

build for life



Kawneer
Door & Entrance Systems



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Technical drawing of a door threshold with dimensions and handwritten notes. The drawing shows a cross-section of a door frame with a threshold. Dimensions include a height of 965 mm, a width of 200 mm, and a depth of 140 mm. Handwritten notes include 'Kawneer 190 series Door, 100 mm thick' and 'Alternative threshold 069-141 170 mm'.

Kawneer, a global systems company

Kawneer offers a comprehensive range of architectural aluminium building products and systems for commercial construction-entrances, framing systems, windows and curtain wall systems.

Since its beginnings almost a century ago, Kawneer has been recognized as an innovator. Through the years, we've balanced experience with innovation. We've listened to our customers, and we are dedicated to providing the tools our customers need to succeed.

Our unrivalled team has a wealth of experience working closely with architects, contractors and clients to develop project solutions from their earliest concepts. We are committed to injecting innovation into new product development to ensure our products meet the most exacting engineering and technical standards whilst overcoming sophisticated design challenges. Kawneer's global design expertise, combined with aluminium's flexibility and recyclability, makes our building systems and products the right solutions for today and tomorrow.

Introduction

Committed to the success of your project

Kawneer products are made from materials of the highest quality and designed with the benefit of many years of construction experience. Because we control every stage of the process, from mining the bauxite ore through to designing individual windows and doors, we offer a unique resource to architects and contractors. Our engineers and designers can support you through every stage of the design and installation process, ensuring a successful outcome.

Need something special?

Kawneer offers the world's greatest pool of talent in architectural glazing systems, and we can design custom solutions that will help you to realise your most daring concepts. So don't compromise - by working with Kawneer you can achieve a solution to your most challenging architectural concept.

Total Performance

High performance is an essential ingredient for all building components nowadays – it is demanded by users and required by current building regulations. Throughout our history we have kept ahead of both the market and regulatory requirements to offer glazing solutions that surpass even the most demanding specifications, and our products meet or exceed all required standards of thermal performance.

We have developed leading-edge production techniques to ensure that manufacturing efficiency is optimised, and environmental impact is minimised, and our right-first-time quality management systems have been devised to minimise waste and exceed the requirements of current ISO 9001 standards.

Why Aluminium?

Kawneer has been producing advanced glazing solutions in this versatile material for many decades. Aluminium is a near-perfect material for architectural glazing products, and has practical advantages over all other available choices, including inherent resistance to corrosion and very low whole-life costs. Aluminium is also an environmentally friendly material and possibly one of the best options for energy saving within the construction industry. In the building sector vast amounts of aluminium are collected for recycling, with rates as high as 92-98%, and more than 50% of the energy used in aluminium production comes from hydro-electric schemes.



Standard Solutions

190 An all purpose narrow style door.

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

AA®605 A single action open-in or open-out swing door, designed to optimise thermal performance in compliance with Document L and Part J.

AA®603 Available in a variety of single or double tilt slide and fixed light combinations, providing flexibility to suit individual project requirements and is ideal for the high rise residential market.

451PT A thermal framing system suitable for ground and first floor applications, combining thermal performance with product aesthetics. The system is internally drained, offers a dual

colour option and is fully compliant with Document L and Part J.

AA®4001 A unitised framing system with a dual colour option, fully compliant with Document L and Part J and ideal for refurbishment projects.

1040 Designed specifically for sheltered applications, the system operates smoothly and is both a simple and practical system to meet open front retailing requirements.

902 Available in two, three and four panel options, the patio door is suitable for most domestic and commercial requirements, offering superior performance and a range of security features.

Door & Entrance Systems

Door Categories of Duty

The table below gives a guide to the door for each category - the descriptions & categories relate to the door construction and not necessarily the fittings.

Door Type Guide	Category	Description	Example
190 Narrow Style 350 Heavy Duty 605 Swing 603 Tilt Slide 1040 Sliding Front 902 Patio	Light Duty (LD)	Low frequency of use by those of high incentive to exercise care. e.g. by private house owner with small chance of accidents occurring or misuse.	Internal doors in dwellings and external doors in dwellings providing secondary access to private areas.
190 Narrow Style 350 Heavy Duty 605 Swing 1040 Sliding Front	Medium Duty (MD)	Medium frequency of use primarily by those with some incentive to exercise care, with some chance of accidents occurring or misuse.	External doors in dwellings providing primary access. Office doors providing access to designated public areas but not used by the public or people carrying or propelling bulky objects.
190 Narrow Style 350 Heavy Duty	Heavy Duty (HD)	High frequency of use by public & others with incentive to exercise care, with chance of accidents occurring or misuse.	Doors of shops, hospitals and of other buildings which provide access to designated public areas & which are used by the public & others frequently carrying or propelling bulky objects.
350 Heavy Duty	Severe Duty (SD)	Subject to frequent violent usage.	Doors of stockrooms, etc, commonly opened by driving trolleys against them; doors in educational establishments subject to frequent impact by people.

The table has been reproduced with the permission of British Standards Institution (BSI). British Standards can be obtained from BSI Customer Services at 389 Chiswick High Road, London, W4 4AL. Tel: +44 (0) 20 8996 9001. Email: cservices@bsi-global.com





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.

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.

Fully adjustable weathered astragals are standard on the lock stiles. All permissible tolerances are thus accumulated at the meeting stiles where an adjustment to the astragal, can compensate. Binding or gaps can be corrected by a simple adjustment. Glazing beads push directly into the door section to enhance weathering and ease glazing.

Security

Kawneer's 190 Door has been tested to the PAS 23 and PAS 24 Standards for the enhanced security performance of single leaf external doors, proven by stringent laboratory testing, carried out at the Building Research Establishment (BRE). The newly tested 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.

Product Features

- Dual moment welded door construction with lifetime warranty
- Narrow sightlines (190)
- Midrail options
- Different threshold applications
- 6mm to 24mm glazing options
- Finger guard option (standard option on 190)

With the decisive advantage of...

- Suitable for use in high traffic locations
- Finger guard design provides safety in use
- Single or double action

190/350 Doors



Peninsula Medical School, Plymouth

Nightingale Associates





Introduction

The Kawneer AA®605 Swing Door is a high performance thermally efficient door due to the polyamide thermal break that is incorporated into the aluminium profile. 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 to masonry, window and door composites or ribbon windows, the range can suite with the Kawneer curtain walling and framing systems and is suitable for low or high rise buildings for residential and commercial new build or refurbishment projects.

The 605 is available as a single action open-in or open-out swing door and can be single or dual colour.

Construction

The AA®605 Swing Door is a three chamber pressure equalised system and has mechanical corner cleats crimped and bonded together with a stainless steel corner brace. Weathering is achieved by the use of single and dual durometer, EPDM gaskets, all with non-shrinkage cord.

Security

Kawneer's AA®605 Door has been tested to the PAS 23 and PAS 24 Standards for the enhanced security performance of single leaf external doors, proven by stringent laboratory testing, carried out at the Building Research Establishment (BRE). The newly tested AA®605 Door is suitable for both light and medium duty requirements, making it ideal for low to medium frequency use in dwellings and commercial applications.

AA®605 Swing Door



Cheltenham Racecourse
Stephen Limbrick Associates

Product Features

- Low (for easy wheelchair access) or mid/rebated threshold
- Specifically designed anti-finger trap protector
- Snap on glazing beads
- Choice of locks: multi-point or single with latch, roller or deadbolt
- Adjustable two or three part hinges
- Suites with the 601 Casement, 602 Pivot, 603 Tiltturn, Kawneer's curtain walling and framing products for total design flexibility

With the decisive advantage of...

- Low threshold provides improved accessibility for all users
- Finger guard design provides safety in use
- Internally glazed vents offer added security and ease of glazing
- Suitable for use in medium traffic locations

Introduction

The Kawneer AA®603 Tilt Slide Door is available in a variety of single or double tilt slide combinations providing flexibility to suit individual project requirements.

The Kawneer AA®603 Tilt Slide Door is especially user friendly. Sliders in the top guide rail and high precision bearings in the wheels ensure that even large and heavy doors operate with ease and very smoothly, giving the end user extra peace of mind.

Designed for the end-user the Kawneer AA®603 Tilt Slide Door has been installed in applications such as executive homes, flats and apartments in a variety of colour options.

AA®603 Tilt Slide Door

Product Features

- Tilt and slide door, tilt for ventilation and slide for access
- The doors can be opened from the inside or outside, allowing internal or external access to the building
- Snap on glazing beads
- Locking and non-locking handles
- Locking handle from inside and outside
- Choice of handle design – option to suite with and complement Tiltturn handle
- Compact tilt stay
- Standard gear
- Full peripheral central locking
- Suites with the 601 Casement, 602 Pivot, 603 Tiltturn, Kawneer's curtain walling and framing products for total design flexibility

Construction

The AA®603 Tilt Slide Door is a pressure equalised system and has mechanical corner cleats crimped and bonded together with a stainless steel corner brace. Weathering is achieved by the use of EPDM gaskets.

With the decisive advantage of...

- Choice of vent options allowing for internal or external access
- Comfortable, smooth and positive operation
- Easy installation
- Extremely stable for sash weights up to 150kg
- A sprung buffer prevents the sash from being opened too far
- Anti-slam device in stays
- Anti-locking device in "sliding-unlocked" position
- Mishandling device operational in tilt and in slide operation
- Two interlocking stay arms enable the compact tilt stay to position the sash in the tilt and sliding position smoothly and accurately





Introduction

The thermally efficient 451PT Framing system, designed in close collaboration with the Consortium for Local Authority Special Projects (CLASP), meets the needs of the education refurbishment and new build markets. It is also suitable for use on commercial projects, across the full public sector spectrum and is also ideal for large display windows in the retail sector.

The 451PT Framing system meets the thermal requirements of Document L and Part J and provides slim line, dual colour, multi-glazed framing modules of varying widths and heights that feature fixed lights, opening vents and insulated panels.

Construction

The 451PT Framing system uses shear block construction where contoured shear blocks are screw fixed to the verticals, forming a spigot for horizontal members.

451PT Framing System



Rushcliffe Comprehensive School, Nottingham (CLASP Project)
Nottinghamshire County Council

Product Features

- Suitable for ground and first floor applications
- Flush glazed
- EPDM glazing gaskets
- Internally drained
- Slim 50mm sightlines
- 24mm & 28mm double glazing options
- Suites with Kawneer's AA®600 Window & Door Systems

With the decisive advantage of...

- Ease of application
- Internal drainage directs moisture infiltration to the outside of the building
- Slim sightlines give the system a visually pleasing aesthetic appearance



Introduction

The AA®4001 Framing system, designed in line with the DfE's 'Building schools for the future' is compliant with Document L and Part J, acoustics BB93 and Environmentally friendly classrooms BB95.

As well as traditional stick build and semi unitising, the system offers the advantage of fully unitised assembly and also enables it to meet the demands of fast track work schedules and restricted working conditions.

The AA®4001 Framing system is adaptable to any new construction project, and because it can be quickly installed in occupied buildings with minimal disturbance, the system is ideal for refurbishment projects.

Construction

The AA®4001 Framing system uses shear block construction and is a fully drained and pressure equalised system offering optimal weather performance. Concealed vents are cleated and crimped.

Weather Performance

The system, installed and glazed to Kawneer recommended procedures, has been tested in accordance with BS 6375.

Air Permeability:
BS EN 12207:2000 Class 4

Watertightness:
BS EN 12208:2000 Class 9A

Resistance to Windload:
BS EN 12210:2000 Class C4



AA®4001 Framing System

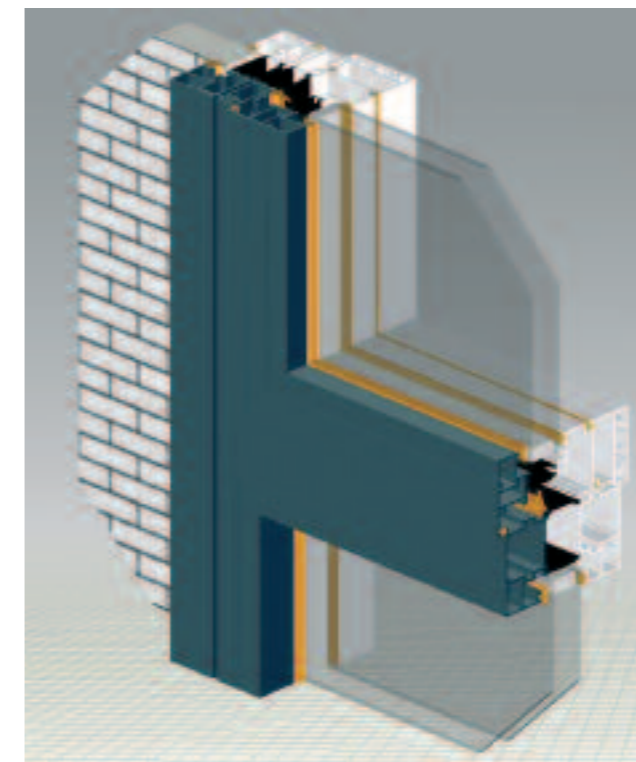
Product Features

- Unitised assembly
- Concealed vent, top hung open out and bottom hung open in
- Snap on glazing beads accommodate infill panels up to 72mm
- Capabilities for fully unitising, semi unitising (site glaze) and traditional stick build
- Ability to fit panels
- 22mm to 38mm glazing options with EPDM gaskets
- Choice of internal and external glazing for fixed applications
- Fixed bead
- Adhesive backed glazing gasket for unitising and added security
- One vent profile for both open in and open out vent
- Selection of mullion and transom profiles to suit application

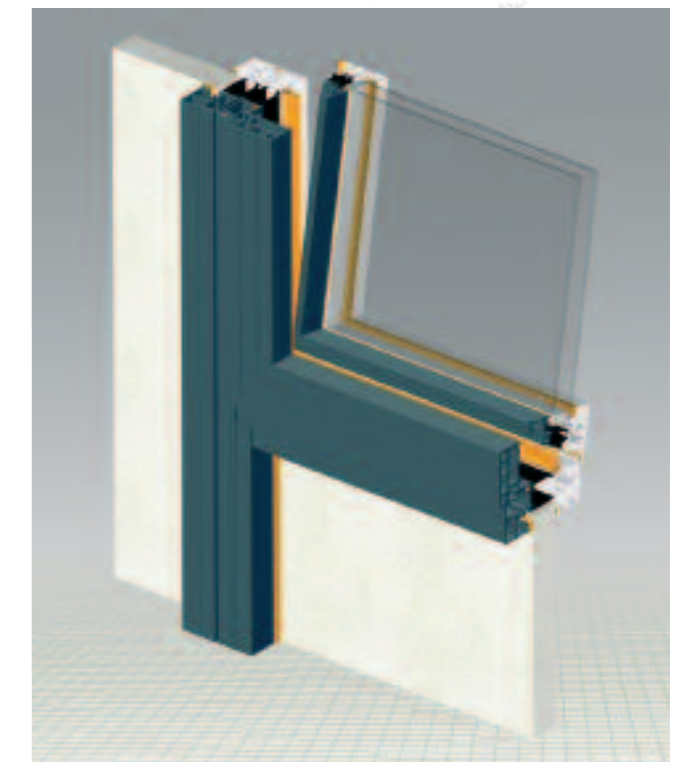
With the decisive advantage of...

- Unitised assembly offers the advantage of factory fabrication to ensure additional quality control, rapid on site installation with slimline design and flexibility
- Concealed vent for optimum safety and air flow
- Fixed bead for added security

AA®4001 Framing System



Ability to Fit Panels



Concealed Vent



Introduction

The 1040 Sliding Front is the simplest, most practical system yet devised for achieving open-front merchandising and is available in four standard stacking arrangements.

The system operates smoothly and easily and has no overhead hangers needing structural support, no hinges to drop, no switches or other complex arrangements. By day the 1040s can be rolled into concealed storage and by night, they interlock to ensure maximum secure protection with a single track that is flat and flush with the floor. The 1040 can terminate in a simple channel or, alternatively, it can be integrated with adjacent fixed or swing door entrances.

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.

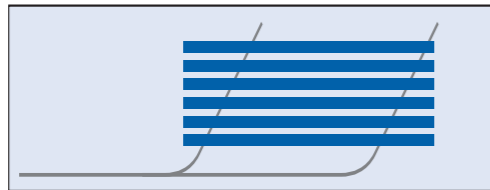
'Dual Moment' Corner Construction

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.

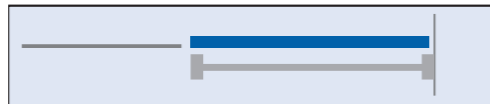
The floor track has an exposed width of only 48mm and is made from hard-alloy. It is adjustable during installation to ensure a level bed and smooth operation.

1040 Sliding Front

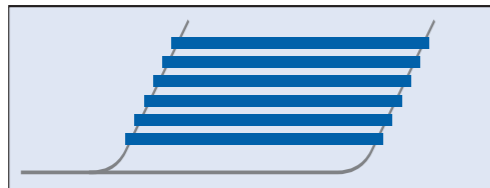
Stacking Arrangements



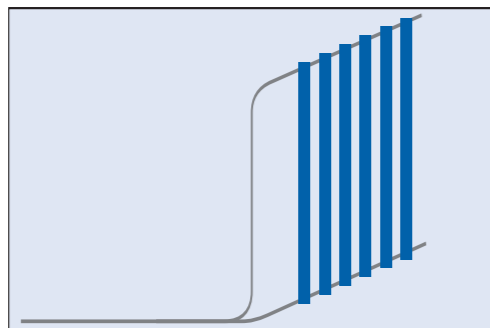
Even Stacking



Single or Bi Parting Door Parallel Stacking



Staggered Stacking



Stacking at 90°

Product Features

- Self lubricating castors
- Siliconised woolpile weathering to the sides of each panel
- 6mm to 24mm glazing options

With the decisive advantage of...

- Self lubricating castors for positive positioning

Introduction

The 902 Patio Door is suitable for most domestic and commercial requirements.

The door has an advanced range of security features and is available in two, three and four panel options and can be supplied as a kit which contains all the components for door manufacture excluding glazing gaskets. The specifier can choose which panels are fixed and which are sliding with single sliding and two panel bi-parting designs easily accommodated. The door can also be supplied with an optional nightvent which will give a minimum of 4000mm² of air flow.

Construction

The 902 Patio Door is engineered for ruggedness to stand up to the wear and tear of everyday domestic or commercial use.

Corrosion resistant screws are used to assemble the frames by the tried and tested screw spline method.

The aluminium sections give the product a feel of quality as well as solidity of construction.

902 Patio Door

Product Features

- Stainless steel track
- Four point locking
- Europrofile cylinders
- Anti-lift block
- Optional nightvent
- Optional internal thumb-turn deadlock
- 6mm, 20mm, 24mm & 25mm glazing options

With the decisive advantage of...

- Four point locking as standard gives added security
- Europrofile cylinders deadlock the action
- Anti-lift blocks and sill retention clips ensure a high degree of resistance to forced entry



The Oval County Cricket Ground, London

Darbourne & Partners



Kawneer Permacover™ is a high quality polyester powder paint finish, offering over 130 standard and 31 metallic paint colours and providing outstanding resistance to environmental conditions. Kawneer Permacover™ has 15 year gloss and a 25 year matt and metallic guarantees subject to application and Kawneer acceptance in marine, industrial, swimming pools or other aggressive atmospheres.

Kawneer Permanodic® is a range of subtle co-ordinated colours which have been researched and developed for architectural 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 from our Head Office.

Supporting Your Projects

Authorities

ISO 9001:2000

Quality Management System

BS EN 12020

Extruded precision aluminium profiles

BS 3987

Specification for anodic coatings

BS 6496

Specification for powder coatings

BS 6375 Part 1:2004

Classification for weathertightness

BS 6375 Part 2:1987

Specification for operation and strength

BS 4873

Specification for aluminium alloy windows

BS 4255 Part 1

Specification for non-cellular gaskets

ASTM C509-94

Specification for cellular gaskets

Technical Assistance

Kawneer's regionally based team of Architectural Advisers are able to provide product information and support and can be contacted through the Head Office at Runcorn. Information on Kawneer's extensive range of Curtain Wall, Window and Ground Floor Treatment solutions can also be obtained from our Head Office at Runcorn.

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





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