

Kitemark™ Certificate

This is to certify that:

Smart Systems Limited
Incorporating Smart Extrusions
Arnolds Way
Yatton
BS49 4QN
United Kingdom

Holds Certificate Number:

KM 81580

In respect of:

BS 4873 / PAS24
Enhanced Security Aluminium Window System Supplier

This issues the right and licence to use the Kitemark in accordance with the Kitemark Terms and Conditions governing the use of the Kitemark, as may be updated from time to time by BSI Assurance UK Ltd (the "Conditions"). All defined terms in this Certificate shall have the same meaning as in the Conditions.

The use of the Kitemark is authorized in respect of the Product(s) detailed on this Certificate provided at or from the above address.



For and on behalf of BSI:

Frank Lee, Product Certification Technical and Compliance Director

First Issued: 2005-02-03

Latest Issue: 2021-11-02

Effective Date: 2021-11-02

Expiry Date: 2024-10-09

Page: 1 of 28



...making excellence a habit.™

Kitemark™ Certificate

No. KM 81580

BS 4873:2016 / PAS 24:2016 - Enhanced security performance requirements for window assemblies.

This Certificate covers the following window system design specification. Only those components that have been approved in accordance with the Kitemark scheme requirement can be incorporated within the system detailed.

Alitherm 300 Aluminium Alloy Window System

Fabrication and Installation: Fabricated and installed in accordance with the latest issue(s) of the following Smart Systems Limited controlled manual(s):

Smart Systems Alitherm 300 Window Manual

System description: The windows are thermally broken, double glazed only, internally or externally beaded, multipoint locking only, with mechanically fixed transoms/mullions

Ventilation: None

Window Types: Casement windows
Fixed windows
Multilight windows comprising opening light(s) and/or dummy vent(s) or fixed light(s)

Profiles	Outer Frame(s)	ETC302/303/304/305/306/308/310/313
	Transom/Mullion(s)	ETC333/335/336/337
	Sash(es)	ETC321/323/324N/326/327/328N/329/423/424N
	Rebate Reverser	ETC343/344/345/346N

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Page: 2 of 28

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To check its validity telephone +44 (0) 345 080 9000. An electronic certificate can be authenticated [online](#).

BSI Assurance UK Limited, registered in England under number 7805321 at 389 Chiswick High Road, London W4 4AL, UK.
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Kitemark™ Certificate

No. KM 81580

Hardware - Alitherm 300 Aluminium Alloy Window System

Casement windows*

Hardware Reference	Hardware Supplier	Fixing Specification	Fixing Supplier
Friction Hinge Securistyle Defender Nico ME-Egress Hinge (Yale)	Smart Systems	ACET070	Smart Systems
Securistyle/Yale hinge protector ASD/ASD-ST	Smart Systems	ACET066	Smart Systems
Trojan Shootbolt/mushroom bolt espagnolette locking system	Smart Systems	Espagnolette & keeps: ACET066	Smart Systems
ACET081/ACET165 Key locking handles	Smart Systems	ACET069	Smart Systems
Run-up blocks 4 off per sash	-		

*Glass retention as specified below.

Dummy vent windows*

Hardware Reference	Hardware Supplier	Fixing Specification	Fixing Supplier
Securistyle Defender stays	Smart Systems	ACET070	Smart Systems

*Glass retention as specified below.

Glass retention: External: Glazing beads and Glaslok Securi-clip security glazing clips
Internal: Glazing beads

Multilight windows comprising opening light(s) and/or dummy vent(s) or fixed light(s)

Hardware/Fixing requirements are as specified for opening, dummy vent and fixed window types.

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Page: 3 of 28

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Kitemark™ Certificate

No. KM 81580

Size Limitations and Performance Characteristics – to be read in conjunction with fabrication manual Alitherm 300 Aluminium Alloy Window System

Window Type	Length (mm) - Maximum	Height (mm) - Maximum	Area(m²) - Maximum	Friction Stays (up to and including)	Transom/Mullion Length (mm) inc frame - Maximum	Air Permeability classification	Watertightness classification	Resistance to Wind classification	Exposure category as given in Table 1 of BS 6375-1:
Sash dimensions for windows with approved sash profiles:									
Projecting top hungs Internally beaded	1400	1400	-	24"	-	4	E1200	AE2400	2000+
Projecting top hungs Externally beaded	1400	1400	-	24"	-	4	E1200	AE2400	2000+
Projecting side hungs Internally beaded	600	1400	-	16"	-	4	E1200	AE2400	2000+
Projecting side hungs Externally beaded	600	1400	-	16"	-	4	E1200	AE2400	2000+
Overall dimensions for windows with approved outer frame profiles:									
Fixed Internally Beaded	2100	2100	4.2	-	-	4	E1200	AE2400	2000+
Fixed Externally Beaded	2100	2100	4.2	-	-	4	E1200	AE2400	2000+
Overall dimensions for approved outer frames & transom/mullion profiles:									
Multilights ETC335 T/M Internally Beaded	2100	2100	2.5	-	1450	4	E1200	AE2400	2000+
Multilights ETC335 T/M Externally Beaded	2100	2100	2.5	-	1450	4	E1200	AE2400	2000+

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Page: 4 of 28

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No. KM 81580

BS 4873:2016 / PAS 24:2016 - Enhanced security performance requirements for window assemblies.

This Certificate covers the following window system design specification. Only those components that have been approved in accordance with the Kitemark scheme requirement can be incorporated within the system detailed.

Alitherm 400 Aluminium Alloy Window System

Fabrication and Installation: Fabricated and installed in accordance with the latest issue(s) of the following Smart Systems Limited controlled manual(s):

Smart Systems Alitherm 400 Window Manual

System description: The windows are thermally broken, double glazed only, internally or externally beaded, multipoint locking only, with mechanically fixed transoms/mullions

Ventilation: None

Window Types: Casement windows
Fixed windows
Multilight windows comprising opening light(s) and/or dummy vent(s) or fixed light(s)

Profiles	Outer Frame(s)	ETC4110/4112/4115
	Transom/Mullion(s)	ETC4130/4135
	Sash(es)	ETC4120/4129
	Rebate Reverser	ETC4146/4147

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Page: 5 of 28

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Hardware - Alitherm 400 Aluminium Alloy Window System

Casement windows*

Hardware Reference	Hardware Supplier	Fixing Specification	Fixing Supplier
Friction Hinge Securistyle Defender Nico ME-Egress Hinge (Yale)	Smart Systems	ACET070	Smart Systems
Securistyle/Yale hinge protector ASD/ASD-ST	Smart Systems	ACET066	Smart Systems
Trojan Shootbolt/mushroom bolt espagnolette locking system ACET4061-4066 (ERA Lock)	Smart Systems	Espagnolette & keeps: ACET066	Smart Systems
ACET081/ACET165 Key locking handles	Smart Systems	ACET069	Smart Systems
Run-up blocks 4 off per sash	-		

*Glass retention as specified below.

Dummy vent windows*

Hardware Reference	Hardware Supplier	Fixing Specification	Fixing Supplier
Securistyle Defender stays	Smart Systems	ACET070	Smart Systems

*Glass retention as specified below.

Glass retention: External: Glazing beads and Glaslok Securi-clip security glazing clips
Internal: Glazing beads

Multilight windows comprising opening light(s) and/or dummy vent(s) or fixed light(s)

Hardware/Fixing requirements are as specified for opening, dummy vent and fixed window types.

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Page: 6 of 28

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No. KM 81580

Size Limitations and Performance Characteristics – to be read in conjunction with fabrication manual Alitherm 400 Aluminium Alloy Window System

Window Type	Length (mm) - Maximum	Height (mm) - Maximum	Area(m ²) - Maximum	Friction Stays (up to and including)	Transom/Mullion Length (mm) inc frame - Maximum	Air Permeability classification	Watertightness classification	Resistance to Wind classification	Exposure category as given in Table 1 of BS 6375-1:
Sash dimensions for windows with approved sash profiles:									
Projecting top hungs Internally beaded	1400	1400	-	24"	-	4	E1200	AE2400	2000+
Projecting top hungs Externally beaded	1400	1400	-	24"	-	4	E1200	AE2400	2000+
Projecting side hungs Internally beaded	600	1400	-	16"	-	4	E1200	AE2400	2000+
Projecting side hungs Externally beaded	600	1400	-	16"	-	4	E1200	AE2400	2000+
Overall dimensions for windows with approved outer frame profiles:									
Fixeds Internally Beaded	2100	2100	4.2	-	-	4	E1200	AE2400	2000+
Fixeds Externally Beaded	2100	2100	4.2	-	-	4	E1200	AE2400	2000+
Overall dimensions for approved outer frames & transom/mullion profiles:									
Multilights ETC4130/4135 T/M Internally Beaded	2100	2100	2.5	-	1450	4	E1200	AE2400	2000+
Multilights ETC4130/4135 T/M Externally Beaded	2100	2100	2.5	-	1450	4	E1200	AE2400	2000+

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Page: 7 of 28

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No. KM 81580

BS 4873:2016 / PAS 24:2016 - Enhanced security performance requirements for window assemblies.

This Certificate covers the following window system design specification. Only those components that have been approved in accordance with the Kitemark scheme requirement can be incorporated within the system detailed.

Alitherm 500 Aluminium Alloy Window System

Fabrication and Installation: Fabricated and installed in accordance with the latest issue(s) of the following Smart Systems Limited controlled manual(s):

Smart Systems Alitherm 500 Window Manual

System description: The windows are thermally broken, double glazed only, internally or externally beaded, multipoint locking only, with mechanically fixed transoms/mullions

Ventilation: None

Window Types: Casement and dummy casement windows
Multilight windows comprising opening light(s) and/or dummy vent(s)

Profiles	Outer Frame(s)	ETC511
	Transom/Mullion(s)	ETC531
	Sash(es)	ETC521

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Page: 8 of 28

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No. KM 81580

Hardware - Alitherm 500 Aluminium Alloy Window System

Casement windows*

Hardware Reference	Hardware Supplier	Fixing Specification	Fixing Supplier
Butt Hinge ACET552	Smart Systems	M4 x 15mm –ACET490	Smart Systems
Trojan Reverse espagnolette locking system –ACET501-505	Smart Systems	Espagnolette & keeps: ACET064	Smart Systems
ACET460, 465. Key locking handles	Smart Systems	M5 x 12mm	Smart Systems
Run-up blocks ACET580 4 off per sash	Smart Systems-	ACET490	Smart Systems
Mullion anti-twist clip ACET157	Smart Systems		

*Glass retention as specified below.

Glass retention: Internal: Glazing beads

Multilight windows comprising opening light(s) and/or dummy vent(s) or fixed light(s)

Hardware/Fixing requirements are as specified for opening, dummy vent.

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Page: 9 of 28

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Kitemark™ Certificate

No. KM 81580

Size Limitations and Performance Characteristics – to be read in conjunction with fabrication manual Alitherm 500 Aluminium Alloy Window System

Window Type	Length (mm) - Maximum	Height (mm) - Maximum	Area(m²) - Maximum	Friction Stays (up to and including)	Transom/Mullion Length (mm) inc frame - Maximum	Air Permeability classification	Watertightness classification	Resistance to Wind classification	Exposure category as given in Table 1 of BS 6375-1:
Sash dimensions for windows with approved sash profiles:									
Top hungs Internally beaded	1400	1400	-	-	-	2	E900	AE2400	2000+
Side hungs Internally beaded	700	1400	-	-	-	4	E1050	AE2400	2000+
Dummy Sash Internally beaded	1400	1400	-	-	1400	4	E1050	AE2400	2000+

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Page: 10 of 28

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BS 4873:2016 / PAS 24:2016 - Enhanced security performance requirements for window assemblies.

This Certificate covers the following window system design specification. Only those components that have been approved in accordance with the Kitemark scheme requirement can be incorporated within the system detailed.

Alitherm 600 Aluminium Alloy Window System

Fabrication and Installation: Fabricated and installed in accordance with the latest issue(s) of the following Smart Systems Limited controlled manual(s):

Smart Systems Alitherm 600 Window Manual

System description: The windows are thermally broken, double glazed only, internally or externally beaded, multipoint locking only, with mechanically fixed transoms/mullions

Ventilation: None

Window Types: Casement windows
Fixed windows
Multilight windows comprising opening light(s) and/or dummy vent(s) or fixed light(s)

Profiles	Outer Frame(s)	ETC610/ETC611/ETC612/ETC613/ETC614/ETC615/ ETC616/ETC619/ETC6101/ETC618
	Transom/Mullion(s)	ETC630/ETC631/ETC632/ETC633/ETC634/ETC635/ ETC636/ETC638/ETC639/ETC6301/
	Sash(es)	ETC620/ETC621/ETC622/ETC623/ETC624/ETC625/ ETC627/ETC628
	Rebate Reverser	ETC645/ETC647/ETC648

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Page: 11 of 28

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Kitemark™ Certificate

No. KM 81580

Hardware - Alitherm 600 Aluminium Alloy Window System

Casement windows*

Hardware Reference	Hardware Supplier	Fixing Specification	Fixing Supplier
Friction Hinge Securistyle Defender Nico ME-Egress Hinge (Yale)	Smart Systems	ACET070	Smart Systems
Securistyle/Yale hinge protector ASD/ASD-ST	Smart Systems	ACET066	Smart Systems
Trojan Shootbolt/mushroom bolt espagnolette locking system	Smart Systems	Espagnolette & keeps: ACET066	Smart Systems
ACET081/ACET165 Key locking handles	Smart Systems	ACET069	Smart Systems
Run-up blocks 4 off per sash	-		

*Glass retention as specified below.

Dummy vent windows*

Hardware Reference	Hardware Supplier	Fixing Specification	Fixing Supplier
Securistyle Defender stays	Smart Systems	ACET070	Smart Systems

*Glass retention as specified below.

Glass retention: External: Glazing beads and Glaslok Securi-clip security glazing clips
Internal: Glazing beads

Multilight windows comprising opening light(s) and/or dummy vent(s) or fixed light(s)

Hardware/Fixing requirements are as specified for opening, dummy vent and fixed window types.

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Page: 12 of 28

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Size Limitations and Performance Characteristics – to be read in conjunction with fabrication manual Alitherm 600 Aluminium Alloy Window System

Window Type	Length (mm) - Maximum	Height (mm) - Maximum	Area(m ²) - Maximum	Friction Stays (up to and including)	Transom/Mullion Length (mm) inc frame - Maximum	Air Permeability classification	Watertightness classification	Resistance to Wind classification	Exposure category as given in Table 1 of BS 6375-1
Sash dimensions for windows with approved sash profiles:									
Projecting top hungs Internally beaded	1400	1500	-	24"	-	4	9A	AE2400	2000+
Projecting top hungs Externally beaded	1400	1500	-	24"	-	4	E1200	AE2400	2000+
Projecting side hungs Internally beaded	1000	1400	-	16"	-	4	9A	AE2400	2000+
Projecting side hungs Externally beaded	1000	1400	-	16"	-	4	E1200	AE2400	2000+
Overall dimensions for windows with approved outer frame profiles:									
Fixeds Internally Beaded	2100	2100	4.2	-	-	4	9A	AE2400	2000+
Fixeds Externally Beaded	2100	2100	4.2	-	-	4	E1200	AE2400	2000+
Overall dimensions for approved outer frames & transom/mullion profiles:									
Multilights ETC630 T/M Internally Beaded	2100	2100	2.5	-	1450	4	9A	AE2400	2000+
Multilights ETC630 T/M Externally Beaded	2100	2100	2.5	-	1450	4	E1200	AE2400	2000+

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Page: 13 of 28

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Alitherm 700 Aluminium Alloy Window System

Fabrication and Installation: Fabricated and installed in accordance with the latest issue(s) of the following Smart Systems Limited controlled manual(s):

Smart Systems Alitherm 700 Windows Manual

System description: The windows are thermally broken, double glazed only, internally beaded, multipoint locking only, with mechanically fixed transoms/mullions

Ventilation: None

Window Types: Casement windows
Parallel opening windows
Fully reversible windows
Fixed windows

Profiles Outer Frame(s)
Sash(es)
Mullion/Transom
Rebate Reverser

ETC710/ETC716/ETC717/ETC718
ETC720/ETC721/ETC726
ETC 730/ ETC733/ETC736/
ETC737
ETC745/ETC746/ETC747

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Page: 14 of 28

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Kitemark™ Certificate

No. KM 81580

Hardware - Alitherm 700 Aluminium Alloy Window System

Hardware Reference	Hardware Supplier	Fixing Specification	Fixing Supplier
Friction Hinge Securistyle Parallel Plus Sterling Nico ME-Egress Hinge (Yale)	Smart Systems	ACET070	Smart Systems
Securistyle/Yale hinge protector ASD/ASD-ST	Smart Systems	ACET066	Smart Systems
Locking Kit ACET710	Smart Systems		Smart Systems
ACET081/ACET165 Key locking handles	Smart Systems	ACET069	Smart Systems
Run-up blocks 4 off per sash	-		

*Glass retention as specified below.

Glass retention: External: Glazing beads and Glaslok Securi-clip security glazing clips
Internal: Glazing beads

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Page: 15 of 28

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Kitemark™ Certificate

No. KM 81580

Size Limitations and Performance Characteristics – to be read in conjunction with fabrication manual Alitherm 700 Aluminium Alloy Window System

Window Type	Length (mm) - Maximum	Height (mm) - Maximum	Area(m ²) - Maximum	Friction Stays (up to and including)	Transom/Mullion Length (mm) inc frame - Maximum	Air Permeability classification	Watertightness classification	Resistance to Wind classification	Exposure category as given in Table 1 of BS 6375-1
Sash dimensions for windows with approved sash profiles:									
Projecting Top Hungs	2100	1600	-	-	-	4	9A	AE2400	2000+
Projecting Side Hungs	840	2100	-	-	-	4	9A	AE2400	2000+
Parallel	1800	2100	3.7	-	-	4	9A	AE2400	2000+
Reversible	1500	1558	2.2	-	-	4	9A	AE2400	2000+
Fixed	2100	2100	4.2	-	-	4	9A	AE2400	2000+

Maximum sizes subject to lx/ly checks and maximum weights -Side-hung 55kgs. Top-hung – 100kgs (check ly)

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Page: 16 of 28

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Alitherm 800 Aluminium Alloy Window System

Fabrication and Installation:	Fabricated and installed in accordance with the latest issue(s) of the following Smart Systems Limited controlled manual(s):	
	Smart Systems Alitherm 800 Windows and Doors Manual	
System description:	The windows are thermally broken, double glazed only, internally or externally beaded, multipoint locking only, with mechanically fixed transoms/mullions	
Ventilation:	None	
Window Types:	Casement windows	
	Fixed windows	
	Multilight windows comprising opening light(s) and/or dummy vent(s) or fixed light(s)	
Profiles	Outer Frame(s)	ETC810/ETC811/ETC812/ETC813/ ETC814/ETC815/ETC816/ETC817/ETC819 ETC821/
	Transom/Mullion(s)	ETC830/ETC832/ETC834/ETC835/ETC8350/ETC839/ETC8350
	Sash(es)	ETC821/ETC823/ETC824/ETC826/ETC827/ ETC828/ETC829/ETC8201/ETC8250/ETC8255
	Rebate Reverser (Internal glazing)	ETC845/ETC846

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Expiry Date: 2024-10-09

Kitemark™ Certificate

No. KM 81580

Hardware - Alitherm 800 Aluminium Alloy Window System

Casement windows*

Hardware Reference	Hardware Supplier	Fixing Specification	Fixing Supplier
Friction Hinge Securistyle Defender Nico ME-Egress Hinge (Yale)	Smart Systems	ACET070	Smart Systems
Securistyle/Yale hinge protector ASD/ASD-ST	Smart Systems	ACET066	Smart Systems
Trojan Shootbolt/mushroom bolt espagnolette locking system	Smart Systems	Espagnolette & keeps: ACET066	Smart Systems
ACET081/ACET165 Key locking handles	Smart Systems	ACET069	Smart Systems
Run-up blocks 4 off per sash	-		

*Glass retention as specified below.

Dummy vent windows*

Hardware Reference	Hardware Supplier	Fixing Specification	Fixing Supplier
Securistyle Defender stays	Smart Systems	ACET070	Smart Systems

*Glass retention as specified below.

Glass retention: External: Glazing beads and Glaslok Securi-clip security glazing clips
Internal: Glazing beads

Multilight windows comprising opening light(s) and/or dummy vent(s) or fixed light(s)

Hardware/Fixing requirements are as specified for opening, dummy vent and fixed window types.

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Page: 18 of 28

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Kitemark™ Certificate

No. KM 81580

Size Limitations and Performance Characteristics – to be read in conjunction with fabrication manual Alitherm 800 Aluminium Alloy Window System

Window Type	Length (mm) - Maximum	Height (mm) - Maximum	Area(m ²) - Maximum	Friction Stays (up to and including)	Transom/Mullion Length (mm) inc frame - Maximum	Air Permeability classification	Watertightness classification	Resistance to Wind classification	Exposure category as given in Table 1 of BS 6375-1
Sash dimensions for windows with approved sash profiles:									
Projecting top hungs	1400	1300	-	24"	-	3	8A	A2	800
Projecting side hungs	800	1400	-	16"	-	3	E1050	AE	2000
Overall dimensions for windows with approved outer frame profiles:									
Fixed	2100	2100	4.2	-	-	3	E1050	AE	2000
Overall dimensions for approved outer frames & transom/mullion profiles:									
Multilights ETC831 Transom/Mullion	2100	2100	2.9	-	1450	3	E1050	AE	2000

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Page: 19 of 28

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Kitemark™ Certificate

No. KM 81580

BS 4873:2016 / PAS 24:2016 - Enhanced security performance requirements for window assemblies.

This Certificate covers the following window system design specification. Only those components that have been approved in accordance with the Kitemark scheme requirement can be incorporated within the system detailed.

Eco Futural Aluminium Alloy Window System

Fabrication and Installation:	Fabricated and installed in accordance with the latest issue(s) of the following Smart Systems Limited controlled manual(s):	
	Smart Systems Eco Futural Windows and Doors Manual	
System description:	The windows are thermally broken, double glazed only, internally or externally beaded, multipoint locking only, with mechanically fixed transoms/mullions	
Ventilation:	None	
Window Types:	Casement windows	
	Tilt/Turn windows	
	Fixed windows	
	Multilight windows comprising opening light(s) and/or dummy vent(s) or fixed light(s)	
Profiles	Outer Frame(s)	EF010/EF011/EF019/EF110/EF910/SPD710
	Transom/Mullion(s)	EF030/EF031/EF032/EF033/EF034/ EF035/EF036/EF130/EF131/EF930
	Sash(es)	EF020/EF023/EF926
	Rebate Reverser (Internal glazing)	EF044/EF045/EF945/EF946

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Kitemark™ Certificate

No. KM 81580

Hardware - Eco Futural Aluminium Alloy Window System

Casement windows*

Hardware Reference	Hardware Supplier	Fixing Specification	Fixing Supplier
Friction Hinge Securistyle Defender Sterling ME-Egress Hinge (Yale)	Smart Systems	ACET070	Smart Systems
Securistyle/Yale hinge protector ASD/ASD-ST	Smart Systems	ACET066	Smart Systems
ERA lock ACEF951-956	Smart Systems	Espagnolette & keeps: ACET066	Smart Systems
ACET081/ACET165 Key locking handles	Smart Systems	ACET069	Smart Systems
Run-up blocks 4 off per sash	-		

*Glass retention as specified below

Tilt/Turn windows*

Hardware Reference	Hardware Supplier	Fixing Specification	Fixing Supplier
Chrono hinge stays	Smart Systems	Integral within gearing	Smart Systems
Chrono Safe TiltTurn gearing	Smart Systems	Integral within gearing	Smart Systems
Tilt/Turn Key locking handles	Smart Systems	ACET069	Smart Systems
Run-up blocks 4 off per sash	-		

*Glass retention as specified below

Glass retention: External: Glazing beads and Glaslok Securi-clip security glazing clips
Internal: Glazing beads

Multilight windows comprising opening light(s) and/or dummy vent(s) or fixed light(s)

Hardware/Fixing requirements are as specified for opening, dummy vent and fixed window types.

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Page: 21 of 28

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Kitemark™ Certificate

No. KM 81580

Size Limitations and Performance Characteristics – to be read in conjunction with fabrication manual Eco Futural Aluminium Alloy Window System

Window Type	Length (mm) - Maximum	Height (mm) - Maximum	Area(m²) - Maximum	Friction Stays (up to and including)	Transom/Mullion Length (mm) inc frame - Maximum	Air Permeability classification	Watertightness classification	Resistance to Wind classification	Exposure category as given in Table 1 of BS 6375-1
Sash dimensions for windows with approved sash profiles:									
Projecting top hungs	1440	2500	-	24"	-	3	8A	A5	2000
Projecting side hungs	840	1440	-	16"	-	4	E1050	AE2400	2000+
Overall dimensions for windows with approved outer frame profiles:									
Fixed	2100	2100	4.2	-	-	3	E1050	AE	2000
Tilt/Turns	1600*	2400	-	-	-	4	E900	AE	2400
Overall dimensions for approved outer frames & transom/mullion profiles:									
Multilights ETC831 Transom/Mullion	2400	2100	3.1	-	1345	4	E1050	AE	2000

*Width of the Tilt/Turn Sash must not exceed 1½ times the height.

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Expiry Date: 2024-10-09

Page: 22 of 28

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Kitemark™ Certificate

No. KM 81580

BS 4873:2016 / PAS 24:2016 - Enhanced security performance requirements for window assemblies.

This Certificate covers the following window system design specification. Only those components that have been approved in accordance with the Kitemark scheme requirement can be incorporated within the system detailed.

Alitherm Heritage & Alitherm Heritage HD Aluminium Alloy Window System

Fabrication and Installation:	Fabricated and installed in accordance with the latest issue(s) of the following Smart Systems Limited controlled manual(s):	
	Smart Systems Alitherm Heritage & Alitherm Heritage HD Window Manual	
System description:	The windows are thermally broken, double glazed only, internally or externally beaded, multipoint locking only, with mechanically fixed transoms/mullions	
Ventilation:	None	
Window Types:	Casement windows	
	Tilt/Turn windows	
	Fixed windows	
	Multilight windows comprising opening light(s) and/or dummy vent(s) or fixed light(s)	
Profiles	Outer Frame(s)	W20015/20016/20017/20018/W20110
	Transom/Mullion(s)	W20032/20034/20035/20037/20039/W20130/W20131/W20133/W20139
	Sash(es)	W20024/20025/20026/20028/20029/W20120/20122
	Rebate Reverser	W20047/20147
HD Profiles	Outer Frame(s)	W20310/20317
	Transom/Mullion	W20330/20331/20332/20333/20135N
	Sash(es)	W20320/20325
	Rebate Reverser	W20345

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Page: 23 of 28

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Kitemark™ Certificate

No. KM 81580

Hardware -

Alitherm Heritage & Heritage HD Aluminium Alloy Window System

Casement windows*

Hardware Reference	Hardware Supplier	Fixing Specification	Fixing Supplier
Friction Hinge – Security Defender Sterling Nico ME-Egress Hinge	Smart Systems	ACET070	Smart Systems
Securistyle/Yale hinge protector ASD/ASD-ST	Smart Systems	ACET066	Smart Systems
Shootbolt/mushroom bolt espagnolette locking system ACW201-205 (ACW301-306 HD profiles)	Smart Systems	Espagnolette & keeps: ACET066	Smart Systems
ACET165 Key locking handles	Smart Systems	ACET069	Smart Systems
Run-up blocks 4 off per sash	-		

Tilt/Turn windows

Hardware Reference	Hardware Supplier	Fixing Specification	Fixing Supplier
Sobinco Chrono invasion safe tilt turn gearing , Sobinco Scissor Stay.	Smart Systems	ACET070	Smart Systems
Key Locking handle ACET463	Smart Systems		Smart Systems

Dummy vent windows*

Hardware Reference	Hardware Supplier	Fixing Specification	Fixing Supplier
Securistyle Defender stays	Smart Systems	ACET070	Smart Systems

Glass retention:

External: Glazing beads and Glaslok Securi-clip security glazing clips

Internal: Glazing beads

Multilight windows comprising opening light(s) and/or dummy vent(s) or fixed light(s)

Hardware/Fixing requirements are as specified for opening, dummy vent and fixed window types.

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Expiry Date: 2024-10-09

Page: 24 of 28

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Kitemark™ Certificate

No. KM 81580

Size Limitations and Performance Characteristics – to be read in conjunction with fabrication manual Alitherm Heritage Aluminium Alloy Window System

Window Type	Length (mm) - Maximum	Height (mm) - Maximum	Area(m²) - Maximum	Friction Stays (up to and including)	Transom/Mullion Length (mm) inc frame - Maximum	Air Permeability classification	Watertightness classification	Resistance to Wind classification	Exposure category as given in Table 1 of BS 6375-1
Sash dimensions for windows with approved sash profiles:									
Projecting top hungs Internally beaded	1400	1400	-	24"	-	4	7A	AE2400	2000+
Projecting top hungs Externally beaded	1400	1400	-	24"	-	4	9A	AE2400	2000+
Projecting top hungs HD Int/Ex Beaded	1750	1400			-	4	7A	AE2400	2000+
Projecting side hungs Internally beaded	600	1400	-	16"	-	4	7A	AE2400	2000+
Projecting side hungs Externally beaded	600	1400	-	16"	-	4	9A	AE2400	2000+
Projecting side hungs HD Int/Ex Beaded	838	1750			-	4	7A	AE2400	2000+
Tilt/Turn Internally beaded	1200	2100	-	-	-	4	9A	AE2400	2000+
Overall dimensions for windows with approved outer frame profiles:									
Fixeds Internally Beaded	2100	2100	4.2	-	-	4	7A	AE2400	2000+
Fixeds Externally Beaded	2100	2100	4.2	-	-	4	9A	AE2400	2000+
Overall dimensions for approved outer frames & transom/mullion profiles:									
Multilights W2035 T/M Internally Beaded	2100	2100	2.5	-	1450	4	7A	AE2400	2000+
Multilights W2035 T/M Externally Beaded	2100	2100	2.5	-	1450	4	9A	AE2400	2000+
Multilights W21030 T/M Internally Beaded	2100	2100	-			4	7A	AE2400	2000+

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Expiry Date: 2024-10-09

Page: 25 of 28

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Kitemark™ Certificate

No. KM 81580

BS 4873:2016 / PAS 24:2016 - Enhanced security performance requirements for window assemblies.

This Certificate covers the following window system design specification. Only those components that have been approved in accordance with the Kitemark scheme requirement can be incorporated within the system detailed.

Alitherm Heritage FR90 Aluminium Alloy Window System

Fabrication and Installation: Fabricated and installed in accordance with the latest issue(s) of the following Smart Systems Limited controlled manual(s):

Smart Systems Alitherm Heritage FR90 Window Manual

System description: The windows are thermally broken, double glazed only, internally beaded, multipoint locking only, with mechanically fixed transoms/mullions

Ventilation: None

Window Types: Casement windows
Fixed windows
Multilight windows comprising opening light(s) and/or steel panel

Profiles	Outer Frame(s)	W20017
	Sash(es)	W20025
	Glazing Bead	W20170

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Page: 26 of 28

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Kitemark™ Certificate

No. KM 81580

Hardware -

Alitherm Heritage FR90 Aluminium Alloy Window System

Casement windows*

Hardware Reference	Hardware Supplier	Fixing Specification	Fixing Supplier
Securistyle Top Hung Stays ACINDS24	Smart Systems	ACET070	Smart Systems
Yale Hinge Protector ACET513	Smart Systems	ACET064	Smart Systems
Trojan four point locking espagnolette system ACW203R	Smart Systems	ACET064	Smart Systems
Key locking handles ACET165	Smart Systems	WCA134 SSZ	Smart Systems
Run-up blocks 4 off per sash	-		

*Glass retention as specified below.

Glass retention: **Internal: Glazing beads**

Multilight windows comprising opening light(s) and/or steel panel

Hardware/Fixing requirements are as specified for opening window.

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Expiry Date: 2024-10-09

Page: 27 of 28

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Kitemark™ Certificate

No. KM 81580

Size Limitations and Performance Characteristics – to be read in conjunction with fabrication manual Alitherm Heritage FR90 Aluminium Alloy Window System

Window Type	Length (mm) - Maximum	Height (mm) - Maximum	Area(m²) - Maximum	Friction Stays (up to and including)	Transom/Mullion Length (mm) inc frame - Maximum	Air Permeability classification	Watertightness classification	Resistance to Wind classification	Exposure category as given in Table 1 of BS 6375-1
Sash dimensions for windows with approved sash profiles:									
Projecting top hungs Internally beaded	1100	1200	-	24"	-	4	E750	CE2400	2400
Overall dimensions for windows with approved outer frame & transom/mullion profiles									
Multilights Internally beaded	1100	2500	2.75-	24"	1100	4	E750	CE2400	2400

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Page: 28 of 28

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