

## heroyal D 92 UD

Front door system



## Door system

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.

The heroal door systems open up new dimensions with their design, sustainability and functionality. Front doors are statistically the components that remain the longest in the structure. As a result, the flexible, adaptable usability and appearance of front doors is gaining in importance. Door systems by heroal are durable and functional, and also provide a variety of designs. They impress with standards such as multi-point locking, patented retaining devices for the fittings and the heroal profile compound. Excellent heat insulation properties are provided through the modular insulation zone and the three-level sealing technology.

Discover the variable and powerful multi-generation door system!







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## heroal D 92 UD

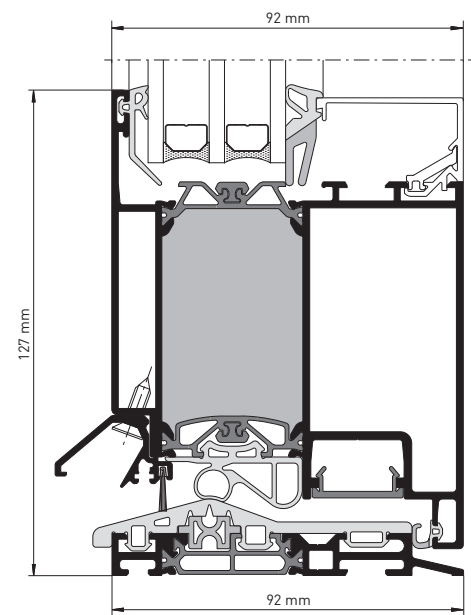
The variable and efficient front door system



The heroal D 92 UD front door system is characterised by intuitive operation and adaptive design. The system offers a multitude of design options with its modular structure. The appearance and usage properties can be easily adapted to different capabilities or new user requirements. And this has no effect whatsoever on the outstanding performance features or functional operability.

### System dimensions and performance features

- » Installation depths: 92/92 mm
- » Variable view widths: frame 85 – 120 mm, cross bars 94 – 120 mm, casement 56 – 84 mm
- » Max. glass thickness/thickness of infill panel: frames up to 70 mm (glass) and 92 mm (infill panel), casement up to 70 mm (glass) and 92 mm (infill panel)
- » Air permeability: class 4
- » Tightness against driving rain: class 9A
- » Heat insulation:  $U_D \geq 0.7 \text{ W/m}^2\text{K}$
- » Fulfils all requirements of the current German Energy Conservation Regulation (EnEV) 2014
- » Passive-house certified by ift
- » Certification for burglary resistance up to resistance class RC 3 for profile, fitting and infill technologies
- » Highly insulated 3-chamber profile system
- » Sealing technology for frames and casements with corner vulcanised seal frames to ensure the highest requirements are met for element tightness
- » Corner vulcanised seal frames for all element sizes with very short delivery times



D 92 UD door system, cross section

### Design options

- » Types of opening: one-piece inward opening with side section and transom window
- » One or multiple-piece shaped elements with side section or transom window as semicircular, segmental or three-centre arch
- » Framed with HT casement frame, profile and design options for infill, one-sided or double-sided flush casement-enclosing infill
- » Attachment options for infill panels using conventional adhesive technology or innovative reversible heroal infill panel attachment
- » Design freedom for side sections due to the integration of infills and casement-enclosing infill panels
- » Threshold solutions for new builds (accessible) and renovations
- » Colour design with high-quality heroal hwr powder coating

# Sustainability

## Innovative component reduction for optimum manufacturing benefits

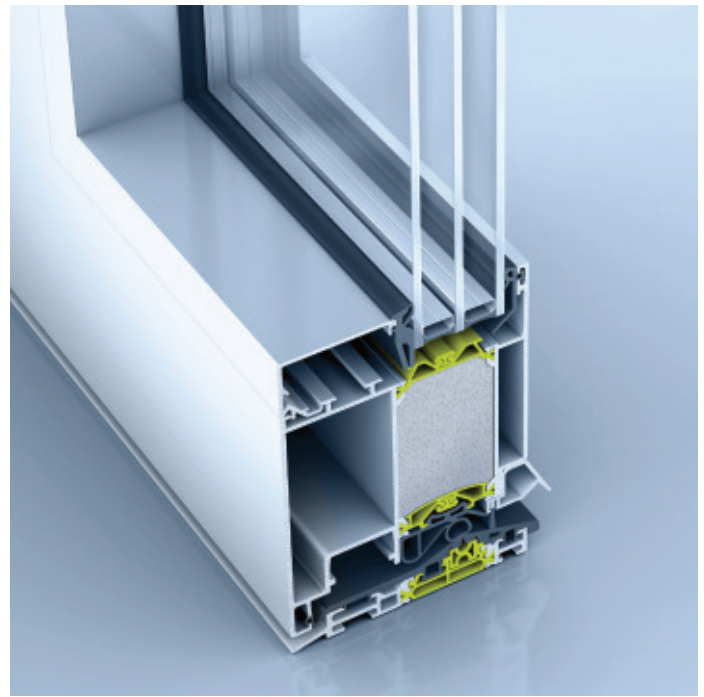
### Component reduction/design options

The reduction in the number of heroal D 92 UD components is a reflection of the optimum production benefits and sustainability of the system.

Compared with conventional processing, the prefabrication of assemblies reduces the number of components/individual parts by up to 70% in the lower door area. The sustainability is also reflected in its performance features: air, water, wind and U-value tests match the values and classifications of window elements thanks to the innovative door sills and sealing technology.

### heroal thermal break technology

The system's sustainability and the patented warp resistance are the focus of heroal thermal break technology. Thanks to the optimum thermal break technology, improved U-values for the entire system have been achieved without having to resort to using additional insulating materials. With a green variant, heroal is providing thermal breaks made from renewable resources. This supplies architects, planners and builders with an even greener option for modern building concepts.



## System dimensions

Description	heroal D 92 UD	
Profile installation depth (mm)	Frame profiles	92
	Casement profiles	78 – 92
	Cross bar profiles	92
Profile view width (mm)	Frame profiles	85 – 120
	Casement profiles	56 – 85
	Cross bar profiles	94 – 120
Casement profile variants	Sliding bar fitting groove (ALU)	–
	Plastic fitting groove (PVC)	–
Max. thickness of glass/infill panel (mm)	92	
Max. casement weights (kg)	180	
Max. casement leaf widths (mm)	1400	
Max. casement leaf heights (mm)	2500	

## System properties

Description	heroal D 92 UD
Heat insulation ( $U_f$ in $W/m^2K$ )	1.3
Heat insulation ( $U_f$ in $W/m^2K$ ) for standard view width (mm)	1.3
Heat insulation ( $U_d$ in $W/m^2K$ )*	$\geq 0.70$
Air permeability	4
Tightness against driving rain	9A
Wind load resistance	C5
Soundproofing class (SSK)	1 – 3
Burglary resistance (RC) up to	up to RC 3
Operating forces	2
Shock resistance	–
Mechanical durability	–
Continuous function	6
Climate difference test EN 12219 d/e	2

\*U-value according to DIN EN 12567-1, calculated based on element size 1230 x 2180 mm

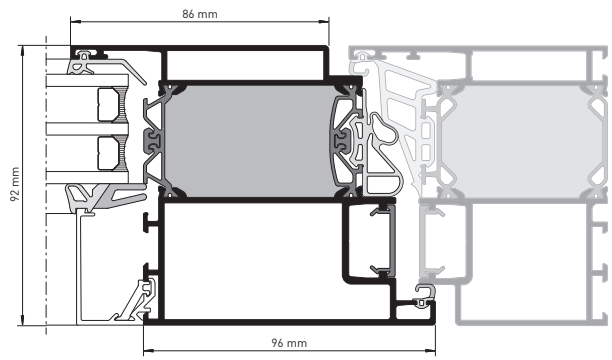


# heroal casement types

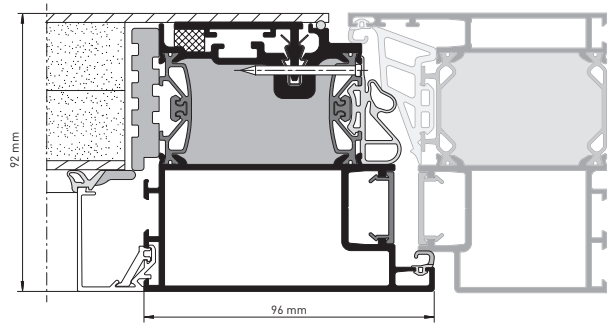
Extensive design options with the highest performance features

Design diversity is one of the main features of the heroal D 92 UD front door system. Numerous design options can be produced, ranging from tailor-made infills, to one-sided exterior, right up to double-sided casement-enclosing. heroal provides the possibility for all casement-enclosing filling options to be realised as a systematic flush installation on both the interior and exterior.

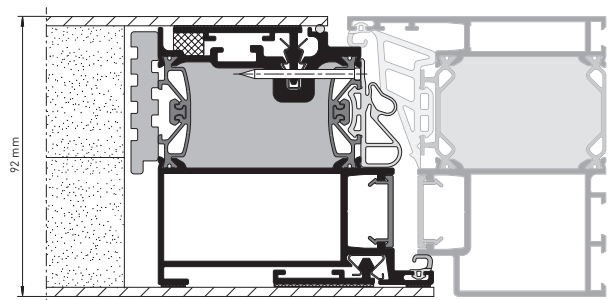
Alternatively, there is of course the possibility for an offset backstop variant for the outside. The innovative and patented attachment technology with reversible infill panel securing device promises to save time and give creative freedom. Naturally, the design options for the casements can also be adapted to the side sections.



Infill



One-sided casement-enclosing, reversible



Double-sided casement-enclosing, reversible

## heroal D 92 UD production technology

### Innovative reversible infill panel attachment and side section integration

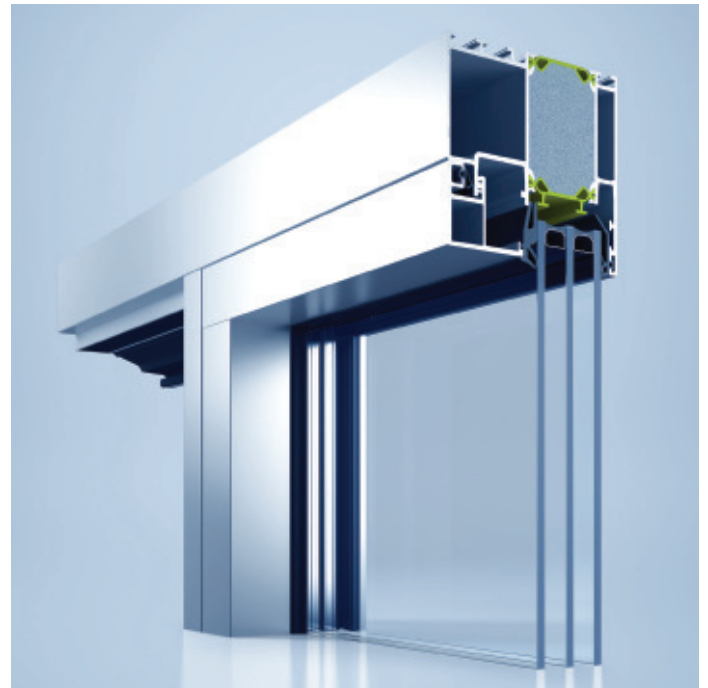


With its heroal D 92 UD door system, heroal is providing innovative infill panel attachment for aluminium materials. This variant offers the possibility of fixing the prefabricated infill panel in the casement by means of joints. Due to the different possibilities provided by the heroal infill panel attachments, maximum casement leaf sizes can be manufactured. Processors are offered many benefits as the heroal D 92 UD door system can be extended thanks to a profile design for this type of infill panel attachment.

Easy installation, even at the construction site, reversible for design modifications and time-saving processing of the entire system are just a few aspects of the new design.

### Creative diversity

By extending the profiles for the connection of side sections from the heroal D 92 UD front door system, heroal is providing processors with new opportunities. Depending on your requirements, side sections can be finished with surrounding frames or with adjoining side sections. This provides new possibilities for the design of side sections, e.g. matching finishes for both the casement and the side section. Optionally, the processor can choose the best suited variation of processing. heroal offers the expected short and simple processing times for the new design of the side sections.

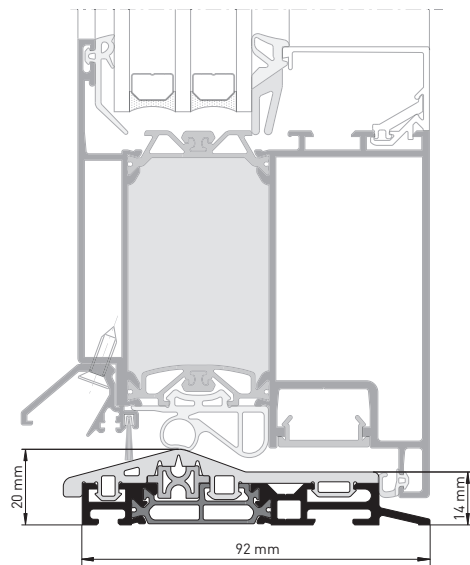
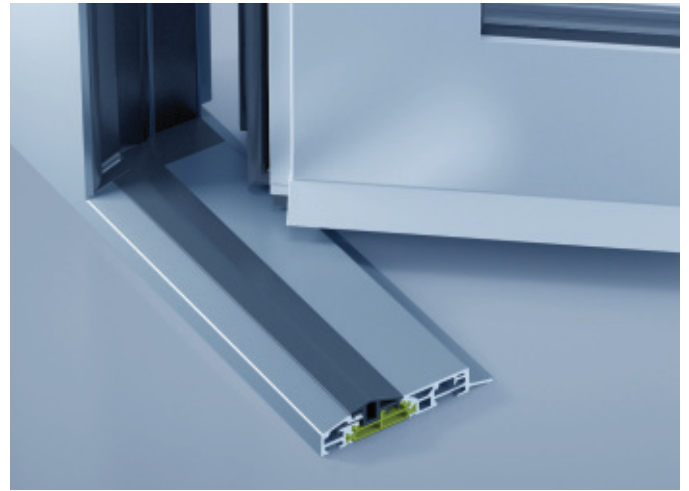
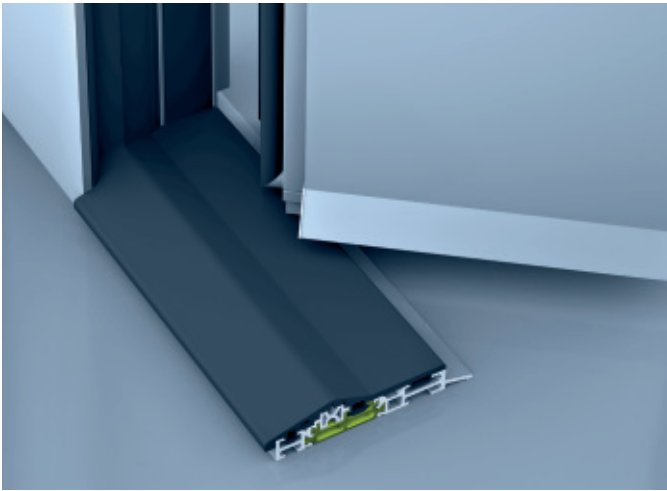


# heroal HT threshold solutions

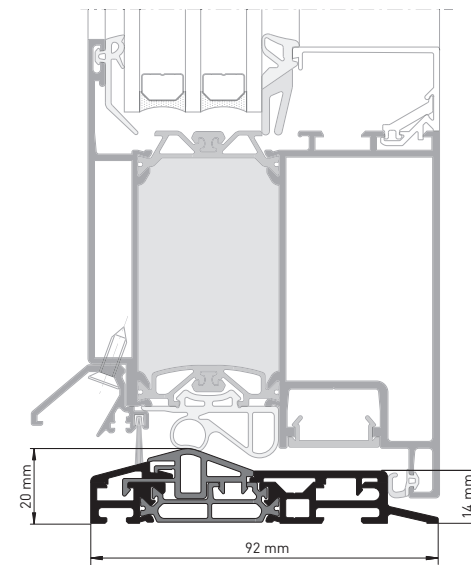
## Systematically redesigned

With the heroal D 92 UD door system, the threshold layout has also been systematically redesigned. Care was taken to significantly reduce the number of components. This includes the heroal T-connector technology with sealant injection. By using the new HT threshold connection, the processor can make a time saving of up to 20% in the manufacturing process in contrast to conventional threshold layouts. heroal offers a repetition accuracy of almost 100% and excellent performance features that stand the test of time. The system is manufac-

tured with corner vulcanised seal frames as standard. The threshold installation depth is perfectly adapted to the profile installation depth. U-values on a par with windows can be achieved thanks to the integrated heroal break technology. This design is comparable with a surrounding frame. Transport aids are not required thanks to the continuous threshold layout. This manufacturing method allows for the door to be adjusted ex-works and provides key benefits in terms of time when installing.



HT threshold, corner vulcanised seal frames, framed



HT threshold, corner vulcanised seal frames, three-sided, aluminium appearance in the threshold area



## High processing reliability

Individually adaptable, quick to construct



### heroal corner angle technology

The innovative heroal sealant injection method guarantees an optimum seal for the element mitre with less material, with a complete four-sided sealant coating of the corner cleating set for even more system security. Door production is guaranteed to be efficient and therefore time-saving thanks to the heroal corner cleating set technology with the optimised manufacturing processes for corner angle fitting. The optimal, guided sealant distribution along with the innovative corner angle technology enable considerable material savings. There are special heroal tool solutions, adapted to a variety of production batch sizes for efficient and cost-effective unit assembly.

### heroal T-connector technology

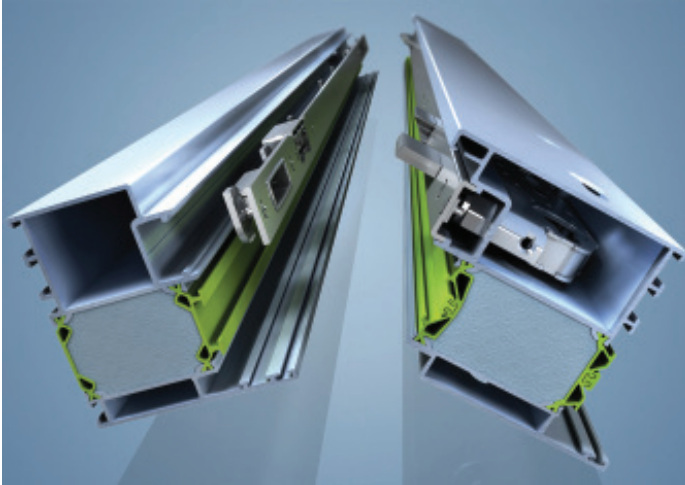
Optimised and thus time-saving door assemblies are made possible by the heroal T-connector technology. The new and innovative heroal sealant injection has been developed for the best possible sealing of T-connections/joints. It ensures a high level of system reliability as a result of closed-cell sponge piping for rebate sealing.

The innovative sealant injection provides the best possible sealing of T-connections/joints with just a small amount of sealant.



## heroal fitting technology

System technology for proven security and habitual convenience



The profile geometry of the heroal D 92 UD front door system is constructed with a fitting groove that allows a wide variety of fitting components to be mounted. In addition, the geometry provides a visually appealing door folding area thanks to the use of striker fitting technology for the customised use of modern opening technologies. Speedy processing is ensured thanks to the clampable installation of locks and hinges. The integration of fully concealed hinge systems is possible without impairing the insulation level. All heroal hinge systems are adjustable in three dimensions. Barrel hinges in a high-grade steel finish are also available in the portfolio.



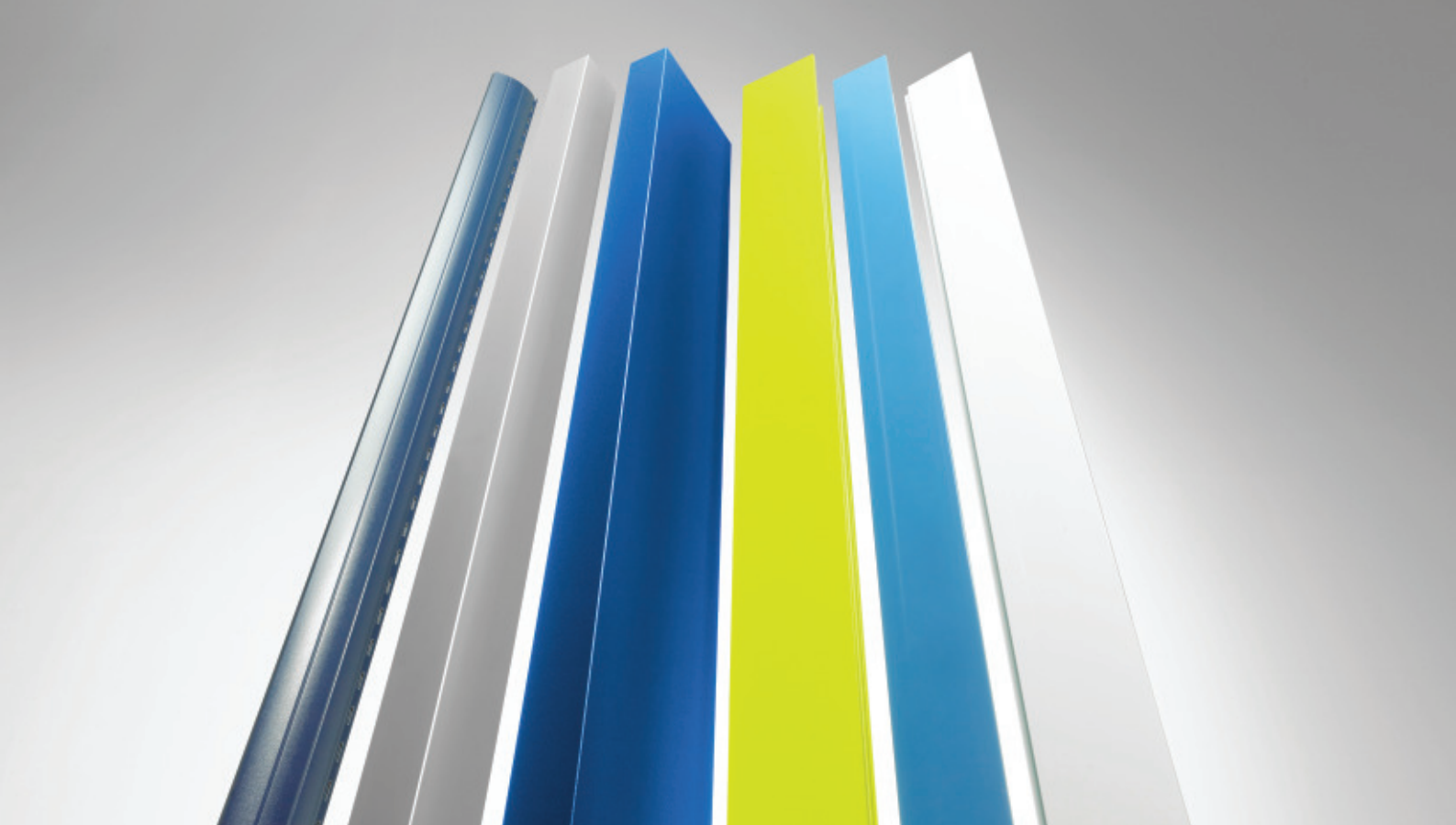
### **The concealed heroal door hinge**

The heroal fitting technology is the key component of the modular system technology. The concealed door hinge forms a particularly architecturally sophisticated variant. Therefore, only the inner half-shell is machined, which does not create gaps in the system's thermal and sealing planes. The three-dimensional hinge system can be conveniently and easily adjusted allowing for variants for the three levels: height, side and pressure.



### **The clampable heroal barrel hinge**

The classic heroal barrel hinge provides the typical hinge appearance of a front door. The three-dimensionally adjustable hinge system is a clampable variant. A special feature of this hinge system is the speedy installation without any machining of the profile system. This system is equipped with a hinge side safety device as standard. This prevents gaps in the thermal and sealing planes. The convenient and easy adjustment of the three levels of height, side and pressure also comes as standard with this hinge system. heroal offers the barrel hinge in white, silver and a high-grade steel finish.



## 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 the efficient, in-house profile bending and edging service, which heroal is unique in offering its customers across the sector.

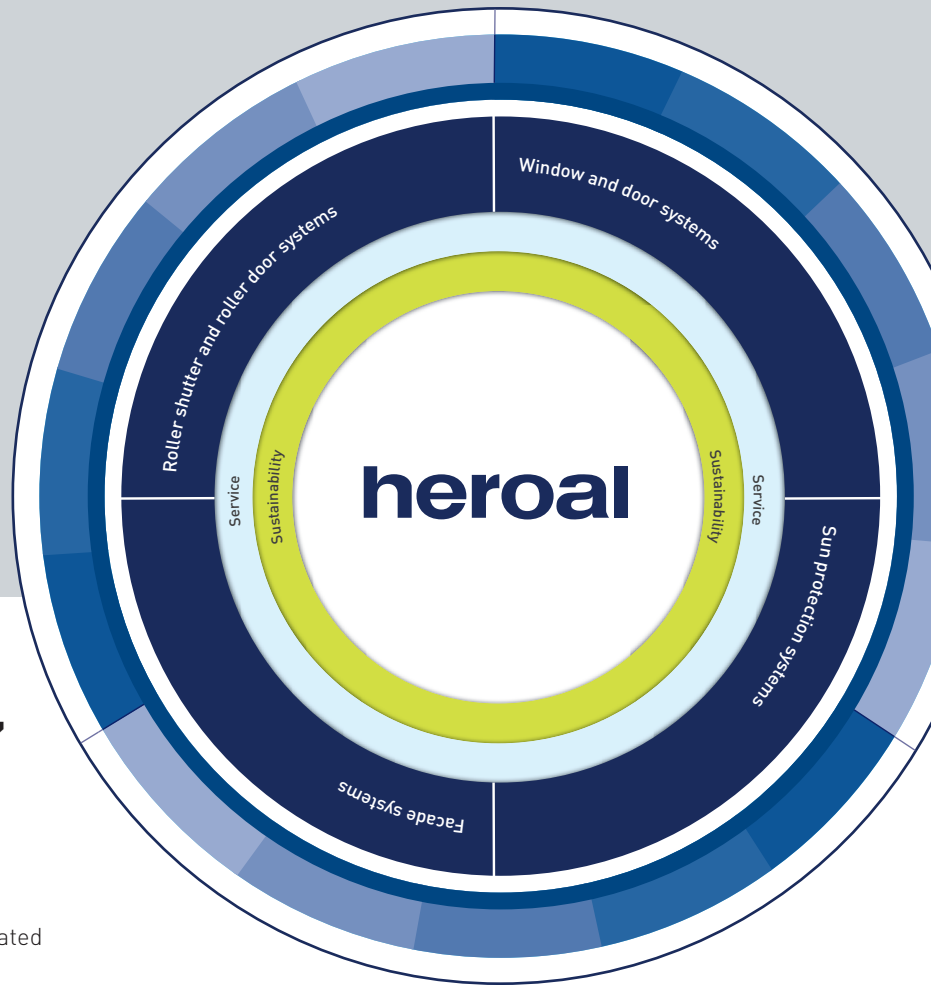


# heroal – the aluminium systems supplier

As one of the leading aluminium system 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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