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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

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Window Product Selector

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<th>Applications</th>
<th>AA®/AA® 720</th>
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<td>Special Applications</td>
<td>Heritage</td>
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<td>Smoke ventilation</td>
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<td>✓</td>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
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</tr>
</tbody>
</table>

Performance

| Security to PAS 24:2012 | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Document F compliant† | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Document L compliant† | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

Accessories

| Locking handle        | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Espagnolette locking  | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Multi-point locking   | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Restricted Pivots     | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Folding opener        | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Releasable and fixed restrictors available | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

Window Types

| Casement Top Hung     | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Casement Side Hung    | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Parallel Opening      | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Pivot Vertical / Offset | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Pivot Horizontal      | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Tilturn               | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Tilturn (Side Hung)   | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| Tilturn (Bottom Hung) | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |

Notes:
* When fitted with trickle vent
† Dependent on window size and configuration
Subject to Kawneer approval
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](http://www.thegreenguide.org.uk) Element Number: 1231900011 (AA) 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 polycarbonate 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 suit 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.

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.

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.

 Independently Weather Performance Tested to BS 6375-1: 2015

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>AA®541 Casement</td>
<td>Class 4 (600 Pa)</td>
<td>Class 9A (600 Pa)</td>
<td>Class E2400 (2400 Pa)</td>
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<tr>
<td>AA®542 Pivot</td>
<td>Class 4 (600 Pa)</td>
<td>Class 9A (600 Pa)</td>
<td>Class E2400 (2400 Pa)</td>
</tr>
<tr>
<td>AA®543 Tilturn</td>
<td>Class 4 (600 Pa)</td>
<td>Class 9A (600 Pa)</td>
<td>Class E2400 (2400 Pa)</td>
</tr>
</tbody>
</table>

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 multi-chamber 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 increased project design flexibility and solutions
- 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 Tiltturn, 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. www.thegreenguide.org.uk

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

* Does not refer to standard hardware, security hardware required

Casement Product Selector

<table>
<thead>
<tr>
<th>Performance</th>
<th>AA®720 Casement*</th>
<th>AA®541 Casement</th>
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<td>Weather Performance (BS 6375)</td>
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<tr>
<td>Security to PAS 24:2012</td>
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<tr>
<td>Uw (Double Glazing)</td>
<td>1.5 W/m²K</td>
<td>1.8 W/m²K</td>
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<tr>
<td>Uw (Double Glazing with warm edge spacer)**</td>
<td>1.3 W/m²K</td>
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<td>Uw (Triple Glazing)</td>
<td>1.2 W/m²K</td>
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<tr>
<td>Uw (Triple Glazing with warm edge spacer)***</td>
<td>1.0 W/m²K</td>
<td>1.3 W/m²K</td>
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</tbody>
</table>

Special Features

- BRE Green Guide Rating*
  - 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*

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<tr>
<th>Projected Top Hung*</th>
<th>2300mm(W) x 2500mm(H)</th>
<th>1800mm(W) x 1800mm(H)</th>
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<td>Projected Side Hung*</td>
<td>845mm(W) x 1900mm(H)</td>
<td>845mm(W) x 1800mm(H)</td>
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<tr>
<td>Top Hung with Butt Hinges*</td>
<td>1800mm(W) x 1600mm(H)</td>
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<td>Side Hung with Butt Hinges*</td>
<td>900mm(W) x 1900mm(H)</td>
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Applications

- New Build
- Refurbishment

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 spacer.
- U-values based on CEN size windows (1230mm x 1480mm) using 0.6 W/m²K triple glazing with warm edge spacer.
- Optional/Limited
- Height and Width Limitations vary dependent 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

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Kawneer’s Collected Works
### AA®541 Casement Window Applications

**Typical Elevations**

Full details can be downloaded from our website [www.kawneer.co.uk](http://www.kawneer.co.uk).

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<tr>
<td>5, 6</td>
<td>Fixed (outside glass)</td>
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<td>7, 8</td>
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<td>9</td>
<td>Windows into curtainwall</td>
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<td>Fixed right panel for corner coupling</td>
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<td>12</td>
<td>Glazed muntin and coupling alternatives</td>
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<td>13</td>
<td>Cill detail options</td>
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<td>14</td>
<td>Horizontal coupling detail</td>
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<td>Fixed (inside glaze)</td>
<td>H04.01</td>
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<tr>
<td>40</td>
<td>Fixed (inside glaze)</td>
<td>H03.01</td>
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**Frame and Vent Size Options**

Full details can be downloaded from our website [www.kawneer.co.uk](http://www.kawneer.co.uk).

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**Top Hung Head & Cill Details**

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

**Side Hung Details**

- 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](http://www.kawneer.co.uk)

Reverse Glazing Detail

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

Vertical detail 32 – Reverse glass adaptor. Fixed lights below top hung for “inside glass”

Window Systems

www.kawneer.co.uk
**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 multi-chamber 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 suit the extrusion profile thus enhancing aesthetic and performance characteristics
- Accommodates glazing up to 39mm
- Suits with AA®541 Casement, AA®543 Tiltturn, 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

**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.

**Vertical Pivot - Offset**

- Maximum weight 110kg
- Minimum dimensions pivot centre 300 wide (open in portion) x 500 high - cockspur/storm catch. Minimum dimensions pivot centre 400 wide (open in portion) x 500 high - multi point locking. Maximum dimensions pivot centre 900 wide (open out portion) x 1800 high. Vents with a height or width dimension greater than 1600 must be fitted with multi point locking.

* 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

**Design Features**

- Dual Colour Option
- Composite Windows
- Ribbon Windows
- Punched Out Openings
- Triple Glazing

**Infill**

- Upto 56mm
- Upto 39mm

**Multi-Point / Single Sided Locking Options**

- Storm Catches
- Up to 100mm Restriction
- Trickle Ventilation
- Locking Handles
- Cockspur Handle
- Espagnollette Handle
- 10° Restriction
- 15° Restriction

**System Depth**

- 54mm
- 72mm

**Maximum Window Sizes**

- Height*: 1900mm
- Width*: 1800mm

*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

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

**Pivot Product Selector**

**Performance**

<table>
<thead>
<tr>
<th></th>
<th>AA®720 Pivot</th>
<th>AA®542 Pivot</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weather Performance (BS 6375)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uw (Double Glazing)</td>
<td>1.6 W/m²K</td>
<td>1.7 W/m²K</td>
</tr>
<tr>
<td>Uw (Double Glazing with warm edge spacer)</td>
<td>1.5 W/m²K</td>
<td>1.6 W/m²K</td>
</tr>
<tr>
<td>Uw (Triple Glazing)</td>
<td>1.3 W/m²K</td>
<td>1.4 W/m²K</td>
</tr>
<tr>
<td>Uw (Triple Glazing with warm edge spacer)</td>
<td>1.2 W/m²K</td>
<td>1.3 W/m²K</td>
</tr>
</tbody>
</table>

**Special Feature**

- BRE Green Guide Rating*: A A+

**Infill**

- Upto 56mm
- Upto 39mm

**Multi-Point / Single Sided Locking Options**

- Storm Catches
- Up to 100mm Restriction
- Trickle Ventilation
- Locking Handles
- Cockspur Handle
- Espagnollette Handle
- 10° Restriction
- 15° Restriction

**System Depth**

- 54mm
- 72mm

**Maximum Window Sizes**

- Height*: 1900mm
- Width*: 1800mm

* 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

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

Typical Elevations - 2 Bar System

<table>
<thead>
<tr>
<th>Elevation</th>
<th>Title</th>
<th>Website CAD ref.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Horizontal pivot head detail</td>
<td>H12.01</td>
</tr>
<tr>
<td>1</td>
<td>Vertical pivot head detail</td>
<td>H16.01</td>
</tr>
<tr>
<td>1</td>
<td>Vertical pivot offset head</td>
<td>H17.01</td>
</tr>
<tr>
<td>1</td>
<td>Vertical pivot offset jamb</td>
<td>H18.01</td>
</tr>
<tr>
<td>1</td>
<td>Horizontal pivot head detail</td>
<td>H21.01</td>
</tr>
<tr>
<td>1</td>
<td>Vertical pivot head detail</td>
<td>H25.01</td>
</tr>
<tr>
<td>1</td>
<td>Vertical pivot offset head</td>
<td>H26.01</td>
</tr>
<tr>
<td>1</td>
<td>Vertical pivot offset jamb</td>
<td>H27.01</td>
</tr>
</tbody>
</table>

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

Typical Elevations - 3 Bar System

<table>
<thead>
<tr>
<th>Elevation</th>
<th>Title</th>
<th>Website CAD ref.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Horizontal pivot head detail</td>
<td>H31.01</td>
</tr>
<tr>
<td>1</td>
<td>Vertical pivot head detail</td>
<td>H35.01</td>
</tr>
<tr>
<td>1</td>
<td>Vertical pivot offset head</td>
<td>H36.01</td>
</tr>
<tr>
<td>1</td>
<td>Vertical pivot offset jamb</td>
<td>H37.01</td>
</tr>
<tr>
<td>1</td>
<td>Horizontal pivot head detail</td>
<td>H41.01</td>
</tr>
<tr>
<td>1</td>
<td>Vertical pivot head detail</td>
<td>H45.01</td>
</tr>
<tr>
<td>1</td>
<td>Vertical pivot offset head</td>
<td>H46.01</td>
</tr>
<tr>
<td>1</td>
<td>Vertical pivot offset jamb</td>
<td>H47.01</td>
</tr>
</tbody>
</table>

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

Frame and Vent Size Options

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

Cill Detail
Multi-point locking

Jamb Detail
Multi-point locking

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

Notes:
1. Top number refers to 2 Bar System
2. Bottom number refers to window detail
**South Bristol Skills Academy**

AA®100 50mm Curtain Wall and Roof Glazing, Casement and Pivot Windows

Photo: timpestridge.co.uk

**Victoria Hospital, Fife**

Architect: BDP

AA®100 50mm Curtain Wall, Casement and Pivot Windows, 190 Heavy Duty Commercial Entrance Doors and Low/Medium Duty Swing Doors

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

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

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

---

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

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

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Cill Detail

H22.01

Jamb Detail

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 multi-chamber 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 ‘tum’ 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
- Suits with AA®541 Casement, AA®542 Pivot, AA®545 Swing Door, AA®100/AA®110 Curtain Walling, 451PT Framing System and Door Systems

**Security**
The AA®543 Tilturn Window has been independently tested to PAS 24:2012*

*Does not refer to standard hardware, security hardware required

---

**Tilturn Product Selector**

<table>
<thead>
<tr>
<th>Performance</th>
<th>AA®720 Tilturn*</th>
<th>AA®543 Tilturn</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weather Performance (BS 6375)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Security to PAS 24:2012</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uw (Double Glazing)</td>
<td>1.4 W/m²K</td>
<td>1.6 W/m²K</td>
</tr>
<tr>
<td>Uw (Double Glazing with warm edge spacer)**</td>
<td>1.3 W/m²K</td>
<td>1.4 W/m²K</td>
</tr>
<tr>
<td>Uw (Triple Glazing)</td>
<td>1.1 W/m²K</td>
<td>1.3 W/m²K</td>
</tr>
<tr>
<td>Uw (Triple Glazing with warm edge spacer)***</td>
<td>1.0 W/m²K</td>
<td>1.1 W/m²K</td>
</tr>
</tbody>
</table>

**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.
- + 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 (A) Element Number 1231500007 (A+).
### AA®543 Tiltturn Window Applications

#### Typical Elevations

<table>
<thead>
<tr>
<th>Elevation</th>
<th>Title</th>
<th>Website</th>
</tr>
</thead>
<tbody>
<tr>
<td>1, 2</td>
<td>Turn only head and cill</td>
<td>H02.01</td>
</tr>
<tr>
<td>3, 4</td>
<td>Jamb detail</td>
<td>H03.01</td>
</tr>
<tr>
<td>5, 6</td>
<td>Tiltturn head and cill detail</td>
<td>H04.01</td>
</tr>
<tr>
<td>7</td>
<td>Vent muntin option</td>
<td>H05.01</td>
</tr>
<tr>
<td>8</td>
<td>Vertical muntin/vent detail</td>
<td>H06.01</td>
</tr>
<tr>
<td>9</td>
<td>Jamb detail</td>
<td>H07.01</td>
</tr>
<tr>
<td>10</td>
<td>Vent/vent coupling muntin detail</td>
<td>H08.01</td>
</tr>
<tr>
<td>11</td>
<td>Horizontal muntin/vent head detail</td>
<td>H09.01</td>
</tr>
<tr>
<td>12</td>
<td>Horizontal muntin/vent cill detail</td>
<td>H10.01</td>
</tr>
<tr>
<td>13</td>
<td>Vent/vent (handle) detail</td>
<td>H11.01</td>
</tr>
<tr>
<td>14</td>
<td>Vent/vent (hinge) detail</td>
<td>H12.01</td>
</tr>
</tbody>
</table>

#### Frame and Vent Size Options

- **Head & Cill Details**
- **H02.01** Turn only vent

[Image of AA®543 Tiltturn Window Applications]

---

**Window Systems**

[www.kawneer.co.uk](http://www.kawneer.co.uk)

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AA®543 Tilt Turn 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

Neptune Marina, Ipswich
Architect: BUJ Architects
Curtain Wall and Tilt Turn Windows

www.kawneer.co.uk
**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™.

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.

**Independently Weather Performance Tested to BS 6375-1: 2015**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>AA®720 Casement</td>
<td>Class 3-4 (600 Pa)</td>
<td>Class 9A (600 Pa)</td>
<td>Class E2400 (2400 Pa)</td>
</tr>
<tr>
<td>AA®720 Pivot</td>
<td>Class 3-4 (600 Pa)</td>
<td>Class 9A (600 Pa)</td>
<td>Class E2400 (2400 Pa)</td>
</tr>
</tbody>
</table>

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.
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 its polyamide thermal breaks to give further thermal improvements to the window, and reduce heat transfer through the profile.

The inclusion of a low emmissivity 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 vector fin glazing rebate foam, closed cell frame perimeter foam insulation tape.

AA® 720 HI – Greater Performance Level, cost conscious – 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 – 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™ – 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™ Casement Window |

<table>
<thead>
<tr>
<th>Glass</th>
<th>1.0 Ug*</th>
<th>0.6 Ug**</th>
<th>1.0 Ug*</th>
<th>0.6 Ug**</th>
<th>1.0 Ug*</th>
<th>0.6 Ug**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Uw</td>
<td>1.5 W/m²K</td>
<td>1.2 W/m²K</td>
<td>1.4 W/m²K</td>
<td>1.1 W/m²K</td>
<td>1.4 W/m²K</td>
<td>1.1 W/m²K</td>
</tr>
<tr>
<td>**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Based on a 34mm Outer Frame/34mm Inside Glaze vent Combination</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
* 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, suited most casement project applications
- Suites with the AA®720 Tiltturn, 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

Casement Product Selector

<table>
<thead>
<tr>
<th>Performance</th>
<th>AA®720 Casement</th>
<th>AA®541 Casement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weather Performance (BS 6375)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Security to PAS 24:2012</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uw (Double Glazing)</td>
<td>1.5 W/m²K</td>
<td>1.8 W/m²K</td>
</tr>
<tr>
<td>Uw (Double Glazing with warm edge spacer)**</td>
<td>1.3 W/m²K</td>
<td>1.6 W/m²K</td>
</tr>
<tr>
<td>Uw (Triple Glazing)</td>
<td>1.2 W/m²K</td>
<td>1.5 W/m²K</td>
</tr>
<tr>
<td>Uw (Triple Glazing with warm edge spacer)***</td>
<td>1.0 W/m²K</td>
<td>1.3 W/m²K</td>
</tr>
</tbody>
</table>

Special Features

- BRE Green Guide Rating*
- Design Features
  - Dual Colour Option
  - Composite Windows
  - Ribbon Windows
  - Punched Out Openings
  - Triple Glazing
- Infills: up to 56mm

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*

<table>
<thead>
<tr>
<th></th>
<th>up to</th>
<th>up to</th>
</tr>
</thead>
<tbody>
<tr>
<td>Projected Top Hung</td>
<td>2300mm(W) x 2500mm(H)</td>
<td>1800mm(W) x 1800mm(H)</td>
</tr>
<tr>
<td>Projected Side Hung</td>
<td>845mm(W) x 1900mm(H)</td>
<td>845mm(W) x 1800mm(H)</td>
</tr>
<tr>
<td>Top Hung with Butt Hinges*</td>
<td>1800mm(W) x 1600mm(H)</td>
<td>1800mm(W) x 1600mm(H)</td>
</tr>
<tr>
<td>Side Hung with Butt Hinges*</td>
<td>900mm(W) x 1900mm(H)</td>
<td>900mm(W) x 1800mm(H)</td>
</tr>
</tbody>
</table>

Applications

- New Build
- Refurbishment

Notes:

* Based on the AA®720 Hi Reflex™;
** Window Energy Ratings and U-values based on CEN size windows (723mm x 1480mm) using 1.0 W/m²K double glazing with warm edge (0.048 W/m²K) spacer.
*** U-values based on CEN size windows (723mm x 1480mm) using 0.6 W/m²K triple glazing with warm edge (0.043 W/m²K) spacer.
+ Optional/Limited
+ Height and Width Limitations vary dependent 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 HI Reflex™ Casement Window

www.kawneer.co.uk

Image 305x559 to 409x626

Kawneer’s Collected Works

Element Number 1231500007 (A+)
Element Number 1231500007 (A)
## AA®720 Casement Window Applications

### Typical Elevations

Full details can be downloaded from our website [www.kawneer.co.uk](http://www.kawneer.co.uk).

<table>
<thead>
<tr>
<th>Elevation</th>
<th>Title</th>
<th>Website CAD ref. no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1, 2</td>
<td>Fixed Light Head and Cill (inside glazed)</td>
<td>H4-3, H4-5, H4-7 &amp; H4-9</td>
</tr>
<tr>
<td>3, 4</td>
<td>Fixed Light Jamb (inside glazed)</td>
<td>H4-4, H4-6, H4-8 &amp; H4-10</td>
</tr>
<tr>
<td>5, 6</td>
<td>Fixed Light Head and Cill (outside glazed)</td>
<td>H4-5, H4-7, H4-9 &amp; H4-11</td>
</tr>
<tr>
<td>7, 8</td>
<td>Fixed Light Jamb (outside glazed)</td>
<td>H4-6, H4-8, H4-10 &amp; H4-12</td>
</tr>
<tr>
<td>9</td>
<td>Casement/Fixed Light Muntin</td>
<td>H4-9, H4-11, H4-13 &amp; H4-15</td>
</tr>
<tr>
<td>10</td>
<td>Casement Laminar Wall Insert - Head</td>
<td>H4-7 &amp; H4-9, H4-11 &amp; H4-13</td>
</tr>
<tr>
<td>11</td>
<td>90° Corner (Casement/Fixed Light)</td>
<td>H4-10, H4-12, H4-14 &amp; H4-16</td>
</tr>
<tr>
<td>12</td>
<td>135° Corner (Casement/Fixed Light)</td>
<td>H4-11, H4-13, H4-15 &amp; H4-17</td>
</tr>
<tr>
<td>13</td>
<td>Coupling Mullion</td>
<td>H4-12, H4-14, H4-16 &amp; H4-18</td>
</tr>
<tr>
<td>14, 15</td>
<td>Casement Jamb Muntin (inside glazed vent)</td>
<td>H4-13, H4-15, H4-17 &amp; H4-19</td>
</tr>
<tr>
<td>16, 17</td>
<td>Casement Head and Cill Detail (outside glazed vent)</td>
<td>H4-13, H4-15, H4-17 &amp; H4-19</td>
</tr>
<tr>
<td>18, 19</td>
<td>Casement Jamb Detail (outside glazed vent)</td>
<td>H4-14, H4-16, H4-18 &amp; H4-20</td>
</tr>
<tr>
<td>20, 21</td>
<td>Casement Head and Cill Detail (outside glazed vent)</td>
<td>H4-14, H4-16, H4-18 &amp; H4-20</td>
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</table>

### Frame and Vent Size Options

<table>
<thead>
<tr>
<th>Elevation</th>
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<tbody>
<tr>
<td>22, 3, 4</td>
<td>Casement/Fixed Light Muntin (outside glazed vent)</td>
<td>H4-15, H4-17, H4-19 &amp; H4-21</td>
</tr>
<tr>
<td>23</td>
<td>Casement/Casement Muntin (inside glazed vent)</td>
<td>H4-16, H4-18, H4-20 &amp; H4-22</td>
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<tr>
<td>24</td>
<td>Horizontal Coupling</td>
<td>H4-17, H4-19, H4-21 &amp; H4-23</td>
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<tr>
<td>25</td>
<td>Casement/Fixed Light (reverse glazing adaptor)</td>
<td>H4-17, H4-19, H4-21 &amp; H4-23</td>
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<tr>
<td>26, 27</td>
<td>Fixed Light Head &amp; Jamb (reverse glazing adaptor)</td>
<td>H4-18, H4-20, H4-22 &amp; H4-24</td>
</tr>
<tr>
<td>28</td>
<td>Casement (outside glazed)/Fixed light</td>
<td>H4-20, H4-22, H4-24 &amp; H4-26</td>
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<tr>
<td>29</td>
<td>Through Frame trickle Ventilation</td>
<td>H4-21, H4-23, H4-25 &amp; H4-27</td>
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<tr>
<td>30</td>
<td>Casement Cill Detail</td>
<td>H4-23, H4-25, H4-27 &amp; H4-29</td>
</tr>
<tr>
<td>31</td>
<td>Casement Cill Detail (alternative)</td>
<td>H4-24, H4-26, H4-28 &amp; H4-30</td>
</tr>
</tbody>
</table>

[www.kawneer.co.uk](http://www.kawneer.co.uk)
AA®720 Casement Window
Full details can be downloaded from our website www.kawneer.co.uk

Head & Cill Detail

Vent/Fixed Light Muntin Detail
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 Up from 1.8 W/m²K
- Range of standard and coloured anodised finishes
- Trickie 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

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.

Pivot Product Selector

<table>
<thead>
<tr>
<th>Performance</th>
<th>AA®720 Pivot</th>
<th>AA®542 Pivot</th>
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</thead>
<tbody>
<tr>
<td>Weather Performance (BS 6375)</td>
<td></td>
<td></td>
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<tr>
<td>Uw (Double Glazing)</td>
<td>1.6 W/m²K</td>
<td>1.7 W/m²K</td>
</tr>
<tr>
<td>Uw (Double Glazing with warm edge spacer)*</td>
<td>1.5 W/m²K</td>
<td>1.6 W/m²K</td>
</tr>
<tr>
<td>Uw (Triple Glazing)</td>
<td>1.3 W/m²K</td>
<td>1.4 W/m²K</td>
</tr>
<tr>
<td>Uw (Triple Glazing with warm edge spacer)**</td>
<td>1.2 W/m²K</td>
<td>1.3 W/m²K</td>
</tr>
</tbody>
</table>

Special Feature
- BRE Green Guide Rating* A 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
- Trickie Ventilation
- Locking Handles
- Cockspur Handle
- Espagnolette Handle
- 15° Restriction
- 15° Restriction
- System Depth
  - 54mm
  - 72mm
- Maximum Window Sizes*
  - Height*
    - 1900mm
  - 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 dependent 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.

Element Number 1231500007

AA®720 Horizontal Pivot Window
AA®720 Pivot Window Applications

Typical Elevations

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

Frame and Vent Size Options

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

Elevation | Title | Website CAD ref. no.
--- | --- | ---
1 | Horizontal Pivot Head | H5-11, H5-12
2 | Horizontal Pivot Cill | H5-13
3 | Horizontal Pivot - Jamb (below Pivot) | H5-14
4 | Horizontal Pivot - Jamb (above Pivot) | H5-15
5 | Vertical Pivot - Head | H5-16
6 | Vertical Pivot - Cill | H5-17
7 | Vertical Pivot - Jamb (handle side) | H5-18
8 | Vertical Pivot - Jamb (open-in side) | H5-19
9 | Horizontal Pivot/Horizontal Pivot Mullin | H5-20
10 | Pivot Window - Vent Mullin | H5-21
11 | Pivot Insert into Curtain Wall | H5-22
12 | Horizontal Pivot - Transom Head Detail | H5-23
13 | Vertical Pivot - Transom Cill Detail | H5-24
14 | Offset Vertical Pivot - Head | H5-16
15 | Offset Vertical Pivot - Cill | H5-17
16 | Offset Vertical Pivot - Jamb (handle side) | H5-18
17 | Offset Vertical Pivot - Jamb (open-in side) | H5-19
AA®720 Horizontal Pivot Window

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

Pivot into Curtain Wall

Transom Cill Detail

H5-21

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 U-values 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
- Parallel operation of window - maintains the same reflective aesthetic as the facade
- Maximum vent size of 1500mm wide x 2400mm high for 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

* A case study carried out by Arup based on a typical classroom reported free air flow of 560 litres/sec for parallel opening windows compared to 290 litres/sec for top hung windows of an equivalent size.

Similarly, air changes within the classroom were reported as 10.9 per hour for the parallel window design compared to 5.7 for the equivalent sized top hung windows.


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.

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

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

AA®720 Parallel Opening Window Applications

Typical Elevations

<table>
<thead>
<tr>
<th>Elevation</th>
<th>Title</th>
<th>Website CAD ref. no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1, 2</td>
<td>Jamb Sections</td>
<td>H-001</td>
</tr>
<tr>
<td>3, 4</td>
<td>Head and Cill Sections</td>
<td>H-002</td>
</tr>
<tr>
<td>5</td>
<td>Cill - POW Insert into Curtain Wall</td>
<td>H-003</td>
</tr>
<tr>
<td>6</td>
<td>Jamb - POW Insert into Curtain Wall</td>
<td>H-004</td>
</tr>
<tr>
<td>7</td>
<td>Run-Up Blocks</td>
<td>H-005</td>
</tr>
</tbody>
</table>

Frame and Vent Size Options

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

The AA®720 Parallel Opening Window

Secured by Design

Official Police Security Initiative

www.kawneer.co.uk
AA®720 Parallel Opening Window

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

Head and Cill Detail

Parallel Opener into Curtain Wall

Parallel Opener into Curtain Wall

2-38

2-39
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 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 fire-rated door and fixed screen solutions.

Design variants to the AA®720 inward opening window range are:
- 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
- Curtain Wall Look-alike variant that offers the appearance of curtain wall

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 Tiltturn Window has been independently tested to PAS 24:2012.

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

Independently Weather Performance Tested to BS 6375-1: 2015

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>AA®720 Tiltturn</td>
<td>Class 4 (600 Pa)</td>
<td>Class E1200 (1200 Pa)</td>
<td>Class E2400 (2400 Pa)</td>
</tr>
</tbody>
</table>

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.
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 emissivity 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 diurometer 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 diurometer centre seal.**

**Thermal Evaluation of the AA®720 HI Reflex Tilturn Window**

<table>
<thead>
<tr>
<th>Glass</th>
<th>1.0 Ug*</th>
<th>0.6 Ug**</th>
<th>1.0 Ug*</th>
<th>0.6 Ug**</th>
<th>1.0 Ug*</th>
<th>0.6 Ug**</th>
<th>1.0 Ug*</th>
<th>0.6 Ug**</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>1.5 W/m²K</td>
<td>1.2 W/m²K</td>
<td>1.3 W/m²K</td>
<td>1.0 W/m²K</td>
<td>1.3 W/m²K</td>
<td>1.0 W/m²K</td>
<td>1.3 W/m²K</td>
<td>1.0 W/m²K</td>
</tr>
</tbody>
</table>

* 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**

For the replacement of steel heritage windows
## 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 Uf 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

### BRE Green Guide Rating
- A
- A+

### Design Features
- Dual Colour Option
- Composite Windows
- Ribbon Windows
- Punched Out Openings
- Tip Glazing
- Infill: Uw (Triple Glazing) 1.4 W/m²K
- 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
- **Tiltturn only**
  - AA®720 Tilturn*: 1600mm(W) & 2100mm(H)
  - AA®543 Tilturn*: 1600mm(W) & 2200mm(H)
- **Side Hung**
  - AA®720 Tilturn*: 1600mm(W) & 2100mm(H)
  - AA®543 Tilturn*: 1600mm(W) & 2200mm(H)
- **Bottom Hung**
  - AA®720 Tilturn*: 2000mm(W) & 1200mm(H)
  - AA®543 Tilturn*: 2369mm(W) & 836mm(H)

### Applications
- New Build
- Refurbishment
- Heavy Commercial

### Notes:
- * 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
- ** Weather Energy Ratings and U-values based on CEN size windows (1230mm x 1480mm) using 1.0 W/m²K double glazing with warm edge spacer (0.048 W/m²K) or triple glazing with warm edge (0.043 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 dependent 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 or A+ for non-domestic schemes. www.thegreenguide.org.uk Element Number 1231500011 (A) Element Number 1231500007 (A+)

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### Tilturn Product Selector

<table>
<thead>
<tr>
<th>Performance</th>
<th>AA®720 Tilturn*</th>
<th>AA®543 Tilturn</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weather Performance (BS 6375)</td>
<td></td>
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<tr>
<td>Security to PAS 24:2012</td>
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</tr>
<tr>
<td>Uw (Double Glazing)</td>
<td>1.4 W/m²K</td>
<td>1.6 W/m²K</td>
</tr>
<tr>
<td>Uw (Double Glazing with warm edge spacer)**</td>
<td>1.3 W/m²K</td>
<td>1.4 W/m²K</td>
</tr>
<tr>
<td>Uw (Triple Glazing)</td>
<td>1.1 W/m²K</td>
<td>1.3 W/m²K</td>
</tr>
<tr>
<td>Uw (Triple Glazing with warm edge spacer)***</td>
<td>1.0 W/m²K</td>
<td>1.1 W/m²K</td>
</tr>
</tbody>
</table>

### Special Feature
- BRE Green Guide Rating
  - A
  - A+

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![AA®720 Hi Reflex Tilturn Window](image-url)
### Typical Elevations

Full details can be downloaded from our website [www.kawneer.co.uk](http://www.kawneer.co.uk)

<table>
<thead>
<tr>
<th>Elevation</th>
<th>Title</th>
<th>Website CAD ref. no.</th>
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<tbody>
<tr>
<td>1</td>
<td>Tilturn - Head &amp; Jamb Wall Connection</td>
<td>H1-11</td>
</tr>
<tr>
<td>2</td>
<td>Tilturn - Head &amp; Jamb Wall Connection Adaptor</td>
<td>H1-12</td>
</tr>
<tr>
<td>3</td>
<td>Tilturn - Vent Muntin</td>
<td>H1-13</td>
</tr>
<tr>
<td>4</td>
<td>Fixed Light - Head &amp; Jamb</td>
<td>H1-14</td>
</tr>
<tr>
<td>5</td>
<td>Fixed Light - Cill Detail</td>
<td>H1-15</td>
</tr>
<tr>
<td>6</td>
<td>Tilturn Vent/Fixed Light - Muntin</td>
<td>H1-18</td>
</tr>
<tr>
<td>7</td>
<td>Tilturn Vent/Tilturn Vent - Muntin</td>
<td>H1-18</td>
</tr>
<tr>
<td>8</td>
<td>Tilturn Vent/Turn Only Vent Rebate Adaptor</td>
<td>H1-20</td>
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<td>9</td>
<td>Tilturn Vent/Turn Only Vent Rebate Adaptor</td>
<td>H1-21</td>
</tr>
<tr>
<td>10</td>
<td>Fixed Light - Horizontal Muntin</td>
<td>H1-25</td>
</tr>
<tr>
<td>11</td>
<td>Fixed Light - Vertical Muntin</td>
<td>H1-26</td>
</tr>
<tr>
<td>12</td>
<td>Window Curtain Wall, Muntin/Vent</td>
<td>H1-31</td>
</tr>
<tr>
<td>13</td>
<td>Window Curtain Wall, Integral Vent</td>
<td>H1-34</td>
</tr>
<tr>
<td>14</td>
<td>Window Curtain Wall, Cill Detail</td>
<td>H1-32</td>
</tr>
<tr>
<td>15</td>
<td>Window Curtain Wall, Head &amp; Jamb Detail</td>
<td>H1-33</td>
</tr>
<tr>
<td>16</td>
<td>Barrier Free Balcony Door, Threshold Detail</td>
<td>H1-33</td>
</tr>
</tbody>
</table>
AA®720 Tiltturn Window

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

Window Curtain Wall - Head, Muntin & Cill Detail

Standard Muntin/Vent Detail

H1-17

Standard, Rebate Adaptor/Vent/Vent Detail

H1-21

H1-33

Head

H1-31

Muntin with Vent Above

H1-32

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 option for open out or open in to meet your project designed feature caps adding a unique sculptured effect to sightlines characteristic of original steel windows. These suitable for composite and ribbon windows.

**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**
  - Tilt
  - Tilt (Side Hung)
  - Tilt (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**

<table>
<thead>
<tr>
<th>Performance</th>
<th>GT70</th>
<th>AA®720 Renovation “TIP”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weather Performance</td>
<td>(BS 5368)</td>
<td>(EN 14351)</td>
</tr>
<tr>
<td>Security to ENV 1627</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uw (Double Glazing)</td>
<td>2.1 W/m²K</td>
<td>1.5 W/m²K</td>
</tr>
<tr>
<td>Uw (Double Glazing with warm edge spacer)*</td>
<td>1.9 W/m²K</td>
<td>1.3 W/m²K</td>
</tr>
<tr>
<td>Uw (Triple Glazing)</td>
<td>1.8 W/m²K</td>
<td>1.1 W/m²K</td>
</tr>
<tr>
<td>Uw (Triple Glazing with warm edge spacer)**</td>
<td>1.6 W/m²K</td>
<td>1.0 W/m²K</td>
</tr>
</tbody>
</table>

**Special Features**

- BRE Green Guide Rating

**Design Features**

- Dual Colour Option
- Composite Windows
- Ribbon Windows
- Punched Out Openings
- Triple Glazing

**Infills:**

- upto 54mm
- upto 47mm

**Standard Hardware Groove**

- (Casement only)

**100mm Restriction**

- (Casement only)

**Trickle Ventilation**

- (Casement only)

**Locking Handles**

- (Casement only)

**Folding Openers**

- (Casement only)

**Cockspur Handle**

- (Casement only)

**Friction Hinges**

- (Casement only)

**Butt Hinges**

- (Casement only)

**System Depth**

<table>
<thead>
<tr>
<th>72mm</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>72mm</td>
<td>100mm (W) &amp; 1600mm (H)</td>
<td>1600mm (W) &amp; 1500mm (H)</td>
</tr>
<tr>
<td>72mm</td>
<td>1400mm (W) &amp; 2100mm (H)</td>
<td>1400mm (W) &amp; 2000mm (H)</td>
</tr>
<tr>
<td>900mm (W) &amp; 1600mm (H)</td>
<td>900mm (W) &amp; 1600mm (H)</td>
<td></td>
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</tbody>
</table>

**Applications**

- New Build
- Refurbishment

**Notes**

- U-values based on CEN size inward opening (1230mm x 1480mm) using 0.6 W/m²K double glazing with warm edge (0.043 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.
- Weight 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.

Woodhouse Mill, Todmorden
Architect: Ramsden Barrett Architects
GT70 Slimline Renovation Windows

*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.

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www.kawneer.co.uk
GT70 Slimline Renovation Window Applications

Typical Elevations

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

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### Outside Glazed

<table>
<thead>
<tr>
<th>Elevation</th>
<th>Title</th>
<th>Website CAD ref. no.</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>Vertical section - fixed lights, head detail</td>
<td>6.01</td>
</tr>
<tr>
<td>2</td>
<td>Vertical section - fixed lights, cill detail</td>
<td>6.02</td>
</tr>
<tr>
<td>3, 4</td>
<td>Horizontal section - fixed lights, jamb detail</td>
<td></td>
</tr>
<tr>
<td>5, 5a, 6a</td>
<td>Top hung, side hung</td>
<td>6.03</td>
</tr>
<tr>
<td>6, 6a, 7a, 8, 8a</td>
<td>Horizontal section - top hung and side hung, jamb details</td>
<td>6.04</td>
</tr>
<tr>
<td>10</td>
<td>Horizontal section - top hung</td>
<td>6.06</td>
</tr>
<tr>
<td>11</td>
<td>Vertical section - top hung</td>
<td>6.07</td>
</tr>
<tr>
<td>12</td>
<td>Horizontal section - fixed light</td>
<td>6.08</td>
</tr>
<tr>
<td>13</td>
<td>Vertical section - top hung over side hung</td>
<td>6.09</td>
</tr>
<tr>
<td>16, 16a, 17a, 18</td>
<td>Head detail</td>
<td>6.12</td>
</tr>
<tr>
<td>16, 16a, 18, 19</td>
<td>Cill detail</td>
<td>6.13</td>
</tr>
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</table>

### Inside Glazed

<table>
<thead>
<tr>
<th>Elevation</th>
<th>Title</th>
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<tbody>
<tr>
<td>20, 21</td>
<td>Bottom hung head and cill details</td>
<td>6.14</td>
</tr>
<tr>
<td>22</td>
<td>Bottom hung - jamb detail</td>
<td>6.15</td>
</tr>
<tr>
<td>23, 24</td>
<td>Head and cill detail - fixed</td>
<td>6.16</td>
</tr>
<tr>
<td>25, 26</td>
<td>Jamb detail - fixed</td>
<td>6.17</td>
</tr>
<tr>
<td>28, 29</td>
<td>Capping examples</td>
<td>6.23</td>
</tr>
<tr>
<td>30</td>
<td>Composite window</td>
<td>6.22</td>
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<tr>
<td>38, 39</td>
<td>Capping examples</td>
<td>6.25</td>
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<tr>
<td>40, 41</td>
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<td>6.26</td>
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<td>Capping examples</td>
<td>6.28</td>
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<tr>
<td>45, 46</td>
<td>Capping examples</td>
<td>6.29</td>
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<tr>
<td>47, 48</td>
<td>Capping examples</td>
<td>6.30</td>
</tr>
<tr>
<td>49</td>
<td>Into rotten wall top hung</td>
<td>6.31</td>
</tr>
</tbody>
</table>

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*Image 1:* GT70 Slimline Renovation Open In

*Image 2:* GT70 Slimline Renovation Open Out

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www.kawneer.co.uk
GT70 Slimline Renovation Window

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

Outside Glazed

Jamb Detail (Minimum Outer Frame)

Jamb Detail (Odd Leg Outer Frame)

Top Hung

Inside Glazed

GT70 Slimline Renovation Window

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

Jamb Detail (Tilt Turn & Side Hung)

Top Hung

6.13 Tilt Turn

6.13 Side Hung

The Shoe Factory, Leicester
Architect: Metropolis Architecture
Casement and Tilt Turn Windows, GT70 Slimline
Renovation Windows, 190 Heavy Duty Commercial
Entrance Doors, Medium Duty Swing Doors
and 451PT Framing
Photograph supplied by Pearmain Ltd
GT70 Slimline Renovation Window
Full details can be downloaded from our website www.kawneer.co.uk

Inside Glazed

Head and Cill Details

Capping Detail
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 £463million Kingston Riverside development in the Royal Borough of Kingston Upon Thames alongside the flagship AA®720 single-action door, its AA®543 tiltturn windows and AA®100 curtain waling.

Some 145m² of the mullion-drained curtain waling 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-bedroom 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, facade construction by the Kawneer fabricator was rolled out in four phases over three years.

As well as the Kawneer windows, doors and curtain waling, the 6,000m² of facade 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 tiltturn 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 facade 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.
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.