

Schüco product performance certificate
Aluminium sliding systems
Schüco ASS 70 FD

In accordance with EN 14351-1 : 2006-03

MB1007818_EN-00
Valid until 31.12.2012



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SCHÜCO

Schüco

product performance certificate

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Basic principles

EN 14351-1 (2006-03)






















Windows and external doors
The Schüco performance certificate shows the performance characteristics of the systems named with their product families as per the specifications of the product standard.

The national building regulations and contractual arrangements apply to the use of the performance characteristics.

Notes on publication

The license conditions and conditions of use of Schüco International KG shall apply.

System	Schüco ASS 70 FD
Special features	- / -
Product families	1. Type 0 / Type 1 / Type 2 / Type 3 / Type 3.1 / Type 4 / Type 5 / Type 6
Frame material	Aluminium/PVC-U composite

Properties	Resistance to wind load	Resistance to snow and permanent load	Fire characteristics	Watertightness	Dangerous substances	Impact resistance	Load-bearing capacity of safety devices
							
Class / value	B3 / C3	Not applicable	Not applicable	8A 9A	****)	npd	Not applicable
Properties	Height and width	Ability to release	Acoustic performance	Thermal transmittance	Solar energy transmittance	Air permeability	Operating forces
							
Class / value	Not applicable	Not applicable	*)	*)	CE marking	3	npd
Properties	Mechanical strength	Ventilation	Bullet resistance	Explosion resistance	Resistance to repeated opening and closing	Behaviour between different climates	Burglar resistance
							
Class / value	4	Not applicable	Not applicable	Not applicable	npd	npd	WK2

*) Project-specific certification – if necessary

***) Only applies to windows with integrated ventilation devices

**) Only external doors

****) Certification in accordance with country of destination

Bielefeld, 9 January 2010

ppa.
























T. Lauritzen
Head of Enterprise Coordination

i.V.



U. Brühl
Head of Development and Product Management for
Opening Units and Automation

1 Performance matrix in accordance with product standard EN 14351-1

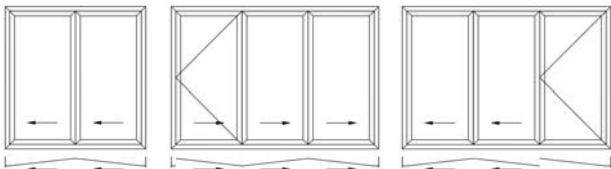
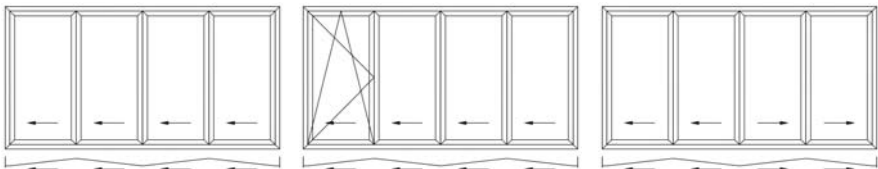
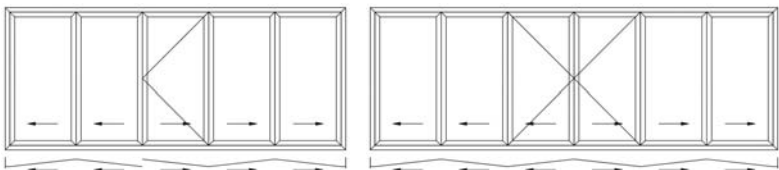
Extract from product standard EN 14351-1		Product family 1	
		Schüco ASS 70 FD	Type 0 / Type 1 / Type 2 / Type 3 / Type 3.1 / Type 4 / Type 5 / Type 6
4.2		Resistance to wind load	B3 / C3
4.3		Resistance to snow and permanent load	Not applicable
4.4		Fire characteristics	Not applicable
4.5		Watertightness	8A 9A
4.6		Dangerous substances	The manufacturer must prepare and supply suitable information about the components in accordance with the legal requirements of the intended country of destination.
4.7		Impact resistance	npd
4.8		Load-bearing capacity of safety devices	Not applicable
4.9		Height and width (only external doors)	Not applicable
4.10		Ability to release (only external doors)	Not applicable
4.11		Acoustic performance	The R_w values must be calculated based on standard dimensions or for specific projects.
4.12		Thermal transmittance U_w ($W/(m^2K)$)	The U_w values must be calculated based on standard dimensions or for specific projects.
4.13		Solar energy transmittance	The solar energy transmittance g and the level of light transmittance τ must be verified by means of CE marking for the glazing.
4.14		Air permeability	3
4.16		Operating forces	npd
4.17		Mechanical strength	4
4.18		Ventilation	Not applicable
4.19		Bullet resistance	Not applicable
4.20		Explosion resistance	Not applicable
4.21		Resistance to repeated opening and closing	npd
4.22		Behaviour between different climates	npd
4.23		Burglar resistance	WK2

Comment 1 npd: no performance determined

2 System features and performance characteristics of the product families

2.1 Product family 1

2.1.1 Description of system features for product family 1

System	Schüco ASS 70 FD
Options	Folding/sliding unit
	<p>Type 0 Type 1 Type 2</p>  <p>Type 3 Type 3/1 Type 3E/1</p>  <p>Type 4 Type 6</p> 
Frame material	Aluminium/PVC-U composite
Profile depth	70 mm leaf frame, 80 mm outer frame
Frame assembly	Mitre cut with corners nailed and bonded.
Rebate design	Single rebate
Rebate gasket, inside	Vertical gasket 224 691 / 224 693 / 224 694 bonded at the top to gasket 224 564 and bonded to moulded corner pieces at the bottom with gasket 224 569. Gaskets, black EPDM, supplier: Schüco International KG
Rebate gasket, outside	Vertical gasket 224 691 / 224 693 / 224 694 closed with corner pieces and bonded at the bottom. Gasket 224 070 continuous in the outer frame. Gaskets, black EPDM, supplier: Schüco International KG
Rebate drainage	Slots of 8 x 34 mm, alternative 5 x 55 mm in the outer frame, drill hole \varnothing 8 mm in the profile 316 250
Glazing	Multi-pane insulating glass, glass thicknesses from 6 mm to 45 mm
Glazing gasket, outside	Glazing gasket 224 063, black EPDM, supplier: Schüco International KG; continuous, joined and bonded in centre at top
Glazing gasket, inside	Glazing gasket, EPDM, supplier: Schüco International KG, continuous, joined and bonded in centre at top



Glazing gaskets with different thicknesses can be used depending on the glazing thickness and given the same material properties and geometries














Vapour pressure equalisation









Slots on the outside 5 x 20 mm, bottom slots 8 mm at glazing rebate depth

Fittings

Folding sliding fittings, supplier: Schüco International KG






















2.1.2 Overview of performance characteristics for product family 1

Folding/sliding unit type 0 / type 1 / type 2 / type 3 / type 3.1 / type 4 / type 5 / type 6					
Extract from product standard EN 14351-1		Type, design	Certificate	Value / class	Area of use
4.2		Resistance to wind load	ASS 70 FD Type 1	Test report 102 27798 dated 03.03.04 from ift Rosenheim	B3 / C3
4.3		Resistance to snow and permanent load	Not applicable		
4.4		Fire characteristics	Not applicable		
4.5		Watertightness	ASS 70 FD Type 1 (Without front chamber)	Test report 102 27798 dated 03.03.04 from ift Rosenheim	8A
			ASS 70 FD Type 1 (With front chamber)	Test report 101 28331/1 dated 29.09.04 from ift Rosenheim	9A
4.6		Dangerous substances	The manufacturer must prepare and supply suitable information about the components in accordance with the legal requirements of the intended country of destination.		
4.7		Impact resistance		npd	
4.8		Load-bearing capacity of safety devices	Not applicable		
4.9		Height and width (only external doors)	Not applicable		
4.10		Ability to release (only external doors)	Not applicable		
4.11		Acoustic performance	ASS 70 FD Type 1	Test report 161 19374/1.0.0 dated 13.11.97 from ift Rosenheim	Rw (C; Ctr) = 44 (-1;-4) Db
			ASS 70 FD Type 1	Test report 161 19374/1.1.0 dated 13.11.97 from ift Rosenheim	Rw (C; Ctr) = 37 (-1;-5) Db
			ASS 70 FD Type 1	Test report 161 19374/1.2.0 dated 13.11.97 from ift Rosenheim	Rw (C; Ctr) = 42 (-1;-5) Db
4.12		Thermal transmittance U_w (W/(m²K))	ASS 70 FD	EN 14351-1	Table value in accordance with EN 14351-1
4.13		Solar energy transmittance	The solar energy transmittance g and the level of light transmittance τ must be verified by means of CE marking for the glazing.		
4.14		Air permeability	ASS 70 FD Type 1	Test report 102 27798 dated 03.03.04 from ift Rosenheim	3

4.16		Operating forces			npd	
4.17		Mechanical strength			npd	
4.18		Ventilation	Not applicable			
4.19		Bullet resistance	Not applicable			
4.20		Explosion resistance	Not applicable			
4.21		Resistance to repeated opening and closing			npd	
4.22		Behaviour between different climates			npd	
4.23		Burglar resistance	ASS 70 FD	Test report 211 27308 dated 08.11.05 from ift Rosenheim	WK2	

Comment 1 npd: no performance determined

Appendix 1

	Properties in accordance with EN 14351-1	Test standard	Classification standard
	Resistance to wind load	EN 12211	EN 12210
	Resistance to snow and permanent load	National regulations	
	Fire characteristics	EN 13501-1	EN 13501-1
	Watertightness	EN 1027	EN 12208
	Dangerous substances	National regulations	
	Impact resistance	EN 13049	
	Load-bearing capacity of safety devices	prEN 14609:2003 EN 948	
	Height and width (only external doors)	prEN 12519:2003	
	Ability to release (only external doors)	EN 179, EN 1125, prEN 13633, prEN 13637	
	Acoustic performance	EN ISO 140-3	EN ISO 717-1
	Thermal transmittance U_w (W/(m ² K))	EN 10077-1, prEN ISO 10077-2	
	Solar energy transmittance	EN 410, prEN 13363-1, prEN 13363-2	
	Air permeability	EN 1026	EN 12207
	Operating forces (only with manually operated windows)	EN 12046-1	EN 13115
	Mechanical strength	EN 14608, EN 14609, 12046-1	EN 13115
	Ventilation	EN 13141-1:2004	
	Bullet resistance	EN 1523	EN 1522
	Explosion resistance	EN 13124	EN 13123
	Resistance to repeated opening and closing	EN 1191	EN 12400
	Behaviour between different climates	ENV 13420	
	Burglar resistance	EN 1628, EN 1629, EN 1630	ENV 1627

Appendix 2

Information regarding the listed test/certificate documentation

The original test reports / certificates serve as verification. You can refer to them on the Internet at:
www.schueco.com/web/de/partner/services/download/pruefzeugnisse

Test report no. Test institute	Date	Valid	Type of test	Normative basis
102 27798 ift Rosenheim	03.03.04	Until updated	Resistance to wind load, watertightness, air permeability	prEN 14351-1
162 19374/1.0.0 ift Rosenheim	30.11.04	Until updated	Airborne sound insulation	DIN 52210-3
162 19374/1.1.0 ift Rosenheim	30.11.04	Until updated	Airborne sound insulation	DIN 52210-3
162 19374/1.2.0 ift Rosenheim	30.11.04	Until updated	Airborne sound insulation	DIN 52210-3
211 27308 ift Rosenheim	08.11.05	Until updated	Burglar resistance	DIN V ENV 1627 DIN V ENV 1628 DIN V ENV 1629 DIN V ENV 1630

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