

heroal heroal

## Spaces for life, individual and sustainable.



Dear Readers,

Construction projects are becoming more and more complex, and the increased requirements for building shells require intensive cooperation between manufacturers, fabricators, architects, planners and investors. With recyclable systems made from recycled materials, minimal energy consumption in production and maximum energy-efficiency during use, heroal system solutions make a decisive contribution to sustainable construction. heroal's Project Services are there to support you in the integrated planning and implementation of sustainable building projects.

In the first section of the brochure, you can find out more about heroal (from p. 04) and our Project Services (from p. 08).

The second section gives you an overview of the heroal system portfolio (from p. 28). In the third section, we present reference projects from all over the world (from p. 102) – from single-family homes and apartment buildings to commercial properties and hotels to special construction projects.

As a company, heroal stands for innovative, perfectly customised system solutions for the creation of individual living spaces whose functionality and design are thought out down to the last detail. Our architectural consultants and the heroal Project Services team are happy to advise you - naturally also right at your construction site.

The heroal team



## heroal

04 About heroal

07 Contact



## Services

08 Project Services

12 heroal Communicator

14 Surface coating

15 Quality

**16** Shaping architecture

**20** Building automation

22 Sustainability

27 Awards & accolades



## **Systems**

28 Window systems

**38** Door systems

48 Lift and slide systems

**58** Curtain wall systems

**66** Non-insulated profile systems

72 Fire protection systems 80 Sun protection systems

**90** Roller shutter systems

**96** Roller door systems



## References

104 Office & Administration

108 Industry & Trade

112 Hotel & Residential

116 Education & Culture

Page 03: Štěpán Látal, Page 05: Christian Weinrich Fotografie, Page 07: Jan Tichý, Studio Blickfang, Page 17: Štěpán Látal, Studio Blickfang, Page 26: Štěpán Látal, Christian Weinrich Fotografie, Page 46: ekey biometric systems, Page 48: Fandament, Page 54: Solarlux, Page 72: Christian Weinrich Fotografie, Page 80: Studio Blickfang, Page 102: Fandament, Christian Weinrich Fotografie, Page 104: Christian Eblenkamp , Page 105: Štěpán Látal, Page 106: LIRA/Heine Warnecke Design, Page 108: Christian Weinrich Fotografie, Page 109: Christian Weinrich Fotografie, Page 110: Christian Weinrich Fotografie, Page 112: Amoral, Page 113: Fandament, Page 117: Studio Blickfang, Page 118: Jörg Hempel Fotografie, Page 119: Christian Weinrich Fotografie. The rights for all other images are held by heroal.

2 | Foreword Contents 13

## simply better spaces for life.

heroal is an international market leader in the manufacture of aluminium system solutions for roller shutters, sun protection, roller doors, windows, doors and curtain walls. Founded in 1874, the family company has over 900 employees at its head office in Verl, Germany and other sites in Europe and is involved in the construction of sustainable residential and commercial buildings worldwide. For heroal, the focus is on creating innovative and high-quality complete solutions for fabricators, architects, planners, investors and building owners marked by premium quality, industry-leading customisation options as well as consulting and services in every phase of the building life cycle.

## Why heroal?

## Sustainable

Our top priority is our responsibility for our employees and the region as well as using durable, recyclable systems made from recycled materials that reduce emissions for sustainable buildings.

## High-quality

heroal systems for building shells, indoors and outdoors are manufactured 100% in Germany and are adapted to meet the specific needs of our customers and partners.

## Reliable

In our state-of-the-art  $40,000 \text{ m}^2$  logistics centre, all heroal systems are centrally stored, picked and delivered to our customers with our own fleet of trucks.

## Individual

heroal systems stand for customised solutions of the highest quality. Our in-house surface coating and profile bending and folding technology open up a limitless variety of designs and colours in highly weather-resistant quality.

## Unique

Thanks to its cooperation with Les Couleurs® Le Corbusier®, heroal's systems can be coated exclusively in these unique colours.

## Everything from a single source

heroal supplies everything from a single source for a considerable part of the building shell, ensuring easier planning and tendering as well as colour-coordinated systems.









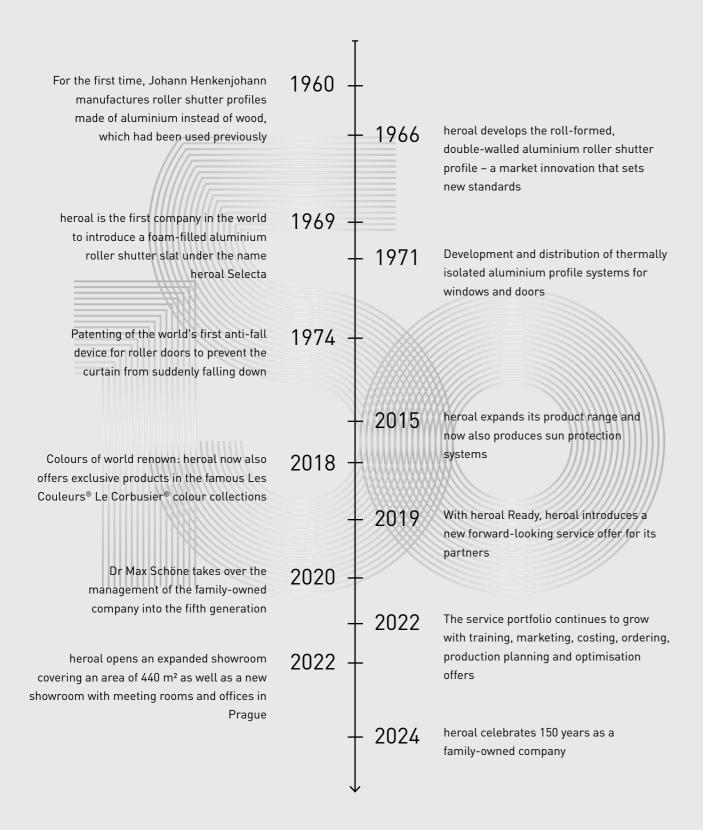






## Your strong partner innovative by tradition

heroal develops and produces top German-made quality at three locations in Verl and Hövelhof. Founded in 1874, heroal has been working with aluminium since 1960 and regularly sets standards in innovation and quality that have won multiple awards.









Plant I, Verl, Germany

Plant II, Hövelhof, Germany

Plant III, Hövelhof, Germany









Administration building, Verl, Germany

Showroom, Verl, Germany

Showroom, Prague, Czech Republic

## Plant I. Verl. Germany

Our site in Verl is home to Plant I, where roller shutters, roller doors and sun protection systems are produced. The administration, machine and tool construction facilities, the heroal Academy, the test centre and a showroom are also located here.

## Plant II, Hövelhof, Germany

Plant II in Hövelhof is where we produce window, door and curtain wall systems. Our coating systems and quality line are also located in Plant II.

## Plant III, Hövelhof, Germany

Plant III is our logistics centre in Hövelhof. We deliver all systems to our customers from here.

Scan for a 360°



## Distribution sites

Our distribution sites are located in Helmond (NL) and Mommenheim (FR).

In our showrooms in Verl (DE) and Praque (CZ), you have the opportunity to experience heroal systems and services live.

## Feel free to contact your personal architectural consultant today:

https://www.heroal.de/en/architects/contact-form | + 49 5246 507-5156 | objekt@heroal.de

You are also invited to discover our Architects area at www.heroal.de/en/architects Or follow us on LinkedIn and Pinterest:









heroal heroal

## Support in every phase of construction planning.

## Interview with Ronny Symannek, Head of Project Services & Quotation Centre



## You are the head of Project Services. What tasks are you and your team responsible for?

heroal Project Sales is set up like a classic sales organisation, with field and inside sales. My team and I are responsible for the internal structures, and here we work closely with the field sales team of Project Sales, which maintains contact with our partners and those involved in projects in various markets. Our key function is to advise and support architects, specialist planners and investors in all phases of project planning. Our service portfolio includes a number of different services that we offer free of charge, including static pre-dimensioning, preparing design proposals and calculations, and drawing up contract specifications.

## Where does the advisory function of Project Sales typically set in?

As a matter of principle, our advice is individually tailored to each architect, specialist planner or investor. Together, we look at which planning phase our contact is in at the particular point in time and consider how we can best support them in their situation. This makes each enquiry different, sometimes only requiring selected services from our range. However, we are often called in early on, for example in the pre-planning or design phase, in which case we offer advice in system selection. The aim here is to find the optimum system combination based on the given requirements – one which satisfies all the specified requirements for heat insulation, noise insulation and

burglary resistance. For this purpose, we carry out structural assessments and static pre-dimensioning. We are also responsible for the development of special solutions if this is desired or technically necessary for a project. This reduces the workload of the trades involved in planning considerably, as they are often not as deeply familiar with our products as we are and would need to invest a lot of time to carry out the system selection process at this level of detail.

## After making the ideal system selection, what is typically the next step?

On the basis of the system selection, we next draft design proposals and drawings for the detailed design plan required for the further planning process. These are already based on the concrete pre-dimensioning. This service saves architects in particular a great deal of time and money, as they do not have to consult a specialist planner for complex planning situations, but instead receive a proposal from us whose technical feasibility has been verified.

## Preparing the contract specifications also takes up a lot of resources for the trades concerned with planning. What support do you offer for this work step?

In this step, we respond flexibly to the needs of architects. If they create the contract specifications themselves, we provide them with the necessary tender texts. Alternatively, we can also take charge of creating the entire project-specific contract specifications.

## Project Services also include the preparation of quotations for fabricators. What added value does this offer architects?

Depending on the scope, preparing a quotation can be a very time-consuming and complex task, as there are often many details to consider. We support our fabricators in the preparation of quotations, making it easier for them to submit a quotation. We stay in close contact with our fabricators at all times and can also meet them at the project site if required. Because we take a lot of work off the fabricators' hands, it is much easier for them to submit a quotation. The advantage here for architects is that this increases the choice of bidders.

As part of the order process, we also assume responsibility for preparing project-specific verifications, such as testing the tightness against driving rain in the case of special constructions. If the verifications are to be provided by an external, accredited testing institute, we are also there to support this process.

Ultimately, we offer consulting during almost all project planning phases and are always available to advise architects, specialist planners and investors as a competent partner.





Scan and

Scan and



8 | Project Services Project Services | 9

heroal heroal

## heroal project services at a glance.

## Inspiration:

## Reference database

Be inspired by the references and project reports on our website at www.heroal.de/en/architects/ references

## Innovations and new products

New products and innovations are presented at www.heroal.de/en/fabricators/products/productnovelties.

### heroal on social media

Follow heroal on LinkedIn, Pinterest, Instagram, Facebook and YouTube.

## heroal partner magazine

The heroal partner magazine at www.heroal.de/ en/fabricators/company/partner-magazine keeps you up-to-date on current topics, new products, projects and events.

## Media library in the heroal Communicator

In the media library, you will find videos on different topics like heroal systems, references, events and much more.

## heroal showrooms in Verl and Prague

Visit our showrooms in Verl and Prague.

## Phase 01 Pre-planning and design:

## Architectural consulting

Personal advice, including on site at the construction project, by our network of architectural consultants.

## System selection

Support with feasibility studies and choosing the right heroal systems during the initial planning

## Cost estimates

Estimates of required costs for budget planning

Reviewing static requirements and options for implementing them. Determining the space

## Phase 02 Implementation planning:

## Architectural consulting

Personal advice, including on site at the construction project, by our network of architectural consultants.

## Development of specialised solutions

Implementing individual requirements through development of property-specific, specialised profiles and fittings.

## Design recommendations

Preparing custom drawings for recommended solutions.

## Oversize element assessments

Assessing the element sizes outside of the standard dimensions.

purposes.

## Static pre-dimensioning

required for relevant solutions.

## (Natural) smoke and heat extraction system

Designing required opening elements and their drives for smoke extraction purposes.

## U-value calculation

Reviewing the heat transfer coefficients to be complied with according to the thermal insulation certificate and German Energy Saving Regulation.

## Sound protection assessments

Assessing the sound insulation index to be achieved for the selected elements.

## Phase 03 Tendering and contract award:

## Architectural consulting

Personal advice, including on site at the construction project, by our network of architectural consultants.

## Preparation of quotations and costing

Faster preparation of quotations by the heroal quotation and costing service for bidders.

## Preparation of contract specifications

Developing project-specific contract specifications.

## Master detail planning

Graphic implementation of heroal solutions for the master detail planning.

## Preparation of bidder lists

Compiling a list of interested and relevant bidders.

## Arrangement of project partners

Arranging suitable partners for the construction project where required.

## Phase 04 Project execution:

## Architectural consulting

Personal advice, including on site at the construction project, by our network of architectural consultants.

## Project-specific certification

Complete processing of the project-specific certification either internally or with accredited test institutes.

## Delivery and packaging concepts

Developing a delivery and packaging concept tailored to the construction project.

## Marketing and heroal Academy:

## In-person and online training

Diverse range of in-person seminars, online training and e-learning offers at www.heroal.de/en/fabricators.

## Support from heroal application engineers

A nation-wide team of application engineers is available for on-site product briefings.

## Preparation of project reports, photos or videos

Follow-up with comprehensive project reports, reference photos and videos. We provide eye-catching marketing for your project with publication in internal and external print and advertising media.

## heroal Communicator (online workplace)

heroal Communicator

## Document centre and digital tools

The heroal Communicator contains information, documents and tools for all planning phases.

10 | Project Services Project Services | 11

## The heroal Communicator: The online workplace.

The heroal Communicator is the central online work environment for heroal partners and architects, bundling a range of tools for efficient and interconnected operation. From fast access to information and documents through to planning tools, tender documents, product configuration and ordering, the platform offers comprehensive support along the entire process chain. The secure access to the heroal Communicator lets you work safely and reliably while using personalized content and important documents. Whether in the office, on the tablet or with the smartphone: the heroal Communicator supports you with your daily business — no matter where you are.

- » tailored solutions for unique and special architecture
- » expertise in windows, doors and curtain walls as well as roller shutters, sun protection and roller doors
- » our experts personally advise you on the implementation of your construction project
- » awards for sustainable products
- » products "Made in Germany"



Communicator login



## **heroal** Communicator

## System search

Select filters to find the right heroal system. compare systems and view system details and documents, such as renderings, BIM/CAD documents, processing instructions, planning documents, test certificates, brochures and project references.

## Planning documents

Easily and quickly find planning manuals and other planning-related documents.

## Test certificates

Certificates, relevant test documents and verifications for all heroal systems, for example, on the continuous function, differential climate behaviour, fire resistance, tightness and wind load, suitability for passive homes, burglary resistance, soundproofing, shock resistance, system testing and more.

## BIM/CAD data11

Optimised BIM and CAD data for all heroal systems with additional integrated benefits, such as » opening types

- » automatic calculation of the U-value
- » clearances
- » door fittings
- » surface designs

## Document search

Technical system information, such as

- » order and production catalogues
- » system and planning manuals
- » processing instructions
- » fabrication instructions
- » price lists
- » brochures
- » forms for documentation

## Planning tools

Static pre-dimensioning and calculation of

- » U-values
- » glass and wind load
- » pressure coefficient
- » anti drop device » continuous beam
- » uniform load
- » trapezoidal/delta load

## Order forms

Download order forms for the heroal Ready finished elements:

- » roller shutter systems
- » sun protection systems
- » roller door systems

## heroal Academy

The heroal Academy has a diverse offer of in-person seminars, online training and e-learning about product- and subjectspecific topics.

## Tender texts 2

Tender texts for all heroal systems to easily draft contract specifications.

## Project reference

Be inspired by references and project reports.

## Contact

Contact us to clarify questions about a product or topic.

## heroal media library / heroal news

You can find videos about heroal systems, topics or solutions in the media library. And Communicator News makes sure that you are always kept up to date.

## 1) Download BIM/CAD data

The BIM data are also available on the BIMobject® platform.

## 2) Tender texts

The texts are also available on the "ausschreiben.de" platform. The texts can be processed in any AVA software, word processing or trade software. All current file formats, such as Word, GAEB, Excel, RTF, PDF and text files are available. The texts are also stored in the Heinz tender text manager. Here, too, the texts can be conveniently downloaded in GAEB format for further processing in AVA software or as PDF.





# You know it's quality when colour stays colourful.



Scan and

We use our own coating systems to give the heroal aluminium systems surfaces that meet the most stringent international quality standards. They ensure high colour stability, protection against UV radiation, gloss retention and exceptionally weather-resistant surfaces.

## heroal hwr powder coating

Colour that just keeps looking good: the high-quality heroal hwr powder coating delivers top performance in terms of colour stability, gloss retention, weather resistance and UV protection. The coating powder is electrostatically applied to the pretreated aluminium profiles. The coating process naturally also satisfies all the ecological requirements.

## heroal 2-layer thick coating

Ideally equipped against wind and weather: coating with heroal 2-layer thick coating gives roll-formed aluminium components special colour and weather resistance. The thick coating is applied in the rolling process and burned in at 240° C, after which a clear coat is applied and the aluminium is roll-formed. Quality that even certifies the thick coating for demanding maritime applications.

## heroal Surface Design (SD)

Individuality in top quality: heroal SD surface finishing lets you create stunning wood, concrete and rust looks. A transfer foil is used to burn the design structure onto the powder-coated profiles at 200°C in a vacuum process. The foil is then removed after the process. So the designs are permanently connected to the heroal hwr powder coating for a premium surface quality.

## heroal Eloxal coating

Elegant metallic look: Eloxal colours give extruded profiles a vibrant, metallic reflective surface. In the anodising process, the top layer of aluminium is converted into a defined aluminium oxide layer under the influence of direct current in an electrolytic bath. For better reproducibility and weather-resistance, Eloxal colours can also be created with heroal hwr powder coating.

heroal stands for high quality and produces exclusively in Germany. Our fully automatic quality control has established a new standard – 100% objective and seamlessly documented. Our profiles are foiled immediately after coating to ensure their optimal protection on the construction site.





The heroal standard of quality also extends to its many years of cooperation with suppliers who are at the forefront of their respective fields as well as a high level of vertical integration, which we can only achieve by using machines developed inhouse. These favourable conditions also enable us to quickly implement individual requests, which we can deliver to our customers with short turnaround times thanks to our reliable in-house logistics.



Scan an











The high quality of the heroal coatings has been endorsed by numerous certifications, including the Qualicoat quality label and our distinction of being named an official GSB Premium Coater.

14 | Surface coating Quality | 15

# Individuality through diversity: shaping architecture with heroal.



"colour design

## Industry-leading technologies

The use of our own coating systems makes heroal a market leader in surface quality that meets even the strictest international quality standards. This is what gives heroal designs their high quality as well as their resistance and durability.

## Perfect uniformity of colour

Whether windows, front doors, roller shutters or sun protection: because our product portfolio covers a large part of the building shell, heroal doesn't just supply everything under one roof, all our products also have perfectly matched colours and surfaces.

## RAL, DB colours, etc.

heroal products are available in over 500 colours from the RAL and DB colour range as well as a wide variety of shades. An impressive selection that opens up countless possibilities for individual colour design.

## Les Couleurs® Le Corbusier®

Thanks to the exclusive partnership between heroal and Les Couleurs® Le Corbusier®, you have access to an equally exclusive colour system: the 63 natural shades were deliberately chosen to harmonise with each other in any combination.

## heroal Surface Design (SD)

This innovative coating technology lets you create high-quality wood, rust and concrete looks. A finish that offers greater design freedom as well as exceptional durability.

## Variety of textiles

The huge selection of sun protection textiles, colours and installation variants provide maximum design freedom. The colours of the aluminium components (panels, guide rails, end slats) match the colours of the heroal products from the window, door and curtain wall systems segment.

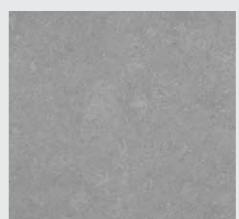
## heroal bending service

Our bending and chamfering technology is also unique in the industry. With our state-of-the-art systems, we can carry out even the most complex profile bending work: round, segmental and basket arches or circular elements as well as precisely fitting, reproducible folds and structural attachments.





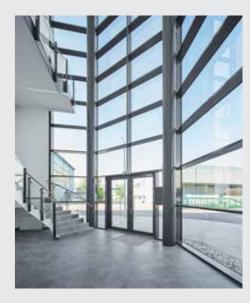




















about the heroal bending service

# Special building-specific solutions for architectural freedom.

heroal's design-adapted building solutions offer a diversity of shapes for particularly sophisticated structures. The design level is modified according to the architectural requirements of the planner or architect. Solutions here include, for example, aluminium half-shells or cover profiles. The system properties of the standard series are completely retained when implemented in building solutions, as the functional level – outlined here in red – remains unchanged.

Our experts have extensive experience in a range of successfully completed projects that they draw on to precisely and reliably implement your individual requirements. We are absolutely committed to turning your dreams into high-quality, customised solutions. For more information or to plan a specific construction project, please get in touch with us.

## Special solutions require special tests

Separate testing is required for requirements that go beyond existing system tests, e.g. if the tested element sizes are exceeded, in case of installation in an exposed position or for building solutions that deviate from the standard systems. heroal takes charge of this project-specific assessment and, in the process, can draw on many years of experience with many tests. In many cases, this makes it possible to receive special approvals without having to conduct a special external test. Whenever a special test proves necessary, heroal takes over the complete processing of the project-specific verification. The tests can be carried out in our own test centre with the ift Rosenheim-certified test stand or with accredited external testing institutes. This means that your building solution can be implemented quickly and easily.

## The following tests can be carried out in our test centre:

- » differential climate / climate
- » air permeability
- » tightness against driving rain
- » resistance level to wind load
- » mechanical durability
- » operating forces
- » shock resistance

## For all other areas, we work together with renowned and accredited testing institutes:

- » heat transfer coefficient
- » fire resistance
- » soundproofing
- » burglary resistance
- » approval capability
- » load-bearing capacity of safety equipment



Project report with additional photos



Scan and view film



## V-Tower, Prague

## **Project information**

- » building owner: PSJ INVEST, a. s.
- » architect: Radan Hubička Architectural Studio
- » fabricator: Sipral a. s.
- » year of completion: 2017

## heroal systems

- » heroal W 72 window system
- » heroal S 77 SL lift and slide system

## Services and special solutions

- » development of project profiles
- » development of expansion frame construction
- » development of crossbar profiles
- » development / optimisation of installation and structural attachments
- » project-specific packing sizes
- » development of insert frame design in heroal S 77 SL
- » project-specific verification from ift Rosenheim









can and ew film

additional photo

## AFI Vokovice, Prague

## **Project information**

- » building owner: AFI Europe
- » architect: Architektenbüro DAM
- » fabricator: Sipral a. s.
- » year of completion: 2018

## heroal systems

- » heroal C 50 curtain wall system
- » heroal W 72 window system
- » heroal W 72 VF ventilation flap
- » heroal VS Z sun protection system» heroal D 72 door system

## Services and special solutions

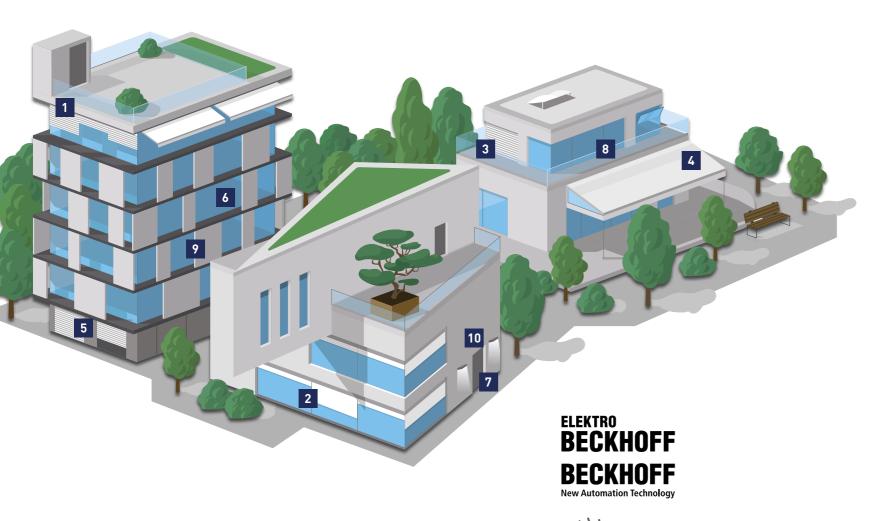
» unitised curtain wall as special design

18 | Shaping architecture

heroal heroal

## **Building automation for** intelligent curtain walls

In order to best meet the increasing requirements for the connected and intelligent control of buildings with heroal systems, heroal has entered into a collaboration with the specialists in automation and control technology, Beckhoff Automation and Elektro Beckhoff. Depending on the requirements, the shading, heating and ventilation as well as all building automation functions can be interconnected. From consulting through to offer preparation and design through to delivery, installation and service, heroal bundles the know-how of industry-leading companies and offers its partners everything from a single source.



## **Beckhoff systems**

Modular extension depending on project requirements



## Weather protection (Sun, rain, wind, hail)

Sensors installed in building curtain walls or near windows monitor wind and weather conditions. Integrated into the building automation, the data detected can be used to control roller shutters, sun protection or Venetian blinds. This protects against the heat and cold as well as preventing potential damage.

## **Energy-efficiency** (heat, cold)

Thermally insulated window, door and curtain wall systems as well as shading solutions compensate temp. differences between indoors and outdoors. If connected to a building control system, they can automatically adapt to the usage conditions and environmental factors. This reduces energy consumption as well as operating costs and conserves resources.

## Ventilation

## (Cont. natural vent., humidity, air quality)

The perfectly tailored automatic control of curtain walls and windows as well as ventilation flans, in combination with sensor data on room temperature, humidity or CO, contents in room air, enables targeted air exchange to ensure good room air quality as well as pleasant thermal comfort year-round.

## Soundproofing

## (noise, sounds)

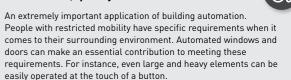
Building automation improves soundproofing by continuously monitoring the noise level inside and outside a building. Elements such as windows, doors and ventilation flaps play a critical role in this respect. Connected to sensors and monitoring systems, they can be automatically opened and closed to optimise soundproofing.

## Comfort

## (Timer, scenarios, automation)

In public and semi-public buildings, linking business hours with intelligent curtain walls enables efficient room management. Doors, sun protection, temperature and ventilation can be programmed based on occupancy times and sunlight/incidence of light to create an optimal, pleasant and productive work environment.

## Accessibility (ease of use, quality of life)



## (Burglary resistance up to RC 4, vandalism)

Intelligent monitoring systems improve building security. Functions such as access controls and sensors that register unusual vibrations or noises can be integrated into windows and doors. This allows unusual events to be registered as soon as possible by an early warning system.

## (personalised control system, access control)

Decentralised operation allows individual rooms or areas of a building to be independently controlled. This means that the lighting, temperature, ventilation, etc. can be adapted to the user's requirements. A separate control system allows energy to be used more efficiently and potential errors can be quickly identified and



2 Sun protection systems

3 Venetian blind systems

4 Awning systems

5 Roller door systems

6 Window systems

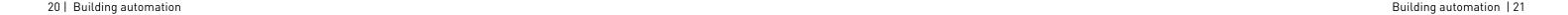
7 Door systems

8 Lift and slide door systems

9 Curtain wall insert elements and ventilation flaps

10 Lighting, room temperature, air quality and more





## Sustainability in practice at heroal.

## We act responsibly towards the environment, employees and society

Climate change is one of the greatest global challenges of our time. As a forward-looking familyowned company, heroal takes responsibility for the environment and society. Sustainability is a core part of our business strategy. We support sustainable living and working environments for current and future generations. Our approach encompasses all the activities along the value chain and is structured into three action areas: environmental protection, sustainable workplaces and social responsibility. We are committed to conserving resources, fair working conditions and supporting local communities to ensure sustainable long-term growth.

This vision is the foundation of our sustainability activities, providing the structural framework as well as allowing us to establish long-term goals in line with the expectations of the various stakeholders and external boundary conditions.

We have broken down our activities into 3 areas of action with 9 core topics.



01

## **Acting responsibly** towards our environment Environmental protection

Environmental protection is our top priority. We are committed to the responsible use of resources and energy in production as well as in terms of the impact of our systems. We have been preparing a carbon footprint since 2020, from which we derive targeted measures to reduce our CO2 emissions. We support renewable energies and work together with partners to reduce the carbon footprint of our products. Our outstanding "Cradle to Cradle" certifications in the categories of material reuse and CO<sub>2</sub> management are a testament to our efforts in this area. For instance, we offer solutions for sustainable buildings with the most stringent requirements.



## Sustainable buildings

- → energy-efficient complete solutions
- → data transparency and building



## Sustainable products

- > circularity and decarbonisation
- → material efficiency and product performance



## Sustainable supply chain

- → energy-efficiency and renewable
- → sustainable distribution



03

## **Acting responsibly** towards our society Social responsibility

We act responsibly towards society by encouraging ethical behaviour and targeting healthy, long-term corporate growth. Our sustainability strategy is based on combining commercial objectives with environmental and social aspects to not only secure our success, but the well-being of our environment and society as well. We also actively encourage and support local, national and global associations and projects to help make a positive difference to our social and ecological environment.



## Sustainable corporate culture

- → community and teamwork
- → corporate values



## Personal development

- → individual career paths
- → lifelong learning



## Work safety and health

- → occupational health and safety
- → health promotion



## Responsible business

- → compliance
- → whistleblower system



## Responsible partnerships

- → supplier code
- → due diligence audits on our business partners



## Social responsibility

- → support non-profit organisations
- > regional involvement



## The material of the future.



## CO2-reduced aluminium

The use of recyclable materials such as aluminium means that heroal systems can be largely recycled at the end of their service life and after removal from a building. CO<sub>2</sub>-reduced aluminium is produced using renewable energies generated by wind, water or the sun. This enables a significant reduction in CO<sub>2</sub> emissions during production. Another major aspect is the increased use of recycled aluminium, which uses just 5% of the energy compared to primary production. As this can be manufactured without any loss of quality, the material can be infinitely reused. As a member of the A|U|F e.V., we support the environmentally-friendly reuse of aluminium from old construction elements. This allows us to ensure that our products are recycled at the end of their life cycle, which conserves resources and helps to reduce CO<sub>2</sub> emissions in the building industry.

## New materials, extended portfolio

In 2025 we will be expanding our product portfolio for windows, doors and curtain walls with  $\rm CO_2$ - reduced and recycled aluminium – heroal Low Carbon Aluminium. This will reduce the carbon footprint to up to 1.9 kg (LC-Al C1.9) with a recycling ratio of up to 75% (LC-Al R75). This offer is certified by DEKRA. Compliance with the characteristic values is therefore constantly externally reviewed and ensured.

heroal's Low Carbon Aluminium offer provides tailored solutions for fabricators, architects and planners alike. It enables a significant reduction in the emissions generated during the construction phase. At the same time, our partners benefit from a transparent overview of the CO<sub>2</sub> values and recycling mix of the materials used as well as from the recycling potential at the end of the product life cycle. This documentation helps heroal partners plan and realise high-quality and sustainable building projects.

heroal is committed to Low Carbon Aluminium because we are convinced that sustainable solutions are the path to a climate-neutral future. By working together, we can help shape the future of the building industry with a focus on innovation, climate protection and responsibility.

## Recyclability rewarded.



## Cradle to Cradle-certified heroal products

heroal products have been C2C certified since 2022. heroal window, lifting/sliding systems, door systems and curtain wall systems are certified with C2C Bronze and fire protection doors and curtain walls with C2C Bronze. The certification includes 36 heroal window, door and curtain wall systems. The recertification in 2024 showed the progress that we have made in the criteria as well as expanding our retail portfolio with various complementary products in collaboration with our suppliers.

As a result, we can offer building owners, investors and architects complete system solutions fully certified in line with the Cradle to Cradle seal guidelines for their building projects.



24 | Sustainability | 25

## Building for tomorrow, today.



## Energy-efficient products for energy-efficient buildings

heroal supports architects and planners from the early planning phase of sustainable construction projects by providing all planning-related information for the certification of buildings in line with DGNB, LEED or BREEAM standards.

An important instrument in this area are the Environmental Product Declarations (EPDs), a kind of "fact sheet" that documents the environmental performance of a building product. Independently verified, EPDs support the objective and transparent communication of environmental information about building products and ensure neutral comparability.

They are the basis for product as well as building certification programmes. heroal provides EPDs for the frame profiles of windows, doors and curtain walls as well as roller shutter elements and exterior sun protection. heroal fabricators have the opportunity to independently create product- and project-specific EPDs using the Orgadata LogiKal software and the heroal EPD tool. This meets all relevant standards and is certified by the ift Rosenheim.



AFI Vokovice Prague, Czech Republic LEED Platinum

certified



**Stellinger Höfe**Hamburg, Germany
DGNB Gold certified



**Kotelna Park II** Prague Czech Republic

BREEAM "Very good" certified













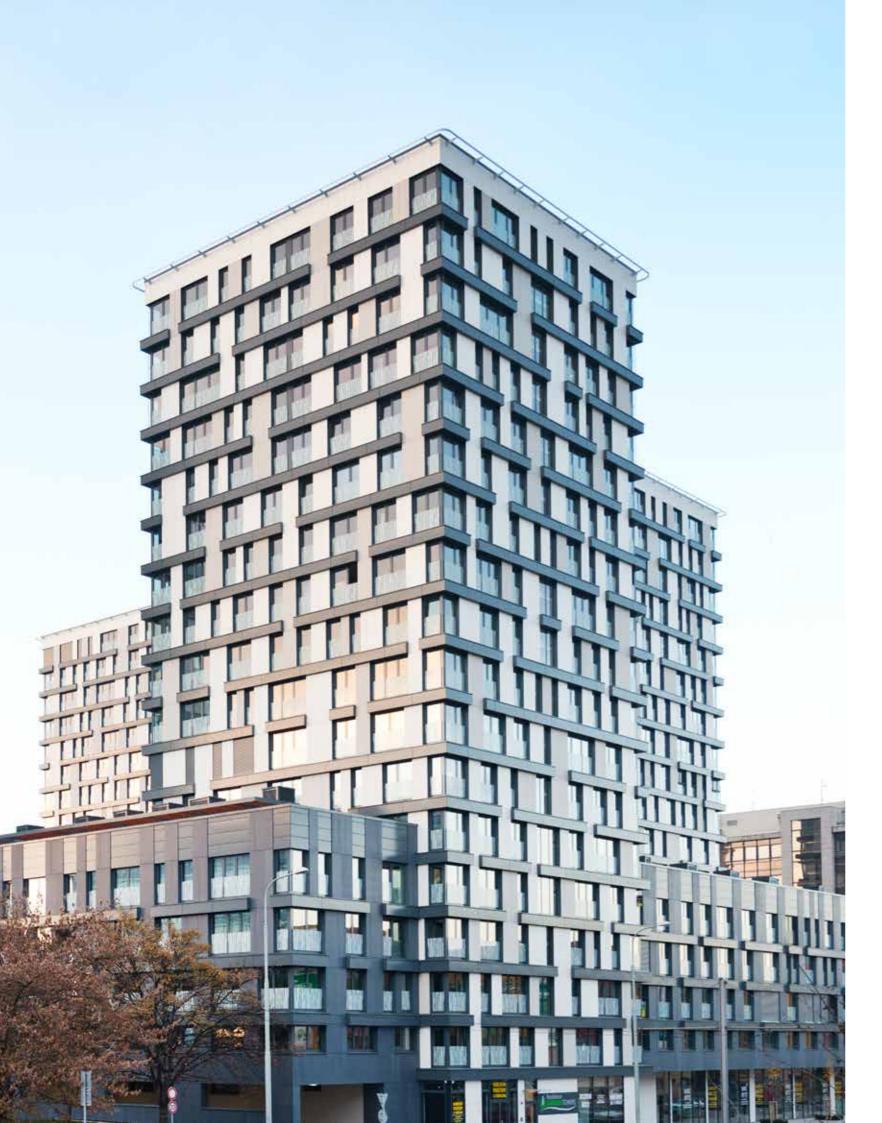




## Awards and accolades.

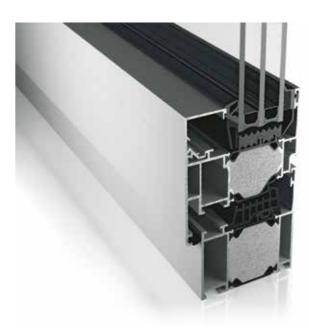
- » 2019 | Architect's Darling Awards: heroal DS drainage system
- » 2019 | Green Good Design Award: AFI Vokovice Prague, Czech Republic
- » 2020 | German Design Award: heroal Les Couleurs® Le Corbusier® front door
- » 2020 | German Innovation Award: heroal S 65 sliding system
- » 2021 | R+T Innovation Award: heroal VS Z EM sun protection system
- » 2021 | German Design Award: heroal OR outdoor roof system
- » 2023 | Innovation Award Architecture + Construction: heroal D 72 PF EM door casement profile
- » 2025 | German Design Award: heroal VS Z sun protection system corner solution

26 | Sustainability Awards and accolades | 27



## Window systems for optimum heat insulation.

heroal window systems impress with their unlimited variety of colours and designs and slimline look with top performance in terms of heat insulation, soundproofing and security. A wide range of design variants, modular heat insulation and combination options with the heroal system portfolio, e.g. with sun protection and ventilation systems, offer architects and planners functional versatility.



## heroal window systems:

- + low design depths and slim view widths
- + burglary resistance up to RC 4 (in combination with heroal roller shutters)
- + high heat insulation up to passive house certification
- + round, segmental and basket arches as well as circular elements
- + highly weather-resistant heroal hwr powder coating
- + comprehensive version and design options
- + automated window systems with electric window drive possible

## **System dimensions**

Description	Description		heroal W 77 HI	heroal W 77 UD	heroal W 77 PH	heroal W 77 i	heroal W 72	heroal W 72 HI	heroal W 72 UD	W	roal 72 i	heroal W 72 RL / CL	her W'	72	heroal W 65
						Interior glazing				Exterior glazing	Interior glazing		Steel effect	Curtain wall look	
Profile instal-	Frame profiles	77	77	77	77	77	72	72	72	7	2	82	106	72	65
lation depth	Crossbar prof.	77	77	77	77	77	72	72	72	76	5.5	81	102-106	76.5-72	65
[mm]	Sash profiles	89	89	89	89	84	84	84	84	7	2	84	76.5	-84	77
	Frame profiles	50-250	50-250	60-154	130	70-140	50-250	50-250	60-154	70-	140	60-154	38/50	28-58	50-250
Profile view width [mm]	Crossbar prof.	74-254	74-254	74-104	164	94-194	74-254	74-254	74-104	114	-244	74/94	5	0	74/254
	Sash profiles	33-67	33-67	33-67	43	34	33-67	33-67	33-67	СО	nc.	33/43	conc.	(-43)	33/104
Min. view width frame/sash pro	file [mm]	90	90	90	180	81	90	90	90/88	77	81	100	77	97	90
Sash profile	SBN <sup>1)</sup>	•	•	•	•	•	•	•	•		•	•	•	•	•
variants	KBN <sup>2)</sup>	•	•	•	•	•	•	•	•		•	•	•	•	•
Max. glass/	Frame profiles	55	55	55	55	54	54	54	54	49	54	41	5	4	47
in. panel thick. [mm]	Sash profiles	66	66	66	66	63	66	54	66	4	.8	46	6	6	58
Glass inset	Frame profiles	18	18	18	18	11	19	18	19	1	8	19	18	8	19
[mm]	Sash profiles	18	18	18	18	11	19	18	19	13	11	19	11/1:	3/19	19
Max. casement	weight [kg]	300	300	300	300	300	300	300	300	30	00	300	30	00	300
Max. sash heigh	ax. sash height³] [mm]		2,800	2,400	2,800	2,400	2,800	2,800	2,400	2,4	400	2,800	2,8	00	2,800
Max. sash width <sup>3]</sup> [mm]		1,600	1,600	1,200	1,600	1,200	1,600	1,600	1,200	1,2	200	1,600	1,6	00	1,600

## **System features**

•														
Heat insulation $[U_f \text{ in W/m}^2 \text{K}]$	≥ 0.74	≥ 0.68	≥ 1.1	≥ 0.78	≥ 0.77	≥ 0.85	≥ 0.74	≥ 1.6	≥ ′	1.2	≥ 0.85	≥ 1.5	≥ 1.3	≥ 2.3
Heat insulation [U <sub>f</sub> in $W/m^2K$ ] / Profile view width [mm]	1.1 120	0.95 120	1.1 134	0.78 180	1.0 101	1.3 120	1.2 120	1.3 88	1.5 95	1.7 91	1.3 120	1.5 100	1.3 120	2.3 120
Heat insulation $[U_w \text{ in W/m}^2 \text{K}]$	≥ 0.77	≥ 0.72	> 0.72	≥ 0.79	≥ 0.72	≥ 0.84	≥ 0.80	≥ 0.82	≥ 0.84	≥ 0.87	≥ 0.84	≥ 1.3	≥ 1.5	≥ 1.4
Air permeability	4	4	4	4	4	4	4	4	4	<b>1</b>	4	4		4
Tightness against driving rain	to E1050	to E1050	to 7A	E900	to E1050	to E1650	to E1650	to 8A	E1050	to E900	to E900	E10	)50	to E1050
Wind load resistance	to C5/B5	to C5/B5	C2/B2	C5/B5	to C5/B5	to C5/B5	to C5/B5	C2/B2	to C5/B5	to C4/B4	to C5/B5	to C	5/B5	to C5/B5
Soundproofing class (SSK)	to 5	to 5	-	to 5	to 5	to 5	to 5	-	to	5	to 5	to	5	to 5
Burglary resistance	to RC 3	to RC 3	RC 2	-	to RC 2	RC 3	RC 3	RC 2	RO	2	to RC 3	-		to RC 2
Operating forces	to 1	1	1	1	1	1	1	1		I	1	1		1
Shock resistance	to 5	to 5	-	5	to 5	to 5	to 5	-	to	5	to 5	to 5	-	to 5
Mechanical durability	4	4	4	4	4	4	4	4	4	1	4	-	-	4
Load-bearing capacity of safety equipment	ful- filled	fulfi	lled	ful- filled	fulfi	lled	ful- filled							
Continuous function (class)	3	3	-	3	3	3	3	-	(	3	2	-		2
NSHEV and SHEV approval 4)	-	-	-	-	-	•	-	-	,	•	-	-		•

## Opening types and design

Description		heroal W 77	heroal W 77 HI	heroal W 77 UD	heroal W 77 PH	heroal W 77 i	heroal W 72	heroal W 72 HI	heroal W 72 UD	W	roal 72 i	heroal W 72 RL / CL	heros W 72 CW	2	heroal W 65
										Exterior glazing	Interior glazing			Curtain wall look	
Turn [D], tilt and tilt before turn el		•	•	•	•	•	•	•	•		•	•	•		•
Forend elements		•	•	•	-	•	•	•	•		•	•	•		•
Parallel sliding-t elements [PSK]	ilting	•	•	-	-	-	•	•	-		-	-	-		•
Fanlight element	s [0L90]	•	•	-	•	•	•	•	-		•	•	•		•
Outward opening	elements [o.o.]	•	•	-	-	-	•	•	-		-	-	-		•
Fixed glazing	Interior glaz.	•	•	•	•	•	•	•	•		•	•	•		•
rixeu glazilig	Exterior glaz.	•	•	-	-	-	•	•	-		-	-	•		•
Accessibility	20 mm barrier	•	•	•	-	•	•	•	•	-	•	•	-		-
(DIN 18040)	0-barrier	-	-	-		-	•	•	-	-	-	-	-		-
heroal DS draina	ge system	•	•	•	-	•	•	•	•	-	•	•	-		-
Curt. wall integ.		•	•	•	-	•	•	•	•	•	•	-	-		•
Min. view width to / casement comb	•	86	86	86	-	77	86	86	86	75	79	-	-		100
System-compatible heroal door system		-	-	-	-	-	heroal D 72	heroal D 72	heroal D 72	heroa	l D 72	heroal D 72 RL/CL	heroal	D 72	heroal D 65
	heroal WF 100			to		to			to		0		•		
Fitting variants	heroal WF 100 i	to	to	RC 2	to	RC 2	to	to	RC 2	R	C 2	to	•		to
r itting variants	heroal WF 200	RC 3	RC 3		RC 3		RC 3	RC 3	•			RC 3	•		RC 2
	heroal WF 300												•		
Ventilation flap (h	neroal W 72 VF)	-	-	-	-	-	•	•	•		-	-	-		-
Window rebate far	n	•	-	-	-	-	•	-	-		-	-	-		-
Anti drop device		•	•	•	•	•	•	•	•		•	•	-	•	•
Insect screen into	egration <sup>5)</sup>	•	•	•	•	•	•	•	•		•	•	•		•

## **Surface coating**

heroal hwr powder coating	•	•	•	•	•	•	•	•	•	•	•	•
Eloxal coating	•	•	•	•	•	•	•	•	•	•	•	•
heroal Surface Design (SD)	•	•	•	•	•	•	•	•	•	•	•	•
Les Couleurs® Le Corbusier®	•	•	•	•	•	•	•	•	•	•	•	•

## heroal Service

Bending technology 6)	-	-	-	-	-	•	-	•	-	•	•	•	•	
(formed elements)														

<sup>1]</sup> Push rod fitting groove

<sup>&</sup>lt;sup>2)</sup> Plastic fitting groove

<sup>&</sup>lt;sup>3]</sup>With use of heroal W 72 sash profiles

<sup>&</sup>lt;sup>4)</sup> Please request verification for heroal systems from D&F

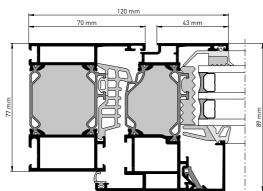
<sup>&</sup>lt;sup>5]</sup> Front-mounted installation only

<sup>&</sup>lt;sup>6]</sup>Only non-foam-filled profiles (o. PU) may be bent

## heroal W 77 The window system for today and tomorrow

Thanks to an intelligent combination of geometry and material, the heroal W 77 window system achieves a  $\rm U_f$  value of 0.95 W/m²K (view width 120 mm) at passive house level with a design depth of just 77 mm. This development has made it possible to harmonise the thermally separated aluminium window not only with the requirements of today, but also with those of the "nearly zero-energy buildings" of tomorrow. The new special frame profiles also make a flush inside and outside view possible.





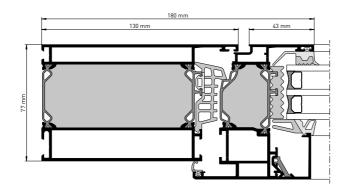
## Design and insulation variants:

- » heroal W 77 HI (high insulation) with high heat insulation
- » heroal W 77 UD (universal design) accessible

## heroal W 77 PH The passive house-certified window system.

With a design depth of just 77 mm and a view width of 180 mm, the heroal W 77 PH window system meets the high requirements of Dr Feist's Passive House Institute. It reaches a passive house-compatible  $U_f$  value of 0.8 W/m<sup>2</sup>K with a view width of just 120 mm.

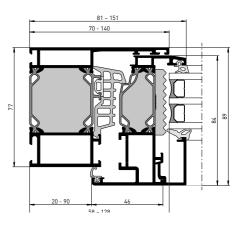




## heroal W 77 i Block window system with internal glazing.

The heroal W 77 i block window system with internal glazing features slim view widths, large glass surfaces and maximum transparency. The outer appearance of the window with no visible casements, which ideally emphasises the narrow view widths of the system, and heat insulation values of  $U_f = 1.0 \text{ W/m}^2\text{K}$  (in the standard cross-section) meet the highest architectural and energy requirements. The window system can also be integrated into the curtain wall as a floating window.



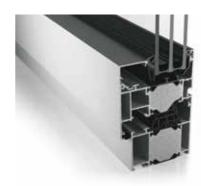


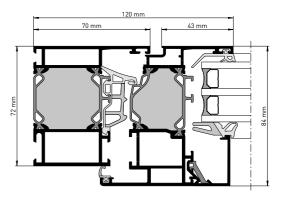
## Design and insulation variants:

» heroal W 77 i UD (integrated universal design) - accessible

## heroal W 72 The innovative system solution for every application.

heroal W 72 is the innovative and sustainable aluminium window system solution by heroal. The system offers top quality with maximum energy and cost efficiency – both its production and throughout its entire service life. Thanks to its numerous innovative and construction-related advantages, it impresses in every range of application. The system can also be designed as a floor-to-ceiling window with RC 2 or French door with 0-threshold. The new special frame profiles also make a flush inside view possible.





## Design and insulation variants:

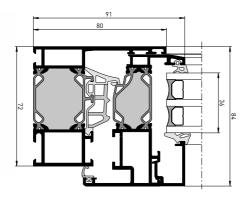
- » heroal W 72 HI (high insulation) with high heat insulation
- » heroal W 72 UD (universal design) accessible

32 | heroal window systems | 33

## heroal W 72 i Block window system with internal glazing.

The heroal W 72 i window system with internal glazing unites architectural design and slim view widths. The heroal W 72 i offers maximum transparency, heat insulation and an elegant design with no visible casements. The block window system can be used in a variety of applications, including as a curtain wall insert element (floating window). Its combination with concealed fittings gives the system an elegant design.





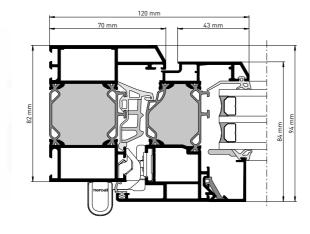
## Design and insulation variants:

- » heroal W 72 i (Integrated) exterior glazing
- » heroal W 72 i UD (integrated universal design) accessible

## heroal W 72 CL Window system with bevelled outer contour.

The heroal W 72 CL window system in a bevelled design (Classicline outline) with balanced proportions is perfect for renovating or refurbishing old buildings. The system combines an offset outline with tried-and-tested heroal system components. This makes it the ideal solution for renovating old and listed buildings in residential and commercial construction.





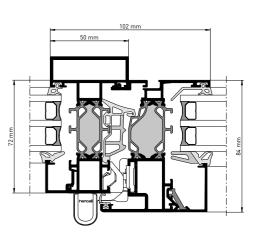
## Design and insulation variants:

» heroal W 72 RL (Roundline) - rounded outer contour

## heroal W 72 CW Window system in curtain wall look.

The heroal W 72 CW window system with curtain wall look offers a design version with the look of a classic curtain wall for floor-to-ceiling window elements. This allows for the creation of large openings in a modern transom-mullion look. The different profile variants make the heroal W 72 CW with curtain wall look an attractive alternative to the classic aluminium curtain wall.





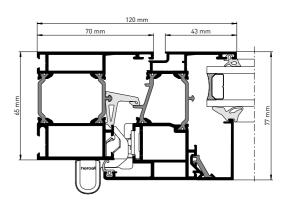
## Design and insulation variants:

» heroal W 72 CW (curtain wall) - steel effect

## heroal W 65 Economical system solution for windows.

The heroal W 65 system stands for particularly economical window solutions. It also meets the highest quality requirements: with 3-chamber profiles and tried-and-tested fittings, the system boasts high-quality components and impresses with its soundproofing and burglary resistance.





34 | heroal window systems heroal window systems | 35

heroal heroal

## Complementary solutions. Functional and versatile.



## heroal WF (window fitting system)

heroal fitting systems for windows grant the greatest possible freedom of design and contemporary handle designs. They are distinguished by their durability, security and functionality. Besides its RC 2 and RC 3 certification, heroal WF also impresses with its standard basic security. Whether surfacemounted (WF 100, WF 200, WF 300) or concealed (WF 100 i), the right fitting can be found for any architecture. Concealed swing sides satisfy the child safety requirements in line with DIN EN 13126-5.



## heroal WF EM (window fitting system)

For maximum security, heroal WF EM is available in burglar-resistant versions up to RC 3 as well as floor-to-ceiling elements up to RC 2. heroal WF EM is suitable for all conventional opening types, including accessible French doors, and is available as a classic surface-mounted swing side (heroal WF EM) or a concealed swing side (heroal WF i EM). Concealed swing sides satisfy the child safety requirements in line with DIN EN 13126-5.



## heroal W 72 VF (slimline ventilation flap)

The heroal W 72 VF ventilation flap satisfies the desire for a pleasant and healthy indoor climate. As a user-independent, motorised ventilation flap, it supports the implementation of controlled natural ventilation concepts day and night. Narrow, floor-to-ceiling opening elements are integrated discreetly into the curtain wall. heroal W 72 VF is compatible with the heroal C 50, heroal W 72, heroal D 72 and heroal S 77 SL systems.



## heroal W 72 and W 77 window rebate vent

The heroal window rebate vent for the heroal W 72 and heroal W 77 window systems ensures user-independent moisture protection according to DIN 1946-6. This prevents mould from forming in the room interior and guarantees the supply of fresh air for fans, for example. It is almost entirely concealed in the internal seal of the window and thus remains invisible from the inside and the outside when the window is closed. Air flows automatically due to the pressure differential inside the building.



## heroal plus: the innovative complete solution

The heroal plus accessory package for heroal W 72 (heroal W 72 plus) and heroal W 77 (heroal W 77 plus) window systems is a high-quality, flexible solution for efficient window construction projects. heroal plus is a modular concept, comprised of a heroal VS Z textile screen, an anti drop device, an integrated insect protection roller blind as well as a windowsill for an integrated, complete solution from a single supplier. All components are available individually, in different combinations or for retrospective installation.



## heroal DS for window systems (drainage system)

The heroal DS drainage system for window systems ensures the backflow-free drainage of surface water, thereby acting as a reliable safeguard against indoor moisture damage. Thanks to having a threshold at the same level, the heroal DS drainage system allows the free passage of large window elements. Sealing levels around the circumference of the element and casement frame guarantee optimum tightness.



## heroal IS (insect screen system for windows and doors)

The heroal KIS insect screen is easy to install and can also be retrofitted in front of almost all windows and doors. The stable and smooth-running heroal IS swivel frame is especially practical for heavily used doors and windows. heroal IS tenter frames are suitable for windows and doors that are tilted or fully opened for ventilation – even if roller shutters, folding shutters, sun protection or burglar grilles need to be taken into account during installation.



## heroal sun protection and heroal roller shutters

heroal sun protection and roller shutter systems can be optionally combined with heroal window systems. For a perfect colour match, the extruded aluminium components of the sun protection or roller shutter system can also be coated with the heroal hwr powder coating. This gives the entire building shell a uniform appearance.

36 | heroal window systems | 37



## Door systems for the highest demands.

heroal offers door systems for a wide range of applications: commercial building doors with panic function, front doors and fire protection doors, including matching thresholds, door casements and fittings. heroal systems deliver top performance in terms of energy-efficiency, tightness, soundproofing and security and offer a particularly high degree of functionality and stability. Thanks to the customised surface finishing and the heroal profile bending and folding service, there are no limits to the possible designs. And our exclusive partnership with Les Couleurs® Le Corbusier® resulted in the creation of the heroal Les Couleurs® Le Corbusier® front door with door infill panel, which impresses with its exclusive, harmonious combinations of the Le Corbusier colours.



## heroal door systems:

- + wide range of version and design options
- + top performance in terms of heat insulation, soundproofing and burglary resistance (RC 3)
- + highly weather-resistant heroal hwr powder coating
- + locks and door hinges for all door situations
- + suitable for emergency exit and escape routes and heavy-duty areas, and tested and approved in accordance with DIN 179 / DIN 1125
- + heroal D 72 RC 2 / RC 3 commercial building panic door as per DIN EN 1125  $\,$

## **System dimensions**

Description		heroal D 72	heroal D 72 RL	heroal D 72 CL	heroal D 65	heroal D 92 UD
	Frame profiles	72	72-82	82	65	92
Profile installation depth [mm]	Crossbar prof.	72	72-	72-82		92
	Sash profiles	59-82	59-82		61-65	78-92
	Frame profiles		60-154		60-250	85-120
Profile view width [mm]	Crossbar prof.	70-254	70-	-94	74-254	94-120
	Sash profiles	56-124	56-100	56-85	56-124	56-85
Min. view width frame/sa	sh profile [mm]	145	14	45	145	177
Max. glass/	Frame profiles	54	5	4	46	70
in. panel thick. [mm]	Sash profiles	72	7	2	56	92
Glass inset [mm]	Frame profiles	19	1	9	19	19
Glass inset [mm]	Sash profiles	18	1	8	18	19
Max. casement weight [kg	ı]	180	18	30	180	180
Max. sash height [mm]		3,000	2,500		2,500	2,500
Max. sash width [mm]	•		1,400		1,400	1,400

## **System features**

Description	heroal D 72	heroal D 72 RL	heroal D 72 CL	heroal D 65	heroal D 92 UD
Heat insulation $[U_f \text{ in W/m}^2 \text{K}]$	≥ 0.96	≥ 0.97	≥ 0.97	≥ 3.3	<b>≥</b> 1.1
Heat insulation [Ut in W/m²K] Profile view width [mm]	1.7 145	1.7 145	1.7 145	3.2 145	1.3 177
Heat insulation $[U_D \text{ in W/m}^2 \text{K}]$	≥1.0	≥1.0	≥1.0	≥1.6	≥ 0.70
Air permeability	4	4	4	4	4
Tightness against driving rain	E900	7A	7A	5A	9A
Wind load resistance	C4	C4	C4	C3	C5
Soundproofing class [SSK]	1-3	1-3	1-3	1-3	1-3
Burglary resistance	RC 3	RC 3	RC 3	RC 3	RC 3
Operating forces	2	2	2	2	2
Shock resistance	4	4	4	4	-
Mechanical durability	3	3	3	3	3
Load-bearing cap. of safety equipment	fulfilled	fulfilled	fulfilled	fulfilled	fulfilled
Continuous function	8	6	6	6/8	6
Differential climate test d/e	3	-	-	-	2

## heroal Service

Description	heroal D 72	heroal D 72 RL	heroal D 72 CL	heroal D 65	heroal D 92 UD
Bending technology (formed elements)	•	•	•	•	•
Edging and laser machining	•	•	•	•	•

## Opening types and design

Description			heroal D 72	heroal D 72 RL	heroal D 72 CL	heroal D 65	heroal D 92 UD
Contract to any		Inward opening	•	•	•	•	•
Swing doors		Outward opening	•	•	-	•	-
	Inward opening	One-sided	•	•	•	•	•
Sash-con- cealing	iliwaru operiilig	Both sides	•	•	•	-	•
panel	Outward opening	One-sided	•	-	-	-	-
	outmand oponing	Both sides	•	-	-	-	-
Automatic do	oors		•	-	-	•	-
Anti-finger-	trap doors		•	-	-	•	-
All-glass do	ors		-	-	-	-	-
Push-pull do	oors		•	-	-	•	-
Half-swing o	doors		•	-	-	•	-
Double-actir	ng swing doors		-	-	-	-	-
French door	S		•	•	•	•	-
Folding door	rs .		•	-	-	•	-
Escape door	s DIN 179 / 1125		•	-	-	•	-
	rs CE cert. / cap. DIN 179 / 1125		•	-	-	-	-
Burglary res	sistance: escape doo	rs DIN 1125	RC 3	-	-	RC 2	-
Accessibility	DIN 18040		•	•	•	•	•
Zero barrier	s DIN 18040		•	•	•	-	-
heroal DS dr	ainage system		•	•	•	-	•
	formation-inhibiting n sash profiles		•	•	•	•	•
Curt. wall in Min. view wi			• 126	• 126	• 126	• 126	-
System-com	patible heroal windo	ow system	W 72	W 72 RL	W 72 CL	W 65	-
		U-forend	•	•	•	•	•
Fitting varia	nts	Flat forend	-	-	-	-	•
Keyless entr	ry (fingerprint)		•	•	•	•	•
heroal front	door panel		•	-	-	-	-
PF (Panel Fi	xed)		•	-	-	-	-
PF EM (Pane	el Fixed Easy Mount)		•	-	-	-	-

## **Surface coating**

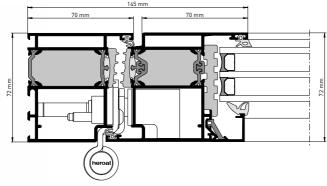
Description	heroal D 72	heroal D 72 RL	heroal D 72 CL	heroal D 65	heroal D 92 UD
heroal hwr powder coating	•	•	•	•	•
Eloxal coating	•	•	•	•	•
heroal SD	•	•	•	•	•
Les Couleurs® Le Corbusier®	•	•	•	•	•

40 | heroal door systems | 41

## heroal D 72 Building door system for heavily frequented entrance areas.

The heroal D 72 door system offers functional versatility with a range of opening and infill panel types with typical heroal performance features. The tested and certified heroal system can be used to implement all standard types of opening, including tested emergency exit and escape routes (in accordance with DIN EN 179 / 1125), automatic door systems, anti-finger-trap doors and burglar-resistant doors – also with emergency exit door function – in line with RC 2 and RC 3.



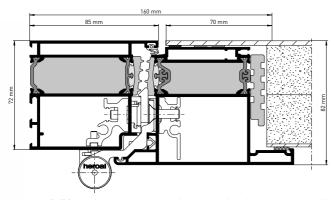




Scan and

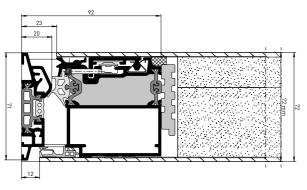
heroal D 72 flush with glass panel





heroal D 72 surface-mounted with one-sided sash-concealing panel and fixed glass strip





heroal D 72 with flush infill panel on both sides

## heroal DS Drainage system for heroal D 72 commercial door system.

Special measures must be taken to make thresholds in the area of door elements accessible in accordance with regulations while protecting against moisture damage indoors. One secure system solution is the use of the heroal DS drainage system for door systems, which drains away any surface water with no backflow. When selecting the right drainage, the expected amount of rain as well as the design of the external lining are important factors to plan for the necessary surface drainage to ensure problem-free water discharge.

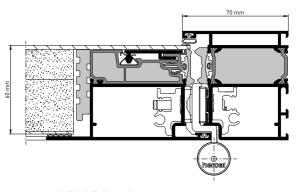


## heroal D 72 PF EM Efficient front door system.



The heroal D 72 PF EM door casement profiles are a highly efficient addition to the heroal D 72 door system for easy fabrication. The new thermal break geometry, innovative reversible heroal infill panel attachment technique and overhauled accessories make the sash profiles particularly easy, efficient and economical to produce. The reversible infill panel attachment helps to conserve resources while also protecting the environment: the door infill panel can be easily and quickly replaced without damaging other door components, which eliminates the time-consuming bonding of the infill panel and complete replacement of the casement.







Scan and

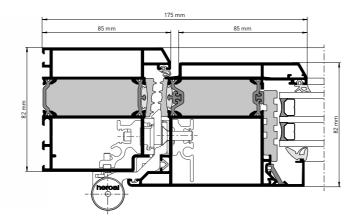
heroal D 72 PF EM 60 mm one-sided casement-enclosing (casement-enclosing on both sides is also possible)

42 | heroal door systems heroal door systems

## heroal D 72 CL Front door system with bevelled outer contour.

The heroal D 72 RL front door system with a harmonious Roundline outline or heroal CL with a Classicline outline offers functional versatility, a large number of design variants and excellent performance in terms of heat insulation and statics. The system is the ideal solution for heavily used entrance areas as well as for the renovation of old and listed buildings in residential and commercial construction. All standard types of opening can be implemented.





## Design and insulation variants:

» heroal D 72 RL front door (Roundline) - rounded outer contour

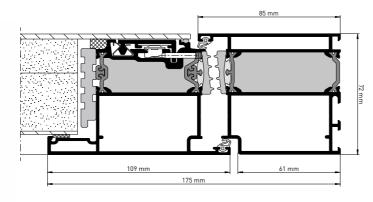
## heroal Les Couleurs® Le Corbusier® front door exclusive to heroal.



The heroal Les Couleurs® Le Corbusier® front door always combines the best materials, maximum functionality and perfect flexibility with the unique Le Corbusier colour spectrum. Each version of the door infill panel with resistance class RC 2 according to EN 1627 offers a high level of security. Thanks to its contemporary design in combination with the exclusive Le Corbusier colour scheme, the Les Couleurs® Le Corbusier® front door won the German Design Award 2020 in the category of "Excellent Product Design".



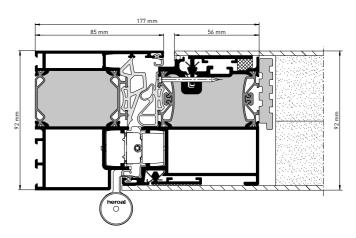




## heroal D 92 UD The variable and high-performance front door system.

The heroal D 92 UD (Universal Design) front door system is characterised by an adaptive design and high heat insulation performance suitable for passive houses. With its modular construction, the system offers a wide range of design variants. The appearance and functional characteristics can be easily adapted to changing capabilities or new user requirements. This does not compromise the outstanding performance features or the functional operability of the system in any way.

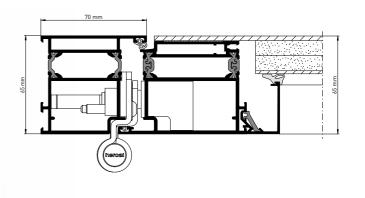




## heroal D 65 Economical system solution.

The heroal D 65 door system offers economical solutions for doors that open inwards and outwards, including automatic door systems and escape doors. The 3-chamber profiles offer the best possible system reliability with the tried-and-tested system fittings in combination with the heroal system components. The heroal D 65 door system satisfies the highest demands in terms of ease of use and burglary resistance.





44 | heroal door systems heroal door systems

## Complementary solutions. Functional and versatile.



## heroal DF (door fitting system)

heroal DF fitting technology for commercial building and front door systems guarantees maximum flexibility and pursues the universal design approach, which can be individually tailored to the needs of users at any time and is additionally distinguished by intuitive handling and user-friendliness. A wide range of combinations of mechanical and electronic building components as well as standardised lock dimensions make a major contribution to this. Naturally also as panic fittings.



## Keyless entry (fingerprint)

heroal door fittings are compatible with the latest technologies – including, for example, Bluetooth and keyless entry, which further increase the ease of use. Keyless entry not only permits doors to be opened via and app, but also the integration of fingerprint access solutions.



## heroal front door panel

The heroal front door panel has a discreet, timeless look with an integrated and illuminated recessed handle. In each version, the door infill panel with resistance class RC 2 in accordance with EN 1627 offers a high level of security and is approved without restriction for burglar-resistant doors in the heroal D 72 profile system. It achieves a  $\rm U_{\rm D}$  value in W/m²K of 0.91 with a door size of 1,230 x 2,180 mm and an infill panel thickness of 60 mm. The heroal front door panel can be coated in all heroal colours and designs.



## heroal D 72 PF (Panel Fixed)

The heroal PF casement without glass strip ensures a particularly aesthetic, discreet design and looks like it was cast from a single mould from the inside. The reversible infill panel attachment makes it possible to attach the prefabricated infill panel through joints in the casement. The different options for heroal infill panel attachments allow the manufacture of maximum casement sizes. Extremely simple installation even on the construction site, design modification and replacement options, and time-saving fabrication are the advantages of this attachment.



## Reversible infill panel attachment

By comparison to the standard infill panel attachment using 2-component adhesives on the entire surface, the reversible infill panel attachment is not only the most efficient and reliable method of infill panel installation, it is now even faster and easier: no prior processing of the profile is required for attachment. Instead of the familiar mechanical locking pins, a circumferential clip profile joins the door infill panel to the sash profile. There is also no longer any need to insert the sealing

46 | heroal door systems | 47



## Sliding and lift and slide systems for maximum transparency.

heroal aluminium sliding and lift and slide systems offer the perfect combination of transparency and heat insulation, even for large areas. Different types of opening and design variants give planners and architects the freedom to combine comfort and functionality. The tried-and-tested heroal technologies also ensure optimum results in terms of accessibility, air permeability, tightness against driving rain and burglary resistance. Versions as 90 degree corners for opening or fixed all-glass corners ensure a smooth transition between the inside and the outside.



## heroal sliding and lift and slide systems:

- + wide range of version and design options
- + fixed glazing, 90 degree corners for opening or all-glass corners
- + highly weather-resistant heroal hwr powder coating
- + top performance in terms of heat insulation, soundproofing and burglary resistance
- + automated lift and slide systems with electric drive possible

## **System dimensions**

			Lift and sli	de systems			Sliding	systems	
Description		heroa	al S 77	heroal	S 77 SL	heroa	l S 65	heroa	l S 42
Description		S 77	S 77 HI	S 77 SL	S 77 SL HI	S 65	S 65 HI	S 42	S 42 HF
	Frame profiles	178	/ 279	2	02	1	54	72 / 132	113
Profile installation depth [mm]	Crossbar prof.	7	'2	72		-		3	8
	Sash profiles	7	7	7	77	6	5	38	/42
	Frame profiles	35 - 52		40 - 52		57		48	conc.
Profile view width Crossbar prof.		74 - 104		74 - 104		62 - 87		6	8
[mm]	Sash profiles	94 104		104		-		68,	/ 72
	Central joint	114 124		104		62		3	5
Glass inset [mm]	Frame profiles		-	18		-			-
otass inset (imm)	Sash profiles	1	8	1	18	1	6	1	3
Max. glass/	Frame profiles		-	5	52		-		-
in. panel thick. [mm] Sash profiles		5	52	52		4	7	24	-28
Max. casement weight [kg]		400		400		250		160	
Max. sash height [mm]			3,000		3,000		2,400		500

## **System features**

-								
		Lift and sli	de systems			Sliding	systems	
Description	heroa	al S 77	heroal	S 77 SL	heroa	l S 65	heroa	l S 42
	S 77	S 77 S 77 HI S 77 SL S 77 SL HI		S 65	S 65 HI	S 42	S 42 HF	
Heat insulation $[U_f \text{ in W/m}^2 \text{K}]^{11}$	2.2	2.1	2	.1	≥ ′.	2.4	-	-
Heat insulation $[U_w \text{ in W/m}^2 \text{K}]^{2J}$	≥ 1.0	≥ 1.0	> C	).86	≥ '	1.1	≥ 1.3	≥ 1.2
Air permeability		4		4	4	4	4	4
Tightness against driving rain	9	'A	9	Ά	≥ 1.1 4 7A		8A	8A
Wind load resistance	C3,	/B3	C3	/B3	Е	2	C3/B4	C1/B2
Soundproofing class [SSK]	;	3	;	3		-	3	3
Burglary resistance	RO	C 2	R	C 2	RO	2	-	-
Operating forces		1		1		1	1	1
Protection against corrosion		5		5		-	-	-

 $<sup>^{11}</sup>$ U $_{\rm f}$ -value according to EN ISO 10077-2; average value of the frame combinations

## Opening types and design

	Lift and slide systems				Sliding systems			
Description	heroa	ıl S 77	heroal S 77 SL		heroal S 65		heroal S 42	
	S 77	S 77 HI	S 77 SL	S 77 SL HI	S 65	S 65 HI	S 42	S 42 HF
Number of runners	1.	-3		1	1-	-2	2-3	1
Max. number of movable casements	6			2	2	2	6	2
90° all-glass corner	-		•			-	-	-
90° corner for opening	-		•			-	•	-
Accessibility DIN 18040	•		•		•	•	•	•
heroal DS drainage system		•		•	•	•	-	-
heroal SF fitting system		•		•		•	•	•
Integrated motorisation (heroal SF Drive)		•		•		-	-	-
Curt. wall integ.		•		•	•		•	-
Insect screen integration		•		•		•	•	•
Sun protection integration <sup>3]</sup>		•		•	•	,	•	•

## **Surface coating**

Description	Lift and slide systems				Sliding systems			
	heroal S 77		heroal S 77 SL		heroal S 65		heroal S 42	
2-551. <b>p</b> .10.1	S 77	S 77 HI	S 77 SL	S77SLHI	S 65	S 65 HI	S 42	S 42 HF
heroal hwr powder coating	•	•	•	•	•	•	•	•
Eloxal coating	•	•	•	•	•	•	•	•
heroal SD	•	•	•	•	•	•	•	•
Les Couleurs® Le Corbusier®	•	•	•	•	•	•	•	•

## heroal Service

	Lift and slide systems				Sliding systems			
Description	heroal S 77		heroal S 77 SL		heroal S 65		heroal S 42	
	S 77	S 77 HI	S 77 SL	S 77 SL HI	S 65	S 65 HI	S 42	S 42 HF
Bending technology (formed elements)	-	-	-	-	-	-	-	-
Edging and laser machining	-	-	-	-	-	-	-	-

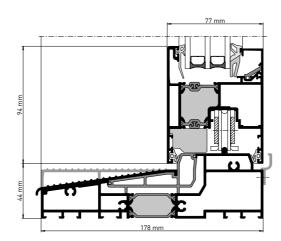
 $<sup>^{2)}</sup>$ U $_{\rm w}^{\rm v}$ -value according to EN ISO 12567-1; determined based on an element size of 3500 × 2180 mm

<sup>&</sup>lt;sup>3)</sup> Front-mounted sun protection possible

## heroal S 77 The versatile lift and slide system.

heroal S 77 is a modular profile system with a modern design that fulfils the highest structural requirements. It offers a choice of two view widths and an almost limitless selection of surfaces and is compatible with other heroal systems. heroal S 77 allow allows the implementation of multi-track design variants.





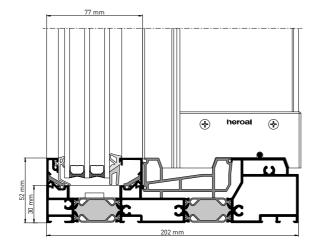
## Design and insulation variants:

- » heroal S 77 HI (high insulation) with high heat insulation
- » heroal S 77 SC (slim compact) without foam filling

## heroal S 77 SL The design-oriented lift and slide system.

heroal S 77 SL can be used to create new dimensions on a large scale and guarantees maximum transparency with its unique and innovative frame construction. The new generation of heroal lift and slide doors combines a movable monorail casement with fixed frame glazing with minimal view widths.





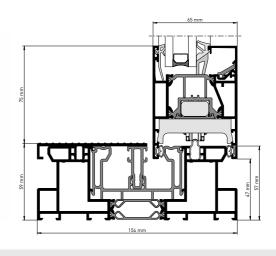
## Design and insulation variants:

- » heroal S 77 SL SC (slim compact) with or without foam filling
- » heroal S 77 SL HI (high insulation) with high heat insulation
- » heroal S 77 SL CC (comfortable climate) with ultra-high heat insulation

## heroal S 65 Sliding system for upscale residential and commercial.

In addition to the advantages in terms of fabrication and production and the resulting economy of this system, heroal S 65 also stands out due to its ease of use and contemporary design. Thanks to the slim central joint and narrow profile views, the system offers fascinating outlooks. Furthermore, the all-round frame reduces the complexity of the system, thus simplifying production even further.







Scan and



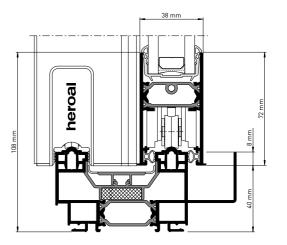
## Design and insulation variants:

» heroal S 65 HI (high insulation) - with high heat insulation

## heroal S 42 Efficient and functional sliding system.

The heroal S 42 sliding system combines top quality and maximum energy and cost efficiency. A sleek look, accessibility and comfort are just a few of the performance features that describe the heroal S 42 sliding system. These guarantee versatile use as a double hung sash or sliding glass door in residential and industrial buildings.





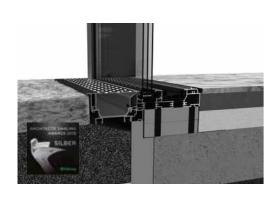
## Design and insulation variants:

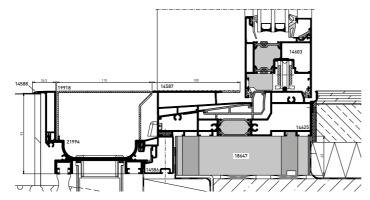
» heroal S 42 HF (hidden frame) - for frameless transparency

heroal **∭** SOLARLUX

## heroal DS Drainage system for sliding / lift and slide systems

heroal sliding and lift and slide systems can be used to create accessible solutions as well as zero-barriers. heroal sliding and lift and slide systems in combination with the heroal DS drainage system offers zero-threshold solutions (zero-barrier) as per the statutory requirements under DIN 18040-1 for public areas and DIN 18040-2 for accessible dwellings. What's more, complete accessibility is combined with protection against moisture damage in the interior to form a single system.





## Solarlux Ecoline and Highline glass folding wall systems for maximum opening widths.

The Ecoline and Highline glass folding wall systems combine a slimline look with maximum comfort and a huge variety of designs. The multi-functional bionicTURTLE® thermal break enables optimum heat insulation and slim profiles, even with large elements, as well as providing a mounting point for locks and fittings. With a view width of just 66 mm in the sash profile and 99 mm in the sash joint, the glass folding walls allow light to flood into rooms. The Ecoline series with 67 mm profile installation depth is the ideal cost-effective entry point for energy-efficient construction. The Highline series with a profile installation depth of 84 mm additionally offers greater security and is the world's first glass folding wall system classified under RC 3.



## **System dimensions**

Description		Ecoline	Highline
Profile installation depth [mm]	Frame profiles	67	84
	Sash profiles	67	84
	Minimal floor rail	29	29
	Frame profiles	0-72	0-72
Profile view widths [mm]	Sash profiles	66	66
	Sash joint	99	99
Max. glass/in. panel thick. [mm]		5-36	22-60
Max. casement weight [kg]		90	110
Max. sash height [mm]		3,000	3,500

## **System features**

Description		Ecoline	Highline
Air permeability	DIN EN 12207	3	3
Tightness against driving rain	DIN EN 12208	8A	9A
Wind load resistance	DIN EN 12210	B4	В4
Continuous function	DIN EN 12400	2	2
Soundproofing class (SSK)	DIN EN ISO 10140-2	Rw to 45 dB	Rw to 46 dB
Heat transfer coefficient	DIN EN ISO 10077-1	U <sub>w</sub> ≽ 1.1 W/m²K	U <sub>w</sub> ≥ 0.8 W/m²K
Burglary resistance	DIN EN 1627-1630	RC 2 / RC 2 N / RC 3	RC 2 / RC 2 N / RC 3
Curt. wall integ.		•	•

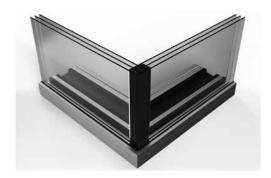
## Opening types and design

Description	Ecoline	Highline
Casement inward or outward folding	•	•
Casement as left or right version	•	•
Left/right-sliding casement pairs	•	•
Floor rail version without backstop as per DIN 18040	•	•
Integrated tilt or turn and tilt casement	•	•
Folding, tilt, turn and tilt, fixed element	•	•

Note: Information depends on version and glass

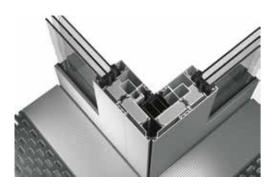
54 | heroal sliding and lift and slide systems heroal sliding and lift and slide systems | 55

## Complementary solutions. Functional and versatile.



## Version as 90° all-glass corner

Even in the joint area, there is no disturbing element frame to restrict the view. The 90° corner design with all-glass corner satisfies the increasing desire for transparency and flowing transitions between the inside and the outside.



## Version as 90° corner solution for opening

The version with a casement corner for opening will redefine any room. Corner areas can be opened completely without a support in the corner area blocking the way out. Even particularly large opening widths can be created without the need for a support.



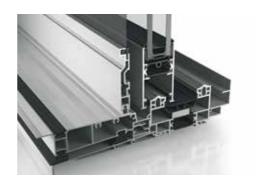
## heroal SF (fitting system)

The heroal SF system offers a high degree of flexibility and design freedom thanks to an extensive selection of handles in various versions ranging from half-moon to design handles. The handle variants can be combined on the interiors and exteriors of the elements.



## heroal SF Drive (integrated drive system)

Fully integrated into the profiles, the heroal SF Drive drive system enables the extremely convenient and almost soundless operation of the heroal S 77 and heroal S 77 SL lift and slide doors at the touch of a button – on request also via wireless remote control.



## heroal IS (insect screen for sliding doors)

heroal insect screen sliding systems are the ideal insect screen solution for particularly large sliding doors or patio and balcony door openings. Their low-noise operation, user and maintenance-friendly design, and variety of design options offer maximum comfort and full protection. The heroal pleated insect screen with vertical folding is ideal for use in any patio or balcony door – even for particularly large sliding doors.



## heroal VS Z corner solution (sun protection system)

heroal sliding systems can also be combined with the heroal sun protection systems. For a perfect colour match, all aluminium components of the sun protection system can be coated with the heroal hwr powder coating. This gives the entire building shell a uniform appearance. The heroal VS Z corner solution provides aesthetic shading – even to all-glass corners.



## heroal FPS anti drop device

The heroal S 77 SL lift and slide system can be complemented with an anti drop device. The heroal FPS anti drop device made of laminated safety glass with slender profiles in uniform colour coating provide a sophisticated architectural solution for safeguarding the opening area of floor-to-ceiling elements in higher stories. The solution meets the requirements under DIN 18008-4 and is suitable for openings (clear passageway) up to 3,000 mm wide.

56 | heroal sliding and lift and slide systems heroal sliding and lift and slide systems | 57



## Curtain wall systems for every requirement.

heroal curtain wall systems meet the increasing requirements for energy-efficiency while affording maximum architectural freedom. Thanks to their variable and functionally reliable system components, heroal C 50 curtain wall systems offer fabricators, architects and planners solutions for almost any building project in private and commercial construction. The heroal C 50 HI, heroal C 50 ID and heroal C 50 FP system variants (featured in the chapter on fire and smoke protection systems) accommodate the increasing requirements for energy-efficiency in the building shell, up to passive house compatibility, design variants such as industrial designs and fire protection. Thanks to its high level of system compatibility, the heroal curtain wall system can be combined with integrated sun protection solutions and a wide range of insert elements, such as block window systems, creating harmonious building shells.



## heroal curtain wall systems:

- + wide range of insert elements and integration of sun protection possible
- + large spans with the heroal C 50 PS transom tensioning system
- + consistent view width of 50 mm even with wide glazing areas and high glass loads
- + uniform appearance and view width of curtain wall and fire protection curtain wall
- + wide range design variants
- + modular heat insulation up to passive house compatibility

## **System dimensions**

Description		heroal C 50	heroal C 50 HI	heroal C 50 ID
Profile installation	Mullion profiles	28 - 260	28 - 260	95 - 185
depth [mm]	Transom profiles	6 - 215	6 - 215	23 - 120
Profile view width [mm]		50	50	50
Max. glass/in. panel thick	r. [mm]	8 - 62	28 - 68	8 - 62
Max. glass/infill panel we	eight [kg]	800	to 800	up to 140

## **System features**

Description		heroal C 50	heroal C 50 HI	heroal C 50 ID
Heat insulation $[U_f \text{ in W/r}]$	m²K]	1.2 - 1.8	0.78 - 1.4	1.2 - 1.8
Air permeability (class)		AE 750	AE 750	AE 750
Tightness against	static	RE 1200	RE 1200	RE 1200
driving rain	dynamic	P <sub>min</sub> 250 PA P <sub>max</sub> 750 PA	P <sub>min</sub> 250 PA P <sub>max</sub> 750 PA	P <sub>min</sub> 250 PA P <sub>max</sub> 750 PA
Wind load resistance	permissible load	2.0 kN/m²	2.0 kN/m²	2.0 kN/m²
Wind toad resistance	increased load	3.0 kN/m²	3.0 kN/m²	3.0 kN/m²
Soundproofing class (SSK	()	up to 46 dB	up to 48 dB	up to 46 dB
Burglary resistance (class	s)	to RC 3	to RC 2	to RC 2
Shock resistance (class)		I5/E5	I5/E5	15/E5

## **Construction types**

Description	heroal C 50	heroal C 50 HI	heroal C 50 ID
Transom-mullion / mullmull. / trantran.	•	•	•
Non-ventilated curtain wall	•	•	•
Ventilated curtain wall	•	-	-
Surfmount. construction	•	•	-
Light roof construction	•	•	•
Element construction	•	•	-
Conservatory roof (heroal C 50 WG)	•	•	-
Cover shell range	•	•	•
Industrial design	-	-	•
Canopy construction (heroal C 50 TC)	•	•	•

## **Insert elements**

Description		heroal C 50	heroal C 50 HI	heroal C 50 ID
heroal window systems		•	•	•
heroal block window systems		•	•	•
heroal W 72 VF ventilation flap		•	•	•
Floating window		•	•	•
heroal door systems		•	•	•
heroal skylight elements		•	•	•
heroal VS Z sun protec-	semi-integrated	•	•	•
tion system	front-mounted	•	•	•
heroal C 50 PS transom tensioning system		•	•	•
heroal sliding and lift and	l slide systems	•	•	•

## **Surface coating**

Description	heroal C 50	heroal C 50 HI	heroal C 50 ID
heroal hwr powder coating	•	•	•
<b>Eloxal coating</b>	•	•	•
heroal SD	•	•	•
Les Couleurs® Le Corbusier®	•	•	•

## heroal Service

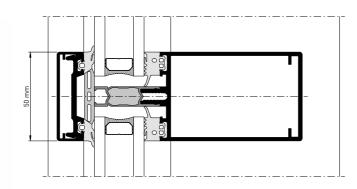
Description	heroal C 50	heroal C 50 HI	heroal C 50 ID
Bending technology (formed elements)	•	•	•
Edging and laser machining	•	•	•

60 | heroal curtain wall systems | 61

## heroal C 50 The system for a rich variety of curtain wall solutions.

The design of the thermally insulated heroal C 50 curtain wall system makes it ideal for use as a vertical or vertical-bending transom-mullion, transom-transom or mullion-mullion curtain wall. The curtain wall can also be used as a roof area, light roof pyramid or conservatory. A variety of cover and pressure profiles adds the finishing touch to the range of systems.

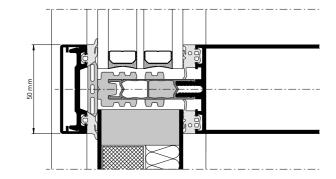




## heroal C 50 HI The highly-insulated curtain wall system.

The heroal C 50 HI curtain wall system with conventional triple-glazed insulating glass achieves passive house compatibility. This enables sustainable curtain wall concepts with outstanding energy-efficiency. Special system construction details support fast, safe and economical production. This system is dinstuighed by its innovative concept for heat insulation with foam-filled insulators and an adapted insulator function as well as the continuous seal.





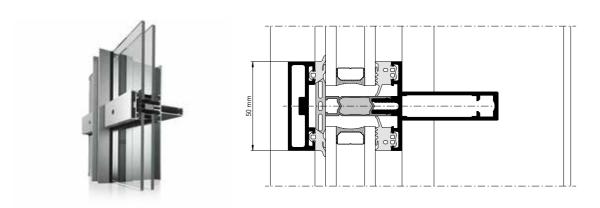
## Design and insulation variants:

» heroal C 50 HI (high insulation) - up to passive house compatibility 1)

1) the heroal C 50 HI curtain wall system is passive house compatible with a suitable curtain wall panel and glazing

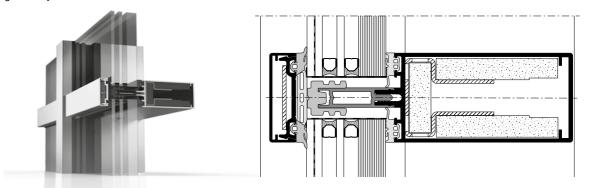
## heroal C 50 ID The designer curtain wall system with steel effect.

The heroal C 50 ID curtain wall system stands for solution-oriented, creative curtain wall design for industrial applications. It allows planners, architects and fabricators to meet the highest requirements. The innovative concept for heat insulation with foam-filled insulators and an adapted insulator function as well as the continuous seal are standard features of the industrial design variant.



## heroal C 50 FP 30 The system solution for fire protection curtain walls.

The heroal C 50 FP 30 fire protection curtain wall system is a building component subject to CE marking requirements tested as a curtain wall at the ift Rosenheim in accordance with standard EN 13501-2. The verification applies across Europe, with no other national requirements. The heroal C 50 curtain wall system can be expanded to an  $\rm EI_2$  30 fire protection curtain wall with just a few auxiliary profiles, with the same transparency and outdoor view. A few additional building components, e.g. the patented Fireblock Isolator, can be used to create a curtain wall that meets high safety standards.



## Design and insulation variants:

» heroal C 50 FP 30 HI (high insulation) - with high heat insulation

Note: See the "Fire protection" chapter for technical data.

62 | heroal curtain wall systems heroal curtain wall systems

## Complementary solutions. Functional and versatile.



## heroal C 50 PS (transom tensioning system)

The transom tensioning system from heroal is placed inside the profile. There it builds a pre-tension that counteracts the expected loads and stiffens the profile. This pre-tensioning of the profile can be individually adjusted to the expected useful and working loads. In addition, the glass weights can be further increased through the use of heavy-duty supports – allowing loads of up to 800 kg to be transferred in a 50 mm construction.



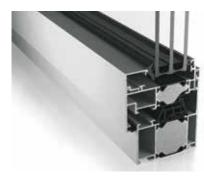
## heroal C 50 TC (canopy system)

The versatile heroal C 50 curtain wall system can be used for the installation of the high-quality heroal C 50 TC canopy in upscale residential and commercial buildings. With a maximum reach of 2,000 mm and an adjustable roof pitch, the canopy can be customised to suit individual requirements. The canopy is firmly connected to the curtain wall or structure. Loads of up to 6.5 kN are transferred per support. The slim profiles with a 60 x 50 mm rafter profile and a 50 x 50 mm support profile create slimline views.



## heroal W 72 VF (ventilation flap)

The heroal W 72 VF ventilation flap satisfies the desire for a pleasant and healthy indoor climate. As a user-independent, motorised ventilation flap, it supports architects and planners in the implementation of controlled natural ventilation concepts day and night. Narrow, storey-high opening elements integrate discreetly into the curtain wall – simple, harmonious.



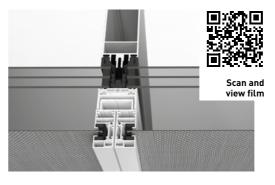
## heroal W 72 i / heroal W 77 i (block window system)

The heroal W 72 i and heroal W 77 i window systems combine architectural design and slim view widths. The heroal W 72 i offers maximum transparency, heat insulation and an elegant design with no visible casements or glass strips. The block window system can be used in a variety of applications, including as a curtain wall insert element. Its combination with concealed system fittings provides for an elegant design. The block window system can also be designed as a floating window.



## Floating window

The fusion of the curtain wall profiles with the special frames of the window systems creates the impression of a window elegantly floating in the curtain wall construction. This solution is available for the heroal W 72 and heroal W 72 i window systems.



## heroal VS Z CS semi-integrated (sun protection system for curtain walls)

To seamlessly integrate the heroal VS Z sun protection system into transom-mullion curtain walls such as heroal C 50, heroal developed the heroal VS Z CS (curtain wall screen) with the heroal GR 25 guide rail. The system can be front-mounted on conventional transom-mullion systems with a view width of at least 50 mm as a using standard sun protection bolts. Besides the semi-integrated variant, it is also available as a surface-mounted system.



## heroal VB Free (Venetian blind system for curtain walls)

The heroal VB Free (Venetian blind free) Venetian blind finished element is delivered fully installed on the supporting guide rails and is perfect for transom-mullion curtain walls such as heroal C 50. heroal VB Free is used wherever the load can only be transferred via the guide rails. The self-supporting Venetian blind is suitable for new builds as well as for retrospective installation, as the box is not attached to the curtain wall or masonry.



## heroal C 50 GD (glass fin for curtain walls)

heroal C 50 GD (Glass Design) is a true highlight when it comes to curtain walls. The concept exploits the idea of reflection in two ways: it visually reduces the view width from the inside while reducing the design depth of the mullion from the outside. This effect is made possible by the use of a glass fin, which assumes the static role of the classic aluminium mullion.

64 | heroal curtain wall systems heroal curtain wall systems | 65



## Non-insulated profile systems for room partitions.

heroal window and door systems not only shape the building shell. They can also set accents indoors and enhance both design diversity and functionality with their outstanding properties. Wherever technical perfection and a timeless look are required, heroal profile systems are the right solution – as partition walls or double hung sashes. The innovative character of these high-quality systems makes it easy to bring modern, light-flooded room concepts to life.



## Non-insulated heroal profile systems:

- + non-insulated window, door, sliding and fire and smoke protection systems
- + wide range of version and design options
- + accessible flat threshold
- + maximum compatibility and colour matching with the heroal system portfolio
- + variety of colours and designs with the heroal hwr powder coating
- + round, segmental and basket bends as well as circular elements

## **System dimensions**

Description		heroal W 50 C	heroal S 50 C	heroal S 20 C	heroal D 50 C
Profile installation depth [mm]	Frame profiles	50	65/115	83/106/129	50
	Crossbar prof.	50	40	-	50
	Sash profiles	50/62	40	20	50
Profile view width [mm]	Frame profiles	53-150	47	45	53-150
	Crossbar prof.	68-250	68	-	68-250
	Sash profiles	35	70	60	73/95
Min. view width frame/sash profile [mm]		93	110	744]	151
Sash profile variants	SBN <sup>1]</sup>	•	-	-	-
	KBN <sup>2)</sup>	-	-	-	-
Max. glass/ in. panel thick. [mm]	Frame profiles	34	-	-	-
	Sash profiles	44	22	10	34
Glass inset [mm]	Frame profiles	16	-	14/20	-
	Sash profiles	16	12	16	16
Max. casement weight [kg]		150	120	80	150
Max. sash height <sup>3]</sup> [mm]		2,800	2,100	2,200	2,250
Max. sash width <sup>3]</sup> [mm]		1,600	-	1,200	1,350/2,250

## **System features**

Description	heroal W 50 C	heroal S 50 C	heroal S 20 C	heroal D 50 C
Air permeability	4	4	-	4
Tightness against driving rain	7A	5A	-	7A
Wind load resistance	C2/B2	C1/B2	-	C2/B2
Operating forces	1	1	-	1

<sup>1)</sup> Push rod fitting groove

## Opening types and design

Description		heroal W 50 C	heroal S 50 C	heroal S 20 C	heroal D 50 C
Turn [D], tilt and turn [DK], tilt before turn elements [TBT]		•	-	-	-
Forend elements		•	-	•	-
Fanlight elements [OL]		•	-	-	-
Fixed alazina	Interior glazing	•	-	-	-
Fixed glazing	Exterior glazing	•	-	-	-
Swing doors	Inward opening	-	-	-	•
	Outward opening	-	-	-	•
Automatic doors		-	-	-	•
Anti-finger-trap doors		-	-	-	-
All-glass doors		-	-	•	•
Push-pull doors		-	-	-	•
Half-swing doors		-	-	-	•
Double-acting swing doors		-	-	-	•
French doors		-	-	-	•
Accessibility DIN 18040		-	-	•	•
System-compatible heroal system		heroal D 50 C	heroal W 50 C	heroal OR, heroal CR	heroal W 50 C
Fitting variants	heroal WF 100	•	-	-	-
	heroal WF 100 i	•	-	-	-
	heroal WF 200	•	-	-	-
	heroal WF 300	•	-	-	-

## **Surface coating**

Description	heroal W 50 C	heroal S 50 C	heroal S 20 C	heroal D 50 C
heroal hwr powder coating	•	•	•	•
Eloxal coating	•	•	•	•
heroal SD	•	•	•	•
Les Couleurs® Le Corbusier®	•	•	•	•

## heroal Service

Description	heroal W 50 C	heroal S 50 C	heroal S 20 C	heroal D 50 C
Bending technology (formed elements)	•	•	-	•
Edging and laser machining	•	•	-	•

<sup>&</sup>lt;sup>2]</sup> Plastic fitting groove

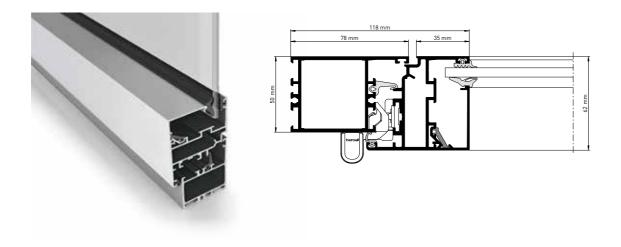
<sup>&</sup>lt;sup>3]</sup> In combination with heroal WF fitting systems

<sup>&</sup>lt;sup>4)</sup> Frame and casement (bottom): 74 mm, frame only (side and top): 45 mm

<sup>&</sup>lt;sup>5]</sup> With 8 mm ESG 2,200 mm; with 10 mm ESG 2,500 mm

## heroal W 50 C Economical partition wall system for indoors.

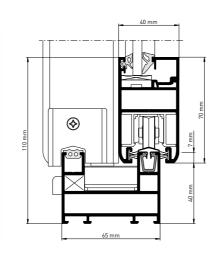
heroal W 50 C is the universal profile system for partition elements and wall systems, primarily for indoors. It is characterised by narrow view widths and can be used as a flush-mounted window or fixed glazing.



## heroal S 50 C System solutions for non-insulated sliding elements.

The heroal S 50 C is the attractive solution for sliding elements and doors, primarily for indoors. The system allows the implementation of 2- and 3-track sliding elements with up to 6 movable casements in narrow view widths.





## heroal S 20 C Sliding door system with frameless casements.

The non-insulated all-glass sliding door system is particularly flexible: the heroal S 20 C affords versatile opening options, with the frameless casements either sliding to one side or opening as a French door system. The 3-, 4- and 5-track thresholds can also be designed for full accessibility. The system is ideal for roofed outdoor areas.

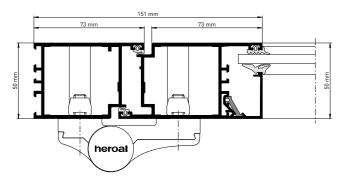


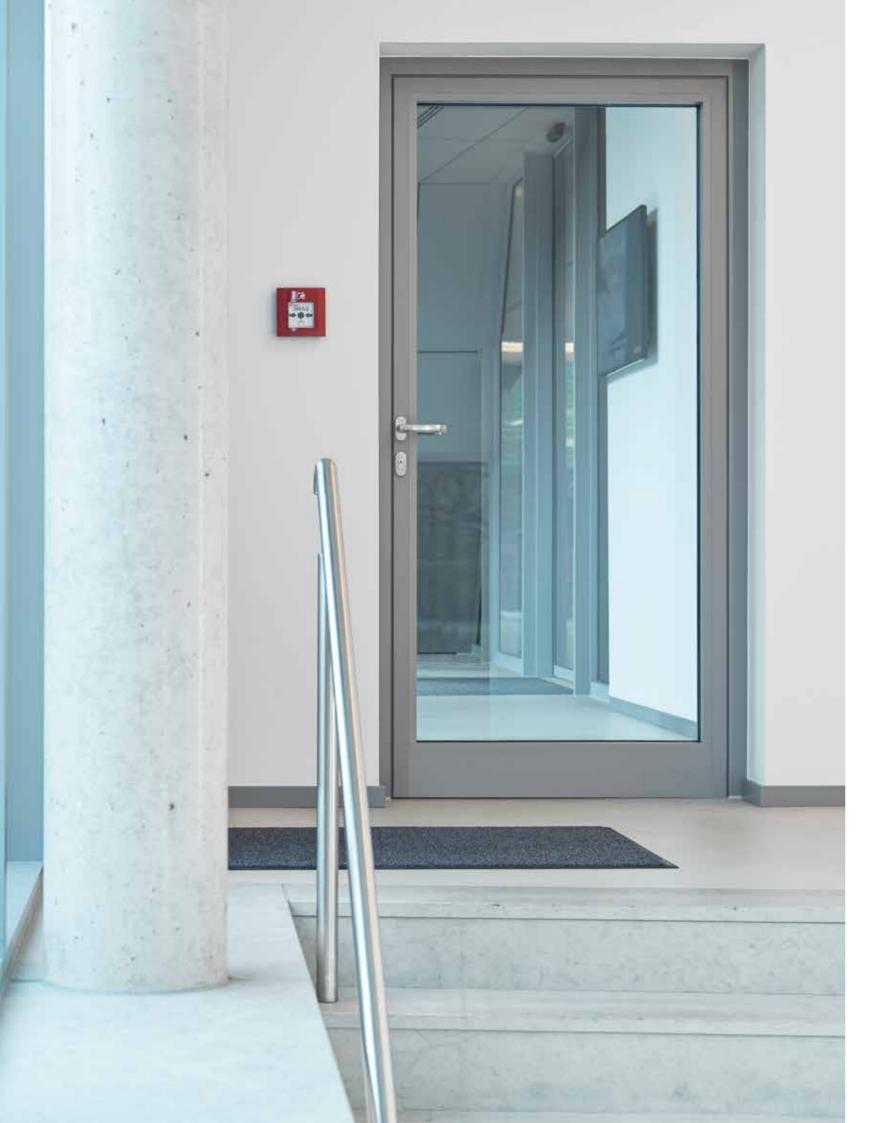


## heroal D 50 C Efficient solutions for door and partition elements.

heroal D 50 C allows the implementation of a variety of opening types for attractive and highly functional door and partition elements as well as partition wall systems, mainly for indoors. The variable flush-mounted external views create a wide range of design options.







## Systems for fire and smoke protection requirements.

heroal fire and smoke protection systems are distinguished by their exceptional flexibility and efficient fabrication. Individual requirements can be satisfied with a range of systems and additional components for commercial and residential construction. The product portfolio extends from inside and outside fire and smoke protection doors through to fire protection curtain walls. heroal fire protection systems cover a whole host of technical requirements, while simultaneously allowing a huge variety of designs.



#### heroal fire protection systems:

- + systems for fire and smoke protection doors, fire protection windows and curtain walls
- + modular construction
- + highly weather-resistant surfaces
- + for indoor and outdoor use
- + maximum heat insulation
- $\boldsymbol{+}$  unlimited colour diversity with heroal hwr powder coating

## **System dimensions**

		heroa	l D 93	heroal D 93	heroal	D 65 C <sup>1)</sup>	heroal C 50	heroal C 50
Description		FP	30	FP 90	SP	FP	FP 30	FP 30 HI
Approval basis 23		FSA CE		FSA	-		CE	CE
	Frame profiles	9	3	93	65		-	-
	Crossbar prof.	9	3	93	65		-	-
Profile installation depth [mm]	Sash profiles	9	3	93	65		-	-
	Mullion profiles		-	-	-		95-185	95-185
Transom profiles		-		-		-	60-190	60-190
	Frame profiles	70-154		70-154	70-154			
Profile view width [mm]	Crossbar prof.	94-104		94-104	94-154		50	50
	Sash profiles	68-98		68-98	74-98			
Min. view width frame/sa	sh profile [mm]	150 338		150	151		-	-
Max. glass/	Frame profiles	6	5	65	-		28-56	34-62
in. panel thick. [mm]	Sash profiles	6	5	65	48/20	20	20 30	04 02
Max. glass/infill panel we	ight [kg]	-	-	-		-	up to 800	up to 800
Glass inset [mm]	Frame profiles	1	7	17		-	-	-
Otass inset [illin]	Sash profiles	1	7	17	1	8	-	-
Max. casement weight [kg]		20	60	360	15	50	-	-
Max. sash height [mm]		3,000	2,387	2,750	2,500	3,000	-	-
Max. sash width [mm]	1-case.	1,450	1,354	1,450	1,450	1,402	-	-
	2-case.	2,850	2,331	2,850	2,860	2,668	-	-

## **System features**

Heat insulation $[U_w/U_d \text{ in } W/m^2K]$	≥ 1.6-1.9	-	-	1.5-2.0	1.1-1.4
Heat insulation [U <sub>f</sub> in W/m <sup>2</sup> K] / Profile view width [mm]	2.7 150	2.7 150	-	-	-
Air permeability	3	-	-	AE 750	AE 750
Tightness against driving rain	- 5A/7B	-	-	RE 1050	RE 1050
Wind load resistance	C3/B3	-	-	2.0 kN/m²/³ <sup>3</sup> 3.0 kN/m²/ <sup>4</sup>	2.0 kN/m²/³ <sup>3</sup> 3.0 kN/m²/ <sup>4</sup>
Noise insulation value Rw,R [dB]	42	42	-	NPD	NPD
Burglary resistance	RC 2	RC 2	-	NPD	NPD
Operating forces	3/5	3/5	-	-	-
Shock resistance	-	-	-	15/E5	15/E5
Mechanical durability	3	3	-	-	-
Continuous function	C5	C5	-	-	-
Differential climate test d/e	2d/2e	-	-	-	-
Emergency exits / escape doors DIN 179 / 1125	•	•	-	-	-
Approval capability	-	-	-	-	-
Fire resistance	30	90	30	30	30
Smoke protection	RS S <sub>a</sub> /S <sub>200</sub>	RS	-	-	-
NSHEV and SHEV approval	-	-	•	-	-

## Opening types and design

Decembries		heroa	l D 93	heroal D 93	heroal	D 65 C <sup>1]</sup>	heroal C 50	heroal C 50
Description		FP	30	FP 90	SP	FP	FP	FP HI
Approval basis 2)		FSA	CE	FSA		-	CE	CE
Swing doors	Inward opening	•		•		•	-	-
Swilly doors	Outward opening	•		•		•	-	-
Fixed glazing	Interior	•	•	•		•	-	-
rixed glazing	Exterior	-	-	-		-	-	-
Automatic doors		-	-	-		•	-	-
Anti-finger-trap doors		•	•	•		-	-	-
Push-pull doors		-		-		•	-	-
French doors / windows		•		•		-	-	-
Accessibility DIN 18040		•		•	•		-	-
Zero barriers DIN 18040		•	•	•		-	-	-
heroal DS drainage system		•	•	•		-	-	-
Patented deformation-inhib compound in sash profiles	iting	•	•	•		-	-	-
Curt. wall integ.		•	•	-		-	-	-
System-compatible heroal s	systems	C 50	) FP	-		-	D 93 FP EI 30	D 93 FP EI 30
Eitting variants	U-forend	-	-	-		-	-	-
Fitting variants	Flat forend	•	•	•		•	-	-
Transom-mullion / mullmu	ıll. / trantran.	-	-	-		-	•	•
Non-ventilated curtain wall		-	-	-		-	•	•

## **Surface coating**

Description	heroal D 93	heroal D 93	heroal D 65 C	heroal C 50	heroal C 50
Description	FP 30	FP 90	SP FP	FP	FP HI
heroal hwr powder coating	•	•	•	•	•
Eloxal coating	•	•	•	•	•
heroal SD	•	•	•	•	•
Les Couleurs® Le Corbusier®	•	•	•	•	•

## heroal Service

Description	heroal D 93	heroal D 93	heroal D 65 C	heroal C 50	heroal C 50
Description	FP 30	FP 90	SP FP	FP	FP HI
Bending technology (formed elements)	•	-	•	•	•
Edging and laser machining	•	•	•	•	•

<sup>1)</sup> Approval for Austria only

74 | heroal fire protection systems | 75

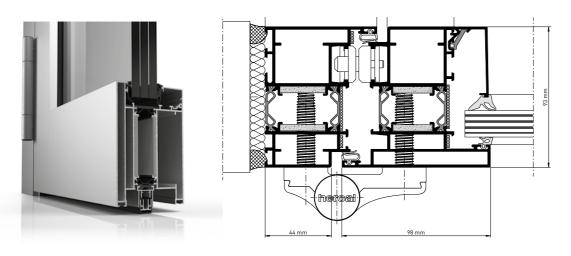
<sup>&</sup>lt;sup>2]</sup> Approval basis for outdoor use: CE marking, indoor use: National approval

<sup>3]</sup> Permissible load

<sup>&</sup>lt;sup>4]</sup> Increased load

## heroal FireXtech D 93 FP 30 - F/T30 fire protection system with general type approval.

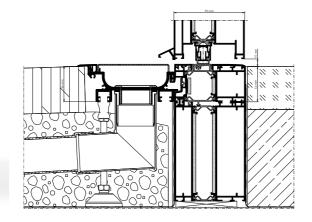
The heroal FireXtech D 93 FP 30 fire door system can be flexibly adapted to fire protection requirements thanks to its modular construction. The system is characterised by its short processing time as well as its outstanding static properties and offers fire protection planners, architects and fabricators a system solution for indoor use in private and commercial construction. heroal FireXtech D 93 FP 30 has received building approval in line with EN 1634-1, DIN 4102- 5 and -13. There is also the option of expanding the construction with a smoke protection function in line with DIN 18095-1. In Austria and Switzerland, the system is classified in class  $EI_230$ .



## heroal FireXtech D 93 FP 30 CE Fire protection door system with $\mathrm{EI}_2$ 30 classification.

The heroal FireXtech D 93 FP 30 CE fire protection door system can be flexibly adapted to the fire protection requirements thanks to its modular construction. The system is characterised by its short processing time as well as its outstanding static properties and offers fire protection planners, architects and fabricators a system solution for outdoor use in private and commercial construction. heroal FireXtech D 93 FP 30 CE is classified as El $_2$  30 - C5 with regard to fire resistance with continuous function (200,000 cycles) in line with EN 16034 and EN 14351-1 There is also the option of adding smoke protection classification  $S_a/S_{200}$  as per EN 1634-3 to the construction at any time.

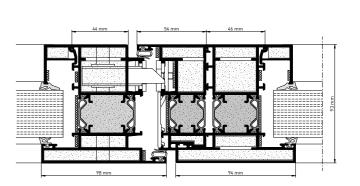




## heroal FireXtech D 93 FP - T90 fire protection door system with general type approval.

The heroal FireXtech D 93 FP 90 fire door system can be flexibly adapted to fire protection requirements thanks to its modular construction. The system is characterised by its outstanding static properties and offers fire protection planners, architects and fabricators a system solution for indoor use in private and commercial construction. heroal FireXtech D 93 FP 90 has received building approval in line with EN 1634- 1, DIN 4102- 5 and -13. There is also the option of expanding the construction with a smoke protection function in line with DIN 18095-1.

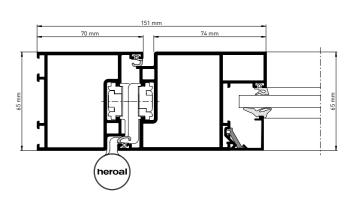




## heroal D 65 C SP Non-insulated solution for smoke protection elements.

The non-insulated heroal D 65 C SP door system combines planning and production certainty with functional and design freedom for indoor smoke protection doors. The door system for smoke protection requirements is based on the versatile profiles of the heroal D 65 C door system, which can be expanded to smoke protection doors with just a few additional components. The heroal D 65 C SP smoke protection door system tested in line with DIN 18095 RS 1/RS 2 and EN 1634-3 offers a host of options that cover a wide range of designs.



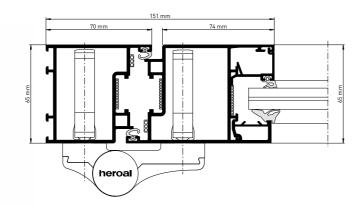


76 | heroal fire protection systems | 77

## heroal D 65 C FP as E 30 / EW 30 non-insulated solution for fire and smoke protection elements for Austria.

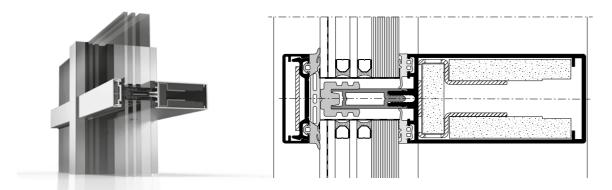
The 1- and 2-casement fire protection doors from the heroal D 65 C FP profile system, tested in line with DIN EN 1364-1 and 1634-1 and approved under the national classification report, offer countless design options including side parts and fanlight as well as fixed glazing. The system can also optionally be used as E  $30-S_{200}$  C5 or EW  $30-S_{200}$  C5.





## heroal C 50 FP The system solution for fire protection curtain walls.

The heroal C 50 FP fire protection curtain wall system is subject to CE marking requirements tested as a curtain wall at the ift Rosenheim in line with EN 13501-2. The verification applies across Europe, with no other national requirements. The heroal C 50 curtain wall system can be expanded to an  $\rm El_2$  30 fire protection curtain wall with just a few auxiliary profiles, with the same transparency and outdoor view. A few additional building components, e.g. the patented Fireblock Isolator, can be used to create a curtain wall that meets high safety standards.



#### Design and insulation variants:

» heroal C 50 FP HI (high insulation) - with high heat insulation

## Complementary solutions. Functional and versatile.



#### Fire protection glazing

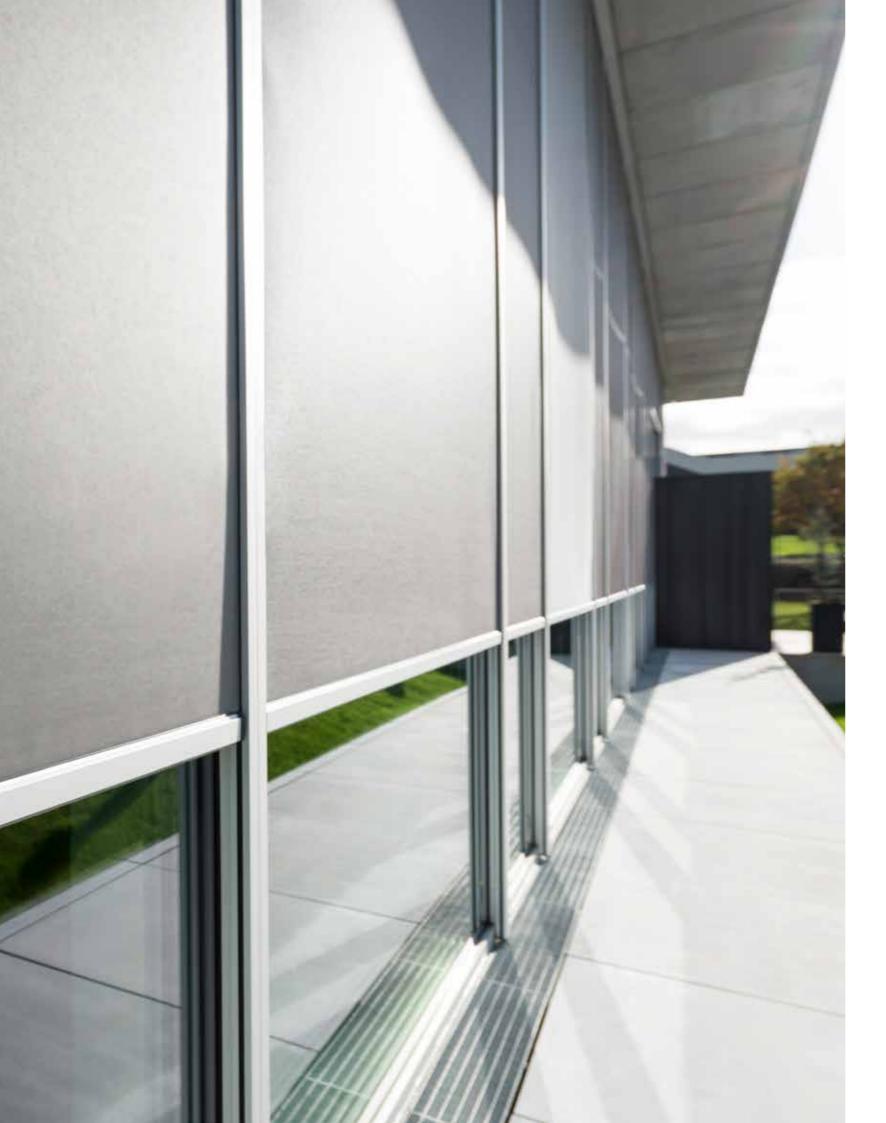
The heroal Fire**X**tech D 93 FP and heroal D 82 FP / SP fire protection door systems can be combined with glazing from different manufacturers. The high number of tested glass panes for different sizes and requirements ensure maximum flexibility when selecting the glazing.



#### heroal DS für heroal FireXtech D 93 FP (drainage system)

For barrier-free passage, the fire door system can be used with a floor-level zero threshold and optionally combined with the heroal DS drainage system. With the patented, seamlessly integrable heroal DS drainage system, threshold-free solutions can be implemented in accordance with legal requirements as per DIN 18040-1 for public areas and DIN 18040-2 for barrier-free dwellings. Moisture damage indoors is reliably prevented by draining surface water at up to 0.8 l/s under a high-quality stainless steel cover.

78 | heroal fire protection systems | 79



# Sun protection systems for heat, glare and privacy protection.

The exterior, textile heroal sun protection systems and heroal Venetian blind systems allow modern residential and commercial construction requirements for efficient sun protection to be met in a wide variety of forms. The textile screens keep the room temperature pleasantly cool on hot days while still allowing in daylight and blend perfectly into the building shell. The portfolio includes sun protection systems for windows and doors in which the curtain is guided by a sturdy zip, a slimline stainless steel cable or discreetly via the end slat. Full integration into the curtain wall is also possible. In addition, heroal also offers horizontal and vertical awnings for use on outdoor roofs.



#### heroal sun protection systems:

- $+ \\ sun \\ protection \\ and \\ Venetian \\ blind \\ solutions \\ for \\ curtain \\ wall \\ shading \\ and \\ all-glass \\ corners \\$
- + optimal shading of all-glass corners by the separate control of the two textile screens
- + textile screen either zip-guided, end slat-guided or cable-guided
- + more than 250 textiles ranging from nearly full transparency to full shading and darkening
- + aluminium components coated with the heroal hwr powder coating for perfect colour matching with the building shell
- $\mbox{+}\xspace$  installation in flush-mounted, surface-mounted or front-mounted boxes
- + narrow guide rails (25 mm), optionally fully plastered
- + optimum textile tensioning even with extreme element dimensions

## **System dimensions**

Description	heroal VS Z	heroal VS Z EM	heroal VS C	heroal VS	heroal VS Z Corner solution
Box type	FME, FMB	FME	FME	FME	FME
Box shapes	45°, 90°, HC N	90°	45°, 90°, HC N	45°, 90°, HC N	90°
Box sizes [mm]	85,95,105,125	85	85,95,105,125	85,95,105,125	105.125
Max. element width [mm]	6,000	2,000	5,000	5,000	3,000
Max. element height [mm]	5,000	2,200	5,000	5,000	3,000
Max. area [m²]	18	4.40	15	15	9
Guide rails	•	•	-	•	•
End slats	Type I, II, III	Type I	Type II	Type II	Type III

## **System features**

Wind-resistant [km/h]	up to 145	up to 65	up to 30	up to 30	to 37
Hail impact class	6	6	6	6	6
Certified ball impact resistance	•	-	-	-	-
Obstacle detection	•	-	•	•	•
Curtain control	But., rem., crank	But., rem.	But., rem.	But., rem.	But., rem.
Drive type	Mo., hand., sol. mo.	Sol. mo.	Mo., Sol. mo.	Mo., hand., sol. mo.	Mo.
Smart Home	Remcont. mo.	-	Remcont. mo.	Remcont. mo.	Remcont. mo.
Installation	on wall/win., con., lint.	clamp. in win. fr.	on wall/win.	on wall/win., con., lint.	Wall, win.
heroal Ready finished element	•	•	•	•	-
heroal C 50 curtain wall system	•	-	-	-	•
heroal OR outdoor roof	•	-	-	-	-
heroal CR outdoor roof	•	-	•	•	-
heroal C 50 WG conservatory	•	-	•	•	•
heroal W 72/W 77 window system	•	•	•	•	•
90° corner solution	•	-	-	-	•

## **Surface coating**

heroal hwr powder coating	•	•	•	•	•
Eloxal coating	•	-	•	•	•
heroal SD	•	•	•	•	•
Les Couleurs® Le Corbusier®	•	•	•	•	•

## **Textile**

Textiles and colour	S	more than 250	more than 250	up to 250	up to 250	more than 250
Opening factor [%]		0/1/3/3.5/4/5/8/10/14				
Reduction	Solar radiation	100	100	75	75	100
<b>up to</b> [%] <sup>2]</sup>	UV radiation	100	100	98	98	100

## **System dimensions**

Description	heroal VS Z Solar	heroal VS Z CS semi-integrated	heroal VS Z CS front-mounted	heroal HS	heroal VB Free
Box type	FME	FME	FME	FME	FMR
Box shapes	90°	20°, 45°, 90°, HC N	20°, 45°, 90°, HC N	90°	90°,HC N
Box sizes [mm]	85, 95, 105	85, 95, 105, 125	85, 95, 105, 125	165	dep. on curt. H and slat W
Max. element width [mm]	3,000	3,000	3,500	5,000	5,000
Max. element height [mm]	3,000	4,000	5,000	5,300	4,500
Max. area [m²]	9	12	15	21	14
Guide rails	•	•	•	•	heroal FS V (sq.), heroal FS R (ro.)
End slats	Type I, II, III	Type I, II, III	Type I, II, III	HS type I, II	-

## **System features**

•					
Wind-resistant [km/h]	up to 145	up to 145	up to 38	to 50	to 60
Hail impact class	6	6	6	-	
Certified ball impact resistance	•	•	•	-	
Obstacle detection	•	•	•	•	
Curtain control	Wirele.	But., rem.	But., rem.	But., rem.	But., rem.
Drive type	Sol. mo.	Mot., sol. mot.	Mot., sol. mot.	Mo.	Mo.
Smart Home	-	Remcont. mo.	Remcont. mo.	Remcont. mo.	Remcont. mo.
Installation	on wall/window	Curtain wall integration	Tranmull. curt. wall	on out. roof / conserv.	on wall/win., tran mull. curt. walls
heroal Ready finished element	•	•	•	•	•
heroal C 50 curtain wall system	-	•	•	-	•
heroal OR outdoor roof	-	-	-	•	•
heroal CR outdoor roof	-	-	-	•	•
heroal C 50 WG conservatory	-	•	•	•	•
heroal W 72/W 77 window system	•	-	•	-	•
90° corner solution	-	-	-	-	•

## **Surface coating**

heroal hwr powder coating	•	•	•	•	•
Eloxal coating	•	•	•	-	•
heroal SD	•	•	•	•	-
Les Couleurs® Le Corbusier®	•	•	•	•	On request

## **Textile**

Textiles and colours / slat colours		more than 250 more than 250		up to 250	up to 100	up to 16
Opening factor [%]		0 / 1	/3/3.5/4/5/8/10	0 / 4	-	
Reduction	Solar radiation	100	100	98	75	90
<b>up to</b> [%] <sup>2]</sup>	UV radiation	100	100	98	98	98

82 | heroal sun protection systems | 83

## heroal VS Z Zip screen system for high wind stability.

The versatile heroal VS Z is an innovative and energy-efficient zip screen system. It is used both in private construction and in medium- and large-scale commercial construction and is particularly suitable for use in schools, offices and residential buildings. The heroal VS Z is installed in front of the window and can provide either translucent sun protection or full shading. By reflecting the sunlight, the system makes it possible to reduce solar radiation by up to 100% without having to do without natural daylight.



## heroal VS Z EM Reversible sun protection system with solar drive.

The heroal VS Z EM (Easy Mount) sun protection system is the clamp-on version of the heroal VS Z textile zip screen system. It can be installed without drilling and can be removed without a trace if needed. The integrated solar-powered drive makes the system ideal for retrofitting and it is also easy to use in heritage listed buildings, rental properties and existing properties. Various clamping support options enable the versatile use of the system in almost all common aluminium, plastic and wood window types.





## heroal VS C Sun protection system with stainless steel cable guide.

The heroal VS C sun protection system comes with a slimline stainless steel cable guide, which makes this version ideal for windows and curtain walls with profiles with a narrow view width. The slender appearance of the entire system perfectly matches with the excellent heroal design language – the high-quality stainless steel cables impress with their minimalistic look. The heroal VS C reduces solar radiation by up to 98%\* (depending on the textile selection).



## heroal VS Textile sun protection system with end slat guide.

Anyone looking for a basic version of the zip-guided heroal VS Z need look no further than the heroal VS sun protection system: one of the differences to the heroal VS Z zip screen system is the curtain guide exclusively via the end slat. This makes this sun protection system ideal for applications in which wind resistance is not a critical factor. The fabric selection can be used to provide either light-transmitting or opaque sun protection that reduces solar radiation by up to 98 %.



84 | heroal sun protection systems | 85

## heroal VS Z corner solution Zip-guided sun protection system for all-glass corners.

The innovative heroal VS Z corner solution consists of two textile screens with zip guide on the sides and a high-quality stainless steel cable guide in the corner area that ensure efficient sun protection, e.g. at all-glass corners. As the curtain is guided with separate end slats, the screens can each be controlled independently. Areas of up to  $9 \text{ m}^2$  per textile screen can be covered, each with a maximum width of 3,000 mm and height of 3,000 mm. When the textile screen is not in use, it disappears in the heroal FME front-mounted box system (size 105 and 125 mm).







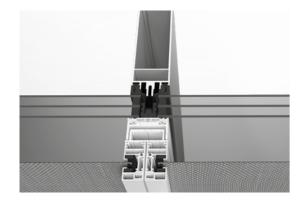




Scan and view film

## heroal VS Z CS Sun protection system semi-integrated in curtain wall.

To seamlessly integrate the heroal VS Z sun protection sys. into tran.-mull. curtain walls, e.g. heroal C 50, we developed the heroal VS Z CS semi-integrated with heroal GR 25 guide rail. The system can be front-mounted on conventional transom-mullion systems with a view width of at least 50 mm as a using standard sun protection bolts. The heroal VS Z CS semi-integrated uses an integration profile as the mounting base that can be fabricated with the curtain wall transoms – saving time on the construction site. heroal VS Z CS semi-integrated is installed near the curtain wall for wind-resistance up to 145 km/h.





Scan and

#### Installation variant:

» heroal VS Z CS surface-mounted - version as front-mounted installation with crossbeams

## heroal VB Free Pre-assembled, self-supporting Venetian blind system.

The heroal VB Free (Venetian blind free) Venetian blind finished element is delivered fully installed on the supporting guide rails and is perfect for transom-mullion curtain walls such as heroal C 50. heroal VB Free is used wherever the load can only be transferred via the guide rails. The self-supporting Venetian blind is suitable for new builds as well as for retrospective installation, as the box is not attached to the curtain wall or masonry. A range of different types of slats (flat slats, flanged slats and Z-slats) are available.



#### Design variants:

- » heroal VB (Venetian blind) well installation
- » heroal VB FM (Venetian blind front mounted) front-mounted installation

86 | heroal sun protection systems | 87

#### Fabric selection

For a pleasant room climate and different needs and requirements, heroal offers a high-quality and diverse selection of textiles: over 250 fabrics are available for selection, with varying colours and light transmittance – from semi-transparent to opaque. All extruded aluminium components are hwr powder-coated with identical colours to the heroal system portfolio.

#### Sergé and Satiné

are made of woven and coated fibre glass – the fibre glass core and the PVC coating make the fabrics particularly smooth and creates a pleasant atmosphere. Depending on the chosen textile, the different levels of transparency range from virtually transparent through to complete darkening.

#### Soltis

retains its shape particularly well. The textile is pulled in both directions under high tension and fixed in place with liquid PVC. The high textile tension makes the fabric ideal for shading large areas and for complete room darkening.

#### Elements SOLIDS

is woven from spun-dyed acrylic fibres and provides optimised performance features in terms of colour stability, resistance level and sun protection. The exclusive "Cleanguard" coating makes these textiles exceptionally waterand dirt-repellent.

#### Flexilight 6002 Opaque

is particularly resistant to UV radiation and has a dirt-repellent texture – so it keeps its good looks even after many years of use. The PVC fabric is phthalate-free, very easy to process and extremely flexible.

#### Trend textiles

For the sun protection systems heroal offers 15 selected trend textiles with short delivery times:



#### "colour design diversity" brochure

The brochure gives you an overview of the available fabric types and colours.



"colour design diversity" brochure

## Complementary solutions. Functional and versatile.



#### heroal VS Z Solar (heroal or Somfy solar drive)

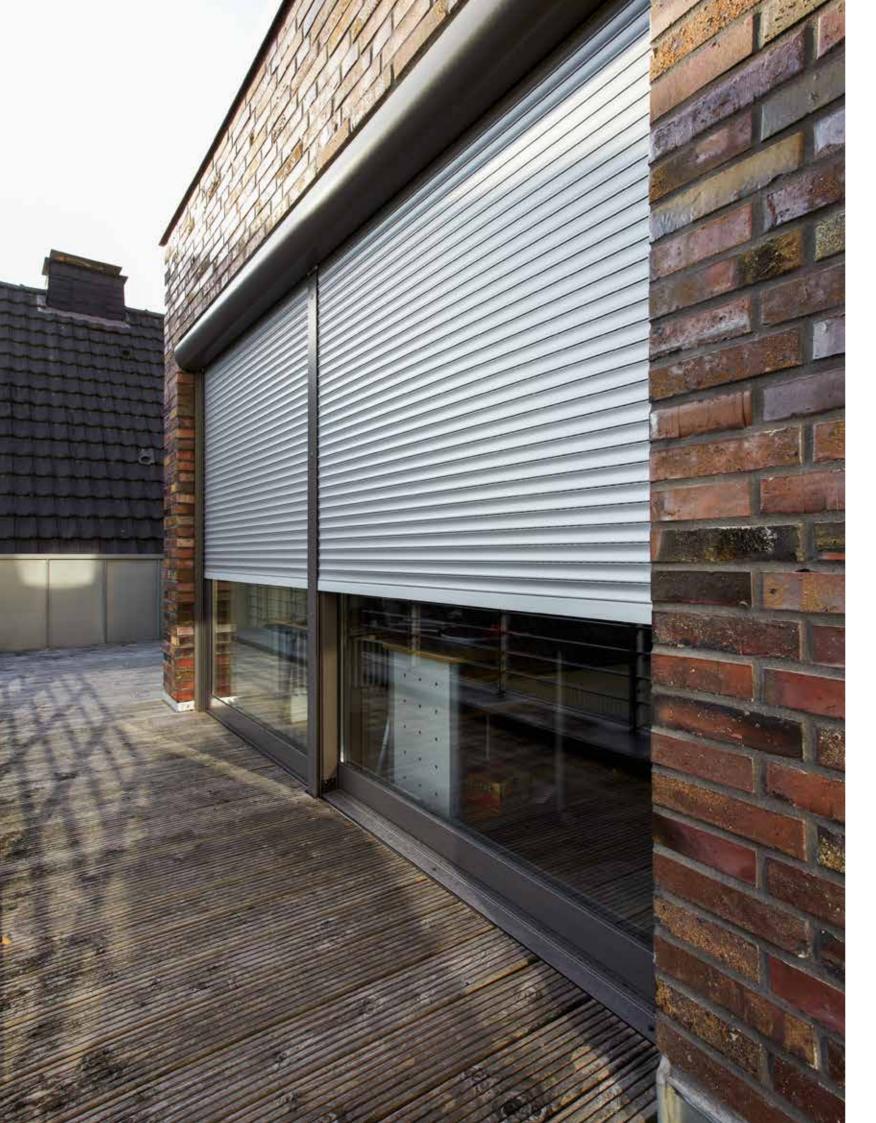
The heroal VS Z Solar sun protection system combines the benefits of an innovative zip-screen system with an integrated solar drive. It is controlled wirelessly via a remote control that can be installed as a wall button. Thanks to the innovative zip system, the heroal VS Z with integrated solar motor is particularly stable in windy conditions (up to 145 km/h). Alternatively, a Somfy drive with 6 Nm or 10 Nm and an external battery is available.



## Sun protection textile assembly and roller shutter finished curtain in Exte and Veka front-mounted box systems

The heroal VS Z textile assembly is preassembled and delivered ready for installation. It can be integrated in the PVC VEKAVARIANT 2.0 front-mounted boxes for renovations, the VEKAVARIANT EPS front-mounted insulated box for new builds and the Exte Exakt XT, Expert XT, Elite XT and Neo XT boxes. After the box is completed, the heroal VS Z textile assembly can be installed in the box and operated in just a few steps (plug and play)

88 | heroal sun protection systems heroal sun protection systems | 89



# Roller shutter systems for greater security and comfort.

heroal roller shutter systems made of aluminium and stainless steel impress with their durability, sustainability and design. The durable roller shutter slats made from recycled materials are coated with a durable 2-layer thick coating, which is even certified for use on ships, and are roll-formed in our own production facilities. Thick walls and medium- to high-density foam filling of the roller shutter slats make them extremely stable and burglar-resistant (up to RC 3) while also ensuring optimum winding behaviour so that even large elements only require small box sizes. Thanks to the wide variety of components and design options, heroal can offer the right solution for almost all construction or building refurbishment projects – whether as a front-mounted, top-mounted or flush-mounted roller shutter and with manual or motorised (also with solar motor) operation and even connection to a smart home system.



#### heroal roller shutter systems:

- + large selection of roller shutter slats made of aluminium and stainless steel
- $\mbox{+}\mbox{ wide}$  range of roll-formed and extruded roller shutter panels
- + harmonious design for linked elements thanks to continuous panel
- + with optional integrated insect screen
- + burglary resistance up to resistance class RC 3
- + small panel boxes thanks to tightly winding slats
- + hail impact up to class 7

## Slat systems

Description	heroal RS 32	heroal RS 37	heroal RS 37 SL	heroal RS 37 RC 2	heroal RS 37 RC 3	heroal RS 38
Covering width [mm]	32	37	37	37	37	38
Nominal thickness [mm]	8.5	8.0	9.5	9.5	9.5	9.0
Fin. curt. weight [kg/m²]	4.8	3.5	5.9	8.8	15.0	4.5
Max. width [mm]	3,500	3,000	4,000	4,200	5,000	3,700
Max. height [mm]	3,500	3,500	4,000	4,000	4,000	3,800
Max. area [m²]	7.5	6.2	9.0	10.5	12.0	8.0
Wind load resistance <sup>1]</sup>	2	1	4	4	6	3
Burglary resistance [RC] <sup>2)</sup>	=	-	SL	RC 2	RC 3	-
Hail impact class <sup>3</sup>	4	4	5	7	7	4
<b>Optimised noise insulation</b> [dB]	+10	+10	+10	+10	+10	+10
Possible overall U-value improvement of up to [%]	42	42	42	41	56	42
Available as heroal Ready finished element <sup>61</sup>	-	•	•	•	•	•
Available as finished curtain	•	•	•	•	•	•
Version	Aluminium	Aluminium	Aluminium	Aluminium	Stainless steel	Aluminium

Description	heroal RS 41	heroal RS 41 SW	heroal RS 42	heroal RS 52	heroal RS 55 SL	heroal RS 53 RC 2
Covering width [mm]	41	41	42	52	55	52
Nominal thickness [mm]	8.5	8.0	9.3	13.5	14.0	14.0
Fin. curt. weight [kg/m²]	3.7	3.7	3.9	4.0	5.0	10.5
Max. width [mm]	3,500	3,500	3,500	4,500	5,000	5,500
Max. height [mm]	3,500	3,500	3,500	3,800	4,000	4,000
Max. area [m²]	7.0	7.0	7.0	9.0	12.0	16.5
Wind load resistance <sup>1]</sup>	2	2	2	4	5	6
Burglary resistance [RC] <sup>2)</sup>	-	-	-	-	SL	RC 2
Hail impact class <sup>3)</sup>	4	4	3	5	5	7
Optimised noise insulation [dB]	+10	+10	+10	+10	+10	+10
Possible overall U-value improvement of up to [%]	43	43	43	41	43	42
Available as heroal Ready finished element	-	•	•	•	•	-
Available as finished curtain	-	•	•	•	•	•
Version	Aluminium	Aluminium	Aluminium	Aluminium	Aluminium	Aluminium

## **Box systems**

Description	Front-mounted panel systems	Flush-mounted panel systems	Security panel systems
Box type	FMR, FME, FMC <sup>8)</sup>	FMB	FMS
Box shapes	20°, 45°, 90°, HC, Q <sup>7)</sup>	20°, 45°, 90°	45°
Box sizes [mm]	125 - 2304)	125 - 205	205
Inspection type	front, bottom	bottom	front, bottom
Insect screen integratable	•	•	-
Anti-push-up device can be integrated	•	•	•
Hail impact class	6-7	-	7
Burglary resistance [RC] <sup>2)</sup>	-	-	•

## Design

Description	heroal RS 32, heroal RS 37, heroal RS 37 SL, heroal RS 37 RC 2, heroal RS 38, heroal RS 41, heroal RS 41 SW, heroal RS 42, heroal RS 52, heroal RS 55 SL, heroal RS 53 RC 2	heroal RS 37 RC 3
hwr powder coating	-	-
2-layer thick coating	•	-
Eloxal coating	+	-
heroal SD	+	-
Les Couleurs® Le Corbusier®6)	1+	-

Description	Front-mounted panel systems	Flush-mounted panel systems	Security panel systems
heroal hwr powder coating	•	•	•
2-layer thick coating	•	•	-
Eloxal coating		-	-
heroal SD	•	•	•
Les Couleurs® Le Corbusier®	•	•	•

92 | heroal roller shutter systems | 93

<sup>&</sup>lt;sup>11</sup> For 2,700 mm element width and a guide with 25 mm insertion depth, for heroal RS 37 RC 2 and heroal RS 37 RC 3 with 40 mm insertion depth, for heroal RS 53 RC 2 with 51 mm insertion depth

<sup>&</sup>lt;sup>2)</sup> SL, the roller shutter slat satisfies technical guideline TR 111 published by the Bundesverband für Rollladen und Sonnenschutz association for roller shutters and sun protection BVRS RC 2/RC 3, the roller shutter slat satisfies DIN 1627

<sup>&</sup>lt;sup>3)</sup> Hail impact class as per VKF test regulations no. 02

<sup>&</sup>lt;sup>4)</sup> Box size 230 mm for FMR 45° only, box size 125 mm not for FMR Q, box size 125 mm not for FMR HC, 125 mm not for FME HC

<sup>&</sup>lt;sup>5)</sup> Depending on the version

<sup>6]</sup> On request

<sup>7)</sup> Box shape Q not available as FME version

<sup>&</sup>lt;sup>8]</sup> FMC box system for 20°, 45° and 90° versions

#### heroal front-mounted roller shutters

heroal front-mounted roller shutter systems with visible box are installed in front of the window. Thanks to the small winding diameter and the large selection of front-mounted boxes in various sizes, the system can be perfectly integrated into the curtain wall. Colour accents can be set thanks to the large selection of colours. The system can be optionally equipped with an integrated insect screen.



## heroal top-mounted roller shutters

Top-mounted roller shutter systems are installed on top of the window and offer exceptional insulation and easy installation, heroal roller shutter curtains can be combined with all standard top-mounted boxes and mounted on window systems. Special applications such as lift and slide doors are also possible.



## heroal security roller shutters

heroal security roller shutters are extremely stable and resilient roll-formed stainless steel roller shutter slats certified up to resistance class RC 3 in accordance with DIN 1627. heroal RS 37 RC 2 and heroal RS 37 RC 3 systems can be implemented with certified element dimensions of a maximum width of up to 2,550 mm and a maximum height of 2,515 mm. The heroal RS 37 RC 2 system is also available in an aluminium version.



## Complementary solutions. Functional and versatile.



### heroal IS (insect screen system)

The high-quality heroal system solution is designed for the space- and material-saving integration of an insect screen into the roller shutter box and can be installed easily, quickly and economically. The insect screen is installed together with the roller shutter directly during the installation of the box and is fitted with a special guide rail for easy and reliable operation by hand independent of the roller shutter.



#### heroal rescue powered by Kaiser Nienhau (2nd escape route)

The heroal rescue 12 V emergency power control system powered by Kaiser Nienhaus with an integrated lithium-ion battery enables the reliable operation of heroal roller shutter systems in the event of a power failure. This allows the roller shutter curtain to be guickly and easily raised even in case of fire.



#### Solar motors for heroal roller shutter systems

The option of integrating Somfy or Kaiser Nienhaus solar motors enables the extremely energy-efficient operation of heroal roller shutter systems with a solar panel, without a separate power supply. The systems can be controlled using a hand-held or wall-mounted wireless transmitter. There is also the option of combining the roller shutter system with a solar-based wireless wind/sun sensor so that the roller shutter curtain can be automatically raised and lowered as the weather situation changes.

94 | heroal roller shutter systems | 95



## Roller shutter systems for more clearance.

Efficient heroal roller door systems are distinguished by their first-class materials, technical solutions down to the last detail and a wide range of design options. Whether roller doors, roller grilles or overhead doors, a high-quality aluminium alloy is used as the material. heroal roller door systems are TÜV-tested and CE-certified and achieve top results in terms of opening and closing speed, energy-efficiency, service life, protection against hail and storms and soundproofing. The high-quality heroal hwr powder coating and the 2-layer thick coating ensure the weather resistance and durability of the roller door systems.



#### heroal roller door systems:

- + roller and overhead doors and roller grilles
- + TÜV-tested and CE-certified
- + wide range of equipment options and design variants
- + high wind load and hail impact resistance
- + optimised noise insulation

heroal heroal

## **System dimensions**

9													
Curtain	Roll-formed						Extruded						
heroal roller door system	heroal heroal heroal RD 55 RD 75 OD 75		heroal RD 75 E			heroal RG 90							
Installation type	Closed installation	Open installation	Closed installation	Open installation	Open installation with gear motor	Installation with lateral drive	Installation with centre drive	Closed installation	Open installation	Open installation with gear motor	Closed installation	Open installation	Open installation with gear motor
Covering width [mm]	5	5		75		7	5	75			91		
Nominal thickness [mm]	1	4		20		2	0		20			14	
Max. clear width [mm]	3,5	500	5,750	6,0	000	2,750	4,000	4,7	750	5,000		4,500	
Max. clearance [mm] <sup>1]</sup>	3,0	000	3,750	5,0	000	2,500	4,000	3,750	4,0	000	3,250	4,	000
Max. area [m²]	10	).5		16		6.8	16		21		14.6	1	18
Min. lintel height [mm] <sup>6]</sup>	231/ 252	293	305/ 367	29	73	65	100	367	4(	05	305	320	390

	Roller door slats									
Description	heroal RD 55	heroal RD 75	heroal RD 75 TL (Trend Lines) with grooves	heroal RD 75 E (Extruded)	heroal RD 75 see- through and grille profile <sup>5]</sup>	heroal RD 75 ventilation profile <sup>5)</sup>	heroal RG 90			
Covering width [mm]	55	75	75	75	75	77	91			
Nominal thickness [mm]	14	20	20	20	20	15	14			
Max. width [mm]	3,500	6,000	6,000	6,000	6,000	6,000	4,500			
Max. height [mm]	3,000	5,000	5,000	5,000	-	-	4,000			
Max. area [m²]	10.5	16	16	21	-	-	18			
Fin. curt. weight [kg]	5.0	5.7	5.7	10.0	-	-	8.0			

## **System features**

		Roll-formed	Extruded		
Description	heroal RD 55	heroal RD 75	heroal OD 75	heroal RD 75 E	heroal RG 90
Wind resistance class <sup>3]</sup>	1	4	4	4	-
Hail impact class <sup>4)</sup>	5	6	6	6	-

## **Versions**

		Roll-formed	Extruded		
Description	heroal RD 55	heroal RD 75	heroal OD 75	heroal RD 75 E	heroal RG 90
Visual, grille and ventilation profiles	-	•	•	•	-
Cabin hook locking device	-	•	-	-	-
Anti-push-up device	-	•	-	•	•
Hollow section end slat	•	•	-	•	-
Sliding barrel system	-	•	-	•	-
Anti-fall device	•	•	-	•	•
Emergency handle	•	•	-	•	•

## Design

		Roll-formed	Extruded		
Description	heroal RD 55	heroal RD 75	heroal OD 75	heroal RD 75 E	heroal RG 90
heroal hwr powder coating	-	-	-	•	•
2-layer thick coating	•	•	•	-	-
Eloxal coating	-	-	-	-	-
heroal SD	-	-	-	•	-
Les Couleurs® Le Corbusier®	-	-	-	•	•

<sup>1)</sup> Overall height (mm) for heroal OD 75

98 | heroal roller door systems heroal roller door systems | 99

<sup>&</sup>lt;sup>2)</sup> For 2,500 mm curtain height

 $<sup>^{\</sup>rm 3J}$  Wind resistance class acc. to DIN EN 13241 at a clear width of 3,000 mm

<sup>&</sup>lt;sup>4</sup> Hail impact class as per VKF test regulations no. 02
<sup>5</sup> The number of see-through, grille and ventilation profiles in a roller door is limited
<sup>6</sup> Specifications per box size

## heroal RD 55 roller door Narrow system with small barrel diameter.

The roll-formed slat of the heroal RD 55 is a slim, tightly winding roller door slat for element widths up to 3,500 mm. The system can be installed either open or in a closed box system. With a maximum curtain height of 2,500 mm, the barrel diameter on an 8K axle with a diameter of 70 mm is around 217 mm and is therefore suitable for box sizes from 230 mm.



### heroal RD 75 roller door Space-saving solution for large roller doors.

This system with a slat covering width of 75 mm provides a huge range of products for use in roller doors. Thanks to its numerous slat and equipment variants, the system supports tailor-made solutions for every installation situation. The closed installation of the roller door in the panel box creates an elegant design. Thanks to the wide range of equipment options, this type of installation is ideal for both private and commercial use.



## heroal OD 75 overhead door Overhead door for garages with a low lintel height.

This system with a slat covering width of 75 mm enables the use of a huge range of products in overhead doors. Thanks to its numerous slat and equipment variants, the system supports tailor-made solutions for every installation situation. The centre drive makes overhead doors with large formats possible even with low lintel heights of just 135 mm. Thanks to the central power transmission on the curtain, the heroal OD 75 overhead door with element dimensions of up to  $4,000 \times 4,000 \text{ mm}$  can be operated safely and reliably – even under heavy loads.



## heroal RG 90 Roller grilles as secure solution for commercial buildings.

The heroal RG 90 roller grille system is perfect for commercial buildings with high security requirements, such as banks and jewellery shops. The system also allows operators to check underground car parks, for example, while simultaneously allowing access and the exchange of air. The curtain consists of fully extruded profiles, making it extremely stable. Thanks to their closed installation in the panel box, the roller grilles can be elegantly adapted to the existing architecture. Various slat designs are available.



100 | heroal roller door systems







## simply better spaces for life.

simply better spaces for life: with a coordinated system portfolio of windows, curtain walls, doors and shading, heroal provides integrated solutions for building shells as well as indoor and outdoor areas that combine sustainability, security, comfort and exceptional design and architectural standards. Premium process and fabrication efficiency together with a comprehensive 360° service offer enable heroal to cost-effectively implement forward-looking residential and commercial construction projects.



Further references at heroal.com

#### Office & Administration

- 104 PhönixWERK
- 105 Kotelna Park II
- 106 IT Campus
- 107 AFI Vokovice

#### Industry & Trade

- **108** Revaler Spitze
- **109** Stellinger Höfe
- 110 Mühlencafè Ottendorf
- 111 ovesco Endoskopy AG

#### Hotel & Residential

- 112 Seaside villa
- 113 Villa Brno
- **114** Residence Garden Towers
- **115** V-Tower

#### **Education & Culture**

- 116 Folkwang Library
- 117 Gymnasium Winsen secondary school
- 118 Fritz-Henßler-Berufskolleg vocational school
- 119 Studentenwerk Göttingen

102 | References



## Office & Administration: PhoenixWERK

Dortmund, Germany

#### Project info

- » owner: SHA Scheffler Helbich Architekten GmbH
- » arch.: SHA Scheffler Helbich Architekten GmbH
- » fab.: Metallbau Lamprecht GmbH
- » year of comp.: 2020





#### heroal sys.

- » heroal C 50 HI curt. wall sys.
- » heroal W 72 window system with heroal WF 100 i

Project report with additional photos

- » heroal S 77 lift and slide system
- » heroal D 72 door system



### Office & Administration: Kotelna Park II

Prague, Czech Republic

#### Project info

- » owner: Jednatel Richard Henry Stewart Ness
- » architect: Chapman Taylor s.r.o.
- » fabricator: Retre s.r.o.
- » year of comp.: 2020
- » certification: BREEAM "Very good" certified

#### heroal sys.

- » heroal C 50 HI curtain wall system
- » heroal W 72 window system
- » heroal W 72 VF ventilation flaps in heroal SD wood look
- » heroal D 72 door system







Project report with additional photos



104 | Office & Administration | 105









Project report with

Office & Administration: IT Campus

Paderborn, Germany

#### Project info

- » building owner: Argali Real Estate GmbH
- » architect: Ferdinand and Ferdinand Architects
- » fabricator: Scheffer Metallbautechnik GmbH
- » year of completion: 2020

#### heroal sys.

- » heroal C 50 curtain wall system
- » heroal W 72 window system
- » heroal D 72 door system







### Office & Administration: AFI Vokovice

Prague, Czech Republic

#### Project info

- » building owner: AFI Europe
- » architect: Architektenbüro DAM
- » fabricator: Sipral a. s.
- » year of completion: 2018
- » certification: LEED Platinum certified

#### heroal systems

- » heroal C 50 curtain wall system
- » heroal W 72 window system
- » heroal W 72 VF ventilation flap
- » heroal VS Z sun protection system
- » heroal D 72 door system

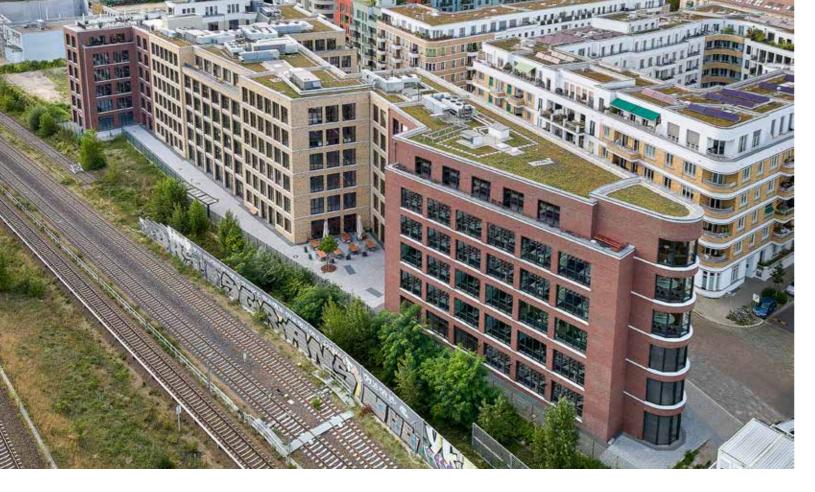
#### Services and special solutions

» unitised curtain wall as special design



Scan and view film

Project report with additional photos



## **Industry & Trade: Revaler Spitze commercial complex**

Berlin, Germany

#### Project info

- » building owner: VARENTA Holding GmbH
- » architect: VARENTA Holding GmbH, Gero Diercks and Christian Schönberger
- » fabricator: Schreinerei&Metallbau Wagner GmbH
- » year of comp.: 2021

#### heroal sys.

- » heroal C 50 curtain wall system
- » heroal W 72 window system
- » heroal D 72 door system









Project report with additional photos









Project report with

**Industry & Trade: Stellinger Höfe** 

Hamburg, Germany

#### Project info

- » owner: GSG Stellinger Hof mbH
- » architect: Mennerich BauProjektManagement GmbH
- » fabricator: Hilgefort & Götting Metall- und Fensterbau GmbH
- » year of completion: 2020/2021
- » certification: DGNB Gold certified

#### heroal sys.

- » heroal C 50 curtain wall system
- » heroal W 72 i window system
- » heroal D 72 door system
- » heroal VS Z sun protection system
- » heroal C 50 TC canopy system



108 | Industry & Trade



## Industry & Trade: Mühlencafé Ottendorf

Ottendorf-Okrilla, Germany

#### Project information

- » building owner: Ottendorfer Mühlenbäcker GmbH
- » architect: Dr. Braun & Barth Freie Architekten Dresden
- » fabricator: Köhler Aluglasbau
- » year of completion: 2022

#### heroal sys.

- » heroal C 50 curtain wall system
- » heroal W 72 window system
- » heroal D 72 door system







## Industry & Trade: ovesco Endoskopy AG

Tübingen, Germany

#### Project info

- » building owner: OVESCO Endoscopy AG» architect: METARAUM Architekten BDA
- » fabricator: epplerfenster GmbH & Co.KG
- » year of completion: 2019

#### heroal systems

- » heroal W 72 window system
- » heroal VS Z sun protection system







110 | Industry & Trade Industry & Trade | 111



## Hotel & Residential: Seaside villa

France

#### **Project information**

» fabricator: Armoral Menuiserie Aluminium

#### heroal systems

- » heroal W 72 window system
- » heroal S 77 SL lift and slide system





## Hotel & Residential: Villa Brno

Brno, Czech Republic

#### **Project information**

- » architect: Fandament Architects s.r.o.
- » fabricator: Josef Siska AL Construct
- » year of comp.: 2020

#### heroal systems

- » heroal C 50 curtain wall system
- » heroal W 77 window system
- » heroal D 72 door system
- » heroal S 77 SL lift and slide system







112 | Hotel & Residential | 113



## Hotel & Residential: Residence Garden Towers

Prague, Czech Republic

#### Project info

- » building owner: Central Group a. s.
- » architect: Central Group a. s.
- » fabricator: SLOVAKTUAL s. r. o.
- » year of completion: 2017

#### heroal systems

- » heroal W 72 window system
- » heroal S 77 lift and slide system
- » heroal D 72 door system

#### Services and special solutions

- » costing support
- » production support from heroal application engineers
- » project-specific testing



Project report with





### Hotel & Residential: V-Tower

Prague, Czech Republic

#### **Project information**

- » building owner: PSJ INVEST, a. s.
- » architects: Radan Hubička Architectural Studio
- » fabricator: Sipral a. s.
- » year of completion: 2017

#### heroal sys.

- » heroal W 72 window system
- » heroal S 77 SL lift and slide system

#### Project report with additional photos

- Services and special solutions

  » development of project profiles
- » development of expansion frame construction
- » development of crossbar profiles
- » development / optimisation of installation and structural attachments
- » project-specific packing sizes
- » development of insert frame design in heroal S 77 SL  $\,$
- » project-specific verification from ift Rosenheim

114 | Hotel & Residential | 115



## **Education & Culture: Folkwang Library**

Essen, Germany

#### Project info

- » building owner: State Ministry of Construction and Real Estate Management of NRW (with the support of the Alfried Krupp von Bohlen und Halbach Foundation)
- » architect: Max Dudler Architekten
- » fabricator: Wigger Fenster + Fassaden GmbH
- » year of completion: 2013



#### heroal systems

» heroal C 50 curtain wall system



## **Education & Culture: Secondary school**

Winsen (Luhe), Germany

#### **Project information**

- » architect: JUP Architektur
- » fabricator: BEKRU Werke Fenster- und Türen-Herstellung und Vertriebs GmbH
- » year of completion: 2021

#### heroal systems

- » heroal C 50 curtain wall system
- » heroal W 72 window system
- » heroal D 72 door system









## Education & Culture: Fritz-Henßler-Berufskolleg

#### Dortmund, DE

#### Project info

- » building owner: Stadt Dortmund Sondervermögen GVVF
- » architects: SSP Architekten
- » fabricator: Tesche Metallbau GmbH
- » year of comp.: 2018

#### heroal sys.

- » heroal C 50 curtain wall system
- » heroal W 72 window system
- » heroal D 72 door system







Project report with additional photos

## **Education & Culture: Studentenwerk Göttingen**

Göttingen, Germany

#### **Project information**

- » building owner: Studentenwerk Göttingen
- » architect: LIMA Architekten BDA Lisa Bogner und Tobias Manzke Part GmbB
- » fabricator: Pistorius Türen- und Fensterbau GmbH
- » year of completion: 2020

#### heroal systems

- » heroal D 82 FP fire protection door system
- » heroal C 50 curtain wall system
- » heroal W 72 window system
- » heroal D  $65\,\mathrm{C}$  SP door system with smoke protection requirement
- » heroal D 72 door system







118 | Education & Culture

