

IV Product pass declaration of performance & CE marking

IV.1 GENERAL EXPLANATION

Following paragraphs indicate the performances which can be declared on the Declaration of Performance (DoP) in accordance with the Regulation EU 305/2011 of the European Parliament and of the Council of 9 March 2011.

The listed essential characteristics are the essential characteristics mentioned in hEN 14351-1+A1:2010: Windows and doors - Product standard, performance characteristics - Part 1: Windows and external pedestrian doorsets without resistance to fire and/or smoke leakage characteristics.

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 evident that it is 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.

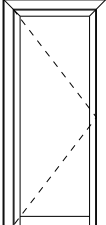
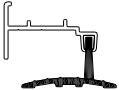

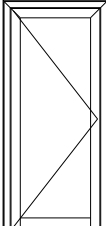
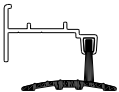

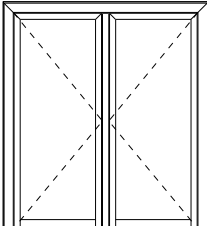
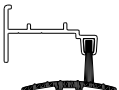

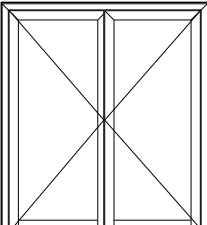
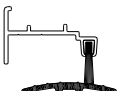

IV.2 NOTIFIED BODIES

No	Notified body	Name	Adress	Country
[1]	0960	SKG	Nieuwe Kanaal 9F 6700 AJ Wageningen	Netherlands
[2]	0757	IFT ROSENHEIM	Theodor-Gietl-Strasse 7-9 83026 Rosenheim	Germany
[3]	1488	INSTYTUT TECHNIKI BUDOWLANEJ (ITB)	ul. Filtrawa 1 00-611 Warszawa	Poland
[4]	1136	BELGIAN BUILDING RESEARCH INSITUTE (BBRI)	Lombardstraat 42 1000 Brussel	Belgium
[5]	1769	UNIVERSITY OF GENT	Sint-Pietersnieuwstraat 41 9000 Gent	Belgium
[6]	0432	MATERIALPRÜFUNGSAMT NORDRHEIN-WESTFALEN (MPA NRW)	Auf den Thränen 2 59597 Erwitte	Germany
[7]	1288	WINTTECH ENGINEERING LIMITED	Halesfield 2 Telford, Shropshire TF7 4QH	United Kingdom
[8]	0679	CENTRE SCIENTIFIQUE ET TECHNIQUE DU BÂTIMENT (CSTB)	84, Avenue Jean Jaurès Champs-sur-Marne F-77447 Marne-la-Vallée Cedex 2	France
[9]	0074	CENTRE D'EXPERTISE DU BÂTIMENT ET DES TRAVAUX PUBLICS (CEBTP)	Domaine De Saint-Paul – 102, Route de Limours 78471 Saint-Remy-Les-Chevreuse Cedex	France
[10]	0744	SOCOTEC	Les Quadrants – 3, Avenue du Centre – Guyancourt 78182 St-Quentin en Yvelines	France
[11]	1671	PEUTZ	Lindenlaan 41 – Molenhoek PO Box 66 6585 ZH Mook	Netherlands
[12]	1749	TNO DEFENCE, SECURITY AND SAFETY	Lange Kleiweg 137 Postbus 45 2280 AA Rijswijk	Netherlands
[13]	0749	BELGIAN CONSTRUCTION CERTIFICATION ASSOCIATION (BCCA)	Aarlenstraat 53 1040 Brussel	Belgium
[14]	1309	PRÜFINSTITUT SCHLÖSSER UND BESCHLÄGE, VELBERT (PIV)	Wallstrasse 41 42551 Velbert	Germany
[15]	0845	DANISH INSTITUTE OF FIRE AND SECURITY TECHNOLOGY (DBI)	Jernholmen, 12 2650 Hvidovre	Denmark

IV.3 VARIANTS

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

IV.3.1 Flush doors

Opening type	Covered variants	
 Single-inward opening	 IV.5.1	 IV.5.2
 Single-outward opening	 IV.5.3	 IV.5.4
 Double-inward opening	 IV.5.5	 IV.5.6
 Double-outward opening	 IV.5.7	 IV.5.8

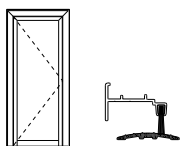
**Remark: the shown pictures of the different bottom solutions do not always represent the real bottom solution for this series, but are just a general sketch to give an indication which type of bottom solution is meant*

IV.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

IV.5 PERFORMANCE

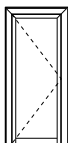
IV.5.1 Flush doors / Single-inward opening / Brush



Characteristic	No	Classification	Notified body - Report	Limits (mm)
Essential characteristics				
Watertightness (EN 12208)	4.5	4A (150 Pa)	[1] – SKG/HRU/cbo/10.0110-1	Maximum Dimensions see catalogue
Dangerous substances	4.6	In the materials delivered by Reynaers, no dangerous substances as indicated in hEN14351-1 are used		
Resistance to wind load (EN 12210)	4.2	C2 (800 Pa)	[1] – SKG/HRU/cbo/10.0110-1	Maximum Dimensions see catalogue
Impact resistance (EN 13049)	4.7	5⁽¹⁾	[1] – 09.1173	FbxFh>604x1739
Load-bearing capacity of safety devices (EN 948)	4.8	npd		
Height & Width	4.9	Height: Width:	See IV.6	
Acoustic performance (EN ISO 140-3 & EN ISO 717-1)	4.11	Door		
		23 (-1;-2)	[2] – 175 42879/2	FbxFh from 891x2068 to 1304x2942
Thermal transmittance (EN ISO 10077-1)	4.12	Ud to be calculated in function of the project. Pre-calculated U-values for dimensions 1230*2180mm can be found in the Uf-value tables. Uf-values are calculated under certification of BCCA [13]. Certificate BPCB - 420 - 72 - 10077/2 REYN - 02.		
Radiation properties (EN 410)	4.13	These properties must be evaluated by the CE-label of the glass		
Air permeability (EN 12207)	4.14	2	[1] – SKG/HRU/cbo/10.0110-1	Maximum Dimensions see catalogue
Non-essential characteristics				
Reaction to fire (EN 13501-1)	4.4	Painted alu. profile: A2 Gaskets: E	Certificate P155748 [6] – 230006500-6	
Operating forces (EN 12217)	4.16	1	Conformity declaration Operation	FbxFh<1327x2904 131 kg
Mechanical strength (EN 1192)	4.17	4	Conformity declaration Mechanical	FbxFh<1327x2904 131 kg
Ventilation (EN 13141-1)	4.18	npd		
Bullet resistance (EN 1522)	4.19	npd		
Explosion resistance (EN 13123-1 & EN 13123-2)	4.20	npd		
Resistance to repeated opening and closing (EN 12400)	4.21	6 (200 000)	Conformity declaration Cyclic	FbxFh<1327x2904 131 kg
Behaviour between different climates (EN 12219)	4.22	npd		
Burglar resistance (ENV 1627) AP version	4.23	Class 2	[1] – KOMO – ATT 09.11.104.06	See report

(1): Impact resistance only valid with tubular or L-shaped glazing beads

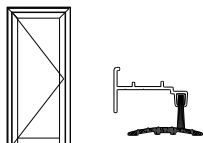
IV.5.2 Flush doors / Single-inward opening / Bottom profile



Characteristic	No	Classification	Notified body - Report	Limits (mm)
Essential characteristics				
Watertightness (EN 12208)	4.5	4A (150 Pa)	[1] – SKG/HRU/cbo/10.0110-2	Maximum Dimensions see catalogue
Dangerous substances	4.6	In the materials delivered by Reynaers, no dangerous substances as indicated in hEN14351-1 are used		
Resistance to wind load (EN 12210)	4.2	C2 (800 Pa)	[1] – SKG/HRU/cbo/10.0110-2	Maximum Dimensions see catalogue
Impact resistance (EN 13049)	4.7	5 ⁽¹⁾	[1] – 09.1173	FbxFh>604x1739
Load-bearing capacity of safety devices (EN 948)	4.8	npd		
Height & Width	4.9	Height: Width:	See IV.6	
Acoustic performance (EN ISO 140-3 & EN ISO 717-1)	4.11	Glass	Door	FbxFh from 891x2068 to 1304x2942
		34 (-1;-4) 39 (-1;-4) 43 (-2;-5)	35 (-1;-4) 36 (0;-2) 39 (-1;-4)	
Thermal transmittance (EN ISO 10077-1)	4.12	Ud to be calculated in function of the project. Pre-calculated U-values for dimensions 1230*2180mm can be found in the Uf-value tables. Uf-values are calculated under certification of BCCA [13]. Certificate BPCB - 420 - 72 - 10077/2 REYN - 02.		
Radiation properties (EN 410)	4.13	These properties must be evaluated by the CE-label of the glass		
Air permeability (EN 12207)	4.14	2	[1] – SKG/HRU/cbo/10.0110-2	Maximum Dimensions see catalogue
Non-essential characteristics				
Reaction to fire (EN 13501-1)	4.4	Painted alu. profile: A2 Gaskets: E	Certificate P155748 [6] – 230006500-6	
Operating forces (EN 12217)	4.16	1	Conformity declaration Operation	FbxFh<1327x2904 131 kg
Mechanical strength (EN 1192)	4.17	4	Conformity declaration Mechanical	FbxFh<1327x2904 131 kg
Ventilation (EN 13141-1)	4.18	npd		
Bullet resistance (EN 1522)	4.19	npd		
Explosion resistance (EN 13123-1 & EN 13123-2)	4.20	npd		
Resistance to repeated opening and closing (EN 12400)	4.21	6 (200 000)	Conformity declaration Cyclic	FbxFh<1327x2904 131 kg
Behaviour between different climates (EN 12219)	4.22	npd		
Burglar resistance (ENV 1627) AP version	4.23	Class 2	[1] – KOMO – ATT 09.11.104.06	See report

(1): Impact resistance only valid with tubular or L-shaped glazing beads

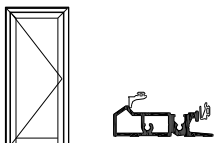
IV.5.3 Flush doors / Single-outward opening / Brush



Characteristic	No	Classification	Notified body - Report	Limits (mm)
Essential characteristics				
Watertightness (EN 12208)	4.5	4A (150 Pa)	[1] – SKG/HRU/cbo/10.0110-1	Maximum Dimensions see catalogue
Dangerous substances	4.6	In the materials delivered by Reynaers, no dangerous substances as indicated in hEN14351-1 are used		
Resistance to wind load (EN 12210)	4.2	C2 (800 Pa)	[1] – SKG/HRU/cbo/10.0110-1	Maximum Dimensions see catalogue
Impact resistance (EN 13049)	4.7	5⁽¹⁾	[1] – 09.1173	FbxFh>604x1739
Load-bearing capacity of safety devices (EN 948)	4.8	npd		
Height & Width	4.9	Height: Width:	See IV.6	
Acoustic performance (EN ISO 140-3 & EN ISO 717-1)	4.11	Door		
		23 (-1;-2)	[2] – 175 42879/2	FbxFh from 891x2068 to 1304x2942
Thermal transmittance (EN ISO 10077-1)	4.12	Ud to be calculated in function of the project. Pre-calculated U-values for dimensions 1230*2180mm can be found in the Uf-value tables. Uf-values are calculated under certification of BCCA [13]. Certificate BPCB - 420 - 72 - 10077/2 REYN - 02.		
Radiation properties (EN 410)	4.13	These properties must be evaluated by the CE-label of the glass		
Air permeability (EN 12207)	4.14	2	[1] – SKG/HRU/cbo/10.0110-1	Maximum Dimensions see catalogue
Non-essential characteristics				
Reaction to fire (EN 13501-1)	4.4	Painted alu. profile: A2 Gaskets: E	Certificate P155748 [6] – 230006500-6	
Operating forces (EN 12217)	4.16	1	Conformity declaration Operation	FbxFh<1327x2904 131 kg
Mechanical strength (EN 1192)	4.17	4	Conformity declaration Mechanical	FbxFh<1327x2904 131 kg
Ventilation (EN 13141-1)	4.18	npd		
Bullet resistance (EN 1522)	4.19	npd		
Explosion resistance (EN 13123-1 & EN 13123-2)	4.20	npd		
Resistance to repeated opening and closing (EN 12400)	4.21	6 (200 000)	Conformity declaration Cyclic	FbxFh<1327x2904 131 kg
Behaviour between different climates (EN 12219)	4.22	npd		
Burglar resistance (ENV 1627) AP version	4.23	Class 2	[1] – KOMO – ATT 09.11.104.06	See report

(1): Impact resistance only valid with tubular or L-shaped glazing beads

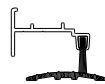
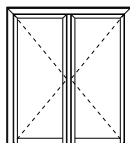
IV.5.4 Flush doors / Single-outward opening / Bottom profile



Characteristic	No	Classification	Notified body - Report	Limits (mm)
Essential characteristics				
Watertightness (EN 12208)	4.5	4A (150 Pa)	[1] – SKG/HRU/cbo/10.0110-2	Maximum Dimensions see catalogue
Dangerous substances	4.6	In the materials delivered by Reynaers, no dangerous substances as indicated in hEN14351-1 are used		
Resistance to wind load (EN 12210)	4.2	C2 (800 Pa)	[1] – SKG/HRU/cbo/10.0110-2	Maximum Dimensions see catalogue
Impact resistance (EN 13049)	4.7	5 ⁽¹⁾	[1] – 09.1173	FbxFh>604x1739
Load-bearing capacity of safety devices (EN 948)	4.8	npd		
Height & Width	4.9	Height: Width:	See IV.6	
Acoustic performance (EN ISO 140-3 & EN ISO 717-1)	4.11	Glass	Door	FbxFh from 891x2068 to 1304x2942
		34 (-1;-4) 39 (-1;-4) 43 (-2;-5)	35 (-1;-4) 36 (0;-2) 39 (-1;-4)	
Thermal transmittance (EN ISO 10077-1)	4.12	Ud to be calculated in function of the project. Pre-calculated U-values for dimensions 1230*2180mm can be found in the Uf-value tables. Uf-values are calculated under certification of BCCA [13]. Certificate BPCB - 420 - 72 - 10077/2 REYN - 02.		
Radiation properties (EN 410)	4.13	These properties must be evaluated by the CE-label of the glass		
Air permeability (EN 12207)	4.14	2	[1] – SKG/HRU/cbo/10.0110-2	Maximum Dimensions see catalogue
Non-essential characteristics				
Reaction to fire (EN 13501-1)	4.4	Painted alu. profile: A2 Gaskets: E	Certificate P155748 [6] – 230006500-6	
Operating forces (EN 12217)	4.16	1	Conformity declaration Operation	FbxFh<1327x2904 131 kg
Mechanical strength (EN 1192)	4.17	4	Conformity declaration Mechanical	FbxFh<1327x2904 131 kg
Ventilation (EN 13141-1)	4.18	npd		
Bullet resistance (EN 1522)	4.19	npd		
Explosion resistance (EN 13123-1 & EN 13123-2)	4.20	npd		
Resistance to repeated opening and closing (EN 12400)	4.21	6 (200 000)	Conformity declaration Cyclic	FbxFh<1327x2904 131 kg
Behaviour between different climates (EN 12219)	4.22	npd		
Burglar resistance (ENV 1627) AP version	4.23	Class 2	[1] – KOMO – ATT 09.11.104.06	See report

(1): Impact resistance only valid with tubular or L-shaped glazing beads

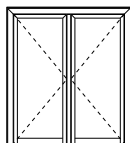
IV.5.5 Flush doors / Double-inward opening / Brush



Characteristic	No	Classification	Notified body - Report	Limits (mm)
Essential characteristics				
Watertightness (EN 12208)	4.5	3A (100 Pa)	[1] – SKG/HRU/cbo/10.0110-3	Maximum Dimensions see catalogue
Dangerous substances	4.6	In the materials delivered by Reynaers, no dangerous substances as indicated in hEN14351-1 are used		
Resistance to wind load (EN 12210)	4.2	A2 (800 Pa)	[1] – SKG/HRU/cbo/10.0110-3	Maximum Dimensions see catalogue
Impact resistance (EN 13049)	4.7	3⁽¹⁾	[1] – SKG/HRU/cbo/12.0644	FbxFh>649x1739
Load-bearing capacity of safety devices (EN 948)	4.8	npd		
Height & Width	4.9	Height: Width:	See IV.6	
Acoustic performance (EN ISO 140-3 & EN ISO 717-1)	4.11	Door		
		23 (-1;-2)	[2] – 175 42879/2	FbxFh from 891x2068 to 1279x2452
Thermal transmittance (EN ISO 10077-1)	4.12	Ud to be calculated in function of the project. Pre-calculated U-values for dimensions 2000*2180mm can be found in the Uf-value tables. Uf-values are calculated under certification of BCCA [13]. Certificate BPCB - 420 - 72 - 10077/2 REYN - 02.		
Radiation properties (EN 410)	4.13	These properties must be evaluated by the CE-label of the glass		
Air permeability (EN 12207)	4.14	2	[1] – SKG/HRU/cbo/10.0110-3	Maximum Dimensions see catalogue
Non-essential characteristics				
Reaction to fire (EN 13501-1)	4.4	Painted alu. profile: A2 Gaskets: E	Certificate P155748 [6] – 230006500-6	
Operating forces (EN 12217)	4.16	1	Conformity declaration Operation	FbxFh<1327x2904 131 kg
Mechanical strength (EN 1192)	4.17	4	Conformity declaration Mechanical	FbxFh<1327x2904 131 kg
Ventilation (EN 13141-1)	4.18	npd		
Bullet resistance (EN 1522)	4.19	npd		
Explosion resistance (EN 13123-1 & EN 13123-2)	4.20	npd		
Resistance to repeated opening and closing (EN 12400)	4.21	6 (200 000)	Conformity declaration Cyclic	FbxFh<1327x2904 131 kg
Behaviour between different climates (EN 12219)	4.22	npd		
Burglar resistance (ENV 1627) AP version	4.23	Class 2	[1] – KOMO – ATT 09.11.104.06	See report

(1): Impact resistance only valid with tubular or L-shaped glazing beads

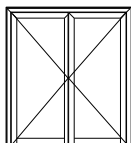
IV.5.6 Flush doors / Double-inward opening / Bottom profile



Characteristic	No	Classification	Notified body - Report	Limits (mm)
Essential characteristics				
Watertightness (EN 12208)	4.5	3A (100 Pa)	[1] – SKG/HRU/cbo/10.0110-4	Maximum Dimensions see catalogue
Dangerous substances	4.6	In the materials delivered by Reynaers, no dangerous substances as indicated in hEN14351-1 are used		
Resistance to wind load (EN 12210)	4.2	A2 (800 Pa)	[1] – SKG/HRU/cbo/10.0110-4	Maximum Dimensions see catalogue
Impact resistance (EN 13049)	4.7	3⁽¹⁾	[1] – SKG/HRU/cbo/12.0644	FbxFh>649x1739
Load-bearing capacity of safety devices (EN 948)	4.8	npd		
Height & Width	4.9	Height: Width:	See IV.6	
Acoustic performance (EN ISO 140-3 & EN ISO 717-1)	4.11	Glass	Door	[2] – 175 42879/2
		34 (-1;-4) 39 (-1;-4) 43 (-2;-5)	34 (-2;-5) 36 (-1;-3) 39 (-1;-4)	
Thermal transmittance (EN ISO 10077-1)	4.12	Ud to be calculated in function of the project. Pre-calculated U-values for dimensions 2000*2180mm can be found in the Uf-value tables. Uf-values are calculated under certification of BCCA [13]. Certificate BPCB - 420 - 72 - 10077/2 REYN - 02.		
Radiation properties (EN 410)	4.13	These properties must be evaluated by the CE-label of the glass		
Air permeability (EN 12207)	4.14	2	[1] – SKG/HRU/cbo/10.0110-4	Maximum Dimensions see catalogue
Non-essential characteristics				
Reaction to fire (EN 13501-1)	4.4	Painted alu. profile: A2 Gaskets: E	Certificate P155748 [6] – 230006500-6	
Operating forces (EN 12217)	4.16	1	Conformity declaration Operation	FbxFh<1327x2904 131 kg
Mechanical strength (EN 1192)	4.17	4	Conformity declaration Mechanical	FbxFh<1327x2904 131 kg
Ventilation (EN 13141-1)	4.18	npd		
Bullet resistance (EN 1522)	4.19	npd		
Explosion resistance (EN 13123-1 & EN 13123-2)	4.20	npd		
Resistance to repeated opening and closing (EN 12400)	4.21	6 (200 000)	Conformity declaration Cyclic	FbxFh<1327x2904 131 kg
Behaviour between different climates (EN 12219)	4.22	npd		
Burglar resistance (ENV 1627) AP version	4.23	Class 2	[1] – KOMO – ATT 09.11.104.06	See report

(1): Impact resistance only valid with tubular or L-shaped glazing beads

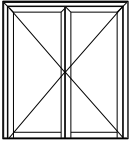
IV.5.7 Flush doors / Double-outward opening / Brush



Characteristic	No	Classification	Notified body - Report	Limits (mm)
Essential characteristics				
Watertightness (EN 12208)	4.5	4A (150 Pa)	[1] – SKG/HRU/cbo/10.0110-3	Maximum Dimensions see catalogue
Dangerous substances	4.6	In the materials delivered by Reynaers, no dangerous substances as indicated in hEN14351-1 are used		
Resistance to wind load (EN 12210)	4.2	A2 (800 Pa)	[1] – SKG/HRU/cbo/10.0110-3	Maximum Dimensions see catalogue
Impact resistance (EN 13049)	4.7	3⁽¹⁾	[1] – SKG/HRU/cbo/12.0644	FbxFh>649x1739
Load-bearing capacity of safety devices (EN 948)	4.8	npd		
Height & Width	4.9	Height: Width:	See IV.6	
Acoustic performance (EN ISO 140-3 & EN ISO 717-1)	4.11	Door		
		23 (-1;-2)	[2] – 175 42879/2	FbxFh from 891x2068 to 1279x2452
Thermal transmittance (EN ISO 10077-1)	4.12	Ud to be calculated in function of the project. Pre-calculated U-values for dimensions 2000*2180mm can be found in the Uf-value tables. Uf-values are calculated under certification of BCCA [13]. Certificate BPCB - 420 - 72 - 10077/2 REYN - 02.		
Radiation properties (EN 410)	4.13	These properties must be evaluated by the CE-label of the glass		
Air permeability (EN 12207)	4.14	2	[1] – SKG/HRU/cbo/10.0110-3	Maximum Dimensions see catalogue
Non-essential characteristics				
Reaction to fire (EN 13501-1)	4.4	Painted alu. profile: A2 Gaskets: E	Certificate P155748 [6] – 230006500-6	
Operating forces (EN 12217)	4.16	1	Conformity declaration Operation	FbxFh<1327x2904 131 kg
Mechanical strength (EN 1192)	4.17	4	Conformity declaration Mechanical	FbxFh<1327x2904 131 kg
Ventilation (EN 13141-1)	4.18	npd		
Bullet resistance (EN 1522)	4.19	npd		
Explosion resistance (EN 13123-1 & EN 13123-2)	4.20	npd		
Resistance to repeated opening and closing (EN 12400)	4.21	6 (200 000)	Conformity declaration Cyclic	FbxFh<1327x2904 131 kg
Behaviour between different climates (EN 12219)	4.22	npd		
Burglar resistance (ENV 1627) AP version	4.23	Class 2	[1] – KOMO – ATT 09.11.104.06	See report

(1): Impact resistance only valid with tubular or L-shaped glazing beads

IV.5.8 Flush doors / Double-outward opening / Bottom profile



Characteristic	No	Classification	Notified body - Report	Limits (mm)
Essential characteristics				
Watertightness (EN 12208)	4.5	4A (150 Pa)	[1] – SKG/HRU/cbo/10.0110-4	Maximum Dimensions see catalogue
Dangerous substances	4.6	In the materials delivered by Reynaers, no dangerous substances as indicated in hEN14351-1 are used		
Resistance to wind load (EN 12210)	4.2	A2 (800 Pa)	[1] – SKG/HRU/cbo/10.0110-4	Maximum Dimensions see catalogue
Impact resistance (EN 13049)	4.7	3 ⁽¹⁾	[1] – SKG/HRU/cbo/12.0644	FbxFh>649x1739
Load-bearing capacity of safety devices (EN 948)	4.8	npd		
Height & Width	4.9	Height: Width:	See IV.6	
Acoustic performance (EN ISO 140-3 & EN ISO 717-1)	4.11	Glass	Door	[2] – 175 42879/2
		34 (-1;-4) 39 (-1;-4) 43 (-2;-5)	34 (-2;-5) 36 (-1;-3) 39 (-1;-4)	
Thermal transmittance (EN ISO 10077-1)	4.12	Ud to be calculated in function of the project. Pre-calculated U-values for dimensions 2000*2180mm can be found in the Uf-value tables. Uf-values are calculated under certification of BCCA [13]. Certificate BPCB - 420 - 72 - 10077/2 REYN - 02.		
Radiation properties (EN 410)	4.13	These properties must be evaluated by the CE-label of the glass		
Air permeability (EN 12207)	4.14	2	[1] – SKG/HRU/cbo/10.0110-4	Maximum Dimensions see catalogue
Non-essential characteristics				
Reaction to fire (EN 13501-1)	4.4	Painted alu. profile: A2 Gaskets: E	Certificate P155748 [6] – 230006500-6	
Operating forces (EN 12217)	4.16	1	Conformity declaration Operation	FbxFh<1327x2904 131 kg
Mechanical strength (EN 1192)	4.17	4	Conformity declaration Mechanical	FbxFh<1327x2904 131 kg
Ventilation (EN 13141-1)	4.18	npd		
Bullet resistance (EN 1522)	4.19	npd		
Explosion resistance (EN 13123-1 & EN 13123-2)	4.20	npd		
Resistance to repeated opening and closing (EN 12400)	4.21	6 (200 000)	Conformity declaration Cyclic	FbxFh<1327x2904 131 kg
Behaviour between different climates (EN 12219)	4.22	npd		
Burglar resistance (ENV 1627) AP version	4.23	Class 2	[1] – KOMO – ATT 09.11.104.06	See report

(1): Impact resistance only valid with tubular or L-shaped glazing beads

IV.6 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:

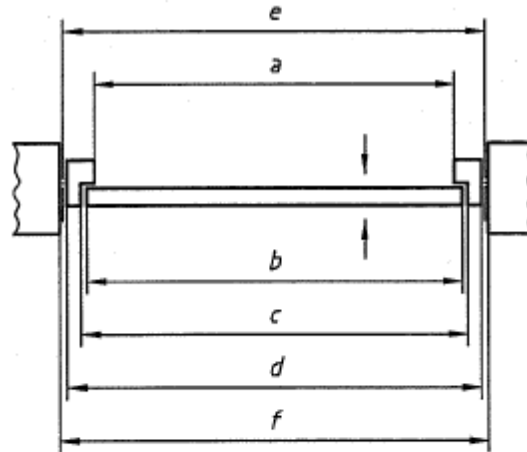


Figure 1/Figure 1/Bild 1

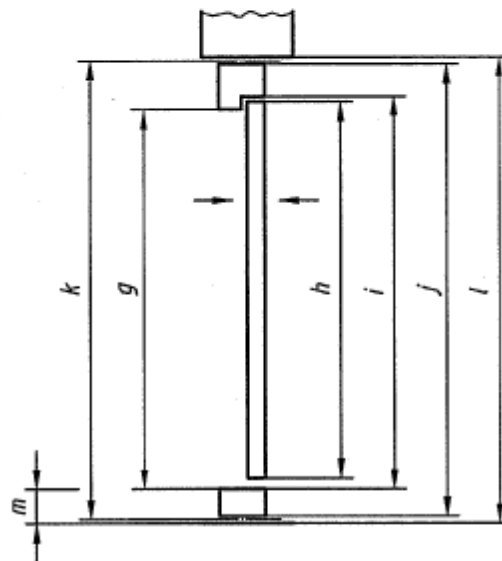


Figure 2/Figure 2/Bild 2