

# 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/PAS 24**  
**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:

Shahm Barhom, Group Product Certification Director

First Issued: 2005-02-03

Latest Issue: 2024-10-10

Effective Date: 2024-10-10

Expiry Date: 2027-10-09

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# Kitemark™ Certificate

No. KM 81580

## **BS 4873:2016 / PAS 24: 2022 - Enhanced security performance requirements for windows in the UK.**

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, internally or externally beaded, with at least one pane of laminated glass meeting the requirements of BS EN 356:2000, Class P1A or higher, where applicable, and shall be glazed in accordance with the BS 6262 series where required, multipoint locking only, with mechanically fixed transoms/mullions. The fitting of any connected or smart device to this product will invalidate this Kitemark Certificate unless BSI has been provided with objective evidence from a competent authority that the device has been tested and certified to EN 303645. BSI will update any Kitemark certificates with the relevant products as and when they have been tested.

**Ventilation:** None

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

<b>Profiles:</b>	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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# 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	ACET067	Smart Systems
Trojan and ERA 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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A member of BSI Group of Companies.

# Kitemark™ Certificate

No. KM 81580

## **Alitherm 300 Aluminium Alloy Window System Classification for Operational strength in accordance with BS 6375**

Operating forces	Class 1
Resistance to Static Torsion	Class 3
Racking	Class 3
Load Bearing capacity of safety devices	Pass
Impact Resistance	Class 0
Resistance to opening and closing	Class 2



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# Kitemark™ Certificate

No. KM 81580

## Alitherm 300 Aluminium Alloy Window System

### Size Limitations and Performance Characteristics - to be read in conjunction with fabrication manual

Window Type	Length (mm) - Maximum	Height (mm) - Maximum	Area(m <sup>2</sup> ) - 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	900	1400	-	16"	-	4	E1200	AE2400	2000+
Projecting side hungs Externally beaded	900	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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# Kitemark™ Certificate

No. KM 81580

## **BS 4873:2016 / PAS 24: 2022 - Enhanced security performance requirements for windows in the UK.**

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, internally or externally beaded, with at least one pane of laminated glass meeting the requirements of BS EN 356:2000, Class P1A or higher, where applicable, and shall be glazed in accordance with the BS 6262 series where required, multipoint locking only, with mechanically fixed transoms/mullions. The fitting of any connected or smart device to this product will invalidate this Kitemark Certificate unless BSI has been provided with objective evidence from a competent authority that the device has been tested and certified to EN 303645. BSI will update any Kitemark certificates with the relevant products as and when they have been tested.

**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)

<b>Profiles:</b>	Outer Frame(s)	ETC4110/4112/4115/4111/4113/4117/4011/4014/4210
	Transom/Mullion(s)	ETC4130/4135/4136/4031/4230/4232/4236
	Sash(es)	ETC4120/4129/4124/4021/4229
	Rebate Reverser	ETC4146/4147

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# Kitemark™ Certificate

No. KM 81580

## Hardware - Alitherm 400 Aluminium Alloy Window System Casement windows\*

Hardware Reference	Hardware Supplier	Fixing Specification	Fixing Supplier
Friction Hinge Securistyle Defender/Sterling Nico ME-Egress Hinge (Yale)	Smart Systems	ACET070	Smart Systems
Securistyle/Yale hinge protector ASD/ASD-ST	Smart Systems	ACET066	Smart Systems
Trojan and ERA Shootbolt/mushroom bolt espagnolette locking system, ERA hook lock	Smart Systems	Espagnolette & keeps: ACET067	Smart Systems
Casement Key locking handles	Smart Systems	ACET069	Smart Systems
Run-up blocks 4 off per sash	-		

\*Glass retention as specified below.

### Tilt/Turn Windows

Sobinco Chrono Invision Safe Tilt/Turn gearing Sobinco scissor stay	Smart Systems	Integral within gearing	Smart Systems
Tilt/Turn Key locking handles	Smart Systems	ACET069	Smart Systems

### 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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# Kitemark™ Certificate

No. KM 81580

## **Alitherm 400 Aluminium Alloy Window System Classification for Operational strength in accordance with BS 6375**

Operating forces	Class 1
Resistance to Static Torsion	Class 3
Racking	Class 3
Load Bearing capacity of safety devices	Pass
Impact Resistance	Class 0
Resistance to opening and closing	Class 2



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# Kitemark™ Certificate

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## Alitherm 400 Aluminium Alloy Window System

**Size Limitations and Performance Characteristics – to be read in conjunction with fabrication manual**

Window Type	Length (mm) - Maximum	Height (mm) - Maximum	Area(m <sup>2</sup> ) - 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	E1200	AE2400	2000+
Projecting top hungs Externally beaded	1400	1500	-	24"	-	4	E1200	AE2400	2000+
Projecting side hungs Internally beaded	1000	1400	-	16"	-	4	E1200	AE2400	2000+
Projecting side hungs Externally beaded	1000	1400	-	16"	-	4	E1200	AE2400	2000+
Tilt/Turn	1200	2100	-	-	-	4	9A	BE2400	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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# Kitemark™ Certificate

No. KM 81580

## **BS 4873:2016 / PAS 24: 2022 - Enhanced security performance requirements for windows in the UK.**

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, internally or externally beaded, with at least one pane of laminated glass meeting the requirements of BS EN 356:2000, Class P1A or higher, where applicable, and shall be glazed in accordance with the BS 6262 series where required, multipoint locking only, with mechanically fixed transoms/mullions. The fitting of any connected or smart device to this product will invalidate this Kitemark Certificate unless BSI has been provided with objective evidence from a competent authority that the device has been tested and certified to EN 303645. BSI will update any Kitemark certificates with the relevant products as and when they have been tested.

**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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# Kitemark™ Certificate

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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# Kitemark™ Certificate

No. KM 81580

## Alitherm 500 Aluminium Alloy Window System Classification for Operational strength in accordance with BS 6375

Operating forces	Class 1
Resistance to Static Torsion	Class 3
Racking	Class 3
Load Bearing capacity of safety devices	Pass
Impact Resistance	Class 0
Resistance to opening and closing	Class 2

## Size Limitations and Performance Characteristics – to be read in conjunction with fabrication manual

Window Type	Length (mm) - Maximum	Height (mm) - Maximum	Area(m <sup>2</sup> ) - 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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# Kitemark™ Certificate

No. KM 81580

## BS 4873:2016 / PAS 24: 2022 - Enhanced security performance requirements for windows in the UK.

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, internally or externally beaded, with at least one pane of laminated glass meeting the requirements of BS EN 356:2000, Class P1A or higher, where applicable, and shall be glazed in accordance with the BS 6262 series where required, multipoint locking only, with mechanically fixed transoms/mullions. The fitting of any connected or smart device to this product will invalidate this Kitemark Certificate unless BSI has been provided with objective evidence from a competent authority that the device has been tested and certified to EN 303645. BSI will update any Kitemark certificates with the relevant products as and when they have been tested.

**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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# 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	ACET067	Smart Systems
Trojan and ERA Shootbolt/mushroom bolt espagnolette locking system	Smart Systems	Espagnolette & keeps: ACET066	Smart Systems
Casement 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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# Kitemark™ Certificate

No. KM 81580

## **Alitherm 600 Aluminium Alloy Window System Classification for Operational strength in accordance with BS 6375**

Operating forces	Class 1
Resistance to Static Torsion	Class 3
Racking	Class 3
Load Bearing capacity of safety devices	Pass
Impact Resistance	Class 0
Resistance to opening and closing	Class 2



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# Kitemark™ Certificate

No. KM 81580

## Alitherm 600 Aluminium Alloy Window System

**Size Limitations and Performance Characteristics – to be read in conjunction with fabrication manual**

Window Type	Length (mm) - Maximum	Height (mm) - Maximum	Area(m <sup>2</sup> ) - 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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# Kitemark™ Certificate

No. KM 81580

## **BS 4873:2016 / PAS 24: 2022 - Enhanced security performance requirements for windows in the UK.**

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 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, internally beaded, with at least one pane of laminated glass meeting the requirements of BS EN 356:2000, Class P1A or higher, where applicable, and shall be glazed in accordance with the BS 6262 series where required, multipoint locking only, with mechanically fixed transoms/mullions. The fitting of any connected or smart device to this product will invalidate this Kitemark Certificate unless BSI has been provided with objective evidence from a competent authority that the device has been tested and certified to EN 303645. BSI will update any Kitemark certificates with the relevant products as and when they have been tested.

**Ventilation:** None

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

**Profiles:** Outer Frame(s) ETC710/ETC716/ETC717/ETC718  
Sash(es) ETC720/ETC721/ETC726  
Mullion/Transom ETC 730/ ETC733/ETC736/  
ETC737  
Rebate Reverser ETC745/ETC746/ETC747

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Latest Issue: 2024-10-10

Effective Date: 2024-10-10

Expiry Date: 2027-10-09

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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
Casement 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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Effective Date: 2024-10-10  
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# Kitemark™ Certificate

No. KM 81580

## Alitherm 700 Aluminium Alloy Window System Classification for Operational strength in accordance with BS 6375

Operating forces	Class 1
Resistance to Static Torsion	Class 3
Racking	Class 3
Load Bearing capacity of safety devices	Pass
Impact Resistance	Class 0
Resistance to opening and closing	Class 2

### Size Limitations and Performance Characteristics – to be read in conjunction with fabrication manual

Window Type	Length (mm) - Maximum	Height (mm) - Maximum	Area(m <sup>2</sup> ) - 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	838	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)

First Issued: 2005-02-03  
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# Kitemark™ Certificate

No. KM 81580

## **BS 4873:2016 / PAS 24: 2022 - Enhanced security performance requirements for windows in the UK.**

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 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, internally or externally beaded, with at least one pane of laminated glass meeting the requirements of BS EN 356:2000, Class P1A or higher, where applicable, and shall be glazed in accordance with the BS 6262 series where required, multipoint locking only, with mechanically fixed transoms/mullions. The fitting of any connected or smart device to this product will invalidate this Kitemark Certificate unless BSI has been provided with objective evidence from a competent authority that the device has been tested and certified to EN 303645. BSI will update any Kitemark certificates with the relevant products as and when they have been tested.

**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/ ETC821/ETC823/ETC824/ETC826/ETC827/ETC8252/ ETC828/ETC829/ETC8201/ETC8250/ETC8255
Sash(es)	
Rebate Reverser (Internal glazing)	ETC845/ETC846

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Latest Issue: 2024-10-10

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# 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	ACET067	Smart Systems
Trojan and ERA Shootbolt/mushroom bolt espagnolette locking system	Smart Systems	Espagnolette & keeps: ACET066	Smart Systems
Casement 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.

First Issued: 2005-02-03  
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# Kitemark™ Certificate

No. KM 81580

## Alitherm 800 Aluminium Alloy Window System Classification for Operational strength in accordance with BS 6375

Operating forces	Class 1
Resistance to Static Torsion	Class 3
Racking	Class 3
Load Bearing capacity of safety devices	Pass
Impact Resistance	Class 0
Resistance to opening and closing	Class 2

## Size Limitations and Performance Characteristics – to be read in conjunction with fabrication manual

Window Type	Length (mm) - Maximum	Height (mm) - Maximum	Area(m <sup>2</sup> ) - 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	865	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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# Kitemark™ Certificate

No. KM 81580

## BS 4873:2016 / PAS 24: 2022 - Enhanced security performance requirements for windows in the UK.

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, internally or externally beaded, with at least one pane of laminated glass meeting the requirements of BS EN 356:2000, Class P1A or higher, where applicable, and shall be glazed in accordance with the BS 6262 series where required, multipoint locking only, with mechanically fixed transoms/mullions. The fitting of any connected or smart device to this product will invalidate this Kitemark Certificate unless BSI has been provided with objective evidence from a competent authority that the device has been tested and certified to EN 303645. BSI will update any Kitemark certificates with the relevant products as and when they have been tested.

#### 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	ACET067	Smart Systems
ERA lock ACEF951-956	Smart Systems	Espagnolette & keeps: ACET066	Smart Systems
Casement 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 Tilt/Turn gearing (Invision)	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.

First Issued: 2005-02-03  
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# Kitemark™ Certificate

No. KM 81580

## Eco Futural Aluminium Alloy Window System Classification for Operational strength in accordance with BS 6375

Operating forces	Class 1
Resistance to Static Torsion	Class 3
Racking	Class 3
Load Bearing capacity of safety devices	Pass
Impact Resistance	Class 0
Resistance to opening and closing	Class 2

### Size Limitations and Performance Characteristics – to be read in conjunction with fabrication manual

Window Type	Length (mm) - Maximum	Height (mm) - Maximum	Area(m <sup>2</sup> ) - 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	838	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:									
Multilight 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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Latest Issue: 2024-10-10

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# Kitemark™ Certificate

No. KM 81580

## **BS 4873:2016 / PAS 24: 2022 - Enhanced security performance requirements for windows in the UK.**

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, internally or externally beaded, with at least one pane of laminated glass meeting the requirements of BS EN 356:2000, Class P1A or higher, where applicable, and shall be glazed in accordance with the BS 6262 series where required, multipoint locking only, with mechanically fixed transoms/mullions. The fitting of any connected or smart device to this product will invalidate this Kitemark Certificate unless BSI has been provided with objective evidence from a competent authority that the device has been tested and certified to EN 303645. BSI will update any Kitemark certificates with the relevant products as and when they have been tested.

**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)

<b>Profiles:</b>	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
<b>HD Profiles :</b>	Outer Frame(s)	W20310/20317
	Transom/Mullion	W20330/20331/20332/20333/20135N
	Sash(es)	W20320/20325
	Rebate Reverser	W20345

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# Kitemark™ Certificate

No. KM 81580

## Hardware -

### Alitherm Heritage & Alitherm 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
Casement 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 inversion safe tilt turn gearing , Sobinco Scissor Stay.	Smart Systems	Integral within gearing	Smart Systems
Tilt/Turn Key Locking Handles	Smart Systems	ACET069	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.

First Issued: 2005-02-03

Latest Issue: 2024-10-10

Effective Date: 2024-10-10

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# Kitemark™ Certificate

No. KM 81580

## **Alitherm Heritage & Alitherm Heritage HD Aluminium Alloy Window System Classification for Operational strength in accordance with BS 6375**

Operating forces	Class 1
Resistance to Static Torsion	Class 3
Racking	Class 3
Load Bearing capacity of safety devices	Pass
Impact Resistance	Class 0
Resistance to opening and closing	Class 2



First Issued: 2005-02-03  
Latest Issue: 2024-10-10

Effective Date: 2024-10-10  
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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(m <sup>2</sup> ) - 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 Int 9A Ex	AE2400	2000+
Projecting side hungs Internally beaded	900	1400	-	16"	-	4	7A	AE2400	2000+
Projecting side hungs Externally beaded	900	1400	-	16"	-	4	9A	AE2400	2000+
Projecting side hungs HD Int/Ex Beaded	838	1750			-	4	7A Int 9A Ex	AE2400	2000+
Tilt/Turn Internally beaded	1200	2100	-	-	-	4	9A	BE2400	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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# Kitemark™ Certificate

No. KM 81580

## **BS 4873:2016 / PAS 24: 2022 - Enhanced security performance requirements for windows in the UK.**

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, internally beaded, with at least one pane of laminated glass meeting the requirements of BS EN 356:2000, Class P1A or higher, where applicable, and shall be glazed in accordance with the BS 6262 series where required, multipoint locking only, with mechanically fixed transoms/mullions. The fitting of any connected or smart device to this product will invalidate this Kitemark Certificate unless BSI has been provided with objective evidence from a competent authority that the device has been tested and certified to EN 303645. BSI will update any Kitemark certificates with the relevant products as and when they have been tested.

**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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Latest Issue: 2024-10-10

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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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# Kitemark™ Certificate

No. KM 81580

## Alitherm Heritage FR90 Aluminium Alloy Window System Classification for Operational strength in accordance with BS 6375

Operating forces	Class 1
Resistance to Static Torsion	Class 3
Racking	Class 3
Load Bearing capacity of safety devices	Pass
Impact Resistance	Class 0
Resistance to opening and closing	Class 2

### Size Limitations and Performance Characteristics – to be read in conjunction with fabrication manual

Window Type	Length (mm) - Maximum	Height (mm) - Maximum	Area(m <sup>2</sup> ) - 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

First Issued: 2005-02-03  
Latest Issue: 2024-10-10

Effective Date: 2024-10-10  
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# Kitemark™ Certificate

No. KM 81580

## **BS 4873:2016 / PAS 24: 2022 - Enhanced security performance requirements for windows in the UK.**

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.

### **Visotherm 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 Windows Manual

**System description:** The windows are thermally broken, internally or externally beaded, with at least one pane of laminated glass meeting the requirements of BS EN 356:2000, Class P1A or higher, where applicable, and shall be glazed in accordance with the BS 6262 series where required, multipoint locking only, with mechanically fixed transoms/mullions. The fitting of any connected or smart device to this product will invalidate this Kitemark Certificate unless BSI has been provided with objective evidence from a competent authority that the device has been tested and certified to EN 303645. BSI will update any Kitemark certificates with the relevant products as and when they have been tested.

**Ventilation:** None

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

<b>Profiles:</b>	Outer Frame(s)	UL010/UL011
	Transom/Mullion(s)	UL030/031/032/033
	Sash(es)	UL020/023/025/026/027
	Rebate Reverser (Internal glazing)	UL040/043/045

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A member of BSI Group of Companies.

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No. KM 81580

## Hardware - Visotherm Aluminium Alloy Window System

### Casement windows\*

Hardware Reference	Hardware Supplier	Fixing Specification	Fixing Supplier
Friction Hinge Sterling ME-Egress Hinge (Yale)	Smart Systems	ACET070	Smart Systems
Securistyle/Yale hinge protector ASD/ASD-ST	Smart Systems	ACET067	Smart Systems
ERA Hook lock	Smart Systems	Espagnolette & keeps: ACET066	Smart Systems
Casement Key locking handles	Smart Systems	ACET069	Smart Systems
Run-up blocks 4 off per sash	-		

**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.

### Classification for Operational strength in accordance with BS 6375

Operating forces	Class 1
Resistance to Static Torsion	Class 3
Racking	Class 3
Load Bearing capacity of safety devices	Pass
Impact Resistance	Class 0
Resistance to opening and closing	Class 2

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# Kitemark™ Certificate

No. KM 81580

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

Window Type	Length (mm) - Maximum	Height (mm) - Maximum	Area(m <sup>2</sup> ) - 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	838	1440	-	16"	-	4	E1050	AE2400	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 Transom/Mullion	2400	2100	3.1	-	1345	4	E1050	AE	2000

BS 4873:2016 has been issued by BSI under a flexible accreditation scope

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