

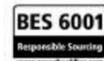


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Other brochures available on request from Kawneer are:

- Architectural Aluminium Systems Finishes
- Door Systems
- Framing 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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## Curtain Wall Systems





## Contents

Curtain Wall Design Considerations	4
Zone or Mullion Drained?	5
Curtain Wall Product Characteristics/Regulations	6
AA®100 50mm Curtain Wall System	8, 12-27
AA®110 65mm Curtain Wall System	10, 12-27
Windows and Doors into Curtain Walling	28
AA®100 and AA®110 Concealed Vent Open Out Applications	34
AA®100 and AA®110 Horizontally Capped (HC) and AA®100 and AA®110 Vertically Capped (VC) Gasket System	38
AA®100 Structurally Silicone Glazed (SSG)	52
AA®100 and AA®110 PFL	58
Case Study – Cardiff and Vale College	64
Supporting Your Projects	66

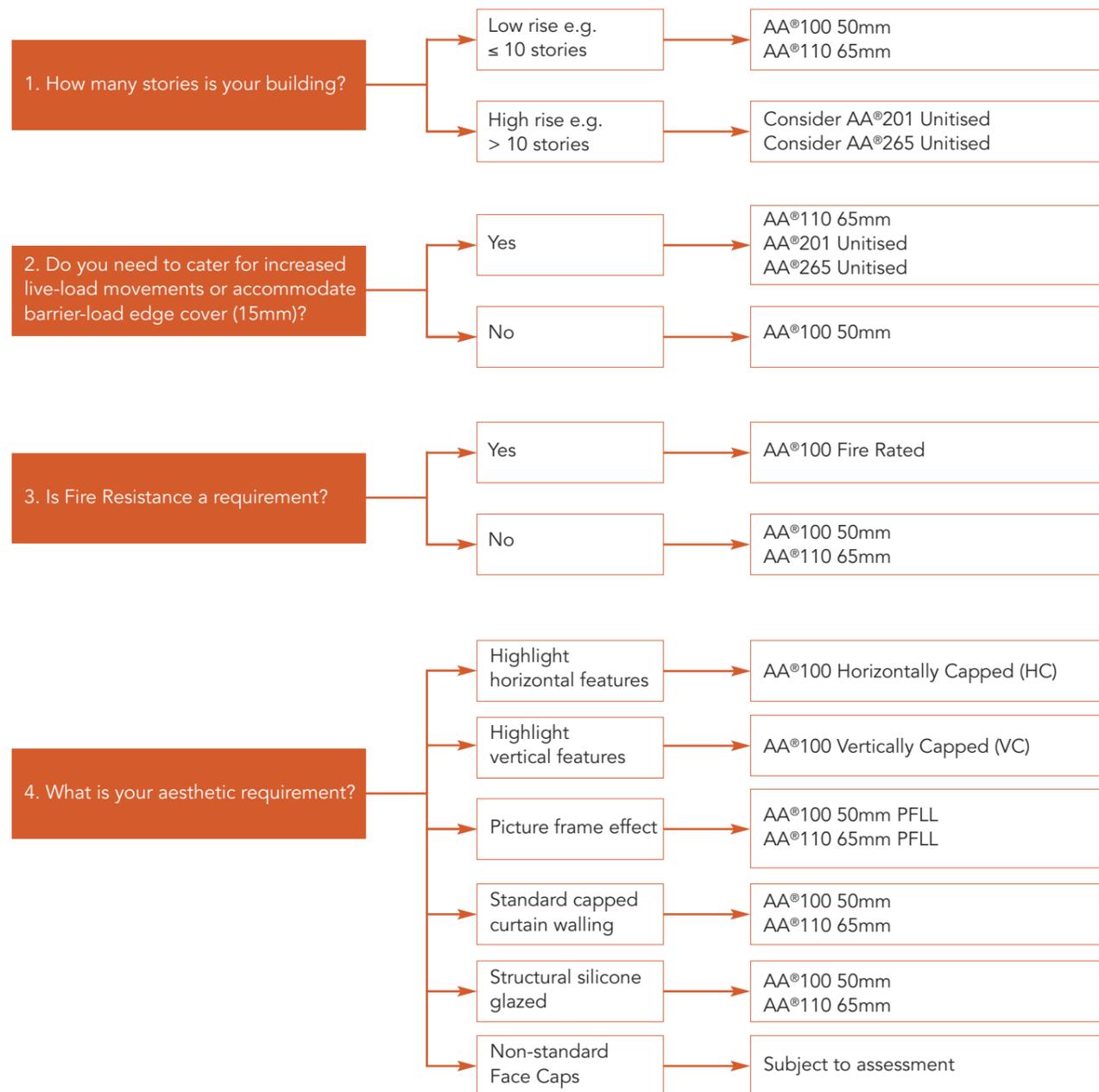
Today's fast paced construction schedules demand it all – design innovation, flexibility, high quality, fast installation, simplified fabrication and superior performance. Kawneer's curtain wall systems have been designed and engineered to meet these demands and more.

Our curtain wall systems have been tested and assessed in accordance with the relevant BS EN and Centre for Window and Cladding Technology (CWCT) Curtain Wall Standards.



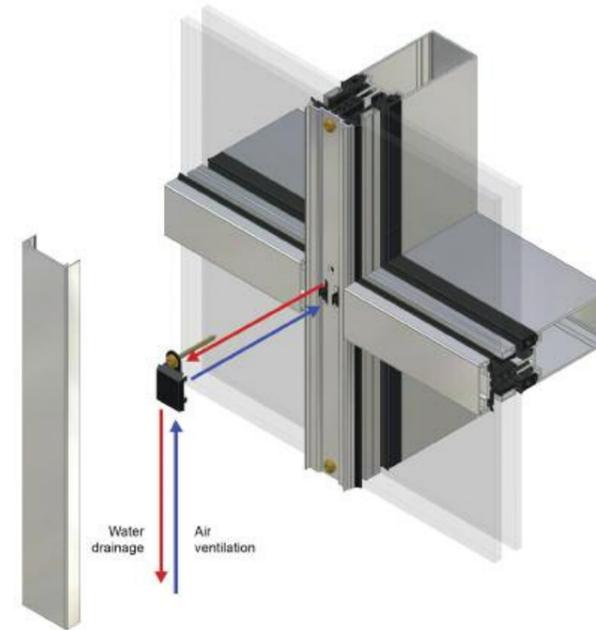
## Curtain Wall Design Considerations

Please note this is for guidance only



## Zone or Mullion Drained?

### Zone Drainage



Zone drainage systems feature simple butt jointed mullions and transoms, with each panel acting as an individual unit.

Drainage and ventilation slots are located in the vertical pressure plate. Transoms are square cut at the ends to incorporate EPDM mouldings and gaskets to maintain each zone.

Transoms are fitted with a 'Batman gasket' to maintain the thermal performance.

#### Benefits

- Each panel is individually pressure equalised and drained via its transom, enabling the curtain wall to quickly react to fluctuating wind pressure

### Mullion Drainage



Mullion (or point) drainage systems feature overlapping joints. Drainage and ventilation slots are located in the vertical pressure plate. Transoms are overlapped to the mullion which incorporates an EPDM gasket to seal between mullion and transom.

Transoms are fitted with a 'Batman gasket' to maintain the thermal performance.

#### Benefits

- Suitable for slope glazing



## Curtain Wall Product Characteristics/Regulations

System	BS EN 13830 & CWCT Test	Expansion Joint	Facets	Barrier Loading required?	Concealed Vent
AA®100	✓	✓	✓	✓*	✓
AA®100 HC	✓		✓	✓	✓
AA®100 VC	✓	☎	✓	✓	✓
AA®100 Slope Glazing	✓		✓		
AA®100 SSG	✓		☎	✓	☎
AA®100 PFL	☎				
AA®100 Fire Resistant	BS 476-22, Pr EN 1364-3	✓			
AA®110	CWCT Assessment	✓	✓	✓	✓
AA®110 HC	CWCT Assessment	✓	✓	✓	✓
AA®110 VC	CWCT Assessment	✓	✓	✓	✓
AA®110 SSG	CWCT Assessment		☎	✓	☎
AA®110 Slope Glazing	☎		✓	✓	
AA®110 PFL	☎			✓	
AA®201 Unitised	✓	✓	☎	✓	☎
AA®201 Unitised HC/VC	✓	✓	☎	✓	☎
AA®201 Unitised SSG	✓	✓	☎	✓	☎
AA®265 Unitised	✓	✓	☎	✓	☎

Key  
 ✓ = Available ☎ = Project dependant; contact our advisory line \* = Subject to Structural Assessment  
 HC = Horizontally Capped VC = Vertically Capped SSG = Structurally Silicone Glazed PFL = Picture Frame Look-Alike  
 Note: HI version cannot be facetted

Thermal compliance in line with current Building Regulations	Compatibility with Kawneer Doors and Windows	HI Option	Glazing	Drainage Method	Acoustic Performance Doc E
✓	✓	✓	Upto 40mm - 50mm	Zone or Mullion Drained	✓
✓	✓	✓	Upto 40mm - 50mm	Zone or Mullion Drained	✓
✓	✓	✓	Upto 40mm - 50mm	Zone or Mullion Drained	✓
✓	✓		Upto 40mm - 50mm	Mullion Drained	✓
✓	✓		Upto 4mm - 40mm	Mullion Drained	
✓	✓	✓	Upto 40mm - 50mm	Zone or Mullion Drained	
✓	✓	✓	Upto 40mm - 50mm	Zone Drained	
✓	✓		Upto 40mm - 50mm	Zone or Mullion Drained	✓
✓	✓		Upto 50mm	Zone or Mullion Drained	✓
✓	✓		Upto 50mm	Zone or Mullion Drained	✓
✓	✓		Upto 4mm - 40mm	Mullion Drained	
✓	✓		Upto 40mm - 50mm	Mullion Drained	✓
✓	✓		Upto 40mm - 50mm	Zone or Mullion Drained	
✓	✓		Infill panels/glass upto 32mm	Zone Drained	✓
✓	✓		Infill panels/glass upto 32mm	Zone Drained	✓
✓	✓		Infill panels/glass upto 32mm	Zone Drained	✓
✓	✓		Upto 50mm	Zone Drained	

Key  
 ✓ = Available ☎ = Project dependant; contact our advisory line \* = Subject to Structural Assessment  
 HC = Horizontally Capped VC = Vertically Capped SSG = Structurally Silicone Glazed PFL = Picture Frame Look-Alike  
 Note: HI version cannot be facetted



Criminal Justice Centre, Aberdeen  
 Architect: Ryder Architecture

## AA®100 50mm Curtain Wall System

### Introduction

A stick-frame assembly with weather performance achieved by drainage and ventilation of the glazing rebates. Drainage and ventilation is achieved via the mullion or via each individual transom on zone drained.

The system is available in a variety of mullion depths which combined with seven thermal break options, including an enhanced thermal performance option, and aesthetic external capping allows a specifier the flexibility of design to make their own statement. The system has outstanding performance and its ease of installation makes it possible to suit individual project requirements.

The AA®100 is suitable for vertical and sloped applications including faceted walls.

### Design Considerations

A comprehensive range of mullions and transoms allow façades to be designed with minimal structural support. The selection of mullion is dependent on several factors:

- The span (the distance between the fixings to supporting structure)
- The mullion centres (up to 3.0m using AA®100 curtain walling)
- Windload (up to 2400 Pa)
- Maximum weight of infill is 600kg
- The deflection limitations of the glazing system
- The drainage method required; i.e. zone or mullion

Guidance on this element of the curtain wall design should be sought from the Kawneer Architectural Services Team.

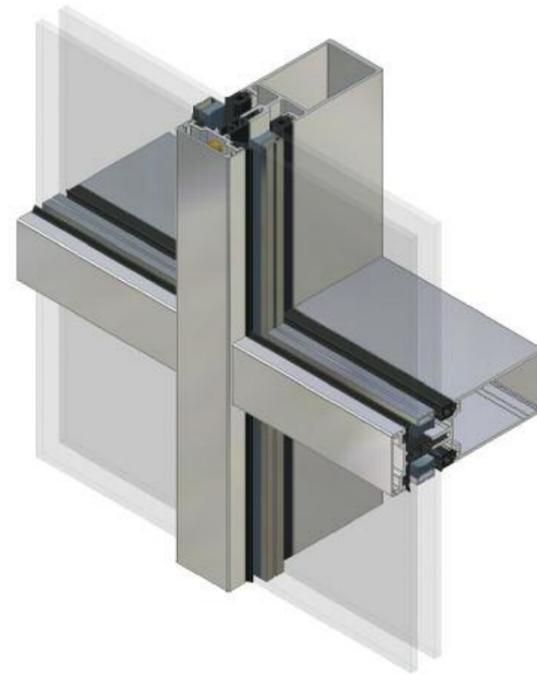
### Product Features and Benefits

- Concealed drainage offering better aesthetics
- Maximum glazing up to 50mm
- Large choice of face caps to enable total design flexibility to suite your individual aesthetic requirements
- Bespoke face caps available (subject to approval)
- Fire resistant solution providing uniformity of the façade in accordance with Pr EN 1364-3, with up to 30 minutes integrity and insulation
- Patented transom overlap detail which gives the uniform aesthetic finish
- Market leading product tested and certified in accordance with CWCT Sequence B
- Range of mullion, transom and face cap options with 50mm sightlines

- Enhanced thermal performance to meet or exceed current Building Regulations
- Incorporates AA®130 Brise Soleil System
- Facilitates the integration of opening window products including a concealed vent option
- HC/VC gasket system provided as an alternative to structural glazed solutions

### AA®100 HC/VC (Horizontal/Vertical Cap)

The Horizontal/Vertical Cap provides the specifier the opportunity to highlight the horizontal or vertical features across the building envelope and gives the building its individual signature. The variety of distinctive face caps gives total flexibility in design. The system has been exclusively designed, developed and supplied by Kawneer, with installation contracts carried out by approved Dealers.



AA®100 50mm

Eastleigh Borough Council, Eastleigh, Hampshire

Architect: Stride Treglown

Photo: Positive Image Photography



## AA®110 65mm Curtain Wall System

### Introduction

The AA®110 65mm curtain wall system is designed as a stick-frame assembly with weather performance achieved by drainage and ventilation of the glazing rebates. Drainage and ventilation is achieved via the mullion on mullion drained or via each individual transom on zone drained. The system is available in a variety of mullion depths which combined with seven thermal break options and aesthetic external capping provide flexibility of design, outstanding performance and ease of installation to suit individual project requirements.

The AA®110 is suitable for vertical and sloped applications including faceted walls. A deeper glazing rebate meets the requirements for barrier loading and enables facades to stand up to high levels of building movement. This enables the use of bigger glass sheets resulting in more natural light penetration. In addition, less metal results in an aesthetically pleasing building – on the whole better for both the environment and the building occupier.

The system has been exclusively designed, developed and supplied by Kawneer, with installation contracts carried out by approved Dealers.

### Design Considerations

A comprehensive range of mullions and transoms allow façades to be designed with minimal structural support. The selection of mullion is dependent on several factors:

- The span (the distance between the fixings to supporting structure)
- The mullion centres (up to 3.5m using AA®110 curtain walling)
- Windload (up to 2400 Pa)
- Maximum weight of infill is 600kg
- The deflection limitations of the glazing system
- The drainage method required; i.e. zone or mullion

Guidance on this element of the curtain wall design should be sought from the Kawneer Architectural Services Team.

### Product Features and Benefits

- Concealed zone drainage – each pane acts as an individual self draining unit or mullion drainage – ventilation and drainage via the mullions
- Fully capped (zone drained and mullion drained with wide choice of facecap options)
- Bespoke face caps available (subject to approval)
- Glazing up to 50mm
- Enhanced thermal performance to meet or exceed current Building Regulations

- Incorporates AA®130 Brise Soleil System
- Assessed and certified in accordance with CWCT Sequence B
- Range of mullion, transom and face cap options with 65mm sightlines
- Facilitates the integration of opening window products including a concealed vent option (same as 50mm)
- Seven thermal break options including a HI variant
- Offers a cost effective solution for barrier loading

### AA®110 HC/VC (Horizontal/Vertical Cap)

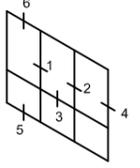
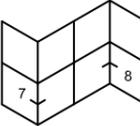
The Horizontal/Vertical Cap provides the specifier the opportunity to highlight the horizontal or vertical features across the building envelope and gives the building its individual signature. The variety of distinctive face caps gives total flexibility in design. The system has been exclusively designed, developed and supplied by Kawneer, with installation contracts carried out by approved Dealers.

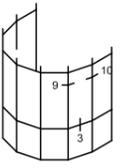
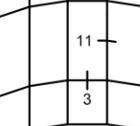


# AA®100 50mm and AA®110 65mm Zone Drained Façade Applications

## Typical Elevations

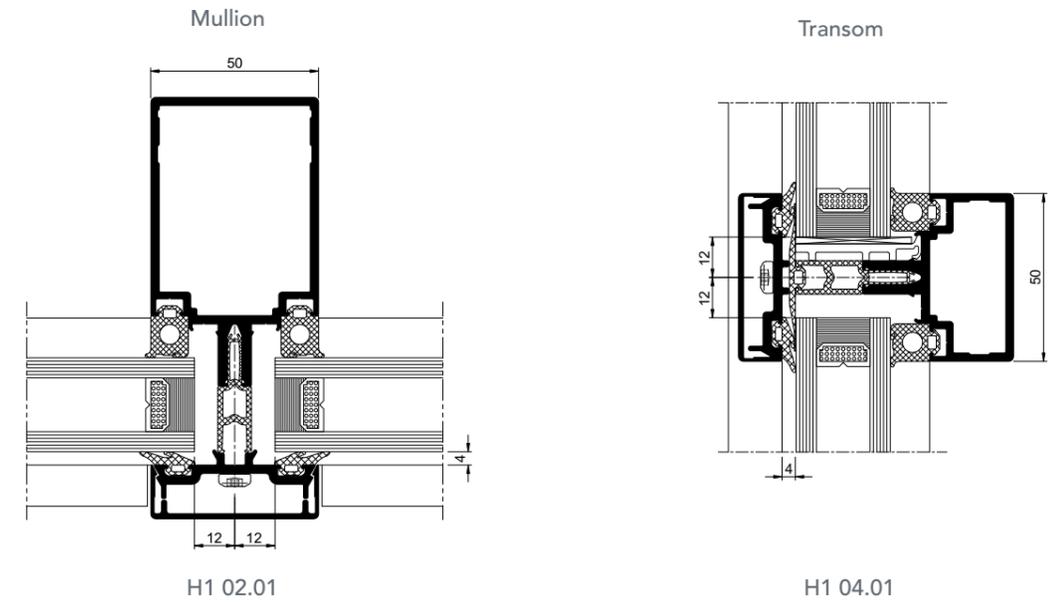
Full details can be downloaded from our website [www.kawneer.co.uk](http://www.kawneer.co.uk)

Elevation	Title	Website cad ref no.
	1 Intermediate Mullion	H1 02.01
	2 Expansion Mullion	H1 03.01
	3 Intermediate Transom	H1 04.01
	4 Jamb detail (generic)	H1 10.01
	5 Cill detail (generic)	H1 11.01
	6 Head detail (generic)	H1 12.01
	7 External Corner	H1 05.01
	8 Internal Corner	H1 06.01

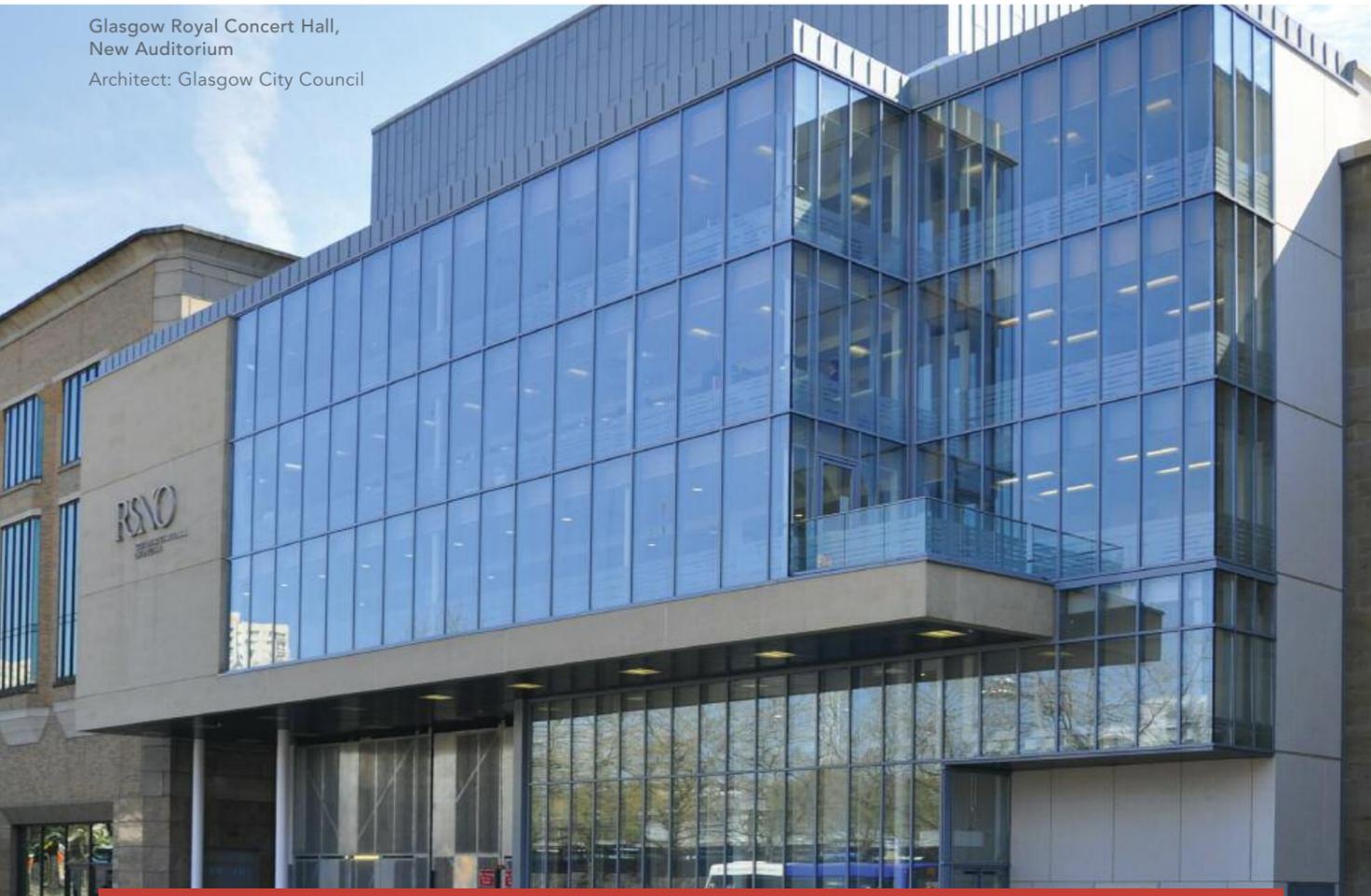
Elevation	Title	Website cad ref no.
	3 Intermediate Transom	H1 04.01
	9 Convex Faceted Mullion	H1 07.01
	10 Convex Faceted Mullion	H1 08.01
	3 Intermediate Transom	H1 04.01
	11 Convex Faceted Mullion	H1 09.01

# AA®100 50mm and AA®110 65mm Zone Drained Façade

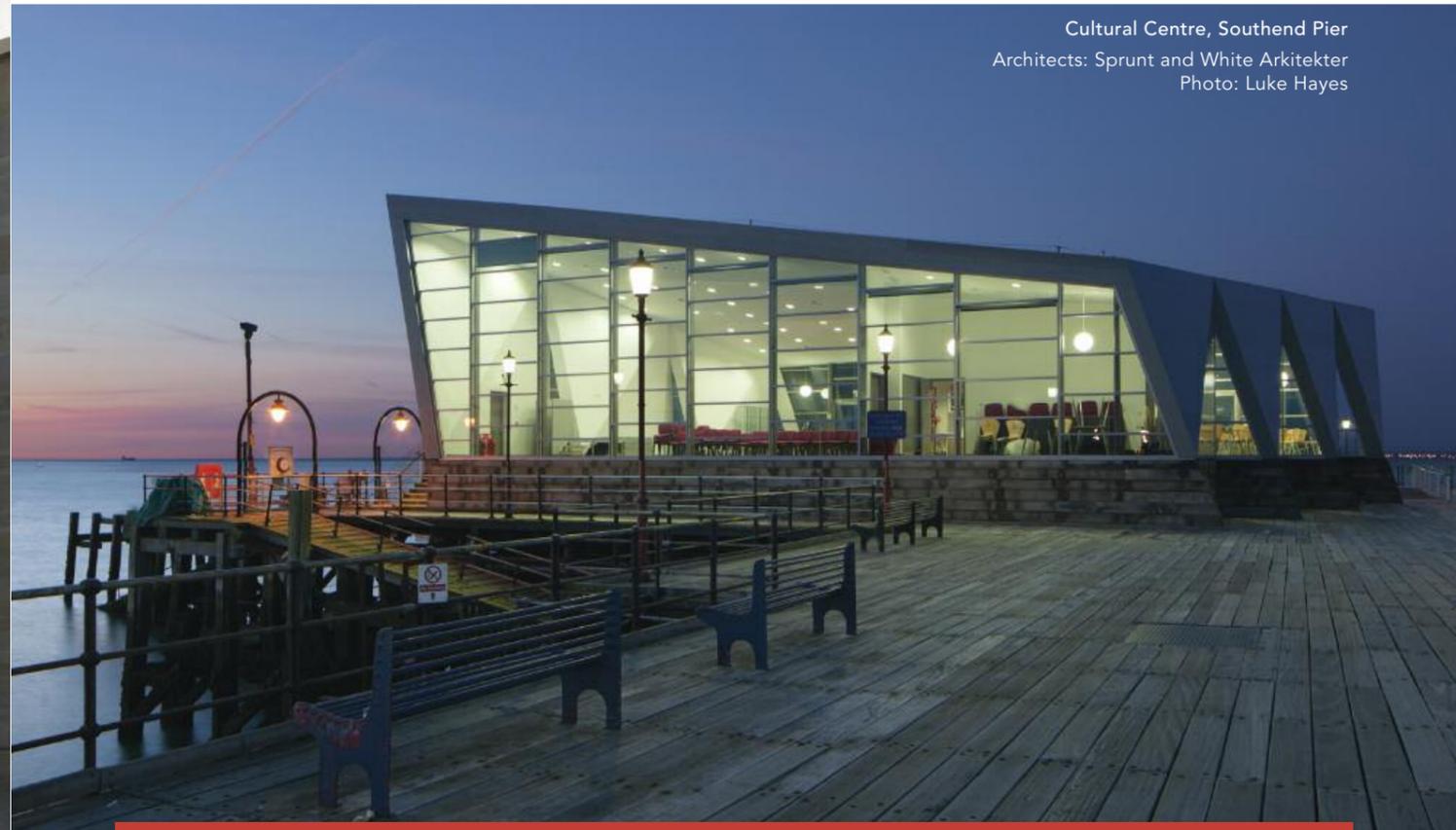
Full details can be downloaded from our website [www.kawneer.co.uk](http://www.kawneer.co.uk)



Glasgow Royal Concert Hall,  
New Auditorium  
Architect: Glasgow City Council



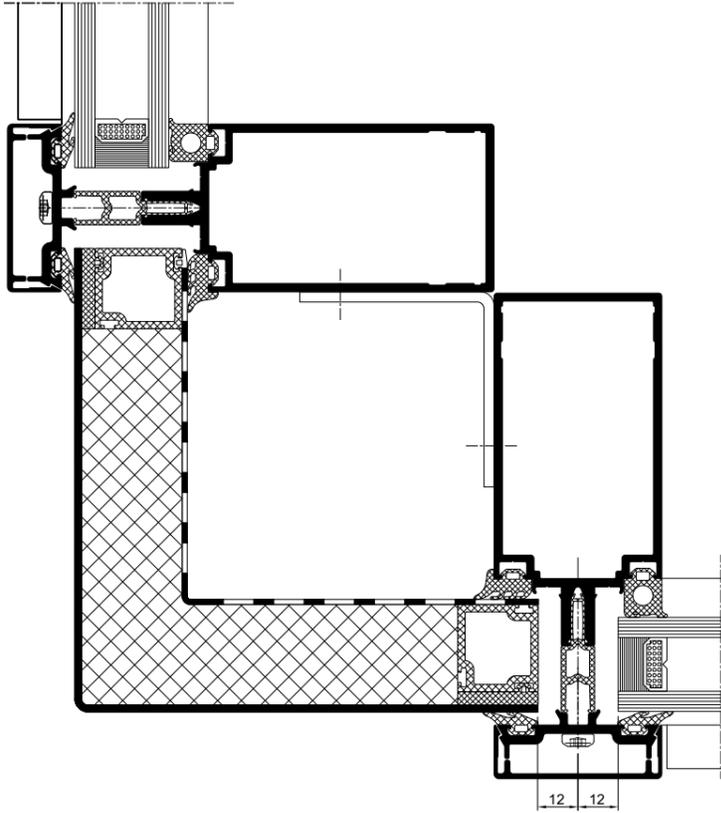
Cultural Centre, Southend Pier  
Architects: Sprunt and White Arkitekter  
Photo: Luke Hayes



AA®100 50mm and AA®110 65mm Zone Drained Façade

Full details can be downloaded from our website [www.kawneer.co.uk](http://www.kawneer.co.uk)

External Corner

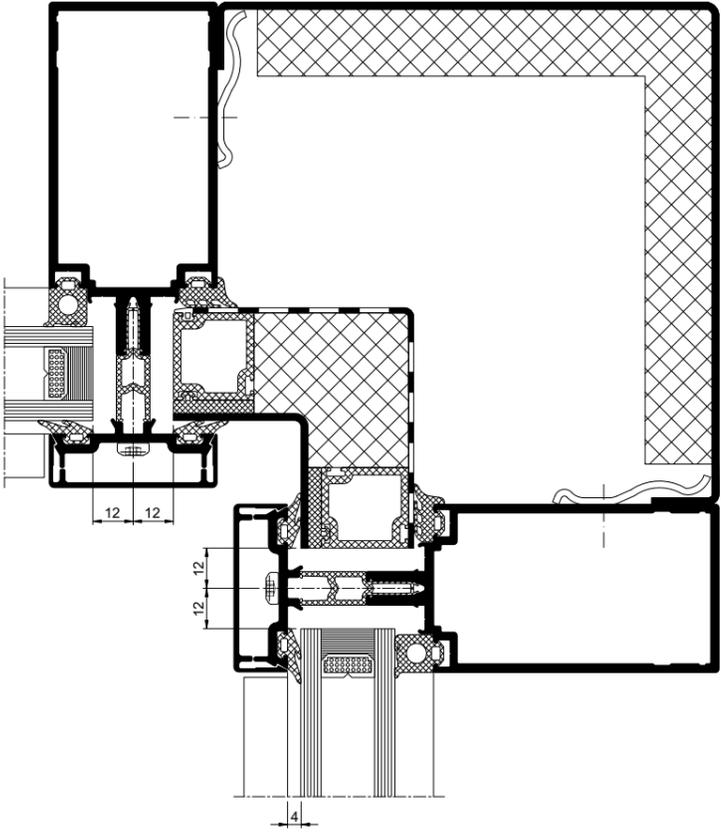


H1 05.01

AA®100 50mm and AA®110 65mm Zone Drained Façade

Full details can be downloaded from our website [www.kawneer.co.uk](http://www.kawneer.co.uk)

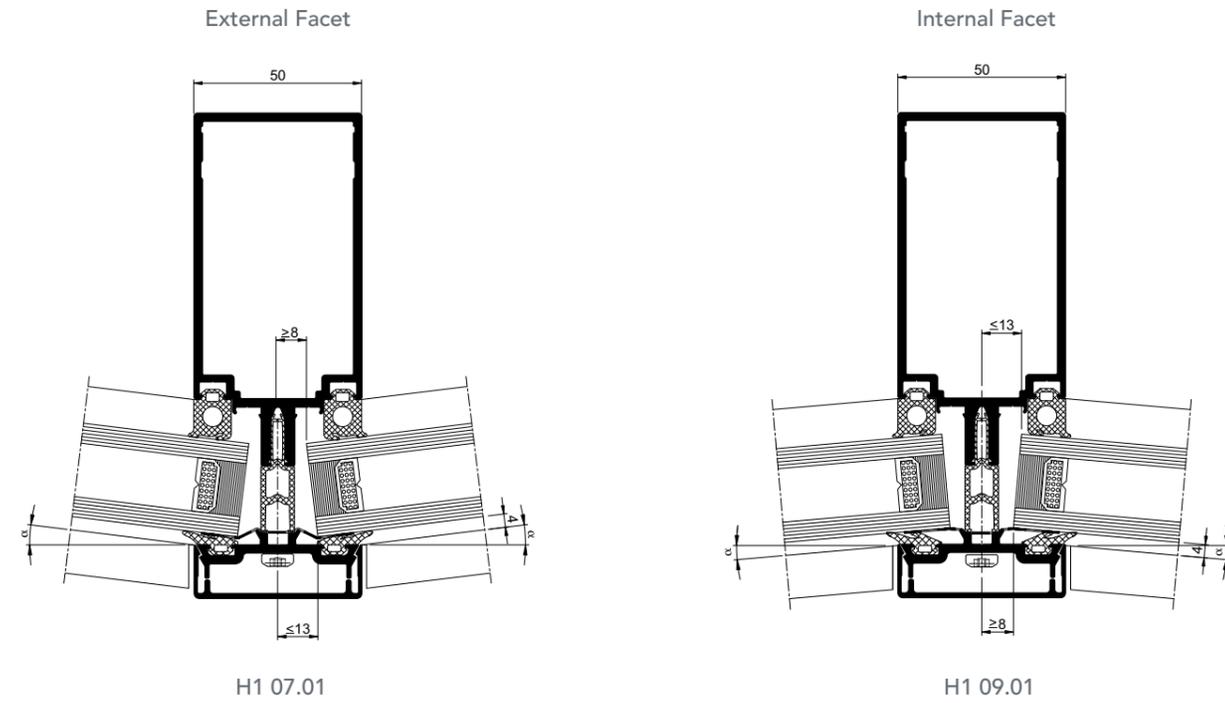
Internal Corner



H1 06.01

## AA®100 50mm and AA®110 65mm Zone Drained Façade

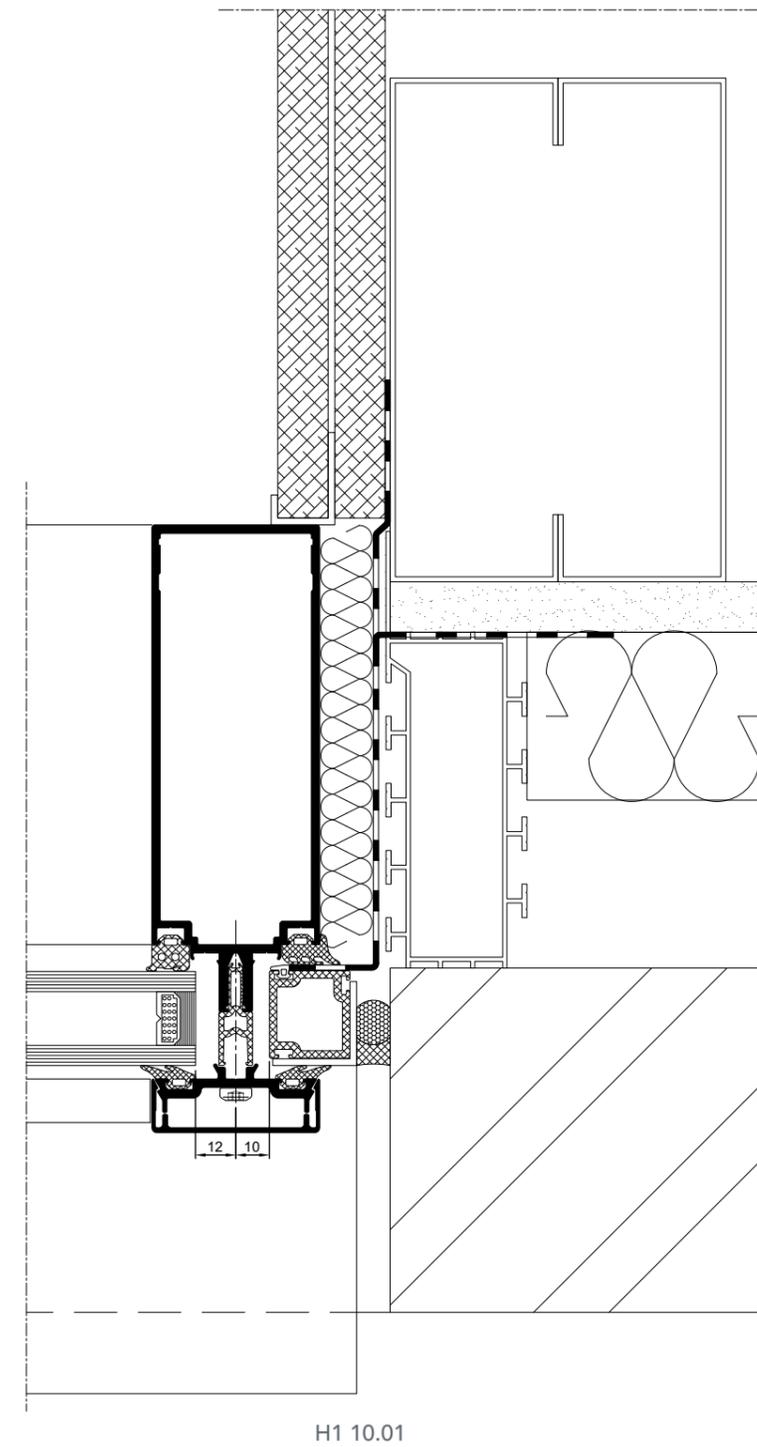
Full details can be downloaded from our website [www.kawneer.co.uk](http://www.kawneer.co.uk)



## AA®100 50mm and AA®110 65mm Zone Drained Façade

Full details can be downloaded from our website [www.kawneer.co.uk](http://www.kawneer.co.uk)

Jamb Interface Detail (Example)



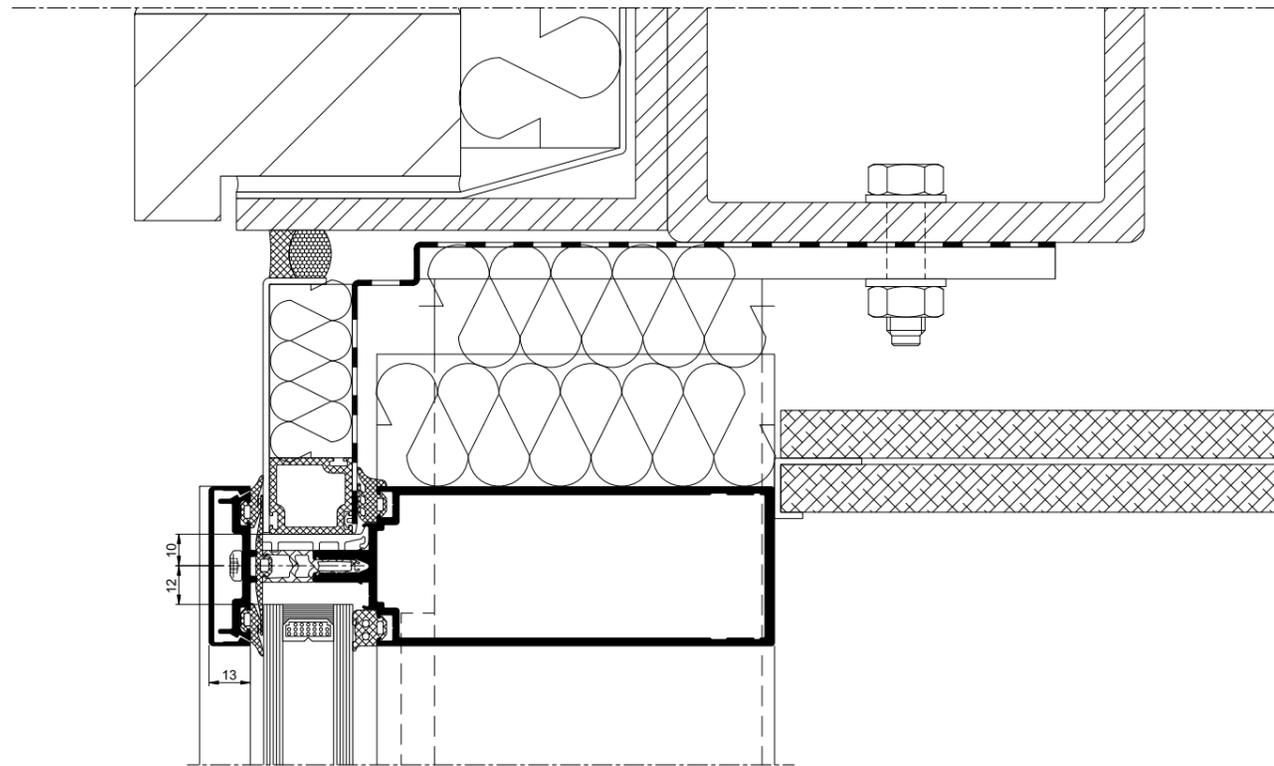
Stenhouse Building, University of Strathclyde  
Architect: Hypostyle Architects



### AA®100 50mm and AA®110 65mm Zone Drained Façade

Full details can be downloaded from our website [www.kawneer.co.uk](http://www.kawneer.co.uk)

Head Detail

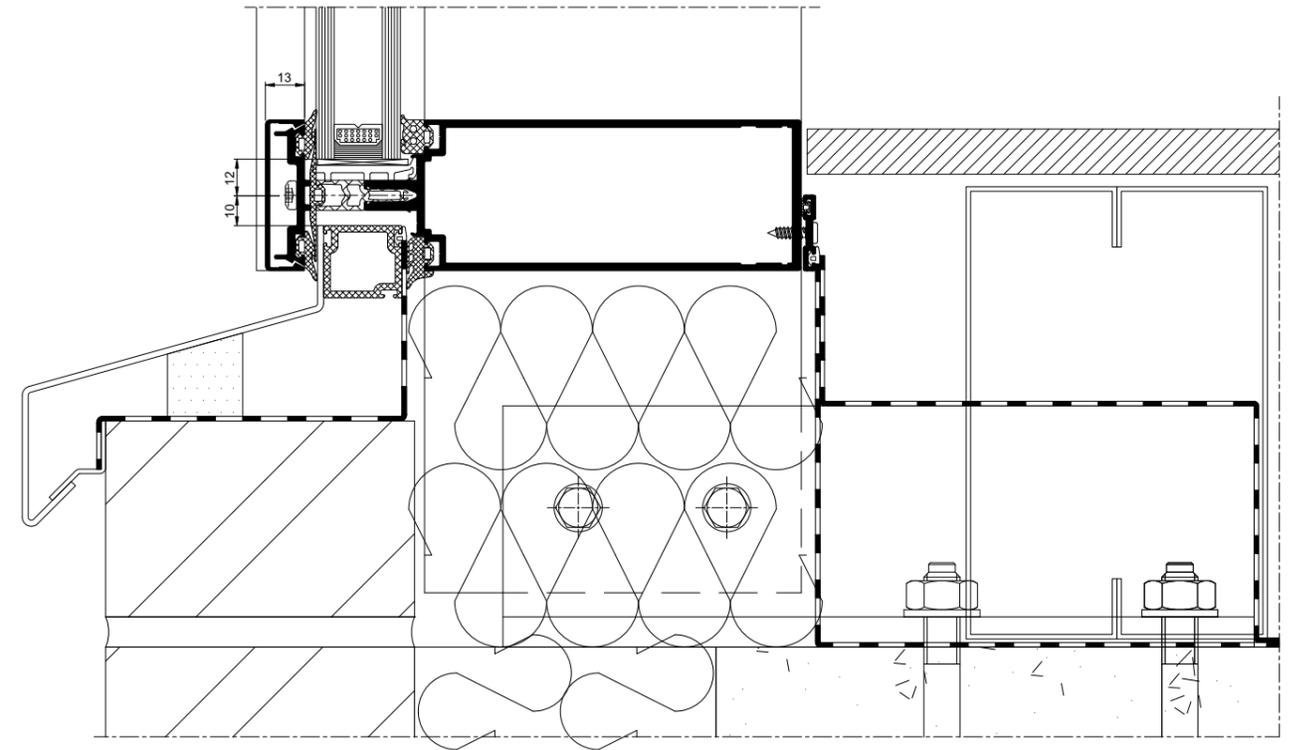


H1 12.01

### AA®100 50mm and AA®110 65mm Zone Drained Façade

Full details can be downloaded from our website [www.kawneer.co.uk](http://www.kawneer.co.uk)

Cill Detail

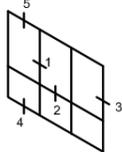
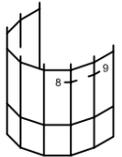
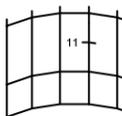


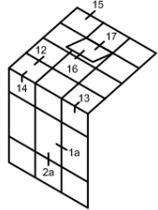
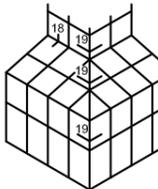
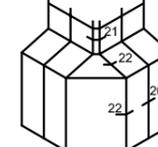
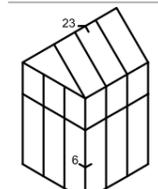
H1 11.01

# AA®100 50mm and AA®110 65mm Mullion Drained Façade and Roof Applications

## Typical Elevations

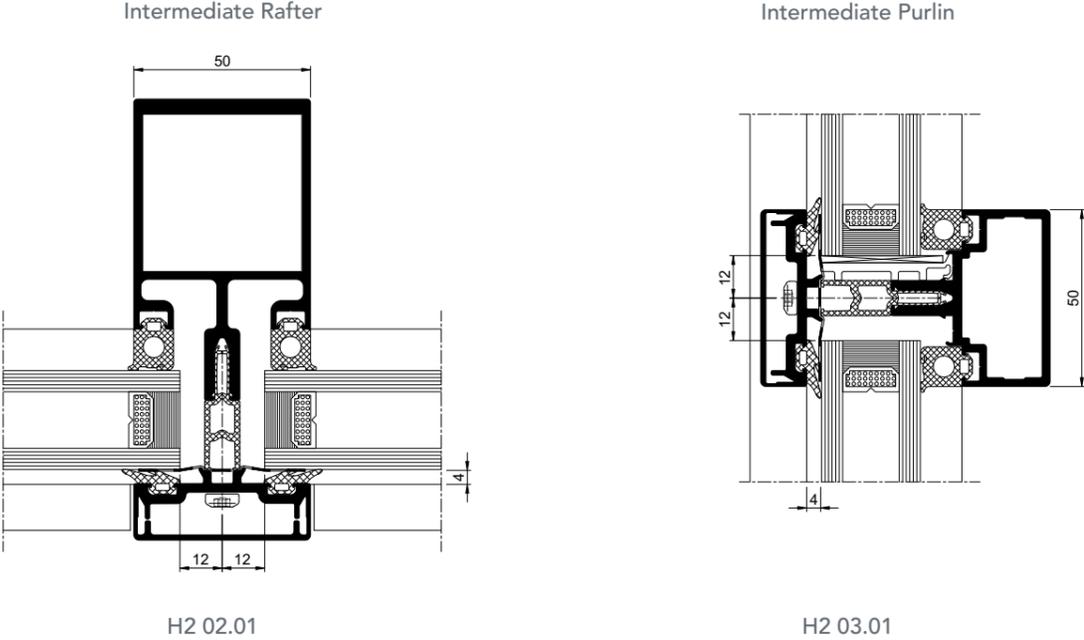
Full details can be downloaded from our website [www.kawneer.co.uk](http://www.kawneer.co.uk)

Elevation	Title	Website cad ref no.
	1 Intermediate Mullion	H2 02.01
	2 Intermediate Transom	H2 03.01
	3 Jamb detail (generic)	H2 26.01
	4 Cill detail (generic)	H2 25.01
	5 Head detail (generic)	H2 24.01
	6 External Corner	H2 08.01
	7 Internal Corner	H2 09.01
	8 Convex Faceted Mullion	H2 10.01, H2 11.01, H2 12.01
	9 Convex Faceted Mullion	H2 11.01
	10 Concave Faceted Mullion	H2 22.01, H2 23.01

Elevation	Title	Website cad ref no.
	1a Intermediate Mullion	H2 02.01
	2a Intermediate Transom	H2 03.01
	12 Intermediate Purlin	H2 04.01
	13 Eaves (slope - vertical)	H2 06.01, H2 07.01
	14 Eaves Gutter	H2 19.01
	15 Wall Plate	H2 20.01
	16 Slope Vent (lower end)	H2 17.01
17 Slope Vent (upper end)	H2 18.01	
	18 Vertical - slope connection	H2 05.01
	19 Hip	H2 13.01
	20 Intermediate Mullion	H2 14.01
	21 Corner	H2 15.01
	22 Hip / Facet	H2 16.01
	6 External Corner	H2 08.01
	23 Ridge	H2 27.01

# AA®100 50mm and AA®110 65mm Mullion Drained Façade and Roof

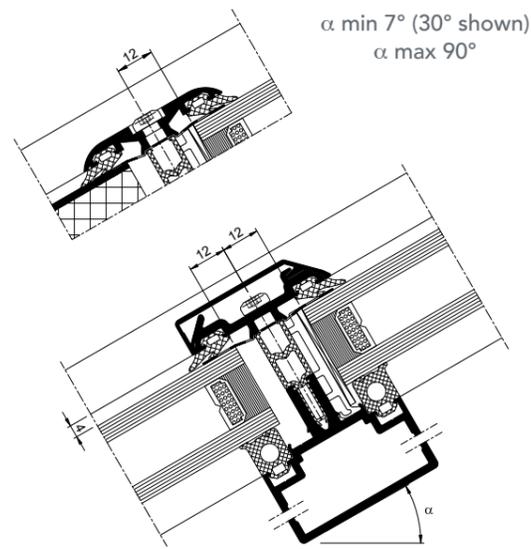
Full details can be downloaded from our website [www.kawneer.co.uk](http://www.kawneer.co.uk)



AA®100 50mm and AA®110 65mm Mullion Drained Façade and Roof

Full details can be downloaded from our website [www.kawneer.co.uk](http://www.kawneer.co.uk)

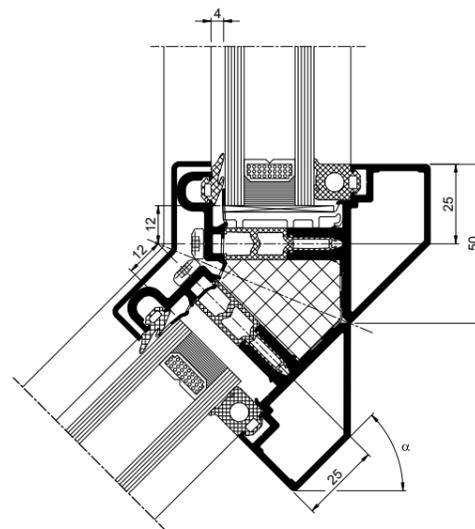
Purlin



$\alpha$  min = 15°

H2 04.01

Slope/Vertical Connection



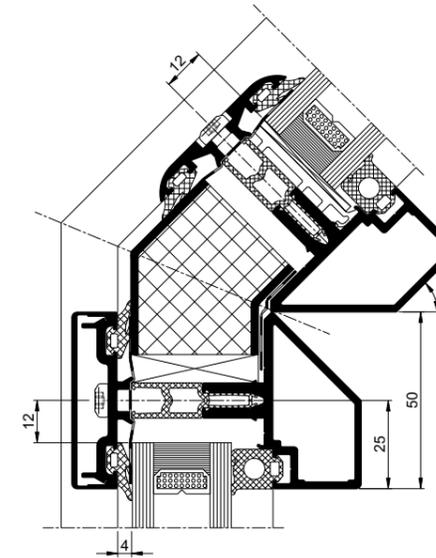
$\alpha$  min = 40° thermal break 16mm  
 $\alpha$  min = 45° thermal break 20mm  
 $\alpha$  min = 50° thermal break 26mm  
 $\alpha$  min = 55° thermal break 36mm  
 $\alpha$  max = 90°

H2 05.01

AA®100 50mm and AA®110 65mm Mullion Drained Façade and Roof

Full details can be downloaded from our website [www.kawneer.co.uk](http://www.kawneer.co.uk)

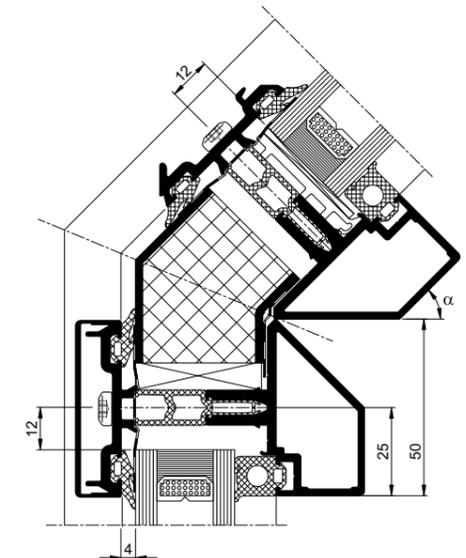
Eaves Detail (7° to 90° Pitch)



$\alpha$  min = 7°  
 $\alpha$  max = 90°

H2 07.01

Eaves Detail (15° to 90° Pitch)



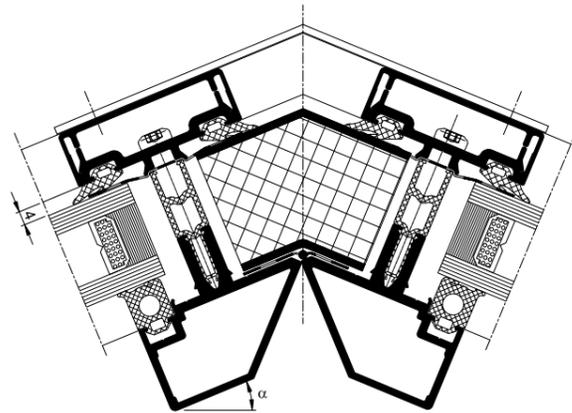
$\alpha$  min = 15°  
 (45° shown)  
 $\alpha$  max = 90°

H2 06.01

# AA®100 50mm and AA®110 65mm Mullion Drained Façade and Roof

Full details can be downloaded from our website [www.kawneer.co.uk](http://www.kawneer.co.uk)

Apex (Generic)



$\alpha$  min = 5°  
 $\alpha$  max = 45°

H2 27.01

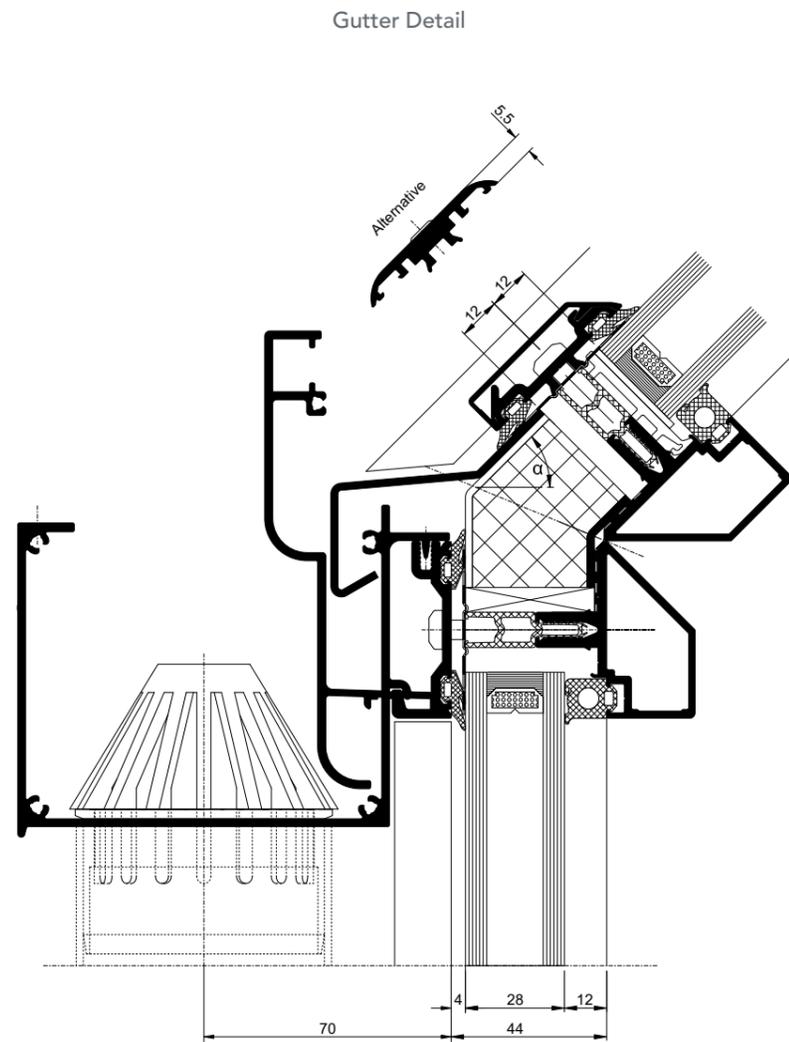
British Gas at Oxford Business Park  
Architect: Frank Shaw Associates  
Photo: Martin Cleveland Photography



London Designer Outlet, Wembley, North London  
Architect: Leslie Jones Architects  
Photo: London Designer Outlet

AA®100 50mm and AA®110 65mm Mullion Drained Façade and Roof

Full details can be downloaded from our website [www.kawneer.co.uk](http://www.kawneer.co.uk)

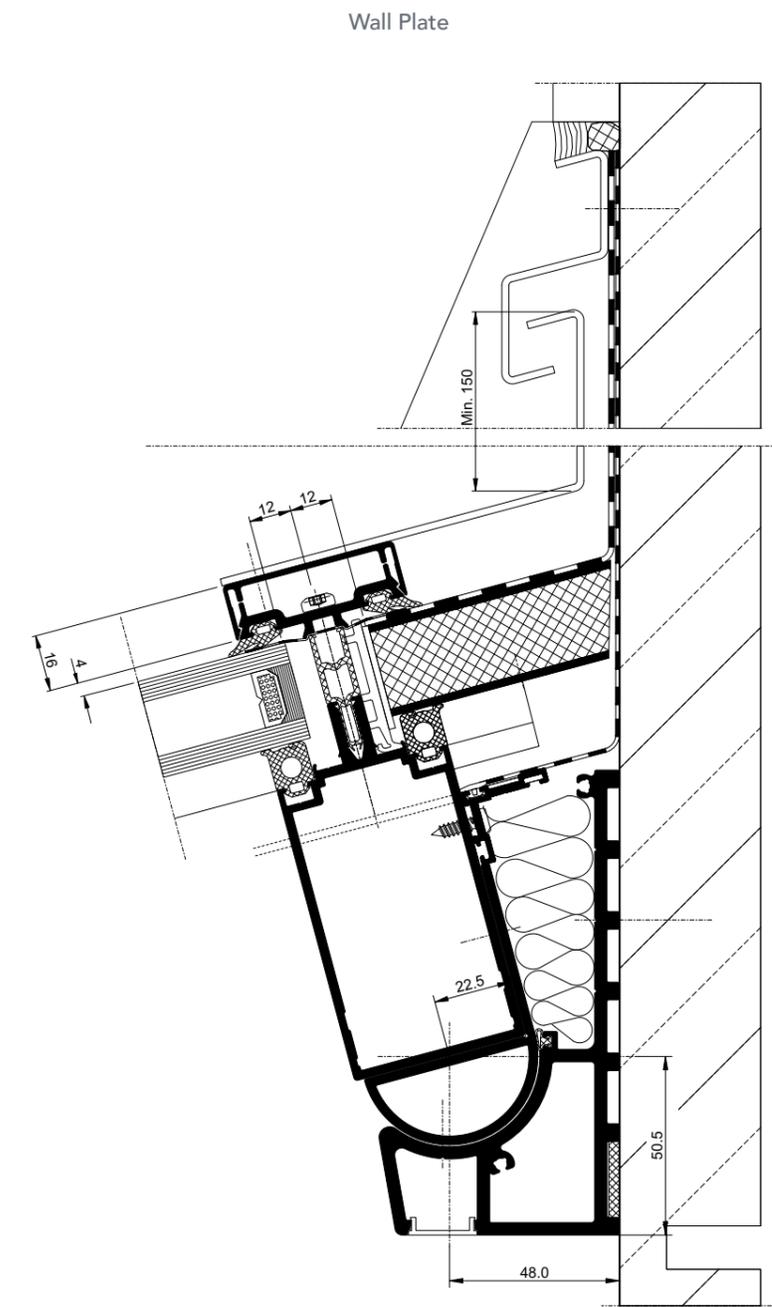


α min 7° -172 158  
 α min 15° -127 818  
 α max 45°

H2 19.01

AA®100 50mm and AA®110 65mm Mullion Drained Façade and Roof

Full details can be downloaded from our website [www.kawneer.co.uk](http://www.kawneer.co.uk)



α min 7°  
 α max 45°

H2 20.01

# Windows and Doors into Curtain Walling

## Introduction

Ventilation through curtain walling facades can be achieved with the introduction of opening windows into the screens' design. All window options from the AA®720, AA®540 and AA®3610 systems include perimeter adaptors enabling them to be simply glazed into the curtain wall.

Additionally, the AA®100 CV 'Concealed Vent' is designed specifically for the AA®100 curtain walling system. Utilising a structurally bonded double glazed unit, it allows the windows to be installed into the façade with no obvious external indication of their location.

The AA®100 and AA®110 systems can also offer a purpose designed window for slope glazing installations. As well as natural ventilation this vent can be used for smoke ventilation and has been tested to BS EN 12101-2.

Through the incorporation of perimeter adaptors, it is also possible to install doors from the AA®720 range and the AA®545 door directly into the curtain walling façade. The Kawneer heavy duty 190 and 350 entrance doors can be installed in a similar way.

## Design Considerations

The Kawneer window range offers a ventilation solution to satisfy all project requirements.

When considering the type of window to install it is necessary to consider the following points:

- Height and width size limits are different for each window type
- Required free air area for each window
- Thermal performance

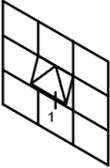
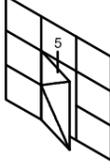
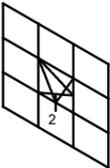
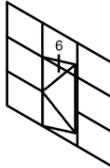
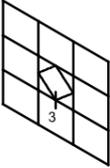
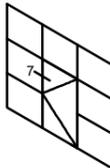
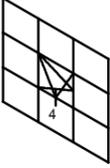
## Product Features and Benefits

- Inward opening and outward opening window inserts available
- Vertical sliding window inserts for optimum ventilation configuration
- Automation of windows is possible
- AA®720 windows offer frames with a range of thermal performance
- All windows are weather tested to BS 6375
- AA®720 Tiltturn tested to CWCT standard
- AA®100 Slope Vent tested to BS EN 12101-2 for smoke ventilation
- Full range of door locking and function options

# Windows and Doors into Curtain Walling Applications

## Typical Elevations

Full details can be downloaded from our website [www.kawneer.co.uk](http://www.kawneer.co.uk)

Elevation	Title	Website cad ref no.	Elevation	Title	Website cad ref no.
	1 Top Hung Vent	H3 05.01		5 Open Out Door	H3 09.01
	2 Tiltturn Vent	H3 06.01		6 Open In Door	H3 10.01
	3 Pivot Vent	H3 07.01		7 Dual Action Door	H3 11.01
	4 Integral Tiltturn Vent	H3 08.01			

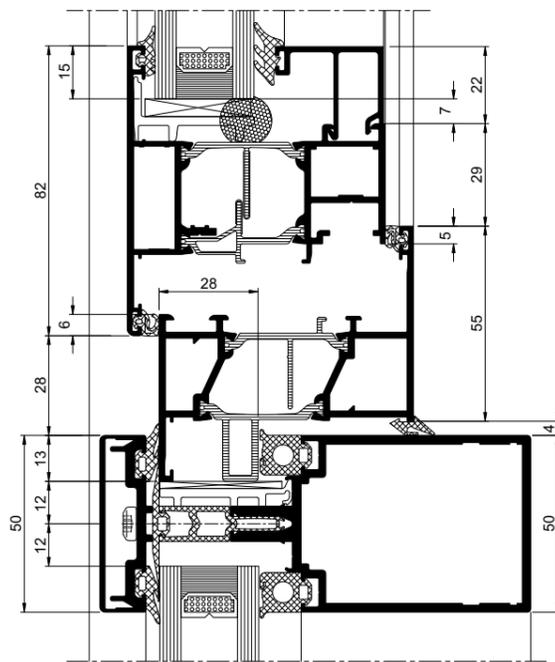
West of Scotland Satellite Radiotherapy Facility  
Architect: Keppie Design



## Windows and Doors into Curtain Walling

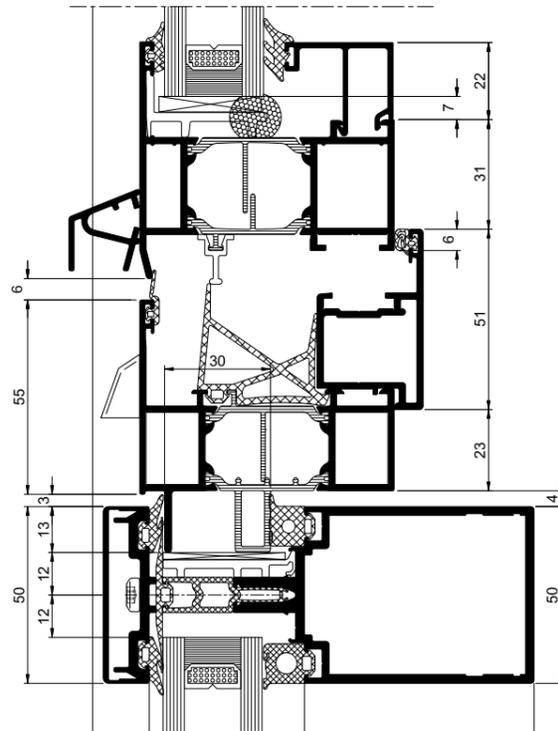
Full details can be downloaded from our website [www.kawneer.co.uk](http://www.kawneer.co.uk)

AA®100 including an  
AA®720 Casement



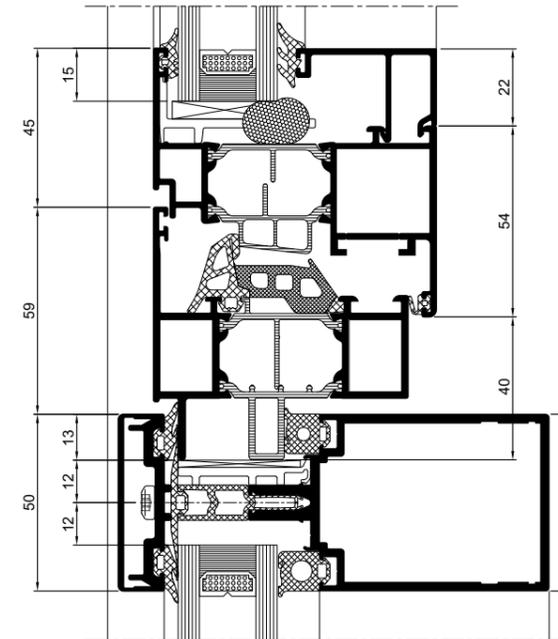
H3 05.01

AA®100 including an  
AA®720 Pivot



H3 07.01

AA®100 including an  
AA®720 Tiltturn



H3 06.01

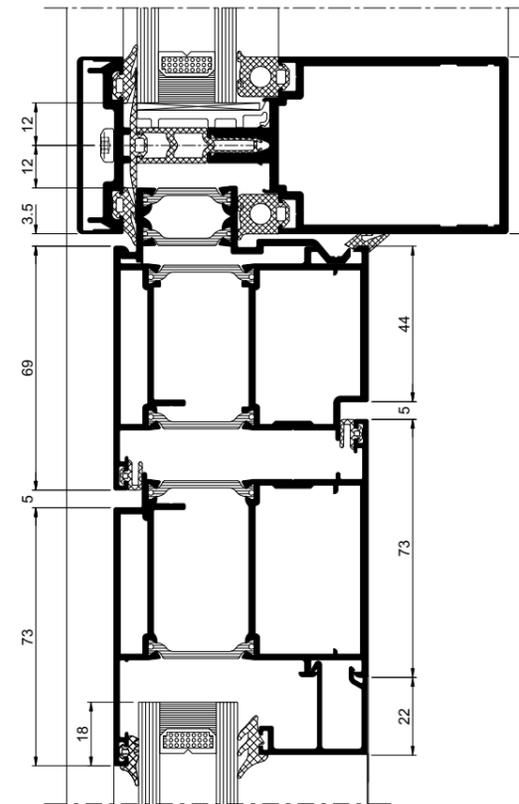
Cardiff and Vale College  
Architect: BDP  
Photo: Gareth Gardner



## Windows and Doors into Curtain Walling

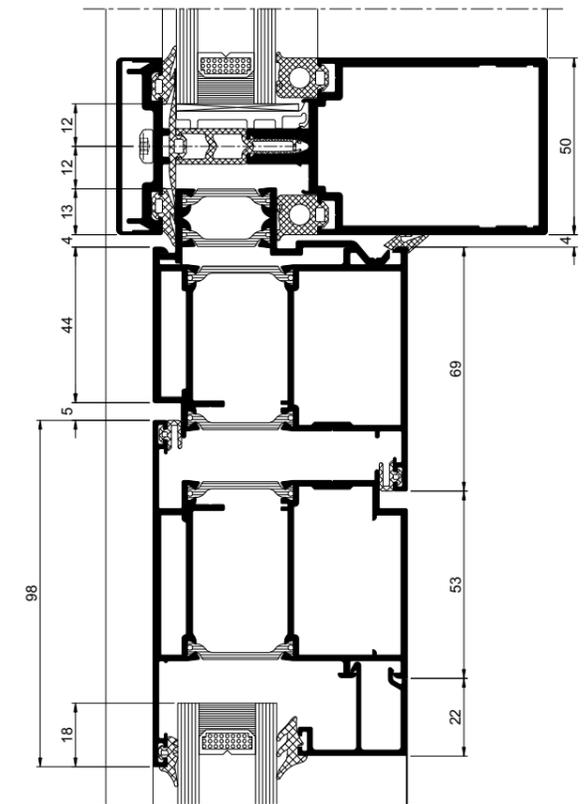
Full details can be downloaded from our website [www.kawneer.co.uk](http://www.kawneer.co.uk)

AA®100 including an  
Inward Opening AA®720 Door



H3 10.01

AA®100 including an  
Outward Opening AA®720 Door



H3 09.01

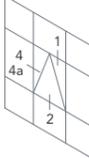
# AA®100 and AA®110 Concealed Vent Open Out Applications

## Typical Elevations

Full details can be downloaded from our website [www.kawneer.co.uk](http://www.kawneer.co.uk)

### Outside Elevations

Elevation	Title	Website cad ref no.	
	1	AA®100 Zone Drained Head	AA®100 CV/AA®110 CV H 02.01
	2	AA®100 Zone Drained Cill	AA®100 CV/AA®110 CV H 03.01
	3	AA®100 Zone Drained Jamb	AA®100 CV/AA®110 CV H 02.01
	3a	AA®100 Zone Drained Jamb Stepped Glass	AA®100 CV/AA®110 CV H 04.01

Elevation	Title	Website cad ref no.	
	1	AA®100 Mullion Drained Head	AA®100 CV/AA®110 CV H 02.01
	2	AA®100 Mullion Drained Cill	AA®100 CV/AA®110 CV H 03.01
	4	AA®100 Mullion Drained Jamb	AA®100 CV/AA®110 CV H 06.01
	4a	AA®100 Mullion Drained Jamb Stepped Glass	AA®100 CV/AA®110 CV H 07.01

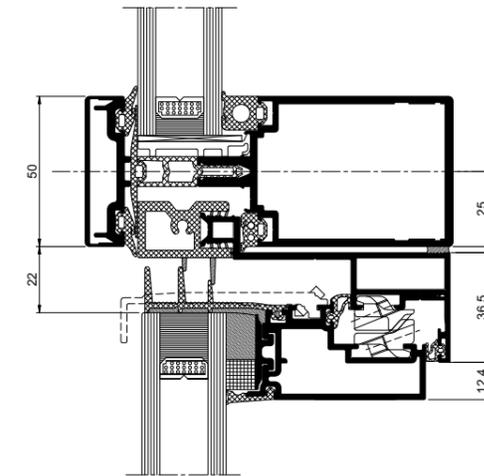
### Outside Elevations

Elevation	Title	Website cad ref no.	
	5	AA®100 HC Systems Zone Drained Jamb	AA®100 CV/AA®110 CV H 08.01
	5a	AA®100 HC Systems Zone Drained Jamb Stepped Glass	AA®100 CV/AA®110 CV H 09.01

# AA®100 and AA®110 Concealed Vent Open Out

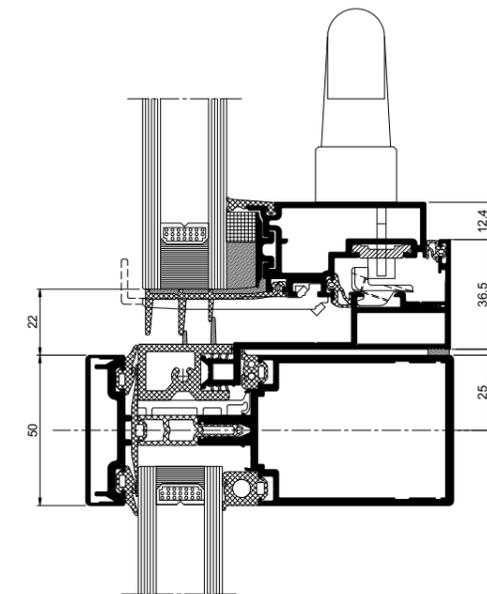
Full details can be downloaded from our website [www.kawneer.co.uk](http://www.kawneer.co.uk)

## Head Detail



H 02.01

## Cill Detail



H 03.01

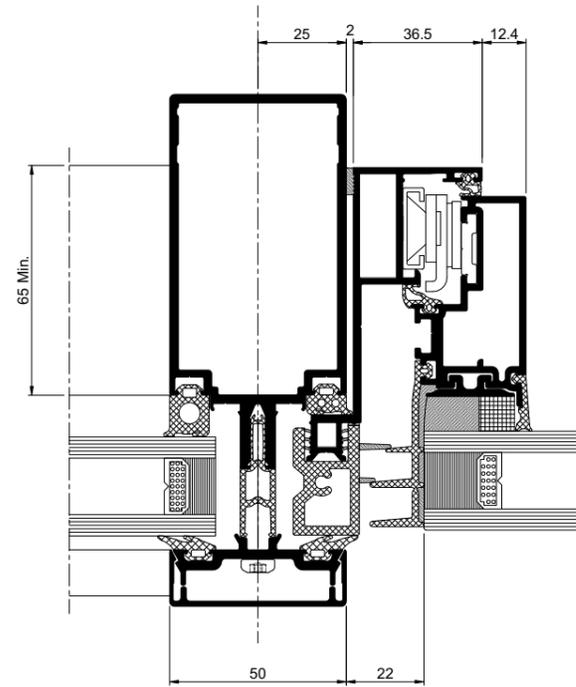
World Wildlife Fund – UK Headquarters, Living Planet Centre  
 Architect: Hopkins Architects  
 Photograph copyright: Morley von Sternberg



## AA®100 and AA®110 Concealed Vent Open Out

Full details can be downloaded from our website [www.kawneer.co.uk](http://www.kawneer.co.uk)

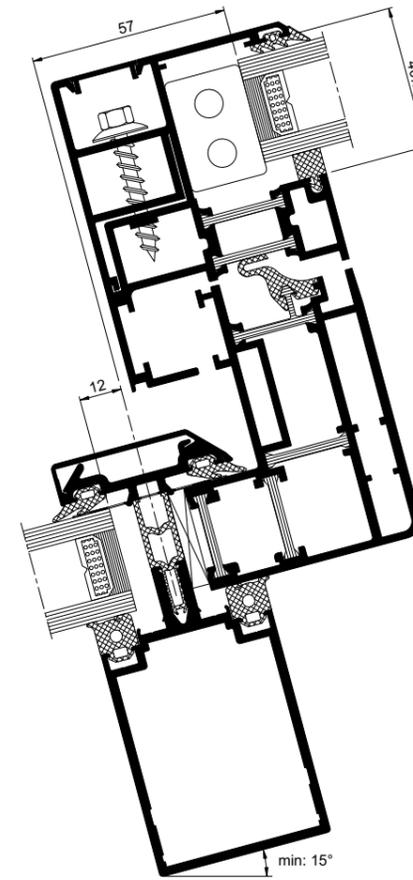
Jamb Detail – Zone Drained



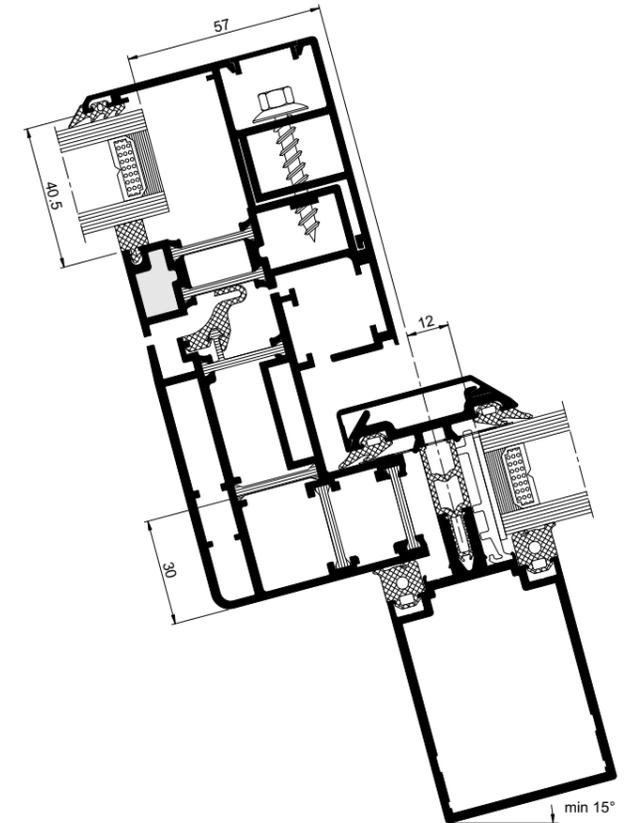
H 04.01

## AA®100 and AA®110 Sloped Vent Details

Full details can be downloaded from our website [www.kawneer.co.uk](http://www.kawneer.co.uk)



H2 17.01



H2 18.01

### AA®100/AA®110

Max glass area	2.15m <sup>2</sup>		
Max height	1800mm	Min height	600mm
Max width	1500mm	Min width	500mm
Min glass thickness	16mm (units)	Max glass thickness	34mm (units)
Min roof angle	15°		

# AA®100 and AA®110 Horizontally Capped (HC) and AA®100 and AA®110 Vertically Capped (VC) Gasket System

## Introduction

The AA®100 and AA®110 HC/VC options provide the specifier with an alternative to traditional (SSG) Structurally glazed silicone joints.

The low profile EPDM gasket system enables specifiers to maintain the look of a structurally glazed system whilst maintaining the benefits of a capped system.

On an AA®100/AA®110 HC façade the vertical glazing joints are secured and sealed with a discreet pressure plate and EPDM cover gasket. The horizontal face caps run continuously across the glazing and are enhanced by the unobtrusive vertical gasket system.

On an AA®100/AA®110 VC façade utilises the same principle but with the EPDM gasket in a horizontal application between vertical caps.

In addition, we are also able to offer a wide variety of face caps to accentuate the visual look of the building facade, giving the building its own individual signature.

The system has been exclusively designed, developed and supplied by Kawneer in conjunction with our approved Dealer network.

## Product Features and Benefits

- Cost effective alternative to traditional SSG structurally glazed silicone joints
- Retains all of the full range of AA®100 and AA®110 mullions and transoms
- Large range of face caps available to compliment the discreet EPDM gasket
- Improved installation speeds compared to traditional SSG
- Ease of glass replacement due to pressure plate / gasket arrangement
- Maximum glazing up to 50mm
- Maximum infill weight 600kg
- Market leading product tested and certified to CWCT Sequence B



AA®100 50mm Horizontal Cap (HC)



# AA®100 Horizontally Capped (HC) Applications

## Typical Elevations

Full details can be downloaded from our website [www.kawneer.co.uk](http://www.kawneer.co.uk)

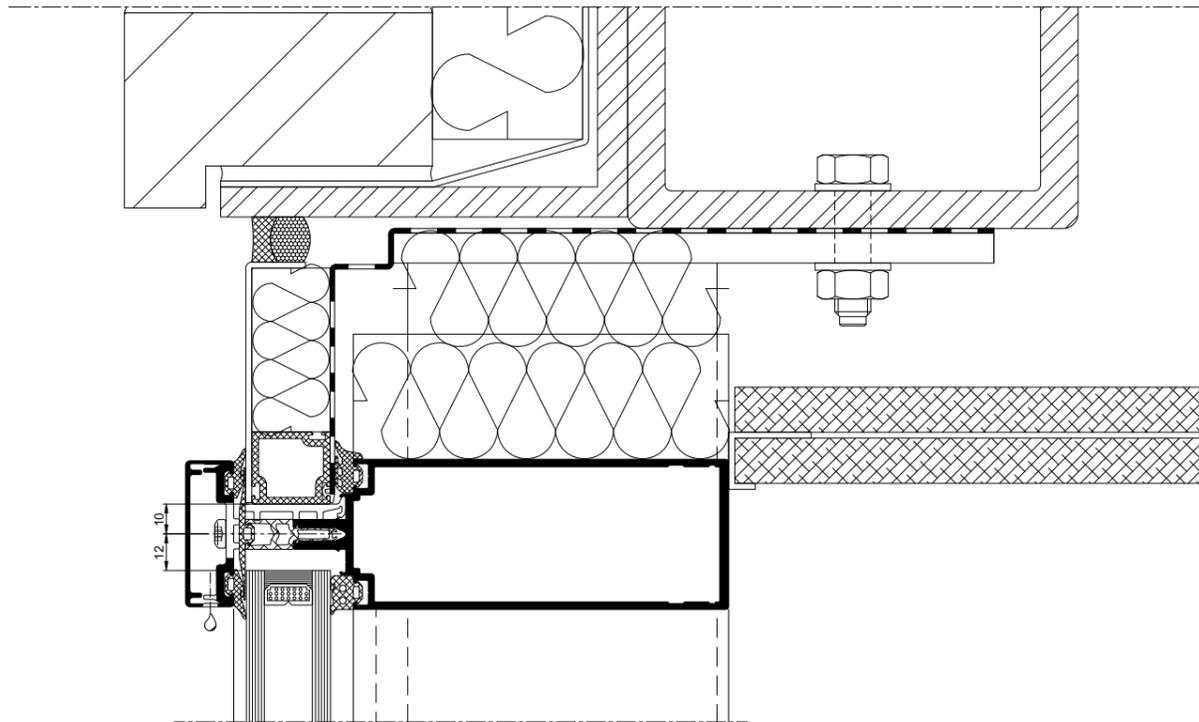
Elevation	Title	Website cad ref no.	
	1	Head Detail (generic)	H4 02.01
	2	Intermediate Transom	H4 03.01
	3	Cill Detail (generic)	H4 04.01
	4	Jamb Detail (generic)	H4 05.01, H4 06.01
	5	Intermediate Mullion	H4 07.01



## AA®100 Horizontally Capped (HC)

Full details can be downloaded from our website [www.kawneer.co.uk](http://www.kawneer.co.uk)

Head Detail (Generic)

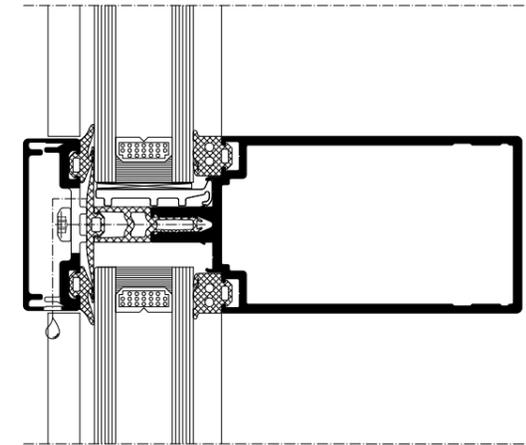


H4 02.01

## AA®100 Horizontally Capped (HC)

Full details can be downloaded from our website [www.kawneer.co.uk](http://www.kawneer.co.uk)

Transom Detail



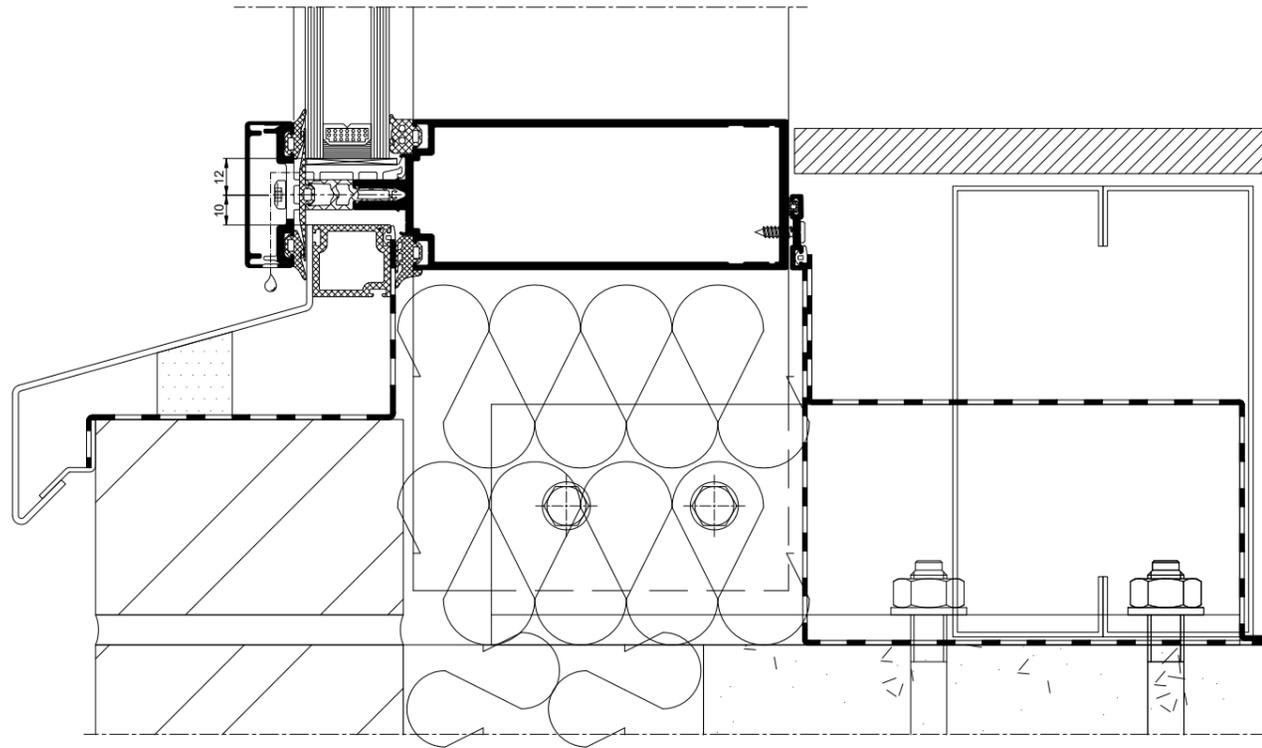
H4 03.01



### AA®100 Horizontally Capped (HC)

Full details can be downloaded from our website [www.kawneer.co.uk](http://www.kawneer.co.uk)

Cill Detail (Generic)

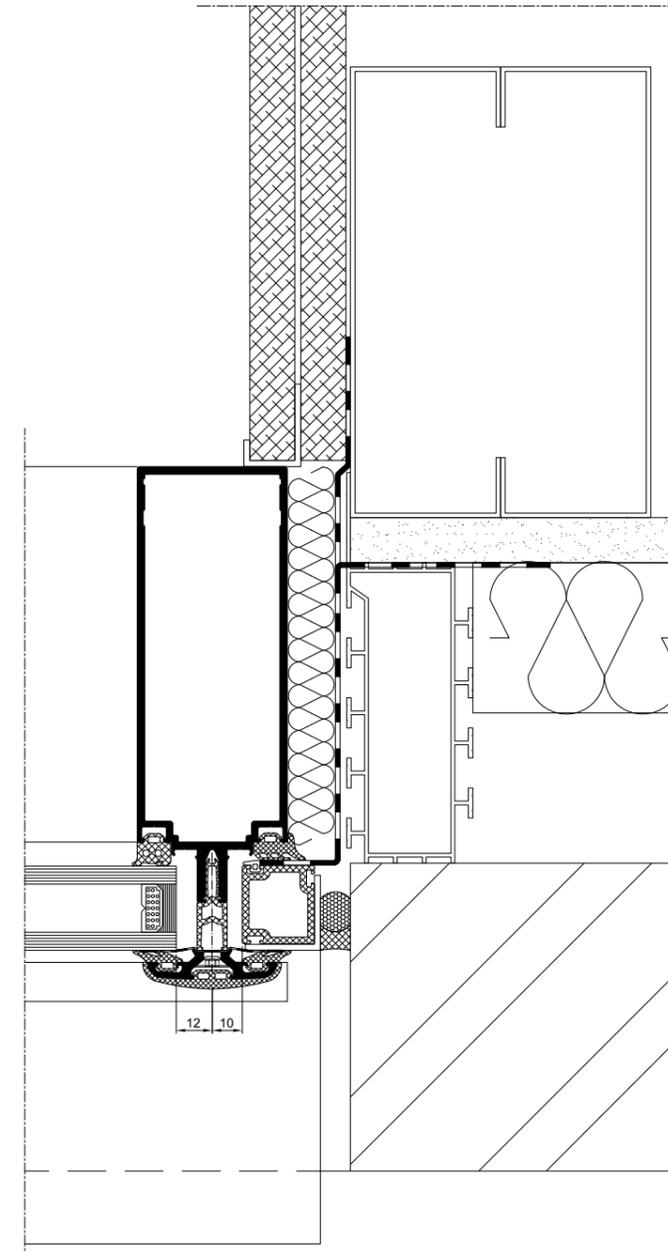


H4 04.01

### AA®100 Horizontally Capped (HC)

Full details can be downloaded from our website [www.kawneer.co.uk](http://www.kawneer.co.uk)

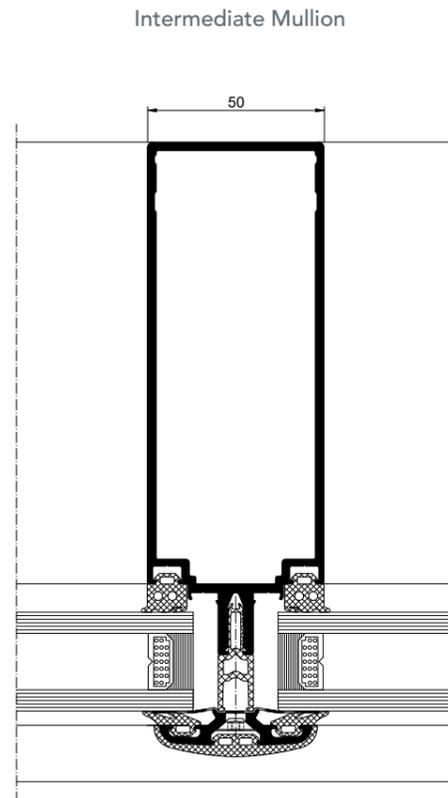
Jamb Detail (Generic)



H4 05.01

## AA®100 Horizontally Capped (HC)

Full details can be downloaded from our website [www.kawneer.co.uk](http://www.kawneer.co.uk)



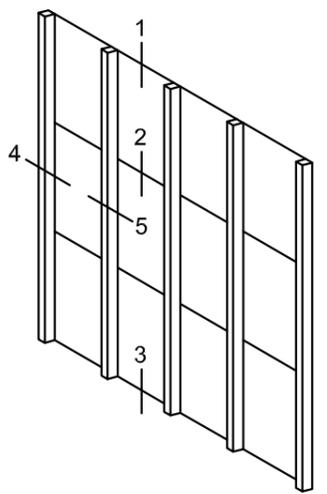
H4 07.01



# AA®100 Vertically Capped (VC) Applications

## Typical Elevations

Full details can be downloaded from our website [www.kawneer.co.uk](http://www.kawneer.co.uk)

Elevation	Title	Website cad ref no.
	1 Head Detail (generic)	H4 10.01, H4 11.01
	2 Intermediate Transom	H4 12.01
	3 Cill Detail (generic)	H4 13.01, H4 14.01
	4 Jamb Detail (generic)	H4 15.01, H4 16.01
	5 Intermediate Mullion	H4 17.01, H4 18.01

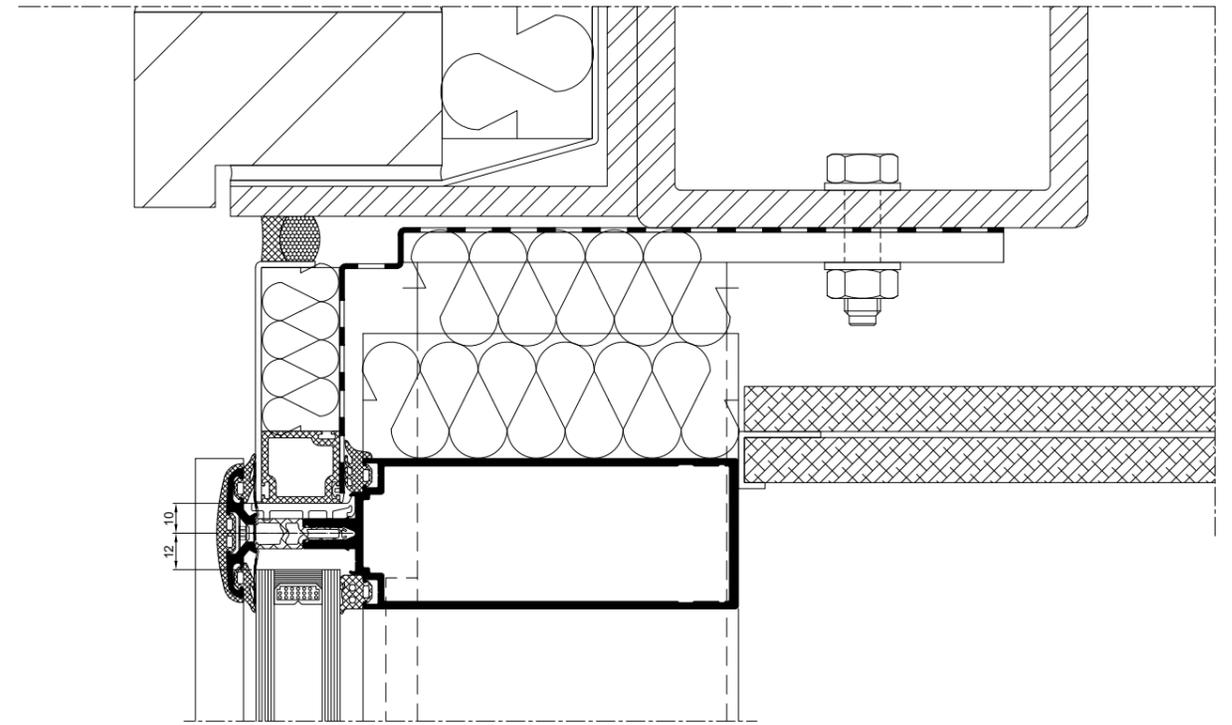
John Roan School, London  
 Architect: John McAslan + Partners  
 Photo: John McAslan + Partners / Hufton+Crow



## AA®100 Vertically Capped (VC)

Full details can be downloaded from our website [www.kawneer.co.uk](http://www.kawneer.co.uk)

Head Detail (Generic)

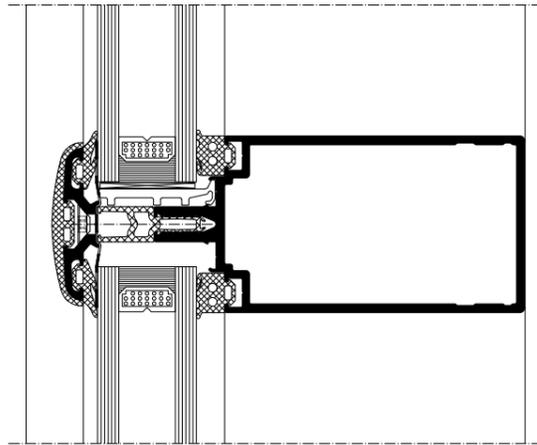


H4 10.01

## AA®100 Vertically Capped (VC)

Full details can be downloaded from our website [www.kawneer.co.uk](http://www.kawneer.co.uk)

Transom Detail



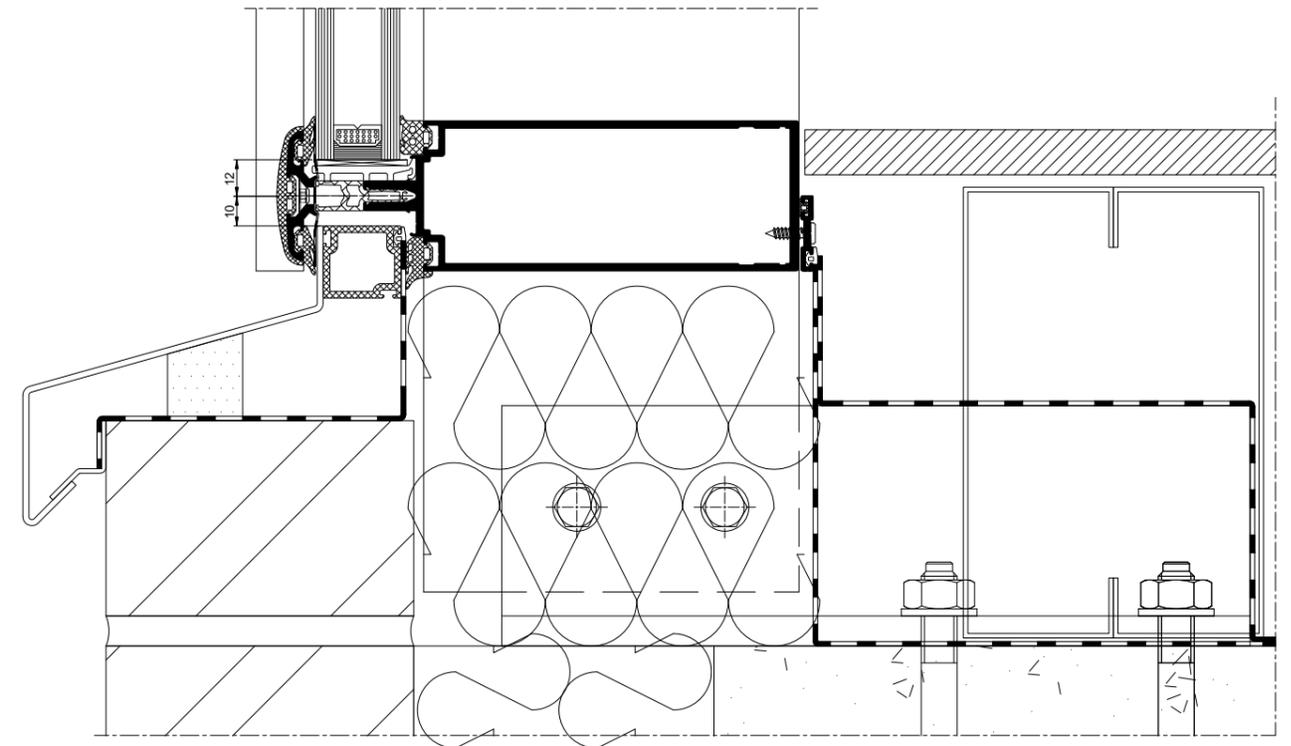
H4 12.01



## AA®100 Vertically Capped (VC)

Full details can be downloaded from our website [www.kawneer.co.uk](http://www.kawneer.co.uk)

Cill Detail (Generic)

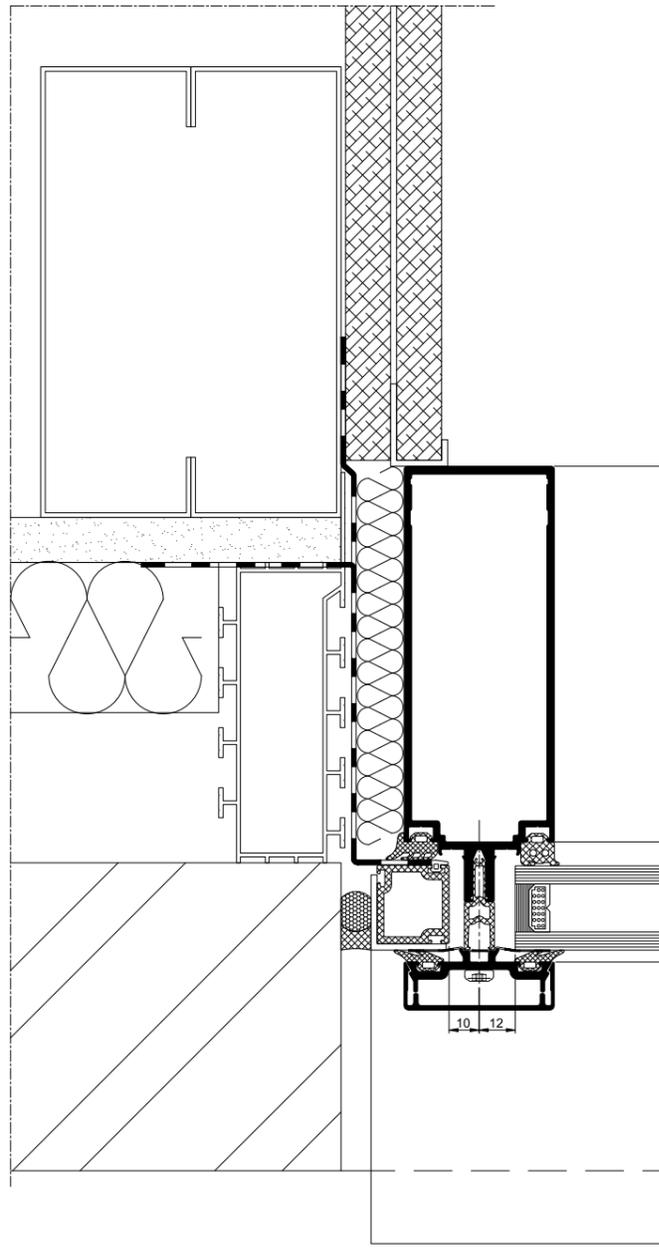


H4 13.01

## AA®100 Vertically Capped (VC)

Full details can be downloaded from our website [www.kawneer.co.uk](http://www.kawneer.co.uk)

### Jamb Detail (Generic)

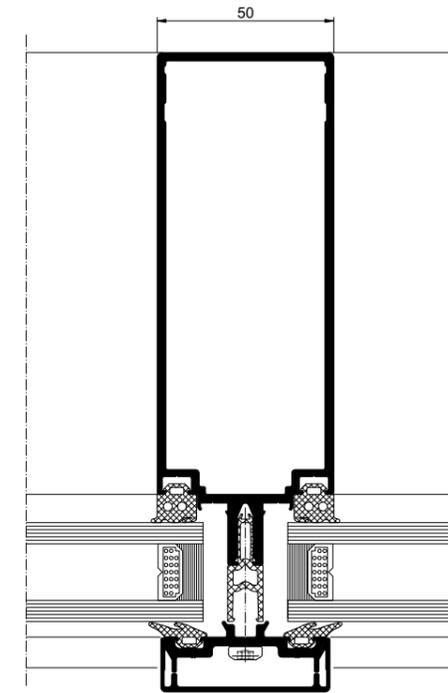


H4 15.01

## AA®100 Vertically Capped (VC)

Full details can be downloaded from our website [www.kawneer.co.uk](http://www.kawneer.co.uk)

### Intermediate Mullion



H4 17.01

## AA®100 Structurally Silicone Glazed (SSG)

### Introduction

The AA®100 SSG is a system which allows glazing of the curtain walling to be achieved without the use of visible face caps giving an aesthetically pleasing appearance with flush glazing to the exterior.

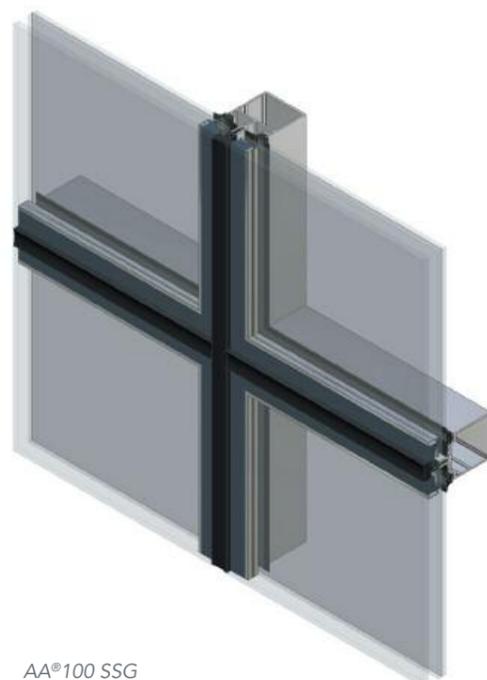
It also offers the benefit of reduced on-site installation time making the AA®100 SSG a more cost effective solution.

The glazing units are constructed with the use of structural silicone sealant and contain an integrated channel profile around the perimeter. Toggle clips positioned on the mullions and transoms locate into the channel profile and provide the mechanical retention to secure the pane to the curtain wall. This offers a specifier assurity and peace of mind of a guaranteed installation. The glazing unit is deadload supported by the transom using a combination of setting blocks and glass supports, additionally the final aesthetics of the façade is enhanced by use of a flush seal between the glass units by means of a UV resistant weatherproofing silicone sealant.

### Product Features and Benefits

- Dry jointing method using specially designed EPDM moulding
- Mullion drainage
- Glazing from 26mm to 37mm for increased design flexibility
- Thermal performance can meet current Building Regulations
- Tested and certified in accordance with CWCT Sequence B
- Maximised structural capability and design with a range of mullions and transoms
- Integration with both AA®100 and AA®110 curtain wall systems
- Glazing retained using a toggle system
- Silicone sealed glass to glass joint
- Maximum screen height of 16m

Contact our Technical Services Department for further information



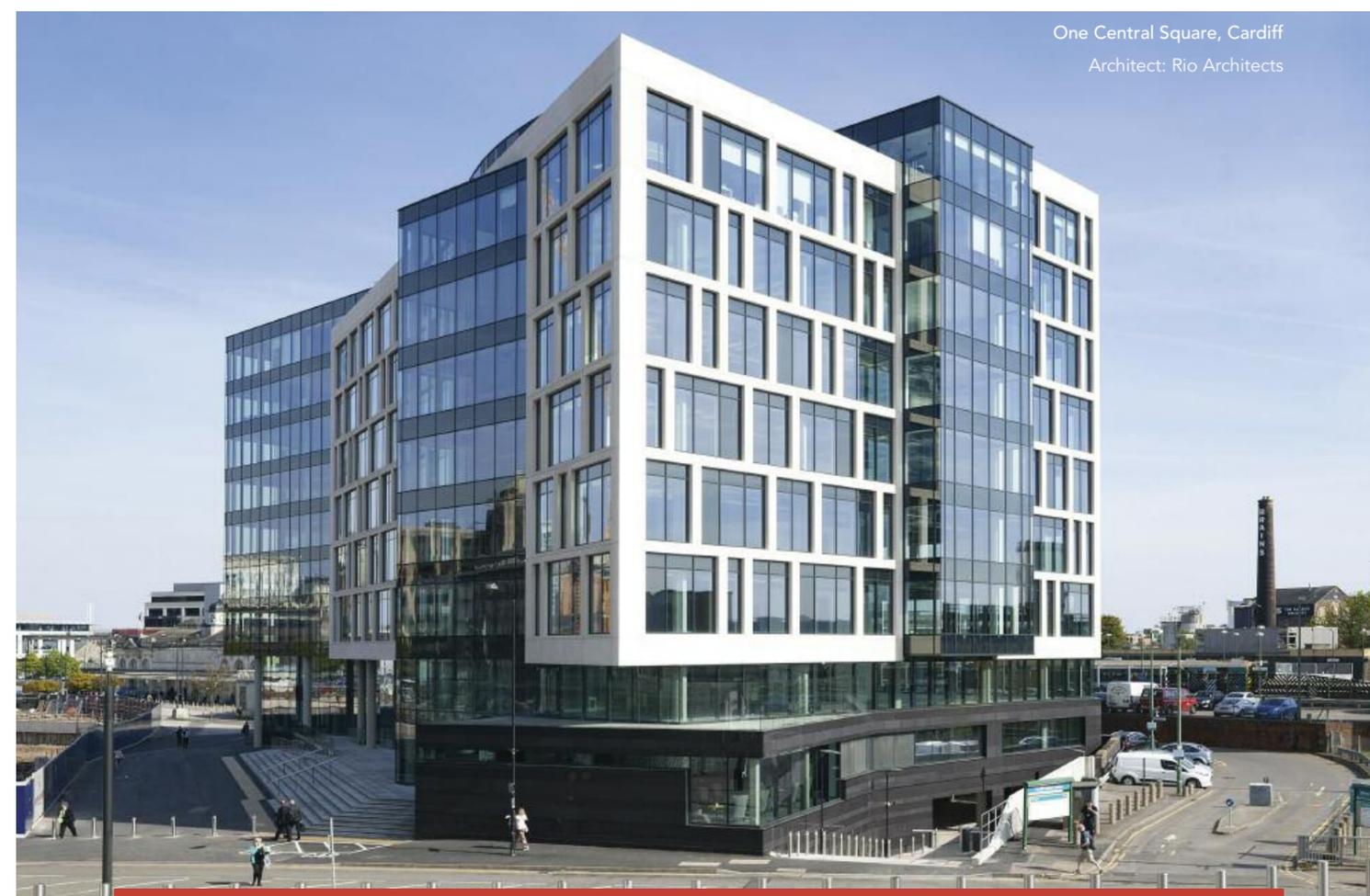
AA®100 SSG

## AA®100 Structurally Silicone Glazed (SSG) Applications

### Typical Elevations

Full details can be downloaded from our website [www.kawneer.co.uk](http://www.kawneer.co.uk)

Elevation	Title	Website cad ref no.
	1 Mullion	AA®100 SSG H 02.01
	2 Jamb Interface	AA®100 SSG H 03.01
	2a Jamb Interface with Face Cap	AA®100 SSG H 04.01
	3 Transom	AA®100 SSG H 05.01
	4 Cill	AA®100 SSG H 06.01
	4a Capped Cill	AA®100 SSG H 06.01
	5 Head	AA®100 SSG H 08.01



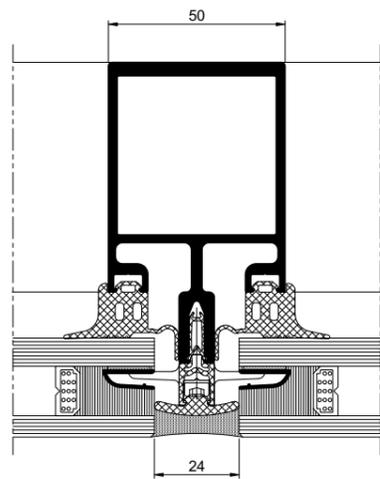
One Central Square, Cardiff  
Architect: Rio Architects



AA®100 Structurally Silicone Glazed (SSG)

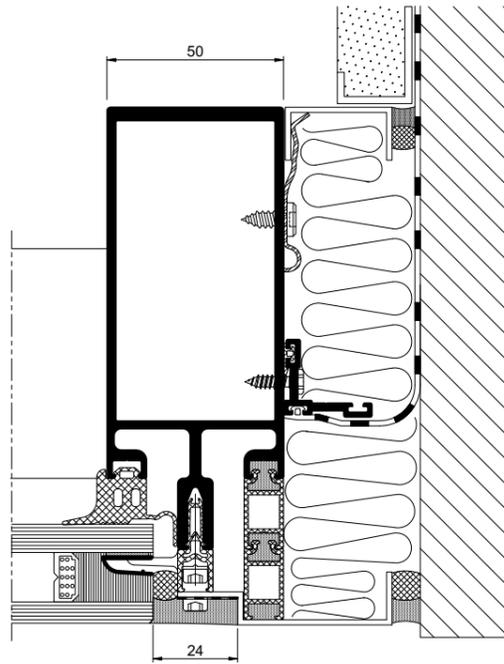
Full details can be downloaded from our website [www.kawneer.co.uk](http://www.kawneer.co.uk)

Mullion Detail



H 02.01

Jamb Interface

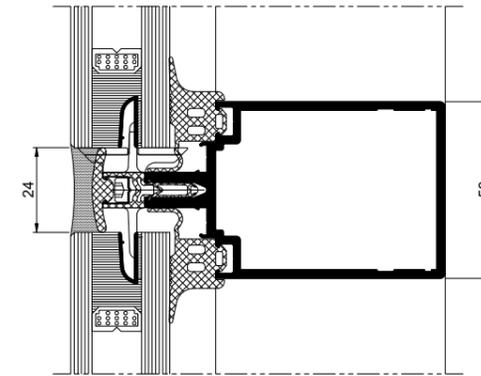


H 03.01

AA®100 Structurally Silicone Glazed (SSG)

Full details can be downloaded from our website [www.kawneer.co.uk](http://www.kawneer.co.uk)

Transom Detail



H 05.01

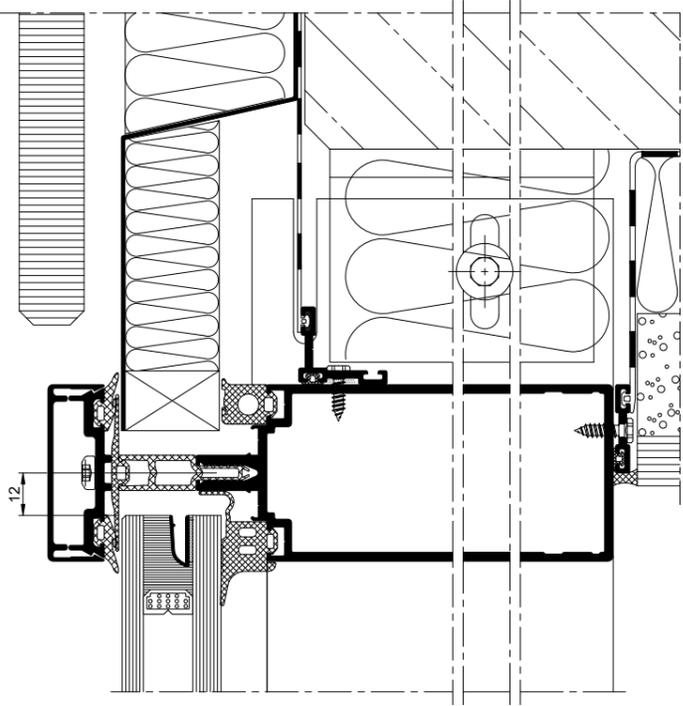


Brighton Aldridge Community Academy, Brighton  
Architect: Feilden Clegg Bradley Studios

AA®100 Structurally Silicone Glazed (SSG)

Full details can be downloaded from our website [www.kawneer.co.uk](http://www.kawneer.co.uk)

Head Detail (Example)

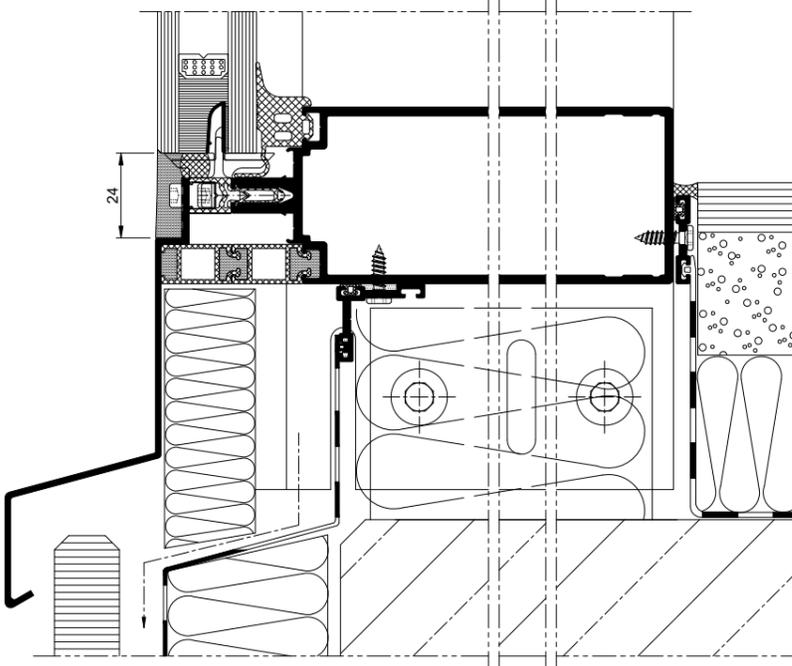


H 08.01

AA®100 Structurally Silicone Glazed (SSG)

Full details can be downloaded from our website [www.kawneer.co.uk](http://www.kawneer.co.uk)

Cill Detail



H 06.01

## AA®100 and AA®110 PFL

### Introduction

A curtain walling system that looks like a picture frame system but is quicker and easier to install using the traditional stick build system. The PFL system is suitable where the build characteristics of a typical semi-unitised picture frame system are not essential or possible and where installation can be achieved in one stage resulting in time reduction, a benefit for both contractors and installers.

The PFL system was developed with just three new parts to suite with the CWCT tested AA®100 50mm and AA®110 65mm dry jointed curtain walling systems.

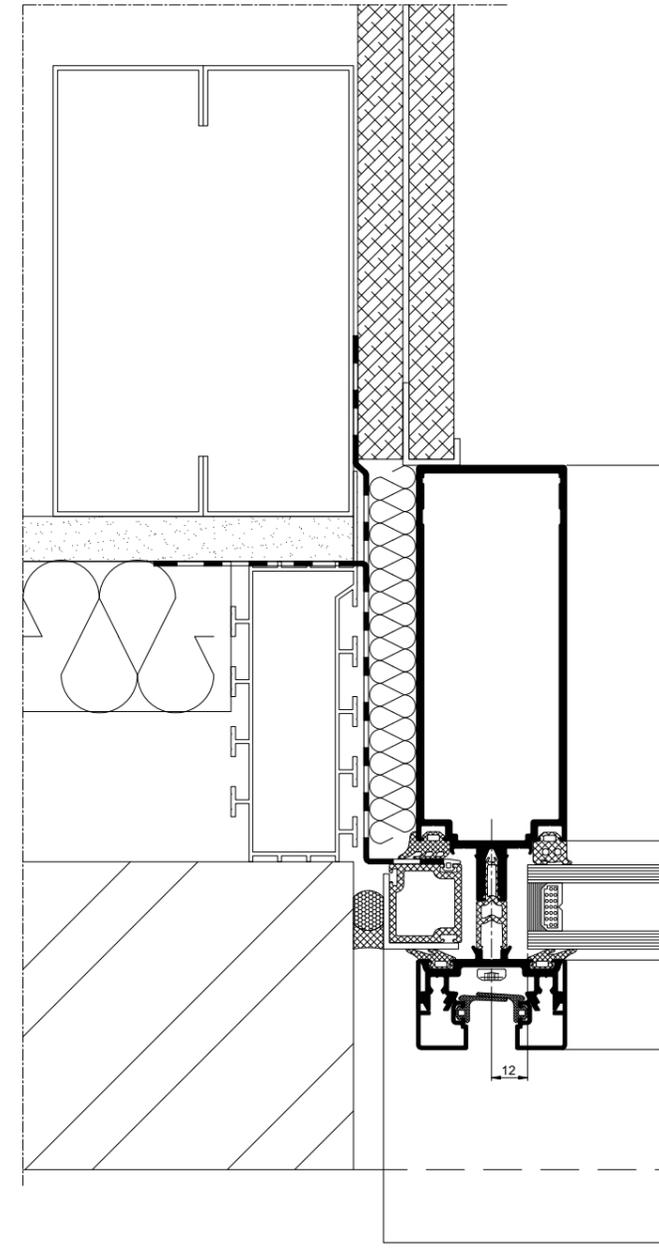
An external pressure plate, face cap and weatherseal enables the system to provide all the robust aesthetics of a picture frame system on a proven grid, which integrates totally with the AA®100 and AA®110 existing systems.



## AA®100 and AA®110 PFL

Full details can be downloaded from our website [www.kawneer.co.uk](http://www.kawneer.co.uk)

Jamb Detail (Generic)



H6 02.01

## AA®100 and AA®110 PFL Applications

### Typical Elevations

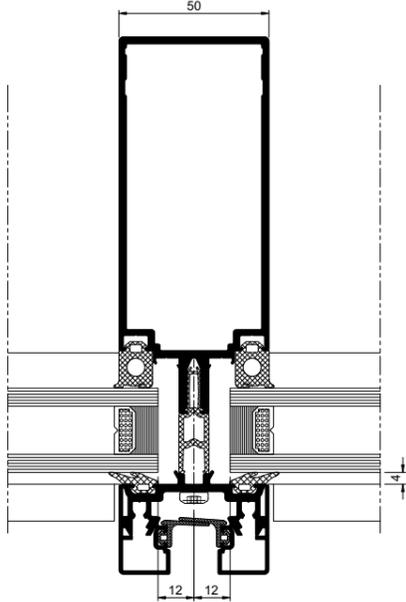
Full details can be downloaded from our website [www.kawneer.co.uk](http://www.kawneer.co.uk)

Elevation	Title	Website cad ref no.
	1 Jamb Detail (generic)	H6 02.01
	2 Intermediate Mullion	H6 03.01
	3 Cill Detail (generic)	H6 04.01
	4 Intermediate Transom	H6 05.01
	5 Head Detail (generic)	H6 06.01

AA®100 and AA®110 PFL

Full details can be downloaded from our website [www.kawneer.co.uk](http://www.kawneer.co.uk)

Intermediate Mullion

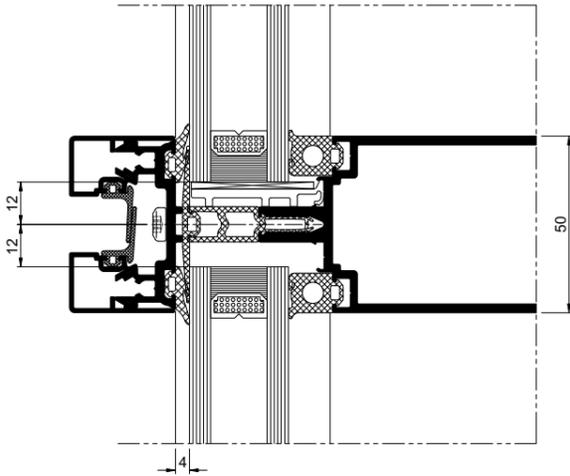


H6 03.01

AA®100 and AA®110 PFL

Full details can be downloaded from our website [www.kawneer.co.uk](http://www.kawneer.co.uk)

Intermediate Transom



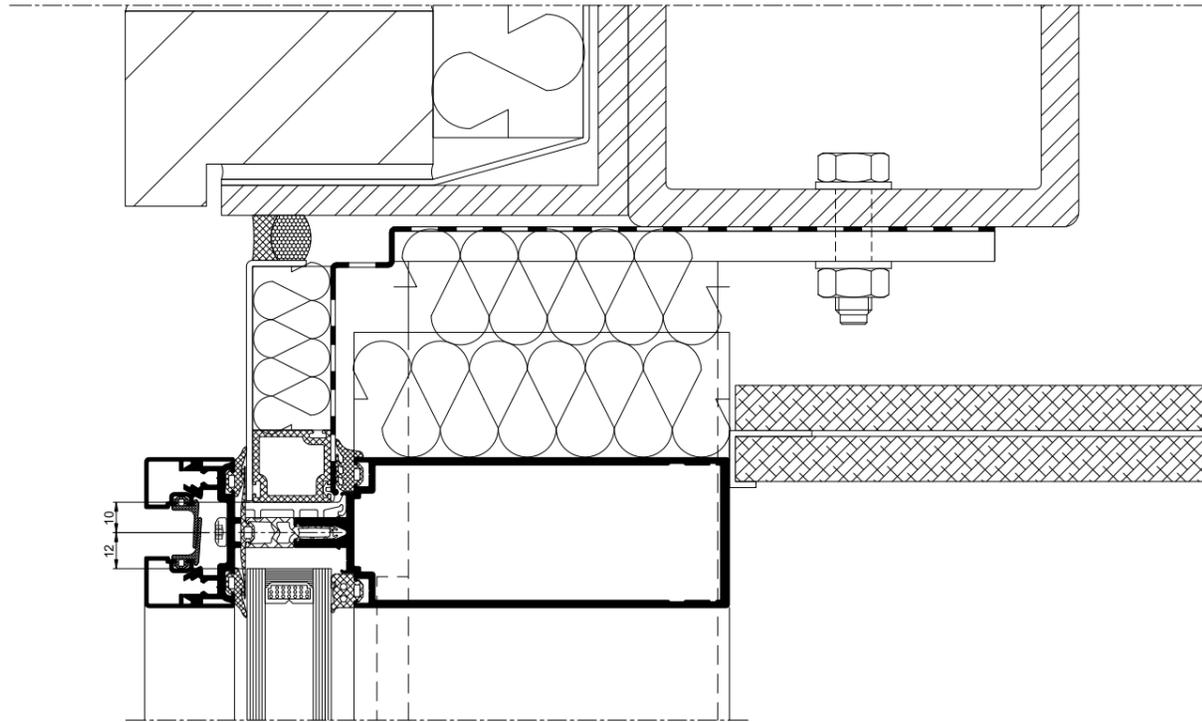
H6 05.01



AA®100 and AA®110 PFL

Full details can be downloaded from our website [www.kawneer.co.uk](http://www.kawneer.co.uk)

Head Detail (Generic)

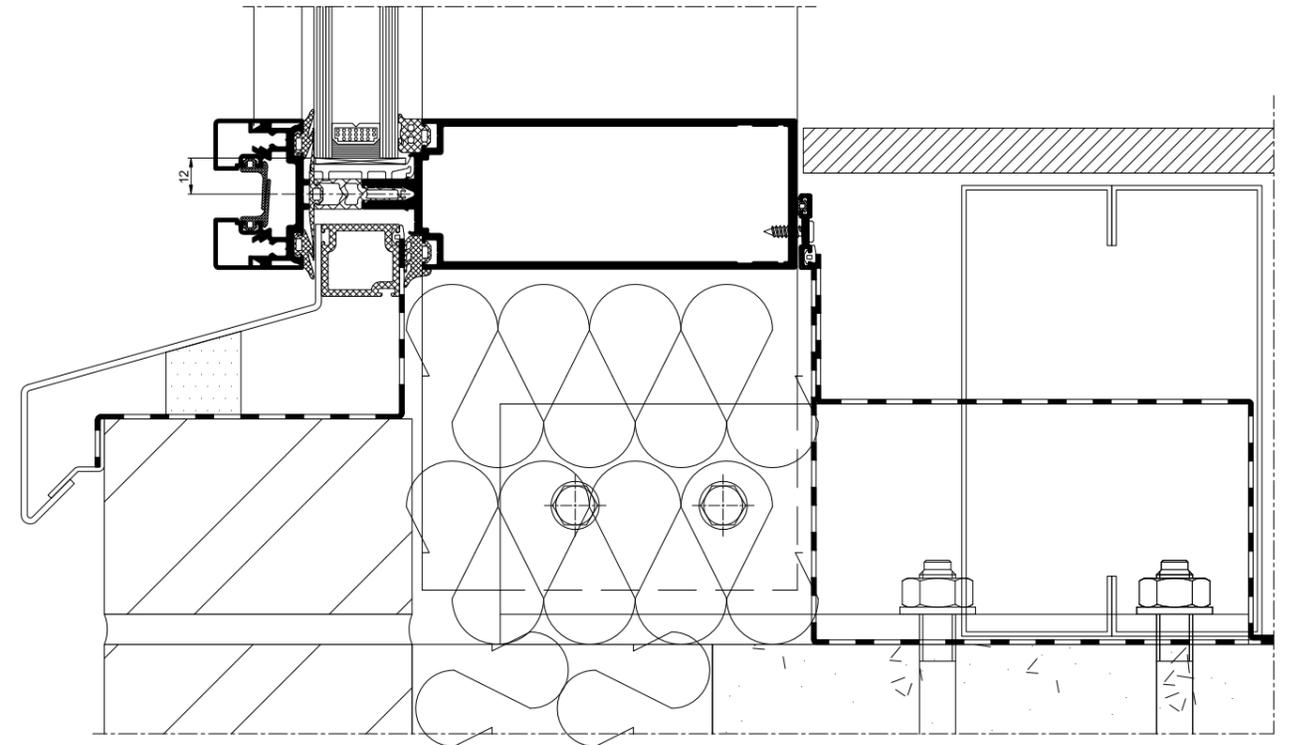


H6 06.01

AA®100 and AA®110 PFL

Full details can be downloaded from our website [www.kawneer.co.uk](http://www.kawneer.co.uk)

Cill Detail (Generic)



H6 04.01

## Case Study - Cardiff and Vale College

Kawneer systems hail a new future for education in Wales.

The £45 million Cardiff and Vale College uses Kawneer's zone-drained AA®100 and AA®110 curtain walling, with 50 and 65mm sightlines respectively, with AA®541 top-hung casement windows and mullion-drained AA®100 curtain walling as a bespoke atrium rooflight.

The 16,000m<sup>2</sup> building in the city centre brings together many of the college's activities onto a single campus and creates a real-life environment for skills training with open and welcoming faculty clusters set around a public route through the heart of the college.

Its distinctive wedge shape connects the interior spaces to south-facing terraces with views towards Cardiff Bay. The oversailing roof is angled to accommodate a 1,850m<sup>2</sup> photovoltaic array, one of the largest in the UK, and The Classroom – a fine dining sky restaurant located under the northernmost tip with views across the city towards the Millennium Stadium.

The landmark building designed by BDP features 130 teaching rooms including specialist labs, workshops, IT studios and two vast learning and skills centres comprising a conference centre, theatre, gym, Urbasba beauty salon and spa, and shops, all of which are open to the public seven days a week. It is home to 4,000 students studying across 200 different courses with thousands more engaged through the year on short courses, employer training and apprenticeships.

It was officially opened by First Minister of Wales Carwyn Jones and Minister for Education and Skills Huw Lewis.

Believed to have been the largest construction project in Cardiff at the time, the college was built on former industrial land south of the city's central station by main contractor Willmott Dixon, with the Kawneer elements installed by approved specialist manufacturer and installer AB Glass.

Backed by a £20 million Welsh Government grant, it was formed after the merger of Barry College and Coleg Glan Hafren as part of the government's bid to transform post-16 education and training in Cardiff and the Vale of Glamorgan.

Cardiff and Vale College has won two awards to date – a RIBA Regional Award 2016 and a RICS Regional Award (Design through Innovation) 2016.



Cardiff and Vale College  
Architect: BDP  
Photos: Gareth Gardner



## 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 4255 Part 1  
Specification for non-cellular gaskets
- CWCT  
Sequence B Standard for Systemised Building Envelopes
- BS EN 12152  
Curtain Walling. Air Permeability. Performance requirements and classifications
- BS EN 12153  
Curtain Walling. Air Permeability. Test method
- BS EN 12154  
Curtain Walling. Watertightness. Performance requirements and classifications
- BS EN 12155  
Curtain Walling. Watertightness. Laboratory test under static pressure
- BS EN 13116  
Curtain Walling. Resistance to Windload. Performance requirements
- BS EN 12179  
Curtain Walling. Resistance to Windload. Test method
- BS EN 14019  
Curtain Walling impact resistance. Performance requirements
- BS 476-22  
Fire tests on building materials and structures

- EN 1991-1-1  
Eurocode 1: Actions on structures – Part 1-1: General actions – Densities, self-weight, imposed loads for buildings
- EN 1991-1-4  
Eurocode 1: Actions on structures – Part 1-4: General actions – Wind actions
- EN 1363-1  
Fire Resistance tests – Part 1: General requirements
- EN 1364-1  
Fire resistance tests on non-loadbearing elements – Part 1: Walls
- EN 1364-3  
Fire resistance tests on non-loadbearing elements – Part 3: Curtain Walling
- EN 13830  
Product standard curtain walls

### 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.



Stenhouse Building, University of Strathclyde  
Architect: Hypostyle Architects