0432] – 230006500-6		
	4.16	Operating forces	<b>2</b>		[0960] – 15.00320	FbxFh < 1408x3008 255 kg
	4.17	Mechanical strength	<b>4</b>		[0960] – 15.00320	FbxFh < 1408x3008 255 kg
	4.18	Ventilation	npd			
	4.19	Bullet resistance (BP version) (BP version)	<b>FB4</b> <b>FSG</b> <b>Kalashnikov</b>		ES-210614a ES-210722b ES-210722a	Remark: classes S or NS depending on ammunition
	4.20	Explosion resistance	npd			
	4.21	Resistance to repeated opening and closing	<b>8</b> (1.000.000)		[0960] – 15.00320	FbxFh < 1408x3008 255 kg
	4.22	Behaviour between different climates	npd			
	4.23	Burglar resistance (AP version) (AP version)	<b>RC2</b> <b>WK2/RC2</b> <b>RC3</b>		[0960] – SKGIKOB.0837.0285.06 [1309] - 22-27/10.122 [1136] – CAR 17266	See report

5.7 Flush doors / Double-inward opening / Brush



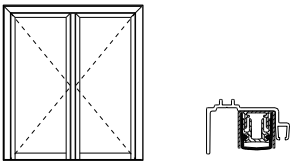
Characteristic		Performance	Notified body - Report	Limits (mm)	
<b>Essential characteristics</b>					
EN 14351-1	4.2	Resistance to wind load	<b>B2</b> (800 Pa)	[0960] - SKG/HRU/cbo/10.0106-4	FbxFh < 1352 x 2350
	4.5	Watertightness	<b>3A</b> (100 Pa)	[0960] - SKG/HRU/cbo/10.0106-4	FbxFh < 1352 x 2350
	4.6	Dangerous substances	In the materials delivered by Reynaers, no dangerous substances as indicated in hEN 14351-1 are used.		
	4.7	Impact resistance	<b>5</b> <sup>(1)</sup>	[0960] - SKG/HRU/age/12.0648	FbxFh > 649x1744
	4.8	Load-bearing capacity of safety devices	<b>Pass</b>	[0960] - 19.00838	FbxFh < 1400x3000
	4.9	Height and Width	See 6		
	4.11	Acoustic performance	Doors: <b>23 (-1;-2)</b>	[0757] - 12-000113-PR02	FbxFh < 891x2068 ~ 1279x2452
	4.12	Thermal transmittance	Ud to be calculated in function of the project. Pre-calculated U-values for dimensions 1230x2180mm can be found in the Uf-value tables. Uf-values are calculated under certification of BCCA: certificate BPCB-420-72-10077/2.		
	4.13	Radiation properties	These properties must be evaluated by the CE-label of the glass		
	4.14	Air permeability	<b>2</b>	[0960] - SKG/HRU/cbo/10.0106-4	FbxFh < 1352 x 2350
<b>Non-essential characteristics</b>					
EN 14351-1	4.4.1	Reaction to fire	Anodized: <b>A1</b> Painted: <b>A2</b> Gaskets: <b>E</b>	EC decision 96/603/EC certificate EFR-21-001664A [0432] - 230006500-6	
	4.16	Operating forces	<b>2</b>	R16893	FbxFh < 1150x2740
	4.17	Mechanical strength	<b>4</b>	[0960] - 19.00838	FbxFh < 1400x3000 353 kg
	4.18	Ventilation	npd		
	4.19	Bullet resistance (BP version) (BP version)	npd		
	4.20	Explosion resistance	npd		
	4.21	Resistance to repeated opening and closing	<b>7</b> (500 000)	[0960] - 19.00838	FbxFh < 1400x3000 353 kg
	4.22	Behaviour between different climates	npd		
	4.23	Burglar resistance (AP version) (AP version)	<b>RC2</b> <b>WK2/RC2</b> <b>RC3</b>	[0960] - SKGIKOB.0837.0285.06 [1309] - 22-27/10.122 [1136] - CAR 17266	See report

### 5.8 Flush doors / Double-inward opening / Bottom profile



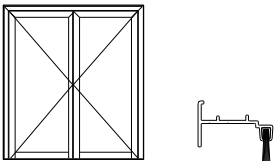
Characteristic		Performance		Notified body - Report	Limits (mm)		
<b>Essential characteristics</b>							
EN 14351-1	4.2	Resistance to wind load	<b>C2</b> (800 Pa)		[0960] – 15.00081-Rev A	FbxFh < 1339x2352.5	
	4.5	Watertightness	<b>6A</b> (250 Pa)		[0960] – 15.00081-Rev A	FbxFh < 1339x2352.5	
	4.6	Dangerous substances	In the materials delivered by Reynaers, no dangerous substances as indicated in hEN 14351-1 are used.				
	4.7	Impact resistance	<b>5</b> <sup>(1)</sup>	[0960] – SKG/HRU/age/12.0648		FbxFh > 649x1744	
	4.8	Load-bearing capacity of safety devices	<b>Pass</b>		[0960] – 19.00838	FbxFh < 1400x3000	
	4.9	Height and Width	See 6				
	4.11	Acoustic performance	Glass: <b>34 (-1;-4)</b> <b>41 (-2;-4)</b> <b>50 (-2;-8)</b>	Doors: <b>35 (-3;-6)</b> <b>36 (-3;-5)</b> <b>40 (-1;-3)</b>	[0757] – 12-000113-PR02		FbxFh < 891x2068 ~ 1279x2452
	4.12	Thermal transmittance	Ud to be calculated in function of the project. Pre-calculated U-values for dimensions 2000x2180mm can be found in the Uf-value tables. Uf-values are calculated under certification of BCCA: certificate BPCB-420-72-10077/2.				
	4.13	Radiation properties	These properties must be evaluated by the CE-label of the glass				
	4.14	Air permeability	<b>3</b>	[0960] – 15.00081-Rev A		FbxFh < 1339x2352.5	
<b>Non-essential characteristics</b>							
EN 14351-1	4.4.1	Reaction to fire	Anodized: <b>A1</b> Painted: <b>A2</b> Gaskets: <b>E</b>	EC decision 96/603/EC certificate EFR-21-001664A [0432] – 230006500-6			
	4.16	Operating forces	<b>2</b>	R16893		FbxFh < 1150x2740	
	4.17	Mechanical strength	<b>4</b>	[0960] – 19.00838		FbxFh < 1400x3000 353 kg	
	4.18	Ventilation	npd				
	4.19	Bullet resistance (BP version) (BP version)	npd				
	4.20	Explosion resistance	npd				
	4.21	Resistance to repeated opening and closing	<b>7</b> (500 000)	[0960] – 19.00838		FbxFh < 1400x3000 353 kg	
	4.22	Behaviour between different climates	npd				
	4.23	Burglar resistance (AP version) (AP version)	<b>RC2</b> <b>WK2/RC2</b> <b>RC3</b>	[0960] – SKGIKOB.0837.0285.06 [1309] - 22-27/10.122 [1136] – CAR 17266		See report	

**5.9 Flush doors / Double-inward opening / Automatic bottom seal**



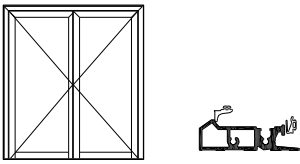
Characteristic		Performance		Notified body - Report	Limits (mm)	
<b>Essential characteristics</b>						
EN 14351-1	4.2	Resistance to wind load	<b>B2</b> (800 Pa)		[0960] – SKG/HRU/cbo/11.0632 FbxFh < 1352x2500	
	4.5	Watertightness	<b>3A</b> (100 Pa)		[0960] – SKG/HRU/cbo/11.0632 FbxFh < 1352x2500	
	4.6	Dangerous substances	In the materials delivered by Reynaers, no dangerous substances as indicated in hEN 14351-1 are used.			
	4.7	Impact resistance	<b>5</b> <sup>(1)</sup>		[0960] – SKG/HRU/age/12.0648 FbxFh > 649x1744	
	4.8	Load-bearing capacity of safety devices	<b>Pass</b>		[0960] – 19.00838 FbxFh < 1400x3000	
	4.9	Height and Width	See 6			
	4.11	Acoustic performance	Glass: <b>34 (-1;-4)</b> <b>41 (-2;-4)</b> <b>50 (-2;-8)</b>	Doors: <b>33 (-2;-5)</b> <b>34 (0;-2)</b> <b>36 (0;-2)</b>	[0757] – 12-000113-PR02	FbxFh < 891x2062 ~ 1200x2452
	4.12	Thermal transmittance	Ud to be calculated in function of the project. Pre-calculated U-values for dimensions 2000x2180mm can be found in the Uf-value tables. Uf-values are calculated under certification of BCCA: certificate BPCB-420-72-10077/2.			
	4.13	Radiation properties	These properties must be evaluated by the CE-label of the glass			
	4.14	Air permeability	<b>2</b>		[0960] – SKG/HRU/cbo/11.0632 FbxFh < 1352x2500	
<b>Non-essential characteristics</b>						
EN 14351-1	4.4.1	Reaction to fire	Anodized: <b>A1</b> Painted: <b>A2</b> Gaskets: <b>E</b>	EC decision 96/603/EC certificate EFR-21-001664A [0432] – 230006500-6		
	4.16	Operating forces	<b>2</b>		R16893 FbxFh < 1150x2740	
	4.17	Mechanical strength	<b>4</b>		[0960] – 19.00838 FbxFh < 1400x3000 353 kg	
	4.18	Ventilation	npd			
	4.19	Bullet resistance (BP version) (BP version)	npd			
	4.20	Explosion resistance	npd			
	4.21	Resistance to repeated opening and closing	<b>7</b> (500 000)		[0960] – 19.00838 FbxFh < 1400x3000 353 kg	
	4.22	Behaviour between different climates	npd			
	4.23	Burglar resistance (AP version) (AP version)	<b>RC2</b> <b>WK2/RC2</b> <b>RC3</b>		[0960] – SKGIKOB.0837.0285.06 [1309] - 22-27/10.122 [1136] – CAR 17266	See report

5.10 Flush doors / Double-outward opening / Brush



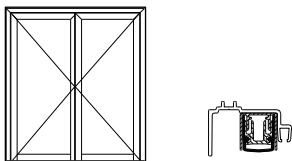
Characteristic		Performance	Notified body - Report	Limits (mm)	
<b>Essential characteristics</b>					
<b>EN 14351-1</b>	4.2	Resistance to wind load	<b>B2</b> (800 Pa)	[0960] - SKG/HRU/cbo/10.0106-4 FbxFh < 1352x2350	
	4.5	Watertightness	<b>4A</b> (150 Pa)	[0960] - SKG/HRU/cbo/10.0106-4 FbxFh < 1352x2350	
	4.6	Dangerous substances	In the materials delivered by Reynaers, no dangerous substances as indicated in hEN 14351-1 are used.		
	4.7	Impact resistance	<b>5</b> <sup>(1)</sup>	[0960] - SKG/HRU/age/12.0648 FbxFh > 649x1744	
	4.8	Load-bearing capacity of safety devices	<b>Pass</b>	[0960] - 19.00838 FbxFh < 1400x3000	
	4.9	Height and Width	See 6		
	4.11	Acoustic performance	Doors: <b>23 (-1;-2)</b>	[0757] - 12-000113-PR02 FbxFh < 891x2068 ~ 1279x2452	
	4.12	Thermal transmittance	Ud to be calculated in function of the project. Pre-calculated U-values for dimensions 1230x2180mm can be found in the Uf-value tables. Uf-values are calculated under certification of BCCA: certificate BPCB-420-72-10077/2.		
	4.13	Radiation properties	These properties must be evaluated by the CE-label of the glass		
	4.14	Air permeability	<b>2</b>	[0960] - SKG/HRU/cbo/10.0106-4 FbxFh < 1352x2350	
<b>Non-essential characteristics</b>					
<b>EN 14351-1</b>	4.4.1	Reaction to fire	Anodized: <b>A1</b> Painted: <b>A2</b> Gaskets: <b>E</b>	EC decision 96/603/EC certificate EFR-21-001664A [0432] - 230006500-6	
	4.16	Operating forces	<b>2</b>	R16893 FbxFh < 1150x2740	
	4.17	Mechanical strength	<b>4</b>	[0960] - 19.00838 FbxFh < 1400x3000 353 kg	
	4.18	Ventilation	npd		
	4.19	Bullet resistance (BP version) (BP version)	npd		
	4.20	Explosion resistance	npd		
	4.21	Resistance to repeated opening and closing	<b>7</b> (500 000)	[0960] - 19.00838 FbxFh < 1400x3000 353 kg	
	4.22	Behaviour between different climates	npd		
	4.23	Burglar resistance (AP version) (AP version)	<b>RC2</b> <b>WK2/RC2</b> <b>RC3</b>	[0960] - SKGIKOB.0837.0285.06 [1309] - 22-27/10.122 [1136] - CAR 17266 See report	

5.11 Flush doors / Double-outward opening / Bottom profile



Characteristic		Performance		Notified body - Report	Limits (mm)	
<b>Essential characteristics</b>						
EN 14351-1	4.2	Resistance to wind load	<b>C2</b> (800 Pa)		[1488] – LK02-00948/15/R84NK	FbxFh < 1339x2352.5
	4.5	Watertightness	<b>7A</b> (300 Pa)		[1488] – LK02-00948/15/R84NK	FbxFh < 1339x2352.5
	4.6	Dangerous substances	In the materials delivered by Reynaers, no dangerous substances as indicated in hEN 14351-1 are used.			
	4.7	Impact resistance	<b>5</b> <sup>(1)</sup>		[0960] – SKG/HRU/age/12.0648	FbxFh > 649x1744
	4.8	Load-bearing capacity of safety devices	<b>Pass</b>		[0960] – 19.00838	FbxFh < 1400x3000
	4.9	Height and Width	See 6			
	4.11	Acoustic performance	Glass: <b>34 (-1;-4)</b> <b>41 (-2;-4)</b> <b>50 (-2;-8)</b>	Doors: <b>35 (-3;-6)</b> <b>36 (-3;-5)</b> <b>40 (-1;-3)</b>	[0757] – 12-000113-PR02	FbxFh < 891x2062 ~ 1279x2452
	4.12	Thermal transmittance	Ud to be calculated in function of the project. Pre-calculated U-values for dimensions 2000x2180mm can be found in the Uf-value tables. Uf-values are calculated under certification of BCCA: certificate BPCB-420-72-10077/2.			
	4.13	Radiation properties	These properties must be evaluated by the CE-label of the glass			
	4.14	Air permeability	<b>3</b>		[1488] – LK02-00948/15/R84NK	FbxFh < 1339x2352.5
<b>Non-essential characteristics</b>						
EN 14351-1	4.4.1	Reaction to fire	Anodized: <b>A1</b> Painted: <b>A2</b> Gaskets: <b>E</b>	EC decision 96/603/EC certificate EFR-21-001664A [0432] – 230006500-6		
	4.16	Operating forces	<b>2</b>		R16893	FbxFh < 1150x2740
	4.17	Mechanical strength	<b>4</b>		[0960] – 19.00838	FbxFh < 1400x3000 353 kg
	4.18	Ventilation	npd			
	4.19	Bullet resistance (BP version) (BP version)	npd			
	4.20	Explosion resistance	npd			
	4.21	Resistance to repeated opening and closing	<b>7</b> (500 000)		[0960] – 19.00838	FbxFh < 1400x3000 353 kg
	4.22	Behaviour between different climates	npd			
	4.23	Burglar resistance (AP version) (AP version)	<b>RC2</b> <b>WK2/RC2</b> <b>RC3</b>		[0960] – SKGIKOB.0837.0285.06 [1309] - 22-27/10.122 [1136] – CAR 17266	See report

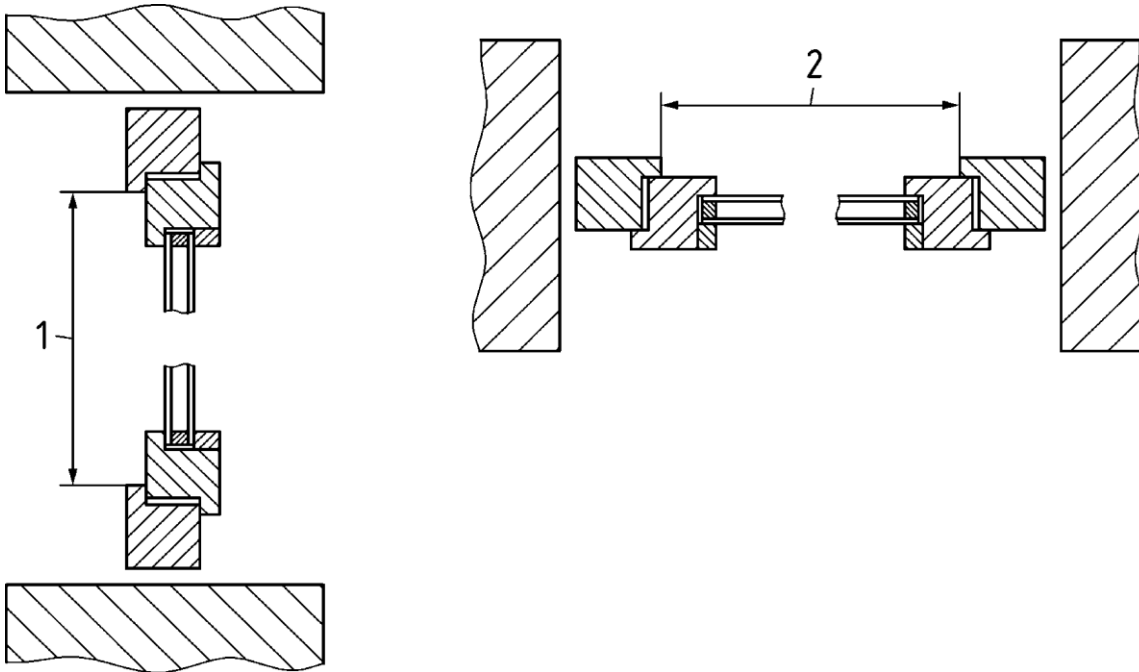
5.12 Flush doors / Double-outward opening / Automatic bottom seal



Characteristic		Performance		Notified body - Report	Limits (mm)	
<b>Essential characteristics</b>						
EN 14351-1	4.2	Resistance to wind load	<b>B2</b> (800 Pa)		[0960] – SKG/HRU/cbo/11.0632	FbxFh < 1352x2500
	4.5	Watertightness	<b>3A</b> (100 Pa)		[0960] – SKG/HRU/cbo/11.0632	FbxFh < 1352x2500
	4.6	Dangerous substances	In the materials delivered by Reynaers, no dangerous substances as indicated in hEN 14351-1 are used.			
	4.7	Impact resistance	<b>5</b> <sup>(1)</sup>		[0960] – SKG/HRU/age/12.0648	FbxFh > 649x1744
	4.8	Load-bearing capacity of safety devices	<b>Pass</b>		[0960] – 19.00838	FbxFh < 1400x3000
	4.9	Height and Width	See 6			
	4.11	Acoustic performance	Glass: <b>34 (-1;-4)</b> <b>41 (-2;-4)</b> <b>50 (-2;-8)</b>	Doors: <b>33 (-2;-5)</b> <b>34 (0;-2)</b> <b>36 (0;-2)</b>	[0757] – 12-000113-PR02	FbxFh < 891x2068 ~ 1200x2452
	4.12	Thermal transmittance	Ud to be calculated in function of the project. Pre-calculated U-values for dimensions 2000x2180mm can be found in the Uf-value tables. Uf-values are calculated under certification of BCCA: certificate BPCB-420-72-10077/2.			
	4.13	Radiation properties	These properties must be evaluated by the CE-label of the glass			
	4.14	Air permeability	<b>2</b>		[0960] – SKG/HRU/cbo/11.0632	FbxFh < 1352x2500
<b>Non-essential characteristics</b>						
EN 14351-1	4.4.1	Reaction to fire	Anodized: <b>A1</b> Painted: <b>A2</b> Gaskets: <b>E</b>	EC decision 96/603/EC certificate EFR-21-001664A [0432] – 230006500-6		
	4.16	Operating forces	<b>2</b>		R16893	FbxFh < 1150x2740
	4.17	Mechanical strength	<b>4</b>		[0960] – 19.00838	FbxFh < 1400x3000 353 kg
	4.18	Ventilation	npd			
	4.19	Bullet resistance (BP version) (BP version)	npd			
	4.20	Explosion resistance	npd			
	4.21	Resistance to repeated opening and closing	<b>7</b> (500 000)		[0960] – 19.00838	FbxFh < 1400x3000 353 kg
	4.22	Behaviour between different climates	npd			
	4.23	Burglar resistance (AP version) (AP version)	<b>RC2</b> <b>WK2/RC2</b> <b>RC3</b>		[0960] – SKGIKOB.0837.0285.06 [1309] - 22-27/10.122 [1136] – CAR 17266	See report

## 6 RULE FOR DEFINITION OF CLEAR OPENING HEIGHT AND WIDTH

The clear opening height 1 and clear opening width 2 are defined as indicated in following sketches of EN 12519:2018.





## UPDATES

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### 22/4/2022

	VARIANTS	Characteristic
12.1060 rev A	5.1 ~ 5.3	4.8, 4.16, 4.17, 4.21
EFR-21-001664A	5.1 ~ 5.12	4.4.1
230006500-6	5.1 ~ 5.12	4.4.1
22.00537	5.1 ~ 5.10	4.16 + 4.21
19.00838	5.7 ~ 5.12	4.8, 4.17, 4.21
R16893	5.7 ~ 5.12	4.16
SKGIKOB.0837.0285.06	5.1 ~ 5.12	4.23
22-27/10.120	5.1 ~ 5.12	4.23
CAR 17266	5.1 ~ 5.12	4.23
ES-210614a, ES-210722a, ES-210722b,	5.1 ~ 5.6	4.19

### 20/1/2023

	VARIANTS	Characteristic
15.00090	5.5	4.2, 4.5, 4.14

### 08/06/2023

	VARIANTS	Characteristic
23.00580	5.5	4.2, 4.5, 4.14
22-27/10.122	5.1 ~ 5.12	4.23