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Other brochures available on request from Kawneer are:

- Architectural Aluminium Systems Finishes
- Door & Entrance Systems
- Curtain Wall Systems
- Window Systems
- Architectural Aluminium Glazing Systems Specification Guide

Specialist Kawneer Contractor:

Specialist Horizontal Sliding Window Solutions for your Healthcare Project



A R C H I T E C T U R A L A L U M I N I U M G L A Z I N G S Y S T E M S



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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AA®3110HW Sliding Window Solutions for the Healthcare Market

Introduction

Kawneer is one of the UK's leading architectural aluminium glazing systems manufacturers. We have a long track record of successful project delivery in the Healthcare market, providing best value and best practice solutions.

Our commitment to the Healthcare new build and refurbishment markets is supported by our significant investment in Product Development to meet the sectors increasingly stringent project requirements.

Special Healthcare projects need special products that are designed for the needs of the user. The AA®3110HW (Healthcare Window) has been designed to ensure that the needs of the user are paramount with easy to operate functions.

Working in partnership with several Healthcare Trusts across the UK, Kawneer has developed the AA®3110HW horizontal window with key features which makes this window suitable for use within the Mental Healthcare sector. Our experience has highlighted the need to be flexible with the patients needs whilst ensuring that their safety and well being is paramount.

The AA®3110HW is the product you can specify with confidence.



AA®3110HW Single Sliding Horizontal Window with fixed lights above and below

Single Source Responsibility

Kawneer is an ISO 9001 company. We operate within a stringently applied Environmental Health and Safety policy, providing the unique single source responsibility for product design, extrusion, and finishing. In addition we offer technical design support tailored to meet the needs of your project, large or small.

Our designers ensure they develop advanced systems to assist in the reduction of the Whole Life Costs of buildings.

AA®3110HW Single Sliding Horizontal Window with fixed lights above and below



AA®3110HW Healthcare Window



Key Product Features

- Perforated Glazing Gasket
- No Glazing Bead
- Specialist Hardware
- Concealed window locking
- Horizontal Sliding Window - does not open into the room
- Fully tested for safety in use (see page 5 for full test criteria)
- Proven in use in even the most stringent conditions (see page 5)
- Excellent weather performance
- Perforated stainless steel mesh

With the decisive advantage of . . .

- Breaks into harmless pieces when an attempt is made to remove it from the window
- Bead cannot be removed and used as a weapon or for self-harm
- Aesthetically designed handle with no ligature risk
- Locking at 125mm opening offering safety and security *
- No ligature point is formed by the opening of the window
- Giving you peace of mind in even the most stringent conditions. The three security levels offered ensure that you have the flexibility to choose the right solution for each application
- Robust solution to meet the needs of all applications
- Offering you peace of mind and comfort for the end user
- Allows ventilation, visibility and security. Stops the flow of contraband in or out of the window

* Locking at 100mm compliant with HTM 55 and BS 8213 is also available

Specialist support for your Healthcare Project

Demanding projects need special support and advice. At Kawneer we have an Architectural Services Team who can give informed advice on your hospital project from ventilation to anti-ligature, to ensure you have the best solution for your individual project needs. Kawneer's unrivalled back up and support is the reason why our systems are the systems of choice.

Understanding the individual needs of each project we have designed three window security levels: see the Window Product Selector on Page 4.

Healthcare Projects

For information on Healthcare projects successfully completed by Kawneer please contact our Architectural Services Team:

Tel: 01928 502604 / Fax: 01928 502512

Email: kawneerAST@alcoa.com

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Window Product Selector

Features

Security Levels

	Level 1	Level 2	Level 3
Locked open at 125mm	•		
Permanently restricted opening to 125mm	•		
Window can open fully	•	•	•
Anti-ligature handles	•	•	•
Perforated wrap around glazing gasket for sash	•	•	•
Anti-lift blocks (stops removal of sash)	•	•	•
Window does not project into the room	•	•	•
Double sliding	•		
Single sliding	•	•	•
Perforated stainless steel mesh covers the opening aperture vent (visible at all times)		•	
Perforated stainless steel mesh covers the opening aperture vent (only visible from inside when window open)			•
Perforated stainless steel mesh hidden on the other side of the wall			•
Secure clip in plates	•	•	•
Window sensors can be fitted (optional)	•	•	•
Tested at the BRE to 600Pa air and water penetration	•	☎	☎
Integral blinds can be fitted with suitable glazing	•	•	•

☎ = Contact our Architectural Services Team for further information on 01928 502604

Ventilation

The pursuit of naturally ventilated building solutions has become a vital component when considering the design of hospitals which is driven by a desire for a healthier environment. The purpose of ventilation is to move stale air from within a building replacing it with fresh air from the outside.

Kawneer's response to this requirement has been the development of key products within it's suite of windows including the AA®3110HW Horizontal Sliding window, AA®3610 Vertical Sliding window and the AA®602TE Pivot window.

Security Testing

The AA®3110HW Window has been tested by Healthcare Trusts to simulate its performance in the most stringent conditions. The test results highlighted below prove the suitability of the AA®3110HW for Healthcare projects.

Test	Result
■ 15 minutes fire extinguisher attack test	■ Panels remain intact
■ 20/25 strikes with a snooker ball in a sock (used as a truncheon)	■ Limited damage to sash and frame, no damage to the 10mm toughened glass
■ Up to 30 blows to window using a wardrobe door, drawer unit, belt buckle, shoe heel, small stone or flint or any other implement detached in earlier tests	■ Glazing remains intact
■ To remove parts of the window with a knife, fork or spoon	■ Not removed
■ Standing on furniture at window level, kicking window / frame up to 30 times	■ Window, sashes and glazing remain in-situ (10mm toughened glass)
■ Attempt to remove gaskets/seals with a tool such as a key, pen or belt buckle or fingers	■ Removal of gaskets resulted in only small sections of gasket (less than 10mm lengths) being withdrawn at any one time
■ Attempt to defeat window restrictors via deflection, distortion by repeated pushing/pulling	■ Restrictors and other fittings remain intact and firmly fixed to window assembly
■ Attempt to remove window fittings using key, pen, ruler, belt buckle, fingers, small stone or flint	■ Not removable
■ Attempt to lift sashes out of frame	■ Not removable
■ Attempt to form ligature point using key, pen, belt buckle, string or shoelace, towel or sheet	■ Ligature not formed

Weather Performance

Independently tested at the BRE up to the following performance *

Air Permeability: Class 3
Watertightness: Class 9A 600Pa
Resistance to Windload: Class B5

* Performance is dependant on frame and panel combinations

Security*

Independently tested to ENV 1627 Class 2 by the SKG test institute in the Netherlands

* Does not refer to standard hardware, security hardware required

Key Product Features

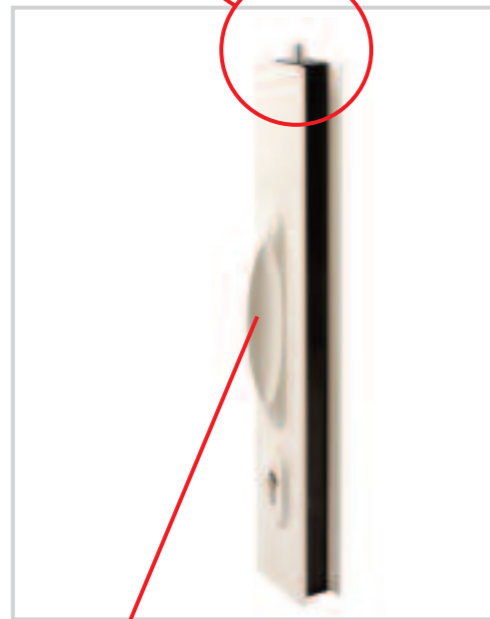
We know that the demanding Healthcare environment requires tried and tested solutions to perform in the most onerous conditions. Understanding these specific needs has made Kawneer the system of choice for many hospital projects. Working in partnership with key Hospital Trusts we have developed the AA[®]3110HW to meet the safety needs of the user.

Here are a few examples of the standard features available on the AA[®]3110HW Horizontal Sliding Window.



Secure clip-in plates

Locking hardware secure in profile



No ligature point



Wrap around glazing gasket perforated at 10mm intervals which breaks into harmless pieces when there is an attempt to remove it

AA[®]3110HW Horizontal Sliding Healthcare Range

Security Level 1

- Double or single sliding windows
- Closed or locked open at 125mm – suitable where nurse operation needs to be a consideration
 - Can offer purge ventilation if required
- Permanently restricted at 125mm – can be patient operated
 - Purge ventilation not an option for this application
- Secure clip in plates
- Anti-ligature handles and hardware
- Perforated wrap around glazing gasket for sash

The Specifier must ensure that the Security Level chosen is suitable for the occupants for present and future use.



Locked open at 125mm (single and double sliding options)

Outside view



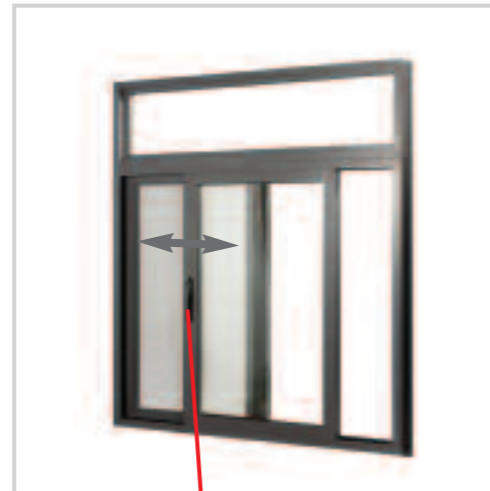
Security Level 2

- Single sliding window
- Permanent perforated stainless steel mesh on the outside of the window offers good visibility and ventilation
- Suitable where contraband is an issue
- No visible hardware – free opening for patient operation
- Secure clip in plates
- Anti-ligature handles
- Perforated wrap around glazing gasket for sash

The Specifier must ensure that the Security Level chosen is suitable for the occupants for present and future use.



Permanent mesh on the outside of the window



Patient has full control of the window for their own comfort



Vent opens to allow ventilation and security. Perforated stainless steel mesh stops the flow of contraband in or out of the window



Perforated stainless steel mesh offers ventilation and visibility (as shown in 'Security Level 3' pictures on page 9)

Security Level 3

- Single sliding window
- Anti-ligature handles and hardware
- Perforated wrap around glazing gasket for sash
- Hidden perforated stainless steel mesh (hidden on the other side of the wall)
 - Perforated stainless steel mesh comes across the window on opening
 - No visible mesh – the occupant cannot see the mesh until the window is opened
 - Perforated stainless steel mesh will stop the exchange of contraband whilst maintaining security
- Window can be opened fully – ideal for ventilation
- The patient can have full control of the window

The Specifier must ensure that the Security Level chosen is suitable for the occupants for present and future use.



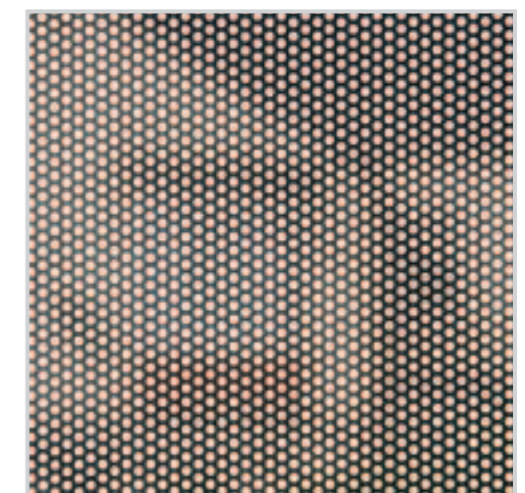
No visible mesh - the occupant cannot see the mesh until the window is opened



Mesh comes across the window on opening allowing good visibility but preventing the flow of contraband in or out of the window



Mesh is hidden as shown (outside view). Window opens to reveal the mesh from the other side of the wall



1.5mm perforated stainless steel mesh, 3mm holes at 5mm centres (Security Levels 2 and 3)

Comprehensive Experience

Best Practice

Kawneer, with our Nationwide network of specialist contractors:

- Understand the unique challenges of refurbishing occupied buildings and understand and respect all parties involved.
- Focus on continuous improvement and working partnership, integrating all parties into the construction process.
- This involves establishing effective lines of communication not only with the architects and surveyors, but also directly with building owners, nurses, clinicians, caretakers and wardens.
- We know that direct communication is critical to site safety and the smooth flexible running of a project to successful completion.
- Our approved Specialist Contractors adopt a rigorous approach to site management, securely fencing off all areas of work, securing the premises each day and locking all material away in site storage units

Sustainability

Aluminium is an environmentally friendly material and possibly one of the best options for energy saving within construction. It is 100% recyclable and retains 95% of its embodied energy. Aluminium's inherent strength and durability offer long service and low maintenance, which is vital when considering the durability and robustness required for these projects.

AA®3110HW Window used in a communal area with fixed lights above and below to ensure a light and airy space - essential for wellbeing



Supporting Your Projects



A full range of guaranteed colours available

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 30 year gloss and a 30 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.

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 organic coatings
- BS 6375 Part 1
Classification for weathertightness
- BS 6375 Part 2
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

Project Assistance

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

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

Information on Kawneer's extensive range of Curtain Wall, Window, Framing and Door solutions can also be obtained from our Head Office by calling:

Tel: 01928 502612

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