

For large dimensions, maximum transparency and highest thermal efficiency requirements

# Lifting-sliding systems heroal S 77 SL



**heroal**



## Lifting-sliding systems

The efficient system technology from heroal sets itself apart with first-class materials, technical perfection down to the last detail 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 configurations, 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 high-quality lifting-sliding heroal S 77 SL systems combine longevity and functionality with first-class design and numerous design options for large opening elements. They fulfil all the criteria for a sustainable, energy-efficient building and always meet the highest demands. heroal is driving innovation with this system. The heroal central joint and seal technology add to the exceptional features.

Discover the range of lifting-sliding systems!



## heroal S 77 SL

Page 4

Perfect combination of transparency and heat insulation

## Types of opening and design options

Page 6

## 90-degree corner models

Page 9

Opening in a new dimension

## Unrestricted mobility

Page 10

heroal standard solution for accessible thresholds

## heroal fitting technology

Page 11

For maximum operating comfort

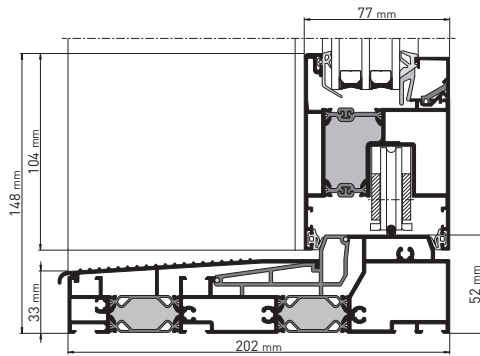
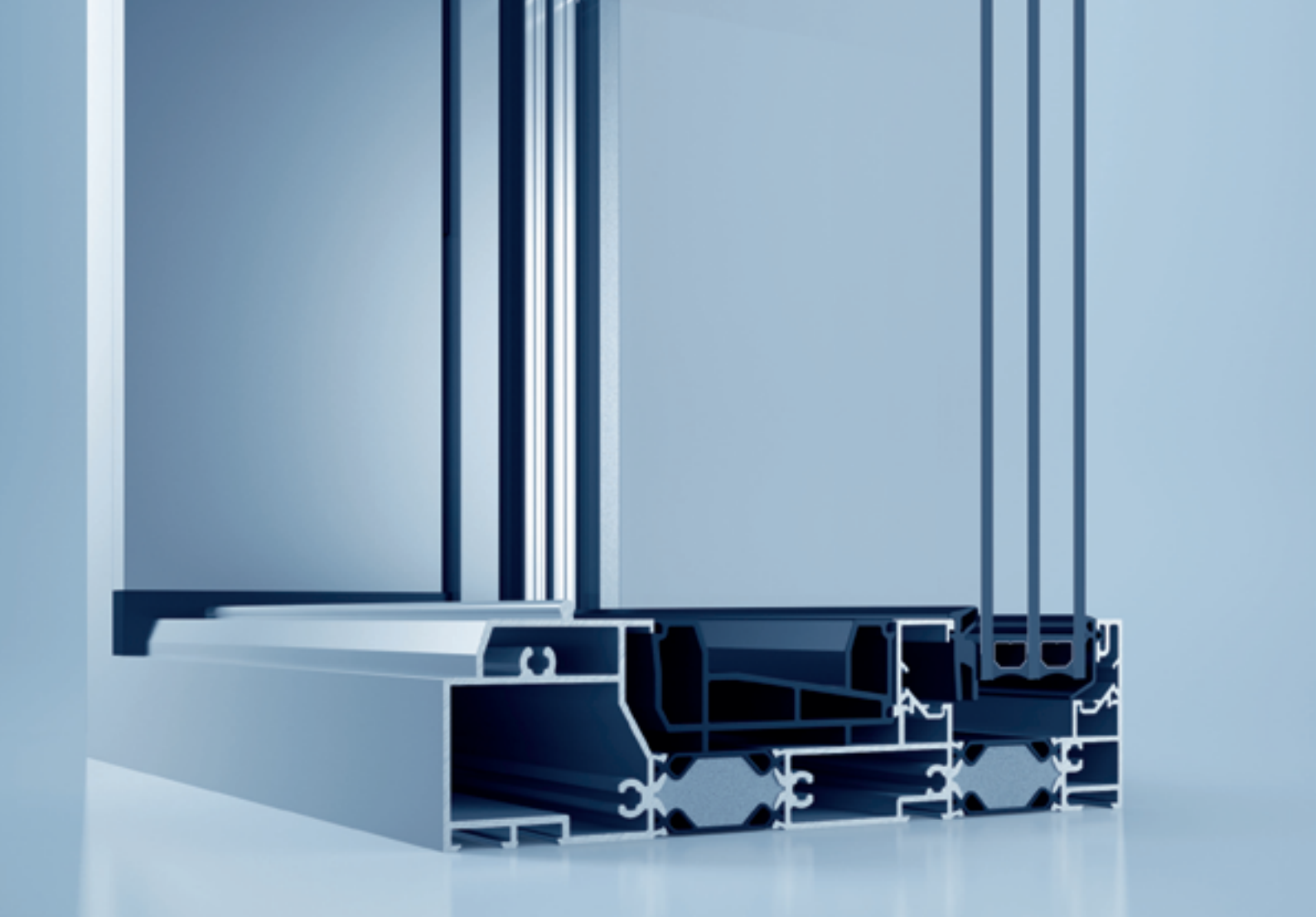
## heroal production technology

Page 13

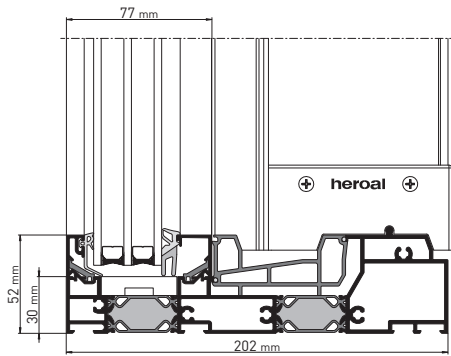
## System and performance features

Page 14





heroal S 77 SL, lifting-sliding casements, sectional view



heroal S 77 SL, frame-fixed glazing, sectional view

# heroal S 77 SL

## Perfect combination of transparency and heat insulation

heroal S 77 SL opens up new large areas and guarantees maximum transparency with its unique, innovative frame construction.

This generation of heroal lifting-sliding doors combines a movable monorail casement with a fixed frame glazing with the smallest view widths.

This large, frameless glazing with clear design is a virtually unnoticeable link between inside and out and extends the living space beyond its actual borders. The heroal S 77 SL lifting-sliding system is a modern architectural design element and creates a new ambience in a room.

The heroal S 77 SL lifting-sliding system forms a harmonious balance between contemporary design, highest comfort and consistent functionality. Its delicate and modular construction details make the heroal S 77 SL limitlessly installable, either in a new build or a renovation.

Special and tried-and-tested heroal casement shapes fulfil all requirements for heat insulation for all casement leaf sizes and weights. The heroal sealing technology with four sealing levels and the use of EPDM sealing corners on casement and central joint sealing provide optimal performance features with regards to air permeability and tightness against driving rain.

### System properties

- » Max. casement leaf heights: 2,400 mm, extendible up to 3,000 mm with additional static strengthening
- » Max. casement weights: 300 kg, extendible up to 400 kg with the use of tandem carriage
- » Max. operating comfort: New additional items, not visible from outside, enable effortless easy operation, also of difficult casements – also available on request with push button thanks to an integrated drive system.
- » Exceptionally smooth running with its combination of tried-and-tested fitting systems and heroal high-grade steel runners
- » Flexible and non-wearing EPDM-sealed moulded parts for long-lasting tightness against driving rain and wind
- » Sealing technology with four levels and windstop for casement and central joint seal
- » Glazing seal with narrow elevations, fully retractable
- » Cost-optimised and time-saving processing with innovative heroal detailed solutions
- » Highly thermally insulated 3-chamber profile system
- » heroal seal technology with patented warp-resistant casement profiles

### Configuration options and design

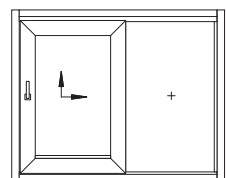
- » Types of opening: Single-track (monorail) with up to two movable casements.
- » 90° corner formation with all-glass corner made of insulation glass or opening casement corner.
- » Accessible threshold design with integration into the structure attachment
- » Handle selection: Turning handle with handle recess outside, or turning handle inside and out. Both versions are optionally lockable
- » Handle colours: White, silver, anodized (E6/EV1) and high-grade steel
- » Extensive range of connection and additional profiles for easy structural integration
- » Integration into the heroal C 50 curtain wall system
- » Additional design freedom with the various profile colours on the element interior and exterior
- » Colour design in high-quality heroal hwr powder coating



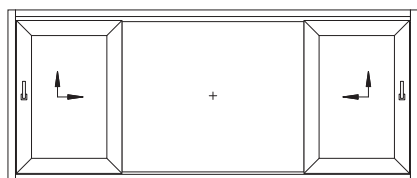


## heroal S 77 SL

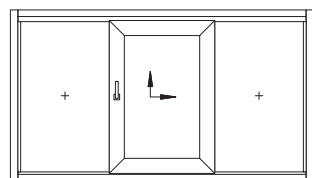
Types of opening and design options



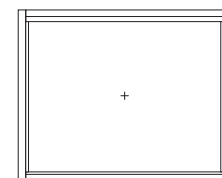
Fitting diagram A



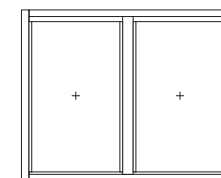
Fitting diagram K



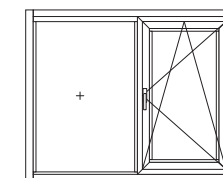
Fitting diagram G



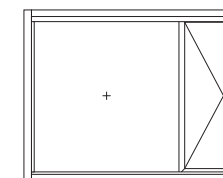
Fixed glazing



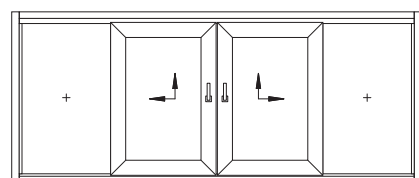
Fixed glazing with cross bar



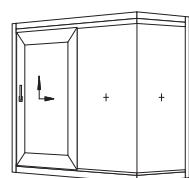
Window integration



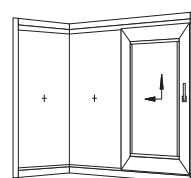
Ventilation damper integration



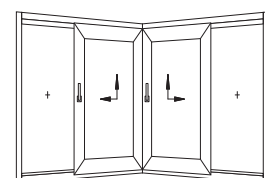
Fitting diagram C



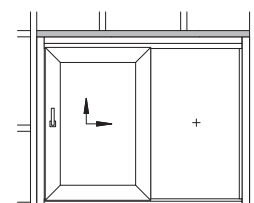
All-glass corner (inside)



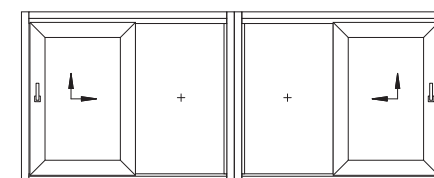
All-glass corner (outside)



Openable casement corner



Curtain wall integration



Element coupling





## 90-degree corner models

### Opening in a new dimension

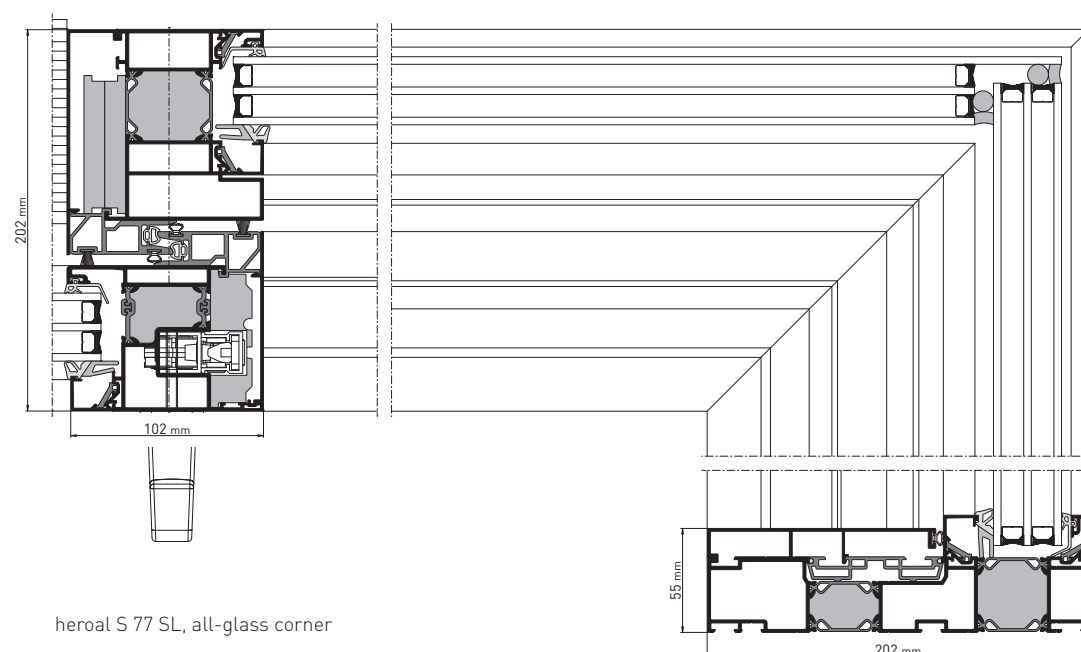
#### All-glass corner

The innovative and delicate all-glass corner made of insulation glass fulfils the boundless and increasing desire to have greater transparency in architecture. This attractive design variant, in which no disturbing element frame restricts the view even in the joint area, conveys brightness and joie de vivre. The beautifully designed heroal detailed solution impresses in its interior and exterior view and lends additional architectural accents.

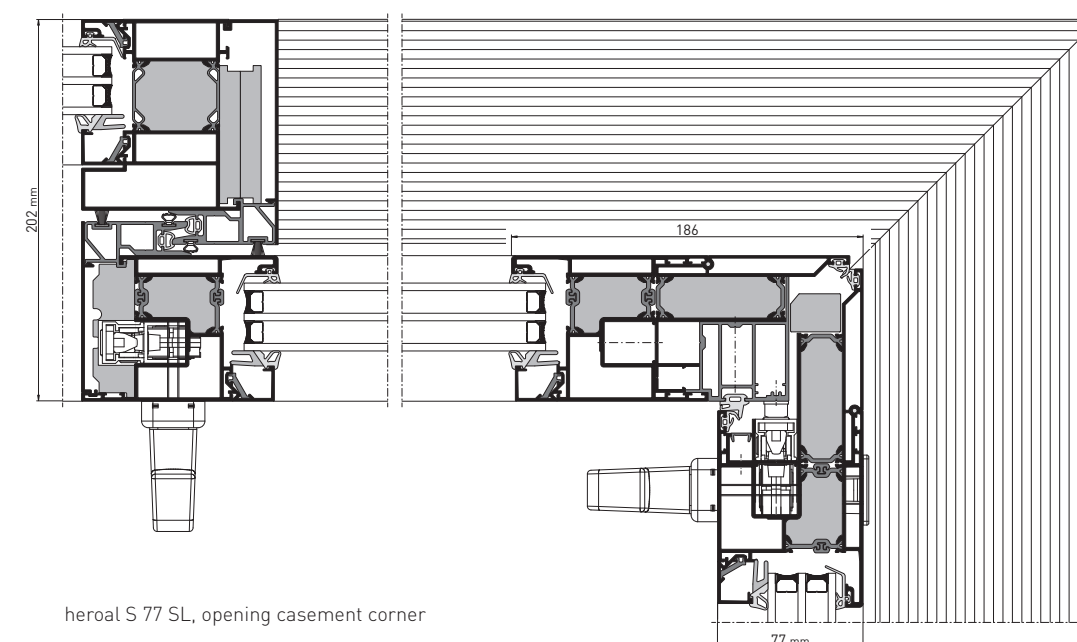
#### Opening casement corner

The perfect addition to the all-glass corner is the opening casement corner which redefines the room. The implementation of particularly large opening widths without the need for a support in the corner area allows a flowing transition between inside and out, and its maximum transparency creates rooms flooded with light and a completely new room experience.

Two moveable monorail lifting-sliding casements with fixed frame glazing are installed with maximum casement leaf heights of 3,000 mm and casement weights of 400 kg possible. In combination with the drainage system heroal DS, there is the possibility to choose between three different threshold variants and create perfect freedom of movement in the form of a zero barrier.



heroal S 77 SL, all-glass corner

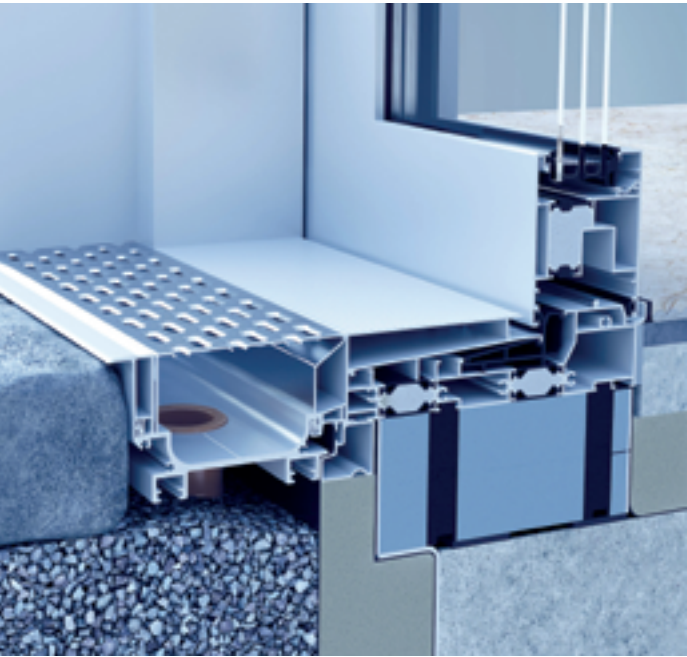


heroal S 77 SL, opening casement corner



# Unrestricted mobility

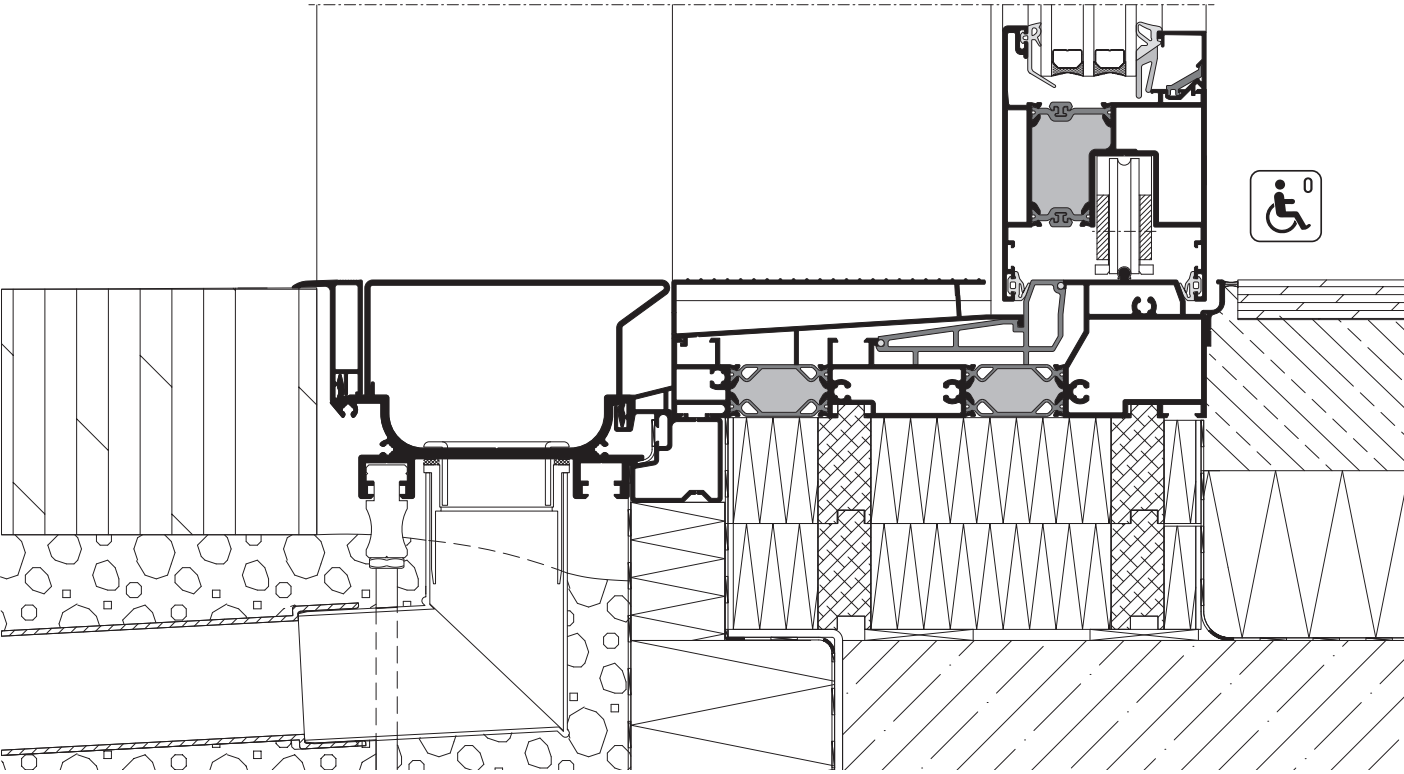
heroal standard solution for accessible thresholds



heroal offers solutions across systems for all large openings for entrance door, window and lifting-sliding door system product areas.

The enhanced heroal threshold solution for lifting-sliding door systems fulfils the statutory requirements for accessibility with its professional structural integration.

To correctly implement accessible thresholds in the lifting-sliding elements while also protecting against moisture damage indoors, some special measures need to be taken. One possible solution is the use of the drainage system heroal DS, which diverts the accumulating surface water without backing up. Alongside the expected amount of rainfall, the selection of outer lining version is also an important factor when planning the necessary surface drainage for proper drainage. The wide range of combinations between the heroal systems ensures planning security for developers, architects and fabricators.



heroal S 77 SL, zero-barrier according to DIN 18040, sectional view

# heroal fitting technology

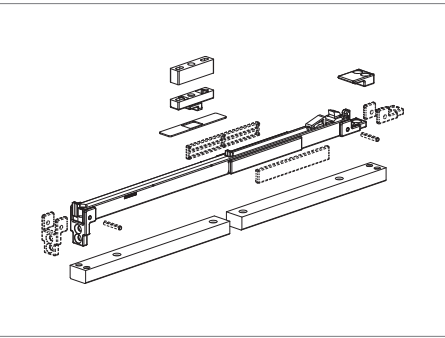
For maximum operating comfort



Operating area for the motorised drive heroal SF Drive

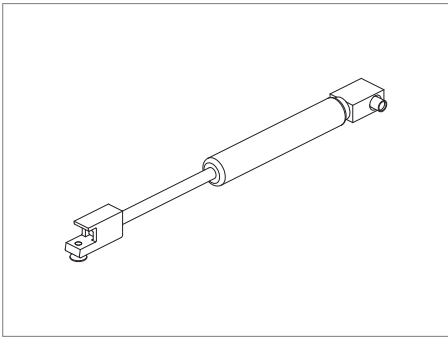
Modern lifting-sliding door systems with large glazing provide light-flooded rooms but, due to the often high casement weights, are often difficult to open and close manually. A motorised drive is therefore the perfect addition for effortless and safe operation. The heroal SF Drive system, which is fully integrated into the profiles, enables especially convenient and almost silent operation at the touch of a button – optionally available with remote control or smartphone app.

For safe operation also in the event of a power outage, the motors are supplied with power via two batteries. The intuitive control system of the SF Drive detects obstacles and ensures that the opening or closing casements stop with even the slightest counterpressure. This ensures effective protection against personal accident or damage to property.



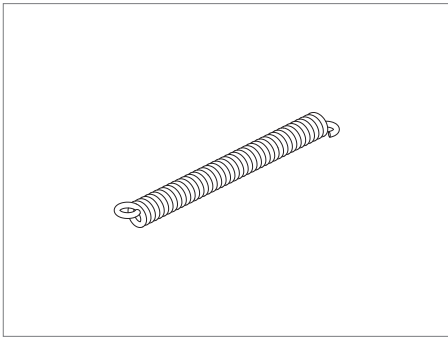
**heroal Easy Move**

The concealed slide damper Easy Move automatically provides the soft, quiet and controlled opening and closing operation of lifting-sliding casements and, particularly for high casement weights, it offers additional security and a high level of comfort. The Easy Move can be used up to a maximum casement weight of 400 kg.



**Handle dampers**

The handle dampers ensure that even heavy sliding casements are effortless to operate. It enables non-rebounding, controlled sinking of the casement and a controlled movement of the turning handle. Installation is recommended for casement weights starting at 100 kg.

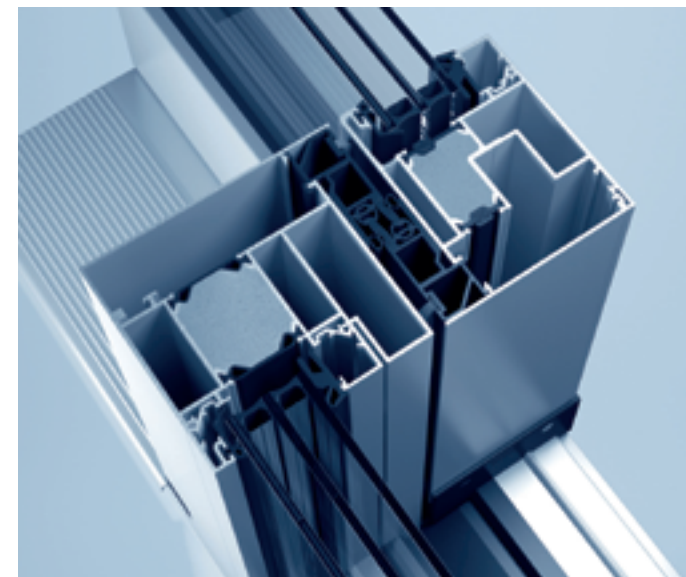


**Tension spring**

The tension spring provides a significant reduction in operating forces on the turning handle and should be used for casement weights starting at 200 kg to ensure that the sliding casement is effortless to raise up.



## heroal production technology



heroal S 77 SL, central joint with four sealing levels and windstop

### heroal central joint technology

heroal creates innovation. Our central joint technology for the heroal S 77 SL system represents the highest statics and stability; its four sealing levels and windstop ensure perfect joint and tightness against driving rain. This is necessary because the central joint is a construction component that connects various building elements of the lifting-sliding system. The central joint must be able to withstand the stress caused by the active forces. heroal has developed an innovative technology to optimise this link in the system and to develop it into a strength of the lifting-sliding system.

### heroal seal technology

The three innovative production steps of the heroal lifting-sliding systems offer effective protection against the bimetal effect in which large differences in temperature between the inside and outside area can cause the casement frames to become warped.

Lifting-sliding casements can also be retrofitted against this. This can be done using a standard jigsaw. Any rough cuts can be covered up seamlessly and effortlessly with the slide-in spring.



**Step 1:** To avoid a significant influence of temperature differences on the function and look of the lifting-sliding elements, the patented warp-resistant heroal profile seal is available. This protects the profile against damaging shear forces. This seal consists of a fixed, rolled-up thermal break and a slide-in spring.



**Step 2:** The lifting-sliding casement is first cut to size, milled and drilled. Before the casement is pressed or nailed, the slide-in spring is first removed from the casement profiles. The thermal break is then separated out in parts of the casement profile using a specially developed tool.



**Step 3:** The slide-in springs are then reinstalled. The profile seal remains partially intact and any shear forces cannot be transferred to the gear and closing cylinders. In the area of the separated seal, tensile forces, which arise during a break-in attempt, for example, the slide-in springs cause the profile to act like a profile with a conventional seal.



System and performance features

System dimensions

Description		heroal S 77		heroal S 77 HI		heroal S 77 SL		heroal S 57	
Profile 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
	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. leaf heights [mm]		3,000		3,000		3,000		2,100	

System properties

Heat insulation [W/m²K]	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	4
Resistance to driving rain	DIN EN 12208	9A		9A		9A	5A
Wind load resistance	DIN EN 12210	C3/B3		C3/B3		C3/B3	C3/B3
Sound insulation class (SSK)	DIN EN ISO 717-1	1–3		1–3		3	–
Burglary resistance	DIN V ENV 1627	RC 2		RC 2		RC 2	WK 2

Types of opening and designs

Number of high-grade steel runners	Single-track (monorail)	–	–	•	–
	Double-track (2-rail)	•	•	–	•
	Double-track (3-rail)	•	•	–	•
Max. number of movable casements		6	6	2	6
Accessibility (zero barriers)		•	•	•	–
Drainage system heroal DS		•	•	•	–
All-glass corner/opening casement corner		–	–	•	–
Curtain wall integration		•	•	•	•

1) According to EN ISO 10077-2, mean value of the frame combinations  
2) According to DIN EN 12567-1; calculated using an element size of 3,500x2,180 mm



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# 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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