

heroal C 50 Curtain wall systems



Curtain wall systems

Top-quality materials, technical solutions fine-tuned to the smallest detail and a wide variety of design options distinguish the efficient technology available from heroal. These are benefits that speak for themselves. For decades, heroal has been the reliable partner of architects, building constructors and processors thanks to its innovative solutions made of aluminium and aluminium composite materials for the building shell.

Planners appreciate the variety of design options, building constructors can realize their individual wishes with a reliable system and our partners benefit from the economical and efficient heroal system solutions.

With its innovative curtain wall systems, heroal meets the increasingly stringent requirements for energy efficiency in the building shell, without restricting the creative freedom. The heroal C 50 curtain wall systems feature an innovative concept for heat insulation. Foam-filled insulators and a continuous seal offer comprehensive benefits in terms of processing, installation and warehousing. They stand out with their technically and functionally sophisticated, design-oriented and economical solutions – right up to passive-house-certified façades.

Apart from façades, the easy-to-install and flexible heroal systems enable the construction of carports and roofing for terraces.

Discover the variety of heroal curtain wall systems!





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heroal C 50 curtain wall systems

Optimum solutions for every requirement



heroal C 50 - fully-developed, design-oriented, economical

Curtain wall systems offer architecture considerable scope with the design of modern building concepts.

The heroal C 50 curtain wall systems provide the ideal solutions for architects, planners and processors. It is thanks to the variable system components that the heroal system can demonstrate many benefits and strengths – visually attractive, functionally reliable and tested. The basis of the heroal C 50 curtain wall systems lies in the unitary construction.

From energy-efficient (heroal C 50) to highly insulated curtain wall solutions (heroal C 50 HI) right up to the passive-house-certified variant (heroal C 50 PH) for the most stringent of demands – heroal supplies innovative system solutions for any requirement on the building shell thanks to the heroal C 50 curtain wall systems.



heroal C 50 HI – highly insulated and versatile



"WITH ALUMINIUM, YOU CAN MAKE A LOT. WE MAKE SOMETHING SPECIAL WITH IT."



heroal C 50

The system for a wide variety of façade solutions



All designs of the tried-and-tested insulated heroal C 50 curtain wall system deliver excellent results, whether vertical or verticalbending transom-mullion, transom-transom or mullion-mullion façade. The façade can also be used as a roof area, light roof pyramid or conservatory. Last but not least, the system offers creative freedom thanks to various cover and pressure profiles.

heroal offers an innovative concept for heat insulation. Foamfilled insulators and a continuous seal offer processing benefits in terms of installation, transportation and the screw guidance. All processing benefits apply throughout the systems for the respective design options. The insulation concept can also be used across the systems in the design options and thus leads to a reduction in storage requirements. Values of up to $U_f = 1.2 \text{ W/m}^2\text{K}$ can be achieved with the heroal C 50 curtain wall system. Optimised ventilation and drainage are guaranteed with this system.



heroal C 50 mullion cross section with insert element

System dimensions and system properties

- » View width: 50 mm
- » Mullion profile depth: 28 260 mm
- » Transom profile depth: 6 215 mm
- » Thicknesses of glass/infill panel: 8 62 mm
- » Max. weight of filling element: 450 kg
- » Heat insulation: U_f ≥ 1.2 1.7 W/m²K
- » Burglary resistance: up to resistance class 3
- » Wind load resistance: requirement fulfilled
- » Tightness against driving rain: RE 1050
- » Air permeability: AE
- » Shock resistance: I5/E5
- » Soundproofing: up to 46 dB

- » Transom-mullion, transom-transom or mullion-mullion façade
- » Straight or polygon design for floor plan
- » In sub-areas as roof area, light roof or conservatory
- » Integration of all heroal window and door systems including heroal skylights
- » Wide variety of cover and pressure profiles
- » Colour design with high-quality hwr powder coating

heroal C 50 ID

The design-oriented curtain wall system with steel effect



The heroal C 50 ID curtain wall system stands for creative façade design that can provide industrial design solutions. It enables planers, architects and processors to satisfy the highest of demands. The innovative concept for heat insulation with foam-filled insulators and adapted insulator damping, and the continuous seal are standard in the industrial design options.

No-compromise design options for the façade coupled with effective compatibility with the other heroal systems in the façade form the basis for a top-quality, flexible façade design.



heroal C 50 ID mullion cross section with screwed pressure strip (steel router)

System dimensions and system properties

- » View width: 50 mm
- » Mullion profile depth: 95 185 mm
- » Transom profile depth: 60 120 mm
- » Thicknesses of glass/infill panel: 8 68 mm
- » Max. weight of filling element: 450 kg
- » Thermal insulation up to: U_f \ge 0.78 1.7 W/m²K
- » Burglary resistance up to resistance class 3
- » Wind load resistance: 2 kN/m² (perm. load), 3 kN/m² (pos. load)
- » Tightness against driving rain: RE 1200
- » Air permeability: AE
- » Shock resistance: I5/E5

- » Transom-mullion façade
- » Straight or polygon design for floor plan
- » In sub-areas as roof area, light roof
- » Insert elements: integration of all heroal window and door systems including heroal skylights
- » Wide variety of cover and pressure profiles
- » Colour design with high-quality hwr powder coating

heroal C 50 HI

The highly insulated curtain wall system



The heroal C 50 HI curtain wall system achieves the standard required for a passive house with standard triple-glazed insulating glass. This enables sustainable façade concepts with outstanding energy efficiency. Special details in the construction of the system ensure quick, reliable and economical assembly.

The innovative concept for heat insulation with foam-filled insulators and adapted insulator damping, and the continuous seal characterise this system.



heroal C 50 HI mullion cross section with insert element

System dimensions and system properties

- » View width: 50 mm
- » Mullion profile depth: 28 260 mm
- » Transom profile depth: 6 215 mm
- » Thicknesses of glass/infill panel: 28 62 mm
- » Max. weight of filling element: 450 kg
- » Heat insulation: U_f ≥ 0.78 1.8 W/m²K
- » Burglary resistance: up to resistance class 2
- » Wind load resistance: 2 kN/m² (perm. load), 3 kN/m² (pos. load)
- » Tightness against driving rain: RE 1200
- » Air permeability: AE
- » Shock resistance: I5/E5
- » Soundproofing: up to 49 dB

- » Transom-mullion, transom-transom or mullion-mullion façade
- » Straight or polygon design for floor plan
- » In sub-areas as roof area, light roof or conservatory
- » Integration of all heroal window and door systems including heroal skylights
- » Wide variety of cover and pressure profiles
- » Colour design with high-quality hwr powder coating



heroal C 50 HI + heroal W 72 i

heroal C 50 PH

The curtain wall system certified for passive houses



heroal C 50 PH is the logical and systematic development of the already highly insulated heroal C 50 HI curtain wall system, with which minimum U_f values of 0.78 W/m²K can be achieved in the transom-mullion design. The system is passive-house-certified thanks to the appropriate façade panel and glazing. The modular heroal insulation zone reduces energy loss to a minimum through the use of innovative materials.

The innovative concept for heat insulation is equipped with foam-filled insulators and modified insulator damping and the continuous seal as standard.



System dimensions and system properties

- » View width: 50 mm
- » Mullion profile depth: ≥ 115 mm
- » Transom profile depth: > 120 mm
- » Thicknesses of glass/infill panel: 48 mm
- » Max. weight of filling element: 380 kg
- » Heat insulation: U_f ≥ 0.78 W/m²K
- » Wind load resistance: 2 kN/m² (perm. load), 3 kN/m² (pos. load)
- » Tightness against driving rain: RE 1050
- » Air permeability: AE
- » Shock resistance: I5/E5

- » Identical exterior and interior views to heroal C 50
- » Transom-mullion façade
- » Straight or polygon design for floor plan
- » Wide variety of cover and pressure profiles
- » Colour design with high-quality hwr powder coating



Isothermal curve in line with $\rm U_{f}$ EN ISO 10077-2



heroal C 50 FP

The system solution for fire protection façades



The heroal C 50 FP fire protection curtain wall system requires a CE marking and has been tested in accordance with the EN 13501-2 standard as a curtain wall by the ift Rosenheim testing institute. All fire protection components are concealed within the construction, enabling an invisible transition to façade areas without protective requirements.

The fire protection curtain wall system can be expanded on the basis of the heroal C 50 façade to create a uniform El 30 i<>o façade. Using the same basic profiles and a few additional components such as the patented Fireblock insulator, a façade offering a high level of safety can be created. This is subject to CE marking.

System dimensions and system properties

- » View width: 50 mm
- » Mullion profile depth: 95 185 mm
- » Transom profile depth: 60 190 mm
- » Thicknesses of glass/infill panel: 22 44 mm
- » Max. weight of filling element: 450 kg
- » Heat insulation: U_f ≥ 1.6 2.2 W/m²K
- » Wind load resistance: 2 kN/m² (perm. load), 3 kN/m² (pos. load)
- » Tightness against driving rain: RE 1050
- » Air permeability: AE
- » Fire protection: EI 30

- » Identical exterior and interior views to heroal C 50
- » Transom-mullion, transom-transom or mullion-mullion façade
- » Straight or polygon design for floor plan
- » In sub-areas as roof area
- » Wide variety of cover and pressure profiles
- » Colour design with high-quality hwr powder coating









heroal C 50 FP mullion cross section for fire protection area

heroal C 50 FP mullion cross section for fire protection transition area

System dimensions and system properties: comparison tables

System dimensions

Description	heroal C 50	heroal C 50 HI	heroal C 50 ID	heroal C 50 PH	heroal C 50 FP
View width (mm)	50	50	50	50	50
Mullion profile depth (mm)	28 - 260	28 - 260	95 - 185	≥ 115	95 – 185
Transom profile depth (mm)	6 - 215	6 - 215	60 - 120	> 120	60 - 190
Thicknesses of glass/infill panel (mm)	8 - 62	28 - 68	8 - 68	48	22 - 44
Max. weights of filling element (kg)	450	450	450	380	450
Heat insulation (U _f in W/m²K)	1.2 – 1.7	0.78 - 1.4	0.78 – 1.7	≥ 0.78	1.6 - 2.2
Burglary resistance	up to class 3	up to class 2	up to class 3**	-	-
Wind load resistance perm. load	Requirement fulfilled	2 kN/m²	2 kN/m²	2 kN/m²	2 kN/m²
pos. load	Requirement fulfilled	3 kN/m²	3 kN/m²	3 kN/m²	3 kN/m²
Tightness against driving rain	RE 1050	RE 1200	RE 1200	RE 1050	RE 1050
Air permeability	AE*	AE*	AE*	AE*	AE*
Shock resistance	15/E5	I5/E5	I5/E5	15/E5	-
Soundproofing	up to 46 dB	up to 49 dB	up to 49 dB	-	-

* Air permeability < 0.5 m³/h m at pressure> 600 PA

** Only certain cover strips

System properties

Description	heroal C 50	heroal C 50 HI	heroal C 50 ID	heroal C 50 PH	heroal C 50 FP
Transom-mullion construction	•	•	•	•	•
Warm façade	•	•	•	•	•
Cold façade	•	-	•	-	-
Add-on construction	•	•	-	-	-
Light roof construction	•	•	•	-	-
Element construction	•	•	•	-	-
Conservatory roof	•	•	-	-	-
Covering shell range	•	•	•	•	-
Industrial design	-	•	•	-	-

Insert elements

Description	heroal C 50	heroal C 50 HI	heroal C 50 ID	heroal C 50 PH	heroal C 50 FP
heroal window elements	•	•	•	-	-
heroal block windows	•	•	•	-	-
heroal door elements	•	•	•	-	-
heroal dormer window elements	•	•	•	-	-



heroal surfaces

Surface finishing is an integral part of heroal system components. heroal offers optimally matched systems for windows, doors, façades, as well as roller shutters and roller doors. With our heroal hwr powder coating, we rely on quality from our own coating plants. The award as the official GSB Premium coater and the Qualicoat quality seal underline the quality leadership! Apart from the powder coating, heroal also offers its customers Eloxal surfaces and laminations. A twin-coat thick coating is deployed particularly in the roller shutter field. heroal delivers its entire product portfolio directly ex-works, thus ensuring the shortest delivery times for its partners.



Our service is consistently geared to your needs

Alongside its extensive system portfolio with perfectly coordinated products, heroal also provides a service that is unique and the most efficient in the sector – founded on a consistent focus on customers' requirements, wishes and needs. The basis of heroal service - alongside the trained team of employees - is the in-house, energy-efficient production, made in Germany with an unparalleled manufacturing range and process reliability, which ensures optimum product quality for sustainable, cost-effective and value-enhancing construction for processors, architects and constructors. This is also ensured by the new heroal logistics centre, covering an area of around 40,000 m², and the company truck fleet. The heroal service portfolio is rounded off by the testing centre for roller shutters, roller doors, windows, doors and facades, which is certified by ift Rosenheim and can also be used by customers, as well as the efficient, in-house profile bending and edging service, which heroal is unique in offering its customers across the sector.

heroal – the aluminium systems supplier

As a leading supplier of aluminium systems, heroal develops and produces perfectly harmonised systems for roller shutters, roller doors, windows, doors and façades. By minimising energy consumption during production, maximising energy conservation during usage as well as ensuring optimum profitability during system manufacturing and an increase in the value of the building, heroal system solutions make a significant contribution to sustainable construction.

Innovation, service, design, sustainability

The heroal brand stands for sustainable system solutions that set industry standards by means of practical innovations, service that leads the way in the industry and highquality design that can be integrated into every type of architecture.

The heroal system landscape Roller shutters | Roller doors | Windows | Doors | Façades | Service

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