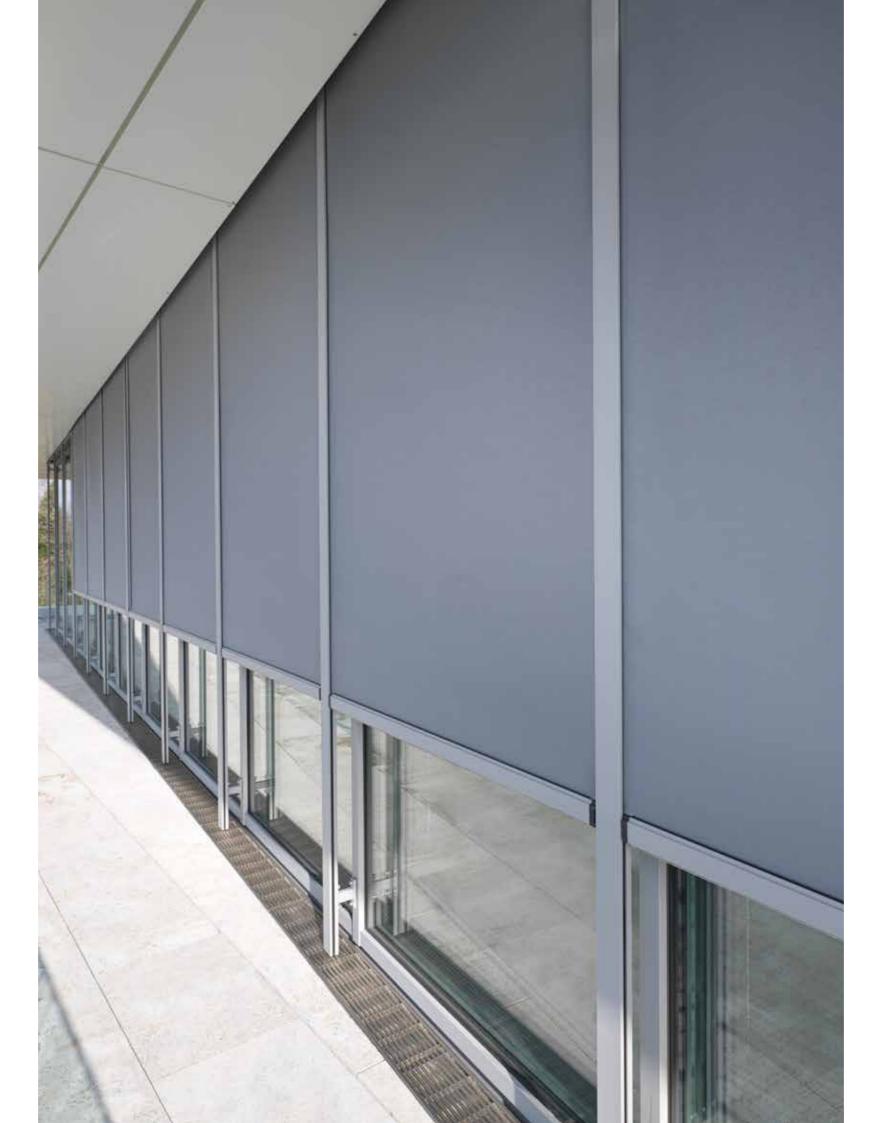


Curtain wall and sun protection system from a single provider

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.

For the harmonious integration of sun protection systems into the heroal C 50 curtain wall system as well as transom-mullion curtain walls of other manufacturers, heroal has developed the heroal VS Z CS sun protection system. It protects the interior from overheating, even where large, glazed areas are used, and provides effective sun, glare and privacy protection. The stable zip technology ensures that the system is ball impact-certified, even for large, shaded areas up to 6 m wide and covering 18 m².

Two different installation versions satisfy architectural and functional requirements: The design with the semi-integrated installed heroal VS Z CS sun protection with its system-compatible construction enables the extremely easy and economical installation of prefabricated sun protection panel boxes directly on the pressure profiles of the curtain wall system. If surface-mounted installation is desired or required (e.g. when the sun protection is retrofitted as part of building modernisation measures), heroal VS Z CS can be installed on the transom-mullion curtain wall with a visible construction using crossbars. This provides effective as well as aesthetically pleasing shading of the curtain wall.



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heroal heroal

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 as a semi-integrated system (curtain wall screen) with the heroal GR 25 guide rail. The system can be installed on conventional transom-mullion systems with a view width of at least 50 mm as a classic front-mounted installation using standard sun protection bolts. The heroal VS Z CS semi-integrated uses an integration profile as the mounting base, which can already be fabricated with the curtain wall mullions in the workshop – saving time on the construction site. The installation close to the curtain wall makes heroal VS Z CS semi-integrated wind-resistant up to 145 km/h.

Versions and design

- » system compatible with the heroal C 50 curtain wall system and transom-mullion curtain walls of other manufacturers
- » integration in the intelligent building control system (Smart Building, Smart Home) via WLAN or bus systems
- » obstacle detection can be installed, which stops the curtain if it encounters resistance
- » certified ball impact resistance
- » high-quality colour design for the aluminium components with heroal hwr powder coating, heroal SD surface designs and Les Couleurs® Le Corbusier®



System sizes and system features

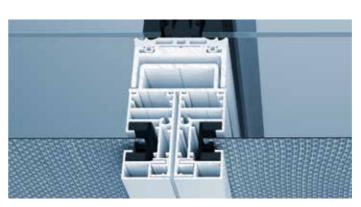
- » max. element sizes: 3,000 mm wide, 4,000 mm high
- » max. area: 12 m² area (also possible with smallest 85 mm panel boxes)
- » slender heroal GR 25 guide rail with 25 mm view width for front-mounted installation
- » high weather resistance and low-maintenance
- » suitable for tall buildings
- » high wind resistance up to 145 km/h
- » electronically powered drive
- » curtain can be controlled remotely, manually by a wall button or with an app
- » available as system solution or heroal Ready VS Z CS semiintegrated

Fabrication and installation

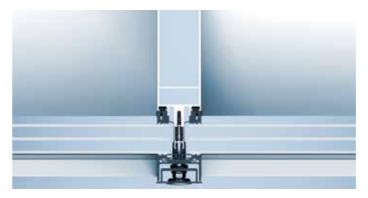
Semi-integrated sun protection system for curtain walls

The heroal VS Z CS semi-integrated sun protection system can be installed on conventional transom-mullion systems with a view width of at least 50 mm as a classic front-mounted installation using standard sun protection bolts. The sun protection bolts are designed with a special depth adjustment range. The mounting base for the semi-integrated heroal VS Z CS provides an integration profile that is attached to the transom-mullion curtain wall by the metal fabricator during fabrication. This saves time on the construction site, while also allowing the building curtain wall to be retrofitted with the heroal VS Z CS semi-integrated sun protection system. This also makes it possible for curtain wall installers and sun protection fitters to work independently, which increases flexibility in the project implementation. The stable connection between the sun protection bolt and the screw channel on the curtain wall mullion is statically tested. In addition, the system installation close to the curtain wall ensures wind stability up to 145 km/h.

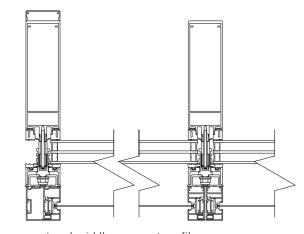
The wiring for the heroal VS Z CS semi-integrated sun protection system is invisible. A Duo cable guide allows two motor cables to be guided to a curtain wall mullion. A cable box ensures that the plug connection is reliably protected from the weather. It can be attached either behind or on the sun protection panel box.



Integration profile



Integration profile with sun protection bolt



End segment and middle segment profile



Cable feed-through between integration profile and mullion

heroal VS Z CS

Surface-mounted sun protection system for curtain walls



To integrate the surface-mounted heroal VS Z sun protection system into transom-mullion curtain walls such as the heroal C 50, heroal developed the heroal VS Z CS front-mounted system (curtain wall screen) with the heroal GR 37 guide rail. An integrated anti drop device securely and reliably holds the guide rails. Slot nuts create a vertical adjustment range for the guide rails. The system can be installed on conventional transom-mullion systems with a view width of at least 50 mm as a classic frontmounted installation using standard sun protection bolts. Crossbars available in three different variants each with an adjustment range of 25 mm are used as the mounting base for the heroal VS Z CS front-mounted system. The resulting customised distance to the curtain wall also allows the sun protection system to be installed in front of anti drop devices for example. The crossbars can be coated with the same surface as the aluminium components of the sun protection system. This creates an exceptionally harmonious integration in the building shell.

Versions and design

- » system compatible with the heroal C 50 curtain wall system and transom-mullion curtain walls of other manufacturers
- » integration in the intelligent building control system (Smart Building, Smart Home) via WLAN or bus systems
- » obstacle detection can be installed, which stops the curtain if it encounters resistance
- » wider curtain walls can easily be shaded with connected systems of joined individual elements
- » combinations of connected elements with different element heights with a continuous box panel in door/window combination possible
- » certified ball impact resistance
- » high-quality colour design for the aluminium components with heroal hwr powder coating, heroal SD surface designs and Les Couleurs® Le Corbusier®

System sizes and system features

- » max. element sizes: 3,500 mm wide, 5,000 mm high
- » max. area: 15 m² area (also possible with smallest 125 mm panel boxes)
- » heroal GR 37 guide rail with 37 mm view width
- » high weather resistance and low-maintenance
- » wind-resistant up to 38 km/h
- » curtain can be controlled remotely, manually by a wall button or with an app
- » available as system solution, heroal VS Z textile assembly or heroal Ready VS Z finished element

Panel box systems

Panel boxes for every design

heroal offers two different types of panel boxes for the sun protection systems. The heroal FME (front-mounted extruded) panel box system is an extruded front-mounted box that is positioned on the masonry or in the reveal. The front-mounted box system is available in different box designs with 20°, 45° and 90° chamfer as well as a half-round variant. The extruded heroal FMB (flush-mounted box) panel box system is a flush-mounted box. It is installed directly in the lintel making it invisible. Different



heroal FME 20° front-mounted box



heroal FME 45° front-mounted box



heroal FME 90° front-mounted box

plaster-base profiles are available for selection for different applications.

System features

- » extremely solid box end system comprised of a steel motor mount and aluminium decorative cap for all box designs and
- » simplified processing of the profiles thanks to the integrated screw channels enable greater widths and additional stability in the panel box
- » the panel box system demountable from below contains a roller capsule with offset locking catch
- » high-quality colour design for the aluminium components with heroal hwr powder coating, heroal SD surface designs and Les Couleurs® Le Corbusier®



heroal FME HC N front-mounted box



heroal FMB 90° flush-mounted box (for curtain wall coverings)

Guide rails

Guide rails tailor-made for every installation situation

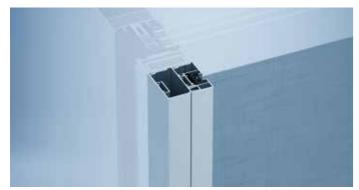
heroal offers a wide range of guide rails for the sun protection systems that can be used to create perfect solutions for every installation situation. The exceptionally robust extruded rails made from high-quality aluminium are fitted with plastic inserts and keep the textile stable as well as ensuring quiet operation. The guide rails for the heroal VS Z are available as a double guide in view widths of 25 mm, 37.5 mm and 60 mm, where the narrow 25 mm view widths create a harmonious design in combination with the heroal C 50 curtain wall system. For easy installation of



heroal GR 25 guide rail



heroal GR 25 CS middle segment guide rail



heroal GR 25 CS end segment guide rail

the heroal VS Z OR vertical blind for patio roofs, the guide rails can be detached from the motor mount and the roller capsule mount.

System features

- » narrow heroal GR 25 guide rail with 25 mm view width for all installation types, except for contra installation
- » heroal GR 37 FMB type II with interior cover cap structure enabling it to be completely plastered in
- » heroal GR 37 2-piece for concealed screw connection for all types of installation, incl. contra installation
- » double guide rail, 60 mm wide for heroal GR 37
- » easy to clip the 2-piece guide rail on the wall installation profile
- » double profiles available for all guide rails
- » high-quality colour design for the aluminium components with heroal hwr powder coating, heroal SD surface designs and Les Couleurs® Le Corbusier®



heroal GR 37 centre guide rail



heroal GR 37 2-piece guide rail

End slats

End slats for ideal textile tension

heroal offers three different end slats for the sun protection systems. The extruded aluminium end slats with different geometries ensure that the textile is under continuous tension. Depending on the height and width of the element, end slat type I, type II or type III can be selected to achieve an optimum textile tension.

End slat type III is ideal for extremely narrow and wide elements as it ensures even better textile tension and less wrinkling with

the use of one or two weights as well as a rectangular hollow section. End slats type II and III also have the same view heights, making combined installation possible.



End slat type I



End slat type II



End slat type III

Textile and colour selection

Maximum design freedom

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 amount of light transmittance – from semi-transparent to opaque.

The "Sergé & Satiné" fabrics consist of woven and coated glass fibres – the glass fibre core and PVC coating make the textiles extremely supple, creating a pleasant atmosphere and ensuring a clear view of the outside.

The **"Soltis"** fabric for exceptional shape retention. 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.

The "Flexilight 6002 Opaque" fabric 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.

The "Elements" fabric 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 water- and dirt-repellent.

The "Sergé BO Lunar and Solar" blockout fabrics have a darkening effect. Both also repel humidity thanks to a full-surface PVC foil. The BO Lunar textiles provide complete darkness while the BO Solar textiles have a translucence with an opening factor of 3%. heroal IS insect screen fabrics can also be used. For a completely individual design, customised printing is also available (on request).

The "Twilight Pearl" fabric is a 100% PVC-free solution with a textile character and a harmonious transparency. It is extremely weather-resistant, odour-neutral and flame retardant.

For the aluminium components of your textile screen you can choose from all shades in the RAL colour range, Les Couleurs® Le Corbusier® and heroal SD surface designs with wood, concrete or rust looks.

Trend textiles

For the sun protection systems we offer 15 selected trend textiles with short delivery times:



You can view the full selection of textiles in textile fans. The textile colours shown here may differ from the originals for printing reasons.

System sizes and system features

Description		heroal VS Z CS semi-integrated	heroal VS Z CS front-mounted		
Box type		FME	FME		
Box shapes		20°, 45°, 90°, HC N	20°, 45°, 90°, HC N		
Box sizes [mm]		85, 95, 105, 125	85, 95, 105, 125		
Max. element width [mm]		3,000	3,500		
Max. element height [mm]		4,000	5,000		
Max. area [m²]		12	15		
Guide rails		heroal GR 25	heroal GR 37		
End slats		Type I, II, III	Type I, II, III		
Wind-resistant [km/h]		up to 145	up to 38		
Hailstorm class		6	6		
Certified ball impact resistance		•	•		
Obstacle detection		•	•		
Curtain control		Button, remote	Button, remote		
Drive type		Motor	Motor, solar motor		
Smart Home		Remote-controlled motor	Remote-controlled motor		
Installation		Curtain wall integration	Transom-mullion curtain wall		
heroal Ready finished element / kit		•	•		
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		-	•		
heroal hwr powder coating		•	•		
Eloxal coating		•	•		
heroal SD		•	•		
Les Couleurs® Le Corbusier®		•	•		
Textiles and colours		more than 250	up to 250		
Opening factor [%]		0/1/3/3.5/4/5/8/10/14	0/1/3/3.5/4/5/8/10/14		
Reduction	Solar radiation	100	98		
up to [%] ^{1]}	JV radiation	100	98		

Box heights of heroal FME 20°, heroal FME 45°, heroal FME 90° and heroal FME HC N ¹¹									
Element height [%]	≤ 1.00	≤ 1.50	≤ 2.00	≤ 2.50	≤ 3.00	≤ 3.50	≤ 4.00		
Element width [m] of ≤ 3.00	85	85	95	95	95	105	105		

1) Version as HC N only possible in sizes 95, 105 and 125



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