





This is to certify that:

3D Aluminium Plas Limited Horace House **Oakfields Industrial Estate** Witney **OX29 4TX** United Kingdom

Holds Certificate Number:

KM 634359

In respect of:

BS 4873 / PAS24 **Enhanced Security Aluminium Window Fabricator**

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: 2015-05-13 Latest Issue: 2022-01-27 Effective Date: 2022-01-31 Expiry Date: 2025-01-30

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No. KM 634359

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

This Certificate covers the fabrication of windows from the range of profiles and components supplied by Hydro Building Systems UK Limited under Certificate Number KM 74159.

Sapa DF75 Si Aluminium Alloy Window System **Technal FE75 Si Aluminium Alloy Window System**

Fabrication and Installation:	Fabricated and installed in accordance with the latest issue(s) of the following Hydro Building Systems UK Limited controlled manual(s) incorporating the Scope of Certification: 75 Casement Window, 75 Si Reversible Window, 75 Si Casement Window, 75 Si Tilt Before Turn Window, 75 Si Pivot Window						
System description:		lly broken, double glazed only, internally or externally locking only and mechanically fixed transoms/mullions.					
Ventilation:	Titon TV4000 Trimvent Ti	rickle Vent controllable ventilator					
Window Types:	Casement windows	Enhanced Security Friction Stays, hinge protectors and Espagnolette locks –.					
	Reversible windows	Peder Nielsen top over swing hinges with integral restrictors and Espagnolette locks					
	TBT windows	Concealed Friction hinges with Espagnolette locks					
	Bottom Hung Open In	Sapa Folding Opener with DFP 1235 hinges					
	Pivot Windows	Sapa Pivot hinges and Sapa Espagnolette locks					
	Dummy vent windows						
	Fixed windows						
	Multilight windows comp	rising opening and/or fixed light(s) or dummy vent(s)					

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No. KM 634359

Size Limitations and Performance Characteristics Sapa DF75 Si Aluminium Alloy Window System Technal FE75 Si Aluminium Alloy Window System

-	Length (mm) - Maximum	Height (mm) - 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 6375-1:2009 (except *)			
Sash dimensions for windows with approved sash profiles:												
Projecting top hungs Standard vent	1315	1220	-	24″	-	2	E1200	- 5	2000			
Projecting top hungs HD vent	1720	1720	-	22″	-	4	9A	C4	2000			
Projecting side hungs Standard vent	665	1265	-	16″	-	4	9A	2000	2000			
Projecting side hungs HD vent	838	1828	-	16″	-	4	9A	2000	2000			
Projecting side hungs Reverse Rebated Fixed	646	1255	-	16″	-	4	9A	C5	2000			
Bottom Hung Open in	2000	701	-	-	-	3	E900	C5	2000			
Reversibles	1400	1400	-	-	-	4	9A	5	2000			
TBTs	1453 1053	1953 2453	-	-	-	4	E1050	E2400	2400			
Dummy vents	1497	1497	2.22	-	-	(600)	(600)	(2400)	2400 Special*			
Overall dimensions for win	ndows w	ith appro	oved oute	r frame	profiles:							
Horizontal Pivot	1810	1810	3.24	-	-	4	AE900	C5	2000			
Vertical Pivot	1810	1810	3.24	-	-	4	8A	C5	2000			
Fixeds	2240	2240	5.02	-	-	4	9A	C5	2000			
Overall dimensions for win	ndows w	ith appro	oved oute	r frame	& transom/	mullion	profiles:					
Multilights,	3000	3000	6.00	-	#	-	-	-	-			

* as given in Table 1 of BS 6375-1:1989

Mullion and transom strengths are to be calculated for each project application in accordance with current standards and design codes

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No. KM 634359

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

This Certificate covers the fabrication of windows from the range of profiles and components supplied by Hydro Building Systems UK Limited under Certificate Number KM 74159.

Sapa Crown Aluminium Alloy Window System

Fabrication and Installation:	Fabricated and installed in accordance with the latest issue(s) of the following Hydro Building Systems UK Limited controlled manual incorporating Scope of Certification:								
	Crown Casement Window								
System description:		The windows are thermally broken, double glazed only, internally or externally beaded, have multipoint locking only and mechanically fixed transoms/mullions.							
Ventilation:	Titon TV4000 Trimvent Tr	ickle Vent controllable ventilator							
Window Types:	Casement windows Fixed windows	Enhanced Security Friction Stays, hinge protectors and Espagnolette locks							
	Multilight windows compr	ising opening and/or fixed light(s) or dummy vent(s)							

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No. KM 634359

Size Limitations and Performance Characteristics Sapa Crown Aluminium Alloy Window System

Window Type	Length (mm) - Maximum	Height (mm) - 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 6375-1:2009
Sash dimensions for wind Projecting top hungs	1200 1200	1355	ea sasn p	24"	_	3	9A	B5	2000
	1200	1555		21				55	2000
Projecting side hungs	756	1359	-	16″	-	4	9A	C5	2000
HD vent									
Overall dimensions for w	indows w	ith appro	oved oute	r frame	profiles:				
Fixeds	2236	2236	-	-	-	4	9A	C5	2000
	<u> </u>	<u> </u>					CI		1
Overall dimensions for w		1		r frame		mullion	profiles:	r	
Multilights,	2200	1390	3.06	-	#	-	-	-	-

Mullion and transom strengths are to be calculated for each project application in accordance with current standards and design codes

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No. KM 634359

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

This Certificate covers the fabrication of windows from the range of profiles and components supplied by Hydro Building Systems UK Limited under Certificate Number KM 74159.

Technal FY65 Aluminium Alloy Window System

Fabrication and Installation:	Fabricated and installed in accordance with the latest issue(s) of the following Hydro Building Systems UK Limited controlled manual incorporating Scope of Certification:							
	Technal Casement Windo	w and Technal Parallel Window						
System description:		lly broken, double glazed only, internally and externally locking only and mechanically fixed transoms/mullions.						
	beaueu, nave multipoint	locking only and mechanically fixed transoms/multions.						
Ventilation:	None							
Window Types:	Casement windows	Sapa Building Systems Enhanced Security Friction Stays, hinge protectors and Espagnolette locks						
	Parallel windows	Sapa Building Systems Single Parallel Friction hinge and Friction Hinge Screw Kit						
	Tilt/Turn windows Fixed windows	Sapa Building Systems Tilt/Turn Hinge and Fixings						
	Multilight windows comp	rising opening and/or fixed light(s) or dummy vent(s)						

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

No. KM 634359

Size Limitations and Performance Characteristics Technal FY65 Aluminium Alloy Window System

Aindow Type	Length (mm) - Maximum	Ĭ'	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 6375-1:2009
Sash dimensions for wind			eu sasii p		1		51050	64	2000
Projecting top hungs	1500	1800	-	28″	-	4	E1050	C4	2000
Projecting side hungs HD vent	756	1359	-	16″	-	4	9A	C5	2000
Parallel vent	1500	2044	-	-	-	4	E1200	CE2400	2000+
Tilt/Turns	1600	1800	-	-	-	2	8A	BE2400	2000+
Overall dimensions for wi	ndows w	ith appro	oved oute	r frame	profiles:			•	
Fixeds	725	1130	-	-	-	4	E1050	C4	2000
Overall dimensions for wi	ndows w	ith appro	oved oute	r frame	& transom/	mullion	profiles:	•	
Multilights,	2400	2550	-	-	#	-	-	-	-

Mullion and transom strengths are to be calculated for each project application in accordance with current standards and design codes

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No. KM 634359

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

This Certificate covers the fabrication of windows from the range of profiles and components supplied by Hydro Building Systems UK Limited under Certificate Number KM 74159.

Wicline Evo 75 Aluminium Alloy Window System

Fabrication and Installation:	Fabricated and installed in accordance with the latest issue(s) of the following Hydro Building Systems UK Limited controlled manual incorporating Scope of Certification:							
	Wicona Casement Windo	w						
System description:	The windows are therma multipoint locking only.	lly broken, double glazed only, externally beaded, and have						
Ventilation:	None							
Window Types:	Casement windows	Wicona Enhanced Security Friction Stays, hinge protectors and Espagnolette locks						

Size Limitations and Performance Characteristics Wicline Evo 75 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 6375-1:2009
Sash dimensions for wind	lows with	approv	ed sash p	rofiles:					
Projecting top hungs	1400	1800	-	-	-	4	E750	C5	2000
Projecting side hungs HD vent	850	1800	-	-	-	4	9A	C4	2000

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No. KM 634359

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

This Certificate covers the fabrication of windows from the range of profiles and components supplied by The Parkside Group Ltd under Certificate Number KM 578159.

System(s):	Comar 5Pi Aluminium Alloy Window System
Fabrication and Installation:	Fabricated and installed in accordance with the latest issue(s) of the following Comar Architectural Aluminium Systems controlled documentation:
	Comar 5Pi Window System Technical Manual
	Comar 5Pi Enhanced Security Document
System description:	The windows are internally glazed only, double glazed only, multipoint locking only with mechanically fixed transoms/mullions
Ventilation:	None
Window Types:	Tilt/turn windows - Comar Security Hardware
	Multilight windows comprising opening light(s) and/or fixed light(s)

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No. KM 634359

Comar 5Pi Aluminium Alloy Window System Size Limitations and Performance characteristics

Window Type	Width (mm) - Maximum	Height (mm) - Maximum	Area(m²) - Maximum	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 6375-1:2009 (except*)	
Sash dimensions for appr	oved tilt/t	urn sash p	profiles:						
Tilt/turns	1100	1600	-	-	4	7A	2400	2400*	
Overall dimensions for approved outer frames & transom/mullion profiles:									
Multilight Tilt & Turn CS 435 Mullion	1200	1600	-	1550	4	5A	A5	2000	

*as given in Table 1 of BS 6375-1:2004

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No. KM 634359

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

This Certificate covers the fabrication of windows from the range of profiles and components supplied by The Parkside Group Ltd under Certificate Number KM 578159.

System(s):	Comar 5Pi Advanced Aluminium Alloy Window System
Fabrication and Installation:	Fabricated and installed in accordance with the latest issue(s) of the following Comar Architectural Aluminium Systems controlled documentation:
	Comar 5Pi Advanced Window System Technical Manual
	Comar 5Pi Advanced Enhanced Security Document
System description:	The windows are internally glazed only, double glazed only, multipoint locking only with mechanically fixed transoms/mullions
Ventilation:	None
Window Types:	Casement windows - Kenrick espagnolette system operated by a key locking handle and Sterling hinge

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No. KM 634359

Comar 5Pi Advanced Aluminium Alloy Window System Size Limitations and Performance characteristics

Window Type	Width (mm) - Maximum	Height (mm) - Maximum	Area(m²) - Maximum	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 6375-1:2009	
Sash dimensions for approved tilt/turn sash profiles:									
Projecting top hungs	1180	1430	-	-	4	9A	A5	2000	

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

This Certificate covers the fabrication of windows from the range of profiles and components supplied by The Parkside Group Ltd under Certificate Number KM 578159.

System(s):	Comar 5Pi ECO 55/75 Aluminium Alloy Window System
Fabrication and Installation:	Fabricated and installed in accordance with the latest issue(s) of the following Comar Architectural Aluminium Systems controlled documentation:
	Comar 5Pi ECO Window System Technical Manual
	Comar 5Pi ECO Enhanced Security Document
System description:	The windows are internally glazed only, double glazed only, multipoint locking only with mechanically fixed transoms/mullions
Ventilation:	None
Window Types:	Casement windows - Comar Security Hardware
	Multilight windows comprising opening light(s) and/or fixed light(s)

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No. KM 634359

Comar 5Pi ECO 55/75 Aluminium Alloy Window System Size Limitations and Performance Characteristics

Mindow Type	Width (mm) - Maximum	Height (mm) - Maximum	Area (m²) - Maximum	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 6375-1:2009 (except*)
Sash dimensions for app	roved cas	sement s	sasn pro	files:				
Projecting top hungs	1100	1116	-	-	4	7A	2400	2400*
Overall dimensions for a	pproved o	outer fra	mes & ti	ransom/mu	llion profil	es:		
Multilight Projecting side hung next to Projecting side hung Mullion CS 835	1305	1330	-	1270	2	E750	AE	2400
Multilight Projecting side hung next to Fixed Mullion CS 835	1300	1320	-	1235	4	E600	E2400	2400

*as given in Table 1 of BS 6375-1:2004

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יס מופנג ווא אמומוני נפופטוסוופ דידי (ט) שיש ססט שטטי. אוז פופנע סווב כפו מוכמני כמו שי מענופותנכמנים <u>סוווויפ</u>.

No. KM 634359

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

This Certificate covers the fabrication of windows from the range of profiles and components supplied by The Parkside Group Ltd under Certificate Number KM 578159.

System(s):	Comar 5Pi ECO+ Aluminium Alloy Window System
Fabrication and Installation:	Fabricated and installed in accordance with the latest issue(s) of the following Comar Architectural Aluminium Systems controlled documentation:
	Comar 5Pi ECO+ Window System Technical Manual
	Comar 5Pi ECO+ Enhanced Security Document
System description:	The windows are internally glazed only, double glazed only, with mechanically fixed transoms/mullions. Locking mechanism ERA (LK5846XKIT) and hinges Securistyle (HN806XSLF).
Ventilation:	None
Window Types:	Casement windows

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No. KM 634359

Comar 5Pi ECO+ Aluminium Alloy Window System Size Limitations and Performance Characteristics

Window Type	Width (mm) - Maximum	Height (mm) - Maximum	Area (m²) - Maximum	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 6375-1:2009	
Sash dimensions for approved casement sash profiles:									
Projecting top hungs	1152	1152	-	-	4	E750	2400	2400	

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No. KM 634359

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

This Certificate covers the fabrication of windows from the range of profiles and components supplied by The Parkside Group Ltd under Certificate Number KM 578159.

System(s):	Comar 9Pi Aluminium Alloy Window System
Fabrication and	Exterior to do not installed in accordance with the latest issue(s) of the following
Fabrication and Installation:	Fabricated and installed in accordance with the latest issue(s) of the following Comar Architectural Aluminium Systems controlled documentation:
	Comar 9Pi Window System Technical Manual
	Comar 9Pi Enhanced Security Document
System description:	The windows are internally glazed only, double glazed only, multipoint locking
	only with mechanically fixed transoms/mullions
Ventilation:	None
Window Types:	Casement windows - Giesse locking system operated by a key locking handle and Giesse hinges or Winlock locking system operated by a key locking handle and Sterling hinges
	Tilt/turn windows - Giesse T/T locking system operated by a key locking handle and T/T Giesse hinges or Sobinco T/T gearing operated by a key locking handle

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No. KM 634359

Comar 9Pi Aluminium Alloy Window System Size Limitations and Performance characteristics

Window Type	Width (mm) - Maximum	Height (mm) - Maximum	Area(m²) - Maximum	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 6375-1:2009
Sash dimensions for appr	oved case	ment sasl	n profiles:					
Projecting top hungs	995	1595	-	-	4	E900	A5	2000
Projecting side hungs	1180	1440	-	-	4	9A	AE	2400
Overall dimensions for approved outer frames & transom/mullion profiles:								
Tilt/turns	1180	1440	-	-	4	9A	AE	2400
Tilt/turns	1040	1650	-	-	4	E750	A5	2000

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This Certificate covers the fabrication of windows from the range of profiles and components supplied by The Parkside Group Ltd under Certificate Number KM 578159.

System(s):	Comar 10 Passivhaus Tilt/Turn Aluminium Alloy Window System
Fabrication and Installation:	Fabricated and installed in accordance with the latest issue(s) of the following Comar Architectural Aluminium Systems controlled documentation:
	Comar 10 Passivhaus Tilt/Turn Window System Technical Manual
	Comar 10 Passivhaus Tilt/Turn Enhanced Security Document
System description:	The windows are internally glazed only, double or triple glazed, using Siegenia Concealed Hinge Tilt Turn Titan AF / PW001-PW077 and Comar Tilt Turn Locking Handle
Ventilation:	None
Window Types:	Tilt/turn windows

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No. KM 634359

Comar 10 Passivhaus Tilt/Turn Aluminium Alloy Window System Size Limitations and Performance characteristics

Window Type	Width (mm) - Maximum	Height (mm) - Maximum	Area(m²) - Maximum	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 6375-1:2009 (except*)
Overall dimensions for approved tilt/turn outer frames:								
Tilt/turns	1280	2220	-	-	4	9A	C5/B5	1600*

*as given in Table 1 of BS 6375-1:2004

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