

## heroyal S 77

Lift and Slide Systems



## Lift and Slide Systems

The efficient system technology from heroal sets itself apart with first-class materials, technical perfection in all details and a wide variety of design options. These are impressive advantages. heroal has been a reliable partner for architects, developers and fabricators for decades, with innovative solutions made of aluminium and aluminium composites for building shells.

Planners value the variety of possible designs, developers can realise their individual wishes with a reliable system and our partners benefit from the economical and efficient heroal system solutions.

Like all innovative heroal systems, the top-quality lift and slide system heroal S 77 combines durability and functionality with top-class design and numerous design options for large-area opening elements. It fulfils all the criteria for sustainable, energy-efficient construction, as well as the highest standards. With this system, the name heroal has become synonymous with innovation. heroal's central joint and compound technology round out the excellent features of this system.

Find out more about the diversity of the lift and slide system range!





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in three variations

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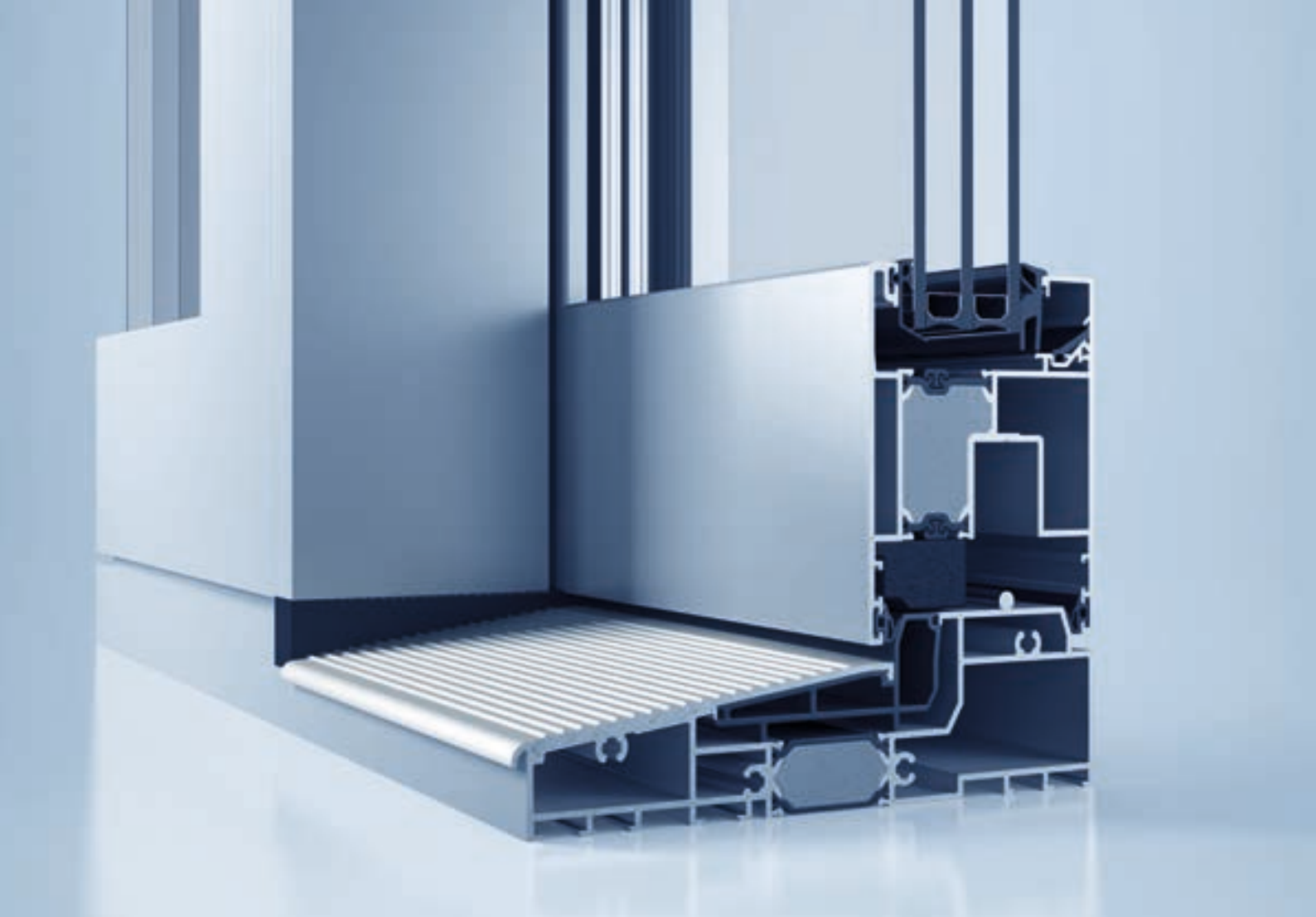
For maximum ease of operation

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## heroyal S 77

### Aluminium Lift and Slide System in three variations

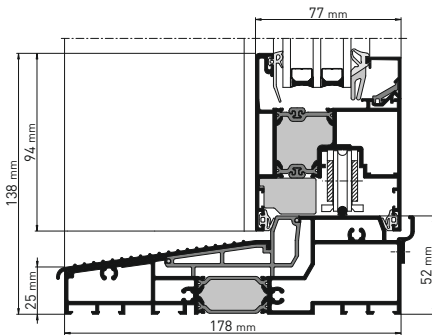
#### **heroyal S 77**

Variety is our strong point: heroyal S 77 is a modular profile system with modern design that meets the highest structural requirements. It offers a choice of two casement view widths, as well as an almost unlimited choice of surfaces, and is compatible with other heroyal systems. heroyal S 77 can also be used to implement multi-track design variants and fully accessible layouts. More on this on page 7.

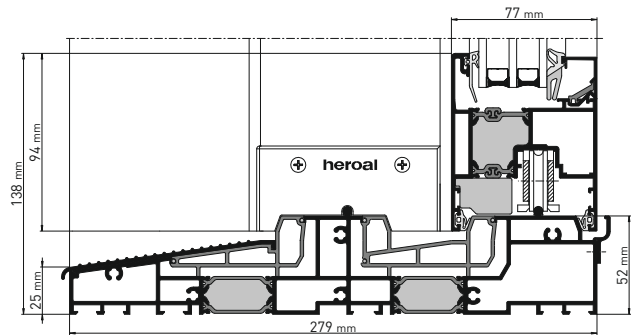
Special casement profile geometries ensure compliance with all requirements and specifications for thermal insulation across all casement sizes and weights. Optimised heroyal seal technology with four levels and wind stop, as well as the use of sealed corners on casements and central joint sealing ensure both optimal air permeability and tightness against driving rain, as well as easy and efficient handling.

#### **heroyal S 77 HI**

Energy efficiency counts: As a logical further development of the heroyal S 77 lift and slide system, heroyal S 77 HI is a highly heat-insulated system that offers a modular insulation zone and four levels of seal technology as well as wind stop for casements and central joint sealing devices. This allows  $U_w$  values from  $\geq 1.0 \text{ W/m}^2\text{K}$  to be achieved. High-quality and economical insulation materials are used in the thermally critical construction detailing of the lifting-sliding door system.



heroal S 77 HI, 2-track, sectional view



heroal S 77 HI, 3-track, sectional view

### System properties

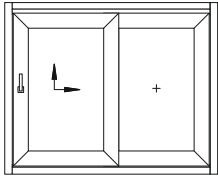
- » Max. casement leaf heights: 2,400 mm, using additional static strengthening extendable to 3,000 mm
- » Max. casement weights: 300 kg, extendable to 400 kg through the use of tandem runners
- » Maximum ease of operation: Newly-added extra features, invisible from the outside, allow easy operation, even of heavy casements – whenever needed, and at the push of a button, thanks to the integrated drive system.
- » Frame and casement profiles can be supplied with or without PU foam in two lengths (cut optimisation)
- » Adapted/Optimised fitting casement profiles
- » Seal technology with four levels and wind stop for casement and central joint seals
- » Frame drainage either visible or concealed, concealed casement drainage
- » Cost-optimized, time-saving processing using constructive solutions, such as 90° cuts of additional lift and slide profiles

### Configuration options and design

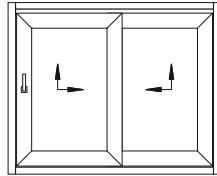
- » Opening types: Two- or three-track with up to six moveable casements
- » Fully accessible version (zero barrier) through integration of the ground threshold in the structure and use of the heroal DS drainage systems
- » Colour design in high-quality heroal hwr powder coating
- » Extensive range of connection and additional profiles for integration in conservatories and the like, and the application of heroal IS insect protection systems

# heroal S 77

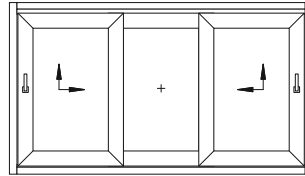
## Opening types and design options



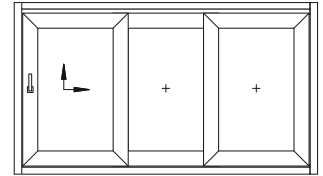
Fitting scheme A



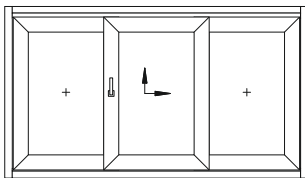
Fitting scheme D



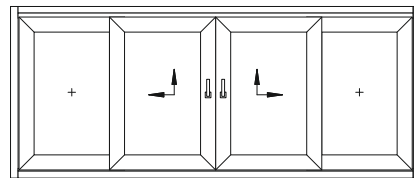
Fitting scheme K



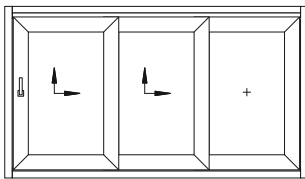
Fitting scheme A



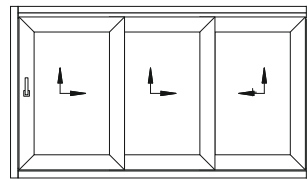
Fitting scheme G



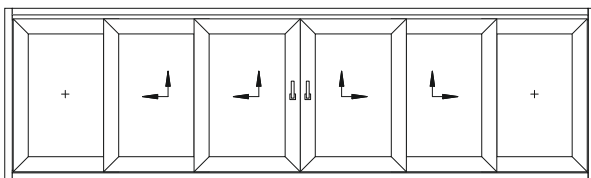
Fitting scheme C



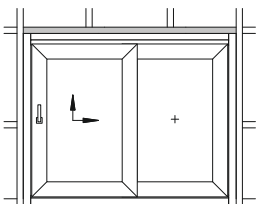
Fitting scheme E



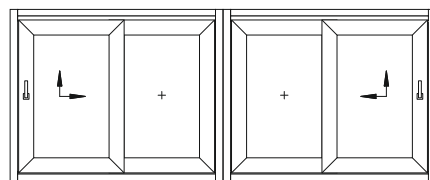
Fitting scheme H



Fitting scheme L



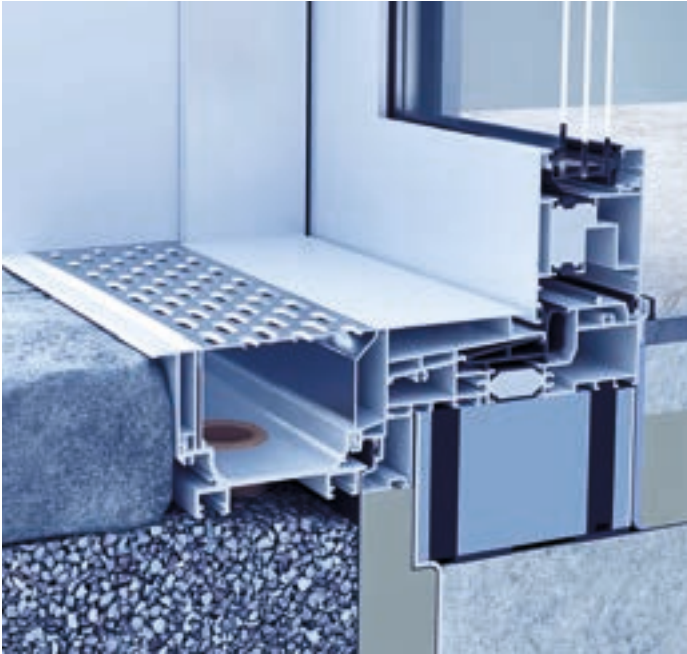
Façade integration



Element coupling

# Unlimited Mobility

heroal standard solution for accessible thresholds

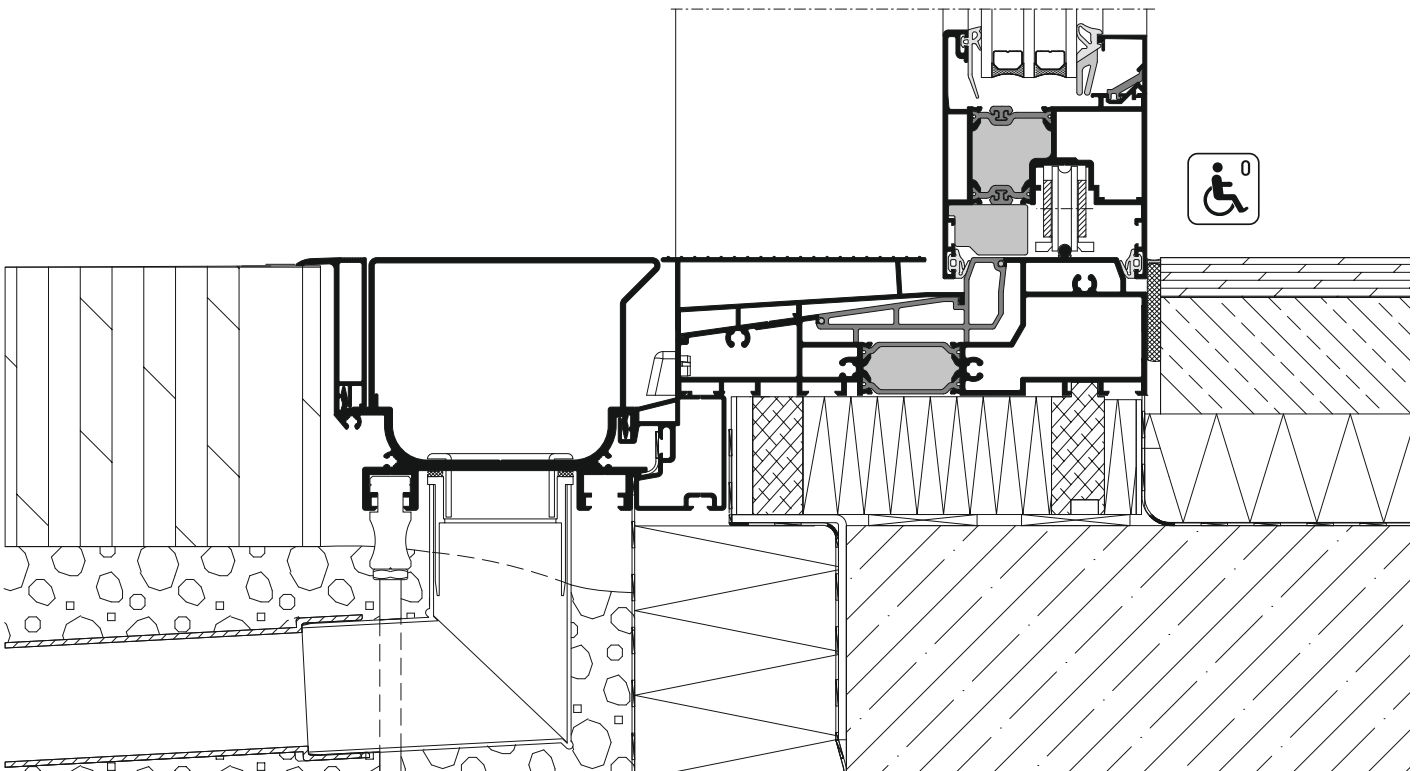


heroal offers cross-system solutions for all large openings as part of their Entrance Doors, French Doors and Lifting-Sliding Doors product ranges.

The enhanced heroal threshold solution for lifting-sliding door systems meets the legal requirements for total accessibility thanks to its professional structural integration.

In order to implement totally accessible thresholds for lifting-sliding door elements correctly, while also protecting against moisture damage indoors, some special measures need to be taken. One possible solution is to use the heroal DS drainage system, which discharges the accumulating surface water without any back-up. When it is time to choose the proper drainage, not only the expected amount of rain but also the version of the outer fitting are important factors you need to consider when planning the necessary surface drainage for seamless water drainage.

The variety of combinations that can be made using heroal systems ensures planning security for developers, architects and fabricators.



heroal S 77, zero-barrier as per DIN 18040, sectional view

# heroal Fitting Technology

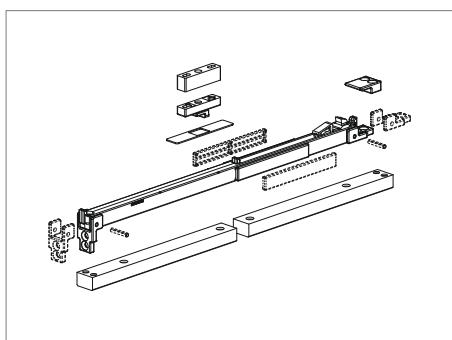
For maximum ease of operation



Control panel for the motorised heroal SF Drive

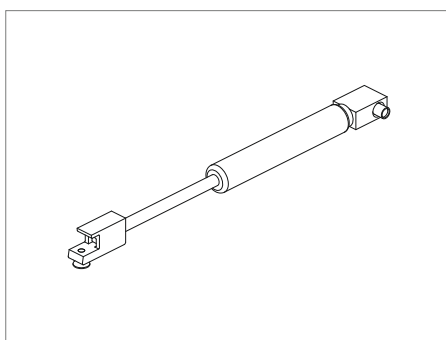
Modern lifting-sliding door systems with large areas of glazing allow rooms to be flooded with light – but on account of the often heavy casement weights, they are often difficult to open and close. A motorised drive is therefore the ideal addition for effortless and safe operation. The heroal SF Drive system, which is completely integrated in the door profiles, enables a particularly convenient and almost noiseless operation at the push of a button – and, if required, can also be operated via remote control or smartphone app.

The motors are equipped with two batteries to ensure safe operation in the event of a power outage. The sensitive control system of the SF Drive detects obstacles and ensures that the opening or closing casement stops with even the slightest counter-pressure. This guarantees effective protection against people becoming trapped and damage to objects.



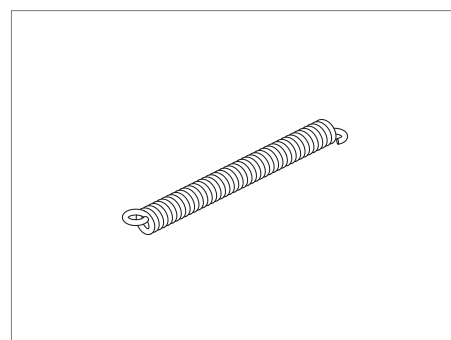
## heroal Easy Move

The Easy Move slide-in damper automatically ensures gentle, quiet and controlled opening/closing of the lift and slide casement and offers additional safety and ease of use, especially with heavy casement weights. The Easy Move can be used with a maximum casement weight of 400 kg.



## Handle damper

With the handle damper, even heavy sliding casements can be easily operated. It enables a non-recoiling, controlled lowering of the casement and a controlled movement of the turning handle. The assembly is recommended for casement weights of 100 kg and up.

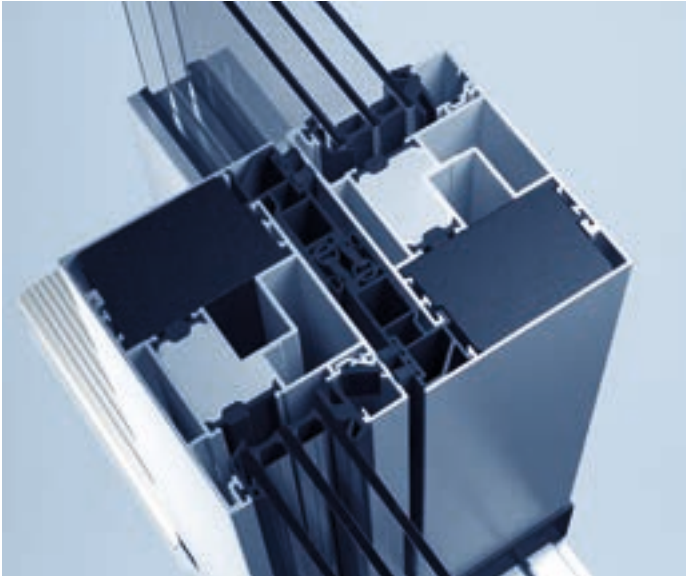


## Tension spring

The tension spring significantly reduces the operating forces on the turning handle and should be used for casement weights over 200 kg, so that the sliding casement can be raised easily.



# heroal Production Technology



heroal S 77 HI, central joint with four seal levels and wind stop

## heroal Central Joint Technology

heroal innovates. Our central joint technology for the heroal S 77 system represents the highest statics and stability and ensures optimal joint- and water-tightness against driving rain, through four levels of seals and wind stoppage. This is a necessity, as the central joint is a construction component that connects various building elements of the lift and slide system. Forces are at work here, producing stresses that the central joint must withstand. heroal has developed an innovative technology that optimises this link in the system and turns it into a strength of the lift and slide system.

## heroal compound technology

Thanks to three innovative production steps, the heroal lift and slide systems offer effective protection against the bimetal effect, during which large differences in temperature between the inside and outside areas cause warping in the casement frame.

Lift and slide casements can, however, also be retrofitted. This can be done with an ordinary jigsaw. Any not-quite-clean cuts can be covered completely and perfectly by the slide-in spring.



**Step 1:** The patented, warp-resistant profile compound from heroal avoids the significant impact the temperature differences exert on the function and the appearance of the lift and slide elements. It protects the profile against harmful thrust forces. The compound consists of a firmly involuted thermal break and a slide-in spring.



**Step 2:** First, the lift and slide casement is cut, milled and drilled. Before the casement is compressed or nailed, the slide-in springs are removed from the casement profiles. Then the thermal break is separated in sections of the casement profile with a tool developed for that purpose.



**Step 3:** The slide-in springs are re-inserted. The profile compound remains intact to a certain degree, and thrust forces exerted cannot be transferred to the gears and the closing cylinder. In the area of the separated compound, the profile behaves like a profile with a conventional compound, thanks to the slide-in spring, when faced with transverse tensile forces which can occur, for example, during an attempted burglary.

# System and Performance Features

## System dimensions

Description		heroal S 77		heroal S 77 HI		heroal S 77 SL		heroal S 57	
Profile installation depth [mm]	Frame profiles	178/279		178/279		202		125/193	
	Casement profiles	77		77		77		57	
	Cross bar profiles	72		72		72		57	
Profile view widths [mm]	Frame profiles	40/52/63		40/52/63		30/40		30/41/48	
	Casement profiles	94	104	94	104	104		90	100
	Cross bar profiles	74-104		74-104		74-104		84/104	
	Central joint	114	124	114	124	104		100	110
Max. glass/thickness of infill panel [mm]	Casement glazing	52		52		52		42	
	Frame glazing	-		-		52		-	
Glass inset [mm]		18		18		18		16	
Max. casement weight [mm]		150	400	150	400	400		150	250
Max. casement leaf height [mm]		3,000		3,000		3,000		2,100	

## System properties

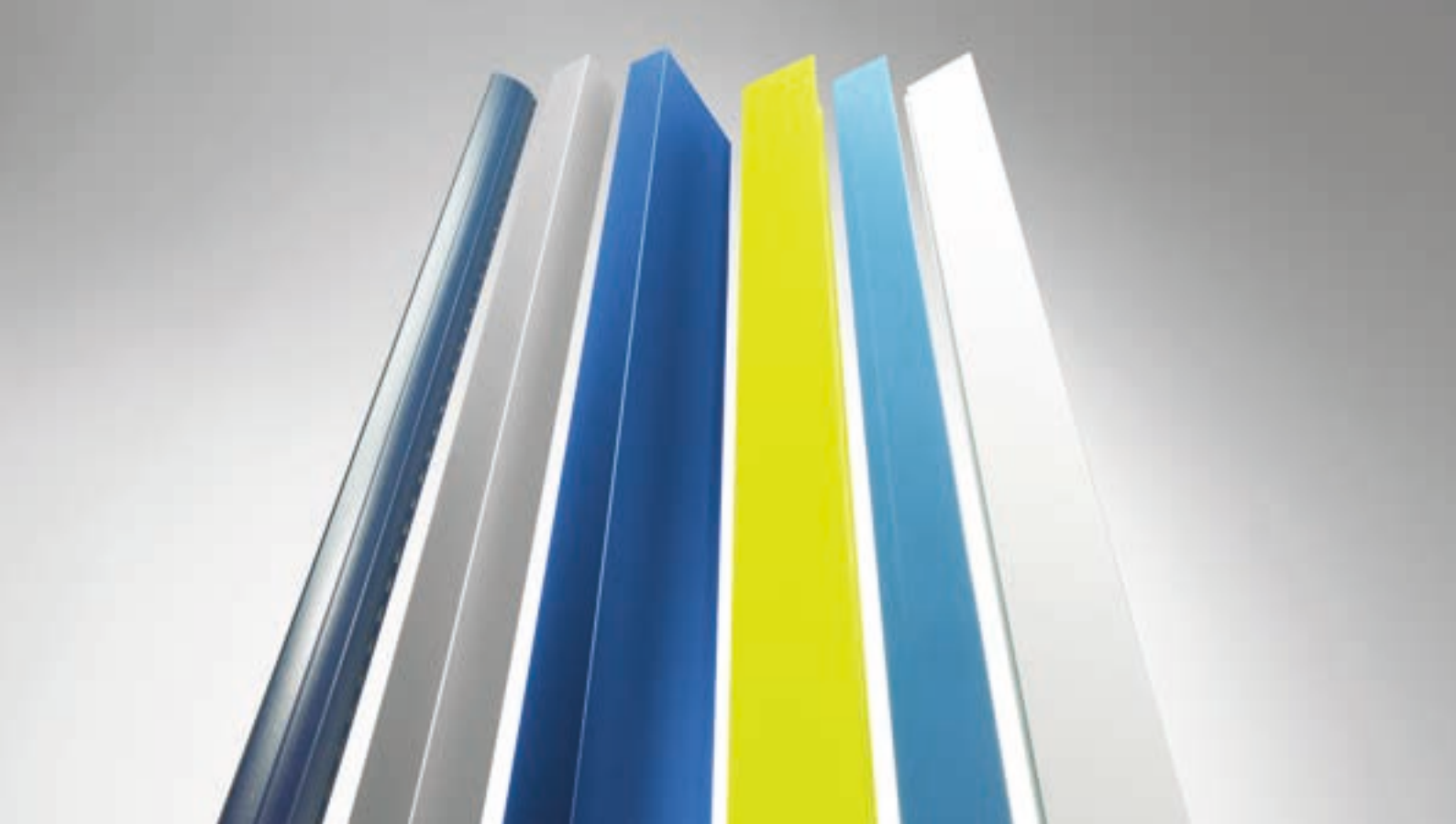
Heat insulation [W/m <sup>2</sup> K]	U <sub>f</sub> <sup>1)</sup>	≥3.0	≥2.9	≥2.2	≥2.1	≥2.1	≥3.2
	U <sub>w</sub> <sup>2)</sup>	≥1.1	≥1.2	≥1.0	≥1.0	≥0.82	≥1.3
Air permeability	DIN EN 12207	4		4		4	
Tightness against driving rain	DIN EN 12208	9A		9A		5A	
Wind load resistance	DIN EN 12210	C3/B3		C3/B3		C3/B3	
Soundproofing class (SPC)	DIN EN ISO 717-1	1-3		1-3		3	
Burglary resistance	DIN V ENV 1627	RC 2		RC 2		RC 2	

## Opening types and design

Number of stainless steel runners	1-track (monorail)	-	-	•	-
	2-track (2-rail)	•	•	-	•
	2-track (3-rail)	•	•	-	•
Max. no. movable casements		6	6	2	6
Accessibility (zero barrier)		•	•	•	-
heroal DS drainage system		•	•	•	-
All-glass corner/Casement corner for opening		-	-	•	-
Façade integration		•	•	•	•

1) According to EN ISO 10077-2, average of frame combinations

2) According to DIN EN 12567-1, calculated using an element size of 3,500×2,180 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 m<sup>2</sup>, 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.

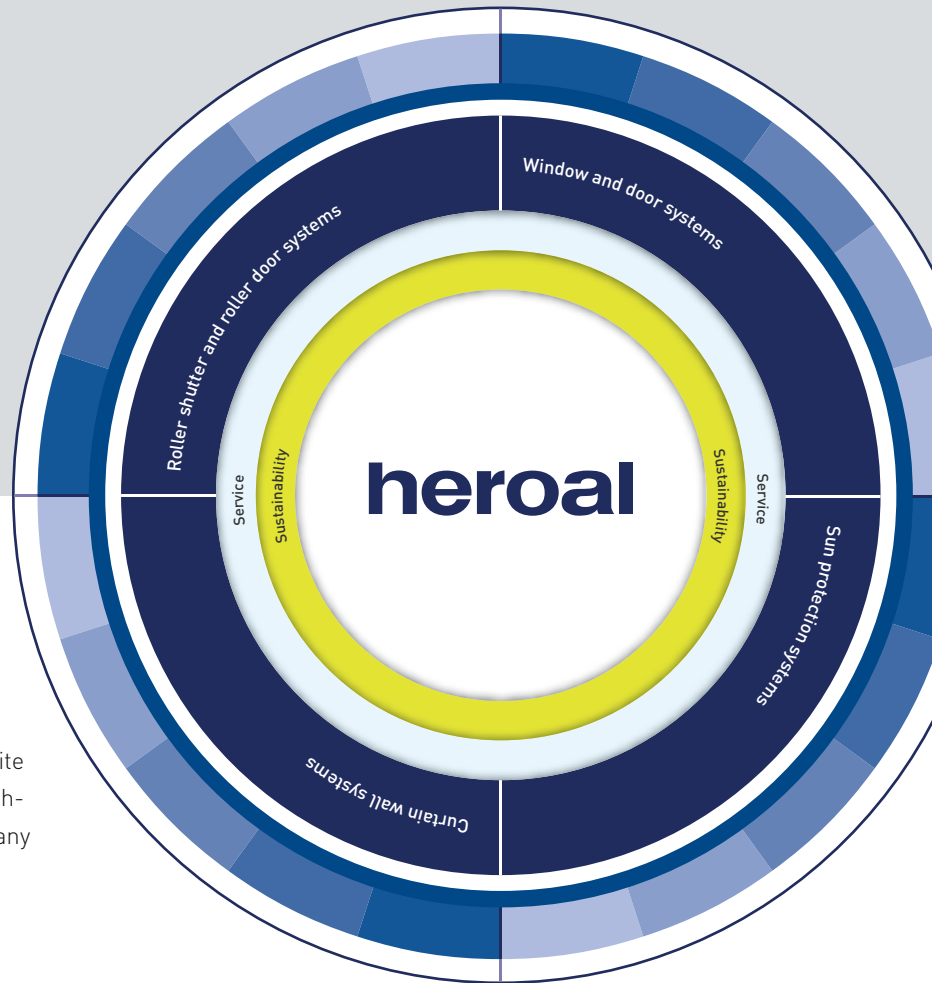


# heroal – the aluminium systems supplier

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 | Sun protection | Roller doors | Windows | Doors | Curtain walls | Service

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