

heroyal S 77 SL

Lifting-sliding systems



Lifting-sliding systems

Top-quality materials, technical perfection down to the smallest detail and a wide variety of design options distinguish the efficient system 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.

As with all innovative heroal systems, the high-quality S 77 lifting-sliding systems combine a long service life and superb functionality with top-quality design and numerous design options for large opening elements. They fulfil all criteria for sustainable, energy-efficient building and always satisfy the most stringent requirements. heroal also represents innovation with this system: the heroal central joint and compound technology complement the outstanding performance properties.

Discover the variety of lifting-sliding systems!





heroal S 77 SL

Page 4

Perfect combination of transparency and heat insulation

Types of openings and design options

Page 6

Architecturally eye-catching all-glass corner solution

heroal threshold solutions

Page 7

From special design to standard solution

Production technology

Page 9

heroal central joint and compound technology

System dimensions and system properties

Page 10

Comparison tables

Service

Page 11

heroyal S 77 SL

Perfect combination of transparency and heat insulation



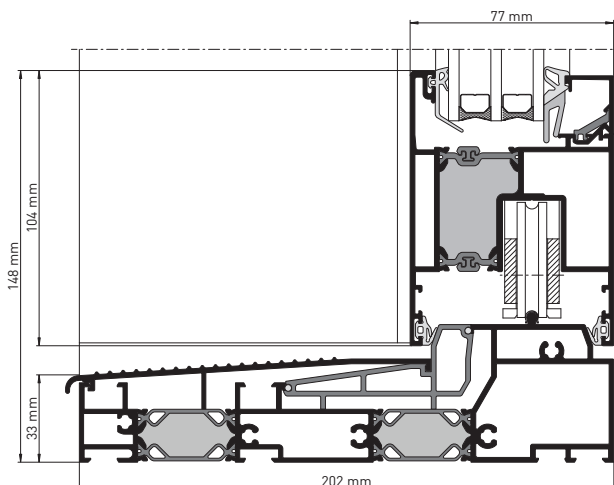
heroyal S 77 SL opens up new large dimensions and guarantees maximum transparency with its unique innovative frame construction.

The new generation of heroyal lifting-sliding doors combines a movable monorail casement with fixed frame glazing and minimal view widths.

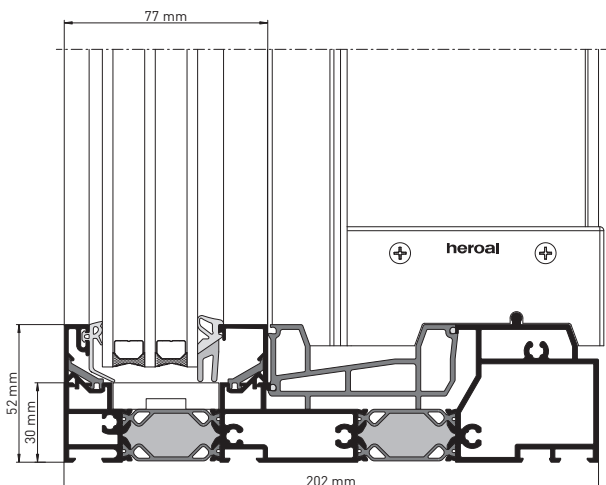
This large frameless glazing with clean lines forms an almost invisible link between the inside and outside, extending the living space beyond its actual limits. The heroyal S 77 SL lifting-sliding system is a new architectural design element that creates a new sense of space.

The heroyal S 77 SL lifting-sliding system creates a harmonised balance between contemporary design, maximum comfort and consistent functionality. Thanks to its elegant and modular construction details, the heroyal S 77 SL has unlimited uses in new buildings and renovations.

Special and proven heroyal casement geometries fulfil all requirements for heat insulation for all casement leaf sizes and weights. The heroyal sealing technology, with three sealing levels and EPDM sealed corners for sealing casements and central joints, enables optimum performance features with regards to air permeability and tightness against driving rain.



heroyal S 77 SL, HS sliding casement, sectional view



heroyal S 77 SL, lifting-sliding frame fixed glazing, sectional view

System properties

- » Max. casement leaf heights: 2400 mm, may be increased to 3000 mm through static strengthening.
- » Max. casement weights: 300 kg, may be increased to 400 kg by using carriages in tandem.
- » Simple operation, including with large casement weights, with optimum coordination of the fitting components
- » Outstandingly quiet running thanks to the combination of tried-and-tested HS fitting systems and heroal high-grade steel runners
- » Flexible and wear-free EPDM moulded sealing parts for lasting tightness against wind and driving rain
- » Sealing technology in three levels for sealing casements and central joints
- » Glazing seal with narrow views, continuously retractable
- » Cost-optimised and time-saving processing thanks to innovative heroal detailed solutions
- » Highly insulated 3-chamber profile system
- » heroal compound technology with patented warp-resistant thermal breaks in HS casement profiles

Design options

- » Types of opening: single-track (monorail) with up to two moveable casements
- » 90° corner design with all-glass corner constructed from insulation glass
- » Threshold design with accessibility for people with disabilities as a result of integration into the structure attachment
- » Handle selection: turning handle with handle recess on outside or turning handle on inside and outside; both options can be lockable
- » Handle colours: white, anodised silver (E6/EV1) and high-grade steel
- » Extensive range of connection and additional profiles for problem-free integration into the structure
- » HS sliding casement can be motorised
- » Integration into heroal C 50 and heroal C 50 HI curtain wall systems
- » Additional design freedom thanks to a variety of profile colours on the interior and exterior element side
- » Colour design with high-quality hwr powder coating

System dimensions

Description		heroal S 77 SL
Profile installation depth (mm)	Frame profiles	202
	Casement profiles	77
	Cross bar profiles	72
Profile view widths (mm)	Lower frame profile	52
	Side frame profile	40
	Upper frame profile	40
	Casement profiles	104
	Central joint/labyrinth	104
	Cross bar profiles	74 – 104
Max. thicknesses of glass/infill panel (mm)	Casement glazing	52
	Frame glazing	52

System properties

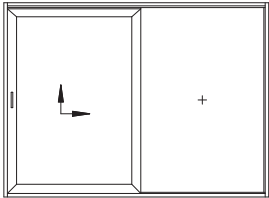
Description		heroal S 77 SL
Number of profile chambers for casement profile		3
Number of high-grade steel runners		1
Max. number of moveable HS sliding casements		2
Max. casement weights (kg)		300/400
Max. casement leaf heights (mm)		3000
Heat insulation (W/m²K)	U _f *	≥ 1.2
	U _w **	≥ 0.82
Wind load resistance		C3/B3
Tightness against driving rain		9A
Air permeability		4

* U_f value according to EN ISO 10077-2; frame combination average

** U_w value according to DIN EN 12567-1, calculated based on element size 3500 x 2180 mm

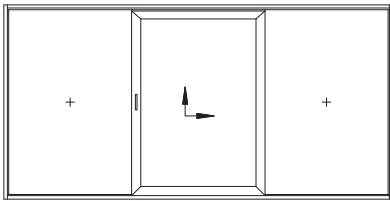
heroal S 77 SL

Types of openings and design options



2-part lifting-sliding door system

- » Fitting pattern A
- » 1 lifting-sliding casement / 1 fixed frame glazing
- » 1-track



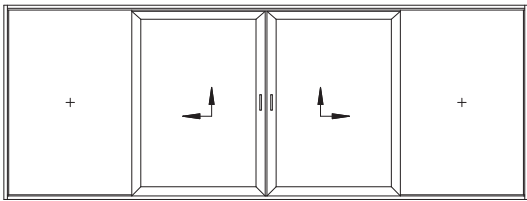
3-part lifting-sliding door system

- » Fitting pattern G
- » 1 lifting-sliding casement / 2 fixed frame glazing
- » 1-track



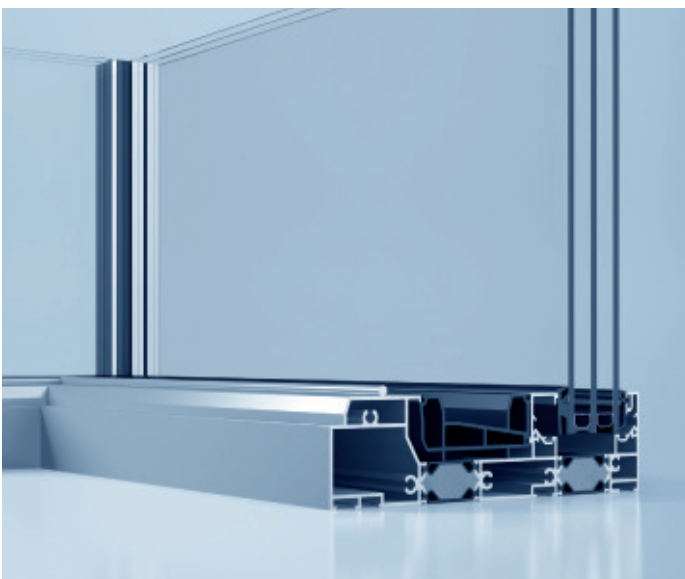
3-part lifting-sliding door system

- » Fitting pattern K
- » 2 lifting-sliding casements / 1 fixed frame glazing
- » 1-track



3-part lifting-sliding door system

- » Fitting pattern C
- » 2 lifting-sliding casements (French windows) / 2 fixed frame glazing
- » 1-track



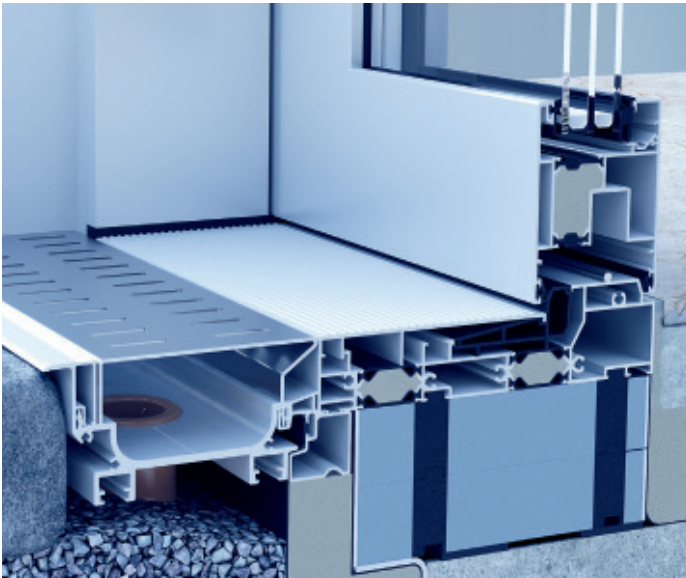
Architecturally eye-catching all-glass corner solution

In addition to the classic corner coupling with two lifting-sliding elements, heroal also offers a 90° frame coupling with an all-glass door corner constructed from insulation glass as an additional design variant. The innovative and sophisticated design variant of the heroal S 77 SL lifting-sliding system completely satisfies the increasing demand for more transparency in architecture.

This attractive design variant provides light and vitality and even in the joint area the element frame does not restrict your view. heroal's elegant detailed solution impresses from both an interior and exterior perspective and creates additional architectural accents.

heroal threshold solutions

From special design to standard solution



heroal offers solutions across all systems for all openings with large surface areas in the entrance door, French door and lifting-sliding door system product sectors.

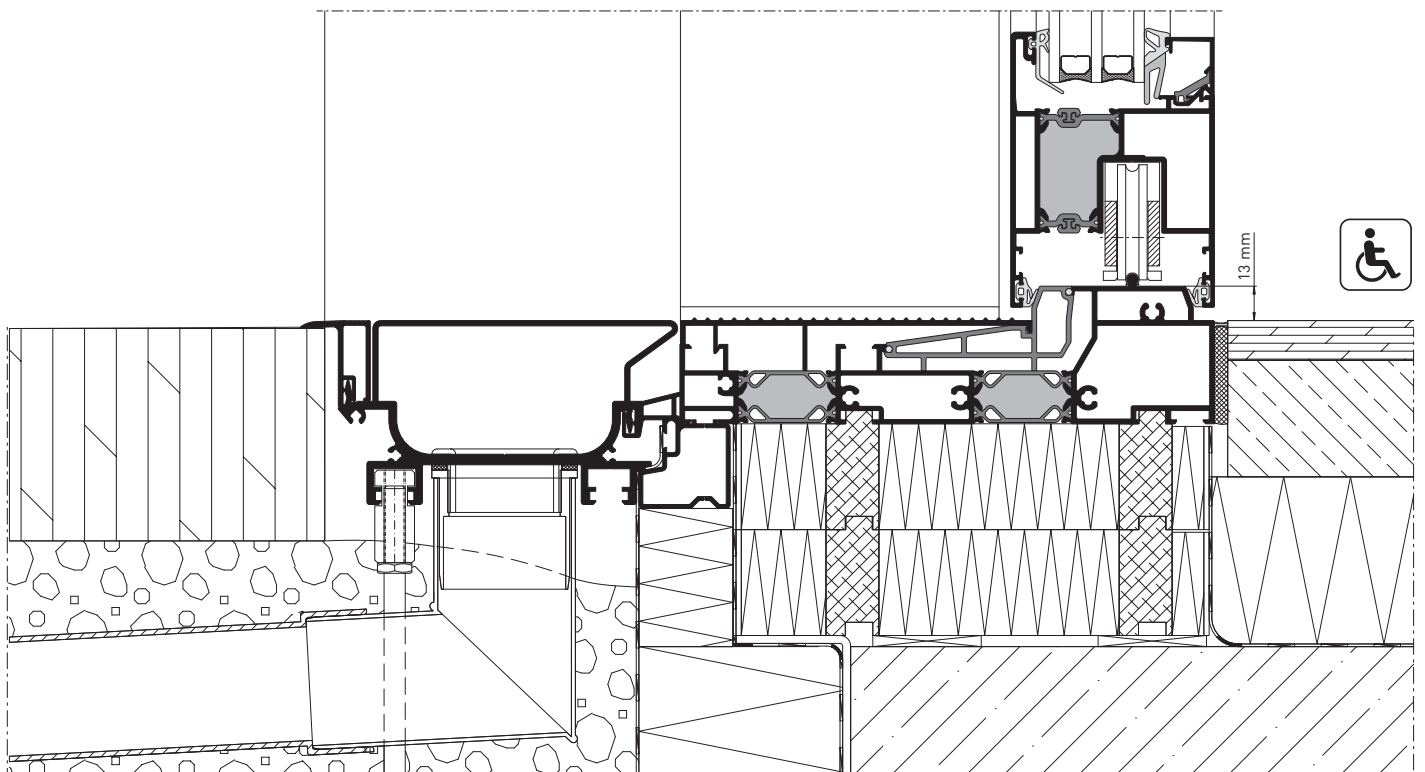
The threshold solution for lifting-sliding door systems developed by heroal meets the legal accessibility requirements through incorporation into the building in the correct manner.

To implement accessible thresholds properly in the area of lifting-sliding elements while offering protection from moisture damage indoors, particular measures need to be taken.

One possible solution is the use of the heroal DS drainage system, which discharges surface water without any back-up.

When choosing the correct drainage system, in addition to the expected amount of rainfall, the finish of the exterior surface is an important consideration in planning the necessary removal of surface water for smooth water discharge.

The variety of combinations within the heroal systems ensures planning security for builders, architects and processors.

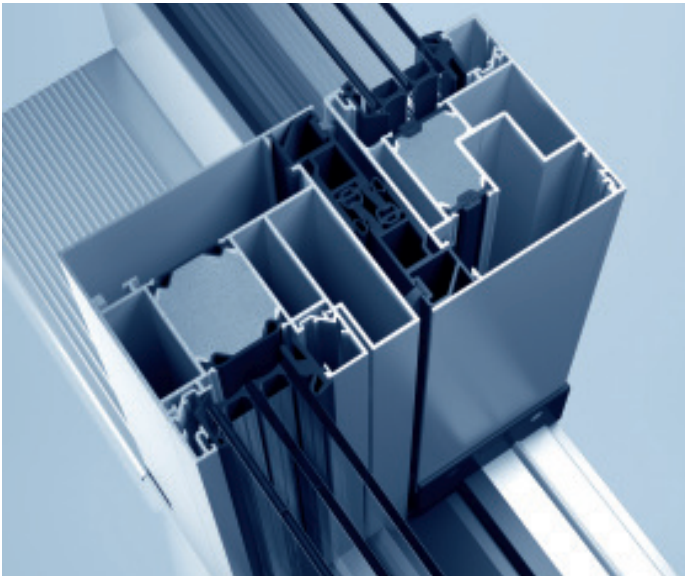


heroal S 77 SL, accessible according to DIN 18040, sectional view



heroal S 77 SL

Production technology



heroal central joint technology

heroal develops innovations. Our central joint technology for the S 77 SL system guarantees statics and stability, ensuring optimal joint impermeability and tightness against driving rain with its three sealing levels. And this is necessary, because the central joint is the structural component that connects various elements of the lifting-sliding system. As such, it must be able to withstand the stress from these different forces. heroal has developed an innovative technology to optimise this connection in the system and to increase the strength of the lifting-sliding system.

heroal compound technology

Thanks to three innovative production stages, heroal lifting-sliding systems offer effective protection against the bi-metal effect. This is when large temperature differences between the interior and exterior cause deformations on the casement frame.

Lifting-sliding casements can also be modified retrospectively to counter this. This can be done using a conventional pad saw. Any section which is not entirely neat is then completely covered by the slide-in spring.



Step 1: The patented, warp-resistant profile compound from heroal is used to help avoid the huge influence that the difference in temperature can have on the function and appearance of the lifting-sliding elements. It protects the profile against the damaging shear forces. This compound consists of a tightly rolled thermal break and a slide-in spring.

Step 2: First the lifting-sliding casement is cut, milled and drilled. Before the casement is pressed or nailed, the slide-in springs are removed from the casement profiles. The thermal break is then split into sub-areas of the casement profile using a specially developed tool.

Step 3: The slide-in springs are replaced. The profile compound remains partially intact, and potential shear forces cannot be applied to the HS gear or the closing cylinder. In the event of transversal shear pull forces in the area where the compound has been separated, for example during a break-in attempt, the slide-in spring allows the profile to behave like a profile with a conventional compound.

System dimensions and system properties: comparison tables

System dimensions

Description		heroal S 57	heroal S 77		heroal S 77 HI		heroal S 77 SL
Profile installation depth (mm)	Frame profiles	125/193	178/279	178/279	178/279	178/279	202
	Casement profiles	57	77	77	77	77	77
	Cross bar profiles	57	72	72	72	72	72
Profile view widths (mm)	Lower frame profile	41	52	52	52	52	52
	Side frame profile	30	40	40	40	40	40
	Upper frame profile	48	35	35	35	35	40
	Casement profiles	90/100	94	104	94	104	104
	Central joint/labyrinth	100/110	114	124	114	124	104
	Cross bar profiles	84/104	74 – 104	74 – 104	74 – 104	74 – 104	74 – 104
Max. thicknesses of glass/ infill panel (mm)	Casement glazing	42	52	52	52	52	52
	Frame glazing	-	-	-	-	-	52
Max. casement weights (kg)		150/250	150	300/400	150	300/400	300/400
Max. casement leaf heights (mm)		2100	3000	3000	3000	3000	3000

System properties

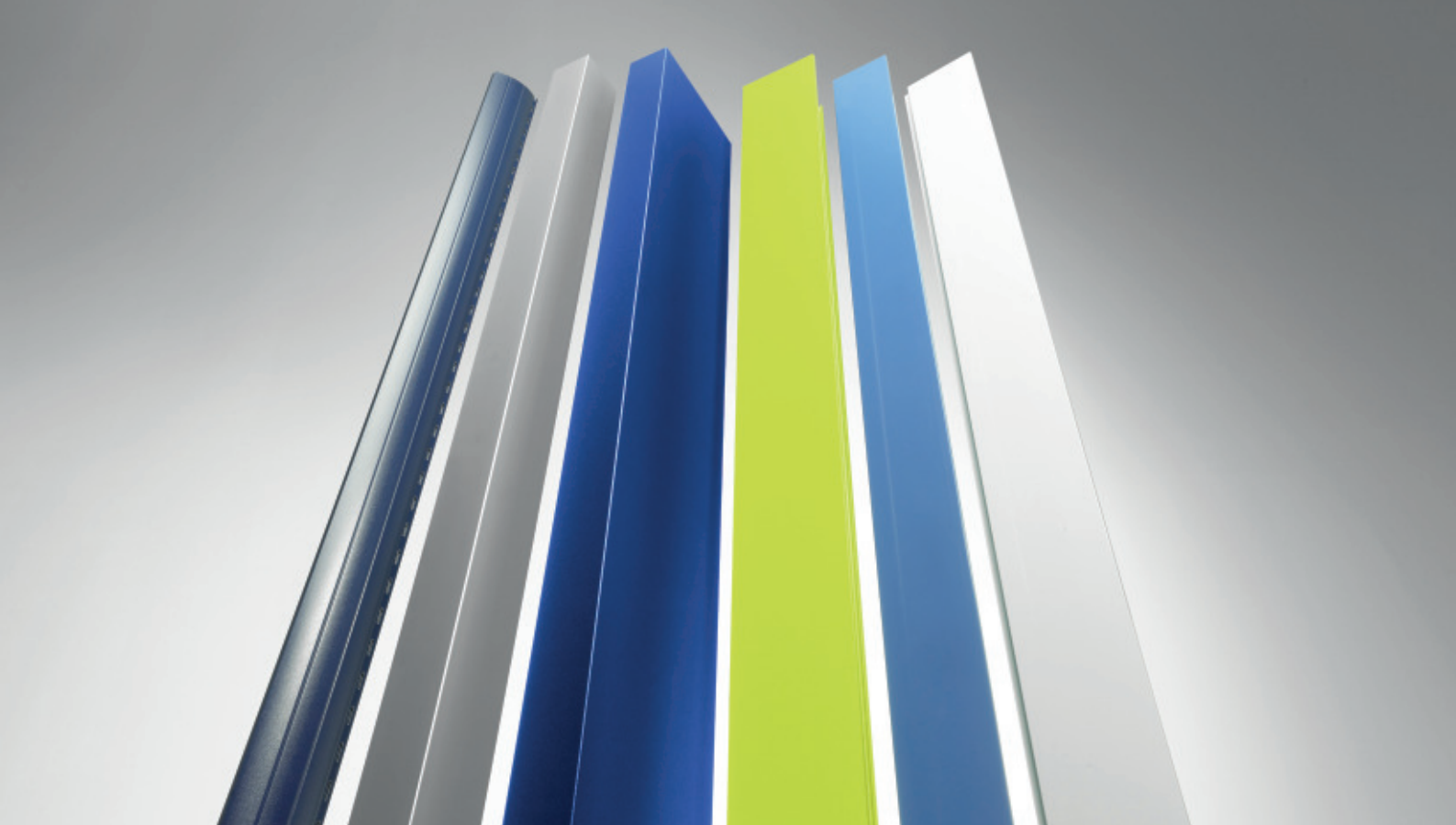
Description		heroal S 57	heroal S 77		heroal S 77 HI		heroal S 77 SL
Heat insulation (W/m²K)	U_f^*	≥ 3.2	≥ 3.0	≥ 2.9	≥ 2.2	≥ 2.1	≥ 1.2
	U_w^{**}	≥ 1.3	≥ 1.1	≥ 1.2	≥ 1.0	≥ 1.0	≥ 0.82
Soundproofing class (SSK)		-	1 – 3	1 – 3	1 – 3	1 – 3	-
Burglary resistance (WK/RC)		RC 2	RC 2	RC 2	RC 2	RC 2	-
Wind load resistance		C3/B3	C3/B3	C3/B3	C3/B3	C3/B3	C3/B3
Tightness against driving rain		5A	9A	9A	9A	9A	9A
Air permeability		4	4	4	4	4	4
Number of profile chambers for casement profile		2	3	3	3	3	3
Patented heroal profile compound		●	●	●	●	●	●

Opening types/design

Description		heroal S 57	heroal S 77		heroal S 77 HI		heroal S 77 SL
Number of high-grade steel runners	1-track (monorail)	-	-	-	-	-	●
	1-track (2-rail)	●	●	●	●	●	-
	1-track (3-rail)	●	●	●	●	●	-
Max. number of moveable HS sliding casements		6	6	6	6	6	2
Accessible threshold design		●	●	●	●	●	●
Façade insert element		●	●	●	●	●	●

* U_f value according to EN ISO 10077-2; frame combination average

** U_w value according to DIN EN 12567-1, calculated based on element size 3500 x 2180 mm



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, roller doors and sun protection. 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 used in the roller shutter field in particular. heroal delivers its entire product portfolio directly ex-works, thus ensuring the shortest delivery times for its partners.

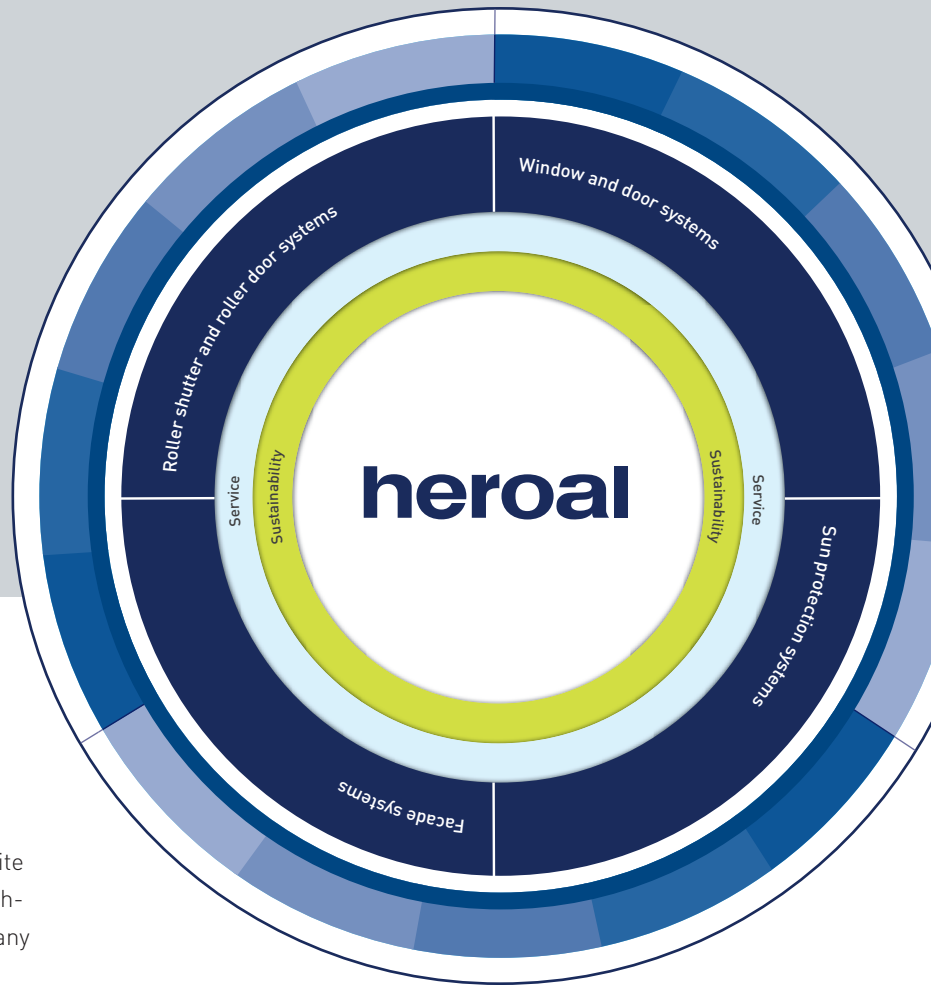
Our service is consistently geared to your needs

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, sun protection, windows, doors and façades, which is certified by ift Rosenheim and can also be used by customers, as well as by the efficient, in-house profile bending and edging service: heroal is the only systems supplier in the sector to offer such a service to its customers.



heroal – the aluminium systems supplier

As one of the leading aluminium systems suppliers, heroal develops and produces perfectly coordinated systems for windows, doors, façades, roller shutters, roller doors and sun protection, complemented by louvre and sliding shutters, insect protection and terrace roofs and carports. By minimising energy consumption during production, maximising energy conservation during usage and ensuring optimum profitability during system processing and building improvement, heroal system solutions make a significant contribution to sustainable construction.



Innovation, service, design, sustainability

The heroal brand represents system solutions that unite practical innovations, industry-leading service and high-quality design that can be sustainably integrated into any architecture.

Roller shutters | Roller doors | Sun protection | Windows | Doors | Façades | Service

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