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Other brochures available on request from Kawneer are:

- Architectural Aluminium Systems Finishes
- Entrance Doors and Framing Systems
- Curtain Wall Systems
- AA®130 Brise Soleil System Solar Shading for Reduced Solar Heat Gain
- Door and Window Sliding Solutions
- Residential Aluminium Glazing Systems
- Specialist Horizontal Sliding Window Solutions for your Healthcare Project
- Fire Resistant Systems
- The Architects Guide to Aluminium in Building
- Sustainability: Our Total Commitment

















Kawneer's continuous development and engineering programmes may bring about product changes. Kawneer reserves the right to introduce without notice such changes which will not detract from the product's performance © KAWNEER UK LTD



Window Systems





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Window Product Selector

	AA®720 Casement	AA®720 Pivot	AA®720 Tilturn	AA®720 Parallel Opening	AA®541 Casement	AA®542 Pivot	AA®543 Tilturn	GT70 Slimline Renovation
Applications								
New build	•		•		-			
Refurbishment	•	•	•	•	-	•	•	
Heavy Commercial	•		•	•				
Key Features								
BRE Green Guide Rating°	А	А	А	А	A+	A+	A+	
Dual colour option	•	•	•	•		•		
Punched openings	•	•	•	•	•	•	•	•
Composite windows	•	•	•	•	•	•	•	•
Ribbon windows	•	•	•	•	•	•	•	•
Triple Glazing	•	•	•	•	= +	# +	# +	
100mm restriction	•	•	•	•	•	•	•	
Choice of vent profiles	•	•	•	•	•	•		•
Choice of muntins	•	•	•	•		•		•
Trickle ventilation	•	•	•	•	•	•	•	
Option to clean from inside the building								•
Suites with AA®100/AA®110 curtain walling	•	•	•	•	•	•	•	
Suites with AA®720 door	•	•	•	•				
Suites with AA®545 door					-			
Suites with 451PT framing	•	•	•	•	-	•	•	-
Special Applications								
Heritage			•					•
Smoke ventilation	-							

	AA®720 Casement	AA®720 Pivot	AA®720 Tilturn	AA®720 Parallel Opening	AA®541 Casement	AA®542 Pivot	AA®543 Tilturn	GT70 Slimline Renovation
Performance								
Security to PAS 24:2012	•			•	-		•	
Document F compliant*†				-		-	-	
Document L compliant†	•	•	•	•	•	•	•	
Accessories								
Locking handle		-		-	-	-		
Espagnolette locking					-			
Multi-point locking					-			
Restricted Pivots		100				-		
Folding opener								
Releasable and fixed restrictors available	•	•	•	•	•	•	•	•
Window Types								
Casement Top Hung					-			
Casement Side Hung					-			
Parallel Opening				-				
Pivot Vertical / Offset								
Pivot Horizontal								
Filturn								
Tilturn (Side Hung)								
ilturn (Bottom Hung)			-					

- Notes:

 * When fitted with trickle vent

 † Dependant on window size and configuration

 □ Subject to Kawneer approval

 ◆ With additional restrictor

- With additional restrictor
 Optional/Limited
 Corresponds to the BRE Global Green Guide online generic specification for windows and achieves a summary rating of A and A+ for non-domestic schemes. www.thegreenguide.org.uk Element Number 1231500011 (A+) Element Number 1231500007 (A)

AA®540 Series Window Systems

Introduction

The AA®540 Series corresponds to the BRE Global Green Guide online generic specification for windows and achieves a summary rating of A+*. The AA®540 has been designed with aesthetics and energy efficiency in mind to ensure compliance with today's stringent performance requirements.

Suitable for new build and refurbishment projects, the AA®540 is the window of choice for all applications. Consisting of a Casement, Pivot and Tilturn window within the same suite, the AA®540 is suitable for Education, Healthcare, Commercial, Retail and Residential markets where cost is the key driver.

A polyamide thermal break offers the option of single and dual colour along with enhanced thermal performance. The excellent weather performance ensures that the AA®540 system is suitable for low or high rise applications.

It is designed to suite with Kawneer's curtain walling, framing and door products ensuring total flexibility in application.

For information on Kawneer's AA®545 Swing Door, which completes the AA®540 Series Window & Door Range, please refer to our Entrance Doors and Framing Systems brochure.

Construction

Crimped with mechanical corner cleats. Corner braces are also used.

Weathering is achieved by the use of single and dual durometer, EPDM gaskets – all with non-shrinkage cord.

Pressure equalised system.

Configurations

The AA®540 Series offers the following design configurations:

Outward Opening

- Top Hung
- Side Hung
- Vertical Pivot (and Offset Pivot)
- Horizontal Pivot

Inward Opening

- Tilturn
- Tilturn (Side Hung)
- Tilturn (Bottom Hung)

Glazing

Glazing and panels up to 39mm thickness can be accommodated.

Security*

The AA®541 Casement and AA®543 Tilturn Windows have been independently tested to PAS 24:2012.

* Does not refer to standard hardware, security hardware required.

Secured by Design



Official Police Security Initiative

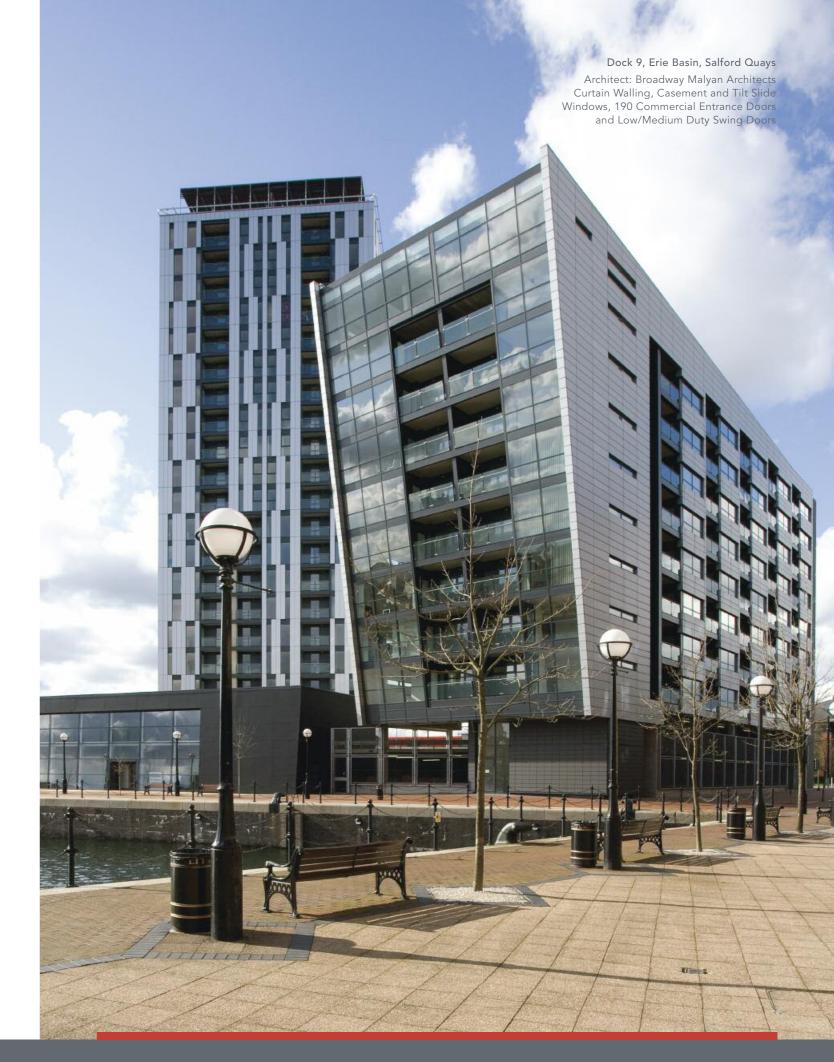
Independently Weather Performance Tested to BS 6375-1: 2015

	Air Infiltration BS EN 12207: 2000	Watertightness BS EN 12208: 2000	Wind Resistance BS EN 12210: 2000
AA®541 Casement	Class 4 (600 Pa)	Class 9A (600 Pa)	Class E2400 (2400 Pa)
AA®542 Pivot	Class 4 (600 Pa)	Class 9A (600 Pa)	Class E2400 (2400 Pa)
AA®543 Tilturn	Class 4 (600 Pa)	Class 9A (600 Pa)	Class E2400 (2400 Pa)

All Windows comply with Operation and Strength Test BS 6375 Pt2: 2015

Details of the Kawneer product tests are available from the Technical Services Department at Runcorn.

* www.thegreenguide.org.uk Element Number 1231500011





AA®541 Casement Window

Introduction

The AA®541 Casement Window is part of the AA®540 Series window range designed to offer optimum weather and thermal performance at a competitive price. The AA®541 corresponds to the BRE Global Green Guide online generic specification for windows and achieves a summary rating of A+ for non-domestic schemes**. The AA®541 uses a multichamber thermal break core, ensuring thermal efficiency and full compliance with Document L.

The AA®541 Casement is available as a top hung or side hung window, the polyamide thermal break offers single or dual colour options.

Product Features and Benefits

- BRE Green Guide 'A+' Rated Frame** for projects that require sustainable and environmental advantages
- Multi-point locking for enhanced security in line with PAS 24:2012*
- Optional trickle ventilation to assist in meeting the requirements of Document F
- Espagnolette locking and key locking handles for added security
- Projected top, side hung or butt hinge options for increased project design flexibility and solutions

- Suites with AA®542 Pivot, AA®543 Tilturn, AA®545 Swing Door, AA®100/AA®110 Curtain Walling, 451PT Framing System and Door Systems
- Offset handle position (side hung) for safety in use
- Interlocking wedge spacers for enhanced weather performance even on large windows
- 100mm fixed restrictor with adjustable friction in compliance with BS 8213
- Folding openers with link bars for safety in use
- Accommodates glazing up to 39mm
- Standard hardware groove offering a cost effective hardware solution
- ** Corresponds to the BRE Global Green Guide online generic specification for windows and achieves a summary rating of A+ for non-domestic schemes.

Element Number 1231500011

The AA®541 Casement Window has been independently tested to PAS 24:2012

* Does not refer to standard hardware, security hardware required

Secured by Design



Official Police Security Initiative



Casement Product Selector

Performance	AA®720 Casement*	AA®541 Casement
Weather Performance (BS 6375)		
Security to PAS 24:2012		
Uw (Double Glazing)	1.5 W/m²K	1.8 W/m²K
Uw (Double Glazing with warm edge spacer)**	1.3 W/m ² K	1.6 W/m ² K
Uw (Triple Glazing)	1.2 W/m ² K	1.5 W/m ² K
Uw (Triple Glazing with warm edge spacer)***	1.0 W/m ² K	1.3 W/m ² K
Special Features		
BRE Green Guide Rating ^o	Α	A+
Design Features		
Dual Colour Option	•	•
Composite Windows	•	•
Ribbon Windows		
Punched Out Openings		•
Triple Glazing		= +
Infills:	upto 56mm	upto 39mm
Standard Hardware Groove	•	
Multi-Point / Single Sided Locking Options	•	•
100mm Restriction	•	
Trickle Ventilation	•	
Locking Handles	•	•
Folding Openers	•	•
Cockspur Handle	•	
Espagnolette Handle	•	
Friction Hinges	•	•
Butt Hinges	•	•
Variable Angle Corner Post		•
System Depth		
54mm		•
72mm	•	
Maximum Window Sizes●	upto	upto
Projected Top Hung●	2300mm(W) x 2500mm(H)	1800mm(W) x 1800mm(H)
Projected Side Hung•	845mm(W) x 1900mm(H)	845mm(W) x 1800mm(H
Top Hung with Butt Hinges●	1800mm(W) x 1600mm(H)	1800mm(W) x 1600mm(H)
Side Hung with Butt Hinges●	900mm(W) x 1900mm(H)	900mm(W) x 1800mm(H
Applications		
New Build	•	•
Refurbishment		

- Based on the AA®720 HI ReflexPlus
- Window Energy Ratings and U-values based on CEN size windows (1230mm x 1480mm) using 1.0 W/m2K double glazing with warm edge (0.048 W/m²K) spacer.
- *** U-values based on CEN size windows (1230mm x 1480mm) using 0.6 W/m²K triple glazing with warm edge (0.043 W/m²K) spacer.

- Height and Width Limitations vary dependant on glass weights and hardware requirements please check with the Technical Services Department Corresponds to the BRE Global Green Guide online generic specification for windows and achieves a summary rating of A and A+ for non-domestic schemes. www.thegreenguide.org.uk Element Number 1231500011 (A+) Element Number 1231500007 (A)

AA®541 Casement Window Applications

Website CAD ref. no.

Typical Elevations

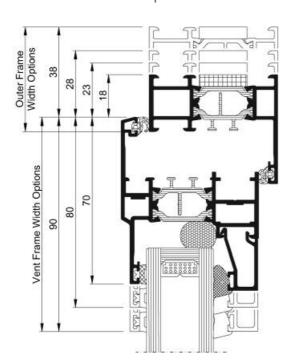
Elevation

Full details can be downloaded from our website www.kawneer.co.uk

Elevation		litle	Website CAD ret. no.
3 4	1, 2 3, 4	Fixed (Inside glaze) Fixed (Inside glaze)	H03.01 H04.01
2 5	5, 6	Fixed (Outside glaze)	H05.01
7———8	7, 8	Fixed (Outside glaze)	H06.01
	9	Windows into curtainwall	H07.01
90°	10	Fixed light panels 90° corner coupling	H08.01
11	11	Fixed light panels variable corner coupling	H09.01
12	12	Glazed muntin and coupling alternatives	H10.01-H16.01
15	13 15	Cill detail options Night ventilation	H17.01 H19.01
13	14	Horizontal coupling detail	H18.01
18 19	16, 17 18, 19	Top hung Top hung	H20.01-H21.01 H22.01
22 - 23	20, 21 22, 23	Side hung Side hung	H22.01-H23.01 H21.01 & H23.01
↑ 1 31	24	Fixed/vent coupling transom	H30.01
+24	31	Fixed/vent coupling transom (reverse glazed)	H31.01

Elevation		Title	Website CAD ref. no.
	25	Vent/vent muntin detail	H24.01
35 28	26	Vent/fixed muntin detail	H25.01
27 32	27	Fixed/fixed muntin detail	H26.01
26+ -27-32	32	Vent (reverse glazed)/ fixed muntin	H32.01
	33	Fixed/fixed both reverse glazed	H33.01
	35	Vent (reverse glazed)/	H35.01
		fixed muntin	
	28	Vent/vent muntin detail	H27.01
	29	Fixed/vent muntin	H28.01
2934	34	Fixed (reverse glazed)/ vent muntin	H34.01
30 +	30	Fixed/vent coupling transom	H29.01

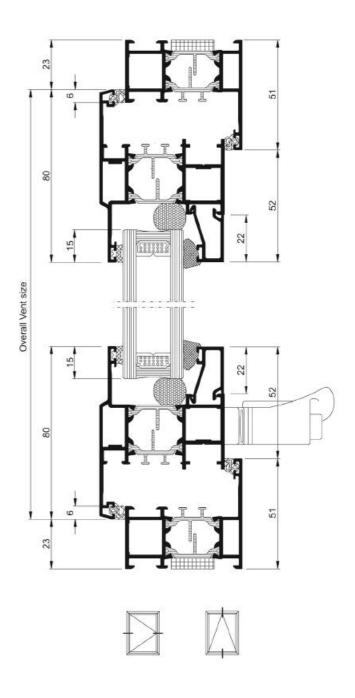
Frame and Vent Size Options



AA®541 Casement Window

Full details can be downloaded from our website www.kawneer.co.uk

Top Hung Head & Cill Details
Side Hung Details



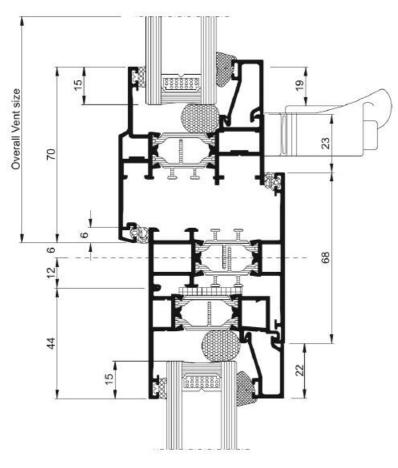
H22.01

Vertical details 20 and 21 Top Hung and horizontal details 18 and 19 side hung inside glazed vent

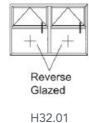
AA®541 Casement Window

Full details can be downloaded from our website www.kawneer.co.uk

Reverse Glazing Detail



N.B. Horizontal adaptor rails run through under jamb reverse glaze adaptor rails.



Vertical detail 32 – Reverse glaze adaptor. Fixed lights below top hung for "inside glaze"





AA®542 Pivot Window

Introduction

The AA®542 Pivot Window is part of the AA®540 Series window range designed to offer optimum weather and thermal performance at a competitive price. The AA®542 corresponds to the BRE Global Green Guide online generic specification for windows and achieves a summary rating of A+ for non-domestic schemes*. The AA®542 uses a multichamber thermal break core, ensuring thermal efficiency and full compliance with Document L.

The AA®542 Window is available for both horizontal pivot and vertical pivot applications, which makes it the ideal choice where natural ventilation is a key project requirement.

Product Features and Benefits

- BRE Green Guide 'A+' Rated Frame* for projects that require sustainable and environmental advantages
- Horizontal and vertical pivot options available resulting in continuous air flow to aid compliance with Document F
- Trickle ventilation option available to help meet the requirements of Document F
- Multi-point locking for added security and added safety in operation
- An integral automatic restrictor with 10° and 15° and reverse stop at 170° is available. An integral adjustable friction mechanism is active from 0° to 170°
- A two operation safety face mounted restrictor provides additional safety in operation and compliance to HTM 55 Building Schools for the future, BB 101 and BS 8213 of 100mm opening
- The pivot housing is exclusively designed for Kawneer in order to suite the extrusion profile thus enhancing aesthetic and performance characteristics
- Accommodates glazing up to 39mm
- Suites with AA®541 Casement, AA®543 Tilturn, AA®545 Swing Door, AA®100/AA®110 Curtain Walling, 451PT Framing and Door Systems
- * Corresponds to the BRE Global Green Guide online generic specification for windows and achieves a summary rating of A+ for non-domestic schemes. www.thegreenguide.org.uk Element Number 1231500011

Vent Size Limitations

All dimensions stated are in millimetres.

All dimensions stated are vent sizes.

Dimensions stated are General System Limitations.

Vent profile and hardware options are chosen depending upon size and glass weight.

Horizontal Pivot

Maximum weight 150kg

Minimum dimensions 500 wide x 600 high - cockspur/storm catch. Minimum dimensions 500 wide x 800 high - multi point locking. Maximum dimensions 1600 wide x 1600 high - cockspur/storm catch. Maximum dimensions 1800 wide x 1800 high - multi point locking - glass dependant. Vents with a height or width dimension greater than 1600 must be fitted with multi point locking.

Vertical Pivot - Central

Maximum weight 110kg

Minimum dimensions 600 wide x 500 high - cockspur/storm catch. Minimum dimensions 800 wide x 500 high - multi point locking. Maximum dimensions 1600 wide x 1600 high - cockspur/storm catch. †Maximum dimensions 1800 wide x 1800 high - multi point locking. Vents with a height or width dimension greater than 1600 must be fitted with multi point locking.

[‡]Glass load dependant.

Vertical Pivot - Offset

Maximum weight 110kg

Minimum dimensions pivot centre 300 wide (open in portion) \times 500 high - cockspur/storm catch. Minimum dimensions pivot centre 400 wide (open in portion) \times 500 high - multi point locking. Maximum dimensions pivot centre 900* wide (open out portion) \times 1800 high. Vents with a height or width dimension greater than 1600 must be fitted with multi point locking.

*Maximum size pivot centre 900 wide applies to heavy duty profiles 3000 646 and 3000 647.

For further information on vent profile options please refer to Section B of the AA®542 Product Manual.

Pivot Product Selector

Performance	AA®720 Pivot	AA®542 Pivot
Weather Performance (BS 6375)	•	•
Uw (Double Glazing)	1.6 W/m ² K	1.7 W/m²K
Uw (Double Glazing with warm edge spacer)*	1.5 W/m ² K	1.6 W/m²K
Uw (Triple Glazing)	1.3 W/m ² K	1.4 W/m²K
Uw (Triple Glazing with warm edge spacer)**	1.2 W/m ² K	1.3 W/m²K
Special Feature		
BRE Green Guide Rating ^o	А	A+
Design Features		
Dual Colour Option	•	•
Composite Windows		
Ribbon Windows		•
Punched Out Openings		•
Triple Glazing		= +
Infills	upto 56mm	upto 39mm
Multi-Point / Single Sided Locking Options		
Storm Catches		•
Up to 100mm Restriction		•
Trickle Ventilation		
Locking Handles		
Cockspur Handle		
Espagnolette Handle		
10° Restriction		
15° Restriction		
System Depth		
54mm		•
72mm	•	
Maximum Window Sizes●	upto	upto
Height•	1900mm	1800mm
Width●	1900mm	1800mm
Applications		
New Build	•	•
Refurbishment		

Notes

- * Window Energy Ratings and U-values based on CEN size windows (1230mm x 1480mm) using 1.0 W/m²K double glazing with warm edge (0.048 W/m²K) spacer.
- ** U-values based on CEN size windows (1230mm x 1480mm) using 0.6 W/m²K triple glazing with warm edge (0.043 W/m²K) spacer.
- + Optional/Limited
- Height and Width Limitations vary dependant on glass weights and hardware requirements please check with the Technical Services Department
- Corresponds to the BRE Global Green Guide online generic specification for windows and achieves a summary rating of A and A+ for non-domestic schemes, www.thegreenguide.org.uk Element Number 1231500011 (A+) Element Number 1231500007 (A)

AA®542 Pivot Window Applications

Typical Elevations - 2 Bar System

Full details can be downloaded from our website www.kawneer.co.uk

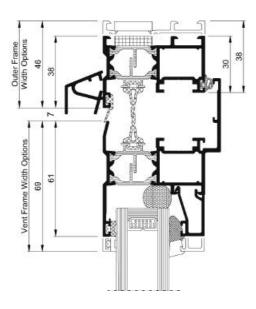
Elevation		Title	Website CAD ref. no.
2 OR 2 12 2 4	$\frac{2}{1}$ or $\frac{2}{12}$	Horizontal pivot head detail	H03.01 H04.01 H17.01
2 ₂ OR ₁₃	$\frac{2}{2}$ or $\frac{2}{13}$	Horizontal pivot cill detail	H05.01 H06.01 H18.01
	2 3	Horizontal pivot jamb detail	H07.01
	2 4 2 5 2 6	Horizontal pivot jamb detail	H08.01
2 5	<u>2</u> 5	Vertical pivot head detail	H09.01
	2 6	Vertical pivot cill detail	H10.01
2 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	2 7	Vertical pivot jamb detail	H11.01 H12.01
	2 8	Vertical pivot jamb detail	H13.01
25	2 5	Vertical pivot offset head detail	H09.01
	2 8 2 5 2 6	Vertical pivot offset cill detail	H10.01
2 2 8	2 7	Vertical pivot offset jamb detail	H11.01 H12.01
6	2 8 2 9	Vertical pivot offset jamb detail	H13.01
	2/9	Horizontal pivot vertical muntin detail	H14.01
2 10	2 10	Pivot/curtain wall window detail	H15.01
22	2/11	Pivot window vent muntin detail	H16.01
	2 11	Pivot window vent muntin detail	H16.01

Typical Elevations - 3 Bar System

Full details can be downloaded from our website www.kawneer.co.uk

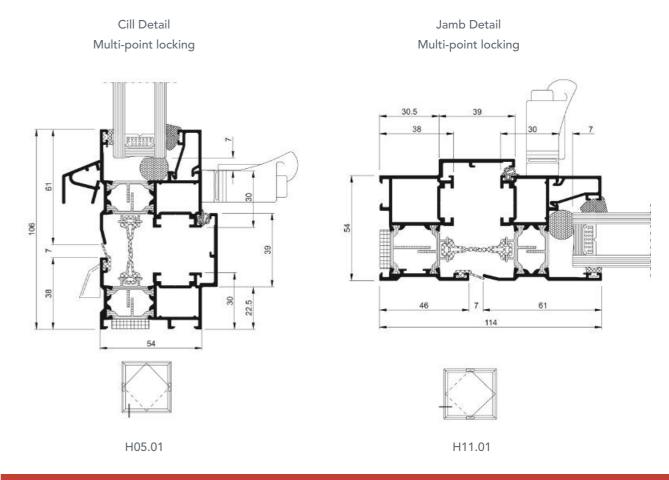
Elevation		Title	Website CAD ref. no.
3 OR 3 12 3 4	$\frac{3}{1}$ or $\frac{3}{12}$	Horizontal pivot head detail	H21.01 H32.01
3 0	$\frac{3}{2}$ or $\frac{3}{13}$	Horizontal pivot cill detail	H22.01 H33.01
$\frac{3}{2}$ OR $\frac{3}{13}$	3 3	Horizontal pivot jamb detail	H23.01
	3 4	Horizontal pivot jamb detail	H24.01
35	3 4 3 5 3 6	Vertical pivot head detail	H25.01
	3	Vertical pivot cill detail	H26.01
7 8	3 7	Vertical pivot jamb detail	H27.01
3/6	3 8	Vertical pivot jamb detail	H28.01
<u>3</u> 5	3 5	Vertical pivot offset head detail	H25.01
	3 6	Vertical pivot offset cill detail	H26.01
3 8	3 7	Vertical pivot offset jamb detail	H27.01
3 6	3 8	Vertical pivot offset jamb detail	H28.01
	3 9	Horizontal pivot vertical muntin detail	H29.01
3 10	3 10	Pivot/curtain wall window detail	H30.01
311	3 11	Pivot window vent muntin detail	H31.01
3	3 11	Pivot window vent muntin detail	H31.01

Frame and Vent Size Options



AA®542 Window Horizontal/Vertical Pivot - 2 Bar System

Full details can be downloaded from our website www.kawneer.co.uk



 $[\]frac{2}{1}$ - Top number refers to 2 Bar System - Bottom number refers to window detail

^{3 -} Top number refers to 3 Bar System

^{1 -} Bottom number refers to window detail

AA®542 Window Horizontal/Vertical Pivot - 3 Bar System

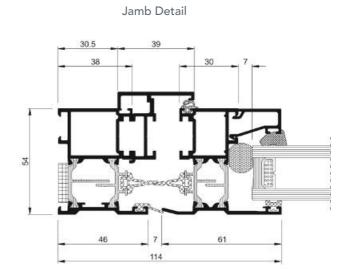
Full details can be downloaded from our website www.kawneer.co.uk



H22.01

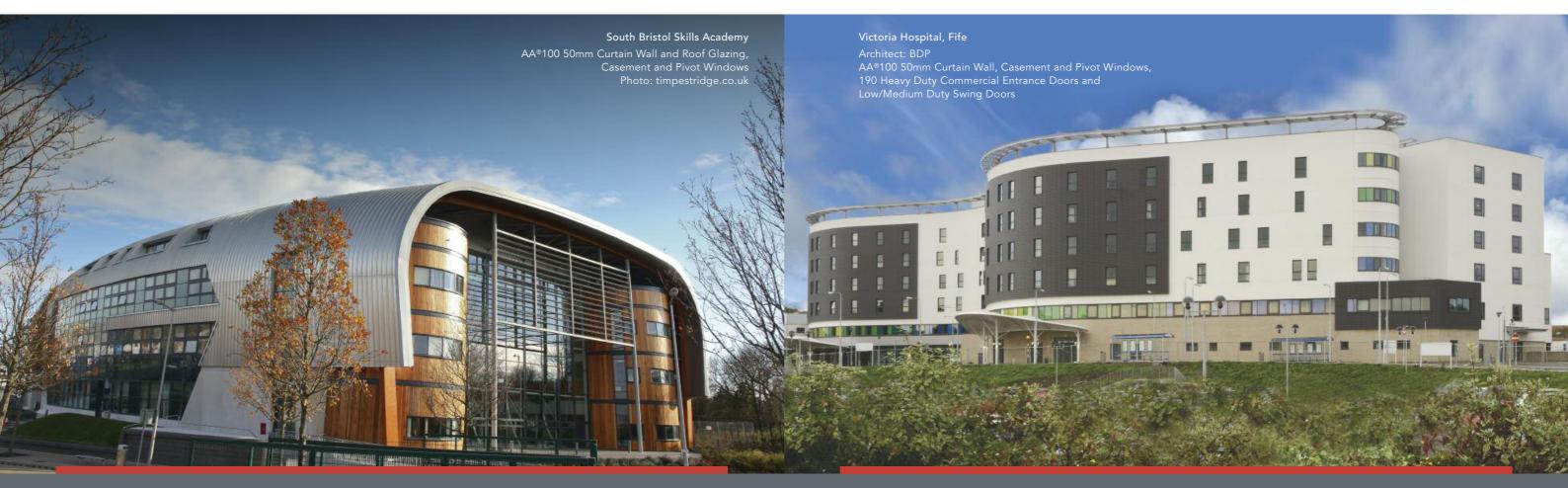
AA®542 Window Horizontal/Vertical Pivot - 3 Bar System

Full details can be downloaded from our website www.kawneer.co.uk





H27.01



AA®543 Tilturn Window

Introduction

The AA®543 Tilturn Window is part of the AA®540 Series window range designed to offer optimum weather and thermal performance at a competitive price. The AA®543 corresponds to the BRE Global Green Guide online generic specification for windows and achieves a summary rating of A+ for non-domestic schemes**. The AA®543 uses a multichamber thermal break core, ensuring thermal efficiency and full compliance with Document L.

The AA®543 Tilturn is available as either a tilturn only or a side hung or bottom hung window, the polyamide thermal break offers a single or dual colour options.

Product Features and Benefits

- BRE Green Guide 'A+' Rated Frame** for projects that require a sustainable and environmental advantages
- Tilt before turn operation. Tilt for ventilation and turn for cleaning. This provides a draught free baffled ventilation and safety in operation and use. The full opening in the 'turn' position offers an escape route in an emergency (subject to size)
- Optional trickle ventilation to assist in meeting the requirements of Document F
- Multi-point locking for enhanced security in line with PAS 24:2012*

- Multi-function handle offering locked, turn lock and open modes
- Option of concealed hinges
- A standard hardware groove offering a cost effective hardware solution
- Accommodates glazing up to 39mm
- Suites with AA®541 Casement, AA®542 Pivot, AA®545 Swing Door, AA®100/AA®110 Curtain Walling, 451PT Framing System and Door Systems

** Corresponds to the BRE Global Green Guide online generic specification for windows and achieves a summary rating of A+ for non-domestic schemes. www.thegreenguide.org.uk
Element Number 1231500011

Security*

The AA $^{\odot}$ 543 Tilturn Window has been independently tested to PAS 24:2012

*Does not refer to standard hardware, security hardware required

Secured by Design



Official Police Security Initiative



Tilturn Product Selector

Performance	AA®720 Tilturn*	AA®543 Tilturn
Weather Performance (BS 6375)	•	•
Security to PAS 24:2012		
Uw (Double Glazing)	1.4 W/m ² K	1.6 W/m²K
Uw (Double Glazing with warm edge spacer)**	1.3 W/m ² K	1.4 W/m²K
Uw (Triple Glazing)	1.1 W/m ² K	1.3 W/m²K
Uw (Triple Glazing with warm edge spacer)***	1.0 W/m ² K	1.1 W/m²K
Special Feature		
BRE Green Guide Rating ^o	Α	A+
Design Features		
Dual Colour Option	•	•
Composite Windows		
Ribbon Windows	•	
Punched Out Openings	•	•
Triple Glazing		# +
Infills:	upto 56mm	upto 39mm
Standard Hardware Groove	•	
Multi-Point Locking	•	
100mm Restriction		
Trickle Ventilation	•	
Locking Handles		
Butt Hinges		
Multi-function Handle	•	
Variable Angle Corner Post		•
System Depth		
54mm		•
72mm	•	
Maximum Window Sizes●	upto	upto
Tilturn only•	1600mm(W) & 2100mm(H)	1600mm(W) & 2200mm(H)
Side Hung●	1600mm(W) & 2100mm(H)	1600mm(W) & 2200mm(H)
Bottom Hung•	2000mm(W) & 1200mm(H)	2369mm(W) & 836mm(H)
Applications		
New Build	•	•
Refurbishment		
Heavy Commercial		

Notes

- * Based on the AA®720 HI Reflex
- ** Window Energy Ratings and U-values based on CEN size windows (1230mm x 1480mm) using 1.0 W/m²K double glazing with warm edge (0.048 W/m²K) spacer.
- *** U-values based on CEN size windows (1230mm x 1480mm) using 0.6 W/m²K triple glazing with warm edge (0.043 W/m²K) spacer.
- + Optional/Limited
- Height and Width Limitations vary dependant on glass weights and hardware requirements please check with the Technical Services Department
- Corresponds to the BRE Global Green Guide online generic specification for windows and achieves a summary rating of A and A+ for nondomestic schemes. www.thegreenguide.org.uk Element Number 1231500011 (A+) Element Number 1231500007 (A)

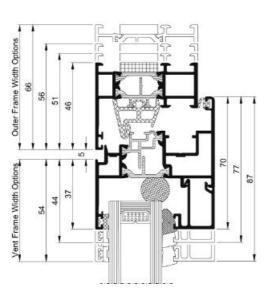
AA®543 Tilturn Window Applications

Typical Elevations

Full details can be downloaded from our website www.kawneer.co.uk

Elevation		Title	Website CAD ref. no.
TURN ONLY TILT TURN	1, 2 3, 4 5, 6	Turn only head and cill Jamb detail Tilturn head and cill detail	H02.01 H03.01 H04.01
+ + + + + + + + + + + + + + + + + + + +	7 8 9	Vent muntin option Vertical muntin/vent detail Jamb detail	H05.01 H06.01 H07.01
	10	Vent/vent coupling mullion detail	H08.01
+	11	Horizontal muntin/ vent head detail	H09.01
1/32 / 5 (Security)	12	Horizontal muntin/ vent cill detail	H10.01
19	13	Vent/vent (handle) detail	H11.01
	14	Vent/vent (hinge) detail	H12.01

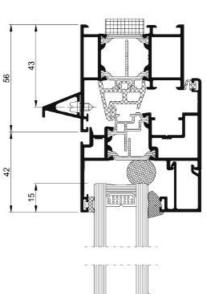
Frame and Vent Size Options

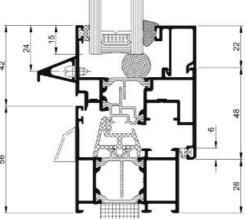


AA®543 Tilturn Window

Full details can be downloaded from our website www.kawneer.co.uk

Head & Cill Details





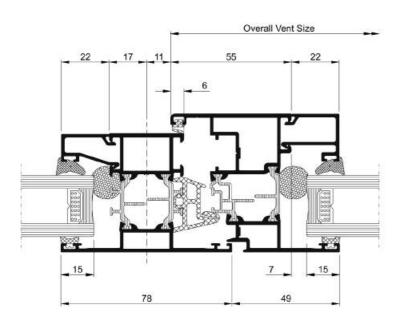


H02.01 Turn only vent

AA®543 Tilturn Window

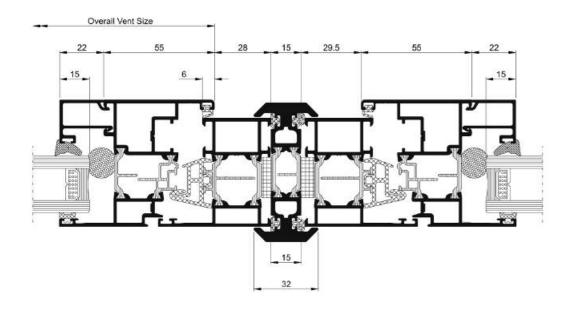
Full details can be downloaded from our website www.kawneer.co.uk

Tilt Turn Vent/Fixed Light Muntin Details





Vent/Vent Coupling Mullion Details







AA®720 Outward Opening Window Systems

Introduction

The AA®720 Series has been developed to meet the latest European requirements for thermal performance and has been future proofed against expected changes in thermal regulation up to 2019.

To enable complete flexibility of design, performance and cost, the AA®720 Series is available in four levels of thermal performance – the AA®720 HW, the AA®720 HI, the AA®720 HI Reflex and the AA®720 HI Reflex Plus.

The 72mm profiles incorporate the very latest thermal technology including; extruded polyamide and patented thermal breaks, insulated centre seals and foam isolators.

As well as being fully integrated, the range can suite with Kawneer's curtain walling and framing products and is suitable for installation in low or high rise buildings for commercial and domestic new build or refurbishment projects.

Construction

Crimped or pinned with mechanical corner cleats. Corner braces are also used.

Weathering is achieved by the use of single and dual durometer, EPDM gaskets.

Pressure equalised system.

Configurations

As well as flexibility in performance, the AA®720 offers versatility in design with the range encompassing a wide variety of integrated window and door configurations.

Design considerations for the outward opening window range are:

- Top Hung
- Side Hung
- Vertical Pivot (and Offset Pivot)
- Horizontal Pivot
- Parallel Opening

For information on Kawneer's AA®720 Series Door Systems please refer to our Entrance Doors and Framing Systems brochure.

Glazing

Glazing and panels up to 56mm thickness can be accommodated enabling the use of triple glazing for when there is a requirement for the very highest thermal and acoustic performance.

Security*

The AA®720 Casement and AA®720 Parallel Opening Windows have been independently tested to PAS 24:2012.

* Does not refer to standard hardware, security hardware required.

Secured by Design



Official Police Security Initiative

Independently Weather Performance Tested to BS 6375-1: 2015

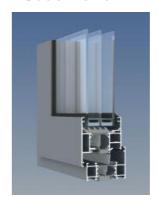
	Air Infiltration BS EN 12207: 2000	Watertightness BS EN 12208: 2000	Wind Resistance BS EN 12210: 2000
AA®720 Casement	Class 3-4 (600 Pa)	Class 9A (600 Pa)	Class E2400 (2400 Pa)
AA®720 Pivot	Class 3-4 (600 Pa)	Class 9A (600 Pa)	Class E2400 (2400 Pa)

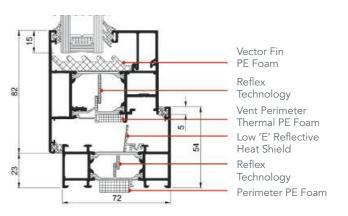
All Windows comply with Operation and Strength Test BS 6375 Pt2: 2015

Details of the Kawneer product tests are available from the Technical Services Department at Runcorn.

Thermal Performance - Outward Opening

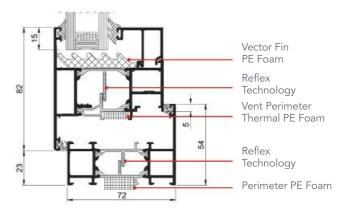
AA®720 HI ReflexPlus Casement



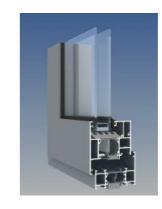


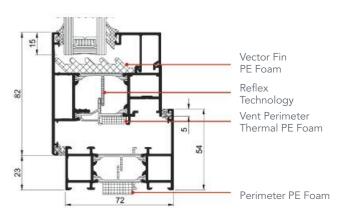
AA®720 HI Reflex Casement



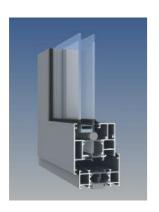


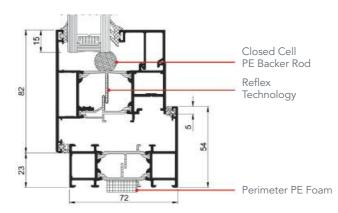
AA®720 HI Casement



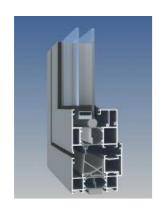


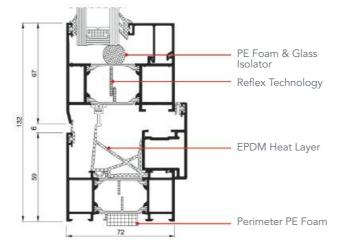
AA®720 HW Casement



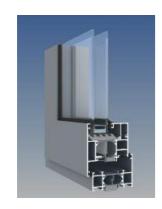


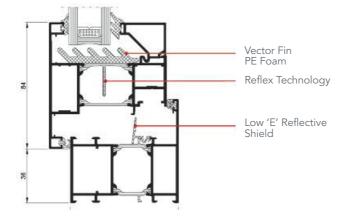
AA®720 HW Pivot





AA®720 HI Parallel





The AA®720 Reflex Technology

Due to the anticipated amendments to Approved Document L, and the continued market demands for high performance windows, Kawneer has developed a unique system it can apply to it's polyamide thermal breaks to give further thermal improvements to the window, and reduce heat transfer through the profile.

The inclusion of a low emmisivity reflective foil to the thermal 'flags' allows the AA°720 Casement to achieve U-values as low as 1.0 W/m²K for a CEN size window with a warm edge spacer**

Additional Product Features

In addition to the features described, the AA®720 Casement Window offers market leading weight capabilities for a top hung window. With a capability of up to 130kg, high performance acoustic and/or security glass applications can be easily accommodated within the standard window without additional reinforcements or fabrication requirements.

With a choice of locking or non locking handles in a range of finishes, the system can be incorporated effectively in a number of applications.

The AA°720 Casement Window has been designed with flexibility and ease of fabrication as key requirements. The system provides the option of internal or external glaze options, to suit a variety of applications. The system incorporates a standard hardware groove, to provide cost effective locking hardware without compromising performance or security.

Performance Testing - Smoke Vent

The AA*720 open out casement window has been successfully tested to BS EN 12101-2, meeting smoke vent standards that are now a mandatory requirement, especially in high rise residential schemes.

The introduction of the Construction Products Regulations in 2013 has resulted in the need to CE mark any product placed onto the market that has a harmonised European standard.

Vertical options for top, side and bottom hung open out applications are available with a single or twin actuator offering opening widths of up to 900mm to meet required free area requirements.

Thermal Performance

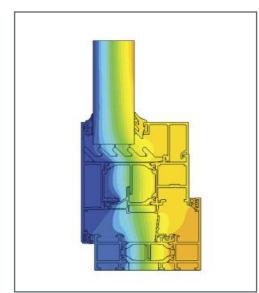
The AA®720 Casement, can be manufactured within 4 levels of thermal performance – providing flexibility in design, performance and cost.

AA°720 HW – Most cost effective option – Reflex Technology within the vent profile, closed cell PE glazing rebate foam, closed cell frame perimeter foam insulation tape.

AA°720 HI – Greater Performance Level, cost conscious – Reflex Technology within the vent profile, closed cell PE vector fin glazing rebate foam, closed cell vent perimeter foam, closed cell frame perimeter foam insulation tape.

AA°720 HI Reflex – Greater Performance Level – Reflex Technology within the vent and frame profiles, closed cell PE vector fin glazing rebate foam, closed cell vent perimeter foam, closed cell frame perimeter foam insulation tape.

AA°720 HI Reflex Plus – Highest Performance Level – Reflex Technology within the vent and frame profiles, closed cell PE vector fin glazing rebate foam, closed cell vent perimeter foam, closed cell frame perimeter foam insulation tape, low 'e' heat shield centre seal.



Thermal Evaluation of the AA°720 HI Reflex^{Plus}

Casement Window

	HW Ca	sement	HI Cas	sement	HI Reflex	Casement	HI Reflex ^{Plu}	· Casement
Glass	1.0 Ug*	0.6 Ug**	1.0 Ug*	0.6 Ug**	1.0 Ug*	0.6 Ug**	1.0 Ug*	0.6 Ug**
Overall Uw	1.5 W/m²K	1.2 W/m²K	1.4 W/m²K	1.1 W/m²K	1.4 W/m²K	1.1 W/m²K	1.3 W/m²K	1.0 W/m ² K

Based on a 34mm Outer Frame/34mm Inside Glaze vent Combination

- * Window Energy Ratings and U-values based on CEN size windows (1230mm x 1480mm) using 1.0 W/m²K double glazing with warm edge (0.048 W/m²K) spacer.
- ** U-values based on CEN size windows (1230mm x 1480mm) using 0.6 W/m²K triple glazing with warm edge (0.043 W/m²K) spacer.

AA®720 Casement Window

Introduction

The AA°720 Casement Window is part of the AA°720 range of Windows and Doors. In line with the existing range, the AA°720 Casement is available in four levels of thermal performance – incorporating Kawneer's latest Reflex unique thermal break technology.

The AA®720 Casement Windows are available as top hung or side hung windows and can be either internally or externally glazed. Additional advantages of the advanced thermal break technology include the options of dual colour finishes, to provide design flexibility in various applications.

Product Features and Benefits

- BRE Green Guide 'A' Rated Frame* for projects that require sustainable and environmental advantages
- Range of locking options available for flexibility. Choose from standard Espagnolette locking to enhanced security in line with PAS 24:2012
- Option of Trickle Ventilation can help meet the requirements of Document F
- Projected top hung or side hung or butt hinge options total flexibility, suits most casement project applications
- Suites with the AA°720 Tilturn, AA°720 Pivot, AA°720 Door and AA°100/AA°110 Curtain Wall. Total design flexibility offering total project solutions
- Offset handle position for side hung windows. Safety in use

 suitable for 'Lifetime Homes' Specification
- Choice of restrictors available to 100mm. Design flexibility. Compliant with the HTM 55 regulations & BS 8213 of 100mm initial opening
- Folding Openers with Link Bars offer safety in use
- Maximum size 2300mm(W) x 2500mm(H) suitable in even the most demanding of applications
- Suited hardware compatible hardware to compliment the AA®720, AA®540 and AA®3720 ranges
- Outside glaze option (not PAS 24 compliant)

Security**

The AA*720 Casement Window has been independently tested to PAS 24:2012.

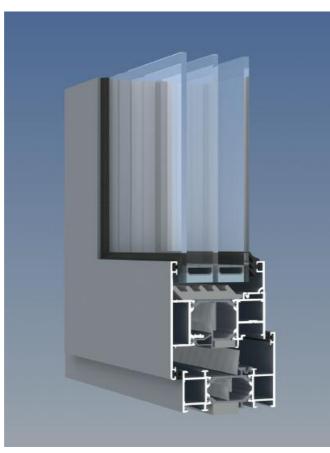
** Does not refer to standard hardware, security hardware required.

Secured by Design



Official Police Security Initiative

* Corresponds to the BRE Global Green Guide online generic specification for windows and achieves a summary rating of A for non-domestic schemes. www.thegreenguide.org.uk Element Number 1231500007



AA®720 HI ReflexPlus Casement Window

Window Systems www.kawneer.co.uk

Casement Product Selector

Performance	AA®720 Casement*	AA®541 Casement
Weather Performance (BS 6375)	•	•
Security to PAS 24:2012	•	
Uw (Double Glazing)	1.5 W/m²K	1.8 W/m²K
Uw (Double Glazing with warm edge spacer)**	1.3 W/m²K	1.6 W/m²K
Uw (Triple Glazing)	1.2 W/m²K	1.5 W/m²K
Uw (Triple Glazing with warm edge spacer)***	1.0 W/m ² K	1.3 W/m ² K
Special Features		
BRE Green Guide Rating ^o	A	A+
Design Features		
Dual Colour Option	•	•
Composite Windows	•	
Ribbon Windows	•	
Punched Out Openings	•	
Triple Glazing		= +
Infills:	upto 56mm	upto 39mm
Standard Hardware Groove	•	
Multi-Point / Single Sided Locking Options		
100mm Restriction		
Trickle Ventilation		
Locking Handles	•	
Folding Openers	•	
Cockspur Handle	•	
Espagnolette Handle	•	
Friction Hinges	•	
Butt Hinges		
Variable Angle Corner Post		
System Depth		
54mm		•
72mm	•	
Maximum Window Sizes•	upto	upto
Projected Top Hung●	2300mm(W) x 2500mm(H)	1800mm(W) x 1800mm(H)
Projected Side Hung•	845mm(W) x 1900mm(H)	845mm(W) x 1800mm(H)
Top Hung with Butt Hinges●	1800mm(W) x 1600mm(H)	1800mm(W) x 1600mm(H)
Side Hung with Butt Hinges●	900mm(W) x 1900mm(H)	900mm(W) x 1800mm(H)
Applications		
New Build	•	•
Refurbishment		

Notes:

- * Based on the AA®720 HI Reflex^{Plus}
- ** Window Energy Ratings and U-values based on CEN size windows (1230mm x 1480mm) using 1.0 W/m²K double glazing with warm edge (0.048 W/m²K) spacer.
- *** U-values based on CEN size windows (1230mm x 1480mm) using 0.6 W/m²K triple glazing with warm edge (0.043 W/m²K) spacer.
- + Optional/Limited
- Height and Width Limitations vary dependant on glass weights and hardware requirements please check with the Technical Services Department

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 Corresponds to the BRE Global Green Guide online generic specification for windows and achieves a summary rating of A and A+ for nondomestic schemes. www.thegreenguide.org.uk Element Number 1231500011 (A+) Element Number 1231500007 (A)

AA®720 Casement Window Applications

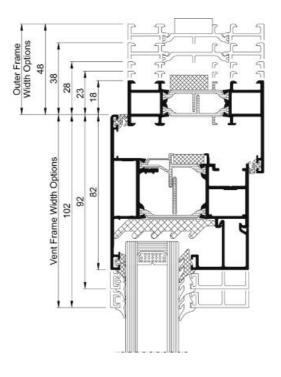
Typical Elevations

Full details can be downloaded from our website www.kawneer.co.uk

Elevation		Title		Website	CAD ref. no.	
			AA®720 HI	AA®720 HW	AA®720 Reflex	AA®720 HI Reflex ^{Plus}
, ,	1, 2 3, 4	Fixed Light Head and Cill (inside glazed) Fixed Light Jamb (inside glazed)	H4-3 H4-4	H4-53 H4-54	H4-3 H4-4	H24-3 H24-4
7 - Ext. Glacos	5, 6 7, 8	Fixed Light Head and Cill (outside glazed) Fixed Light Jamb (outside glazed)	H4-5 H4-6	H4-55 H4-56	H4-5 H4-6	H24-5 H24-6
Ext. Glassed	9	Casement/Fixed Light Muntin	H4-9	H4-59	H4-9	H24-9
Cuta e Wed	= ¹⁰	Casement Curtain Wall Insert - Head	H4-7 & H4-8	H4-57 & H4-58	H4-7 & H4-8	H24-7 & H24-8
W	11	90° Corner (Casement/Fixed Light)	H4-10	H4-60	H4-10	H24-10
180	12	135° Corner (Casement/Fixed Light)	H4-11	H4-61	H4-11	H24-11
u	13	Coupling Mullion	H4-12	H4-62	H4-12	H24-12
16	14, 15	Casement Jamb Detail (inside glazed vent)	H4-13	H4-63	H4-13	H24-13
	16, 17	Casement Head and Cill Detail (outside glazed vent)	H4-13	H4-63	H4-13	H24-13
Ext. Colory	18, 19	Casement Jamb Detail (outside glazed vent)	H4-14	H4-64	H4-14	H24-14
Est.	20, 21	Casement Head and Cill Detail (outside glazed vent)	H4-14	H4-64	H4-14	H24-14

Elevation		Title		Website	CAD ref. no.	
			AA®720 HI	AA®720 HW	AA®720 Reflex	AA®720 HI ReflexPlus
22 E.d. Classed	22 3, 4	Casement/Fixed Light Muntin (outside glazed vent)	H4-15	H4-65	H4-15	H24-15
	23	Casement/Casement Muntin (inside glazed vent)	H4-16	H4-66	H4-16	H24-16
	24	Horizontal Coupling	H4-17	H4-67	H4-17	H24-17
-	25	Casement/Fixed Light	H4-7	H4-57	H4-7	H24-7
Sinverse Graned	26, 27	(reverse glazing adaptor) Fixed Light Head & Jamb (reverse glazing adaptor)	H4-19	H4-89	H4-19	H24-19
Ext Disase	28	Casement (outside glazed)/Fixed Light	H4-20	H4-70	H4-20	H24-20
Tricks Variables	29	Through Frame Trickle Ventilation	H4-21	H4-71	H4-21	H24-21
34/25	30 31	Casement Cill Detail Casement Cill Detail (alternative)	H4-23 H4-24	H4-73 H4-74	H4-23 H4-24	H24-23 H24-24

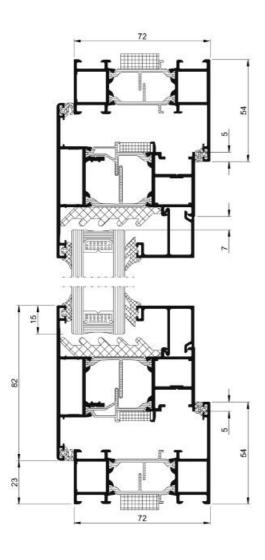
Frame and Vent Size Options

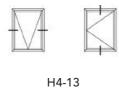


AA®720 Casement Window

Full details can be downloaded from our website www.kawneer.co.uk

Head & Cill Detail

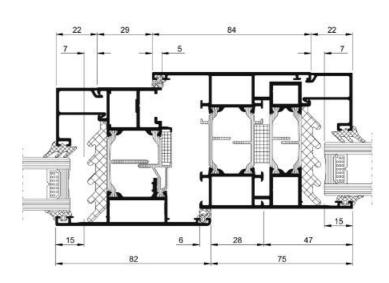




AA®720 Casement Window

Full details can be downloaded from our website www.kawneer.co.uk

Vent/Fixed Light Muntin Detail





H4-18

AA®720 Pivot Window

Introduction

The AA®720 Pivot Window is part of the AA®720 range of Windows and Doors. In line with the existing range, the AA®720 Pivot offers excellent weather and thermal performance incorporating Reflex technology and foam rod.

As you would expect AA®720 Pivot Window is available for both horizontal and vertical pivot applications as well as vertical offset pivot, which makes it the ideal choice where natural ventilation is required.

Product Features and Benefits

- BRE Green Guide 'A' Rated Frame* for projects that require sustainable and environmental advantages
- Horizontal and vertical pivot options available resulting in continuous air flow to aid compliance with Document F
- Standard bead, Box bead and Softline bead (Softline beads are mitred and secured with retaining clips)
- Thermal performance U_f from 1.8 W/m²K
- Range of standard and coloured anodised finishes
- Trickle ventilation option available to help meet the requirements of Document F
- Multi-point locking for added security and added safety in operation
- An integral automatic restrictor for restricted and non restricted pivots:
- Manual Locking/Unlocking with special Allen Key
- Automatic Re-engagement
- Manual Disengagement
- The pivot housing is exclusively designed for Kawneer in order to suite the extrusion profile thus enhancing aesthetic and performance characteristics
- Accommodates glazing up to 56mm including triple glazing
- Suites with AA®720 series, AA®100/AA®110 Curtain Walling, 451PT Framing and Door Systems
- * Corresponds to the BRE Global Green Guide online generic specification for windows and achieves a summary rating of A for non-domestic schemes. www.thegreenguide.org.uk Element Number 1231500007

Vent Size Limitations

All dimensions stated are in millimetres.

All dimensions stated are vent sizes.

Dimensions stated are General System Limitations.

Vent profile and hardware options are chosen depending upon size and glass weight.

Horizontal Pivot

- Maximum weight 150kg
- Width up to 1900mm
- Height up to 1900mm

Vertical Pivot - Central

- Maximum weight 110kg
- Width up to 1900mm
- Height up to 1900mm

Vertical Pivot - Offset

- Maximum weight 110kg
- Minimum Dimensions Pivot Centre 350mm Wide (Open In Portion) x 500mm High
- Maximum Dimensions Pivot Centre *950mm Wide (Open Out Portion) x 1900mm High

Maximum Size Pivot Centre 950mm wide applies to Heavy Duty Profile 3001 877.

For further information on vent profile options please refer to Section B of the AA®720 Product Manual.



AA°720 Horizontal Pivot Window

Pivot Product Selector

Performance	AA®720 Pivot	AA®542 Pivot
Weather Performance (BS 6375)	•	•
Uw (Double Glazing)	1.6 W/m ² K	1.7 W/m ² K
Uw (Double Glazing with warm edge spacer)*	1.5 W/m ² K	1.6 W/m ² K
Uw (Triple Glazing)	1.3 W/m ² K	1.4 W/m ² K
Uw (Triple Glazing with warm edge spacer)**	1.2 W/m ² K	1.3 W/m ² K
Special Feature		
BRE Green Guide Rating ^o	А	A+
Design Features		
Dual Colour Option	•	•
Composite Windows		
Ribbon Windows		
Punched Out Openings		
Triple Glazing		# +
Infills	upto 56mm	upto 39mm
Multi-Point / Single Sided Locking Options		•
Storm Catches		•
Up to 100mm Restriction		•
Trickle Ventilation		•
Locking Handles		•
Cockspur Handle		•
Espagnolette Handle		•
10° Restriction		•
15° Restriction		•
System Depth		
54mm		•
72mm	•	
Maximum Window Sizes●	upto	upto
Height●	1900mm	1800mm
Width●	1900mm	1800mm
Applications		
New Build	•	•
Refurbishment	•	•

Notes

- * Window Energy Ratings and U-values based on CEN size windows (1230mm x 1480mm) using 1.0 W/m²K double glazing with warm edge (0.048 W/m²K) spacer.
- ** U-values based on CEN size windows (1230mm x 1480mm) using 0.6 W/m²K triple glazing with warm edge (0.043 W/m²K) spacer.
- + Optional/Limited
- Height and Width Limitations vary dependant on glass weights and hardware requirements please check with the Technical Services Department
- Corresponds to the BRE Global Green Guide online generic specification for windows and achieves a summary rating of A and A+ for non-domestic schemes. www.thegreenguide.org.uk Element Number 1231500011 (A+) Element Number 1231500007 (A)

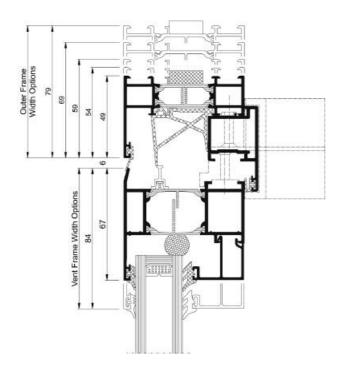
AA®720 Pivot Window Applications

Typical Elevations

Full details can be downloaded from our website www.kawneer.co.uk

Elevation			Vebsite CAD ref. no.
2	1	Horizontal Pivot Head	H5-11, H5-12
4	2	Horizontal Pivot Cill	H5-13
	3	Horizontal Pivot - Jamb	
· 1		(below Pivot)	H5-14
	4	Horizontal Pivot - Jamb	H5-15
1		(above Pivot)	
TWN-HORIONTAL PRIOTS	9	Horizontal Pivot/Horizontal Pivot Muntin	H5-20
1	5	Vertical Pivot - Head	H5-16
	6	Vertical Pivot - Cill	H5-17
	7	Vertical Pivot - Jamb (handle side	
· A.	8	Vertical Pivot - Jamb (open-in sid	
VERTICAL PINOT (ISH OPEN IN SHOWN)		,	
1	5	Offset Vertical Pivot - Head	H5-16
	6	Offset Vertical Pivot - Cill	H5-17
	7	Offset Vertical Pivot - Jamb	H5-18
7 m /m°		(handle side)	
	8	Offset Vertical Pivot - Jamb	H5-19
VERTICAL PROT		(open-in side)	
VERTICAL PIVOT OFFSET (RIH OPEN IN SHOWN)			
VERTICAL PAYOT	11	Pivot Window - Vent Muntin	H5-22
	10	Pivot Insert into Curtain Wall	H5-21
PHOT INHOMINITO CURTAN WHALENG	12	Horizontal Pivot - Transom Head Detail	H5-23
	12	Vertical Pivot - Transom Head Detail	H5-23
	12	Horizontal Pivot - Transom Cill Detail	H5-24

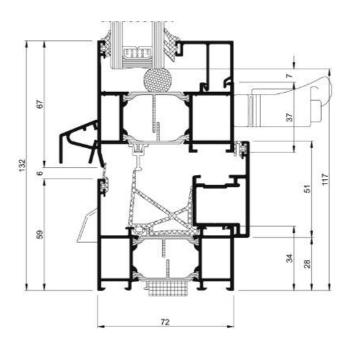
Frame and Vent Size Options



AA®720 Horizontal Pivot Window

Full details can be downloaded from our website www.kawneer.co.uk

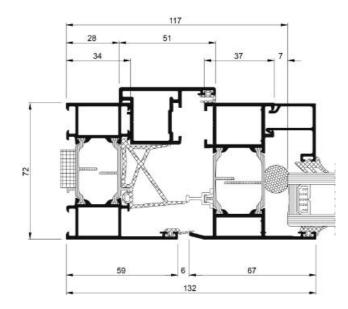
Cill Detail





H5-13

Jamb Detail



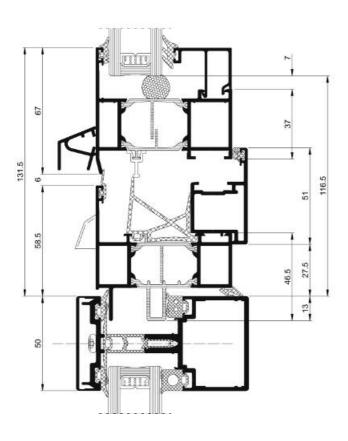


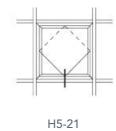
H5-14

AA®720 Horizontal Pivot Window

Full details can be downloaded from our website www.kawneer.co.uk

Pivot into Curtain Wall

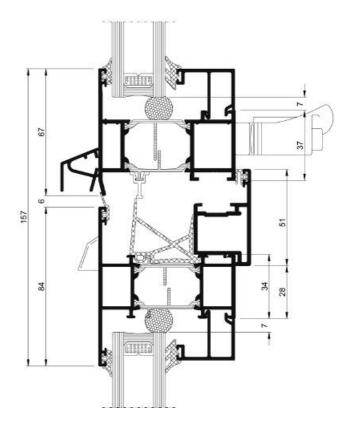




AA®720 Horizontal Pivot Window

Full details can be downloaded from our website www.kawneer.co.uk

Transom Cill Detail





H5-24

AA®720 Parallel Opening Window

Introduction

The AA®720 Parallel Opening Window is available as a stand alone window system and as an insert into existing Kawneer curtain walling and framing systems allowing complete design freedom.

Based on the established Kawneer AA®720 window system, the parallel opening design benefits from the proven thermal performance of the standard AA®720 casement, achieving Uvalues of 1.2 W/m²K for a CEN sized window, triple glazed with warm edge spacer, while offering exceptional levels of natural ventilation and air exchange.

Increased air flow around the full perimeter of the window facilitates highly efficient natural ventilation while greatly reducing draughts. Fresh air is drawn in via the bottom of the window while warm, stale air is expelled via the top of the window creating full circulation of air within the room.

This efficient exchange of air can assist with Approved Document F compliance and can enable the AA®720 Parallel Opening Window to meet the ventilation requirements of even the most demanding project.

Product Features and Benefits

- Effective ventilation around the whole perimeter of the window - can achieve approximately twice the natural ventilation of an equivalent sized top hung window*
- Increased air circulation and natural ventilation draughts are reduced while fresh air ventilation exchange is maximised*
- 80mm clear opening restriction as standard safety for all users and occupants
- Proven thermal performance of standard AA®720 -U-value of 1.2 W/m²K for CEN sized window, triple glazed with warm edge spacer
- Suites with Kawneer Curtain Wall and Framing products - total design flexibility, offering total project solutions
- reflective aesthetic as the facade
- manual operation (larger sizes may be possible using automatic operators) - large vents allow maximum glass area and can reduce the quantity of vents required
- Maximum weight 200 Kg
- reported free air flow of 560 litres/sec for parallel opening windows compared to 290 litres/sec for top hung windows of an equivalent

per hour for the parallel window design compared to 5.7 for the equivalent sized top hung windows.

Roberts K. CFD Comparative Analysis of Parallel & Top Hung Windows 2009

Operational Safety

The AA®720 Parallel Opening Window operating forces have been independently tested with vent sizes up to a maximum of 1500mm wide x 2400mm high falling within the 100N operating force requirement for manual operation**. The AA®720 Parallel Opening Window can also be used with automatic operators for operating forces greater than 100N or in places of restricted access.

** Size and weight dependant

Windows are restricted to 80mm clear opening as standard giving the confidence of safe operation for all users while further enhancing the security of the window.

The AA®720 Parallel Opening Window has been independently tested to PAS 24:2012.

*** Does not refer to standard hardware, security hardware required.

Secured by Design



Official Police Security Initiative



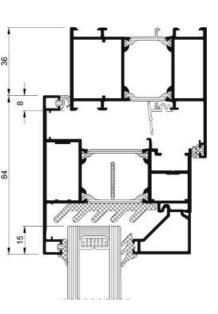
AA®720 Parallel Opening Window Applications

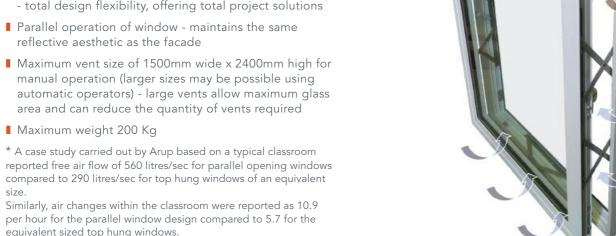
Typical Elevations

Full details can be downloaded from our website www.kawneer.co.uk

Elevation		Title V	Vebsite CAD ref. no.
, ,	1, 2	Jamb Sections	H-001
	3, 4	Head and Cill Sections	H-002
S Curtain Walf	5	Cill - POW Insert into Curtain Wa	II H-003
E Gurtain Wall	6	Jamb - POW Insert into Curtain V	Vall H-004
M	7	Run-Up Blocks	H-005

Frame and Vent Size Options

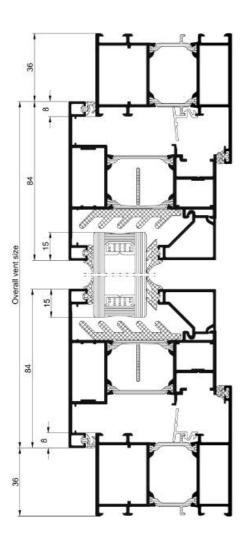




AA®720 Parallel Opening Window

Full details can be downloaded from our website www.kawneer.co.uk

Head and Cill Detail

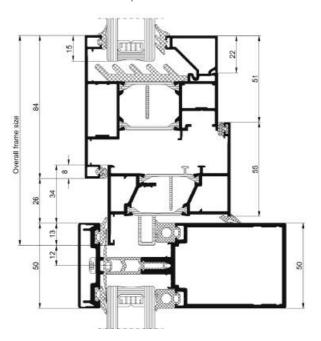




AA®720 Parallel Opening Window

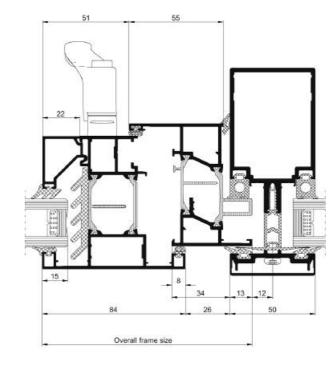
Full details can be downloaded from our website www.kawneer.co.uk

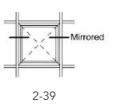
Parallel Opener into Curtain Wall





Parallel Opener into Curtain Wall





AA®720 Inward Opening Window Systems

Introduction

The AA®720 Series has been developed to meet the latest European requirements for thermal performance and has been future proofed against expected changes in thermal regulation up to 2019.

To enable complete flexibility of design, performance and cost, the AA®720 Series is available in four levels of thermal performance – the AA®720, the AA®720 HW, the AA®720 HI

Curtain Wall Look-alike variant that offers the appearance and the AA®720 HI Reflex.

The 72mm profiles incorporate the very latest thermal technology including; extruded polyamide and patented thermal breaks, insulated centre seals, foam isolators and foam core insulation.

As well as being fully integrated, the range can suite with Kawneer's curtain walling and framing products and is suitable for installation in low or high rise buildings for commercial and domestic new build or refurbishment projects.

Construction

Crimped or pinned with mechanical corner cleats. Corner braces are also used.

Weathering is achieved by the use of single and dual durometer, EPDM gaskets.

Pressure equalised system.

Configurations

As well as flexibility in performance, the AA®720 offers versatility in design with the range encompassing a wide variety of integrated window and door configurations. There is also a fire resistant AA®720 FR variant within the range that provides firerated door and fixed screen solutions.

Design variants to the AA®720 inward opening window range

- Softline/Design variants with rounded contours
- Renovation "TIP" steel window replacement system
- Renovation variant with angular contours
- Concealed Vent variant where vent profiles are not visible from the outside

For information on Kawneer's AA®720 Series Door Systems please refer to our Entrance Doors and Framing Systems

Glazing and panels up to 56mm thickness can be accommodated enabling the use of triple glazing for when there is a requirement for the very highest thermal and acoustic performance.

Security*

The AA®720 Tilturn Window has been independently tested to PAS 24:2012.

* Does not refer to standard hardware, security hardware required.

Secured by Design



Independently Weather Performance Tested to BS 6375-1: 2015

	Air Infiltration	Watertightness	Wind Resistance
	BS EN 12207: 2000	BS EN 12208: 2000	BS EN 12210: 2000
AA®720 Tilturn	Class 4 (600 Pa)	Class E1200 (1200 Pa)	Class E2400 (2400 Pa)

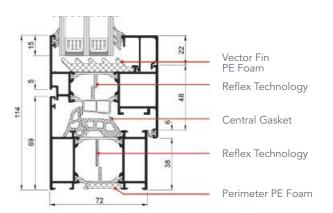
All Windows comply with Operation and Strength Test BS 6375 Pt2: 2015

Details of the Kawneer product tests are available from the Technical Services Department at Runcorn.

Thermal Performance - Inward Opening

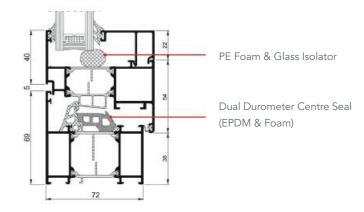
AA®720 HI Reflex Tilturn





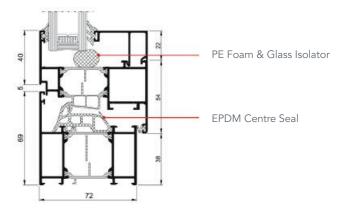
AA®720 HI Tilturn





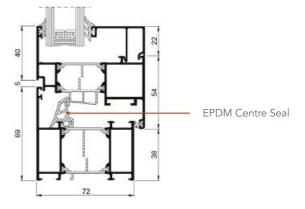
AA®720 HW Tilturn





AA®720 Tilturn





The AA®720 Reflex Technology

Due to the anticipated amendments to Approved Document L, and the continued market demands for high performance windows, Kawneer has developed a unique system it can apply to it's polyamide thermal breaks to give further thermal improvements to the window, and reduce heat transfer through the profile.

The inclusion of a low emmisivity reflective foil to the thermal 'flags' allows the AA®720 Tilturn to achieve U-values as low as 1.0 W/m²K for a CEN size window with a warm edge spacer**

Additional Product Features

In addition to the features described, the AA®720 Tilturn Window offers market leading weight capabilities for a top hung window. With a capability of up to 130kg, high performance acoustic and/or security glass applications can be easily accommodated within the standard window without additional reinforcements or fabrication requirements.

With a choice of locking or non locking handles in a range of finishes, the system can be incorporated effectively in a number of applications.

The AA°720 Tilturn Window has been designed with flexibility and ease of fabrication as key requirements. The system is internally glazed and incorporates a standard hardware groove, to provide cost effective locking hardware without compromising performance or security.

Thermal Performance

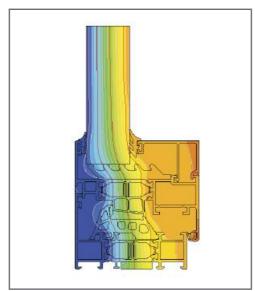
The AA°720 Tilturn can be manufactured within 4 levels of thermal performance – providing flexibility in design, performance and cost.

AA®720 - Most cost effective option - EPDM centre seal.

AA°720 HW – Greater Performance Level, cost conscious – Closed cell vent perimeter foam, EPDM centre seal.

AA°720 HI – Greater Performance Level – Closed cell vent perimeter foam, dual durometer centre seal.

AA°720 HI Reflex – Highest Performance Level – Reflex Technology within the vent and frame profiles, closed cell PE vector fin glazing rebate foam, closed cell frame perimeter foam insulation tape, dual durometer centre seal.



Thermal Evaluation of the AA*720 HI Reflex Tilturn
Window

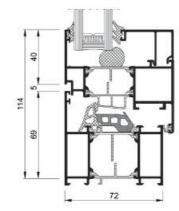
	Tilt	turn	HW T	ilturn	HI Ti	lturn	HI Reflex	x Tilturn
Glass	1.0 Ug*	0.6 Ug**	1.0 Ug*	0.6 Ug**	1.0 Ug*	0.6 Ug**	1.0 Ug*	0.6 Ug**
Overall Uw	1.5 W/m ² K	1.2 W/m²K	1.3 W/m²K	1.0 W/m²K	1.3 W/m ² K	1.0 W/m ² K	1.3 W/m²K	1.0 W/m ² K

Based on a 34mm Outer Frame/43mm Inside Glaze vent Combination

- * Window Energy Ratings and U-values based on CEN size windows (1230mm x 1480mm) using 1.0 W/m²K double glazing with warm edge (0.048 W/m²K) spacer.
- ** U-values based on CEN size windows (1230mm x 1480mm) using 0.6 W/m²K triple glazing with warm edge (0.043 W/m²K) spacer.

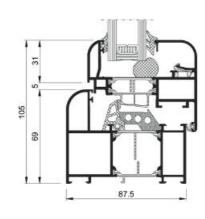
AA®720 Inward Opening Windows

AA®720 HI Standard



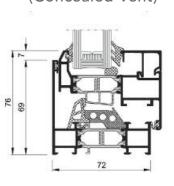
Straight overall contour with flush vent and frame line

AA®720 HI Softline



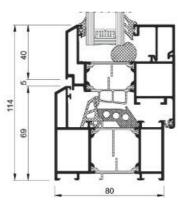
Rounded overall contour

AA®720 HI Integral (Concealed Vent)



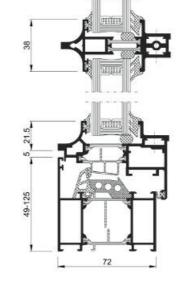
Narrow sightlines with visible aluminium facet on the vent

AA®720 HI Renovation



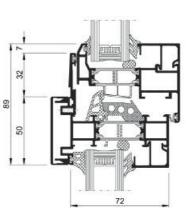
Angular contours for renovation projects

AA®720 HI Renovation "TIP"



For the replacement of steel heritage windows

AA®720 HI Curtain Wall Look-alike



AA®720 Tilturn Window

Introduction

The AA®720 Tilturn Window is part of the AA®720 range of Windows and Doors, designed to offer maximum weather and thermal performance at a competitive price range. Excellent thermal performance (AA®720 HI Reflex) has been met using Reflex technology with foam meeting the most demanding specification performance on any project.

Product Features and Benefits

- BRE Green Guide 'A' Rated Frame* for projects that require sustainable and environmental advantages
- Tilt before turn operation. Tilt for ventilation and turn for cleaning. The full opening in the 'turn' position offers an escape route in an emergency (subject to size)
- Standard bead, Box bead and Softline bead (Softline beads are mitred and secured with retaining clips)
- Excellent thermal performance U_f from 1.0W/m²K (AA®720 HI Reflex)
- Noise protection Rw=39-47dB
- Trickle ventilation option available to help meet the requirements of Document F
- Multi-point locking for added security and added safety in operation
- Accommodates glazing up to 56mm including triple glazing
- Suites with AA®720 series, AA®100/AA®110 Curtain Walling, 451PT Framing and Door Systems

Vent Size Limitations

All dimensions stated are in millimetres. All dimensions stated are vent sizes. Dimensions stated are General System Limitations.

Vent profile and hardware options are chosen depending upon size and glass weight.

- Maximum weight 300kg
- Vent 1600mm x 2100mm
- Leaf 1100mm x 3000mm

Security*

The AA®720 Tilturn Window has been independently tested to PAS 24:2012.

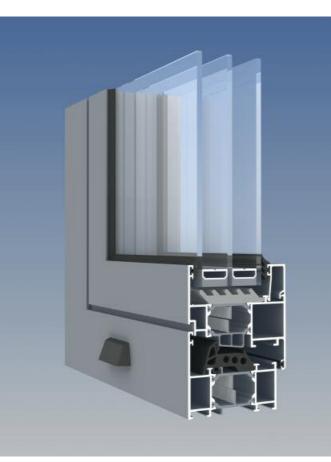
* Does not refer to standard hardware, security hardware required.

Secured by Design



Official Police Security Initiative

* Corresponds to the BRE Global Green Guide online generic specification for windows and achieves a summary rating of A for non-domestic schemes. www.thegreenguide.org.uk Element Number 1231500007



AA®720 HI Reflex Tilturn Window

Tilturn Product Selector

Performance	AA®720 Tilturn*	AA®543 Tilturn
Weather Performance (BS 6375)	•	•
Security to PAS 24:2012		
Uw (Double Glazing)	1.4 W/m²K	1.6 W/m ² K
Uw (Double Glazing with warm edge spacer)**	1.3 W/m²K	1.4 W/m²K
Uw (Triple Glazing)	1.1 W/m²K	1.3 W/m²K
Uw (Triple Glazing with warm edge spacer)***	1.0 W/m²K	1.1 W/m ² K
Special Feature		
BRE Green Guide Rating ^o	A	A+
Design Features		
Dual Colour Option	•	•
Composite Windows	•	•
Ribbon Windows	•	•
Punched Out Openings	•	•
Triple Glazing	•	■+
Infills:	upto 56mm	upto 39mm
Standard Hardware Groove	•	•
Multi-Point Locking	•	•
100mm Restriction	•	•
Trickle Ventilation	•	•
Locking Handles	•	•
Butt Hinges	•	
Multi-function Handle	•	•
Variable Angle Corner Post		•
System Depth		
54mm		•
72mm	•	
Maximum Window Sizes●	upto	upto
Tilturn only●	1600mm(W) & 2100mm(H)	1600mm(W) & 2200mm(H)
Side Hung●	1600mm(W) & 2100mm(H)	1600mm(W) & 2200mm(H)
Bottom Hung●	2000mm(W) & 1200mm(H)	2369mm(W) & 836mm(H)
Applications		
New Build	•	•
Refurbishment	•	•
Heavy Commercial	•	

Notes

- * Based on the AA®720 HI Reflex
- ** Window Energy Ratings and U-values based on CEN size windows (1230mm x 1480mm) using 1.0 W/m²K double glazing with warm edge (0.048 W/m²K) spacer.
- *** U-values based on CEN size windows (1230mm x 1480mm) using 0.6 W/m²K triple glazing with warm edge (0.043 W/m²K) spacer.
- + Optional/Limited
- Height and Width Limitations vary dependant on glass weights and hardware requirements please check with the Technical Services Department
 Corresponds to the RRE Glabel Gross Guide police reports and exhibition for windows and exhibition of A and A L for non-

Ocrresponds to the BRE Global Green Guide online generic specification for windows and achieves a summary rating of A and A+ for non-domestic schemes. www.thegreenguide.org.uk Element Number 1231500011 (A+) Element Number 1231500007 (A)

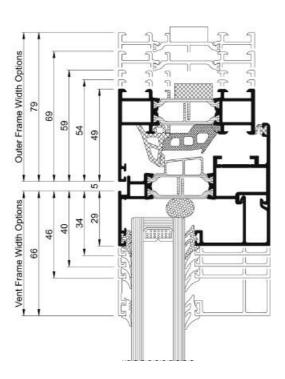
AA®720 Tilturn Window Applications

Typical Elevations

Full details can be downloaded from our website www.kawneer.co.uk

Elevation		Title Websit	e CAD ref. no.
02	1	Tilturn - Head & Jamb Wall Connection	H1-11
	1	Tilturn - Head & Jamb Wall Connection Adaptor	H1-12
, 1	2	Tilturn - Cill detail	H1-13
	3	Tilturn - Vent Muntin	H1-30
1 1	1	Tilturn - Head & Jamb Wall Connection	H1-11
	2	Tilturn - Cill detail	H1-13
[W, T'	4	Fixed Light - Head & Jamb	H1-14
	5	Fixed Light - Cill Detail	H1-15
	6	Tilturn Vent/Fixed Light - Muntin	H1-18
- 1	1	Tilturn - Head & Jamb Wall Connection	H1-11
NA II AZI	1	Tilturn - Head & Jamb Wall Connection Adaptor	H1-12
NH:KI	2	Tilturn - Cill Detail	H1-13
T XIK \1	7	Tilturn Vent/Tilturn Vent - Muntin	H1-18
		The state of the s	
9	1	Tilturn - Head & Jamb Wall Connection	H1-11
	1	Head & Jamb Wall Connection Adaptor	H1-12
	2	Tilturn - Cill Detail	H1-13
	8	Tilturn Vent/Turn Only Vent Rebate Adaptor	H1-20
	9	Tilturn Vent/Turn Only Vent Rebate Adaptor	H1-21
	1	Tilturn - Head & Jamb Wall Connection	H1-11
	2	Tilturn - Head & Jamp Wall Connection Tilturn - Cill Detail	H1-13
X/ ##"	4		
I/ //		Fixed Light - Head & Jamb	H1-14
	5	Fixed Light - Cill Detail	H1-15
	10	Tilturn Vent/Fixed Light - Coupling	H1-27
1 1	1	Tilturn - Head & Jamb Wall Connection	H1-11
	4	Fixed Light - Head & Jamb	H1-14
	6	Tilturn Vent/Fixed Light - Muntin	H1-17
M	11	Tilturn Vent/Bottom Hung Vent - Muntin	H1-23
	12	Tilturn Vent Cill/Fixed Light - Muntin	H1-24
	13	Fixed Light - Horizontal Muntin	H1-25
	13	Fixed Light - Vertical Muntin	H1-26
16	15	Window Curtain Wall, Muntin/Vent	H1-31
15 8.35	16	Window Curtain Wall, Muntin/Integral Vent	
	17	Window Curtain Wall, Cill Detail	H1-32
- N N N N N N N N N N N N N N N N N N N	18	Window Curtain Wall, Head & Jamb Detail	
15.6 35	10	vvindow Curtain vvail, Nead & Jamid Detail	111-33
- 1	1	Tilturn - Head & Jamb Wall Connection	H1-11
	19	Barrier Free Balcony Door, Threshold Detail	
1 M		2000.	

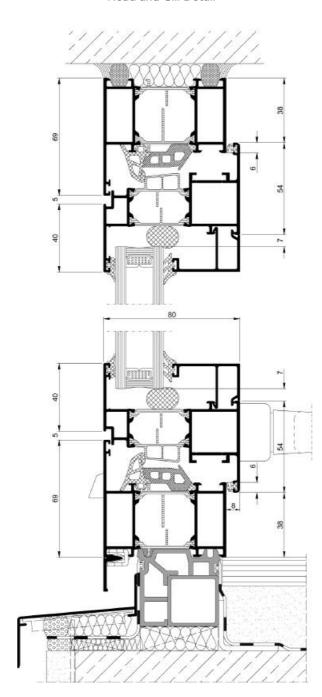
Frame and Vent Size Options



AA®720 Tilturn Window

Full details can be downloaded from our website www.kawneer.co.uk

Head and Cill Detail



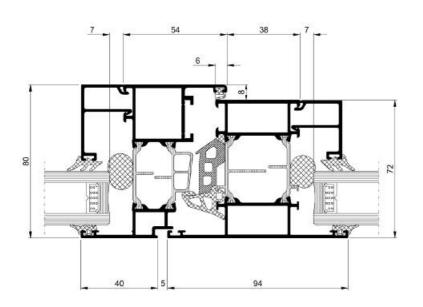


H1-11 and H1-13

AA®720 Tilturn Window

Full details can be downloaded from our website www.kawneer.co.uk

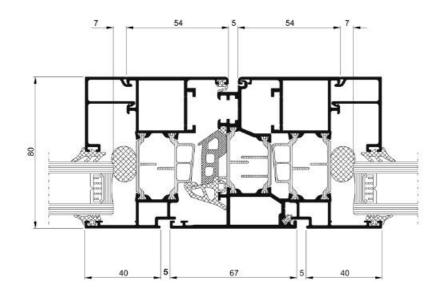
Standard Muntin/Vent Detail





H1-17

Standard, Rebate Adaptor/Vent/Vent Detail



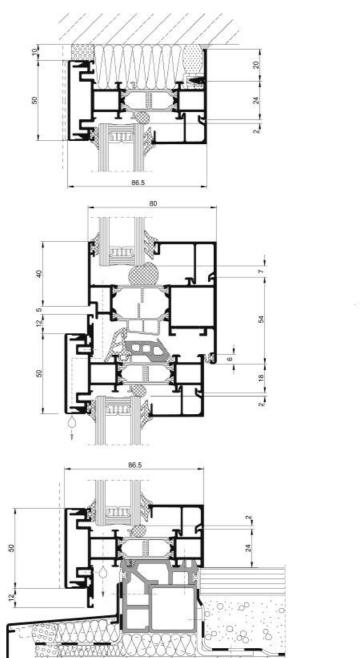


H1-21

AA®720 Tilturn Window

Full details can be downloaded from our website www.kawneer.co.uk

Window Curtain Wall - Head, Muntin & Cill Detail





H1-33 Head



H1-31 Muntin with Vent Above



Cill

GT70 Slimline Renovation Window

Introduction

The GT70 Slimline Renovation Window is an elegant aluminium fenestration solution designed specifically to replicate the appearance of steel windows. Suitable for installation in new build or refurbishment projects, the GT70 window combines the optimum technical performance expected of today's aluminium windows, with the fine sightlines characteristic of original steel windows. These slender sightlines are enhanced further by optional bevelled designed feature caps adding a unique sculptured effect to the external surface of the building.

Product Features and Benefits

- Fine sightline characteristics of steel windows providing a suitable replication for steel windows with additional benefits associated with aluminium, such as the high strength to weight ratio
- Suitable for composite and ribbon windows
- Option for open out or open in to meet your project design requirements and user flexibility
- A range of structural and coupling mullions available
- Special bevelled beads, or feature caps, add a unique sculptured appearance to the building
- Concealed drainage system to enhance the building's aesthetics
- Accommodates glazing up to 54mm for inside glazed or 33mm for outside glazed

Construction

Framing construction incorporates fill and debridge thermal break with resin. All frames have mechanically jointed and adhesive bonded corners. Installation can be by the direct fix method or by twist in fixing lugs.

Configurations

The GT70 Slimline Renovation Window offers the following design configurations:

Outward Opening

- Top Hung
- Side Hung

Inward Opening

- Tilturn
- Tilturn (Side Hung)
- Tilturn (Bottom Hung)

Glazing

Inward opening windows are internally glazed and outward opening windows are externally glazed with a maximum glass thickness of 54mm for inside glazed and 33mm for outside glazed.

Independently Weather Performance Tested to BS 5368: 1993

	Air Infiltration	Watertightness	Wind Resistance
GT70 Slimline Renovation (Open In)	600 Pa	600 Pa	1200 Pa (Windload)* 1750 Pa (Safety)*

^{*} This is dependant upon correct mullion and transom selection to suit span and spacing per project

Details of the Kawneer product tests are available from the Technical Services Department at Runcorn.

Woodhouse Mill, Todmorden

Architect: Ramsden Barrett Architects GT70 Slimline Renovation Windows





Product Selector

Performance	GT70	AA®720 Renovation "TIP"
Weather Performance	■ (BS 5368)	■ (EN 14351)
Security to ENV 1627		
Uw (Double Glazing)	2.1 W/m²K	1.5 W/m ² K
Uw (Double Glazing with warm edge spacer)*	1.9 W/m²K	1.3 W/m ² K
Uw (Triple Glazing)	1.8 W/m²K	1.1 W/m ² K
Uw (Triple Glazing with warm edge spacer)**	1.6 W/m²K	1.0 W/m ² K
Special Features		
BRE Green Guide Rating ^o	A	Α
Design Features		
Dual Colour Option		•
Composite Windows	•	•
Ribbon Windows		
Punched Out Openings		
Triple Glazing	# +	= +
Infills:	upto 54mm	upto 47mm
Standard Hardware Groove	•	•
Multi-Point / Single Sided Locking Options		
100mm Restriction	•	
Trickle Ventilation	•	•
Locking Handles		
Folding Openers	■ (Casement only)	
Cockspur Handle	■ (Casement only)	
Friction Hinges	■ (Casement only)	
Butt Hinges		
System Depth		
70mm	•	
72mm		•
Maximum Window Sizes●	upto	upto
Projected Top Hung●	1600mm(W) & 1500mm(H)	
Projected Side Hung•	840mm(W) & 1600mm(H)	
Top Hung with Butt Hinges●	1600mm(W) & 1600mm(H)	
Side Hung with Butt Hinges●	900mm(W) & 1600mm(H)	
Tilturn●	1600mm(W) & 2000mm(H)	1400mm(W) & 2100mm(H)
Tilturn (Side Hung)●	1400mm(W) & 2000mm(H)	1400mm(W) & 2100mm(H)
Tilturn (Bottom Hung)●	1400mm(W) & 2000mm(H)	2000mm(W) & 1200mm(H)
Applications		
New Build	•	•
Refurbishment	•	

Notes

- * Window Energy Ratings and U-values based on CEN size inward opening (1230mm x 1480mm) using 1.0 W/m²K double glazing with warm edge (0.048 W/m²K) spacer.
- ** U-values based on CEN size inward opening (1230mm x 1480mm) using 0.6 W/m²K triple glazing with warm edge (0.043 W/m²K) spacer.
- + Optional/Limited
- Height and Width Limitations vary dependant on glass weights and hardware requirements please check with the Technical Services Department
 Corresponds to the BRE Global Green Guide online generic specification for windows and achieves a summary rating of A for non-domestic schemes. www.thegreenguide.org.uk Element Number 1231500007

GT70 Slimline Renovation Window Applications

Typical Elevations

Full details can be downloaded from our website www.kawneer.co.uk

Outside Glazed

Elevation		Title	Website CAD ref. no.
3 - 4	1	Vertical section - fixed lights, head detail	6.01
	2	Vertical section - fixed lights, cill detail	6.01
2	3, 4	Horizontal section - fixed lights, jamb detail	6.02
5 5a	5, 5a, 6, 6a	Top hung, side hung head and cill details	6.03
7 8 7a 8 6a	7, 7a, 8, 8a	Horizontal section - top hung and side hung, jamb details	6.04
11 12	10	Horizontal section - top	6.06
	11	Vertical section - top hung	6.07
	12	Horizontal section - fixed light	6.08
13	13	Vertical section - top hung over side hung	6.09
	16, 16a 17	Head detail	6.12
18 16 16A 18 19 17	18 19	Cill detail Jamb detail	6.13
TILTURN SIDE HUN	G		

Inside Glazed

Elevation		Title	Website CAD ref. no.
22	20, 21	Bottom hung head and cill details	6.14
	22	Bottom hung - jamb detail	6.15
23	23, 24	Head and cill detail - fixed	6.16
25 26	25, 26	Jamb detail - fixed	6.17
35/	35	Composite window	6.22
38	38, 39	Capping examples	6.25
	40, 41	Capping examples	6.26
42 39 42	42	Capping example	6.27
	43, 44		6.28
43-44-45/	45, 46		6.29
42 42 42 47 40 48 41	47, 48	Capping examples	6.30
49	49	Into curtain wall top hung	6.31





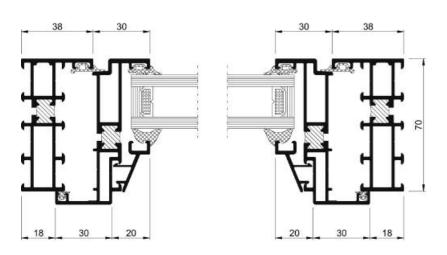


GT70 Slimline Renovation Window

Full details can be downloaded from our website www.kawneer.co.uk

Outside Glazed

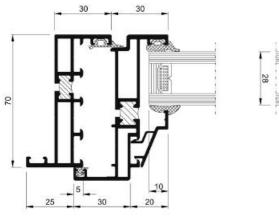
Jamb Detail (Minimum Outer Frame)

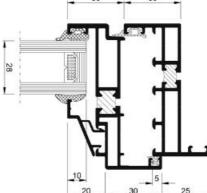




Top Hung

Jamb Detail (Odd Leg Outer Frame)







6.04 Top Hung

GT70 Slimline Renovation Window

Full details can be downloaded from our website www.kawneer.co.uk

Inside Glazed

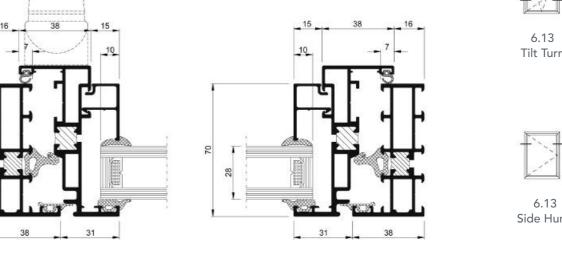
Jamb Detail (Tilt Turn & Side Hung)



Tilt Turn



Side Hung



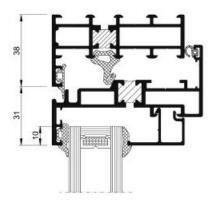


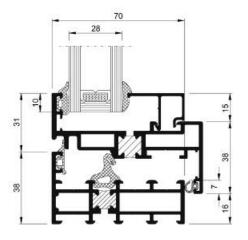
GT70 Slimline Renovation Window

Full details can be downloaded from our website www.kawneer.co.uk

Inside Glazed

Head and Cill Details

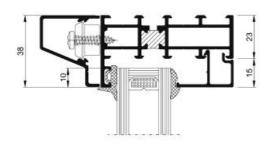


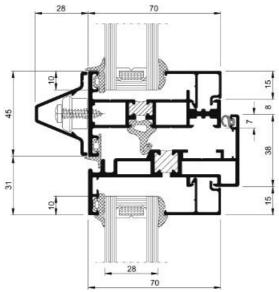




6.14 Bottom Hung

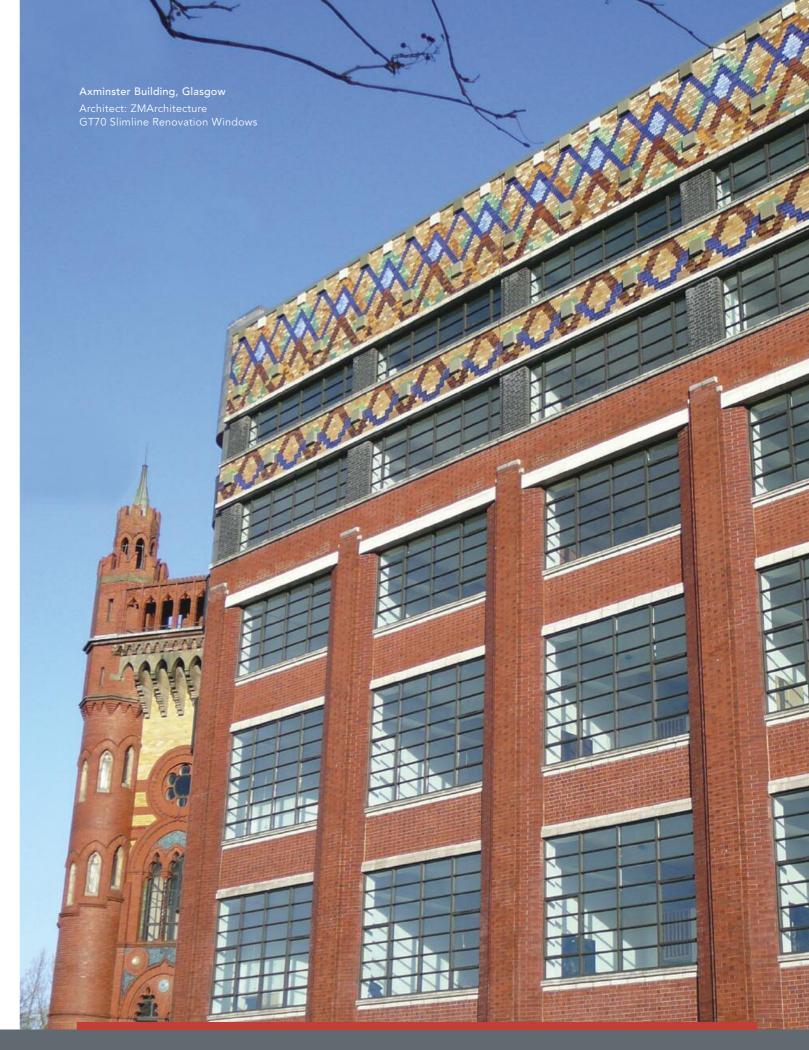
Capping Detail







6.25



Case Study - Kingston, London

Kawneer systems help lift a Royal landmark

Kawneer's AA®3572 lift/slide door was used at Redrow London's stunning £46million Kingston Riverside development in the Royal Borough of Kingston Upon Thames alongside the flagship AA®720 single-action door, its AA®543 tilturn windows and AA®100 curtain walling.

Some 145m² of the mullion-drained curtain walling with 50mm sightlines features on the double-height concierge areas of the 16-storey south block and 11-storey north block of a total of 210 private luxury one to four-bedroomed apartments which were designed by Sprunt architects to be stepped and cantilevered on plan.

Built of concrete frame on the banks of the River Thames on the site of the former coal yard for Kingston power station, façade construction by the Kawneer fabricator was rolled out in four phases over three years.

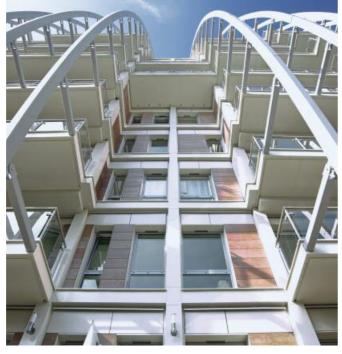
As well as the Kawneer windows, doors and curtain walling, the 6,000m² of façade comprised rainscreen cladding with ceramic tiles and powder-coated aluminium feature projecting beams and pilasters.

The technology behind the AA®3572 lift/slide door provides effortless operation and enables maximum panel sizes of up to 3m x 3m to give large, uninterrupted areas of glazing. It provides an ideal space-saving solution where safety is a priority and projecting swing doors undesirable.







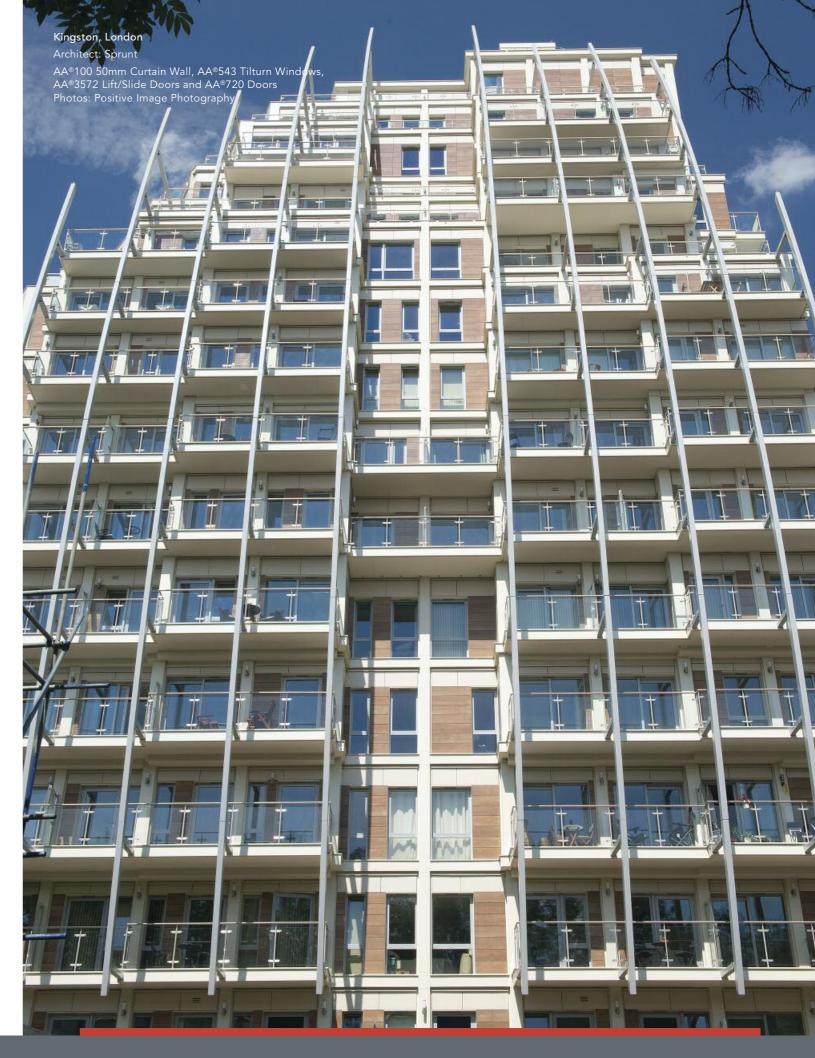


The thermal design of the AA®720 door is set to outperform the anticipated requirements of the 2016 Part L amendments to Building Regulations while the AA®543 tilturn window uses a multi-chamber thermal break core, ensuring thermal efficiency (U values down to 1.4 W/m²K double glazed with warm edge spacer) and full compliance with Document L.

In line with the AA®540 range philosophy of complementing the increasing demand for environmentally-friendly window systems with aesthetic but highly secure building products, the AA®543 is independently tested to PAS 24:2012.

The client wanted a high-quality façade with a variety of window types including secure windows at ground floor.

The glazed elements were a key part of the buildings' appearance, a high percentage taking advantage of the riverside location and views.





Supporting Your Projects



Authorities

ISO 9001:2008 Quality Management System

BS EN 12020

Extruded precision aluminium profiles

BS 3987

Specification for anodic coatings

BS 6496

Specification for powder organic coatings

BS 6375 Part 1

Classification for weathertightness

BS 6375 Part 2

Specification for operation and strength

BS 4873

Specification for aluminium alloy windows

PAS 24:2012

Enhanced security performance requirements for doorsets and windows in the UK

BS 4255 Part 1

Specification for non-cellular gaskets

A full range of guaranteed colours available

Kawneer Permacover™ is a high quality polyester powder paint finish, offering a wide range of solid and metallic colours providing outstanding resistance to environmental conditions. Kawneer Permacover™ has a 15 year gloss and 30 year matt and metallic guarantees subject to application and Kawneer acceptance in marine, industrial, swimming pools or other aggressive atmospheres.

To ensure the highest quality finish, powder coating is carried out in house as part of our single-source responsibility.

Kawneer Permanodic® is a range of subtle anodised colours which have been specifically developed for architectural glazing systems. Kawneer Permanodic® is a tried and tested anodising process, proven in accelerated laboratory tests, extensive field trials and contract experience. Subject to compliance with Kawneer's requirements, a 25 year finishes guarantee can be obtained.

Project Assistance

Kawneer's regionally based team of Architectural Advisers and the Architectural Services Team based at our Head Office in Runcorn are able to provide project advice and support:

Tel: 01928 502604 / Fax: 01928 502512 Email: kawneerAST@alcoa.com

Information on Kawneer's extensive range of Curtain Wall, Window, Framing, Door, Fire Resistant and Sliding Solutions can also be obtained from our Head Office by calling:

Tel: 01928 502612

Kawneer UK Ltd is part of Alcoa Building and Construction Systems, and enjoys the extensive resources of the entire Alcoa organisation, allied to the specific glazing systems experience of Kawneer's many operations around the world. As a result of this our partners and customers have direct access to one of the largest pools of technical expertise in the construction industry.

