Maximum flexibility, security and energy-efficiency with the roller shutter systems for windows, patio doors and (lifting-)sliding doors



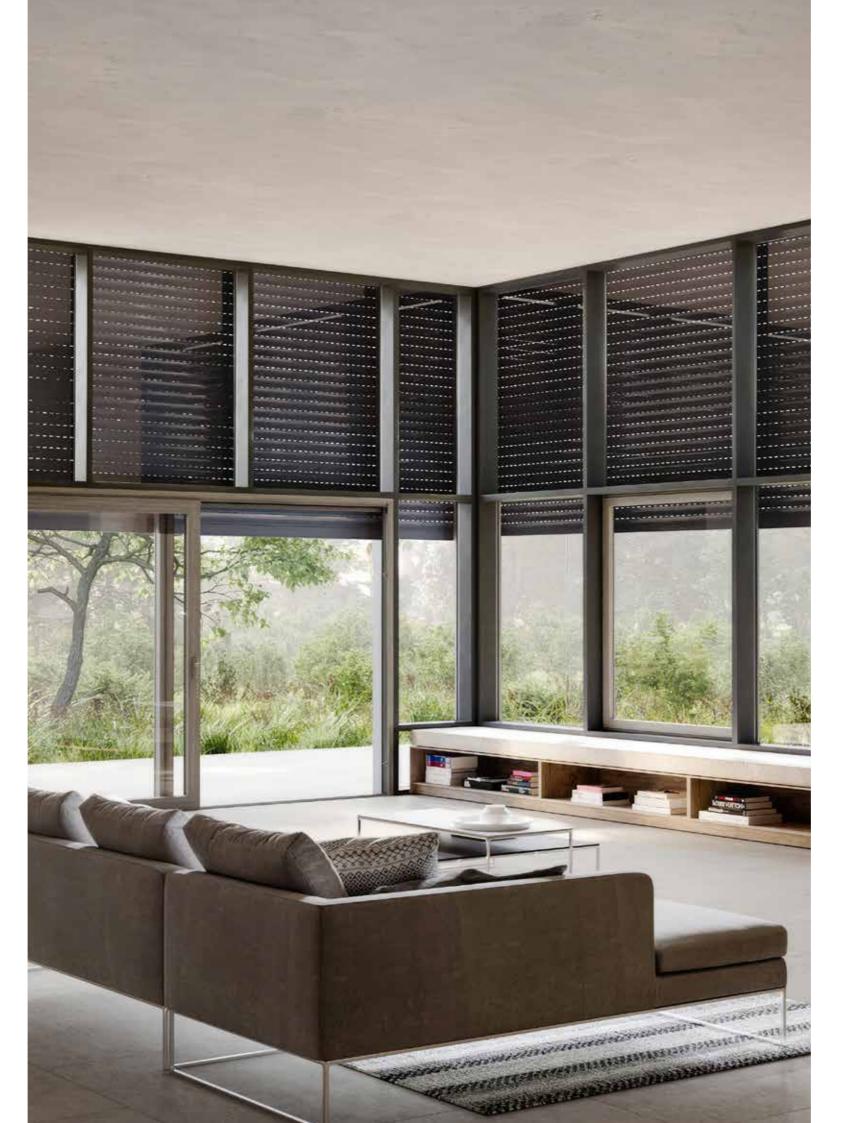


Extremely robust and energy-efficient: heroal roller shutter systems

Premium materials, solutions that are technically coordinated down to the last detail and a wide range of design options are what distinguish the efficient heroal system solutions. For decades, heroal has been a reliable partner for architects, planners, fabricators and builders with innovative aluminium and aluminium composite solutions for the building shell.

Architects and planners value the huge variety of design options, while heroal specialist partners benefit from the economical and efficient heroal system solutions and builders are able to realise their specific preferences with a reliable system.

heroal roller shutter systems impress across the board: the aluminium and stainless steel materials used make heroal roller shutter systems extremely durable, low-maintenance and robust. They enable opening widths that are simply not possible with other materials – without having to forego high wind load resistance. Depending on the version used, they provide a high level of burglary resistance up to resistance class RC 3. They are hail- and weather-resistant, enhance soundproofing and impress with their exceptionally quiet operation. heroal roller shutter systems also impress when it comes to energyefficiency, as they have a positive impact on a building's heat insulation. What's more, a wide range of permanently colourfast coatings provide a huge amount of design freedom.



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heroal roller shutter systems

Maximum flexibility, security and energy-efficiency with aluminium and stainless steel roller shutters

heroal roller shutter slats

are available in the Mini, Maxi and Safe versions to provide the matching solution for every requirement. The huge selection of different systems, high-quality materials and excellent design freedom means that there are virtually no limits to the potential applications.

> Page 06

heroal panel systems

offer maximum flexibility for every installation situation and every application with a variety of shapes, sizes and colours - as well as providing exceptional stability. > Page 10



heroal end slats

are available in a range of versions to provide the right end slat for every roller shutter slat. When it comes to design, the heroal portfolio offers smooth as well as angled end slats.

> Page 16

heroal roller shutter systems

As the inventor of the foamed "heroal Selecta" roller shutter slat in 1969, the family-run company is a pioneer that set a new benchmark in the industry. Ever since, heroal has continuously expended its assortment of high-quality and versatile roller shutter systems. With its broad portfolio of roller shutter slats, front-mounted and flush-mounted panel systems, guide rails and end slats, heroal has the perfect solution for virtually every new-build and renovation project.

Efficient fabrication and installation

When developing and advancing roller shutter systems, timesaving and easy fabrication and installation are the top priority for heroal. This is made possible through standardised processes, the use of common parts and well-designed construction details. For maximum flexibility in fabrication, heroal roller shutter systems are available as systemware, finished curtains or as prefabricated heroal Ready finished elements.

Greater comfort and security

heroal roller shutter systems provide effective protection from glare, heat and prying eyes. They support thermal insulation in the summer and winter, which helps to save energy. heroal roller shutter systems also help to reduce the noise level. The option of integrating an insect screen as well as various types of operation – from manual to motor-operated as well as the connection to a Smart Home system – helps to provide even greater comfort. Where greater security is required, heroal roller shutter systems are also available as burglary resistant variants.

Outstanding quality for versatile applications

systems. > Page 16 heroal roller shutter systems impress with their exceptional durability and weather resistance. The roller shutter slats that are roll-formed in our in-house production department are manufactured from extremely robust, recycled aluminium. What's more, heroal roller shutter slats are also available in stainless steel. Thick walls and medium- to high-density foam filling make heroal roller shutter slats extremely stable while also ensuring optimal winding behaviour so that even large elements only require small box sizes.

Design freedom

There are virtually no limits to the design of heroal roller shutter systems. The high-quality heroal hwr powder coating of the extruded components as well as the durable heroal 2-layer thick coating of the roll-formed components make heroal roller shutter systems perfect for individual designs. Both types of coating are perfectly matched for building shells that are seemingly cast from the same mould. Panel box systems available in different designs complete the design options. These features turn heroal roller shutters into an aesthetic highlight on any building.



heroal roller shutter slats

Mini roller shutter slats

Mini roller shutter slats are roller shutter slats with coverage widths of 32 to 42 mm in the heroal portfolio. Thanks to the high-quality aluminium alloy and outstanding wind-resistance, heroal Mini roller shutter slats are also suitable for use in large elements. What's more, they set themselves apart with their high-quality and durable coating: the heroal 2-layer thick coating is even certified for maritime use and is available in numerous colours. As an additional design element, heroal Mini roller shutter slats are available with and without light slits. The comprehensive portfolio contains the perfect Mini

roller shutter slat for every application. For instance, the heroal RS 37 roller shutter slat impresses with its exceptional winding properties, while the RS 37 SL (Safe Light) roller shutter slat was developed for increased safety requirements thanks to the greater thickness of the materials used.

heroal roller shutter slats

Maxi roller shutter slats





heroal RS 52

heroal RS 55 SL

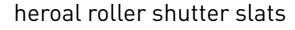








heroal RS 38



Safe roller shutter slats



heroal RS 41

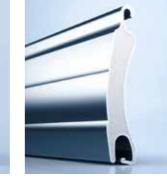


heroal RS 41 SW



heroal RS 42





heroal RS 37 RC 2

heroal RS 37 RC 3



heroal RS 53 RC 2

The heroal Maxi roller shutter slats are slat versions with coverage widths of 52 or 55 mm, which are particularly popular in the new-build segment. They are ideal for large curtains and impress with outstanding wind load properties. The huge selection of colours provides countless options for designing the Maxi roller shutter slats.

The heroal Safe roller shutter slats are used in security roller shutters. They impress with their outstanding stability thanks to exceptionally robust wall thicknesses and high-density foam filling. This also makes them suitable for large roller shutter curtains. The different versions with coverage widths of 37 and 53 mm support flexible applications. When used in the heroal Safe porch unit, they are certified in line with RC 2 or RC 3 as per DIN 1627.

heroal roller shutter slats

System features and comparison

	heroal Mini roller shutter slats						heroal Maxi roller shutter slats her			roal Safe roller shutter slats		
Description	heroal RS 32	heroal RS 37	heroal RS 37 SL	heroal RS 38	heroal RS 41	heroal RS 41 SW	heroal RS 42	heroal RS 52	heroal RS 55 SL	heroal RS 37 RC 2	heroal RS 37 RC 3	heroal RS 53 RC 2
3D illustration									2			
2D illustration			20 20 20 20 20 20 20 20 20 20	Be of the second			27 9,3			P.5		
Version	Aluminium	Aluminium	Aluminium	Aluminium	Aluminium	Aluminium	Aluminium	Aluminium	Aluminium	Aluminium	Stainless steel	Aluminium
Coverage width/nominal thickness (mm)	32/8.5	37/8.0	37/9.5	38/9.0	41/8.5	41/8.0	42/9.3	52/13.5	55/14.0	37/9.5	37/9.5	51/14.0
Max. width/height (mm)	3,500/3,500	3,000/3,500	4,000/4,000	3,700/3,800	3,500/3,500	3,500/3,500	3,500/3,500	4,500/3,800	5,000/4,000	4,200/4,000	5,000/4,000	5,500/4,000
Max. area (m²)	7.5	6.2	9.0	8.0	7.0	7.0	7.0	9.0	12.0	10.5	12.0	16.5
Finished curtain weight (kg/m²) $^{1)}$	4.8	3.5	5.9	4.5	3.7	3.7	3.9	4.0	5.0	8.8	15.0	10.5
With/without light slits	• / •	• / •	• / •	• / •	• / •	• / •	• / •	• / •	• / •	• / •	- / •	• / •
Wind resistance class ²⁾	2	1	4	3	2	2	2	4	5	4	6	6
Optimised noise insulation (dB) ³⁾	+10	+10	+10	+10	+10	+10	+10	+10	+10	+10	+10	+10
Foam filling (medium-density/high-density)	• / -	• / -	• / -	• / -	• / -	• / -	• / -	• / -	• / -	- / •	- / •	- / •
Hail impact class ⁴⁾	4	4	5	4	4	4	3	5	5	7	7	7
Burglary resistance (RC) ⁵⁾	-	-	SL	-	-	-	-	-	SL	RC 2	RC 3	RC 2
Roller shutter slats for 1 metre curtain height	32	27	27	27	25	25	24	20	18	27	27	20
2-layer thick coating	•	•	•	•	•	•	•	•	•	•	-	•

Weight incl. end slat
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 52 RC 2 and heroal RS 52 RC 3 with 51 mm insertion depth

 With a 100 mm air gap between the roller shutter curtain and the insulating glass pane, the noise insulation value increases by up to 10 dB
Hail impact class as per VKF test regulations no. 02
SL, the roller shutter slat satisfies technical guideline TR 111 published by the Bundesverband für Rollladen und Sonnenschutz assoc Hail impact class as per VKF test regulations no. 02 SL, the roller shutter slat satisfies technical guideline TR 111 published by the Bundesverband für Rollladen und Sonnenschutz associ-ation for roller shutters and sun protection BVRS RC 2/RC 3, the roller shutter slat satisfies DIN 1627 RC 2/RC 3, the roller shutter slat satisfies DIN 1627

heroal panel systems

heroal FMR and heroal GKSE roll-formed front-mounted panel systems

heroal front-mounted panel systems are ideal for retrofitting in the window reveal or on the curtain wall. The are easy to install, improve heat insulation by eliminating thermal bridges and their soundproofing ensures greater comfort. Thanks to their straight-edged design and fantastic design freedom, they can be harmoniously integrated into the building shell. The heroal FMR roll-formed flush-mounted boxes are available with a 20°, 45° and 90° chamfer as well as guarterand half-round versions to provide distinct optical highlights and increase the incidence of light inside the building as required.

For instances in which specific requirements are placed on stability, heroal developed the heroal GKSE front-mounted box. heroal GKSE consists of, among other things, panels with stable strip thicknesses manufactured from a high-quality aluminium alloy as well as panel caps made from robust diecast aluminium. This makes heroal GKSE the perfect solution for particularly large roller shutter and roller door elements.



heroal FMR 20°



heroal FMR 45°



heroal FMR 90°



heroal FMR Q



heroal FMR HC

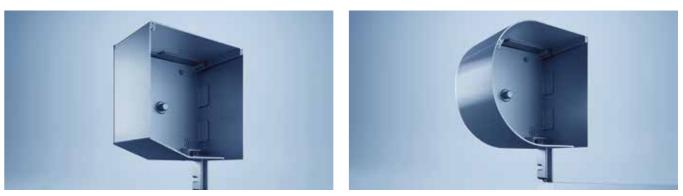


heroal GKSE

heroal panel systems

heroal FME extruded front-mounted panel systems

The heroal FME extruded front-mounted panel system is the perfect solution in cases where greater requirements are placed on stability and security. heroal FME is available in different versions: in a cubic design with 20°, 45° and 90° chamfer as well as in a half-round design. The large selection of colours offers countless opportunities for customisation. Installed in the window reveal or on the curtain wall, the frontmounted panels can either subtly blend in or act as a visual



heroal FME 20°



heroal FME 45°



heroal FME 90°

highlight in the building shell. No direct connection to the interior is necessary, which prevents thermal bridges. The variant with sliding close enables easy removal if maintenance becomes necessary. The inspection panel can be fastened in a decorative strip on the side. All screw connections are concealed to create a particularly attractive look.

heroal FME HC



heroal FME 20° SC, sliding close detail



heroal FME 90° SC, sliding close detail

heroal panel systems

heroal FMC combined roll-formed and extruded front-mounted panel system

The new heroal FMC (front mounted combination) panel box system is a combination of roll-formed and extruded panel. It is available in box sizes 137 to 180 mm and is compatible with heroal FME 20°, 45° and 90° box shapes. heroal FME panels from the current portfolio can be used (standard panel, W panel and SC panel). The new combination box for installing front-mounted systems in the reveal was specifically developed for applications with a visible front extruded panel that required a more economical solution compared to the completely extruded system. The roll-formed and extruded

panel are connected using an adapter profile, which ensures that the look of the front panel view is identical to that of the heroal FME panel box system. The combination box system is suitable for various box shapes and sizes. Four universal heroal FMC panels for a whole range of box shapes together with the use of an adapter profile provide maximum flexibility.

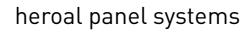
heroal FMC 20°



heroal FMC 45°



heroal FMC 90°



heroal FMB flush-mounted panel system and heroal FMS security panel system

Invisibly integrated in the curtain wall, the heroal FMB flushmounted panel systems combine a harmonious curtain wall appearance with all the functional benefits. The huge selection of plaster-base profiles enables the versatile use of heroal FMB flush-mounted panels in new-build as well as renovation projects. As the flush-mounted panels are fully integrated into the curtain wall, there are no thermal bridges to the interior. heroal FMB is installed in the lintel. A stable, extruded inspection panel is always accessible from the outside.



heroal FMB 20°



heroal FMB 45°



heroal FMB 90°

12 | heroal roller shutter systems

The heroal FMS extruded security panel system offers exceptional burglary resistance thanks to its thick walls, security catches that can only be opened with a special key and steel panel caps, among other features. They can be used to install security roller shutters in resistance classes RC 2 and RC 3.



heroal FMS 45°

heroal panel systems

System features and comparison

Version	Front-mounted panel system heroal FMR	heroal FME front-mounted panel systems	heroal FMC front-mounted panel systems	heroal FMB flush-mounted panel systems	Security panel systems	GKSE front- mounted panel systems
Box sizes	125, 137, 150, 165, 180, 205, 230 ¹⁾	125, 137, 150, 165, 180, 205 ^{2]}	137, 150, 165, 180	125, 137, 150, 165, 180, 205	205	205, 230, 254, 300
Box shapes	20°, 45°, 90°, Q, HC	20°, 45°, 90°, HC	20°, 45°, 90°	20°, 45°, 90°	45°	45°
Number of panel parts	2	3/4	3/4	3	3	2
Insect screen can be integrated	•	•	•	•	-	-
Anti-push-up device (can be integrated)	•	•	•	•	•	•
Max. burglary resistance	-	SL	-	SL	RC 3	-
Hail impact class	6	7	7	-	7	5
hwr powder coating	•	•	•	•	•	-
2-layer thick coating ³⁾	•	-	•	-	-	•
heroal SD	•	•	•	•	•	•
Les Couleurs® Le Corbusier	•	•	•	•	•	•

1) Box size 230 only with a box shape of 45°

2) The heroal FME 20° and heroal FME 90° panel systems with sliding close (SC) are available in box sizes 137, 150, 165, 180

3) heroal FMR panel systems can be coated with the heroal RAL hwr powder coating as well



heroal end slats

Wide range of versions for different designs



Maxi end slat



Maxi RR angled end slat incl. angled end slat profile 31

The end slats manufactured from extruded aluminium are available as smooth end slats (with and without rubber seal), angled end slats and Safe end slats in a wide range of versions. Depending on requirements, a concealed backstop, stopping block, or backstop with angled end slat can be selected. The backstop function ensures that the end slat is not drawn into the panel box. For motors with automatic end position detection for torque, it also serves as the top end position. The optional flat steel slide-in unit increases the weight during manual operation. Different end slats for Mini and Maxi slats ensure a stable and visually appealing completion of the roller shutter curtain. All end slats are coated with highly weather-resistant heroal hwr powder coating, which is available in countless shades.

heroal's new platform for angled end slats as clockwise and counterclockwise roller applications in top- and frontmounted boxes supports the easy and high-quality installation of heroal roller shutter systems. The mounting geometry of the end slats is designed such that the angled profile can be used for both basic end slat profiles (Mini and Maxi). To support easy installation, the basic and angled profile are simply clipped together. The angle attached at the bottom allows the end slat to sit almost flush with the opening of the box system for a clean finish. This means that the end slat is not suspended in the window's viewing area.

heroal guide rails

Secure solutions for all installation situations



heroal guide rail HTF



Guide rail F-HTF-K 20-DRP including weather seal

heroal offers a huge variety of guide rails for heroal Mini, Maxi and Safe roller shutter systems as well as integrated insect screen systems for designing the perfect solution for every installation situation. The heroal portfolio offers solutions with different chamber depths that can be used to respond to different wind load class requirements. What's more, the centre columns as well as the guides with distance are available for selection. The stable extruded rails made of highquality aluminium are equipped with rolled-in inserts for a stable roller shutter curtain. Weather strips made of soft PVC, hard PVC or brush inserts ensure a reliable, quiet curtain operation. The extensive selection of different guide rails as well as the highly weather-resistant heroal hwr powder coating provides maximum design freedom.

heroal DRP (Driving Rain Proof) is a new platform of driving rain proof guide rails whose different versions allow it to be used for a wide range of building requirements. The resistance to driving rain is achieved by a Norseal® sealing tape. As a result, the heroal DRP guide rails are certified up to 600 Pa. The heroal DRP guide rails are installed on the panel frame of the window system. They are compatible with the panel caps of the heroal FMR, heroal FME, heroal FMB and heroal FMC panel box systems. This means that they can also be used in combination with insect screen tenter frames or swing doors from the heroal IS system.

What's more, a range of different spacer profiles are available to respond to individual requirements on site. For example, this enables thicker insulation to be used behind the frontmounted box.

heroal security roller shutters

heroal Safe security roller shutters

The heroal Safe security roller shutter system satisfies the extremely high requirements for security roller shutters in resistance classes RC 2 and RC 3 as per DIN EN 1627. This is ensured by the clever construction together with burglary-re-

sistant components, such as exceptionally robust roller shutter slats, extruded components and functionalities such as an integrated anti-push-up device.

• • Panel box

.

. ..

The extruded heroal panel box system made from a high-quality aluminium alloy is suitable for the RC 2 and RC 3 version. This is made possible by, among other things, wall thicknesses of more than 3 mm, a special security catch that can only be opened with a special key and panel caps made from durable steel.



Reinforced guide rail with S-locking curtain



heroal RS 37 RC 3, heroal FMS

heroal security roller shutters

heroal Safe Light security roller shutters



heroal RS 37 SL with Click Stop system



Guide rail

The extruded guide rail of all heroal roller shutter systems is exceptionally stable. It also contains a bridge for a safety lock. This makes it difficult to lever out the roller shutter curtain.

-

•

Aluminium or stainless steel material

For maximum burglary resistance, all components of the heroal security roller shutters are manufactured from robust aluminium or even more stable stainless steel with particularly thick walls.

Latch end slat

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The three-piece, extruded latch end slat makes it impossible to lever out, push up or pull out the roller shutter using physical force.

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Anti-push-up device

An anti-push-up device

makes it impossible to

push the roller shutter up

using physical force. The

box contains a segment

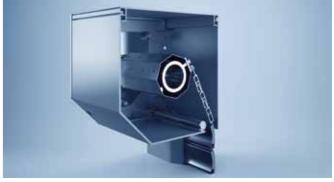
anti-push-up device. This

wedges in and holds the

tempting to push the roller

curtain down when at-

shutter up.



Anti-push-up device



End slat with integrated latch

The heroal Safe Light aluminium system closes the gap between conventional roller shutter systems and the certified security roller shutters in resistance classes RC 2 and RC 3. The "Click Stop" anti-push-up device makes it difficult to slide up or lever out the roller shutter curtain. An extruded angled end slat as well as a robust guide rail make the roller shutter even more secure. For instance, burglary-resistant heroal RS 37 SL roller shutter slats with a coverage width of 37 mm or heroal RS 55 SL with a coverage width of 55 mm can be selected.

The heroal Safe Light security roller shutter was the first solution to be awarded the RSQ seal and satisfies BVRS guideline TR 111 in the area of burglary resistance.

Integrated solar motor

Sustainable drive for heroal roller shutter systems without separate power supply



Front-mounted roller shutters with solar motor

The option of integrating solar motors enables the extremely energy-efficient operation of heroal roller shutter systems with a solar panel, without a separate power supply. The solar motors can be controlled using a hand-held and wallmounted wireless transmitter. If there is not enough sunshine, the roller shutter can still run for up to 100 cycles. And, if the battery is ever completely flat, it can be charged with an external power supply unit. Upon request, the roller shutter system can be combined 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. Solar motors are available in different versions. The version with integrated battery is recommended for the optimal mounting of the insect screen integrated in the panel box. The solar motor with an external battery can be used to create narrow elements, as the panel caps are equipped with an offset pin for axle mounting to make optimal use of the available winding space and enable the use of elements with small box sizes.

heroal finished roller shutter curtain

Prefabricated finished roller shutter curtain



Roller shutter finished curtain

Insect screen system

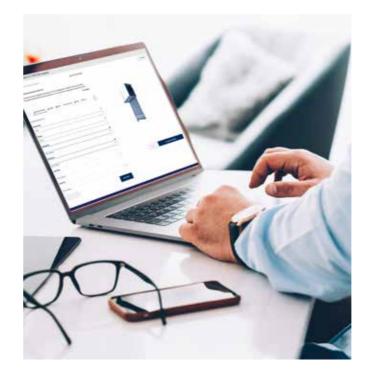
Integration of the heroal IS into heroal roller shutter systems



The heroal IS insect screen system is suitable for integration in heroal roller shutter systems with Mini roller shutter slats and is installed directly in the roller shutter's panel box system. Panel caps with offset pins for axle mounting ensure the optimal use of the winding space. A handle end slat ensures the easy operation of the retractable insect screen. The integrated end slat latch securely fastens the insect screen in the bottom end position. The comfortable, almost automatic raising of the insect screen textile is made possible by an integrated spring mechanism. Two textiles are available for the heroal IS: heroal IS Classic, a grey textile with a slightly coarser mesh width and heroal IS Light in anthracite greyblack with 45% better transparency.

heroal Ready finished elements

Digital configuration and ordering with the heroal Business configurator



Integrated insect screen in the roller shutter front-mounted box

20 | heroal roller shutter systems

For maximum flexibility, rapid availability as well as easy and time-saving manufacturing, heroal roller shutter slats are also available as prefabricated finished roller shutter curtains. In this case, the roller shutter curtain is fastened with latches as standard. Optional delivery without latches is possible. Mounts for attachment to the axle can also be supplied upon request. A huge range of roller shutter slat systems and various end slats from the heroal portfolio are available for the finished roller shutter curtains. A wide selection of shades are available for individual customisation.

heroal finished roller shutter curtains can be quickly and easily ordered using the heroal Business configurator.

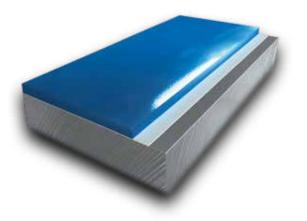
The heroal Business configurator in the heroal Communicator lets you quickly and easily configure finished roller shutter and sun protection elements and order systemware and finished roller shutter curtains. Create a customised product configuration and you will quickly receive an offer for yourself as well as an offer that you can forward directly on to your customer. That's how the heroal Business configurator supports an optimised order process. Potential errors are avoided and the automated order and offer creation simplifies the processes. Systemware and finished curtains can also be ordered.

heroal hwr powder coating

Highly weather-resistant quality

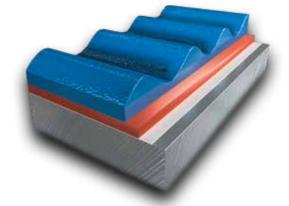


We use our own coating systems to give the heroal aluminium profile surfaces that meet the most stringent international quality standards. The heroal hwr powder coating for extruded profiles in its various gloss and application levels give surfaces a premium coating and finish. It provides the best results 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. The heroal 2-layer thick coating is used for rollformed profiles. The heroal 2-layer thick coating gives rollformed aluminium components exceptional 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.



Coating layers of the heroal hwr powder coating:

- 1. Aluminium base material
- 2. Chromium-free passivation
- 3. heroal hwr powder coating



- Coating layers of the heroal 2-layer thick coating:
- 1. Aluminium base material
- 2. Pretreatment
- 3. Base coat
- 4. Protective coat

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.



The colour selection varies for each slat system. You can check the availability of each slat in the order and production catalogue.

Colour selection

heroal Mini, Maxi and Safe roller shutter slats



The illustrations of the colours may differ slightly from the original products.

heroal



simply better spaces for life

As a manufacturer of aluminium system solutions for roller shutters, sun protection, roller doors, windows, doors, sliding doors, curtain walls and patio roofs, heroal is an international market leader, supporting high-quality residential and commercial construction projects worldwide. heroal products are developed and manufactured in Germany and set themselves apart with their premium quality and exceptional performance features. As a result, the innovative system solutions contribute to greater sustainability, security, comfort and architectural freedom for both current and future building projects and impress with simple and efficient planning and fabrication by heroal specialist partners.

Roller shutters | Sun protection | Roller doors | Windows | Doors | Sliding doors | Curtain walls | Patio roofs