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Other brochures available on request from Kawneer are:

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



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
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Door Systems



Eastleigh Borough Council, Eastleigh, Hampshire
Architect: Stride Treglown
Photo: Positive Image Photography

EASTLEIGH HOUSE

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Door Systems Product Selector

	190/350 Doors	AA®545 Swing Door	AA®720 Door Systems	10D Door
Applications				
New Build	■	■	■	■
Refurbishment	■	■	■	■
Heavy Commercial	■			
Key Features				
Finger Guard Option	■	■	■	■
Dual Colour Option		■	■	
Triple Glazing		■	■	
Internal or External 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	■	■	■	■
Performance				
Weather Performance (BS 6375)		■	■	
Security to PAS 24:2016	■	■	■	
Document L Compliant		■	■	
Accessories				
Multi-point Locking		■	■	
Suitable for Automatic Operation	■		■+	
Panic Exit Hardware	■	■	■	■

Notes:

- * Including Framing
- + Contact the Technical Services Department at Runcorn for advice

The Grange School, Runcorn, Cheshire
Architect: Aedas Architects



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 any application 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 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

190 An all purpose narrow style door.

350 A heavy duty door for use in especially heavy traffic areas.

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.

10D Designed to offer flexibility in design, durability and ease of installation.

Door and Entrance Systems Characteristics/Regulations

System	Traffic Level	Finger Guard	PAS 24 Single & Double Leaf	Thermal Compliance	Compatibility with Kawneer Curtain Wall	Guarantee
190 Commercial Entrance Door	Heavy	✓	✓		✓	Lifetime
350 Commercial Entrance Door	Severe	✓			✓	Lifetime
AA®545 Swing Door	Medium	✓	✓	✓*	✓	
AA®720 Door Systems	Heavy	✓	✓	✓*	✓	
10D Commercial Entrance Door	Light/Medium	✓			✓	

* Can meet current Building Regulations

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
190 Narrow Style 350 Heavy Duty 10D Door AA®545 AA®720 AA®720 FR	Light	Secondary external doorsets to dwellings
190 Narrow Style 350 Heavy Duty 10D Door 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)}
190 Narrow Style 350 Heavy Duty AA®720 ^{C)} AA®720 FR ^{C)}	Heavy	Doorsets for shops, hospital wards and other buildings which provide access to designated public areas
350 Heavy Duty	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.

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Trumpington Meadows Primary School, Cambridge

Photo: Willmott Dixon/Yellowdoor Studios



190/350 Doors

Introduction

Kawneer design, engineer and manufacture complete door systems for any application. High standards of processing ensure equally high standards of performance throughout the lifetime of Kawneer products.

190 Narrow Style

All-purpose door, recommended for use in heavy traffic areas and automatic entrances. The 190 Door can be installed with the 'Finger Guard' option, which safeguards against injury to fingers accidentally caught between the hinge stile and frame.

350 Heavy Duty

A heavy duty door which provides extra width stiles for accommodation of varying lock options and heavy aesthetic appearance, providing the durability needed in high traffic areas.

Product Features and Benefits

- 190 Door independently tested to PAS 24 Standard - Enhanced security performance of single and double leaf external doors
- 'Dual Moment' welded door construction, supported by a Kawneer Lifetime Guarantee offering peace of mind
- Finger Guard Options (standard option on 190) - Protects against trapped fingers when opening and closing, a child-friendly feature
- A robust door suitable for medium, heavy and severe duty applications
- Internal and external applications offering flexibility of design
- Single, double action, auto swing and bi-parting doors, offering flexibility for a wide range of solutions

- A wide range of thresholds including low thresholds - Document M compliant
- Special profiles available – Powered operation

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.

'Dual Moment' Corner Construction

The 'Dual Moment' welded corner is the strongest aluminium door construction available. All four corners are welded four times and fastened mechanically. Rigorous testing has verified its durability and exceptional strength.

Security*

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

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



Penarth Learning Community College
Architect: HLM Architects
Photo: Trevor Burrows

190 Heavy Duty and 350 Severe Duty Commercial Entrance Door Product Details

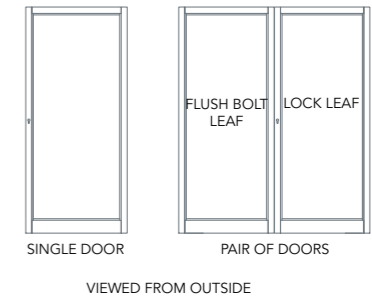
The 190 Heavy Duty Commercial Entrance Door

It meets virtually all construction requirements. A slender look is attained by a 54mm vertical stile, a 57mm top rail and a 98.5mm bottom rail.

The 350 Severe Duty Commercial Entrance Door

The '350' door provides extra width stiles for accommodation of varying lock options and heavy aesthetic appearance.

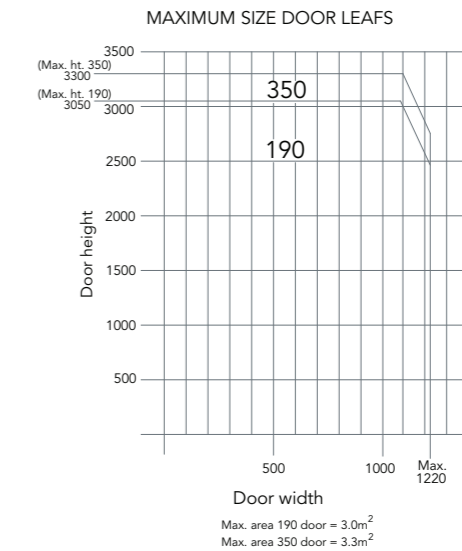
Verticals are 89mm, top rails are 89mm and the bottom rail is 165mm, each providing the durability needed in high traffic zones.



APPLICATION CRITERIA

- Larger doors should use a door closer with a good back check action.
- When a door exceeds 2438mm in height, a cross rail or push bar should be used to reinforce the vertical stiles.
- When an offset hung door exceeds 2286 in height, an intermediate butt or offset pivot should be used.
- Tall doors should be prevented from racking by proper utilisation of hardware, including door closers, door holders and door stops.
- When strong winds prevail latches should always be fitted. Door closers are not intended to hold doors in the closed position.

NOTE
Some of these criteria are of a subjective nature. Contact our technical helpline for application assistance.



Swing Door Selection Guide

Doors	Hinging Options			Closer Options			Exit Device Options Concealed Rod		Glazing Options	
	Butt Hinges	Offset Pivots	Centre Pivots	Surface Mounted	Conc'd O'Head	Floor Spring	Standard	Mid-Panel	Single	Double
190 Heavy Duty Commercial Entrance Door	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
350 Severe Duty Commercial Entrance Door	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

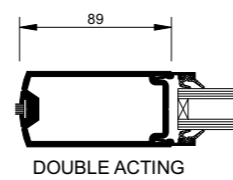
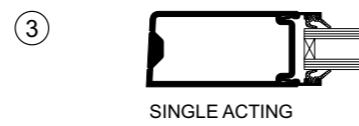
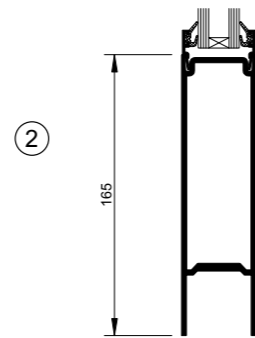
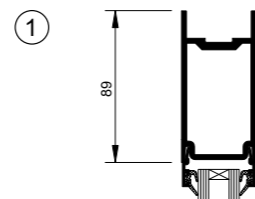
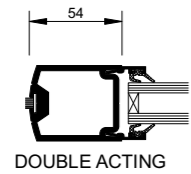
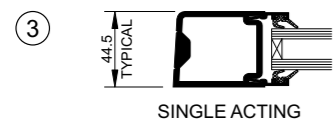
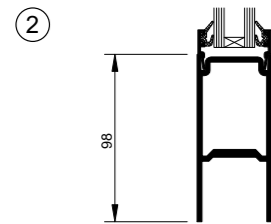
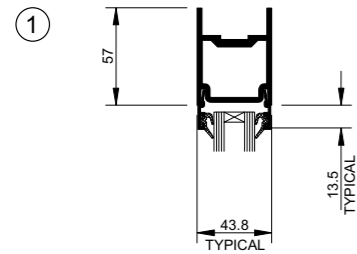
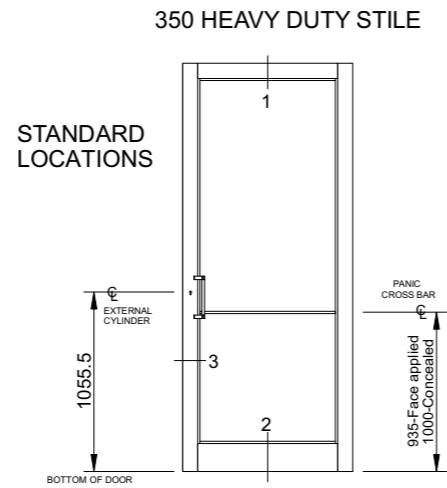
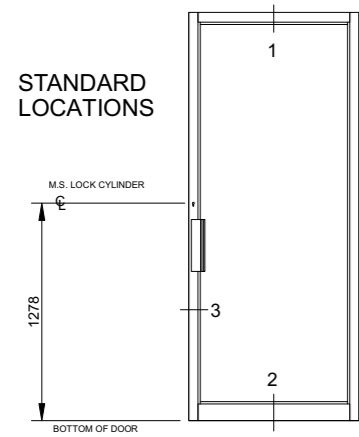
Proper entrance selection should take into consideration traffic use patterns, which include frequency of opening and anticipated abuse.

For further information contact the Technical Services Department at Runcorn.



190 Heavy Duty Commercial Entrance Door

350 Severe Duty Commercial Entrance Door



Eastleigh Borough Council, Eastleigh, Hampshire
 Architect: Stride Treglown
 Photo: Positive Image Photography



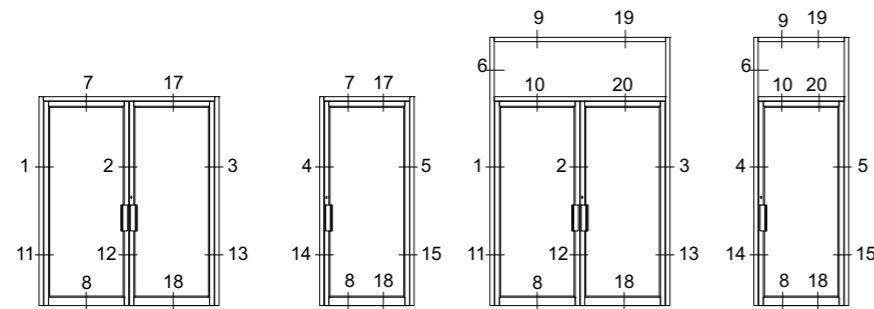
190 Heavy Duty and 350 Severe Duty Commercial Entrance Door Systems

Door Types and Section Dimensions 190 Heavy Duty Entrance Door Systems

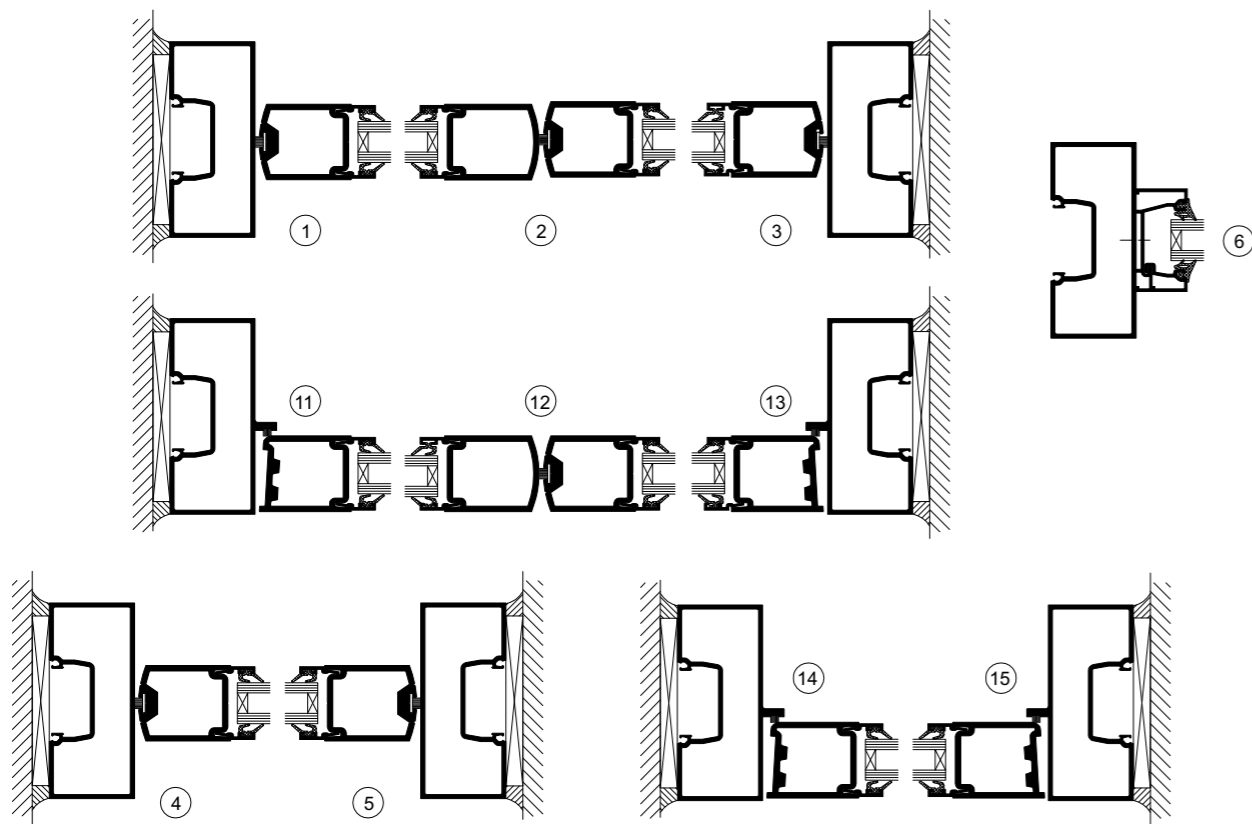
General Arrangements

190 Heavy Duty Commercial Entrance Door details are shown with 451PT Framing Systems. Other Kawneer framing and curtain wall systems may be used.

For further information contact our Technical Services Department at Runcorn.



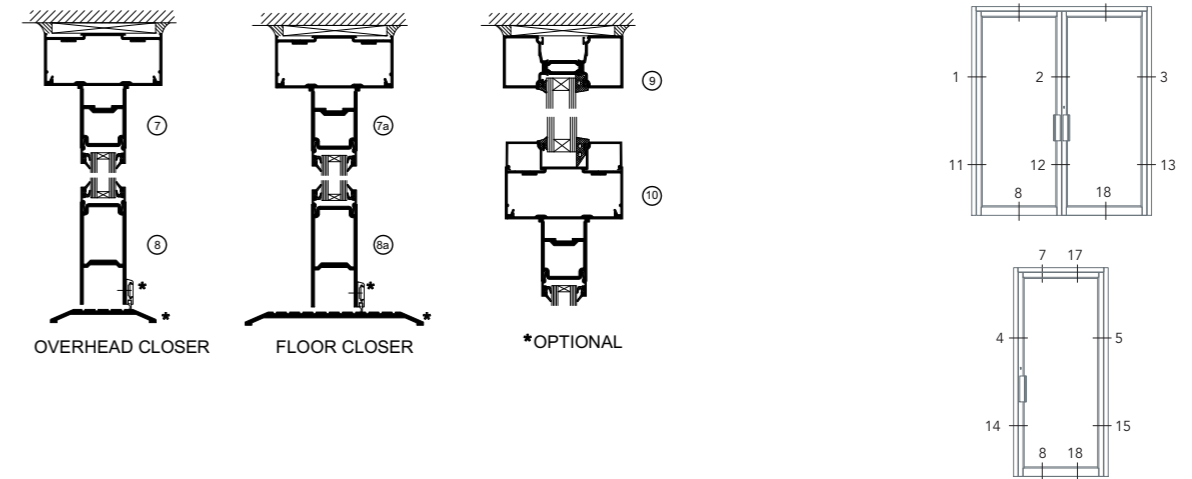
N.B. - SECTION DETAILS 1 TO 10 - DOUBLE ACTING DOORS
- SECTION DETAILS 11 TO 20 - SINGLE ACTING DOORS



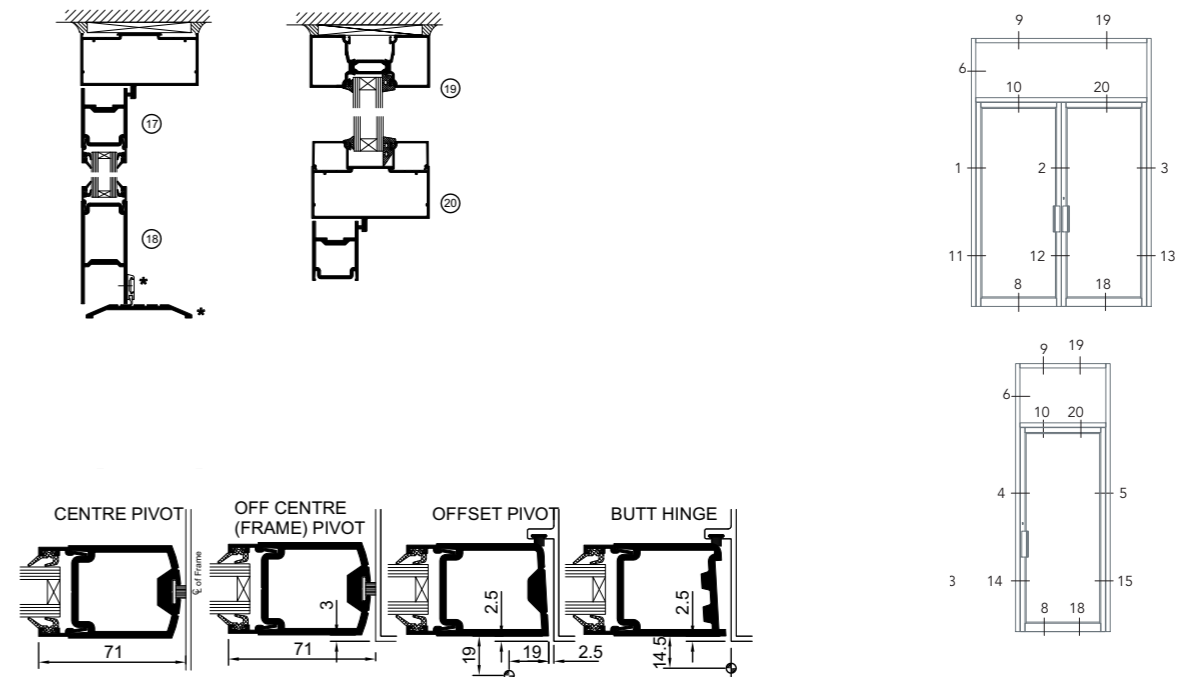
190 Heavy Duty Commercial Entrance Door Systems into 451PT Framing

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

Double Acting Doors

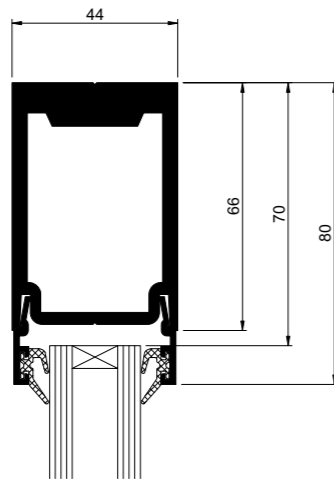


Single Acting Doors



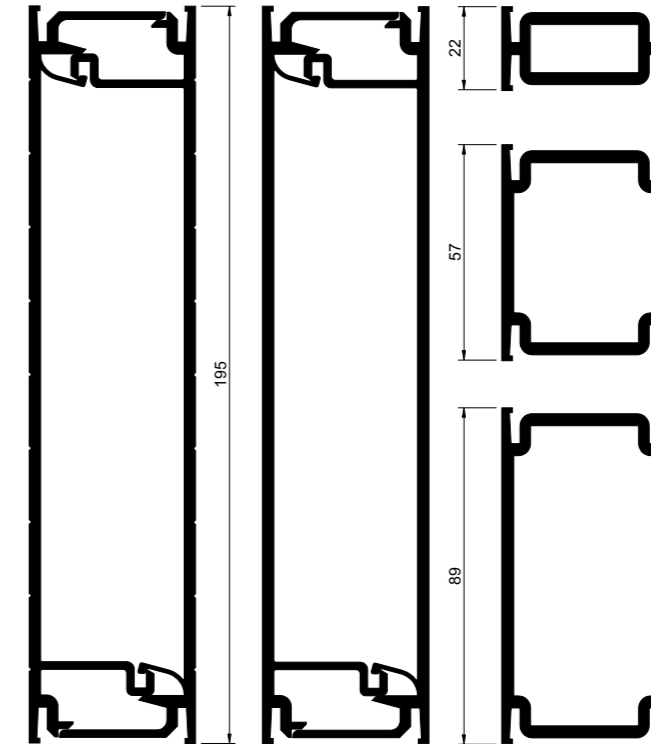
190 Heavy Duty Commercial Entrance Door Automatic Sliding Door Head Detail

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

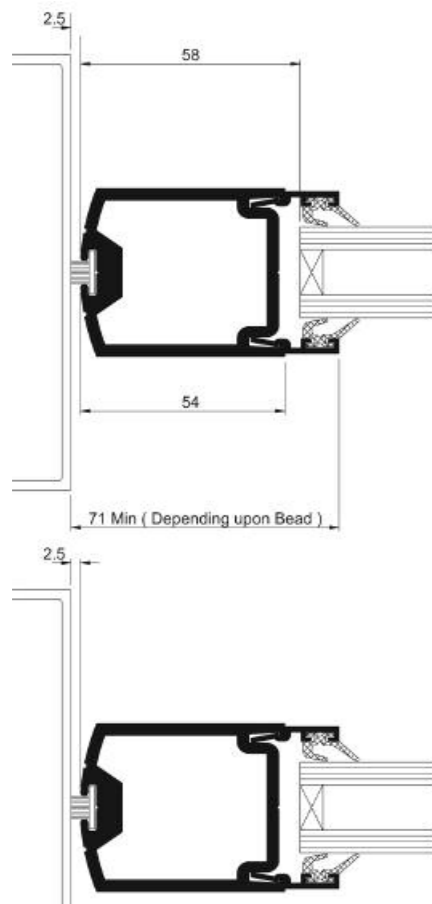


190 Heavy Duty and 350 Severe Duty Commercial Entrance Door Midrail Options

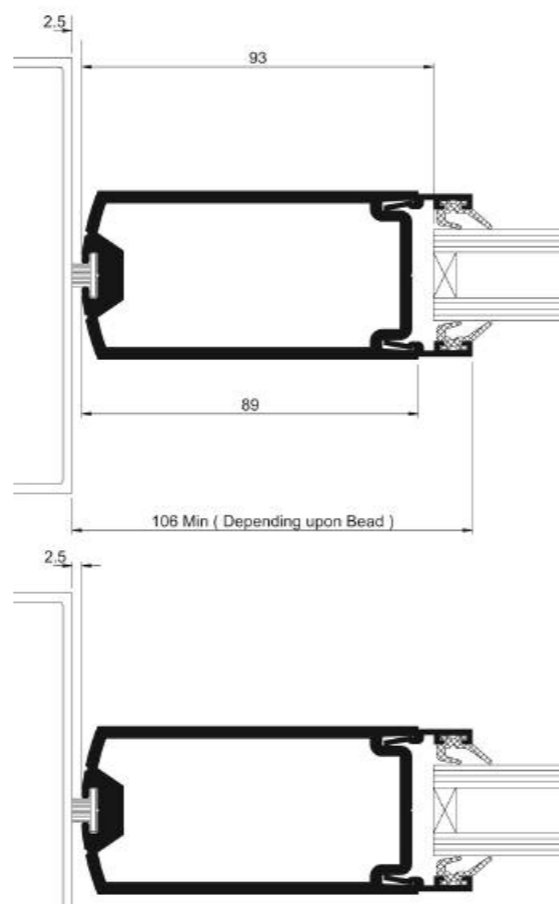
Full details can be downloaded from our website www.kawneer.co.uk



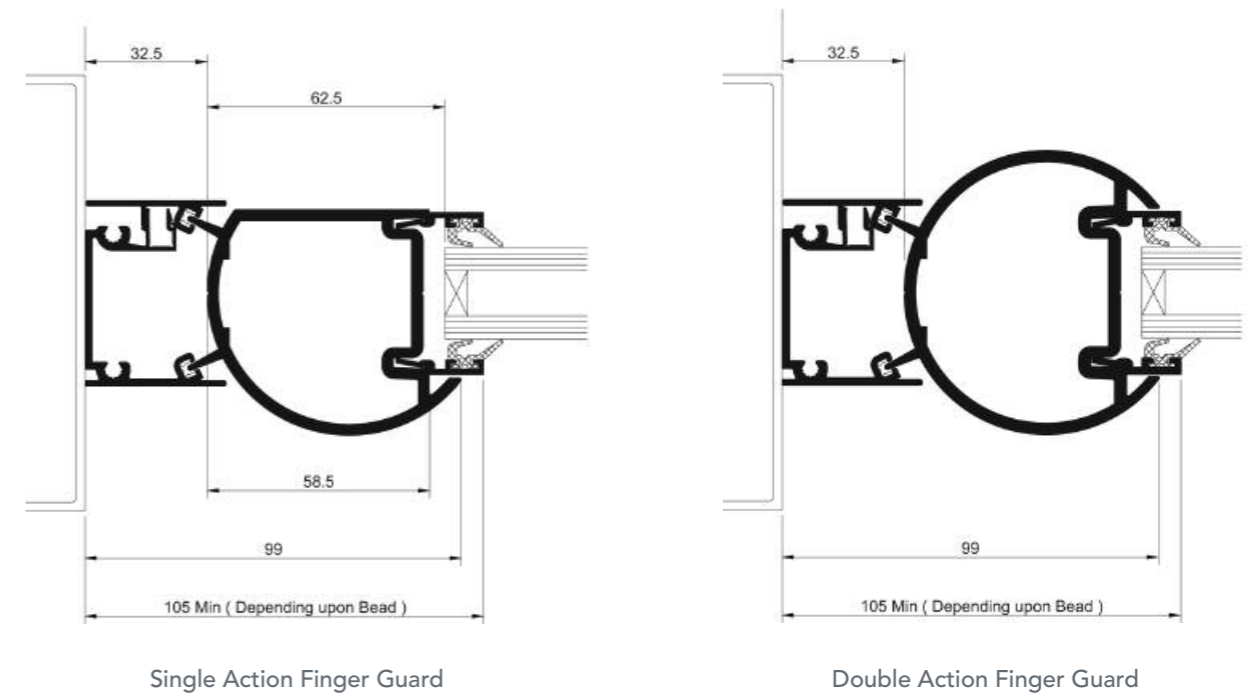
190 Heavy Duty Commercial Entrance Door Stiles



350 Severe Duty Commercial Entrance Door Stiles



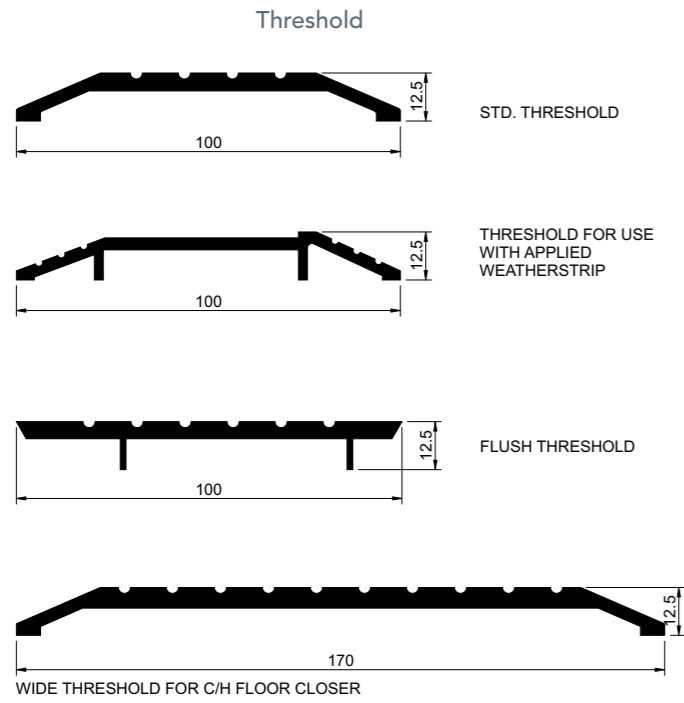
190 Heavy Duty and 350 Severe Duty Commercial Entrance Doors Safety Options



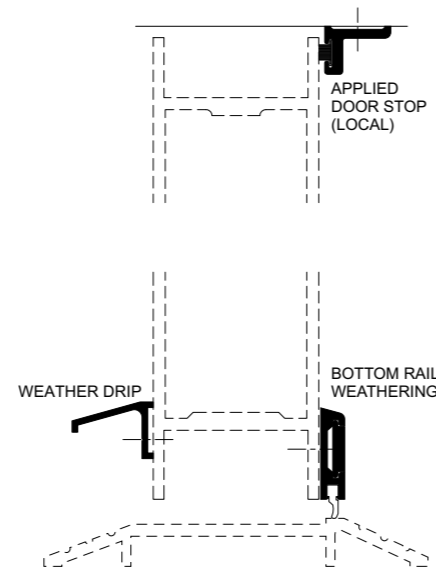
190 Heavy Duty and 350 Severe Duty Commercial Entrance Doors

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

Weathering and Threshold Options

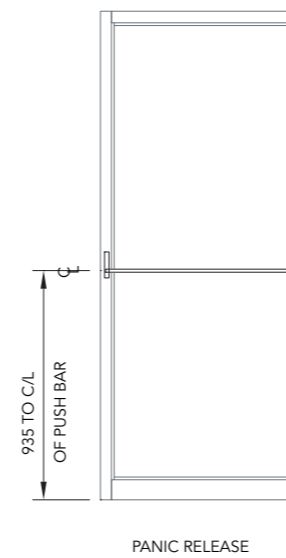
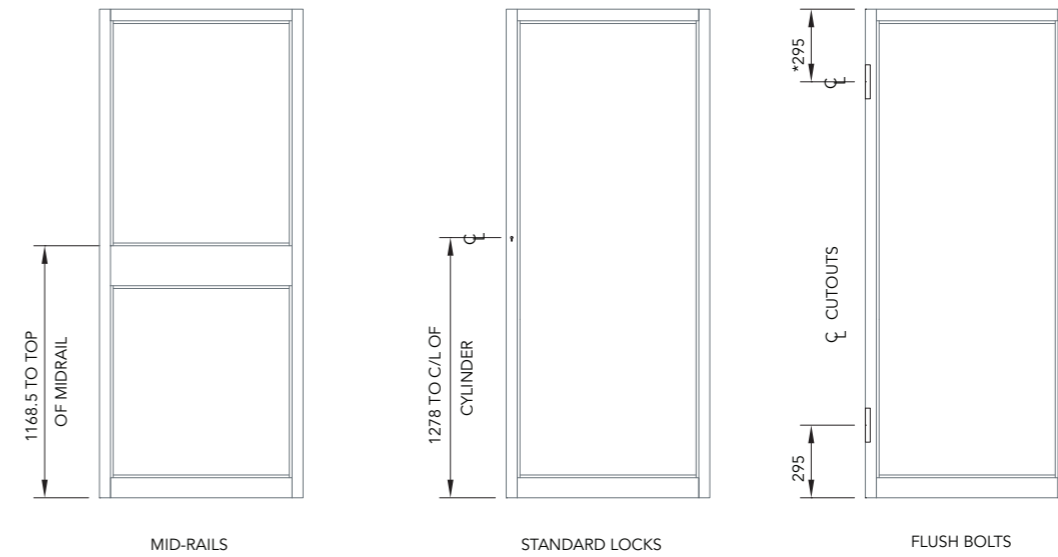


Applied Weathering Options



90 Hills Road, Cambridge
Architect: Barber Casanovas Ruffles

Typical Hardware Locations on Standard 190 Heavy Duty and 350 Severe Duty Commercial Entrance Doors



All sizes are from bottom (or top) of door leaf

Overhead Concealed Door Closer



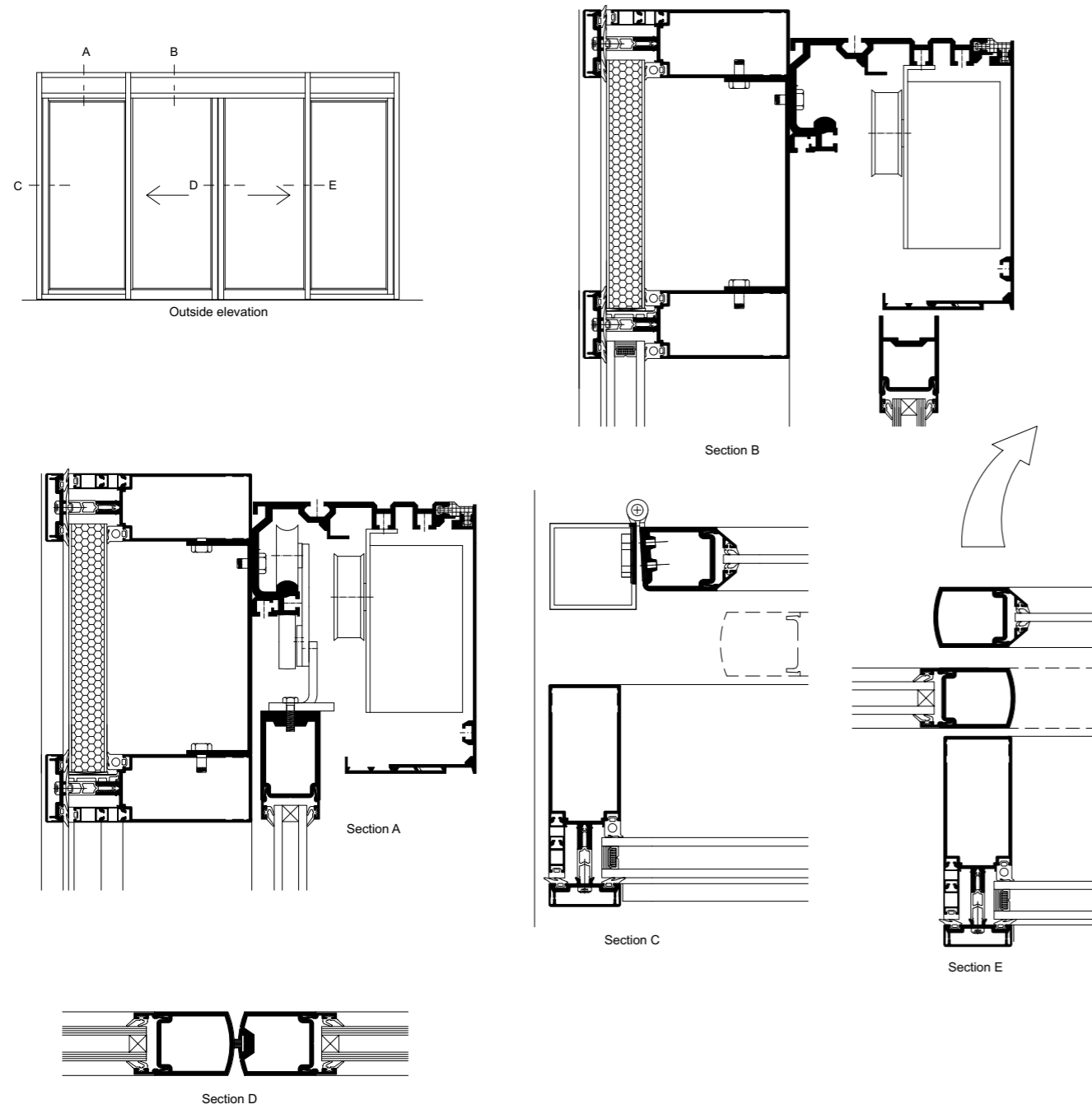
Surface Applied Door Closer



Surface mounted door closers for single action doors



190 Heavy Duty and 350 Severe Duty Doors and Framing Systems Automatic Bi-parting
Typical Details



The Shields Centre, East Pollokshields, Glasgow
Architect: Anderson Bell Christie Architects

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.*

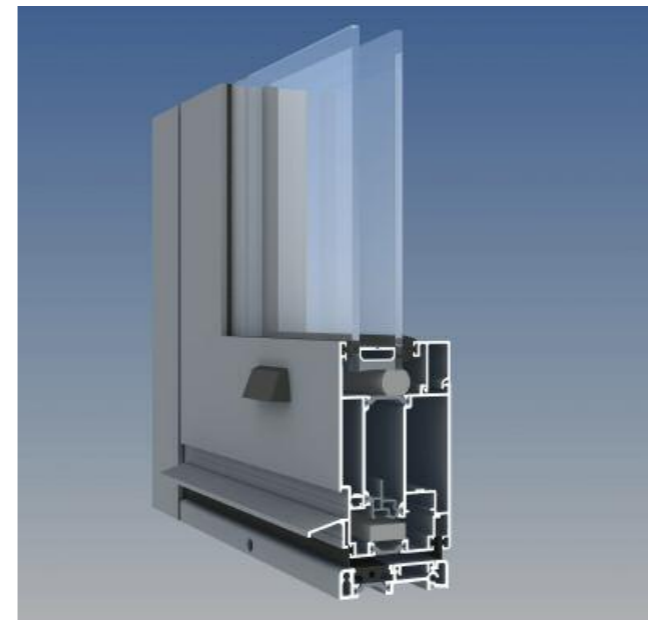


Independently Weather Performance Tested to BS 6375-1: 2015

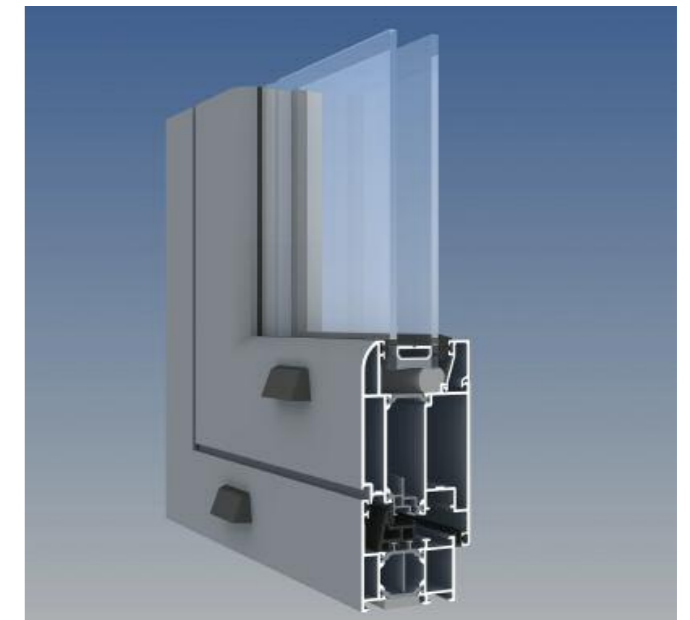
	Air Infiltration BS EN 12207: 2000	Watertightness BS EN 12208: 2000	Wind Resistance BS EN 12210: 2000
AA®545 Swing Door*	Class 3 (600 Pa)	Class E750 (750 Pa)	Class CE2400 (2400 Pa)

* 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)



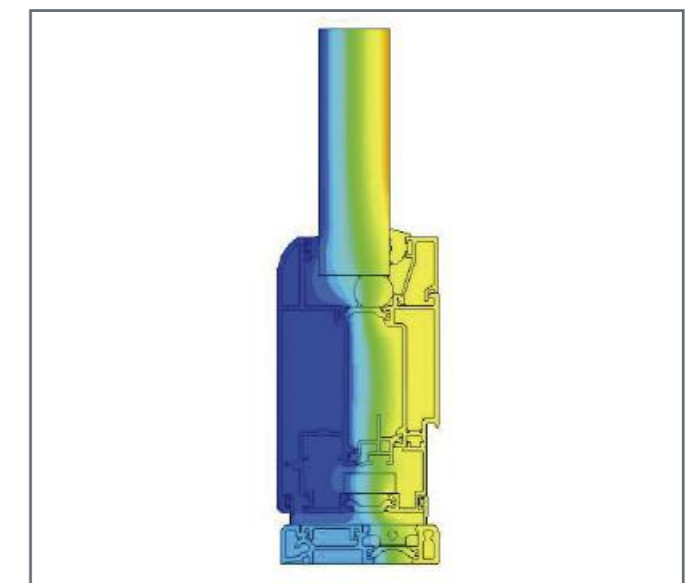
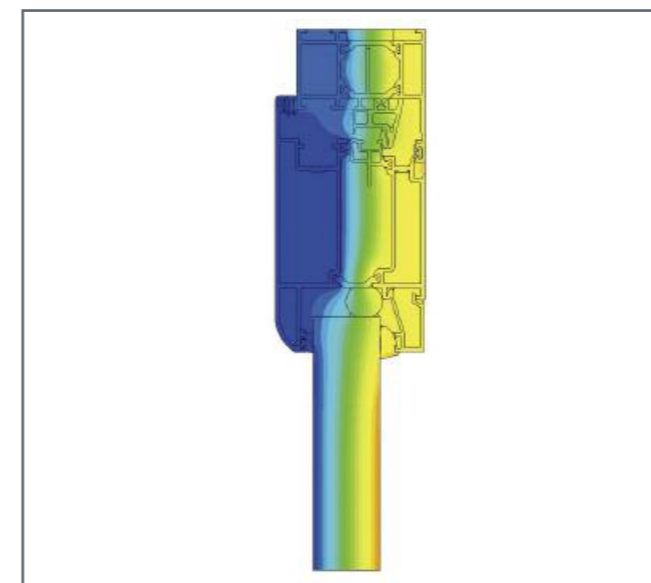
AA®545 Swing Door - Softline Option (Frame All Around Option)

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

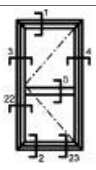
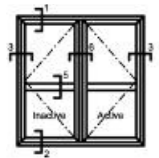
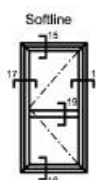
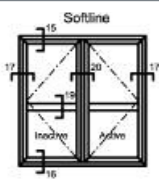
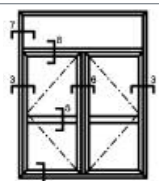
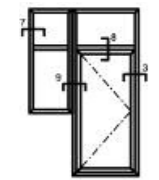
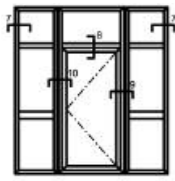
Single - Open Out - Low Threshold	Centre Pane Ug W/m²K	
Whole Door Uw	1.1 W/m²K	0.6 W/m²K
	1.61 W/m²K	1.29 W/m²K

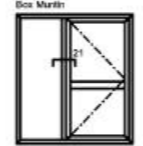
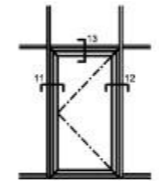
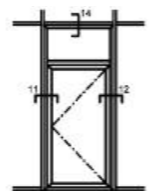


AA[®]545 Swing Door

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 2 Threshold 3 Hinge Jamb 4 Lock Jamb 5 Midrail	H1 03.01 H1 04.01, H1 05.01, H1 06.01 H1 07.01 H1 08.01 H1 09.01	H2 03.01 H2 04.01, H2 05.01, H2 06.01 H2 07.01 H2 08.01 H2 09.01
	1 Head 2 Threshold 3 Hinge Jamb 5 Midrail 6 Meeting Stile	H1 03.01 H1 04.01, H1 05.01, H1 06.01 H1 07.01 H1 09.01 H1 10.01	H2 03.01 H2 04.01, H2 05.01, H2 06.01 H2 07.01 H2 09.01 H2 10.01
	15 Head 16 Threshold 17 Hinge Jamb 18 Lock Jamb 19 Midrail	H1 21.01 H1 22.01, H1 23.01, H1 24.01 H1 25.01 H1 26.01 H1 27.01	H2 21.01 H2 22.01, H2 23.01, H2 24.01 H2 25.01 H2 26.01 H2 27.01
	15 Head 16 Threshold 17 Hinge Jamb 19 Midrail 20 Meeting Stile	H1 21.01 H1 22.01, H1 23.01, H1 24.01 H1 25.01 H1 27.01 H1 28.01	H2 21.01 H2 22.01, H2 23.01, H2 24.01 H2 25.01 H2 27.01 H2 28.01
	2 Threshold 3 Hinge Jamb 5 Midrail 6 Meeting Stile 7 Fanlight Jamb 8 Door Head/Fanlight Transom	H1 04.01, H1 05.01, H1 06.01 H1 07.01 H1 09.01 H1 10.01 H1 11.01 H1 12.01	H2 04.01, H2 05.01, H2 06.01 H2 07.01 H2 09.01 H2 10.01 H2 11.01 H2 12.01
	3 Hinge Jamb 7 Fanlight Jamb 8 Door Head/Fanlight Transom 9 Coupled Flag Frame/Lock Jamb	H1 07.01 H1 11.01 H1 12.01 H1 13.01	H2 07.01 H2 11.01 H2 12.01 H2 13.01
	7 Fanlight Jamb 8 Door Head/Fanlight Transom 9 Coupled Frame/Lock Jamb 10 Coupled Frame/Hinge Jamb	H1 11.01 H1 12.01 H1 13.01 H1 14.01, H1 15.01	H2 11.01 H2 12.01 H2 13.01 H2 14.01, H2 15.01

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

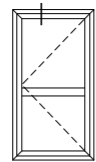
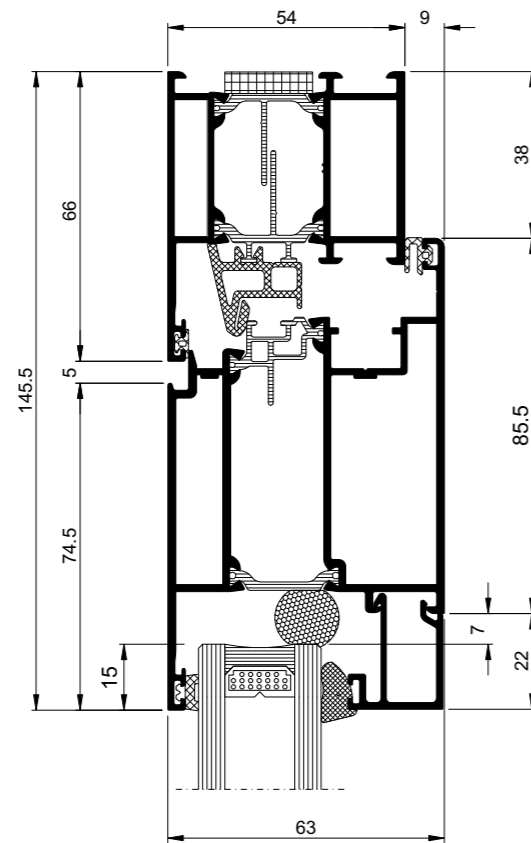


AA®545 Swing Door

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

Inward Opening

Head Detail



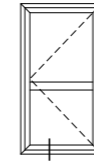
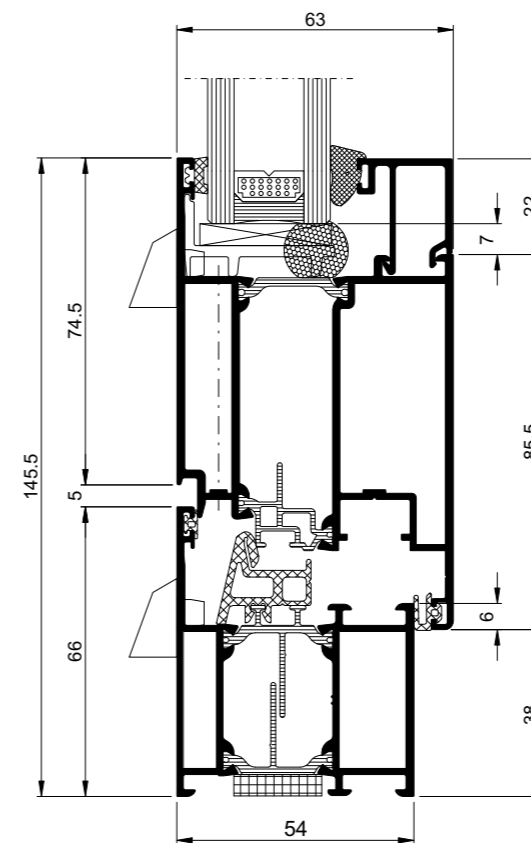
H1 03.01
Viewed Externally

AA®545 Swing Door

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

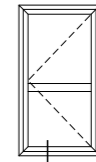
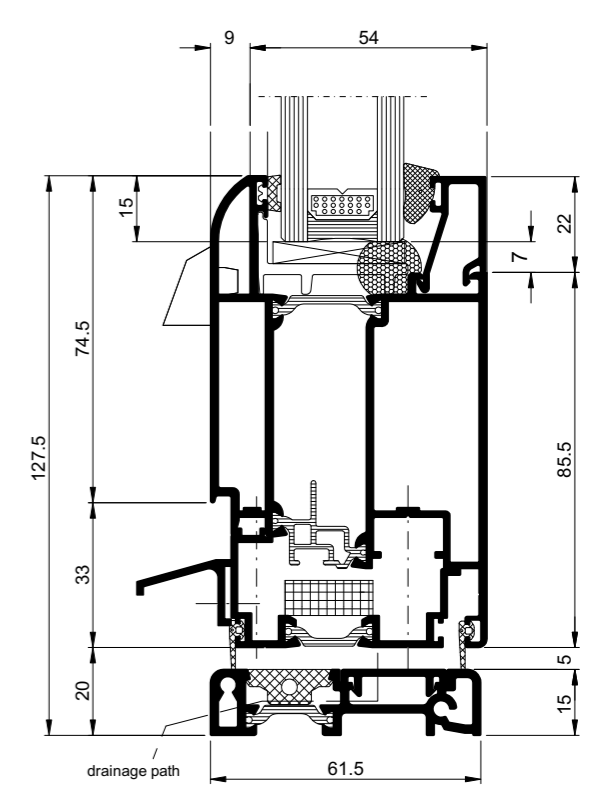
Inward Opening

Rebated Threshold



H1 06.01
Viewed Externally

Low Threshold Softline



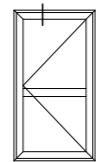
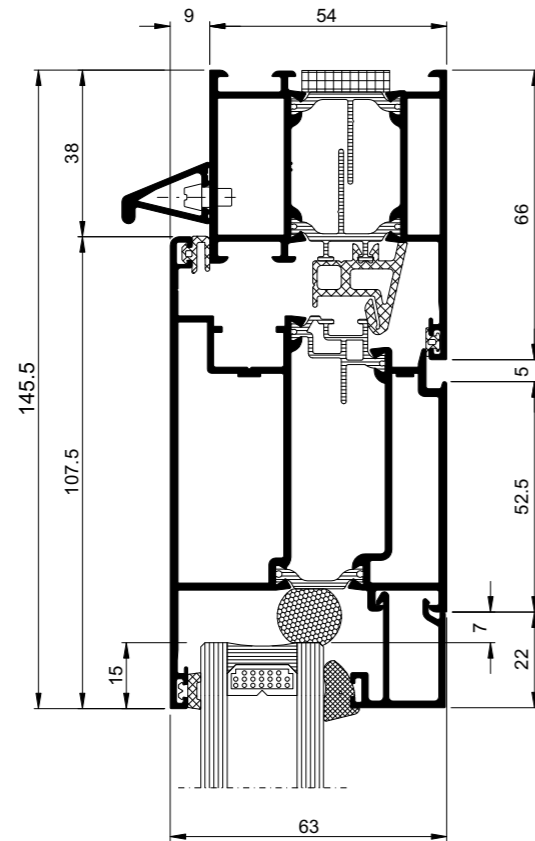
H1 22.01
Viewed Externally

AA®545 Swing Door

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

Outward Opening

Head Detail



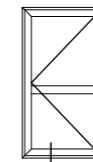
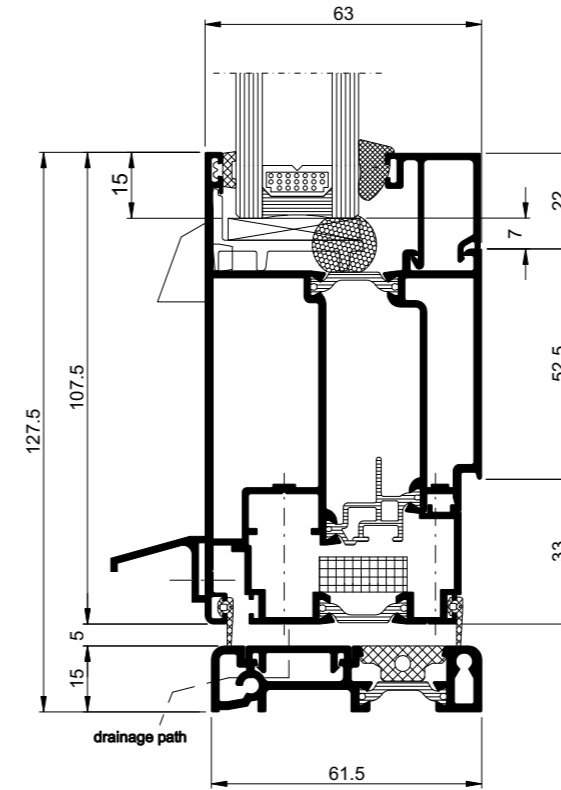
H2 03.01
Viewed Externally

AA®545 Swing Door

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

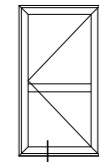
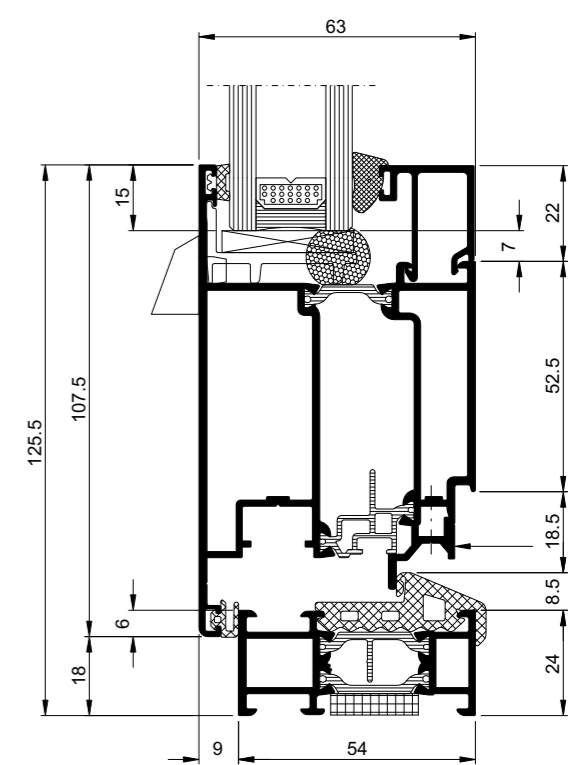
Outward Opening

Low Threshold



H2 04.01
Viewed Externally

Barrier Free Threshold



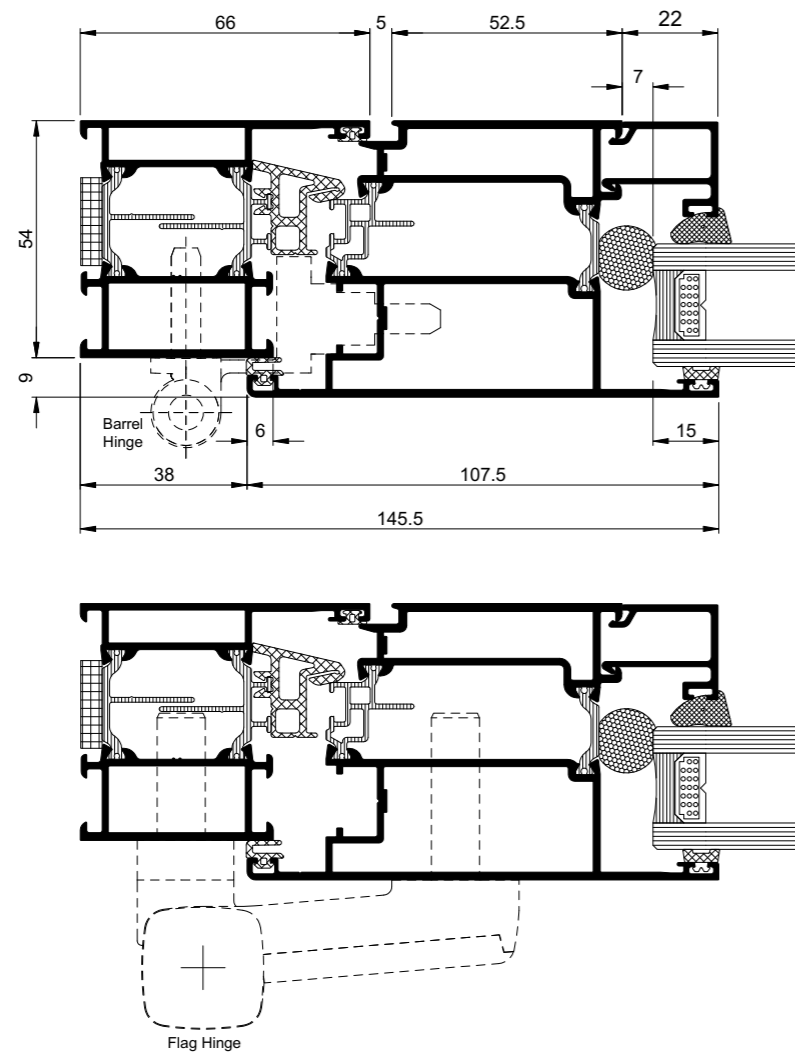
H2 05.01
Viewed Externally

AA®545 Swing Door

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

Outward Opening

Hinge Jamb Details



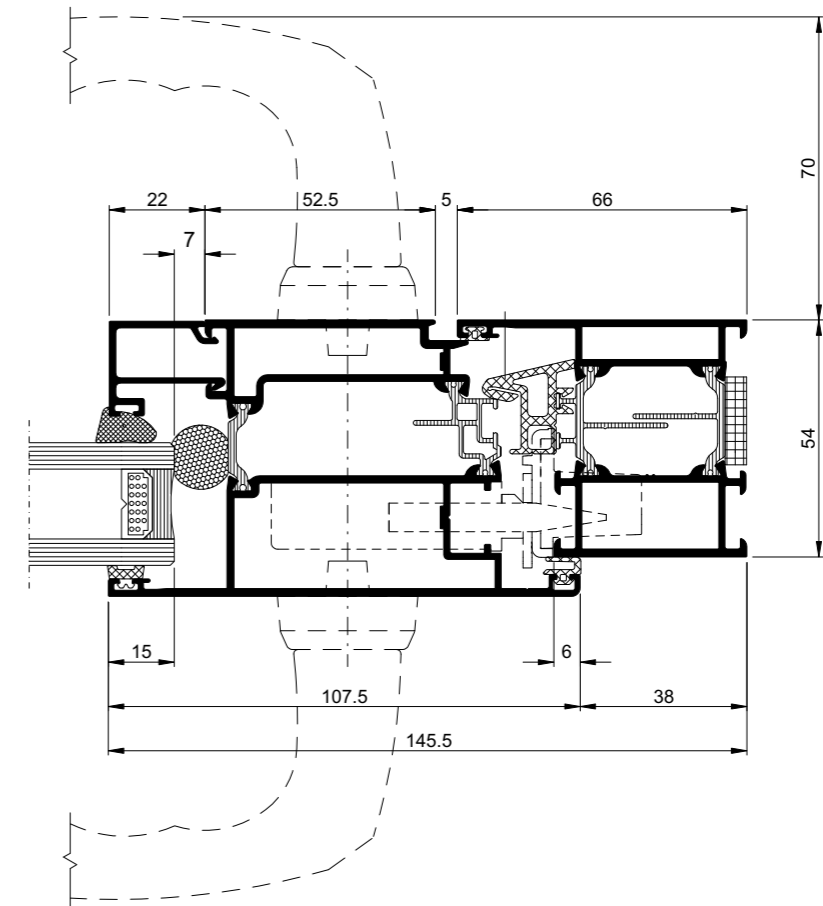
H2 07.01
Viewed Externally

AA®545 Swing Door

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

Outward Opening

Lock Jamb Detail



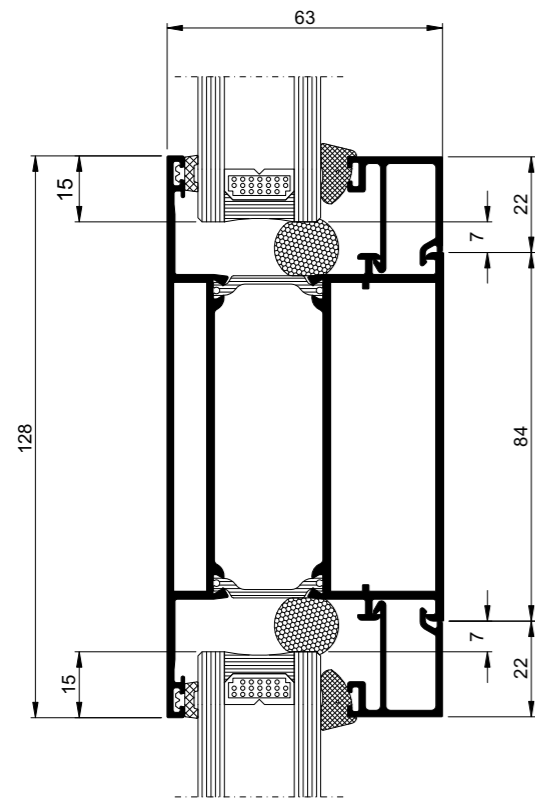
H2 08.01
Viewed Externally

AA®545 Swing Door

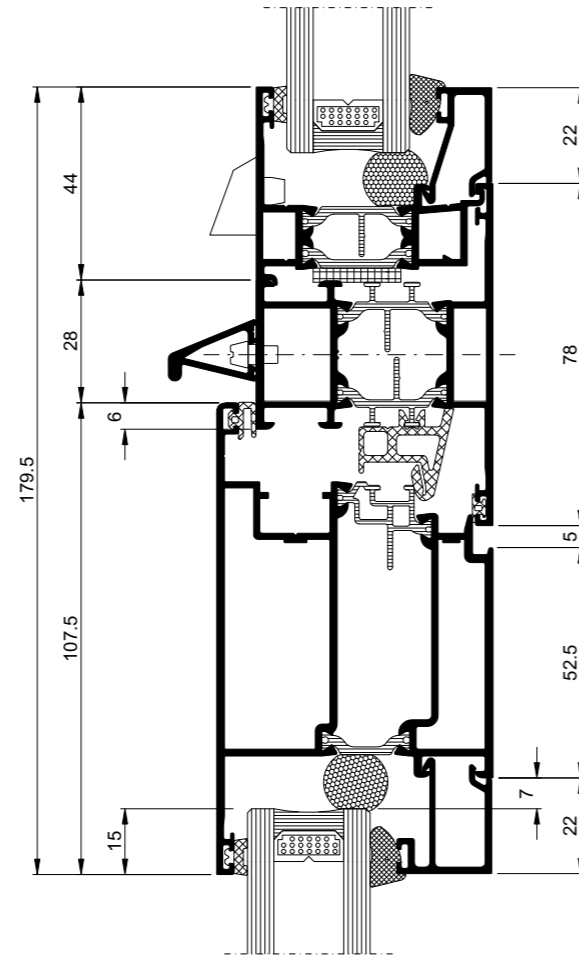
Full details can be downloaded from our website www.kawneer.co.uk

Outward Opening

Midrail Detail



Fixed Pane Fanlight

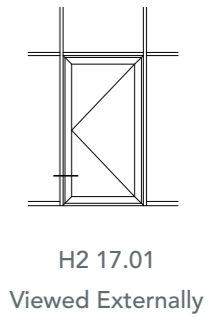
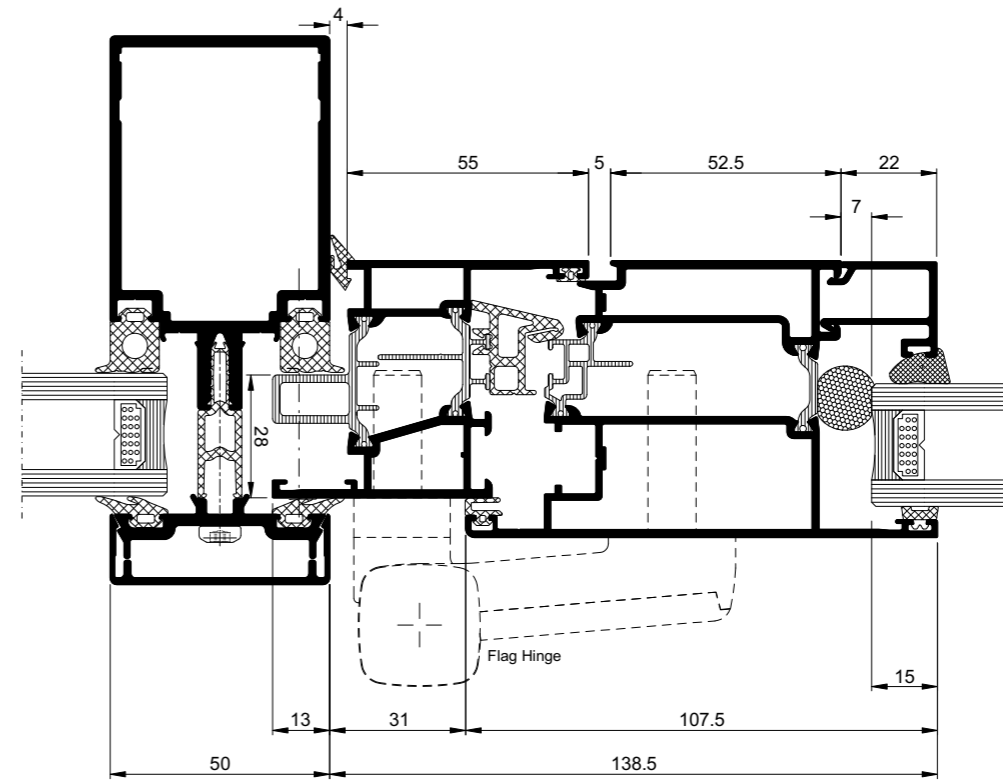


AA®545 Swing Door

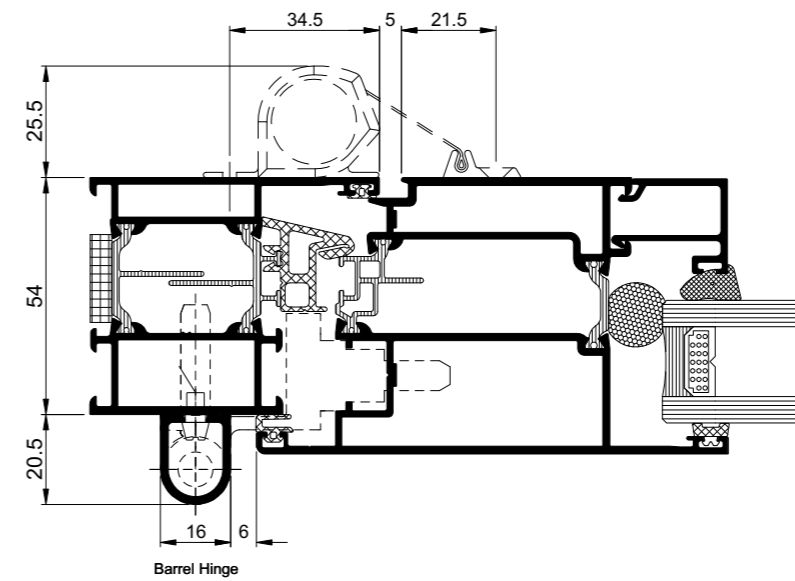
Full details can be downloaded from our website www.kawneer.co.uk

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 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 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.

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.

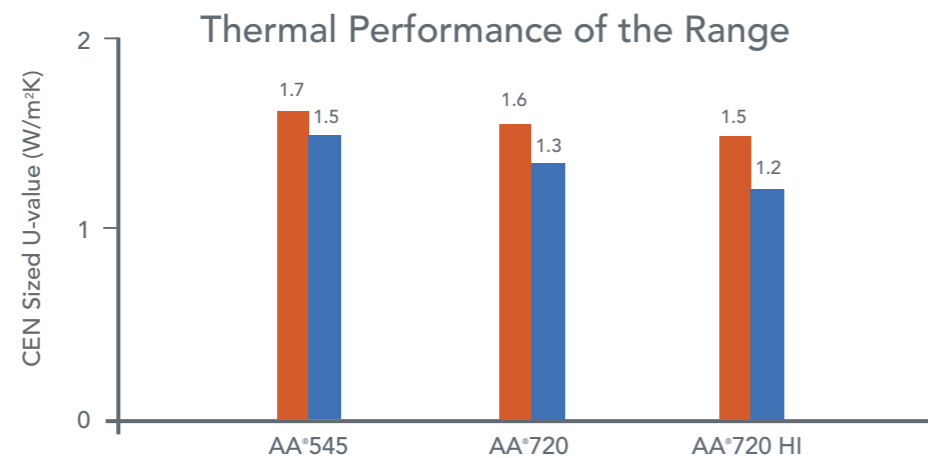
Glazing

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

* 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



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 H51-11, H51-13 H53-1, H53-5, H53-7 H51-14 H51-12, H51-15, H51-16 H51-11, H51-13 H51-22, H51-32 H51-22, H51-23 H53-4 H53-3 H55-14, H55-15 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 H51-20 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 H1-22, 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

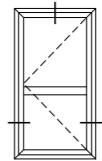
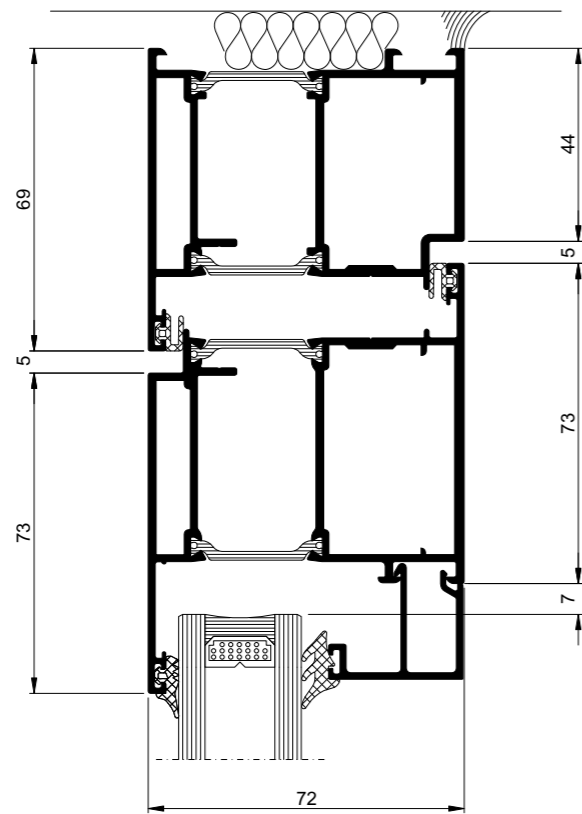


AA®720 Door Systems

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

Inward Opening

Head Detail



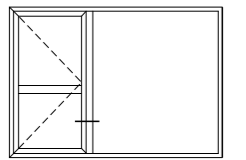
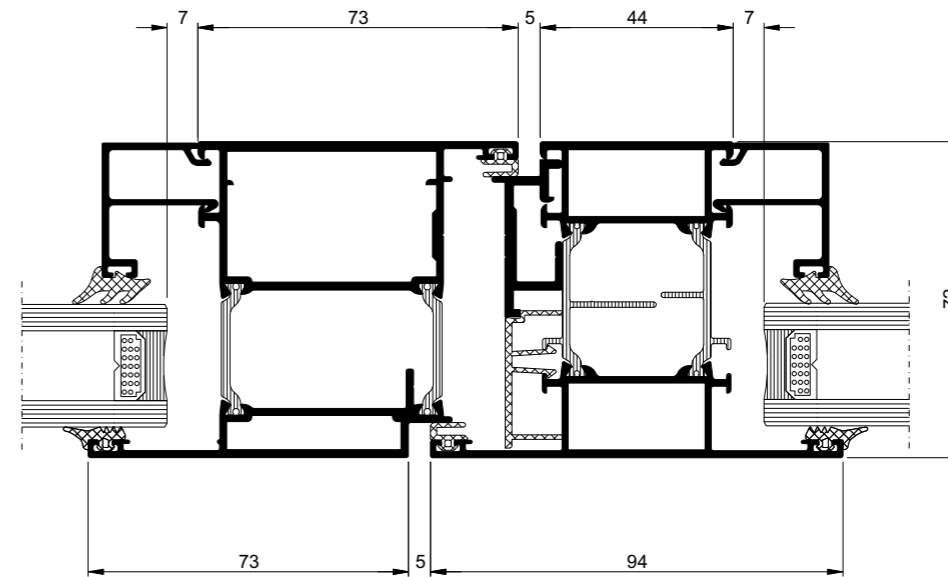
H51-11
Viewed Externally

AA®720 Door Systems

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

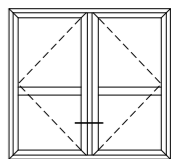
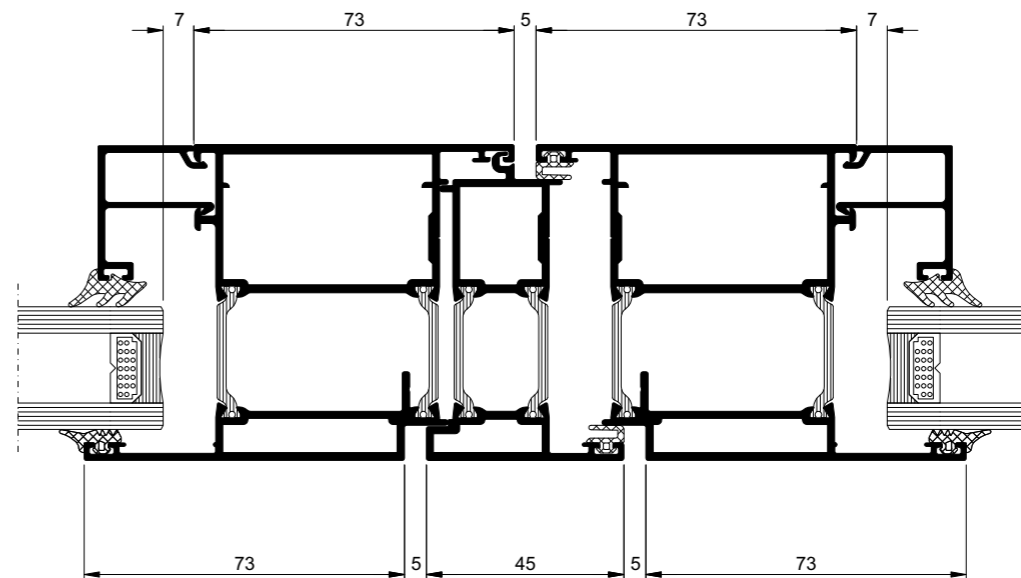
Inward Opening

Standard Door Side Light



H51-17
Viewed Externally

Standard Door Meeting Stile



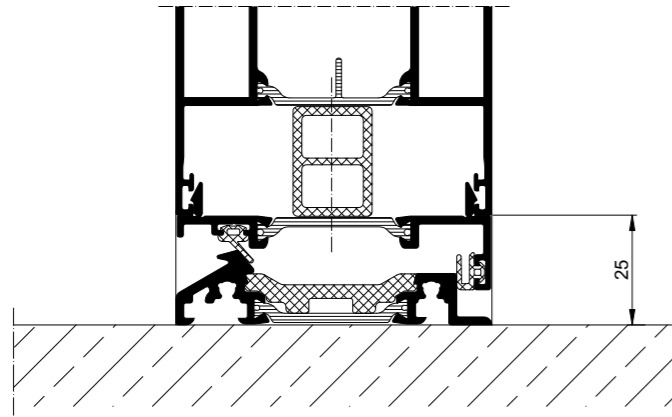
H51-23
Viewed Externally

AA®720 Door Systems

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

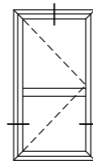
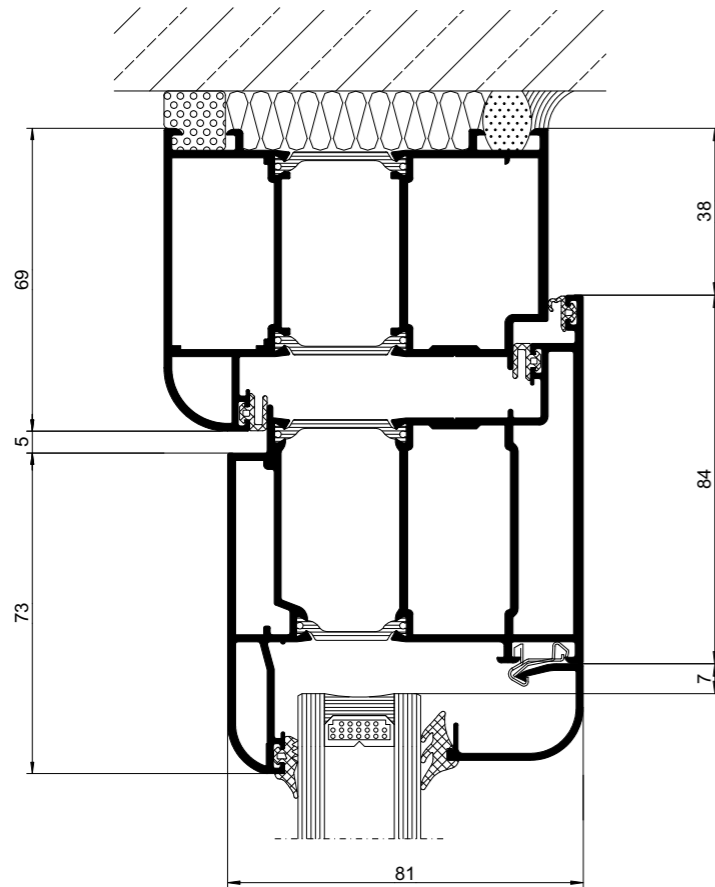
Inward Opening

Standard Door Threshold



H53-01
Viewed Externally

Design Door Head Detail



H61-11
Viewed Externally



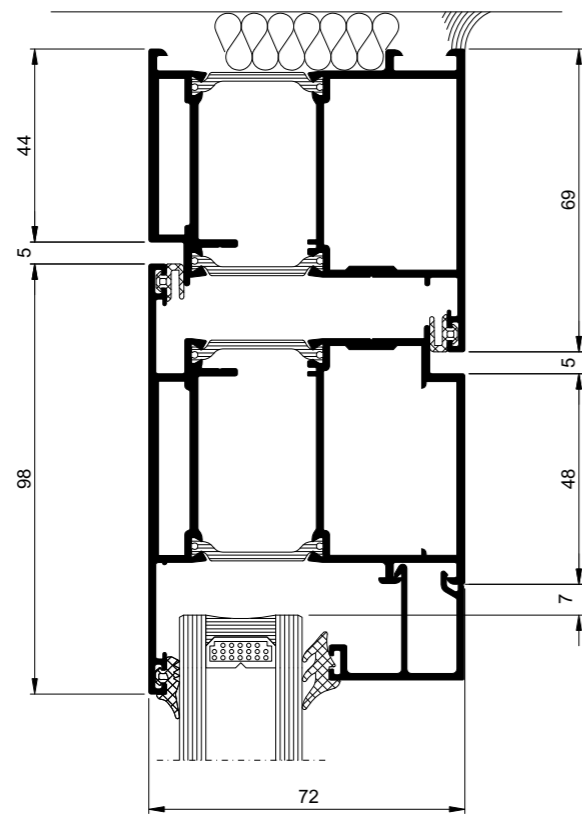
Kingston Riverside, London
Architect: Sprunt
Photo: Positive Image Photography

AA®720 Door Systems

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

Outward Opening

Head Detail

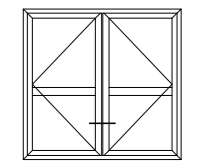
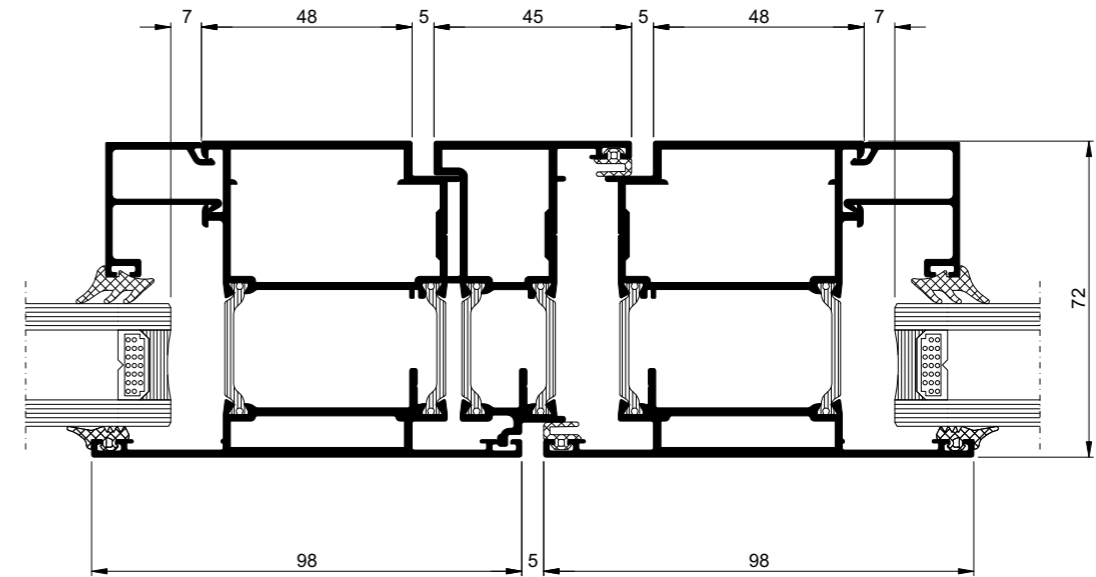


AA®720 Door Systems

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

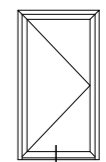
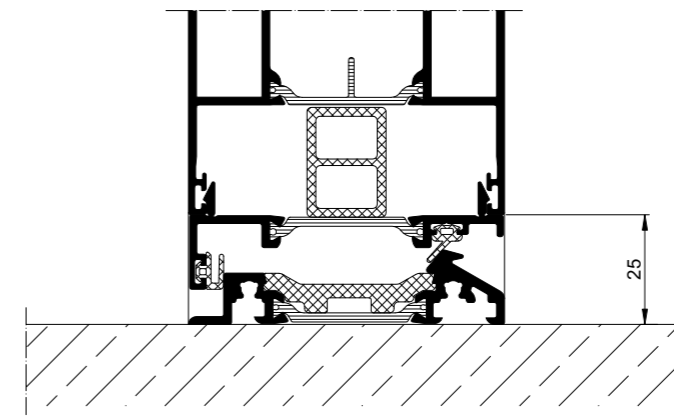
Outward Opening

Standard Door Meeting Stile



H51-32
Viewed Externally

Standard Door Threshold



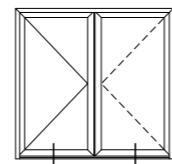
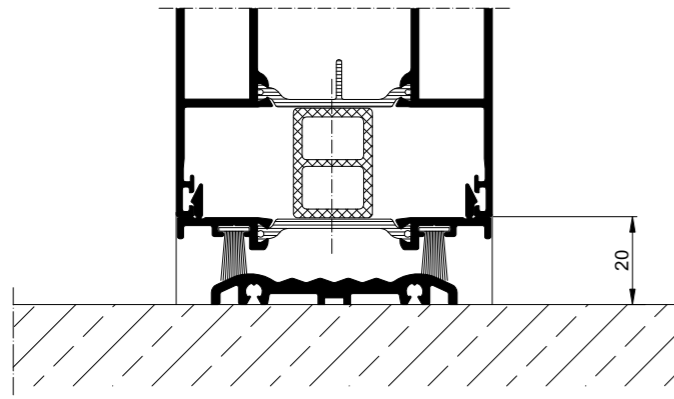
H53-02
Viewed Externally

AA®720 Door Systems

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

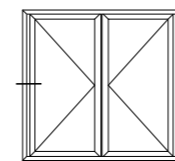
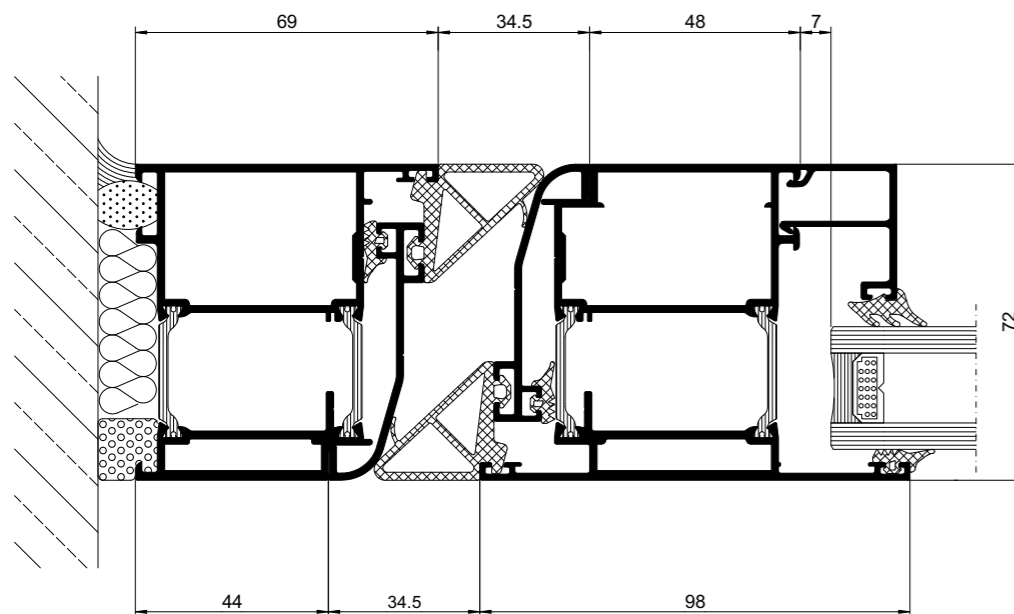
Outward Opening

Standard Door Low Threshold



H53-07
Viewed Externally

Finger Guard Door Hinge Jamb



H55-14
Viewed Externally



Portobello Square, London
Architect: PRP Architects

10D Door

Introduction

The 10D Door has been designed to offer flexibility in design, durability and ease of installation.

The strength of the tie rod construction means the door provides an economic solution to light/medium traffic applications in a variety of markets, including retail, commercial and public sectors.

Product Features and Benefits

- Commercial Entrance Door offering flexibility in design, durability and ease of installation
- Finger Guard Options - Protects against trapped fingers when opening and closing, a child-friendly feature
- Tie Rod Construction - Improves strength of construction

Size Limitations

Door Leaf Sizes (for all types)

Maximum Door Leaf Size

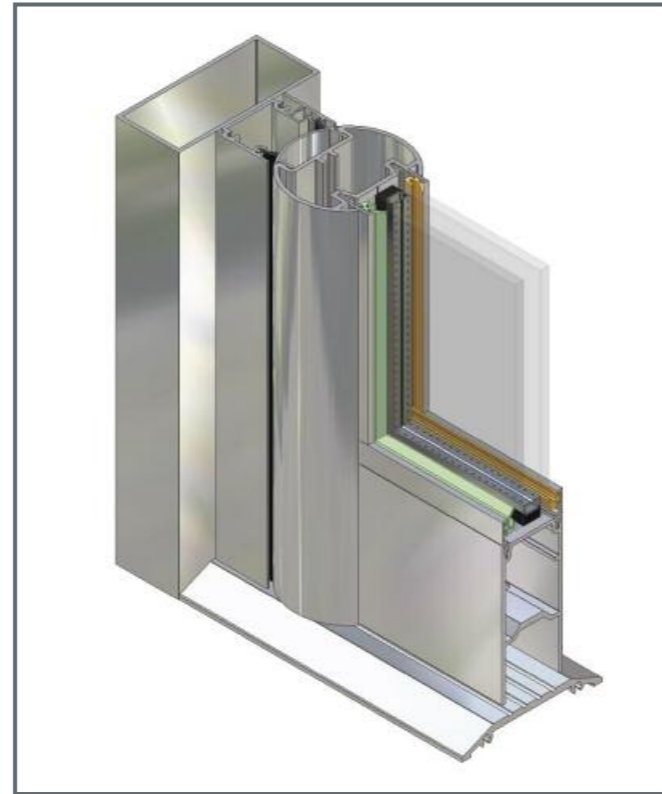
Height = 2200mm

Width = 1220mm

Area = 2.7m²

Minimum Door Leaf Size

Width = 450mm



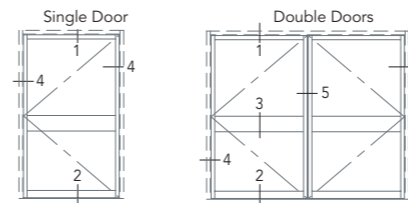
10D Finger Guard
(Finger Guard Options must have a threshold)

10D Door

Typical Elevations

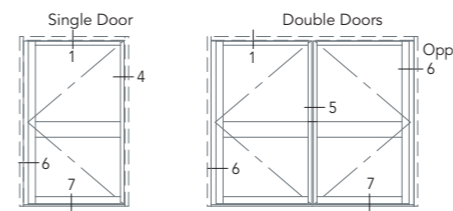
Full details can be downloaded from our website www.kawneer.co.uk

Standard Doors



Note: The standard doors can be used with or without a threshold.

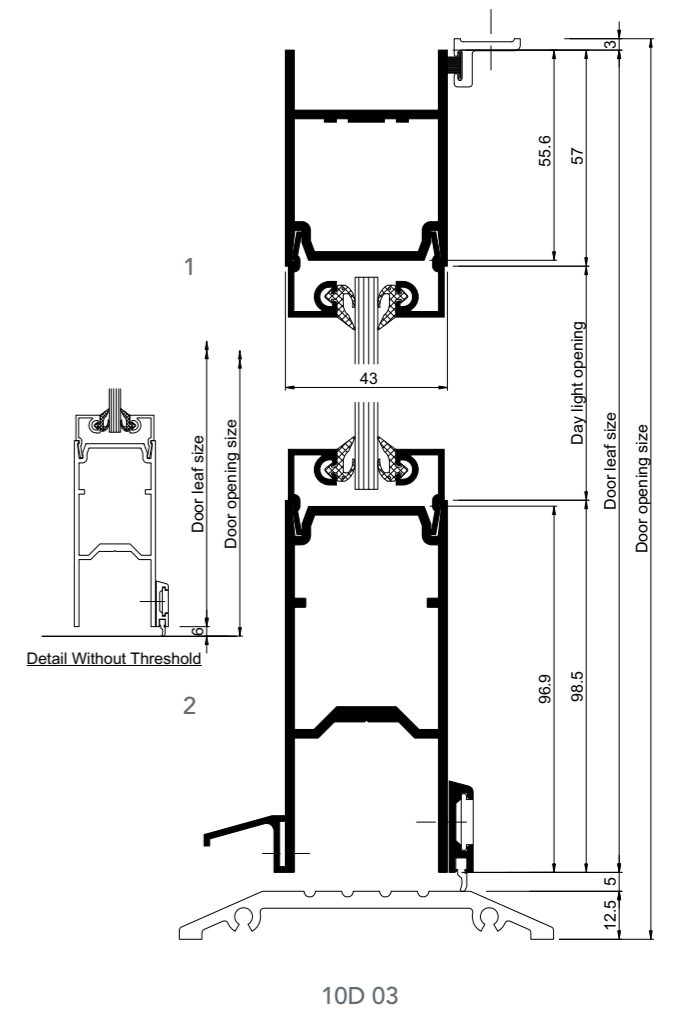
Finger Guard Doors



Note: The Finger Guard doors must have a threshold.
10D C02

Elevation	Title	Website cad ref no.
1, 2	Head rail and bottom rail indicating weathering profile	10D 03
3	Mid rail	10D 04
4, 5	Jamb and meeting stile	10D 05
6, 7	Outward opening door lock jamb	10D 06

Head Rail and Bottom Rail Detail



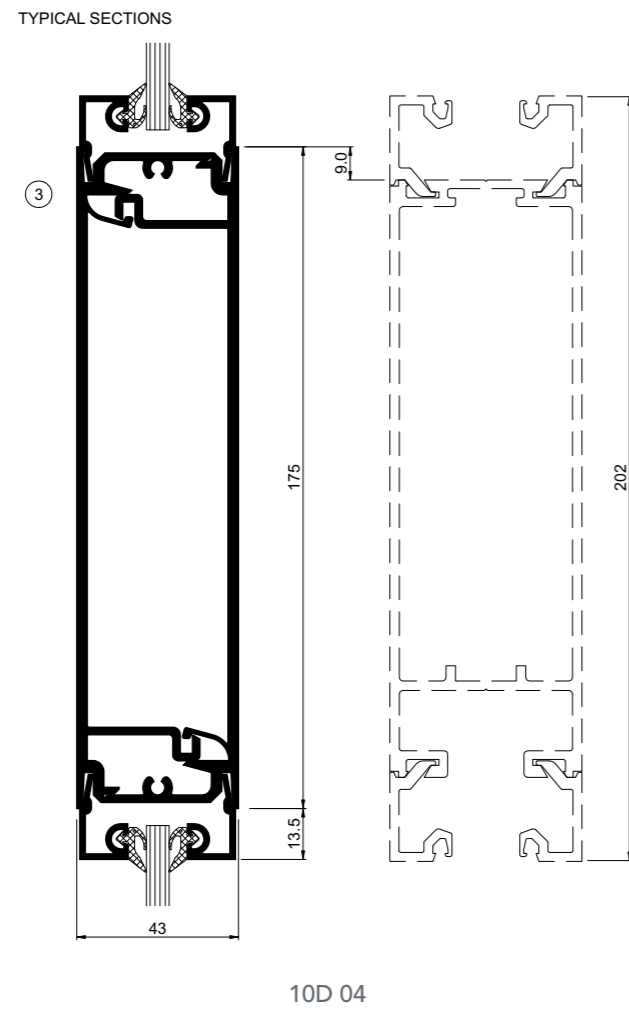
The Grange School, Runcorn, Cheshire
Architect: Aedas Architects



10D Door

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

Midrail Typical Detail

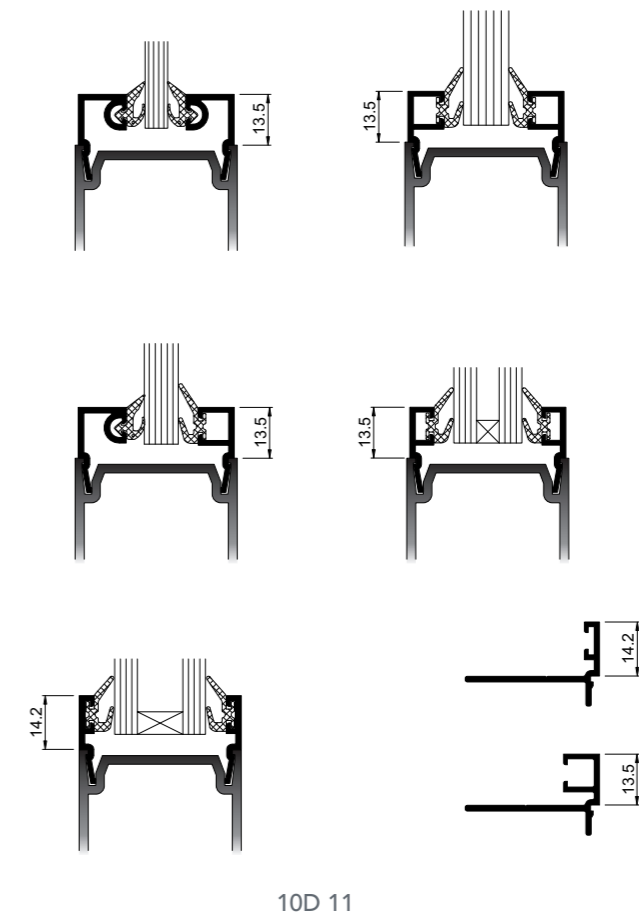


10D Door

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

Entrance Doors

GLAZING OPTIONS



Case Study - Fenstanton Primary School at City Heights Academy

Kawneer systems help Jestico + Whiles meet Part L.

Kawneer systems have been used on the £20million redevelopment of a primary school in a London borough.

Kawneer's AA®100 zone-drained capped curtain walling, AA®540 fixed light and AA®541 top-hung casement windows, medium-duty swing and series 190 heavy-duty commercial entrance doors, feature throughout the 1.5-hectare site at Abbots Park, Tulse Hill in Lambeth. It also includes as rooflights Kawneer's 451PT framing system which was designed in close collaboration with SCAPE. The rebuilding of Fenstanton Primary School for 638 children and creation of a new 1,100-place academy, known as City Heights Academy, for sponsor E-ACT was completed in two phases over two years by main contractor Carillion.

A special requirement of the brief to regular Kawneer specifiers Jestico + Whiles architects was that the buildings should meet Part L of the Building Regulations.

Architect Daniel Bryan-Harris said: "The energy efficiency of the buildings was very important. Achieving good daylighting of teaching spaces was critical but this had to be balanced against limiting solar gains and preventing overheating.

"The window frames and glass spec had to be thermally efficient to achieve the stringent Part L Building Regulations requirements. But the 50mm sightlines of the windows - the transoms and mullions - were also important in the overall composition of the elevations."

He added: "We had successfully used Kawneer on previous education projects and they offered a wide range of products to suit the variety of windows and curtain walling types required for the project."

In addition to providing two quality schools for local children of all ages, one of the key aims of the project was to allow community use of the facilities. A performance hall, sports centre, café and learning resource centre have all been positioned where they can be easily and securely accessed by local people.

Constructed on a flat slab, all Kawneer products were fixed over 17 months by specialist sub-contractor Leay within a proprietary cold-rolled structural framing system and finished with externally insulated render, facing brickwork, rainscreen cladding and multi-coloured brise soleil.



Fenstanton Primary School at City Heights Academy, Lambeth

Architect: Jestico + Whiles

Photos: ©Tim Crocker



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
Specification for operation and strength
- BS 4873
Specification for aluminium alloy windows and doorsets
- BS 4255 Part 1
Specification for non-cellular gaskets

A full range of guaranteed colours available

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

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

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

Project Assistance

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

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

photo opposite:
Alder Hey Children's Hospital, Liverpool
Architect: BDP

