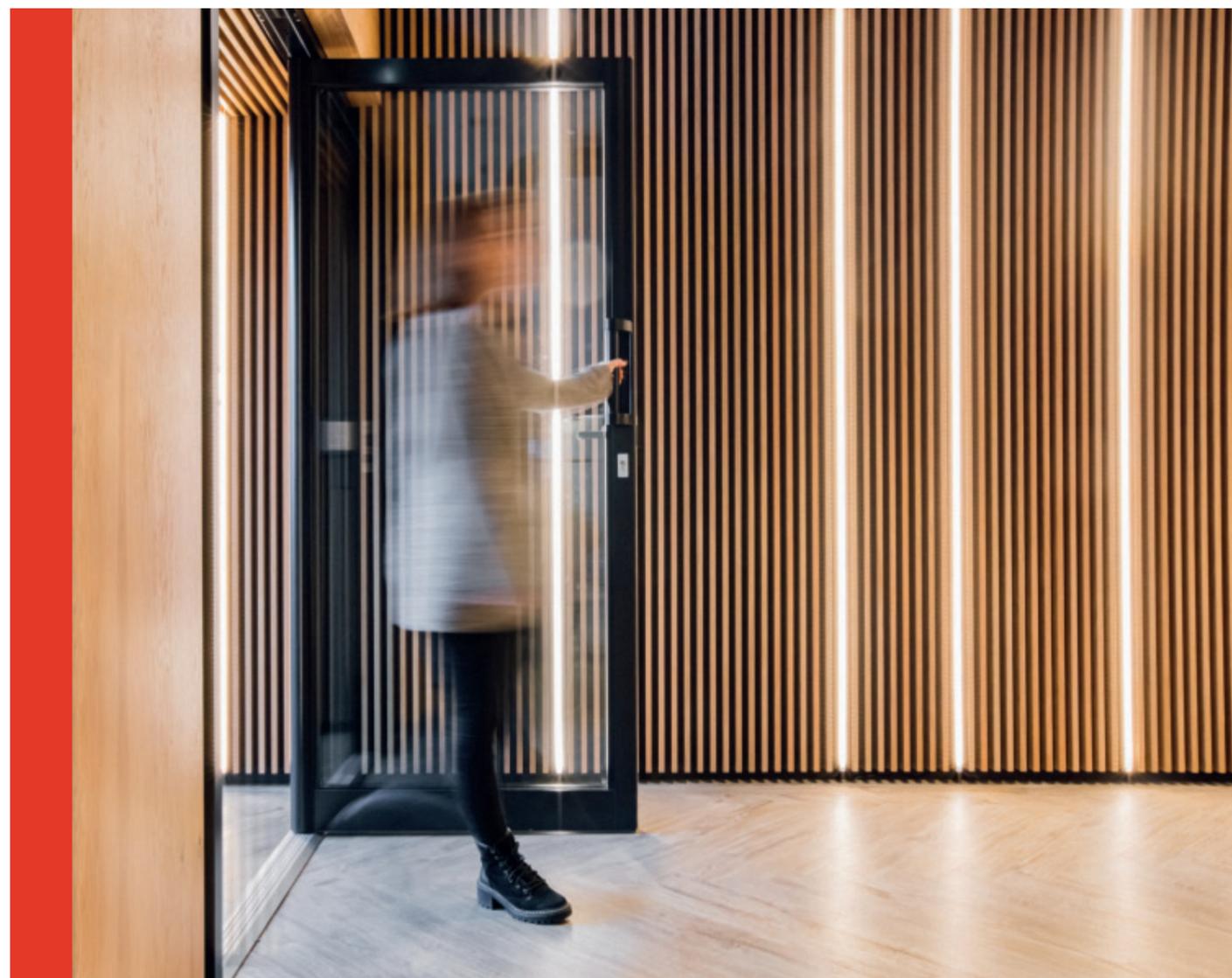


Other brochures available on request from Kawneer are:

- Finishes
- Framing Systems
- Curtain Wall Systems
- Unitised Curtain Wall Systems
- AA®130 Brise Soleil System - Solar Shading for Reduced Solar Heat Gain
- Window Systems
- Juliet Balcony
- LouvreShield
- Sliding Solutions
- Fire Resistant Systems
- Suited Handle Range
- Sustainability
- Maintenance and Cleaning
- Education
- Residential
- Perspectives
- The Architects Guide to Aluminium in Building

DOOR SYSTEMS



Front Cover: Kawneer's AA®190 TB Door

August 2022



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

Kawneer UK Ltd
Astmoor Road
Astmoor Industrial Estate
Runcorn
Cheshire
WA7 1QQ
United Kingdom
Tel: +44 (0) 1928 502500

London Office
12 Berwick Street
Soho
London
W1F 0PN
Tel: +44 (0) 207 287 5911

Architectural Services Team
Tel: +44 (0) 1928 502604
Email: kawneerAST@arconic.com
www.kawneer.co.uk



Contents

Door Systems Product Selector	4
Suited Handle Range	6
Door Systems Product Range	8
AA®190 TB Door	10
AA®545 Swing Door	22
AA®720 Series Door Systems	34
Supporting Your Projects	46

Door Systems Product Selector

	AA®190 TB	AA®545 Swing Door	AA®720 Door Systems
Applications			
New Build	■	■	■
Refurbishment	■	■	■
Heavy Commercial	■		
Key Features			
Finger Guard Option	■	■	■
Dual Colour Option	■	■	■
Triple Glazing	■	■	■
Choice of Midrails	■	■	■
Suites with AA®100/AA®110 Curtain Walling	■*	■	■
Suites with AA®720 System			■
Suites with AA®540 System		■	
Suites with 451PT Framing	■	■	■
Suited Handle Options‡			■
Performance			
Weather Performance (BS 6375)	■	■	■
Security to PAS 24	■	■	■
Document L Compliant	■	■	■
Accessories			
Multi-point Locking	■	■	■
Suitable for Automatic Swing Operation	■		■+
Suitable for Automatic Sliding Operation	■		
Panic Exit Hardware	■	■	■
Suitable for Controlled Access	■		■

Notes:

- * Including Framing
- + Contact the Technical Services Department at Runcorn for advice
- ‡ Suited handles available for the AA®720 Door, see pages 6 and 7



Suited Handle Range

Introduction

A full range of architecturally inspired handles have been developed to complement the AA®720 and AA®720 SL Casement Windows, AA®720 Tiltturn Window, AA®3720 Folding/Sliding Door, AA®3572 Lift/Slide Door and AA®720 Door. With a vast and impressive range of finishes, including stainless steel, we can deliver project specific painted hardware to match RAL finishes, ensuring a consistent design and colour visual appearance of hardware across multiple products used within the same settings.

Kawneer offers two ranges of handle styles that suite across multiple window and door systems. They provide specifiers with the option of high quality window and door furniture in matching finishes and styles.

K-Vesta

K-Vesta is a modern, sleek and elegant design that is available on a range of handles for use on inward opening and outward opening windows, hinged doors, bifold and lift/slide doors.

K-Vesta handles are available in a range of polyester powder coated finishes achieving a high corrosion-resistance Class 5. In addition to the range of standard colours K-Vesta handles can be painted in over 450 RAL finishes including textured coatings. See below for some examples:



Standard Door Handle



Tiltturn Locking Handle



Locking Espagnolette Handle

K-Duro

K-Duro handles are a modern and stylish handle design manufactured in stainless steel. The K-Duro range includes handles for use with inward opening windows, hinged doors, bifold and lift/slide doors. See below for some examples:

For the full range of Suited Handle Options please see our Suited Handle Range Brochure



Standard Door Handle



Tiltturn Locking Handle



Tiltturn Non Locking Handle

K-Vesta Product Selector

Name	AA®720 Casement	AA®720 SL Casement	AA®720 Tiltturn	AA®720 Door	AA®3720 Bifold Door	AA®3572 Lift/Slide Door
TBT Handle - Non Locking			✓			
TBT Handle - Lockable			✓			
Espagnolette Window Handle Lockable	✓	✓				
Lift/Slide Handle - Inner Side - with Cylinder						✓
Lift/Slide Handle - Outside - with Cylinder						✓
Lift/Slide Handle - Inner Side - without Cylinder						✓
Lift/Slide Handle - Outside - without Cylinder						✓
Internal Door Handle on Short Backplate				✓	✓	
External Door Handle on Short Backplate					✓	
Internal Door Handle				✓	✓	
External Door Handle					✓	
External Door Handle without Cylinder Hole (a=21.5mm)					✓	
External Door Handle				✓		
Bifold Shootbolt Lever					✓	

K-Duro Product Selector

Name	AA®720 Tiltturn	AA®720 Door	AA®3720 Bifold Door	AA®3572 Lift/Slide Door
Finger Pull				✓
Window Handle with Cylinder	✓			
Window Handle with Spindle 25mm	✓			
Internal Door Handle		✓	✓	
External Door Handle			✓	
Internal Door Handle		✓	✓	
External Door Handle			✓	
External Door Handle without Cylinder Hole			✓	
External Door Handle		✓		
Lift/Slide Handle - Inner Side - with Cylinder				✓
Lift/Slide Handle - Outside - with Cylinder				✓
Lift/Slide Handle - Inner Side - without Cylinder				✓
Lift/Slide Handle - Outside - without Cylinder				✓

Both K-Vesta and K-Duro door handles incorporate an integrated spring system which returns the handle to its original starting position. The door handles are unhanded with an integral click system allowing them to rotate through 360° in four stages at 90° each. K-Vesta and K-Duro handles are suitable for use on Kawneer PAS 24 certified window and door systems.

Door Systems Product Range

Introduction

The market leading experience that Kawneer enjoys in the aluminium sector is attributed to the production of systems that are robust, fit for purpose and guaranteed to meet the total life cycle costs of today's modern buildings.

Kawneer design, engineer and manufacture complete door systems for most applications that reflect the different needs of the various market segments, from robust, prefabricated and severe traffic commercial entrance doors to thermally broken high performance solutions, thus guaranteeing the availability of the right solution for the right application.

High standards of processing ensure equally high standards of performance throughout the lifetime of the product, which have been proved by stringent third party laboratory testing. Strong construction, quality materials, precision engineering, proven hardware and attention to detail are the dependable performance features found in all Kawneer door systems.

Standard Solutions

AA®190 TB A heavy duty thermally broken commercial entrance door.

AA®545 A single action open-in or open-out swing door, designed to offer optimum weather and thermal performance at a competitive price.

AA®720 A door available in two levels of thermal performance to enable flexibility of design, performance and cost.

Door Categories of Use

The table below provides guidance on appropriate applications for the Kawneer Door Systems. The categories of use are as defined in BS 6375-2: 2009.

Categories of use for the UK ^{A)}

Door Type Guide	UK Category of Use	UK Description of Typical Use
AA®190 TB AA®545 AA®720 AA®720 FR	Light	Secondary external doorsets to dwellings
AA®190 TB AA®545 AA®720 AA®720 FR	Medium	External doorsets to dwellings, providing primary access. Office doorsets providing access to areas not visited by members of the public and school classrooms ^{B)}
AA®190 TB AA®720 ^{C)} AA®720 FR ^{C)}	Heavy	Doorsets for shops, hospital wards and other buildings which provide access to designated public areas
AA®190 TB	Severe	Doorsets for stockrooms, school and hospital corridors etc. Commonly opened by driving trolleys against them

^{A)} Users should be careful in their selection of class. If a particular use is not specifically mentioned, specifiers should take advice from manufacturers as to the best available category.

^{B)} For schools, refer to the DCSF publication *Standard specification, layout and dimensions - Internal doorsets in schools* [1].

^{C)} Specific hardware and leaf size restrictions apply.

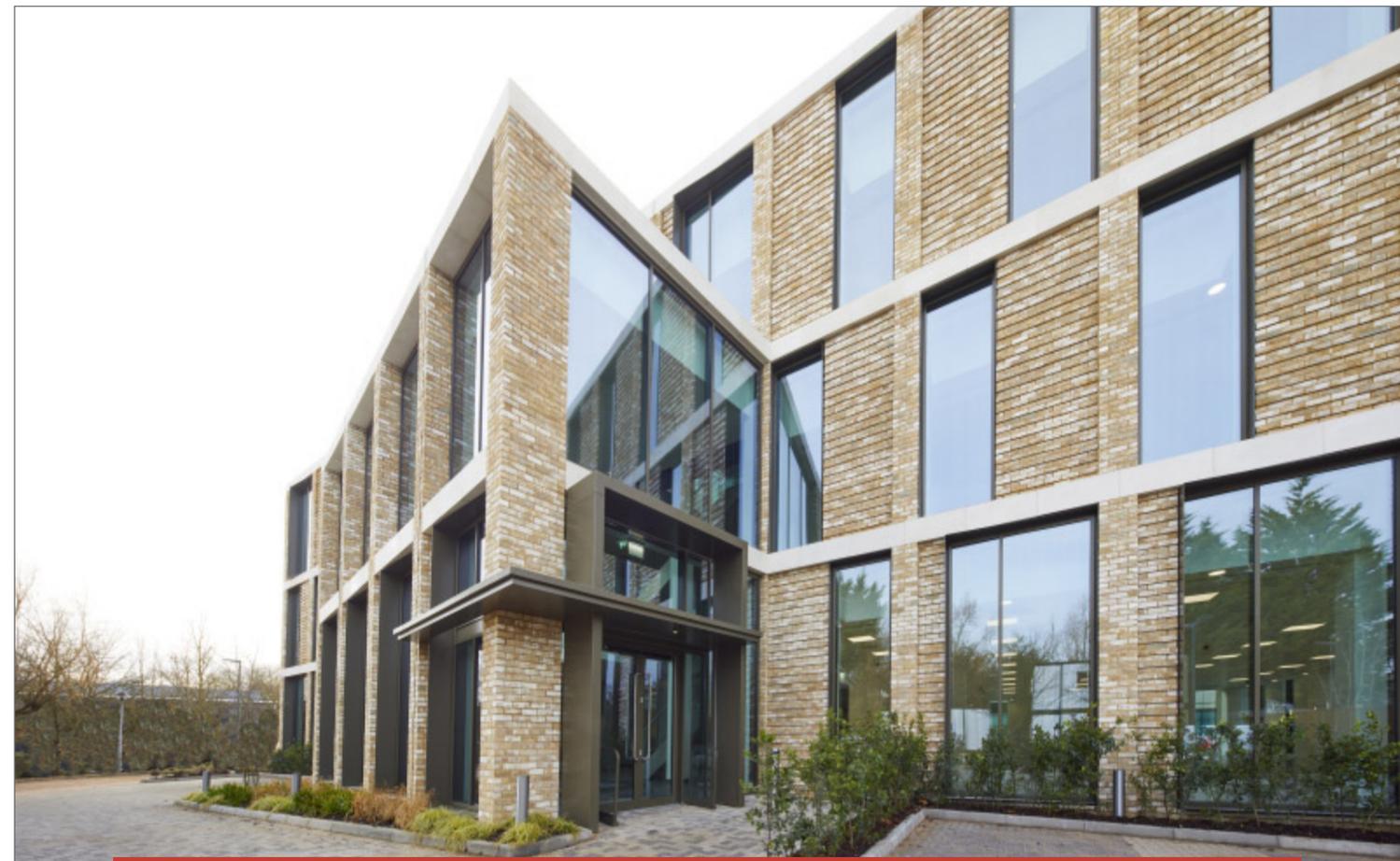
Permission to reproduce extracts from British Standards is granted by BSI Standards Limited (BSI). No other use of this material is permitted. British Standards can be obtained in PDF or hard copy formats from the BSI online shop: www.bsigroup.com/Shop

Door and Entrance Systems Characteristics/Regulations

System	Traffic Level	Finger Guard	PAS 24 Single & Double Leaf	Thermal Compliance	Compatibility with Kawneer Curtain Wall	Guarantee
AA®190 TB Door	Heavy/Severe	✓	✓	✓*	✓	Lifetime
AA®545 Swing Door	Medium	✓	✓	✓*	✓	
AA®720 Door Systems	Heavy	✓	✓	✓*	✓	

* Can meet current Building Regulations

Unit 216, Cambridge Science Park
Architect: Broadway Malyan



AA®190 TB Door

Introduction

Kawneer design, engineer and manufacture complete door systems for most applications. Kawneer's bespoke facility using state of the art manufacturing technology maintains high standards of processing ensuring equally high standards of performance throughout the lifetime of Kawneer products.

The AA®190 TB is an all-purpose door for use in high traffic areas and automatic entrances. Its robust construction means that it is suitable for use in heavy/severe applications. It can be installed with a finger guard pivot stile, which safeguards against injury to fingers accidentally caught between the hinge stile and frame.

Product Features and Benefits

- The AA®190 TB is the only door with welded construction, supported by a Kawneer Lifetime Guarantee offering peace of mind
- AA®190 TB Door independently tested to PAS 24 Standard - Enhanced security performance of single and double leaf external doors
- Finger Guard Pivot Stile, as standard, protects against trapped fingers when opening and closing, a child-friendly feature
- Butt hinge solution available
- An extremely robust door suitable for medium, heavy and severe duty applications
- External and internal applications offering flexibility of design
- Single, double action, auto swing and bi-parting doors, offering flexibility for a wide range of solutions
- A range of thresholds including low thresholds - Document M compliant
- Single or dual colour options

Construction

Kawneer door systems have been proved by stringent laboratory testing. Strong construction, quality materials, precision engineering, proven hardware and attention to detail are the dependable performance features found in all Kawneer door systems.

Welded Corner Construction

The welded corner joint is the strongest aluminium door construction available, each corner having four separate weld points. Rigorous testing has verified its durability and exceptional strength, making it suitable for use in severe duty applications as defined in BS 6375-2: 2009.

Security*

The AA®190 TB Door has been independently tested to PAS 24 for the enhanced security performance of single and double leaf external doors. The AA®190 TB Door meets light, medium, heavy and severe use specifications and is suitable for external and internal doors in all types of buildings from offices and schools to public use doors such as in shops and hospitals.

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



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®190 TB Door*	Class 2 (300 Pa)	Class 3A (100 Pa)	Class C2 (800 Pa)

* Open-In Double Door with Butt Hinges and Rebated Threshold

Data and Reports for other door configurations are available from the Technical Services Department at Runcorn.

AA®190 TB Commercial Entrance Door Product Details

Product Sizes and Options

Feature	Finger Guard Pivot	Butt Hinge	Auto Slide
Max Leaf Height	3000mm	3000mm	3000mm
Max Leaf Width	1320mm	1200mm	1500mm
Max Leaf Area	3.3m ²	3.0m ²	4.5m ²
Double Glazing	✓	✓	✓
Triple Glazing	✓	✓	✓
Single Action	✓	✓	
Dual Action	✓		
Max Leaf Weight with Concealed Closer	120kg		
Max Leaf Weight with Floor Spring	200kg		
Max Leaf Weight with Surface Mounted Closer	120kg	120kg	
Concealed Panic	✓	✓	
Surface Mounted Panic	✓	✓	
BS 8300-2: 2018 Compliant Threshold	✓	✓	
Rebated Threshold		✓	

The Royal Mint, Llantrisant
Architect: Rio Architects
Image © The Royal Mint





AA®190 TB Round Finger Guard with Threshold (internal view)



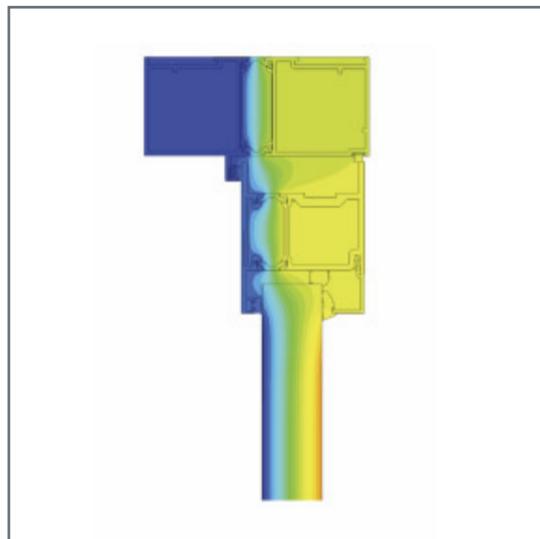
AA®190 TB Butt Hinge and Rebated Threshold Open Out (external view)

All options are available in the 'H' Section of the AA®190 TB Product Manual

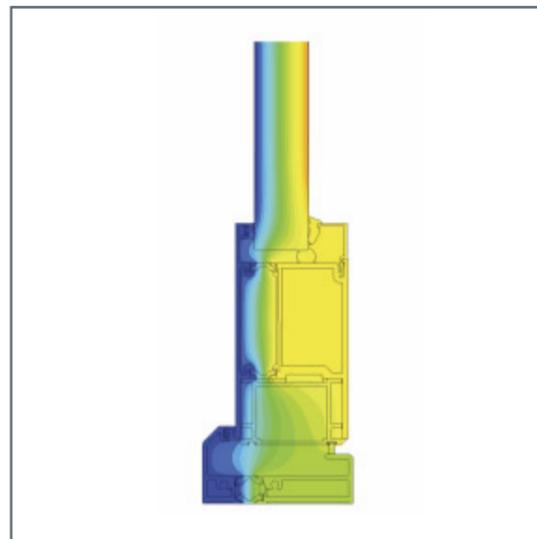
U-values

U-values are based on a standard single door, open out on a CEN sized door

Single - Open Out - Low Threshold		
Centre Pane Ug	1.0 W/m²K	0.7 W/m²K
Whole Door Uw	1.73 W/m²K	1.52 W/m²K



Butt Hung Open In Head Detail



Butt Hung Open In Threshold

AA®190 TB Door

Typical Elevations

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

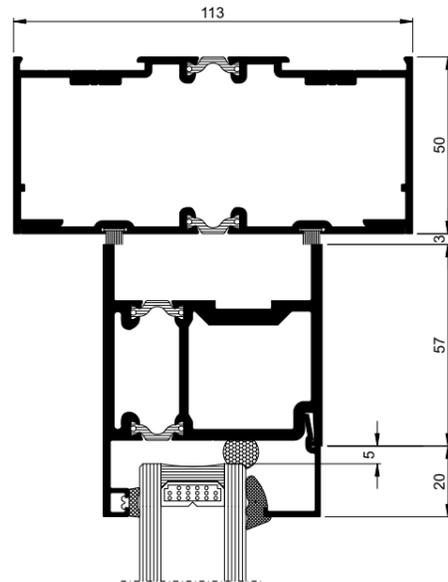
Elevation	Title	Website CAD ref. no.	
Single Leaf Doors	Double Leaf Doors	Round Finger Guard	Flat Finger Guard
		H1 02.01	H2 02.01
		H1 03.01, H1 04.01	H2 03.01, H2 04.01
		H1 05.01	H2 05.01
		H1 07.01	H2 07.01
		H1 08.01, H1 13.01	H2 08.01, H2 11.01
		H1 09.01, H1 11.01	H2 09.01, H2 12.01
		H1 12.01, H1 14.01	
		H1 15.01, H1 16.01	
		H1 10.01	H2 10.01
Single Leaf Doors	Double Leaf Doors	Butt Hinge Open-in	Butt Hinge Open-out
		H3 02.01, H3 11.01	H4 02.01, H4 11.01
		H3 03.01, H3 04.01	H4 03.01, H4 04.01
		H3 05.01, H3 06.01	H4 05.01, H4 06.01
		H3 07.01	H4 07.01
		H3 08.01, H3 12.01	H4 08.01, H4 12.01
		H3 09.01, H3 13.01	H4 09.01, H4 13.01
		H3 10.01	H4 10.01
Auto Slide (single)	Auto Bi-Parting	Auto Slide	
		H5 02.01	
		H5 03.01, H5 04.01	
		H5 05.01	
		H5 07.01	
		H5 08.01	
		H5 09.01	
		H5 10.01	

AA®190 TB Door

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

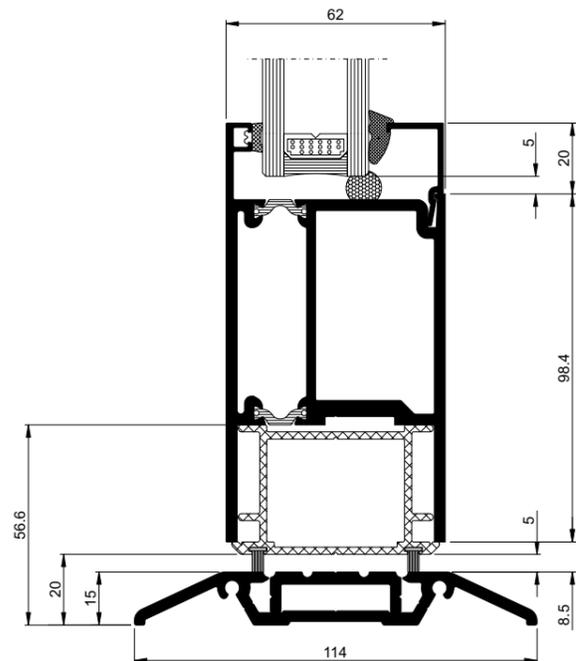
Finger Guard Pivot Door

Head Detail



H1 02.01
Viewed Externally

Threshold Detail



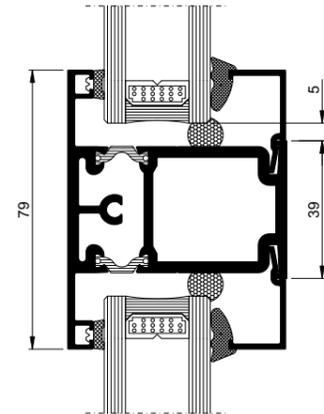
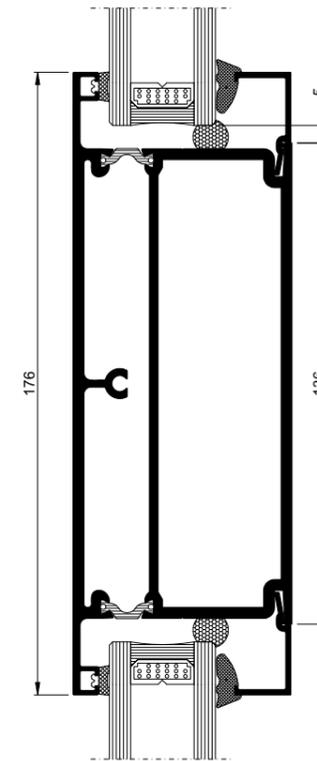
H1 03.01
Viewed Externally

AA®190 TB Door

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

Finger Guard Pivot Door

Midrail Options



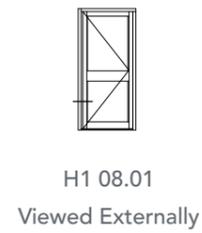
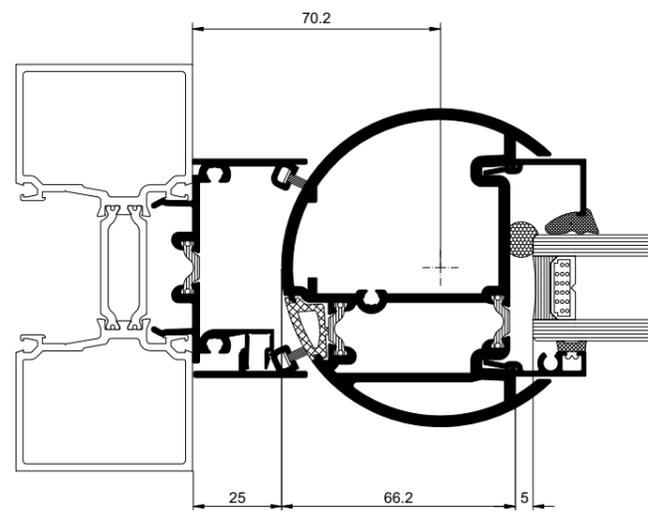
H1 07.01
Viewed Externally

AA®190 TB Door

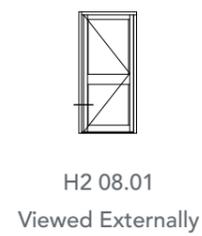
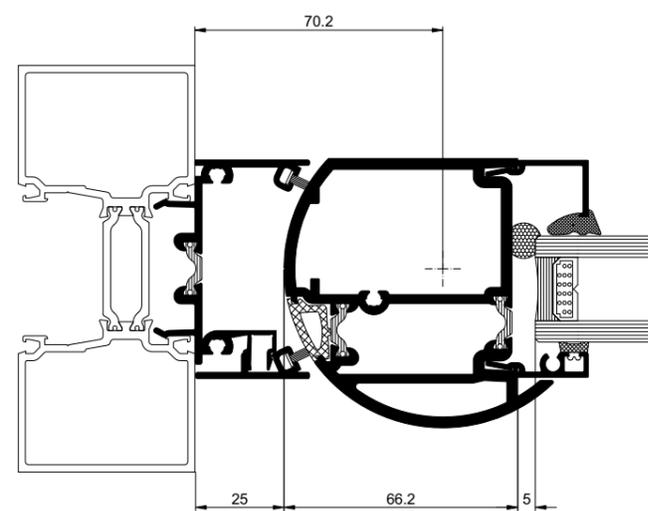
Full details can be downloaded from our website www.kawneer.co.uk

Finger Guard Pivot Door

Jamb Detail (Rounded Finger Guard)



Jamb Detail (Flat Finger Guard)

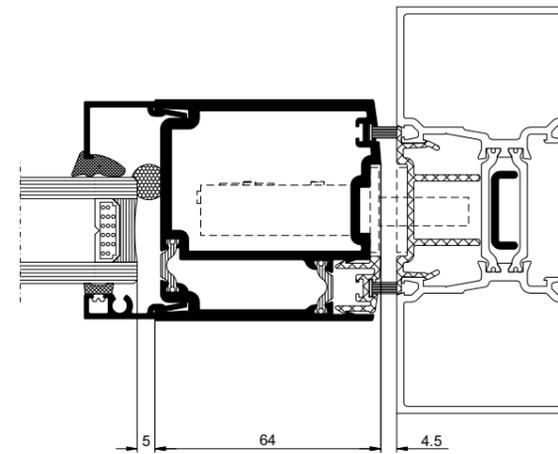


AA®190 TB Door

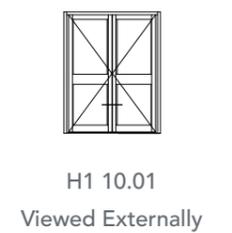
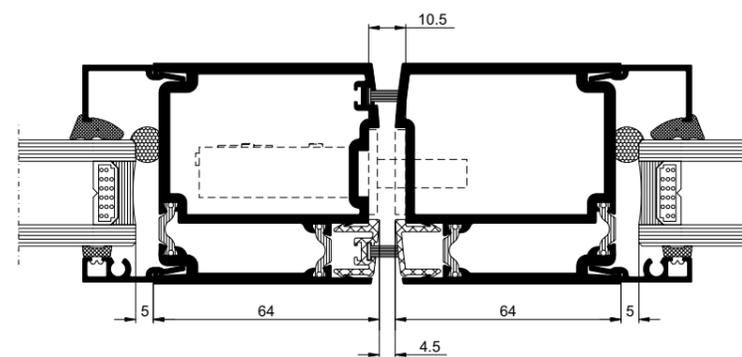
Full details can be downloaded from our website www.kawneer.co.uk

Finger Guard Pivot Door

Jamb Detail (Lock Stile)



Double Door (Meeting Stile)

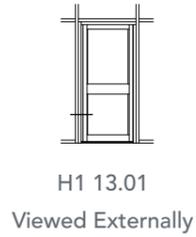
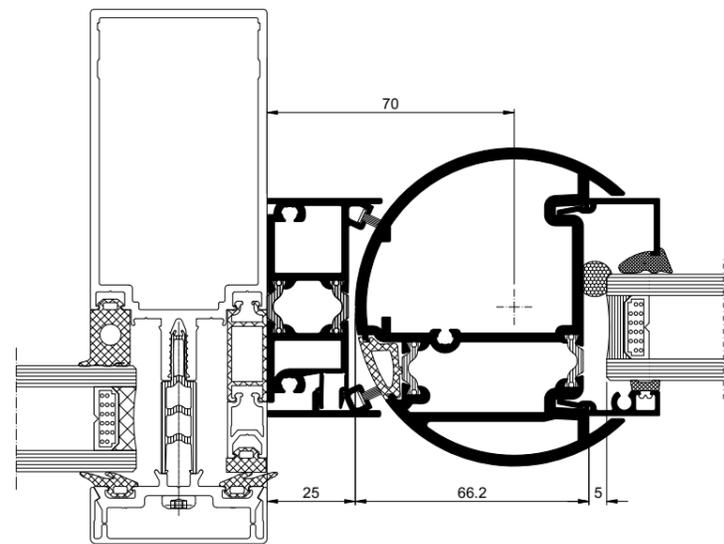


AA®190 TB Door

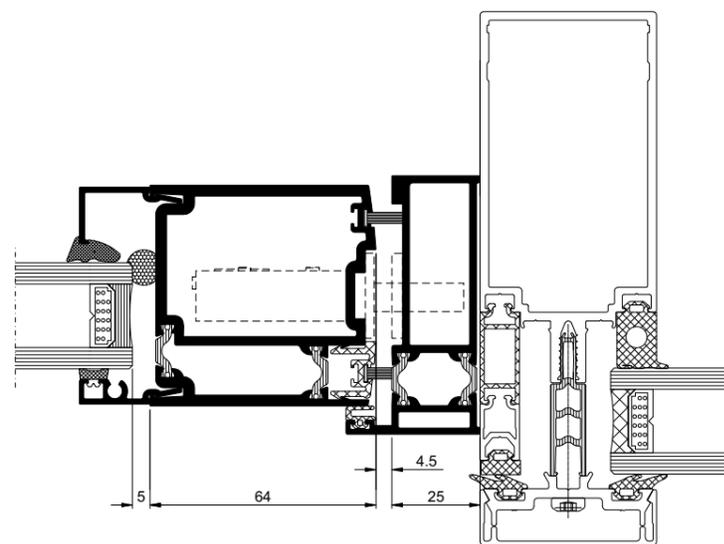
Full details can be downloaded from our website www.kawneer.co.uk

Finger Guard Pivot Door

Jamb Detail - Curtain Wall Adaptor



Jamb Detail - Lock Stile Curtain Wall Adaptor

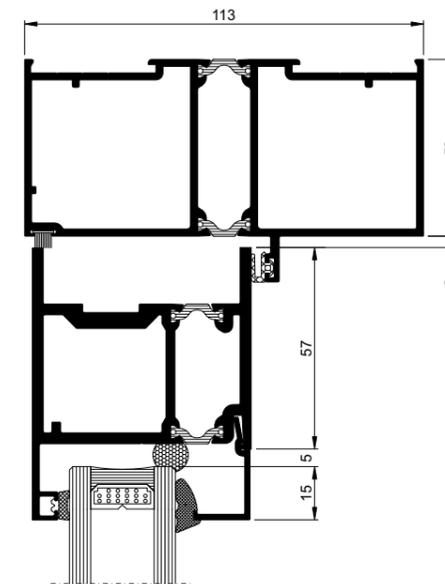


AA®190 TB Door

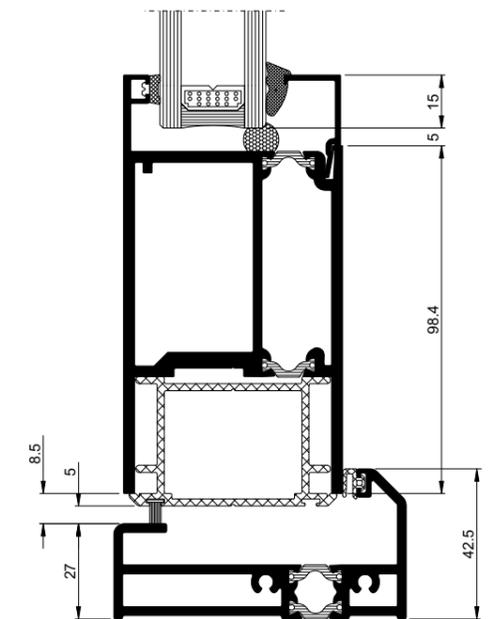
Full details can be downloaded from our website www.kawneer.co.uk

Butt Hinge Door

Head Detail (Open Out)



Rebated Threshold Detail (Open Out)

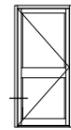
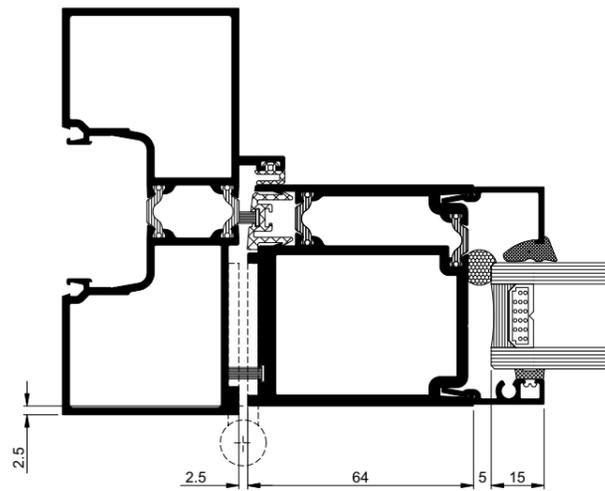


AA®190 TB Door

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

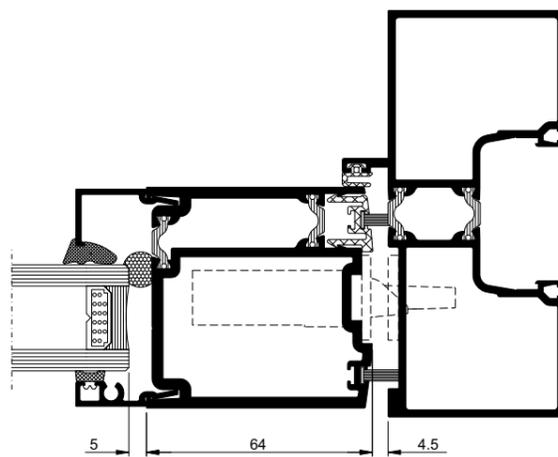
Butt Hinge Door

Jamb Detail - Hinge Stile (Open Out)



H4 08.01
Viewed Externally

Jamb Detail - Lock Stile (Open Out)



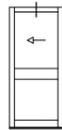
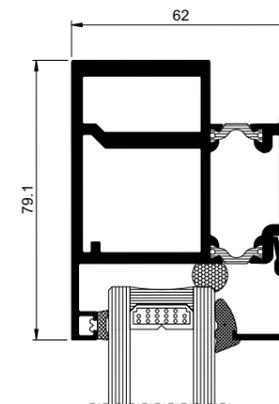
H4 09.01
Viewed Externally

AA®190 TB Door

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

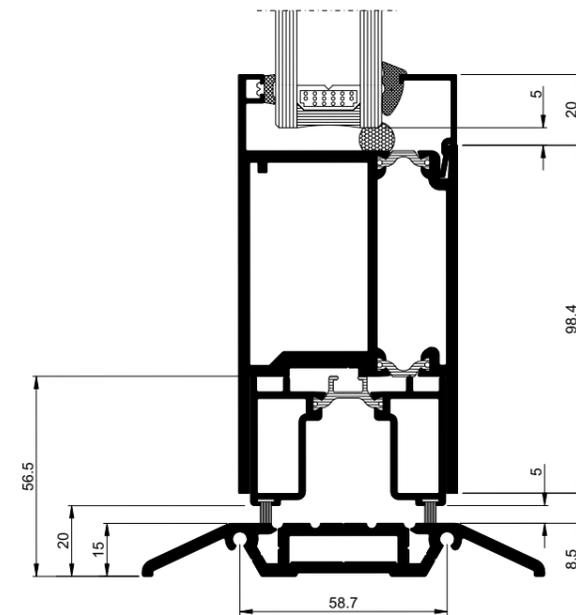
Auto Slider

Head Rail



H5 02.01
Viewed Externally

Threshold



H5 03.01
Viewed Externally

AA®545 Swing Door

Introduction

The AA®545 Swing Door completes the AA®540 Series Window & Door range and has been designed to offer optimum weather and thermal performance at a competitive price.

The AA®545 Swing Door is a high performance door which uses multi-chamber thermal break technology and a thermally enhanced centre seal, ensuring thermal efficiency and full compliance with Approved Document L. With the use of extruded gasket profiles, this system achieves its weathering performance by means of drained and ventilated glazing rebates.

Designed for direct fix into prepared openings and within ribbon windows, the range can suite with the Kawneer curtain walling and framing systems and is suitable for low or high rise buildings.

The AA®545 Swing Door is available as a single action open-in or open-out swing door and can be single or dual colour. It is suitable for both light and medium duty requirements, making it ideal for low to medium frequency use in dwellings and commercial applications.

Product Features and Benefits

- Insulated profiles – with multi chamber thermal break core offering market leading thermal performance
- Market leading glass thickness capabilities - Triple glazing up to 47mm
- Low (for easy wheelchair access) or barrier free/rebated threshold - Low threshold provides improved accessibility for all users and is Document M compliant
- Finger guard option (additional hardware) provides safety in use

- Square and Softline profile options provide a choice of aesthetics
- Adjustable two or three part hinges - Suitable for use in medium traffic locations
- A variety of panic hardware available - A choice of push and touch bar options providing added flexibility in demanding applications
- Suites with the AA®541 Casement, AA®542 Pivot, AA®543 Tiltturn, Kawneer's Curtain Walling and Framing Systems with total design flexibility offering total project solutions

Construction

The AA®545 Swing Door is a three chamber pressure equalised system crimped with mechanical corner cleats. Weathering is achieved by the use of single and dual durometer, EPDM gaskets.

Security*

The AA®545 Swing Door has been independently tested to PAS 24 for the enhanced security performance of single and double leaf external doors.

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

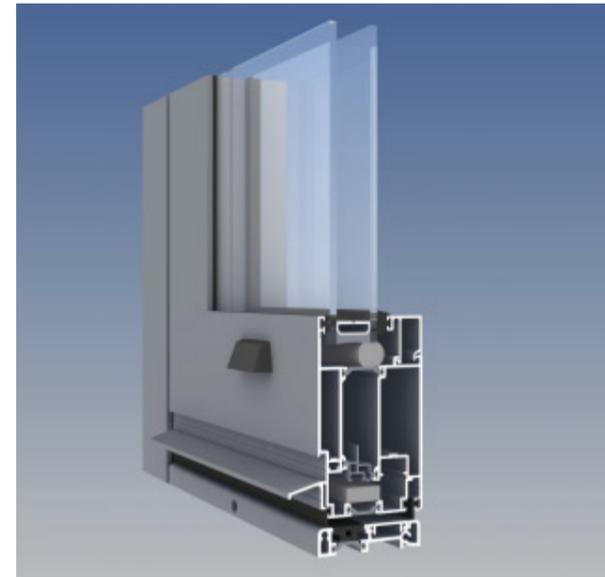


Independently Weather Performance Tested to BS 6375-1: 2015

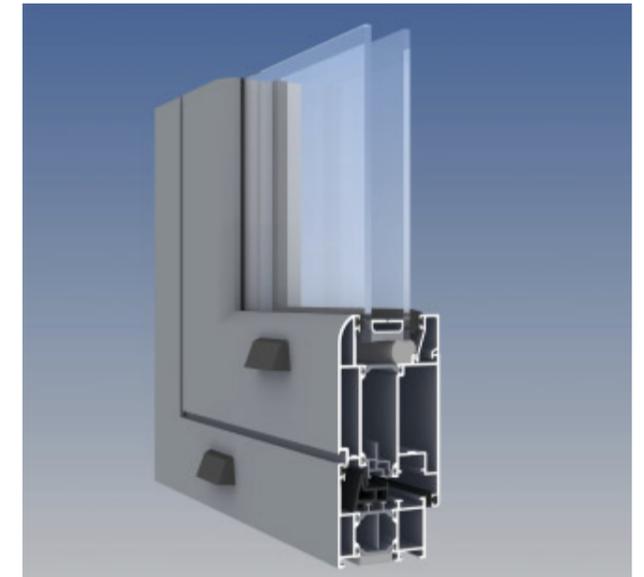
	Air Infiltration BS EN 12207: 2000	Watertightness BS EN 12208: 2000	Wind Resistance BS EN 12210: 2000
AA®545 Swing Door*	Class 3 (600 Pa)	Class E750 (750 Pa)	Class CE2400 (2400 Pa)

* Single Door, Outward Opening with Frame Threshold

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



AA®545 Swing Door (Low Threshold Option)



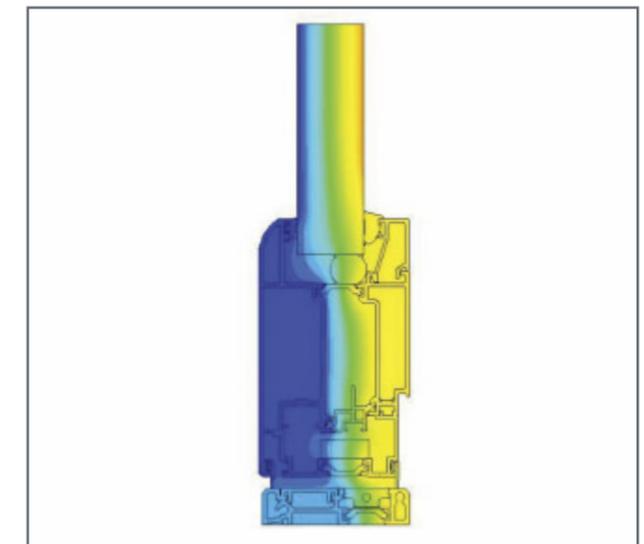
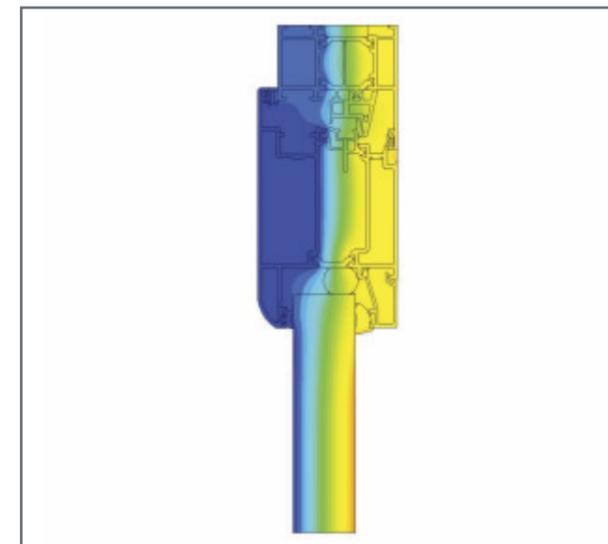
AA®545 Swing Door - Softline Option (Frame All Around Option)

All Inward Opening and Outward Opening options are available in the H Section of the AA®545 Product Manual

U-values

U-values are based on a standard single door, open out on a CEN sized door

Single - Open Out - Low Threshold	Centre Pane Ug W/m²K	
Whole Door Uw	1.1 W/m²K	0.6 W/m²K
	1.61 W/m²K	1.29 W/m²K



AA[®]545 Swing Door

Typical Elevations

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

Elevation	Title	Website CAD ref. no.			
		Open-in	Open-out		
	1	Head	H1 03.01	H2 03.01	
	2	Threshold	H1 04.01, H1 05.01, H1 06.01	H2 04.01, H2 05.01, H2 06.01	
	3	Hinge Jamb	H1 07.01	H2 07.01	
	4	Lock Jamb	H1 08.01	H2 08.01	
	5	Midrail	H1 09.01	H2 09.01	
	22	Hinge Jamb (Finger Guard)	H1 32.01, H1 33.01, H1 34.01	H2 32.01, H2 33.01, H2 34.01	
	23	Threshold (Finger Guard Door)	H1 35.01, H1 36.01, H1 37.01	H2 35.01, H2 36.01, H2 37.01	
	1	Head	H1 03.01	H2 03.01	
	2	Threshold	H1 04.01, H1 05.01, H1 06.01	H2 04.01, H2 05.01, H2 06.01	
	3	Hinge Jamb	H1 07.01	H2 07.01	
	5	Midrail	H1 09.01	H2 09.01	
	6	Meeting Stile	H1 10.01	H2 10.01	
	15	Head	H1 21.01	H2 21.01	
	16	Threshold	H1 22.01, H1 23.01, H1 24.01	H2 22.01, H2 23.01, H2 24.01	
	17	Hinge Jamb	H1 25.01	H2 25.01	
	18	Lock Jamb	H1 26.01	H2 26.01	
	19	Midrail	H1 27.01	H2 27.01	
	15	Head	H1 21.01	H2 21.01	
	16	Threshold	H1 22.01, H1 23.01, H1 24.01	H2 22.01, H2 23.01, H2 24.01	
	17	Hinge Jamb	H1 25.01	H2 25.01	
	19	Midrail	H1 27.01	H2 27.01	
	20	Meeting Stile	H1 28.01	H2 28.01	
	2	Threshold	H1 04.01, H1 05.01, H1 06.01	H2 04.01, H2 05.01, H2 06.01	
	3	Hinge Jamb	H1 07.01	H2 07.01	
	5	Midrail	H1 09.01	H2 09.01	
	6	Meeting Stile	H1 10.01	H2 10.01	
	7	Fanlight Jamb	H1 11.01	H2 11.01	
	8	Door Head/Fanlight Transom	H1 12.01	H2 12.01	
	3	Hinge Jamb	H1 07.01	H2 07.01	
	7	Fanlight Jamb	H1 11.01	H2 11.01	
	8	Door Head/Fanlight Transom	H1 12.01	H2 12.01	
	9	Coupled Flag Frame/Lock Jamb	H1 13.01	H2 13.01	
	7	Fanlight Jamb	H1 11.01	H2 11.01	
	8	Door Head/Fanlight Transom	H1 12.01	H2 12.01	
	9	Coupled Frame/Lock Jamb	H1 13.01	H2 13.01	
	10	Coupled Frame/Hinge Jamb	H1 14.01, H1 15.01	H2 14.01, H2 15.01	

Elevation	Title	Website CAD ref. no.		
		Open-in	Open-out	
	21	Box Muntin (internal)	H1 29.01	H2 29.01
	21	Box Muntin (external)	H1 30.01, H1 31.01	H2 30.01, H2 31.01
	11	Curtain Wall/Hinge Jamb	H1 16.01, H1 17.01	H2 16.01, H2 17.01
	12	Curtain Wall/Lock Jamb	H1 18.01	H2 18.01
	13	Curtain Wall/Head	H1 19.01	H2 19.01
	11	Curtain Wall/Hinge Jamb	H1 16.01, H1 17.01	H2 16.01, H2 17.01
	12	Curtain Wall/Lock Jamb	H1 18.01	H2 18.01
	14	Curtain Wall/Fanlight Head	H1 20.01	H2 20.01

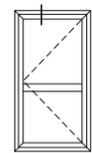
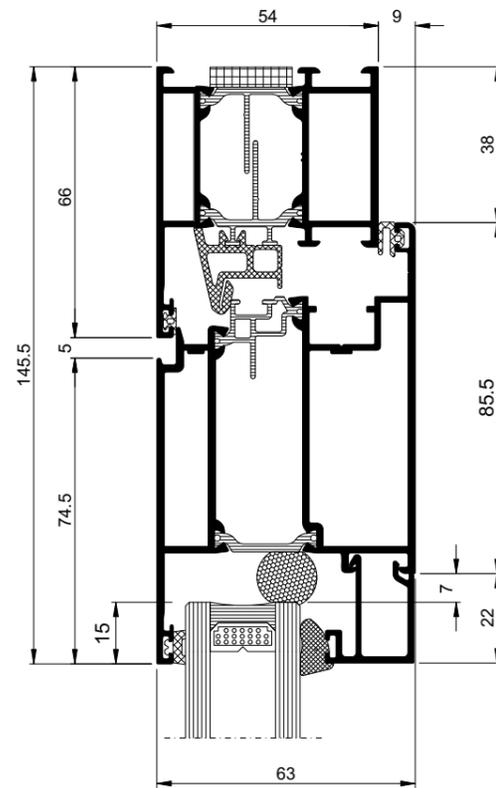


AA®545 Swing Door

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

Inward Opening

Head Detail



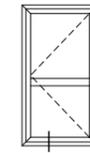
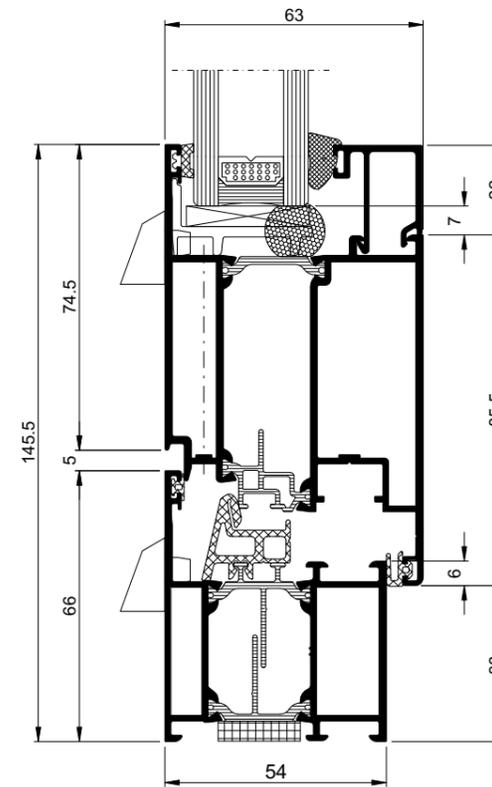
H1 03.01
Viewed Externally

AA®545 Swing Door

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

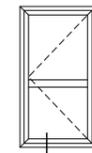
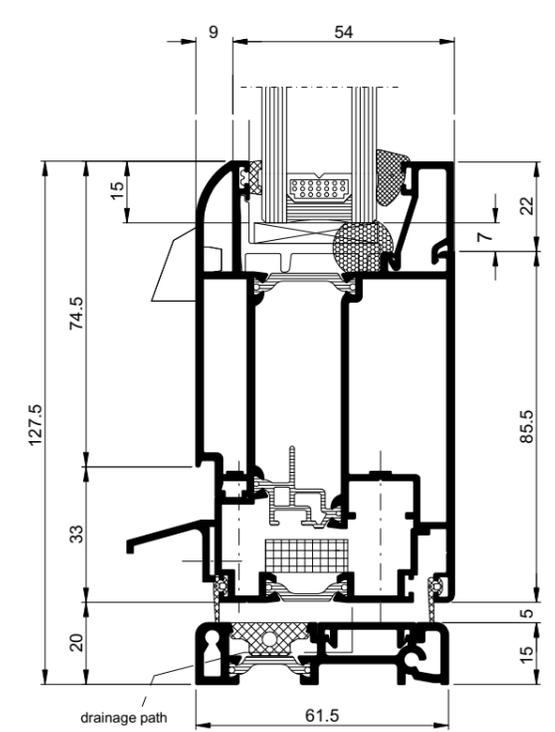
Inward Opening

Rebated Threshold



H1 06.01
Viewed Externally

Low Threshold Softline



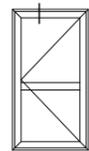
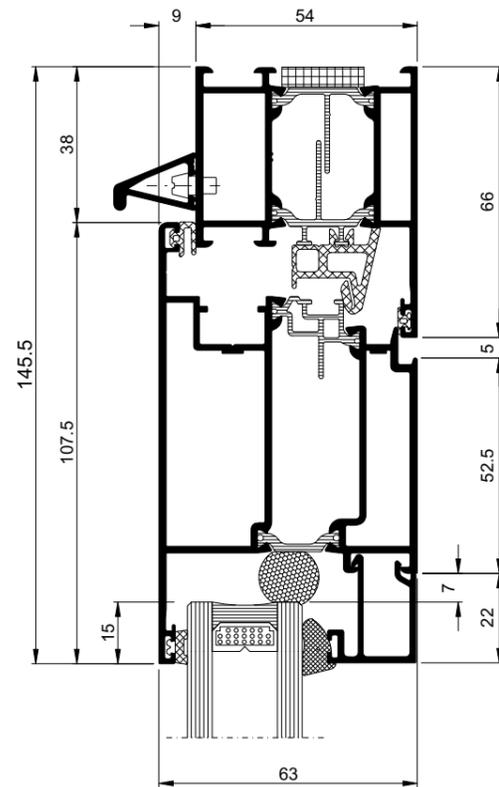
H1 22.01
Viewed Externally

AA®545 Swing Door

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

Outward Opening

Head Detail



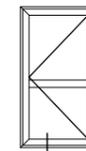
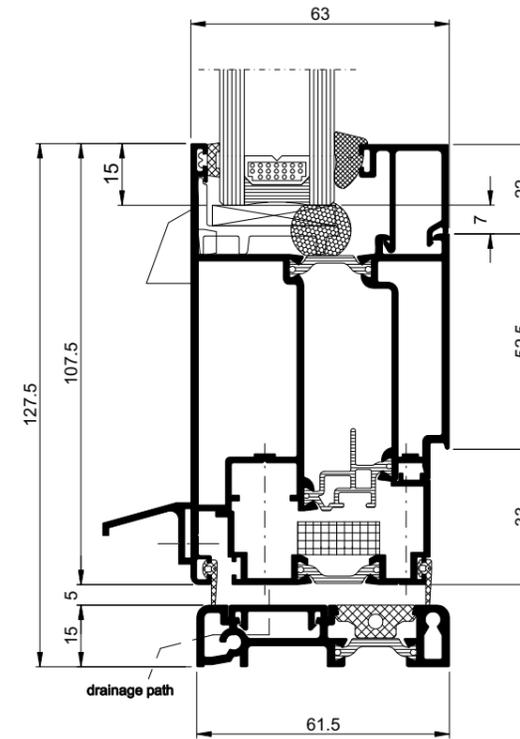
H2 03.01
Viewed Externally

AA®545 Swing Door

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

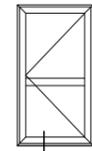
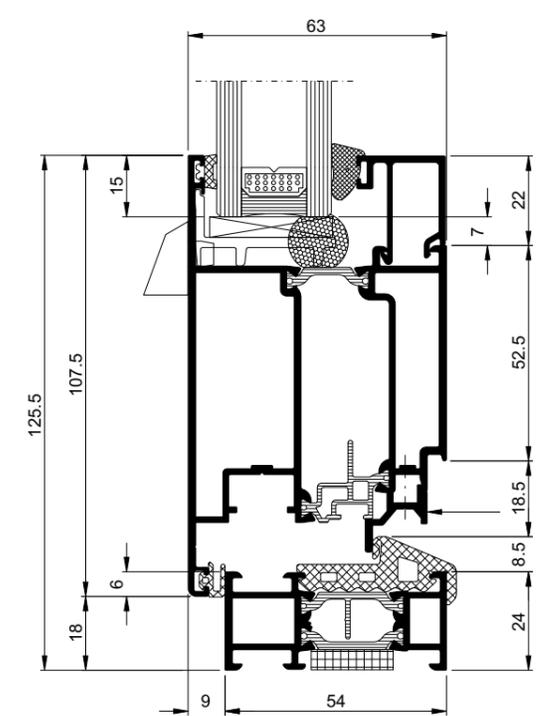
Outward Opening

Low Threshold



H2 04.01
Viewed Externally

Barrier Free Threshold



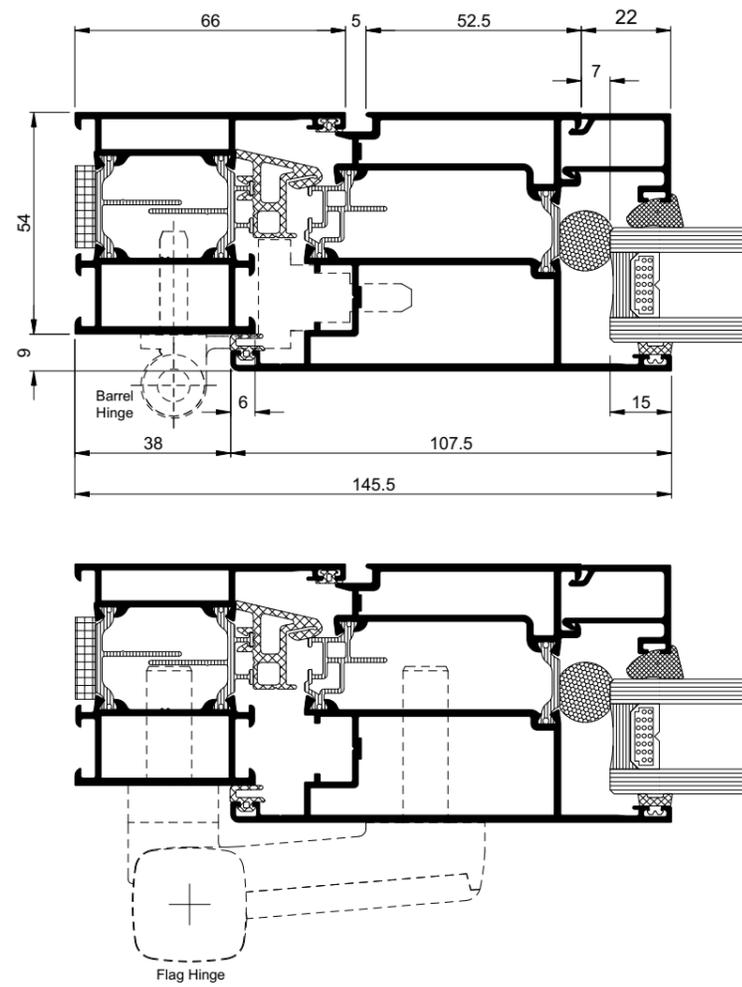
H2 05.01
Viewed Externally

AA®545 Swing Door

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

Outward Opening

Hinge Jamb Details



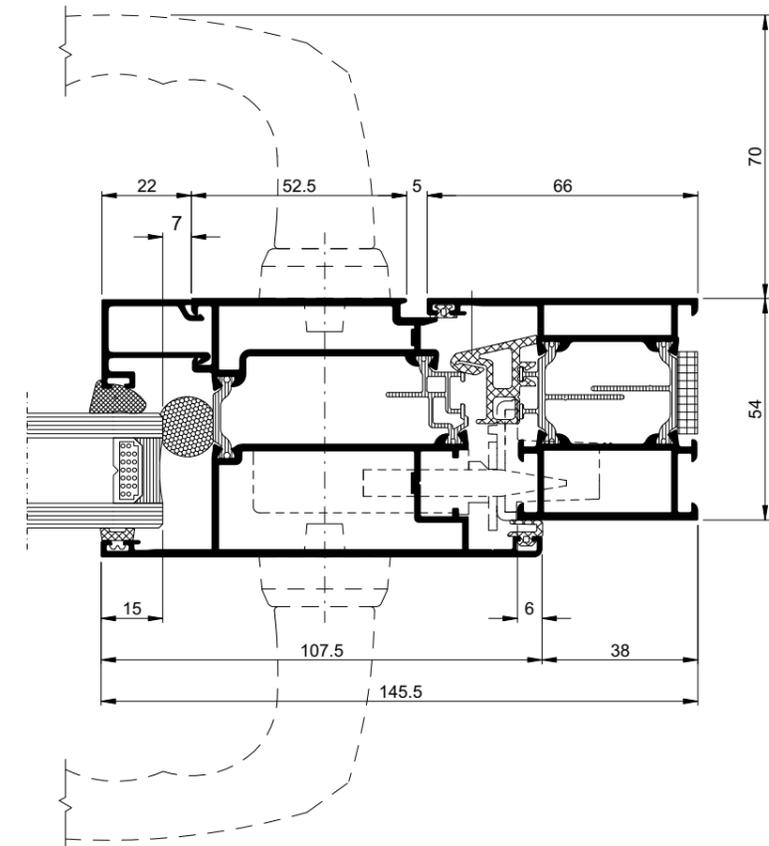
H2 07.01
Viewed Externally

AA®545 Swing Door

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

Outward Opening

Lock Jamb Detail



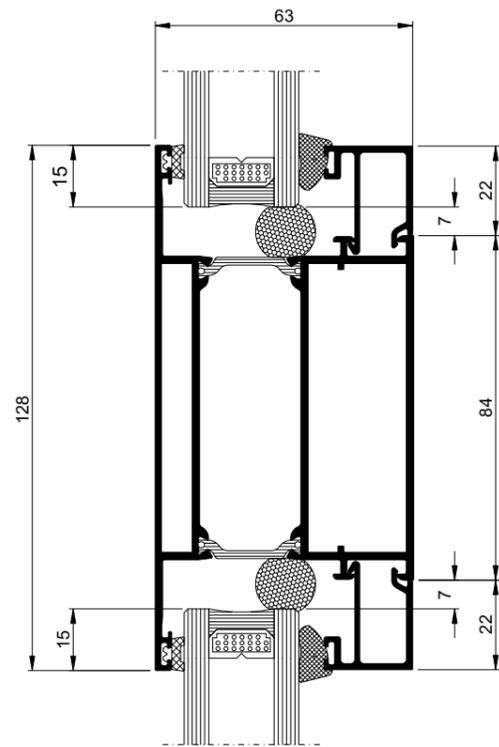
H2 08.01
Viewed Externally

AA®545 Swing Door

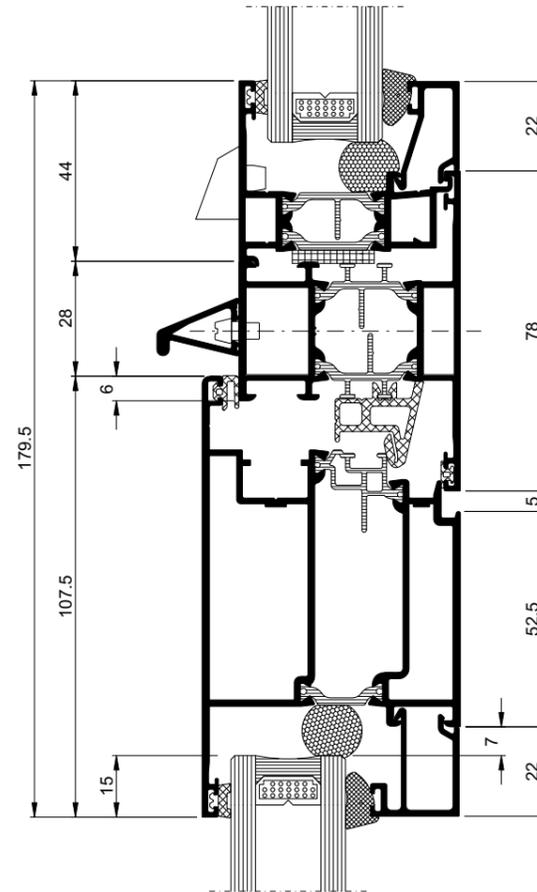
Full details can be downloaded from our website www.kawneer.co.uk

Outward Opening

Midrail Detail



Fixed Pane Fanlight

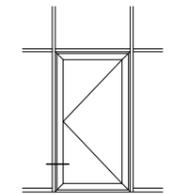
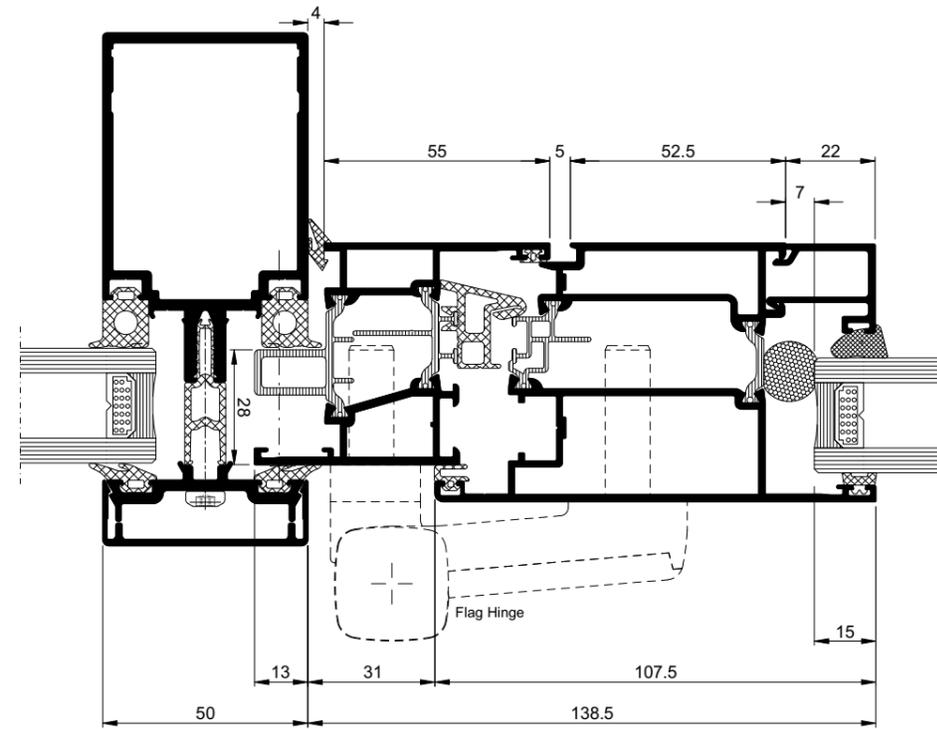


AA®545 Swing Door

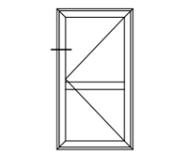
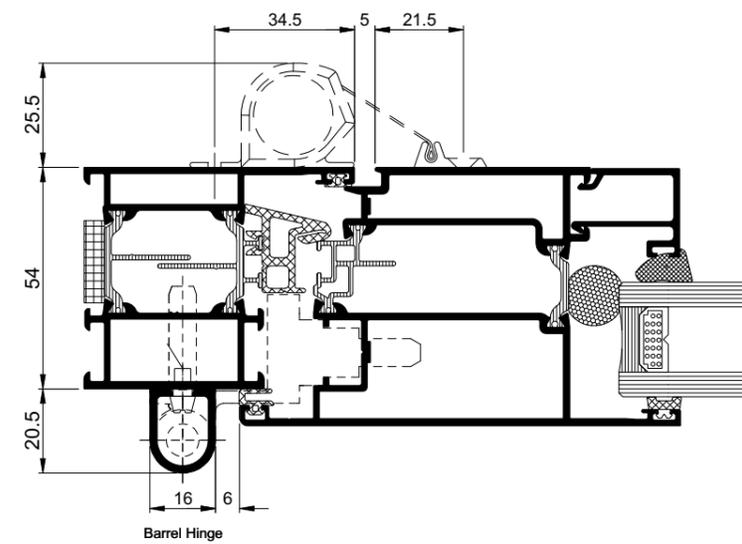
Full details can be downloaded from our website www.kawneer.co.uk

Outward Opening

Curtain Wall Hinge Jamb Detail



Fingerguard - Hinge Jamb Detail



AA®720 Series Door Systems

Introduction

The Kawneer AA®720 Door has been developed to meet the latest European requirements for thermal performance.

To enable complete flexibility of design, performance and cost, the AA®720 Door is available in two levels of thermal performance, the AA®720 and the AA®720HI.

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

As well as being fully integrated, the AA®720 Door 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.

A range of suited handles are available for our AA®720 Doors, see pages 6 and 7.

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.

For information on Kawneer's AA®720 Series Window Systems please refer to our Window Systems Brochure.

Variants to the AA®720 Door range are:

- Softline/Design variants with rounded contours
- Open in and open out variants
- Choice of thresholds
- Extensive panic hardware offer
- Large leaf size and weight capabilities
- Finger guard option

The AA®720 Door also offers extensive hardware configurations, including new concealed hinges and barrel hinges as well as extensive handle and locking options, to suite with other products in the Kawneer range.

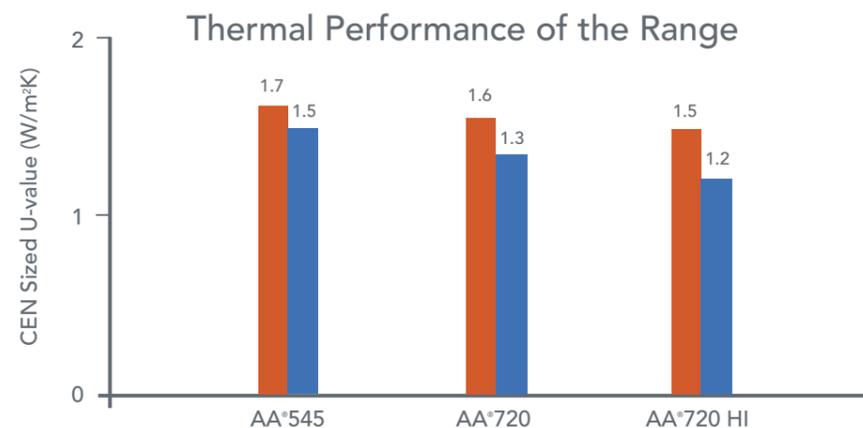
Glazing

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 Door has been independently tested to PAS 24 for the enhanced security performance of single and double leaf external doors.

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



U-values are based on a 1000mm x 2000mm CEN sized single door

- Incorporating 1.0 W/m²K double glazing with warm edge Swisspacer V bar
- Incorporating 0.6 W/m²K triple glazing with warm edge Swisspacer V bar

Product Selector

Performance	AA®720	AA®720 HI	AA®720 FR
U-value (Double Glazing)*	1.6 W/m²K	1.5 W/m²K	1.6 W/m²K
U-value (Triple Glazing)**	1.3 W/m²K	1.2 W/m²K	1.3 W/m²K
Frame Depth	72mm	72mm	72mm
Sound Insulation (BS EN 4109)	38 dB	38 dB	38 dB
Air Infiltration (BS EN 12207: 2000)	Class 2	Class 2	Class 2
Watertightness (BS EN 12208: 2000)	Class 4A	Class 4A	Class 4A
Wind Resistance (BS EN 12210: 2000)	Class C2	Class C2	Class C2
Security (ENV 1627)	WK2 & 3	WK2 & 3	WK2 & 3
Security (PAS 24)	●	●	
Smoke Protection (DIN EN 1634-3)	-	-	●
Fire Protection (DIN EN 1634-1)	-	-	EI ₂ 30
Design Variants			
Standard	●	●	●
Softline/Design – Rounded Contours	●	●	
Renovation – Angular Contours	●	●	
Panel Door	●	●	
Configurations			
Inward Opening			
Single	●	●	●
Double	●	●	●
Outward Opening			
Single	●	●	●
Double	●	●	●
Design Features			
Maximum Door Leaf Size	1400mm x 3000mm		
Maximum Door Leaf Weight	250kg	250kg	250kg
Dual Colour Option	●	●	●
Maximum Glazing Thickness	50mm	50mm	50mm
Multi-Point Locking	●	●	●
Concealed Hinges	●	●	
Barrel Hinges	●	●	●
Thermally Broken Threshold	●	●	●
Fire Escape (DIN EN 179)	●	●	●
Anti-Panic (DIN EN 1125)	●	●	●
Durable Function (EN 1191)	Heavy Duty	Heavy Duty	Heavy Duty
Suited Handle Options‡	●	●	

* U-values based on BR443 size door (1000mm x 2000mm) using 1.1 W/m²K double glazing with warm edge Swisspacer V bar.

** U-values based on BR443 size door (1000mm x 2000mm) using 0.7 W/m²K triple glazing with warm edge Swisspacer V bar.

Fire protection tests carried out using specialist glazing. Tested to DIN EN 1634-1

Sound insulation values are Rw reduction values and are based on tests using acoustic glazing. Further details are available within the Product Manual

Independently weather and operational performance tested to BS EN 1026, 1027 & 12211

‡ For the Suited Handle Options, see pages 6 and 7



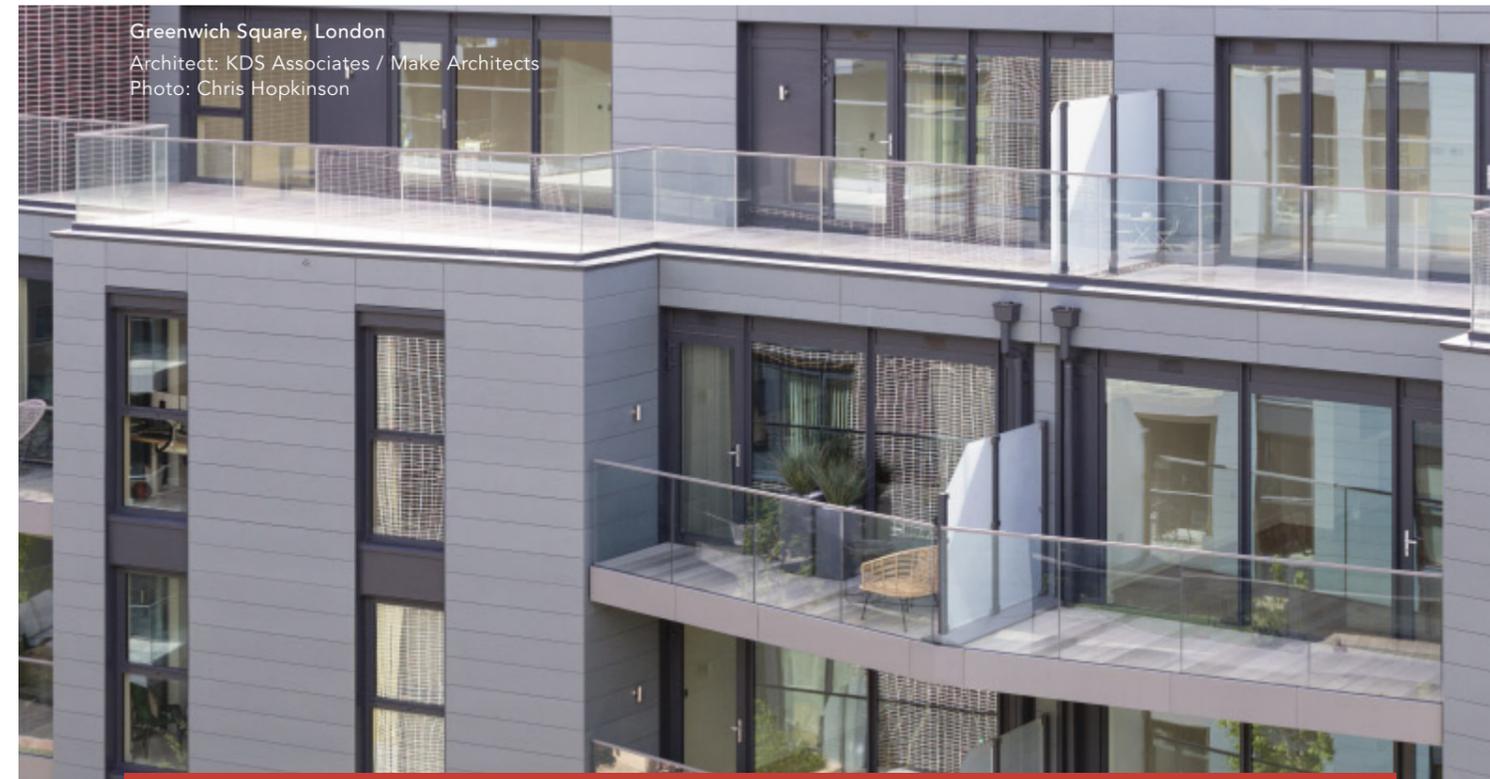
AA[®]720 Door Systems

Typical Elevations

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

Elevation	Title	Website CAD ref. no.		
Single Leaf Door	Double Leaf Door	Open-in	Open-out	
		1 Head 2 Threshold 3 Midrail 4 Jamb 5 Meeting Stile 12 Perimeter Door Leaf - Threshold 23 Finger Guard Hinge Jamb	H51-12, H51-15, H51-16 H53-2, H53-6, H53-7 H51-14 H51-12, H51-15, H51-16 H51-22, H51-32 H53-4 H55-14, H55-15	H51-11, H51-13 H53-1, H53-5, H53-7 H51-14 H51-11, H51-13 H51-22, H51-23 H53-3 H55-12, H55-13
		2 Threshold 3 Midrail 4 Jamb 5 Meeting Stile 6 Door Head/Fanlight Transom	H53-2, H53-6, H53-7 H51-14 H51-12, H51-15, H51-16 H51-22, H51-32 H51-53	H53-1, H53-5, H53-7 H51-14 H51-11, H51-13 H51-22, H51-23 H51-52
		1 Door Head 2 Threshold 3 Midrail 4 Jamb 5 Meeting Stile 7 Door Stile/Side Light Frame Section 8 Side Light Frame Section 9 Side Light Frame Head Section 10 Side Light Threshold	H51-15, H51-16 H53-2, H53-6, H53-7 H51-14 H51-12, H51-15, H51-16 H51-22, H51-32 H51-18, H51-19 H51-20 H51-20, H51-21 H53-8, H53-9	H51-13 H53-1, H53-5 H51-14 H51-11, H51-13 H51-22, H51-23 H51-17 H51-20 H51-20, H51-21 H53-8, H53-9
		1 Door Head 2 Threshold 4 Jamb 5 Meeting Stile 8 Side Light Frame Section 9 Side Light Frame Head Section 10 Side Light Threshold 11 Door Stile/Side Light Frame Section	H51-12 H53-2, H53-6, H53-7 H51-12 H51-22, H51-32 H51-20 H51-20 H53-8, H53-9 H51-53	H51-11 H53-1, H53-5, H53-7 H51-11 H51-22, H51-23 H51-20 H51-20 H53-8, H53-9 H51-52
		2 Threshold 10 Side Light Threshold 13 Special Door Frame Jamb 14 Door Stile/Side Light Special Muntin 15 Door Stile/Fanlight Special Muntin 16 Fanlight Frame Head/Jamb 17 Fanlight/Special Muntin	H53-1, H53-5, H53-7 H53-8, H53-9 H51-45 H51-46 H51-47 H51-48 H51-49	

Elevation	Title	Website CAD ref. no.		
Single Leaf Door	Double Leaf Door	Open-in	Open-out	
		2 Threshold 5 Meeting Stile 8 Side Light Frame Section 9 Side Light Frame Head Section 10 Side Light Threshold 18 Door Stile/Side Light Muntin 19 Door Head/Fanlight Muntin 20 Fanlight Head 21 Fanlight Muntin/Vent 22 Sidelight Muntin	H53-2, H53-6, H53-7 H51-22, H51-32 H51-20 H51-20 H53-8, H53-9 H51-26, H51-34 H51-27, H51-35 H51-28 H51-29 H51-30	H53-1, H53-5, H53-7 H51-22, H51-23 H51-20 H51-20 H53-8, H53-9 H51-24 H51-25 H51-28 H51-29 H51-30
		24 Head 25 Threshold 26 Jamb	H55-23 H55-24, H55-25, H55-26 H55-23	
		27 Head 28 Jamb 29 Midrail 30 Threshold	H61-11, H61-12 H61-11, H61-12 H61-16 H63-1, H63-2, H63-5	

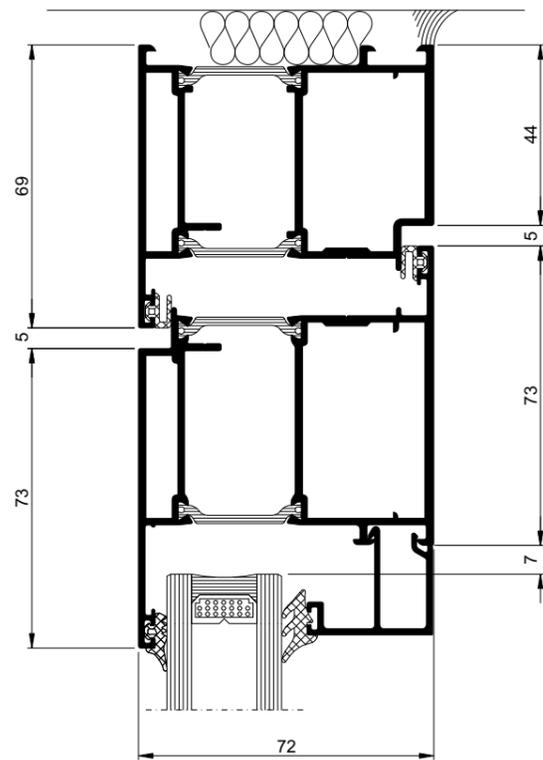


AA®720 Door Systems

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

Inward Opening

Head Detail

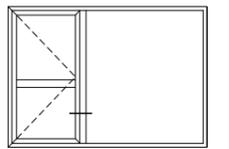
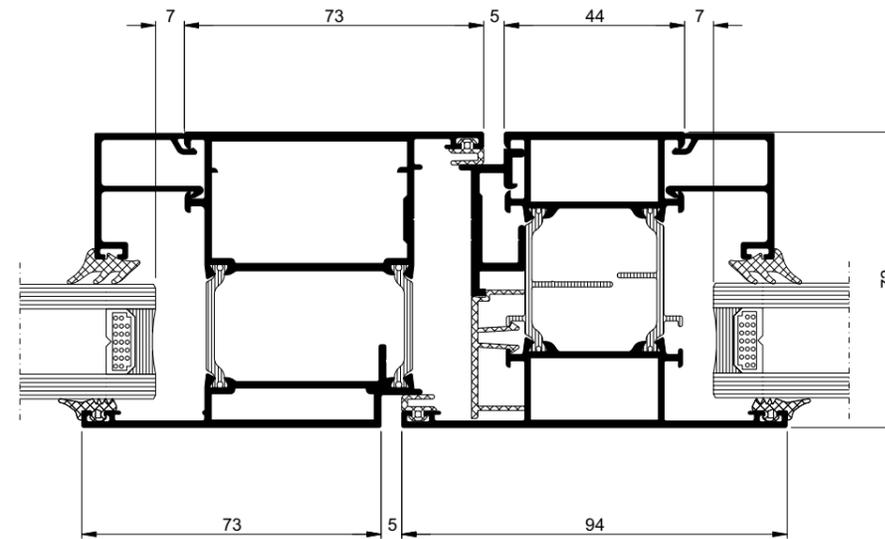


AA®720 Door Systems

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

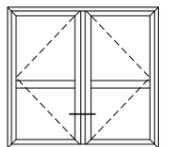
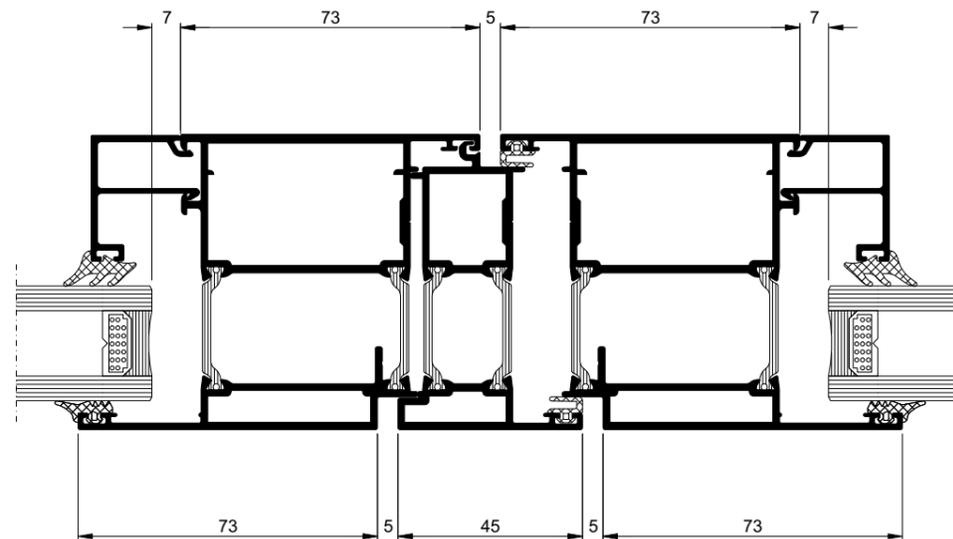
Inward Opening

Standard Door Side Light



H51-17
Viewed Externally

Standard Door Meeting Stile



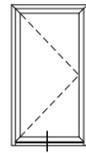
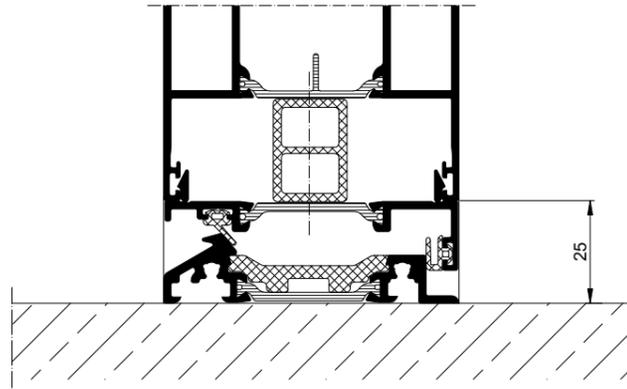
H51-23
Viewed Externally

AA®720 Door Systems

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

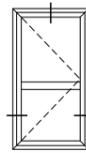
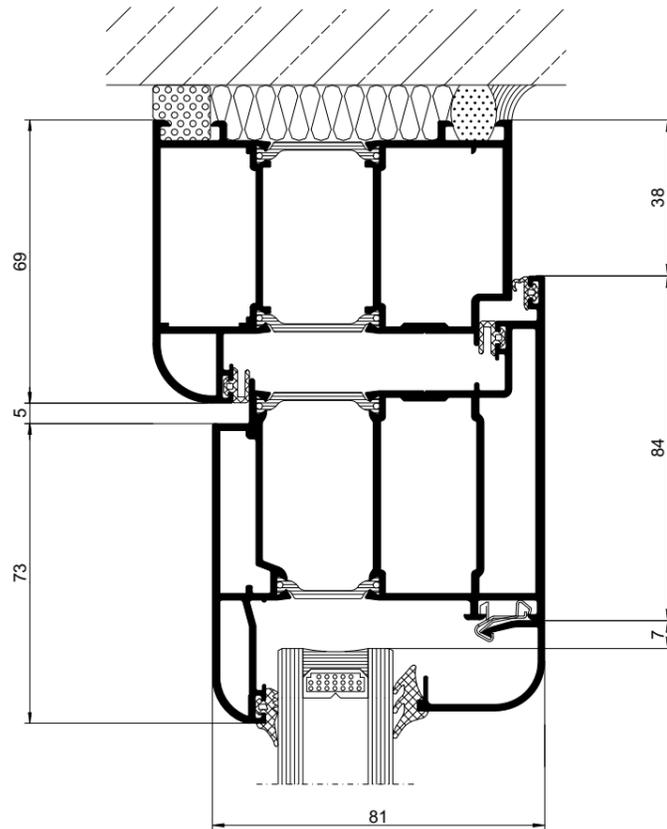
Inward Opening

Standard Door Threshold



H53-01
Viewed Externally

Design Door Head Detail



H61-11
Viewed Externally



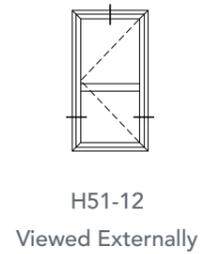
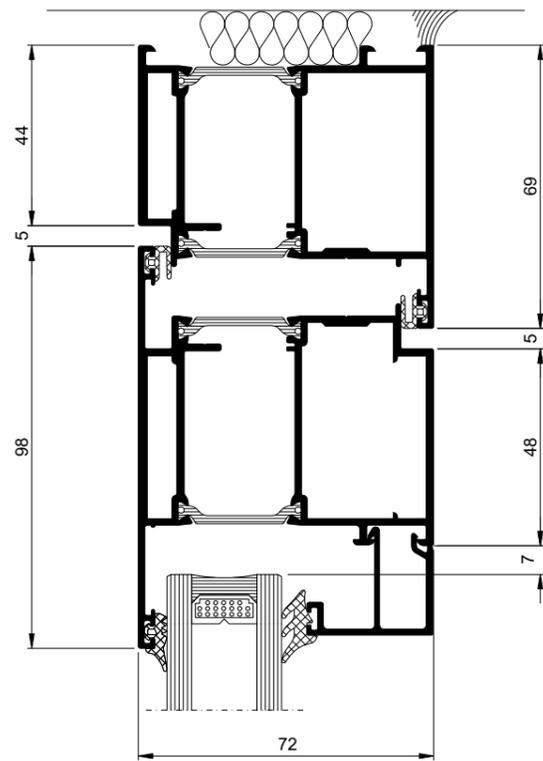
Kingston Riverside, London
Architect: Sprunt
Photo: Positive Image Photography

AA®720 Door Systems

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

Outward Opening

Head Detail

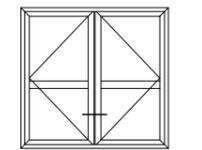
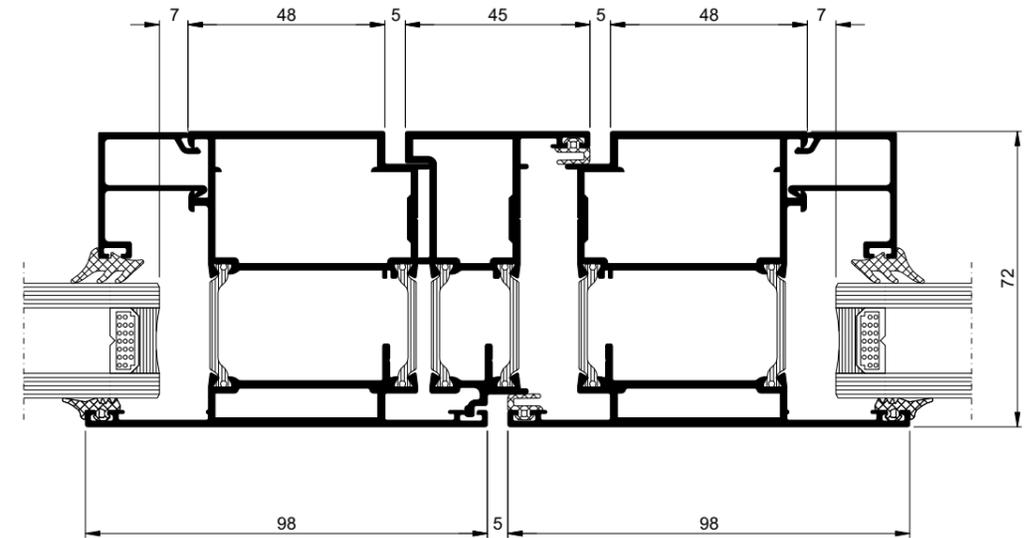


AA®720 Door Systems

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

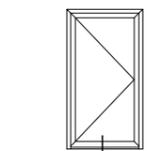
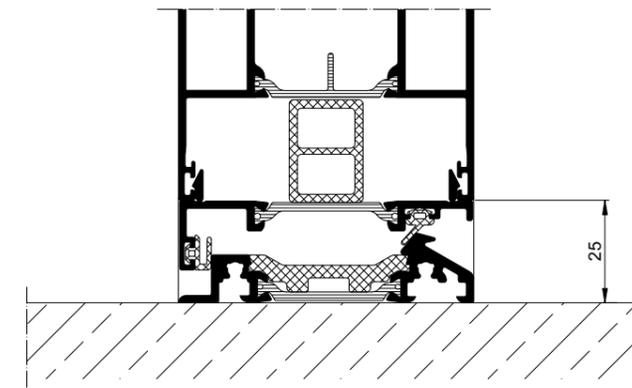
Outward Opening

Standard Door Meeting Stile



H51-32
Viewed Externally

Standard Door Threshold



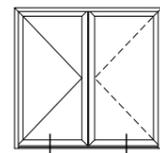
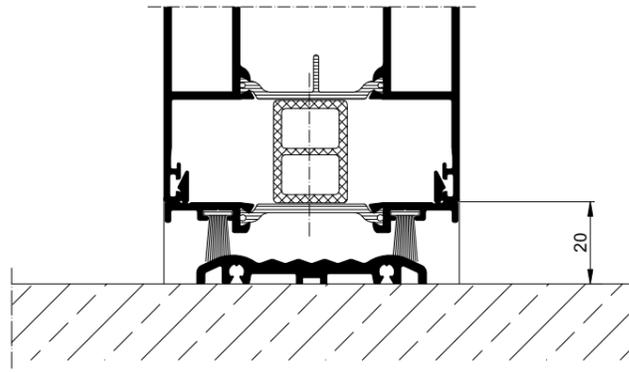
H53-02
Viewed Externally

AA®720 Door Systems

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

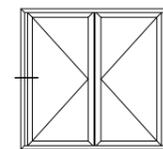
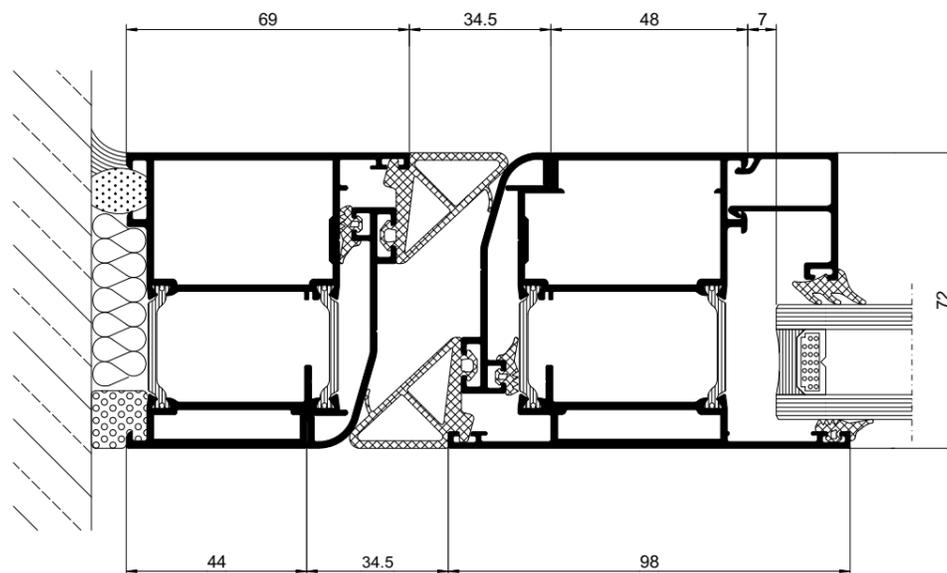
Outward Opening

Standard Door Low Threshold



H53-07
Viewed Externally

Finger Guard Door Hinge Jamb



H55-14
Viewed Externally



Portobello Square, London
Architect: PRP Architects

Supporting Your Projects



Authorities

- ISO 9001
Quality Management System
- BS EN 12020
Extruded precision aluminium profiles
- BS EN 12206-1
Paint and varnishes. Coating of aluminium and aluminium alloys for architectural purposes
- BS 3987
Specification for anodic coatings
- BS 6375 Part 1
Classification for weathertightness
- BS 6375 Part 2
Classification for operation and strength characteristics
- BS 6375 Part 3
Classification for additional performance characteristics
- BS 4873
Specification for aluminium alloy windows and doorsets
- PAS 24
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

Established in the UK for over 50 years and powder coating profiles at its Runcorn base for 40 years, Kawneer has deep knowledge and experience in the specification and application of colour and paint systems.

The existing powder coating facility was converted to 'chrome free' – the first existing plant in the UK to be upgraded to this environmentally friendlier pre-treatment system – which gave Kawneer additional impetus to become a QUALICOAT approved applicator.

Quality and consistency of quality continues to be the main feature of QUALICOAT UK & Ireland, which includes third party testing of all certified powder formulations and pre-treatment systems that make up the QUALICOAT approval process. Kawneer has achieved 'Seaside' specification standard with this third party accreditation programme.

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@arconic.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 Arconic Building and Construction Systems, and enjoys the extensive resources of the entire Arconic 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.

Canolfan S4C Yr Egin, University of Wales, Carmarthen

Architect: BDP

Photo: © Craig Auckland/fotohaus

