

A wide range of curtain wall solutions with versatile  
integration possibilities

# Curtain wall system heroyal C 50



**heroyal**

## Curtain wall systems

First-class materials, technical perfection down to the last detail and a wide range of design options are what distinguish the efficient heroal systems technology. These are benefits that impress. For decades, heroal has been a reliable partner for architects, builders and fabricators with innovative aluminium and aluminium composite solutions for the building shell.

Planners appreciate the diversity of the design possibilities, builders can bring their specific requests to life with a reliable system and our partners benefit from the economical and efficient heroal system solutions.

heroal curtain wall systems meet your every desire when it comes to function, design, fire protection, harmonious system integration and heat insulation. Foam-filled insulators and a continuous seal provide comprehensive benefits in fabrication, installation and storage. Thanks to the wide range of versions and modular insert elements, heroal curtain wall systems are able to meet all the various requirements faced in construction projects.

Besides curtain walls, the easy-to-install and flexible heroal systems can also be used for conservatories and patio roofs.

Discover the diversity of the heroal curtain wall systems.



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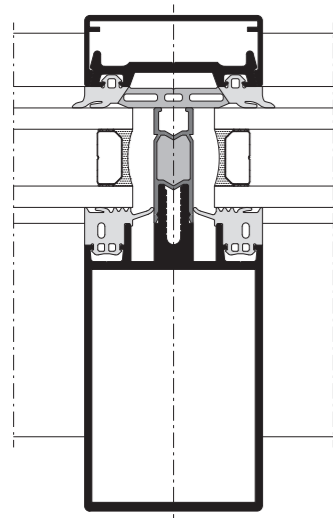
## heroal C 50

The system for a rich variety of curtain wall solutions



The design of the thermally insulated heroal C 50 curtain wall system is ideal for use as a vertical or vertical-bending transom-mullion, transom-transom or mullion-mullion curtain wall. The system can also be used as a roof area, light roof pyramid or conservatory. A variety of cover and pressure profiles adds the finishing touch to the range of systems. The heroal C 50 curtain wall system achieves heat insulation values of up to  $U_f = 1.2 \text{ W/m}^2\text{K}$  and enables optimised ventilation as well as drainage.

All heroal C 50 curtain wall systems contain an innovative heat insulation concept. The insulators and the continuous seal provide fabrication benefits in installation, transport and screw guidance. All fabrication benefits and the insulation concept are available across the range for all heroal C 50 versions.



heroal C 50 mullion sectional view

### System dimensions and features

- » view width: 50 mm
- » mullion profile depth: 28-260 mm
- » transom profile depth: 6-215 mm
- » glass/infill panel thicknesses: 8-62 mm
- » max. weight of filling element: up to 800 kg
- » heat insulation:  $U_f \geq 1.2-1.8 \text{ W/m}^2\text{K}$
- » burglary resistance: up to RC 3
- » wind load resistance:  $2 \text{ kN/m}^2$  (perm. load),  $3 \text{ kN/m}^2$  (inc. load)
- » tightness against driving rain: RE 1200
- » air permeability: AE 750
- » shock resistance: I5/E5
- » soundproofing: up to 46 dB

### Versions and design

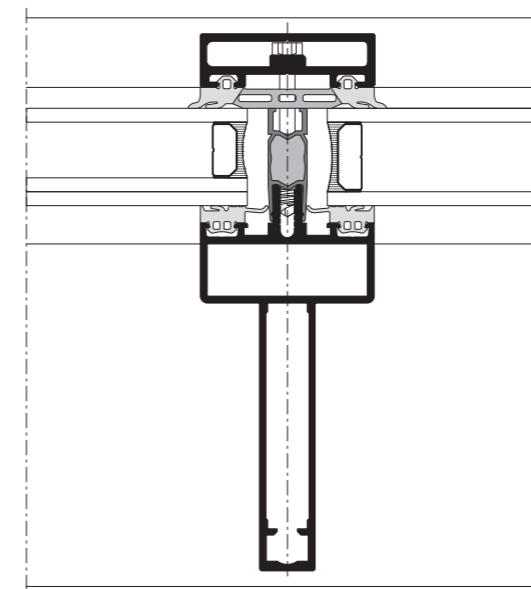
- » transom-mullion, transom-transom or mullion-mullion curtain walls
- » straight or polygon layout
- » light roof, roof area and conservatory also possible in some sections
- » all heroal window and door systems, the heroal skylight and the heroal VS Z sun protection system can be integrated
- » wide variety of cover and pressure profiles
- » high-quality colour design with heroal hwr powder coating, heroal SD surface designs and Les Couleurs® Le Corbusier

## heroal C 50 ID

The design-oriented curtain wall system with a steel effect



The heroal C 50 ID curtain wall system stands for individual and high-quality curtain wall design for industrial applications. It allows planners, architects and fabricators to meet the highest demands. Uncompromising curtain wall design possibilities paired with effective compatibility of the additional heroal systems in the curtain wall lay the foundation for a high-quality and flexible curtain wall design. Just like in the heroal C 50 system version, the insulators, the adapted insulator function as well as the continuous seal ensure maximum heat insulation.



heroal C 50 ID mullion sectional view with screw-mounted pressure strip (steel router)

### System dimensions and features

- » view width: 50 mm
- » mullion profile depth: 95-185 mm
- » transom profile depth: 23-120 mm
- » glass/infill panel thicknesses: 8-62 mm
- » max. weight of filling element: up to 140 kg
- » heat insulation up to:  $U_f \geq 1.2-1.8 \text{ W/m}^2\text{K}$
- » burglary resistance: up to RC 2
- » wind load resistance:  $2 \text{ kN/m}^2$  (perm. load),  $3 \text{ kN/m}^2$  (inc. load)
- » tightness against driving rain: RE 1200
- » air permeability: AE 750
- » shock resistance: I5/E5
- » soundproofing: up to 46 dB

### Versions and design

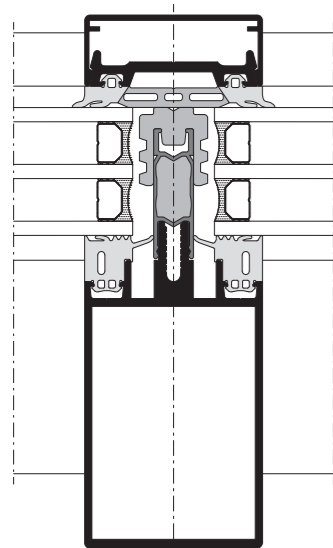
- » transom-mullion curtain wall
- » straight or polygon layout
- » light roof and roof areas also possible in some sections
- » all heroal window and door systems, the heroal skylight and the heroal VS Z sun protection system can be integrated
- » wide variety of cover and pressure profiles
- » high-quality colour design with heroal hwr powder coating, heroal SD surface designs and Les Couleurs® Le Corbusier

## heroal C 50 HI

The highly-insulated curtain wall system



The heroal C 50 HI curtain wall system achieves outstanding energy-efficiency with conventional triple-glazed windows and makes sustainable curtain wall concepts possible. Special system construction details ensure fast, safe and efficient fabrication. This system too enjoys the benefits of the innovative concept for heat insulation with foam-filled insulators, adapted insulator function and the continuous seal.



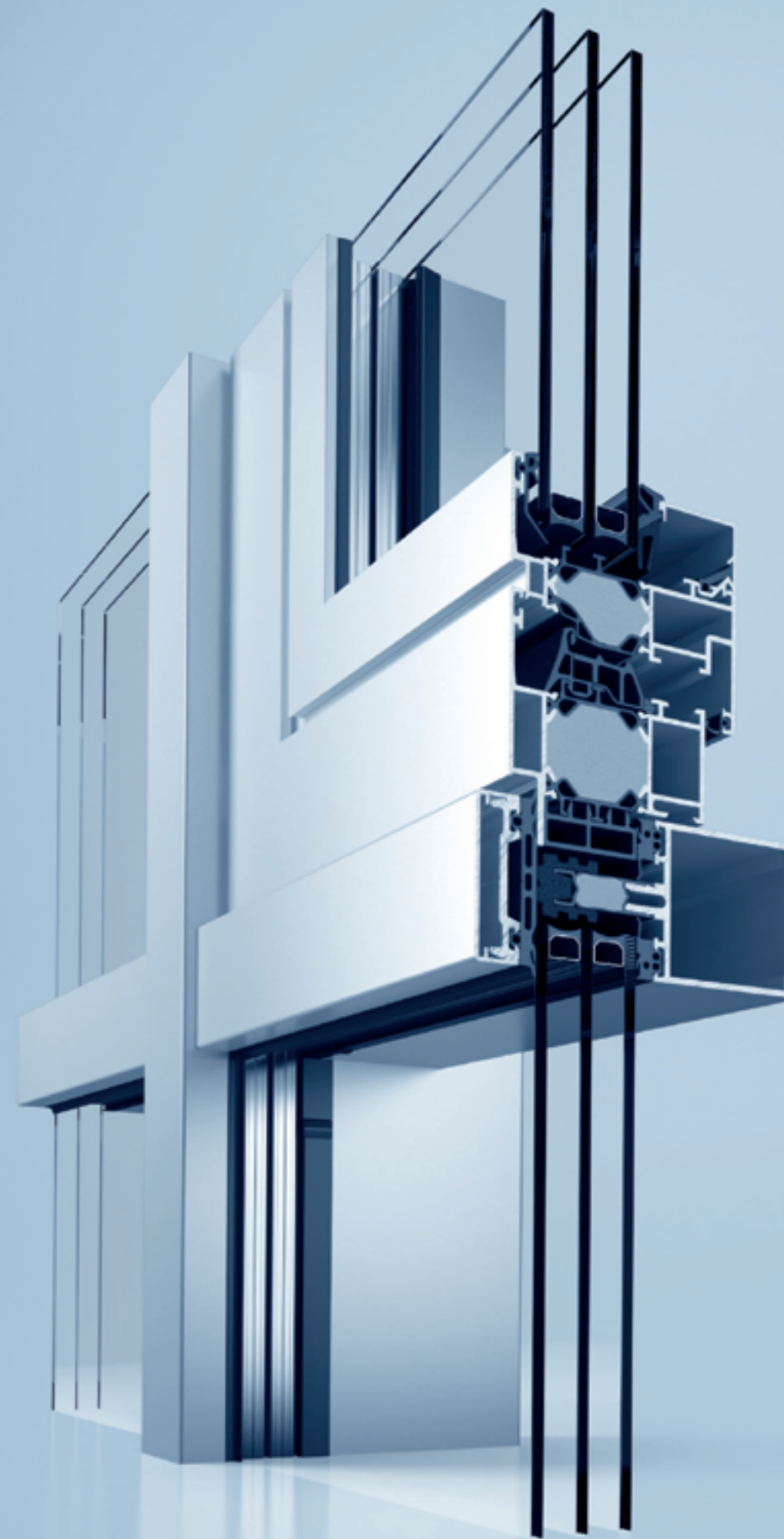
heroal C 50 HI mullion sectional view

### System dimensions and features

- » view width: 50 mm
- » mullion profile depth: 28-260 mm
- » transom profile depth: 6-215 mm
- » glass/infill panel thicknesses: 28-68 mm
- » max. weight of filling element: up to 800 kg
- » heat insulation:  $U_f \geq 0.78-1.4 \text{ W/m}^2\text{K}$
- » burglary resistance: up to RC 2
- » wind load resistance:  $2 \text{ kN/m}^2$  (perm. load),  $3 \text{ kN/m}^2$  (inc. load)
- » tightness against driving rain: RE 1200
- » air permeability: AE 750
- » shock resistance: I5/E5
- » soundproofing: up to 48 dB

### Versions and design

- » transom-mullion, transom-transom or mullion-mullion curtain walls
- » straight or polygon layout
- » light roof, roof area and conservatory also possible in some sections
- » all heroal window and door systems, the heroal skylight and the heroal VS Z sun protection system can be integrated
- » wide variety of cover and pressure profiles
- » high-quality colour design with heroal hwr powder coating, heroal SD surface designs and Les Couleurs® Le Corbusier

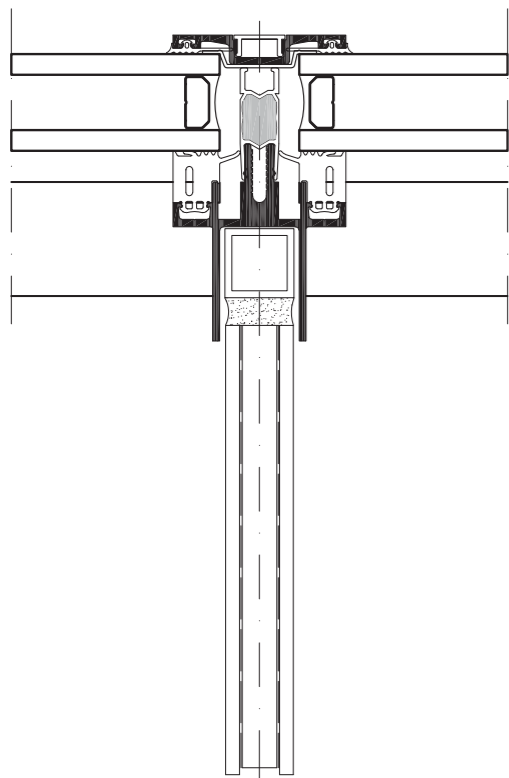


## heroal C 50 GD

The curtain wall concept for maximum transparency



heroal C 50 GD (Glass Design) is a true highlight when it comes to curtain walls. The concept exploits the idea of reflection in two ways: it visually reduces the view width from the inside while reducing the design depth of the mullion from the outside. This effect is made possible by the use of a glass fin, which assumes the static role of the classic aluminium mullion. For architects and planners this opens up new possibilities for creating maximum transparency, even at heights of up to 5 m. The design of the fin with individually decorated panels create virtually unlimited design freedom. Approval is provided for each specific case.



heroal C 50 GD sectional view

### System dimensions and features

- » view width: 50 mm
- » mullion profile depth: 40 mm (aluminium), up to 300 mm (glass fin)
- » mullion height with glass fin: up to 5 m
- » glass/infill panel thicknesses: 8-68 mm
- » wind load resistance: 2 kN/m<sup>2</sup> (perm. load), 3 kN/m<sup>2</sup> (inc. load)
- » tightness against driving rain: RE 1200
- » air permeability: AE 750



## heroal C 50 FP

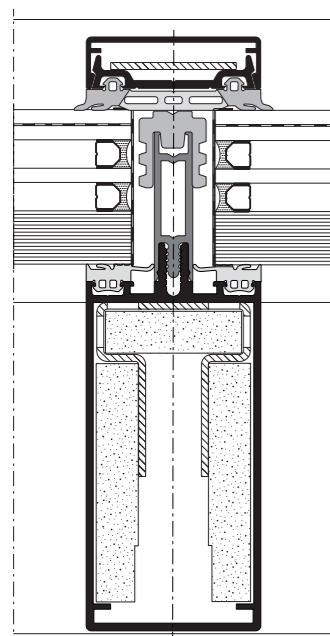
The system solution for fire protection curtain walls



The heroal C 50 FP fire protection curtain wall system is a building component that requires a CE marking, which has been tested by the ift Rosenheim in line with standard EN 1364-3 and classified in accordance with EN 13501-2. All fire protection components are concealed in the construction, which enables an invisible transfer to curtain wall areas without protection requirements.

The fire protection curtain wall system can be expanded to a matching EI 30 i<=>o curtain wall based on the heroal C 50 curtain wall solution. A curtain wall with a high safety standard can be created with the same basic profiles and just a few additional building components, like the patented Fireblock insulator.

The heroal C 50 FP fire protection curtain wall is also available as a highly insulated heroal C 50 FP HI version that meets high heat insulation standards for fire protection curtain walls.



heroal C 50 FP mullion sectional view fire protection area

### System dimensions and features

- » view width: 50 mm
- » mullion profile depth: 95-185 mm
- » transom profile depth: 60-190 mm
- » glass/infill panel thicknesses:
  - heroal C 50 FP: 28-56 mm
  - heroal C 50 FP HI: 34-62 mm
- » max. weight of filling element: up to 800 kg
- » heat insulation:
  - heroal C 50 FP:  $U_f \geq 1.5-2.0 \text{ W/m}^2\text{K}$
  - heroal C 50 FP HI:  $U_f \geq 1.1-1.4 \text{ W/m}^2\text{K}$
- » wind load resistance: 2 kN/m<sup>2</sup> (perm. load), 3 kN/m<sup>2</sup> (inc. load)
- » tightness against driving rain: RE 1050
- » air permeability: AE 750
- » shock resistance: I5/E5
- » fire protection: EI 30

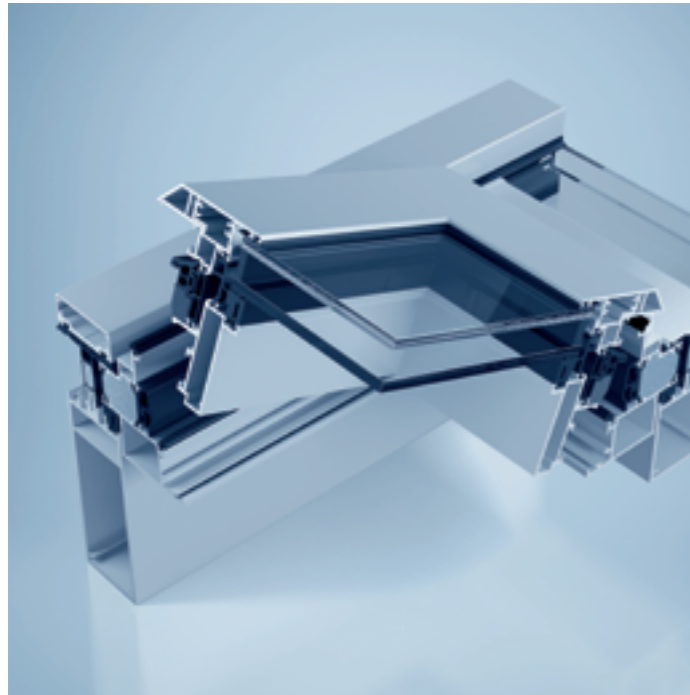
### Versions and design

- » identical external and internal view to heroal C 50/heroal C 50 HI
- » transom-mullion curtain wall
- » straight layout
- » extensive T-connections
- » wide variety of cover and pressure profiles
- » high-quality colour design with heroal hwr powder coating, heroal SD surface designs and Les Couleurs® Le Corbusier



## Complementary product solutions

Functional and versatile



### heroal C 50 SW dormer window for heroal conservatory and curtain wall systems

The heroal C 50 SW (Skylight Window) dormer window system is an outward-opening hinged window that can be integrated as an insert element in the heroal C 50 WG conservatory or in the heroal C 50 curtain wall system and is suitable for all roof pitches. Thanks to the exceptionally durable and highly weather-resistant heroal hwr powder coating, the heroal C 50 SW can be designed to match the conservatory and curtain wall on request. The fabrication of the dormer window is just as easy and efficient as the heroal window systems. The heroal C 50 SW can be operated manually or electrically on request. It is also possible to connect it to a central control system for automatic ventilation. Drainage and ventilation of the dormer window is ensured via the conservatory or curtain wall system.



### heroal W 72 VF (ventilation flap for curtain wall systems)

The heroal W 72 VF ventilation flap satisfies the desire for a pleasant and healthy indoor climate and can be easily integrated in the heroal C 50 curtain wall system, just like a window element. As a user-independent, motorised ventilation flap, it supports architects and planners in the implementation of controlled natural ventilation concepts day and night. Narrow, floor-to-ceiling opening elements integrate discreetly in the curtain wall – simple and harmonious. Casements with high heat insulation and exposed or concealed fittings combine maximum functionality with heat insulation and burglary protection. A motorised version with a specially developed chain drive for greater comfort is possible.



### heroal C 50 TC canopy from the heroal C 50 curtain wall system

The versatile heroal C 50 curtain wall system can be used for the installation of the high-quality heroal C 50 TC canopy in upscale residential and commercial buildings. With a maximum reach of 2,000 mm and an individual roof pitch, the canopy can be customised to suit individual requirements. The pressure strip screw connection with countersunk screws, the same profile fabrication as the heroal C 50 and the heroal system attachment technology make manufacturing and installation quick and easy. The canopy is firmly connected to the curtain wall or structure. Loads of up to 6.5 kN are transferred per support. The slim profiles with a 60 x 50 mm rafter profile and a 50 x 50 mm support profile create slimline views. Thanks to sharing the same surface, the canopy and curtain wall can share the same design.

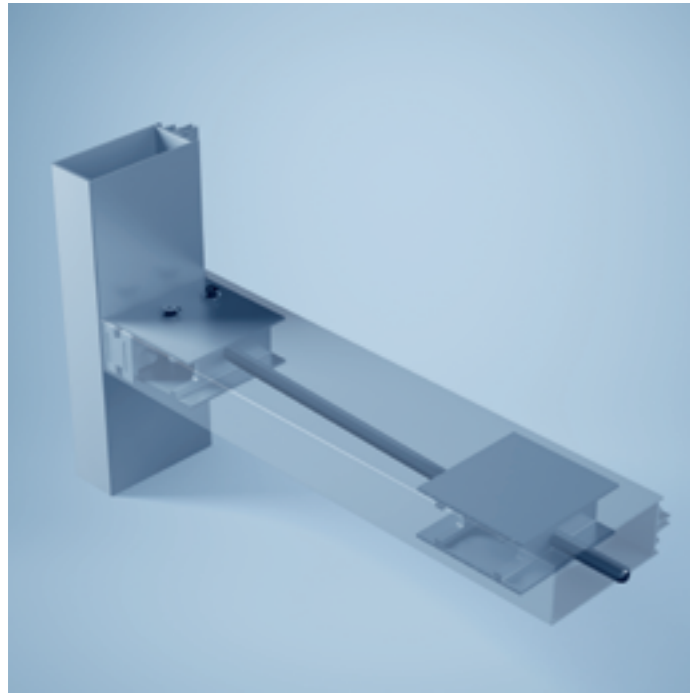


### heroal W 72 i and heroal W 77 i (block window systems)

The heroal W 72 i and heroal W 77 i window systems combine architectural design with narrow view widths. The block window systems offer maximum transparency, heat insulation and elegant design without visible casements and glass strips. heroal W 72 i and heroal W 77 i are extremely flexible and can also be used as curtain window insert elements. Their combination with concealed system fittings provides for an elegant design. The block window systems can also be designed as a floating window.

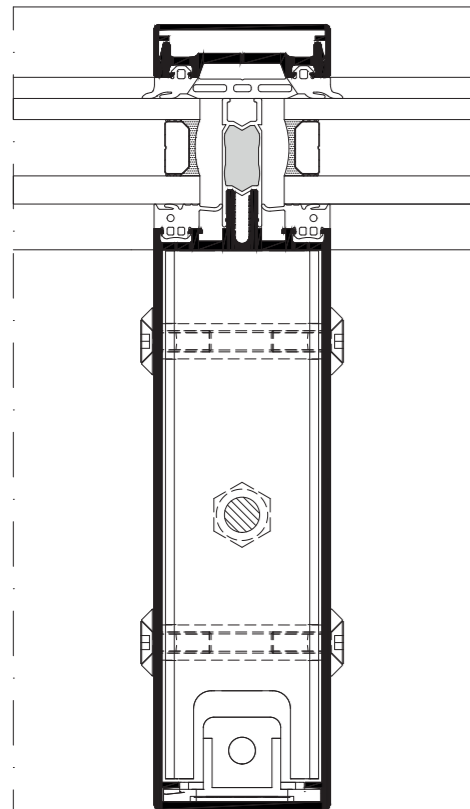
## heroal PS

The innovative transom tensioning system



heroal PS makes large glazing, high glass loads and narrow view widths without heavy insert profiles possible. The building components are invisibly installed in the hollow chambers of the transom profile and create an adjustable pretension against the load direction due to the weight of the glass. This massively increases the load capacity so that the heroal C 50 curtain wall system can still be used even with low view widths and the required transom installation depth can be significantly reduced. This also does away with the otherwise customary use of expensive and unwieldy steel inserts to reinforce the curtain wall construction.

Another benefit of heroal PS is that it supports the long transom lengths necessary for large glazing areas, which would otherwise be structurally impossible due to their high net weights. In combination with the heroal corner and cross glass supports, this enables glass weights of up to 800 kg.



heroal C 50 PS sectional view of the transom tensioning system

### Versions and design

- » ideal addition to the heroal corner and cross glass supports
- » no insert profiles necessary
- » dimensional stability without complex constructions
- » architectural design freedom thanks to the possibility of narrow view widths despite high glass loads
- » wide glazing surfaces with long transom lengths





## Sun protection systems for curtain wall shading

### Semi-integrated and front-mounted sun protection

Curtain wall and sun protection system under one roof – for versatile, attractive and economical curtain wall shading installation options.

Modern curtain walls with high-quality, external textile shading harmoniously integrate in the building's overall appearance. The shading elements are used with large glazing units in commercial buildings as well as in residential construction in order to create a pleasant indoor climate in the building with high-quality system solutions, reduce energy consumption and give the building a recognisable design. For reliable planning and easy installation, heroal offers an ideal combination of the established heroal C 50 curtain wall system and the high-quality

heroal VS Z sun protection system. In this case, two different installation versions combine to satisfy the architectural and functional requirements. The design with semi-integrated, installed heroal VS Z CS (semi-integrated) sun protection as a system-compatible construction enables the easy and economical installation of prefabricated sun protection boxes directly on the pressure profiles of the curtain wall. In addition, the shading elements can be front-mounted on the curtain wall with the attractive, visible heroal VS Z CS (front-mounted) construction, which is an ideal, trouble-free solution for retrofits and upgrades.



Semi-integrated heroal VS Z CS sun protection system for curtain walls



Front-mounted heroal VS Z CS sun protection system for curtain walls



- » Suitable for heroal C 50 transom-mullion curtain wall system
- » Integrated installation with integration profile and sun protection bolts for glazing (heroal VS Z CS semi-integrated)
- » Installation identical to surface-mounted installation
- » Can also be installed with crossbars for a greater distance to the glazing (heroal VS Z CS front-mounted)

You can find more information in heroal sun protection systems brochure no. 87038 and heroal sun protection system for curtain walls brochure no. 89414.



## System dimensions and system features

### System dimensions

Description	heroal C 50	heroal C 50 ID	heroal C 50 HI	heroal C 50 FP	heroal C 50 FP HI
View widths (mm)	50	50	50	50	50
Mullion profile depth (mm)	28-260	95-185	28-260	95-185	95-185
Transom profile depth (mm)	6-215	23-120	6-215	60-190	60-190
Glass/infill panel thicknesses (mm)	8-62	8-62	28-68	28-56	34-62
Max. weight of filling element (kg)	800	140	800	800	800
Heat insulation (U <sub>f</sub> in W/m²K)	1.2-1.8	1.2-1.8	0.78-1.4	1.5-2.0	1.1-1.4
Burglary resistance	up to RC 3	up to RC 2	up to RC 2	-	-
Wind load resistance per. load	2 kN/m²	2 kN/m²	2 kN/m²	2 kN/m²	2 kN/m²
inc. load	3 kN/m²	3 kN/m²	3 kN/m²	3 kN/m²	3 kN/m²
Tightness against driving rain	RE 1200	RE 1200	RE 1200	RE 1050	RE 1050
Air permeability	AE 750	AE 750	AE 750	AE 750	AE 750
Shock resistance	I5/E5	I5/E5	I5/E5	I5/E5	I5/E5
Soundproofing	up to 46 dB	up to 46 dB	up to 48 dB	-	-

### System features

Description	heroal C 50	heroal C 50 ID	heroal C 50 HI	heroal C 50 FP	heroal C 50 FP HI
Transom-mullion construction	•	•	•	•	•
Non-ventilated curtain wall	•	•	•	•	•
Ventilated curtain wall	•	-	-	-	-
Surface-mounted constructions	•	-	•	-	-
Light roof construction	•	-	•	-	-
Element construction	•	-	•	-	-
Conservatory roof	•	-	•	-	-
Cover shell range	•	•	•	-	-
Industrial design	-	•	-	-	-

### Insert elements

Description	heroal C 50	heroal C 50 ID	heroal C 50 HI	heroal C 50 FP	heroal C 50 FP HI
heroal window elements	•	•	•	-	-
heroal block window elements	•	•	•	-	-
heroal ventilation flap	•	•	•	-	-
Floating window	•	•	•	-	-
heroal door elements	•	•	•	-*	-*
heroal skylight elements	•	•	•	-	-
heroal sun protection front-mounted	•	•	•	-	-
heroal sun protection semi-integrated	•	•	•	-	-

\* with the heroal FireXtech D 93 FP fire protection system



# heroal



simply better *spaces for life*

As a manufacturer of aluminium system solutions for roller shutters, sun protection, roller doors, windows, doors, sliding doors, curtain walls and patio roofs, heroal is an international market leader, supporting high-quality residential and commercial construction projects worldwide. heroal products are developed and manufactured in Germany and set themselves apart with their premium quality and exceptional performance features. As a result, the innovative system solutions contribute to greater sustainability, security, comfort and architectural freedom for both current and future building projects and impress with simple and efficient planning and fabrication by heroal specialist partners.

Roller shutters | Sun protection | Roller doors

Windows | Doors | Sliding doors | Curtain walls | Patio roofs

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