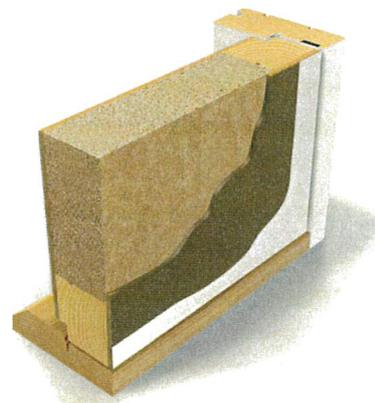


FD18 er beregnet til bruk mellom brannceller i oppvarmede kontorer og boliger.

Temperaturforskjellen mellom lokalene som skilles kan ikke overstige 5°C.

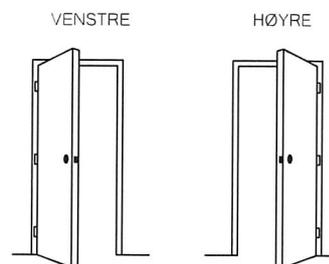
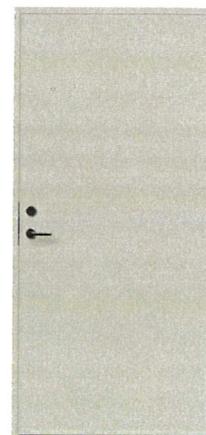


Brannmotstand	EI ₁₃₀
Røykmotstand	Sa/S ₂₀₀
Lydisolasjon	R _w 38-40dB
Selvlukkingsklasse	C0-C5



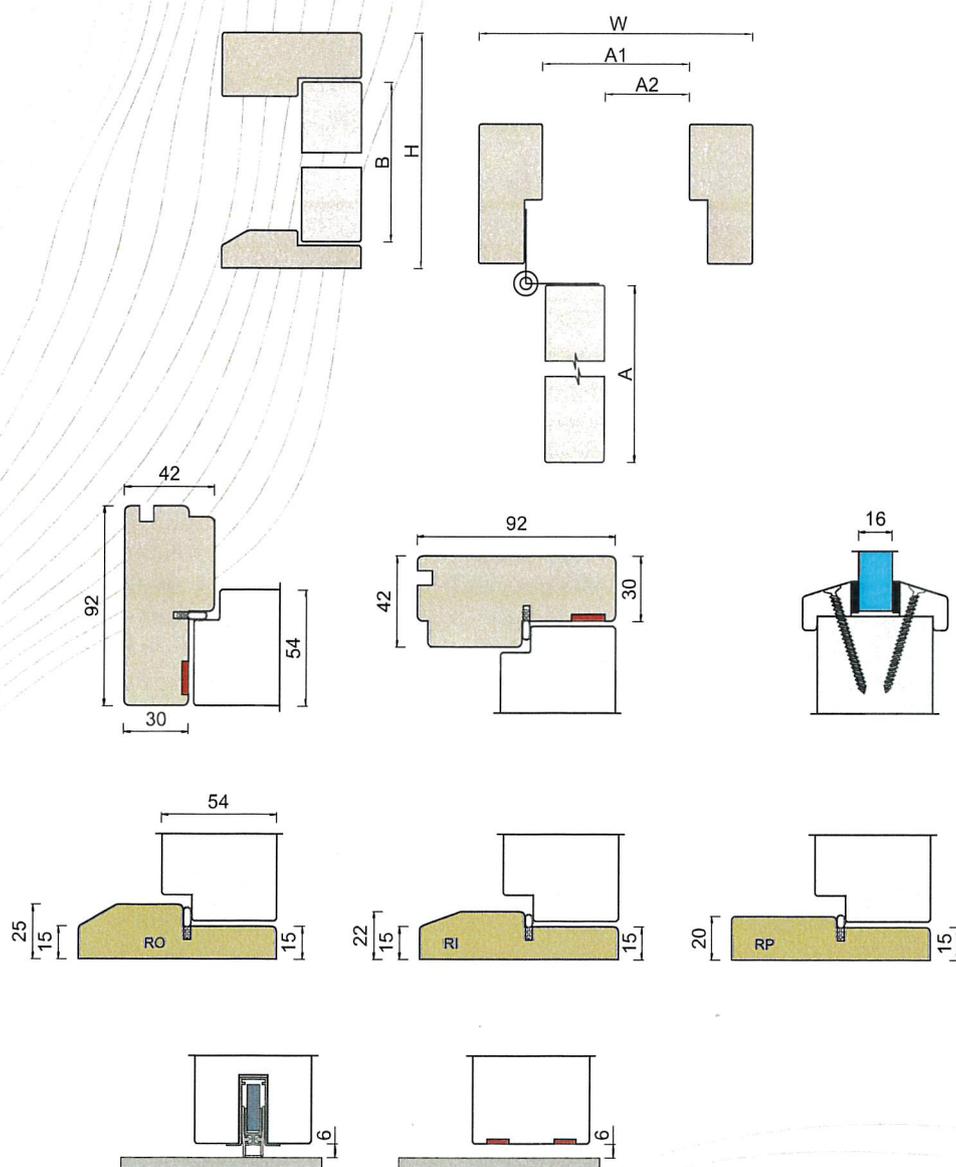
TEKNISK SPESIFIKASJON

Mål	enfløyet M7-10 x M20-21 kan produseres som tofløyet
Dørblad	tykkelse 54mm
Karm	furu, dybde 92mm
Terskel	eike, høyde 25mm
Lås	låskasse ASSA 565 og sluttstykke LP712
Hengsler	løftehengsler Abloy 3248
Overflatebehandling	hvit (S 0502-Y) eller spesialfarge
Glass	klart brannglass
Tillegg	ekstralås, ringelokke, dørkikkert, RST-sparkeplate, dørautomatikk, sporfrest dekor, finert overflate, utenpåliggende dekor og/eller lister



Det er mulig å bestille produkter med spesialløsninger. Spør forhandleren for nærmere informasjon.

	H	B	W	A	A1	A2
M7			690	625	606	550
M8			790	725	706	650
M9			890	825	806	750
M10			990	925	906	850
M20	1990	1940				
M21	2090	2040				



Declaration of performance

Producer: AS VILJANDI AKEN JA UKS, reg no 10052966, Puidu 6, 71020 Viljandi, Estonia

Hereby declares that

Product: internal door **FD18**

Product description: hinged timber leaf hung in timber frame, fire resistant and sound insulation wooden door.

Intended use or uses of the construction product: for closing entrances between the fire compartments of heated working and living premises.

Systems of assessment and verification of constancy of performance of the construction product: system 1

Produced: AS Viljandi Aken ja Uks, Puidu 6, 71020, Viljandi, Estonia

Confirms with following characteristics:

No	Characteristics	Test or calculation standard	Classification standard	Unit	Class/ value	Test report	Notified body*
1.	Fire resistance	EN 1634-1	EN 13501-2	Class	E1,30 E1,230 E30	735-18T2PAU TEK-249/19	1526
2.1.	Single door with wooden threshold, key tube and doorbell	EN ISO 10140-2	ISO 717-1	dB	40	VTT-S-05873-14	0809
2.2.	Single door with wooden threshold, key tube, letterbox, door viewer and doorbell			dB	38	VTT-S-05873-14	0809
2.3.	Single door with drop down seal (Planet PU), key tube and doorbell			dB	39	VTT-S-05873-14	0809
2.4.	Single door with wooden threshold and glass Fireswiss foam 30-15			dB	38	EUF129-19005198	0809
3.	Smoke control	EN 1634-3	EN 13501-2	Class	Sa/S ₂₀₀	SD-181-19-0061 SD-181-19-0064	1336
4.	Self-closing	EN 1191	EN 13501-2	Class	C5	DD-181-19-0065	1336
5.	Burglary resistance	EN 1628 EN 1629 EN 1630	EN 1627	Class	RC2	2P06613	0402

***Notified body:**

0809 – Eurofins Expert Services Oy

1526 – TÜV Eesti OÜ

1336 – Inspecta Estonia OÜ

0402 - RISE Research Institutes of Sweden AB

- Products are produced according to standardisation proposal SFS 4434 in case it is not in conflict with European standards.
- Products are installed according to the product installation and maintenance instructions.
- "Warranty conditions for doors and windows sold by AS Viljandi Aken ja Uks" apply to the sale of products.

AS Viljandi Aken ja Uks



Veiko Põldsaar
R&D Manager
22.01.2021

Certificate of conformity
ET-0370-23



Based on Estonian Regulation No. 49 of the Minister of Economic Affairs and Communications of 26.07.2013 „Requirements and procedure for attestation of the conformity for building materials and construction products” § 4, it has been stated that the construction product

Single- and double leaf fire resistant wooden door FD18

placed on the market by

Viljandi Aken ja Uks AS

Puidu tn 6, 71030 Viljandi linn, Viljandi maakond, ESTONIA

and produced in the factory

Viljandi Aken ja Uks AS

Puidu tn 6, 71030 Viljandi linn, Viljandi maakond, ESTONIA

(Projektuksetehas: Pärnu mnt 20, 71012 Viljandi linn, Viljandi maakond, ESTONIA)

is submitted by the manufacturer to a factory production control. Inspecta Estonia OÜ has performed type assessment, the initial inspection of the factory and of the factory production control and performs the continuous surveillance and assessment of the factory production control.

This certificate attests that all provisions concerning the attestation of conformity and the performances described in Annex ZA of the standard

EN 16034:2014

were applied and that the product fulfils all the prescribed requirements.

This certificate is issued on **18.10.2023** and remains valid until **17.10.2028** as long as the conditions laid down in the standard in reference or the manufacturing conditions in the factory or the FPC itself are not modified significantly. The validity of the certificate can be checked on the Internet at www.kiwa.com/ee. Classification and field of direct application is presented in the technical description TS-ET-370 Appendix Z.

Tõnu Roosaar
Manager



Tallinn 18.10.2023

Inspecta Estonia OÜ
Mäealuse 2/4
12618 Tallinn
EESTI
Tel +372 659 9470
estonia@kiwa.com
www.kiwa.com/ee



Approved technical description TS-ET-0370
version 01, APPENDIX Z



Certificate No: ET-0370-23

Name and address of the sponsor: Viljandi Aken ja Uks AS, Puidu tn 6, 71020 Viljandi linn, Viljandi maakond, ESTONIA

Name and address of the producer: Viljandi Aken ja Uks AS, Piiri tn 2a /Raua tn 1, 71020 Viljandi linn, Viljandi maakond, ESTONIA

Product: Single- and double leaf fire resistant wooden door FD18

Date: 18.10.2023

Maximum possible classification according to EN 13501-2:2023: **EI₁30 – Sa₄/S₂₀₀ - C5**

Essential characteristics	Performance										
		15	20	30	45	60	90	120	180	240	360
Resistance to fire	E	15	20	30	45	60	90	120	180	240	360
	EI₁	15	20	30	45	60	90	120	180	240	360
	EI₂	15	20	30	45	60	90	120	180	240	360
	EW	15	20	30	45	60	90	120	180	240	360
Smoke control	S_a	3					4				
	S₂₀₀										
Resistance to fire	C	0	1*	2*	3*	4*	5*				

* Classifications C1-C5 cover doorsets with a maximum door leaf weight of 80 kg.

Field of applications of the product by different classification combinations is presented by chapters:

- Chapter 1 If fire resistance without smoke control is required (EI₁30 - C5)
- Chapter 2 If fire resistance without smoke control is required (EI₁30 - C)
- Chapter 3 If fire resistance and smoke control Sa3 is required (EI₁30 – Sa3 - C5)
- Chapter 4 If fire resistance and smoke control Sa4 is required (EI₁30 – Sa4 - C5)
- Chapter 5 If fire resistance and smoke control is required (EI₁30 – Sa₄/S₂₀₀ - C5)
- Chapter 6 If fire resistance and smoke control is required (EI₁30 – Sa₄/S₂₀₀ - C)



Inspecta Estonia OÜ
Mäealuse tn 2/4, 12618 Tallinn, Eesti
Tel +372 659 9470
estonia@kiwa.com

1. If fire resistance without smoke control is required

1.1 Essential characteristics and performance

Classification according to EN 13501-2:2023: **EI₁30 - C5**.

Essential characteristics	Performance										
		15	20	30	45	60	90	120	180	240	360
Resistance to fire	E	15	20	30	45	60	90	120	180	240	360
	EI₁	15	20	30	45	60	90	120	180	240	360
	EI₂	15	20	30	45	60	90	120	180	240	360
	EW	15	20	30	45	60	90	120	180	240	360
Smoke control	S_a	3					4				
	S₂₀₀										
Resistance to fire	C	0	1*	2*	3*	4*	5*				

* Classifications C1-C5 cover doorsets with a maximum door leaf weight of 80 kg.

1.2 Product specification and field of application

Detail	max W, mm	max H, mm	max A, m ²
Leaf of single leaf doorset without letter plate	1113	2461	2,49
Leaf of single leaf doorset with letter plate	971	2154	2,09
Active leaf of double leaf doorset without letter plate	1113	2461	2,49
Active leaf of double leaf doorset with letter plate	971	2154	2,09
Passive leaf of double leaf doorset without letter plate	1098	2461	2,45
Passive leaf of double leaf doorset with letter plate	981	2154	2,11
Thickness of the door leaf	54 mm		
Frame profile	(42/30 x 92) mm		

Glass panes	max W, mm	max H, mm	max A, m ²
Fireswiss Foam 30-15, paksus 15 mm	839	2202	1,67

The mode of operation shall not be changed.

The thickness of the door leaf or leaves shall not be reduced but may be increased.

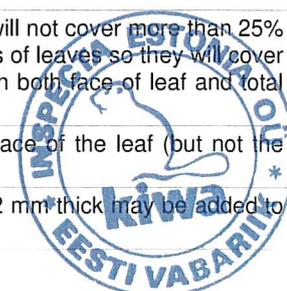
The doorleaf may be produced with grooves, if the depth of the groove is $\leq 2,5$ mm and cross-section area of the groove is ≤ 50 mm². The minimum distance between edges of parallel grooves is 112 mm. The total area of the grooves may be up to 13% of the area of leaf.

Decorative facings such as glass sheet, marble, stone or ceramic tile with a reaction to fire class A1 or A2 may be glued to the faces of leaves (but not to the area of the leaf behind the door frame rebates) providing total weight of door leaf with decorative facing is ≤ 80 kg.

Timber-based mouldings may be added to the faces of leaves providing they will not cover more than 25% of the surface of one face. Timber-based mouldings may be added to the faces of leaves so they will cover more than 25% of the surface of one face only if the mouldings are placed on both face of leaf and total weight of door leaf is ≤ 80 kg.

RST protector plate with a thickness up to 2 mm may be added on the surface of the leaf (but not the edges) provided that it will cover $\leq 40\%$ of the visible area of the closed leaf.

Timber veneer up to 3 mm thick or decorative laminate, plastic or cloth up to 2 mm thick may be added to the faces (but not the edges) of leaves and frame.



1,0 mm stainless steel edge protector may be added to the leaf and frame from the lower edge to height 900 mm.

RST protection may be added on the visible surface of frame (but not the edges).

The cross-sectional dimensions of the timber frames (including rebates) shall not be reduced but may be increased.

Single leaf doorset may be installed with wooden threshold, with mechanical threshold Planet FT, without threshold (gap at the lower edge of leaf ≤ 6 mm) or stainless-steel sheet on the floor.

Double leaf doorset may be installed only with wooden threshold.

Door may be produced up to 1 glazing or without glazing.

The minimum permitted distance between the edge of glazing and the vertical edge of leaf is 110 mm.

The minimum permitted distance between the edge of glazing and the horizontal edge of leaf is 110 mm.

The door leaf and the door frame may be painted.

Sealing of the door leaf and frame	
Intumescent sealing (2,0 x 15)	On vertical frame members and on top frame member.
Intumescent sealing (2,0 x 10)	2 stripes on the lock side edge of passive leaf or on the lower edge of leaf if there is no threshold used.
Silicone sealing $\varnothing 10$ mm	On frame and on the lock side edge rebate of passive leaf.
Silicone sealing $\varnothing 6$ mm	On threshold if it exists.

Hardware	
Lock / C1 – C5 is assured only with strike plates defined in the product family/	multipointlock ASSA M5001; ASSA 565; Abloy EL580; ASSA 410-50; Vingcard Signature; Vingcard Classic
Additional lock	ASSA 411; Abloy 4181
Striking plate	ASSA 730 + 575; ASSA 1887-2; Abloy EL712; Multihela 0094; Rollock ISP-RH; Abloy 5995; EP SECELAS S+EFT-C-RACT9; ASSA 1487-2; Abloy 4691; Abloy LP712; ASSA 5144
Hinges /3 pcs per leaf/	Assa Abloy 3248-110; Abloy 110 x 36 TMKS; Otlav IN300120; Otlav IN303120
Closer	Dorma TS 73; Dorma TS 93; Assa Abloy DC 355 + DC 199; concealed closer Dorma ITS 96 2-4 + G96 N20 P
Door coordinator	Olda 30 DK
Automatic flush bolt /2 pcs on passive leaf/	Olda 28HZ
Panic bar	Abloy PBE001; Abloy PBE002
Door viewer	Y180; Amig 180
Door bell	Abloy DF 64A
Letter plate	Primo 31
Lead cover	Abloy EA281
Key tube	ASSA 88; Dorma DF86



995 ± 200 mm variation from lower edge is allowed. Additional lock if it exists is positioned 400 mm from the main lock.

Distance between the centre of endmost hinges and the edge of leaf is 250 mm. Third hinge is positioned in the middle of leaf. Distance between the endmost hinges and the edge of leaf shall not be increased, but may be decreased, provided distance between the edge of leaf and the edge of endmost hinge is at least 100 mm.

Number of hinges may be increased. Decrease in number of hinges is allowed only if the distance between centres of two hinges is less than 820 mm.

1.3 Installation

Doorset may be mounted in standard high density rigid, in standard low density rigid and in standard flexible supporting construction.

Single leaf door may be mounted also in glazed modular wall.

The installation gap ≤ 25 mm may be sealed with mineral wool, with fire rated PU foam or using combined sealing with wool and foam.



2. If fire resistance without smoke control is required

2.1 Essential characteristics and performance

Classification according to EN 13501-2:2023: **EI₁30 - C**.

Essential characteristics	Performance											
		15	20	30	45	60	90	120	180	240	360	
Resistance to fire	E	15	20	30	45	60	90	120	180	240	360	
	EI₁	15	20	30	45	60	90	120	180	240	360	
	EI₂	15	20	30	45	60	90	120	180	240	360	
Smoke control	EW	15	20	30	45	60	90	120	180	240	360	
	S_a	3							4			
Resistance to fire	S₂₀₀											
	C	0	1	2	3	4	5					

2.2 Product specification and field of application

Detail	max W, mm	max H, mm	max A, m ²
Leaf of single leaf doorset without letter plate	1113	2461	2,49
Leaf of single leaf doorset with letter plate	971	2154	2,09
Active leaf of double leaf doorset without letter plate	1113	2461	2,49
Active leaf of double leaf doorset with letter plate	971	2154	2,09
Passive leaf of double leaf doorset without letter plate	1098	2461	2,45
Passive leaf of double leaf doorset with letter plate	981	2154	2,11
Thickness of the door leaf	54 mm		
Frame profile	(42/30 x 92) mm		

Glass panes	max W, mm	max H, mm	max A, m ²
Fireswiss Foam 30-15, paksus 15 mm	839	2202	1,67

The mode of operation shall not be changed.

The thickness of the door leaf or leaves shall not be reduced but may be increased.

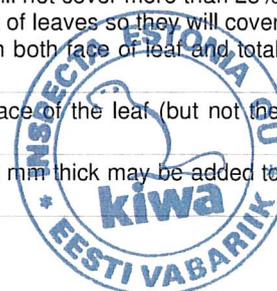
The doorleaf may be produced with grooves, if the depth of the groove is $\leq 2,5$ mm and cross-section area of the groove is ≤ 50 mm². The minimum distance between edges of parallel grooves is 112 mm. The total area of the grooves may be up to 13% of the area of leaf.

Decorative facings such as glass sheet, marble, stone or ceramic tile with a reaction to fire class A1 or A2 may be glued to the faces of leaves (but not to the area of the leaf behind the door frame rebates) providing total weight of door leaf with decorative facing is ≤ 80 kg.

Timber-based mouldings may be added to the faces of leaves providing they will not cover more than 25% of the surface of one face. Timber-based mouldings may be added to the faces of leaves so they will cover more than 25% of the surface of one face only if the mouldings are placed on both face of leaf and total weight of door leaf is ≤ 80 kg.

RST protector plate with a thickness up to 2 mm may be added on the surface of the leaf (but not the edges) provided that it will cover $\leq 40\%$ of the visible area of the closed leaf.

Timber veneer up to 3 mm thick or decorative laminate, plastic or cloth up to 2 mm thick may be added to the faces (but not the edges) of leaves and frame.



1,0 mm stainless steel edge protector may be added to the leaf and frame from the lower edge to height 900 mm.

RST protection may be added on the visible surface of frame (but not the edges).

The cross-sectional dimensions of the timber frames (including rebates) shall not be reduced but may be increased.

Single leaf doorset may be installed with wooden threshold, with mechanical threshold Planet FT, without threshold (gap at the lower edge of leaf ≤ 6 mm) or stainless-steel sheet on the floor.

Double leaf doorset may be installed only with wooden threshold.

Door may be produced up to 1 glazing or without glazing.

The minimum permitted distance between the edge of glazing and the vertical edge of leaf is 110 mm.

The minimum permitted distance between the edge of glazing and the horizontal edge of leaf is 110 mm.

The door leaf and the door frame may be painted.

Sealing of the door leaf and frame	
Intumescent sealing (2,0 x 15)	On vertical frame members and on top frame member.
Intumescent sealing (2,0 x 10)	2 stripes on the lock side edge of passive leaf or on the lower edge of leaf if there is no threshold used.
Silicone sealing $\varnothing 10$ mm	On frame and on the lock side edge rebate of passive leaf.
Silicone sealing $\varnothing 6$ mm	On threshold if it exists.

Hardware	
Lock	multipointlock ASSA M5001; ASSA 565; Abloy EL580; ASSA 410-50; Vingcard Signature; Vingcard Classic; Rollock Smart Lock E111/E112
Additional lock	ASSA 411; Abloy 4181
Striking plate	ASSA 730 + 575; ASSA 1887-2; Abloy EL712; Multihela 0094; Rollock ISP-RH; Abloy 5995; EP SECELAS S+EFT-C-RAC9; ASSA 1487-2; Abloy 4691; Abloy LP712; ASSA 5144
Hinges /3 pcs per leaf/	Assa Abloy 3248-110; Abloy 110 x 36 TMKS; ASSA 3248-01 FOP; Otlav IN300120; Otlav IN303120
Closer	Dorma TS 73; Dorma TS 93; Assa Abloy DC 355 + DC 199; concealed closer Dorma ITS 96 2-4 + G96 N20 P
Door coordinator	Olda 30 DK
Automatic flush bolt /2 pcs on passive leaf/	Olda 28HZ; Olda 31HZ-C
Manual flush bolt /2 pcs on passive leaf/	Olda 30HZ
Quick bolt /1 pc on passive leaf/	Abloy DF3000
Panic bar	Abloy PBE001; Abloy PBE002
Door viewer	Y180; Amig 180
Door bell	Abloy DF 64A
Letter plate	Primo 31
Lead cover	Abloy EA281
Key tube	ASSA 88; Dorma DF86



995 ± 200 mm variation from lower edge is allowed. Additional lock if it exists is positioned 400 mm from the main lock.

Distance between the centre of endmost hinges and the edge of leaf is 250 mm. Third hinge is positioned in the middle of leaf. Distance between the endmost hinges and the edge of leaf shall not be increased, but may be decreased, provided distance between the edge of leaf and the edge of endmost hinge is at least 100 mm.

Number of hinges may be increased. Decrease in number of hinges is allowed only if the distance between centres of two hinges is less than 820 mm.

If self-closing characteristics are not required, the doorset may be installed without door closing device.

2.3 Installation

Doorset may be mounted in standard high density rigid, in standard low density rigid and in standard flexible supporting construction.

Single leaf door may be mounted also in glazed modular wall.

The installation gap ≤ 25 mm may be sealed with mineral wool, with fire rated PU foam or using combined sealing with wool and foam.



3. If fire resistance and smoke control Sa3 is required

3.1 Essential characteristics and performance

Classification according to EN 13501-2:2023: **EI₁30 – Sa3 - C5**.¹

Essential characteristics	Performance											
		15	20	30	45	60	90	120	180	240	360	
Resistance to fire	E	15	20	30	45	60	90	120	180	240	360	
	EI₁	15	20	30	45	60	90	120	180	240	360	
	EI₂	15	20	30	45	60	90	120	180	240	360	
	EW	15	20	30	45	60	90	120	180	240	360	
Smoke control	S_a	3							4			
	S₂₀₀											
Resistance to fire	C	0	1*	2*	3*	4*	5*					

* Classifications C1-C5 cover doorsets with a maximum door leaf weight of 80 kg.

3.2 Product specification and field of application

Detail	max W, mm	max H, mm	max A, m ²
Leaf of single leaf doorset (with or without letter plate)	925	2150	1,99
	967	2140	2,07
Active and passive leaf of double leaf doorset (with or without letter plate)	967	2140	2,07
Thickness of the door leaf	54 mm		
Frame profile	(42/30 x 92) mm		

Glass panes	max W, mm	max H, mm	max A, m ²
Fireswiss Foam 30-15, paksus 15 mm	839	2202	1,67

The mode of operation shall not be changed.

The thickness of the door leaf or leaves shall not be reduced but may be increased.

The doorleaf may be produced with grooves, if the depth of the groove is $\leq 2,5$ mm and cross-section area of the groove is ≤ 50 mm². The minimum distance between edges of parallel grooves is 112 mm. The total area of the grooves may be up to 13% of the area of leaf.

Timber-based mouldings may be added to the faces of leaves providing they will not cover more than 25% of the surface of one face. Timber-based mouldings may be added to the faces of leaves so they will cover more than 25% of the surface of one face only if the mouldings are placed on both face of leaf and total weight of door leaf is ≤ 80 kg.

RST protector plate with a thickness up to 2 mm may be added on the surface of the leaf (but not the edges) provided that it will cover $\leq 40\%$ of the visible area of the closed leaf.

Timber veneer up to 3 mm thick or decorative laminate up to 2 mm thick may be added to the faces (but not the edges) of leaves and frame.

RST protection may be added on the visible surface of frame (but not the edges).

The cross-sectional dimensions of the timber frames (including rebates) shall not be reduced but may be increased.

¹ This classification corresponds to classification EI₁30 – Sa - C5 according to previous version of standard EN 13501-2:2016.



**Approved technical description TS-ET-0370
version 01, APPENDIX Z**



Single leaf doorset may be installed with wooden threshold, with mechanical threshold Planet FT, without threshold (gap at the lower edge of leaf ≤ 6 mm) or stainless-steel sheet on the floor.

Double leaf doorset may be installed only with wooden threshold.

Door may be produced up to 1 glazing or without glazing.

The minimum permitted distance between the edge of glazing and the vertical edge of leaf is 110 mm.

The minimum permitted distance between the edge of glazing and the horizontal edge of leaf is 110 mm.

The door leaf and the door frame may be painted.

Sealing of the door leaf and frame	
Intumescent sealing (2,0 x 15)	On vertical frame members and on top frame member.
Intumescent sealing (2,0 x 10)	2 stripes on the lock side edge of passive leaf or on the lower edge of leaf if there is no threshold used.
Silicone sealing $\varnothing 10$ mm	On frame and on the lock side edge rebate of passive leaf.
Silicone sealing $\varnothing 6$ mm	On threshold if it exists.

Hardware	
Lock /C1 – C5 is assured only with strike plates defined in the product family/	multipointlock ASSA M5001; ASSA 565; Abloy EL580; ASSA 410-50; Vingcard Signature; Vingcard Classic
Additional lock	ASSA 411; Abloy 4181
Striking plate	ASSA 730 + 575; ASSA 1887-2; Abloy EL712; Multihela 0094; Rollock ISP-RH; Abloy 5995; EP SECELAS S+EFT-C-RACT9; ASSA 1487-2; Abloy 4691; Abloy LP712; ASSA 5144
Hinges /3 pcs per leaf/	Assa Abloy 3248-110; Abloy 110 x 36 TMKS; Otlav IN300120; Otlav IN303120
Closer	Dorma TS 73; Dorma TS 93; Assa Abloy DC 355 + DC 199; concealed closer Dorma ITS 96 2-4 + G96 N20 P
Door coordinator	Olda 30 DK
Automatic flush bolt /2 pcs on passive leaf/	Olda 28HZ
Panic bar	Abloy PBE001; Abloy PBE002
Door viewer	Y180; Amig 180
Door bell	Abloy DF 64A
Letter plate	Primo 31
Lead cover	Abloy EA281
Key tube	ASSA 88; Dorma DF86



995 ± 200 mm variation from lower edge is allowed. Additional lock if it exists is positioned 400 mm from the main lock.

Distance between the centre of endmost hinges and the edge of leaf is 250 mm. Third hinge is positioned in the middle of leaf. Distance between the endmost hinges and the edge of leaf shall not be increased, but may be decreased, provided distance between the edge of leaf and the edge of endmost hinge is at least 100 mm.

Number of hinges may be increased. Decrease in number of hinges is allowed only if the distance between centres of two hinges is less than 820 mm.

3.3 Installation

Doorset may be mounted in standard high density rigid, in standard low density rigid and in standard flexible supporting construction.

Single leaf door may be mounted also in glazed modular wall.

The installation gap ≤ 25 mm may be sealed with fire rated PU foam.

The installation gap ≤ 15 mm may be sealed with mineral wool or using combined sealing with wool and foam.



4. If fire resistance and smoke control Sa4 is required

4.1 Essential characteristics and performance

Classification according to EN 13501-2:2023: **EI₁30 – Sa4 - C5**.²

Essential characteristics	Performance										
		15	20	30	45	60	90	120	180	240	360
Resistance to fire	E	15	20	30	45	60	90	120	180	240	360
	EI₁	15	20	30	45	60	90	120	180	240	360
	EI₂	15	20	30	45	60	90	120	180	240	360
	EW	15	20	30	45	60	90	120	180	240	360
Smoke control	S_a	3					4				
	S₂₀₀										
Resistance to fire	C	0	1*	2*	3*	4*	5*				

* Classifications C1-C5 cover doorsets with a maximum door leaf weight of 80 kg.

4.2 Product specification and field of application

Detail	max W, mm	max H, mm	max A, m ²
Leaf of single leaf doorset (with or without letter plate)	925	2150	1,99
	967	2140	2,07
Active and passive leaf of double leaf doorset (with or without letter plate)	967	2140	2,07
Thickness of the door leaf	54 mm		
Frame profile	(42/30 x 92) mm		

Glass panes	max W, mm	max H, mm	max A, m ²
Fireswiss Foam 30-15, paksus 15 mm	839	2202	1,67

The mode of operation shall not be changed.

The thickness of the door leaf or leaves shall not be reduced but may be increased.

The doorleaf may be produced with grooves, if the depth of the groove is $\leq 2,5$ mm and cross-section area of the groove is ≤ 50 mm². The minimum distance between edges of parallel grooves is 112 mm. The total area of the grooves may be up to 13% of the area of leaf.

Timber-based mouldings may be added to the faces of leaves providing they will not cover more than 25% of the surface of one face. Timber-based mouldings may be added to the faces of leaves so they will cover more than 25% of the surface of one face only if the mouldings are placed on both face of leaf and total weight of door leaf is ≤ 80 kg.

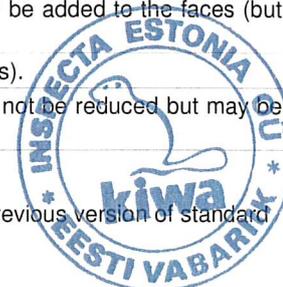
RST protector plate with a thickness up to 2 mm may be added on the surface of the leaf (but not the edges) provided that it will cover $\leq 40\%$ of the visible area of the closed leaf.

Timber veneer up to 3 mm thick or decorative laminate up to 2 mm thick may be added to the faces (but not the edges) of leaves and frame.

RST protection may be added on the visible surface of frame (but not the edges).

The cross-sectional dimensions of the timber frames (including rebates) shall not be reduced but may be increased.

² This classification corresponds to classification EI₁30 – Sa - C5 according to previous version of standard EN 13501-2:2016.



Single leaf doorset may be installed with wooden threshold or with mechanical threshold Planet FT.

Double leaf doorset may be installed only with wooden threshold.

Door may be produced up to 1 glazing or without glazing.

The minimum permitted distance between the edge of glazing and the vertical edge of leaf is 110 mm.

The minimum permitted distance between the edge of glazing and the horizontal edge of leaf is 110 mm.

The door leaf and the door frame may be painted.

Sealing of the door leaf and frame

Intumescent sealing (2,0 x 15)	On vertical frame members and on top frame member.
Intumescent sealing (2,0 x 10)	2 stripes on the lock side edge of passive leaf or on the lower edge of leaf if there is no threshold used.
Silicone sealing Ø10 mm	On frame and on the lock side edge rebate of passive leaf.
Silicone sealing Ø6 mm	On threshold if it exists.

Hardware

Lock /C1 – C5 is assured only with strike plates defined in the product family/	multipointlock ASSA M5001; ASSA 565; Abloy EL580; ASSA 410-50; Vingcard Signature; Vingcard Classic
Additional lock	ASSA 411; Abloy 4181
Striking plate	ASSA 730 + 575; ASSA 1887-2; Abloy EL712; Multihela 0094; Rollock ISP-RH; Abloy 5995; EP SECELAS S+EFT-C-RACT9; ASSA 1487-2; Abloy 4691; Abloy LP712; ASSA 5144
Hinges /3 pcs per leaf/	Assa Abloy 3248-110; Abloy 110 x 36 TMKS; Otlav IN300120; Otlav IN303120
Closer	Dorma TS 73; Dorma TS 93; Assa Abloy DC 355 + DC 199; concealed closer Dorma ITS 96 2-4 + G96 N20 P
Door coordinator	Olda 30 DK
Automatic flush bolt /2 pcs on passive leaf/	Olda 28HZ
Panic bar	Abloy PBE001; Abloy PBE002
Door viewer	Y180; Amig 180
Door bell	Abloy DF 64A
Letter plate	Primo 31
Lead cover	Abloy EA281
Key tube	ASSA 88; Dorma DF86



995 ± 200 mm variation from lower edge is allowed. Additional lock if it exists is positioned 400 mm from the main lock.

Distance between the centre of endmost hinges and the edge of leaf is 250 mm. Third hinge is positioned in the middle of leaf. Distance between the endmost hinges and the edge of leaf shall not be increased, but may be decreased, provided distance between the edge of leaf and the edge of endmost hinge is at least 100 mm.

Number of hinges may be increased. Decrease in number of hinges is allowed only if the distance between centres of two hinges is less than 820 mm.

4.3 Installation

Doorset may be mounted in standard high density rigid, in standard low density rigid and in standard flexible supporting construction.

Single leaf door may be mounted also in glazed modular wall.

The installation gap ≤ 25 mm may be sealed with fire rated PU foam.

The installation gap ≤ 15 mm may be sealed with mineral wool or using combined sealing with wool and foam.



5. If fire resistance and smoke control is required

5.1 Essential characteristics and performance

Classification according to EN 13501-2:2023: **EI₁30 – Sa/S₂₀₀ - C5**.³

Essential characteristics	Performance										
Resistance to fire	E	15	20	30	45	60	90	120	180	240	360
	EI₁	15	20	30	45	60	90	120	180	240	360
	EI₂	15	20	30	45	60	90	120	180	240	360
	EW	15	20	30	45	60	90	120	180	240	360
Smoke control	S_a	3					4				
	S₂₀₀										
Resistance to fire	C	0	1*	2*	3*	4*	5*				

* Classifications C1-C5 cover doorsets with a maximum door leaf weight of 80 kg.

5.2 Product specification and field of application

Detail	max W, mm	max H, mm	max A, m ²
Leaf of single leaf doorset (with or without letter plate)	925	2150	1,99
	967	2140	2,07
Active and passive leaf of double leaf doorset (with or without letter plate)	967	2140	2,07
Thickness of the door leaf	54 mm		
Frame profile	(42/30 x 92) mm		

Glass panes	max W, mm	max H, mm	max A, m ²
Fireswiss Foam 30-15, paksus 15 mm	839	2202	1,67

The mode of operation shall not be changed.

The thickness of the door leaf or leaves shall not be reduced but may be increased.

The doorleaf may be produced with grooves, if the depth of the groove is ≤ 2,5 mm and cross-section area of the groove is ≤ 50 mm². The minimum distance between edges of parallel grooves is 112 mm. The total area of the grooves may be up to 13% of the area of leaf.

Timber-based mouldings may be added to the faces of leaves providing they will not cover more than 25% of the surface of one face. Timber-based mouldings may be added to the faces of leaves so they will cover more than 25% of the surface of one face only if the mouldings are placed on both face of leaf and total weight of door leaf is ≤ 80 kg.

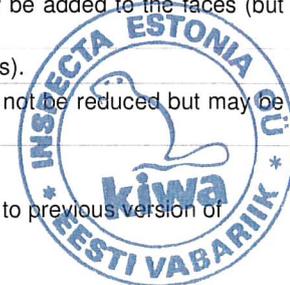
One piece RST protector plate with a thickness up to 1,5 mm and with a width/height of up to 250 mm may be added on the surface of the leaf (but not the edges) below the handle.

Timber veneer up to 3 mm thick or decorative laminate up to 2 mm thick may be added to the faces (but not the edges) of leaves and frame.

RST protection may be added on the visible surface of frame (but not the edges).

The cross-sectional dimensions of the timber frames (including rebates) shall not be reduced but may be increased.

³ This classification corresponds to classification EI₁30 – Sa/S₂₀₀ - C5 according to previous version of standard EN 13501-2:2016.



Single leaf doorset may be installed with wooden threshold or with mechanical threshold Planet FT.

Double leaf doorset may be installed only with wooden threshold.

Door may be produced up to 1 glazing or without glazing.

The minimum permitted distance between the edge of glazing and the vertical edge of leaf is 110 mm.

The minimum permitted distance between the edge of glazing and the horizontal edge of leaf is 110 mm.

The door leaf and the door frame may be painted.

Sealing of the door leaf and frame	
Intumescent sealing (2,0 x 15)	On vertical frame members and on top frame member.
Intumescent sealing (2,0 x 10)	2 stripes on the lock side edge of passive leaf or on the lower edge of leaf if there is no threshold used.
Silicone sealing Ø10 mm	On frame and on the lock side edge rebate of passive leaf.
Silicone sealing Ø6 mm	On threshold if it exists.

Hardware	
Lock /C1 – C5 is assured only with strike plates defined in the product family/	multipointlock ASSA M5001; ASSA 565; Abloy EL580; ASSA 410-50; Vingcard Signature; Vingcard Classic
Additional lock	ASSA 411; Abloy 4181
Striking plate	ASSA 730 + 575; ASSA 1887-2; Abloy EL712; Multihela 0094; Rollock ISP-RH; Abloy 5995; EP SECELAS S+EFT-C-RACT9; ASSA 1487-2; Abloy 4691; Abloy LP712; ASSA 5144
Hinges /3 pcs per leaf/	Assa Abloy 3248-110; Abloy 110 x 36 TMKS; Otlav IN300120; Otlav IN303120
Closer	Dorma TS 73; Dorma TS 93; Assa Abloy DC 355 + DC 199; concealed closer Dorma ITS 96 2-4 + G96 N20 P
Door coordinator	Olda 30 DK
Automatic flush bolt /2 pcs on passive leaf/	Olda 28HZ
Panic bar	Abloy PBE001; Abloy PBE002
Door viewer	Y180; Amig 180
Door bell	Abloy DF 64A
Letter plate	Primo 31
Lead cover	Abloy EA281
Key tube	ASSA 88; Dorma DF86



995 ± 200 mm variation from lower edge is allowed. Additional lock if it exists is positioned 400 mm from the main lock.

Distance between the centre of endmost hinges and the edge of leaf is 250 mm. Third hinge is positioned in the middle of leaf. Distance between the endmost hinges and the edge of leaf shall not be increased, but may be decreased, provided distance between the edge of leaf and the edge of endmost hinge is at least 100 mm.

Number of hinges may be increased. Decrease in number of hinges is allowed only if the distance between centres of two hinges is less than 820 mm.

5.3 Installation

Doorset may be mounted in standard high density rigid, in standard low density rigid and in standard flexible supporting construction.

The installation gap ≤ 25 mm may be sealed with fire rated PU foam.

The installation gap ≤ 15 mm may be sealed with mineral wool or using combined sealing with wool and foam.



6. If fire resistance and smoke control is required

6.1 Essential characteristics and performance

Classification according to EN 13501-2:2023: **EI₁30 – Sa₄/S₂₀₀ - C**.⁴

Essential characteristics	Performance										
		15	20	30	45	60	90	120	180	240	360
Resistance to fire	E	15	20	30	45	60	90	120	180	240	360
	EI₁	15	20	30	45	60	90	120	180	240	360
	EI₂	15	20	30	45	60	90	120	180	240	360
	EW	15	20	30	45	60	90	120	180	240	360
Smoke control	S_a	3					4				
	S₂₀₀										
Resistance to fire	C	0	1	2	3	4	5				

6.2 Product specification and field of application

Detail	max W, mm	max H, mm	max A, m ²
Leaf of single leaf doorset (with or without letter plate)	925	2150	1,99
	967	2140	2,07
Active and passive leaf of double leaf doorset (with or without letter plate)	967	2140	2,07
Thickness of the door leaf	54 mm		
Frame profile	(42/30 x 92) mm		

Glass panes	max W, mm	max H, mm	max A, m ²
Fireswiss Foam 30-15, paksus 15 mm	839	2202	1,67

The mode of operation shall not be changed.

The thickness of the door leaf or leaves shall not be reduced but may be increased.

The doorleaf may be produced with grooves, if the depth of the groove is ≤ 2,5 mm and cross-section area of the groove is ≤ 50 mm². The minimum distance between edges of parallel grooves is 112 mm. The total area of the grooves may be up to 13% of the area of leaf.

Timber-based mouldings may be added to the faces of leaves providing they will not cover more than 25% of the surface of one face. Timber-based mouldings may be added to the faces of leaves so they will cover more than 25% of the surface of one face only if the mouldings are placed on both face of leaf and total weight of door leaf is ≤ 80 kg.

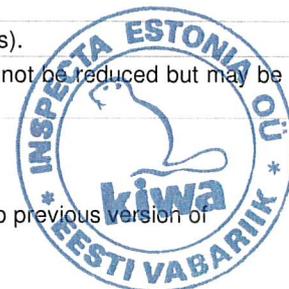
One piece RST protector plate with a thickness up to 1,5 mm and with a width/height of up to 250 mm may be added on the surface of the leaf (but not the edges) below the handle.

Timber veneer up to 3 mm thick or decorative laminate up to 2 mm thick may be added to the faces (but not the edges) of leaves and frame.

RST protection may be added on the visible surface of frame (but not the edges).

The cross-sectional dimensions of the timber frames (including rebates) shall not be reduced but may be increased.

⁴ This classification corresponds to classification EI₁30 – Sa/S₂₀₀ - C according to previous version of standard EN 13501-2:2016.



Single leaf doorset may be installed with wooden threshold or with mechanical threshold Planet FT.

Double leaf doorset may be installed only with wooden threshold.

Door may be produced up to 1 glazing or without glazing.

The minimum permitted distance between the edge of glazing and the vertical edge of leaf is 110 mm.

The minimum permitted distance between the edge of glazing and the horizontal edge of leaf is 110 mm.

The door leaf and the door frame may be painted.

Sealing of the door leaf and frame	
Intumescent sealing (2,0 x 15)	On vertical frame members and on top frame member.
Intumescent sealing (2,0 x 10)	2 stripes on the lock side edge of passive leaf or on the lower edge of leaf if there is no threshold used.
Silicone sealing Ø10 mm	On frame and on the lock side edge rebate of passive leaf.
Silicone sealing Ø6 mm	On threshold if it exists.

Hardware	
Lock	multipointlock ASSA M5001; ASSA 565; Abloy EL580; ASSA 410-50; Vingcard Signature; Vingcard Classic; Rollock Smart Lock E111/E112
Additional lock	ASSA 411; Abloy 4181
Striking plate	ASSA 730 + 575; ASSA 1887-2; Abloy EL712; Multihela 0094; Rollock ISP-RH; Abloy 5995; EP SECELAS S+EFT-C-RACT9; ASSA 1487-2; Abloy 4691; Abloy LP712; ASSA 5144
Hinges /3 pcs per leaf/	Assa Abloy 3248-110; Abloy 110 x 36 TMKS; ASSA 3248-01 FOP; Otlav IN300120; Otlav IN303120
Closer	Dorma TS 73; Dorma TS 93; Assa Abloy DC 355 + DC 199; concealed closer Dorma ITS 96 2-4 + G96 N20 P
Door coordinator	Olda 30 DK
Automatic flush bolt /2 pcs on passive leaf/	Olda 28HZ; Olda 31HZ-C
Manual flush bolt /2 pcs on passive leaf/	Olda 30HZ
Quick bolt /1 pc on passive leaf/	Abloy DF3000
Panic bar	Abloy PBE001; Abloy PBE002
Door viewer	Y180; Amig 180
Door bell	Abloy DF 64A
Letter plate	Primo 31
Lead cover	Abloy EA281
Key tube	ASSA 88; Dorma DF86



995 ± 200 mm variation from lower edge is allowed. Additional lock if it exists is positioned 400 mm from the main lock.

Distance between the centre of endmost hinges and the edge of leaf is 250 mm. Third hinge is positioned in the middle of leaf. Distance between the endmost hinges and the edge of leaf shall not be increased, but may be decreased, provided distance between the edge of leaf and the edge of endmost hinge is at least 100 mm.

Number of hinges may be increased. Decrease in number of hinges is allowed only if the distance between centres of two hinges is less than 820 mm.

If self-closing characteristics are not required, the doorset may be installed without door closing device.

6.3 Installation

Doorset may be mounted in standard high density rigid, in standard low density rigid and in standard flexible supporting construction.

The installation gap ≤ 25 mm may be sealed with fire rated PU foam.

The installation gap ≤ 15 mm may be sealed with mineral wool or using combined sealing with wool and foam.

