# Fire Resistant Systems





ARCHITECTURAL ALUMINIUM GLAZING SYSTEMS



## Fire Resistant Systems

#### Introduction

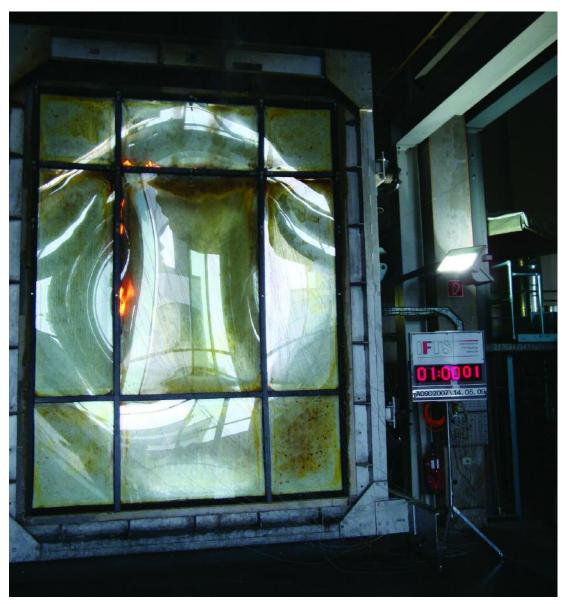
Kawneer are pleased to introduce two new comprehensive Fire Resistant Systems to our product range.

- AA®720 FR Door and Fixed Light Series
- An Enhanced AA®100/AA®110 FR Curtain Walling System

This complete range of Fire Resistant solutions enables design flexibility when fire protection is a requirement to building design. Both product solutions enable safe evacuation of building occupants by offering fire and smoke protection in escape routes. They can also be used to prevent the spread of fire through the building and to adjacent buildings.

Both systems provide 30 minute integrity and insulation fire resistance and are independently tested to the latest European standards for fire and smoke protection at various locations.

Performance of these systems is heavily dependent on the performance of the individual profiles, hardware items, specialist glazing and the interface between the system and the building structure. All these factors have been carefully considered in the development of these products.



Kawneer's AA®100 FR Curtain Wall Screens are 30 minute Fire Rated. The image above shows the screen damage after 60 minutes exposure.

## AA®720 FR

#### Introduction

The AA®720 FR consists of door and fixed light variants that are compliant with the latest European standards offering 30 minute insulation and integrity.

This is cleverly achieved using additional components to the standard AA®720 System and with the use of specialist fire-rated glazing.

#### Performance

Kawneer's AA®720 FR has been tested in accordance with DIN EN 1634-1 achieving El<sub>2</sub>30 (insulation and integrity), and has met the requirements of DIN EN 1634-3 for smoke protection. Testing has been carried out at various locations.

It has also been tested to:

Air Infiltration BS EN 12207: 2000 (Class C2) Watertightness BS EN 12208: 2000 (Class 4A) Wind Resistance BS EN 12210: 2000 (Class 2)

#### Glass

The AA®720 FR has been tested with specialist glazing. All glazing options are available in the AA®720 FR Product Manual.



#### **Product Features**

#### ■ Same versatility as the AA®720 Series

# With the decisive advantage of ...

- eries

  Inward and outward opening single and double doors, combined with integrated fixed lights
- Extensive panic hardware offer
- Integrated panic doors
- Wide range of hardware options
- Large range of options and configurations for Architects and Specifiers
- Specialist cooling material within the profiles
- Helps keep the aluminium at a temperature under the melting point

■ Intumescent strip

- Protection against smoke and heat penetration
- Specialist steel glazing clips and retaining bolts
- Maintaining the structural integrity of the system
- Suites with AA®100/AA®110 FR Curtain Walling
- Total design flexibility
   Offering total project solutions
- Tested and certified in accordance with DIN EN 1634-1 and DIN EN 1634-3 at various locations
- Offering protection against both fire and smoke
- Similar U<sub>Frame</sub> values as the standard AA®720 Door and Fixed Light variants
- Complies with all current thermal regulations

Aesthetics

 Profile depths and widths are the same as the standard AA®720 System

## AA®100 / AA®110 FR

#### Introduction

The AA®100/AA®110 FR is designed as a stick curtain wall assembly that is compliant with the latest European standards offering 30 minute insulation and integrity. Available in 50mm or 65mm face width depending on structural requirements.

The system is available in a variety of mullion depths which when combined with external capping offer aesthetic options and provide flexibility of design, outstanding performance and ease of installation to suit individual project requirements.

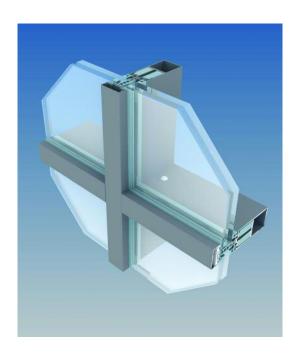
#### Performance

Kawneer's AA®100/AA®110 FR has been tested in accordance with DIN EN 1634-1 achieving  $\rm El_230$  (insulation and integrity), and has met the requirements of DIN EN 1634-3 for smoke protection. Testing has been carried out at various locations.

It has also been tested to:
Air Infiltration BS EN 12152 (600Pa)
Watertightness BS EN 12154 (600Pa)
Wind Resistance BS EN 13116 (2400Pa)

#### Glass

The AA®100/AA®110 FR has been tested with specialist glazing. All glazing options are available in the AA®100 and AA®110 FR Product Manuals.



#### **Product Features**

- Dry jointed system
- Concealed zone drainage
- Fully capped pressure plate system with range of face cap options
- Carriage system for improved installation of cooling materials
- Suites with AA®720 FR
- Tested and certified in accordance with DIN EN 1634-1 and DIN EN 1634-3 at various
- Similar U<sub>Frame</sub> values as the standard AA®100/AA®110 Curtain Wall Series
- Aesthetics

# With the decisive advantage of ...

- Removes reliance upon onsite sealing and ensures excellent weather performance
- Proven weathering performance in the most stringent conditions
- Provides a choice of aesthetics when designing the building façade
- Improved installation methods for quicker and easier fabrication
- Total design flexibility
   Offering total project solutions
- Offering protection against both fire and smoke
- Complies with all current thermal regulations
- Profile depths and widths are the same as the standard AA®100/AA®110 Systems

## Supporting Your Projects



#### **Project Assistance**

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

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

#### Nationwide Network of Approved Specialist Contractors

Our fabricators and installers are fully trained prior to approval, and regularly undergo topup courses to ensure that their skill levels have been maintained as well as receiving instruction on new products, product modifications or regulation changes. All training will be provided by CWCT approved Kawneer staff.

### Single Source Responsibility

Kawneer is an ISO 9001 company. We provide a unique single source responsibility for product design, extrusion and finishing. In addition we offer technical support tailored to the needs of your project, large or small.

Our experienced designers consistently provide responsible solutions through the development of safe products with full consideration for the end-user.

Kawneer is also accredited to Environmental Standard – ISO 14001 (2004 Version).

# A full range of guaranteed colours available

Kawneer Permacover™ is a high quality polyester powder paint finish, offering over 200 paint colours of which 23 are metallic and 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.

## Sustainability

Aluminium is widely recognised as one of the best materials available for construction. Aside from its practical and energy-saving advantages, it can be recycled repeatedly without loss of properties using just 5% of the energy originally used to mine, smelt and produce it. Aluminium's natural strength, lightness and durability makes it the ideal material for meeting architectural glazing requirements.

For our own production, we use recycled aluminium billets 100% of the time and all production waste is recycled. Our extrusions carry a life expectancy of 50 years, significantly higher than other materials - and of course, they're 100% recyclable.

For more detailed information on our sustainability credentials, a Sustainability Brochure can be obtained from our Head Office on 01928 502500 or downloaded from our website www.kawneer.co.uk



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Other brochures available on request from Kawneer are:

- Architectural Aluminium Systems Finishes
- Entrance Doors and Framing Systems
- AA®3572 Lift/Slide Door System
   The Panoramic Solution for Maximum Comfort and Ease of Operation
- Curtain Wall Systems
- AA®130 Brise Soleil System
   Solar Shading for Reduced Solar Heat Gain
- Window Systems
- AA®601TE Parallel Opening Window The Optimum Ventilation Solution for Maximum Air Exchange
- Residential Aluminium Glazing Systems
- AA®3610LS Linked Sash Vertical Sliding Window The Optimum Ventilation Solution for your Education and Health Projects
- Specialist Horizontal Sliding Window Solutions for your Healthcare Project
- Architectural Aluminium Glazing Systems Specification Guide
- Sustainability: Our Total Commitment













