Innovative glare, privacy and heat protection with the sun protection system for curtain walls

# Sun Protection System for Curtain Walls heroal VS Z CS

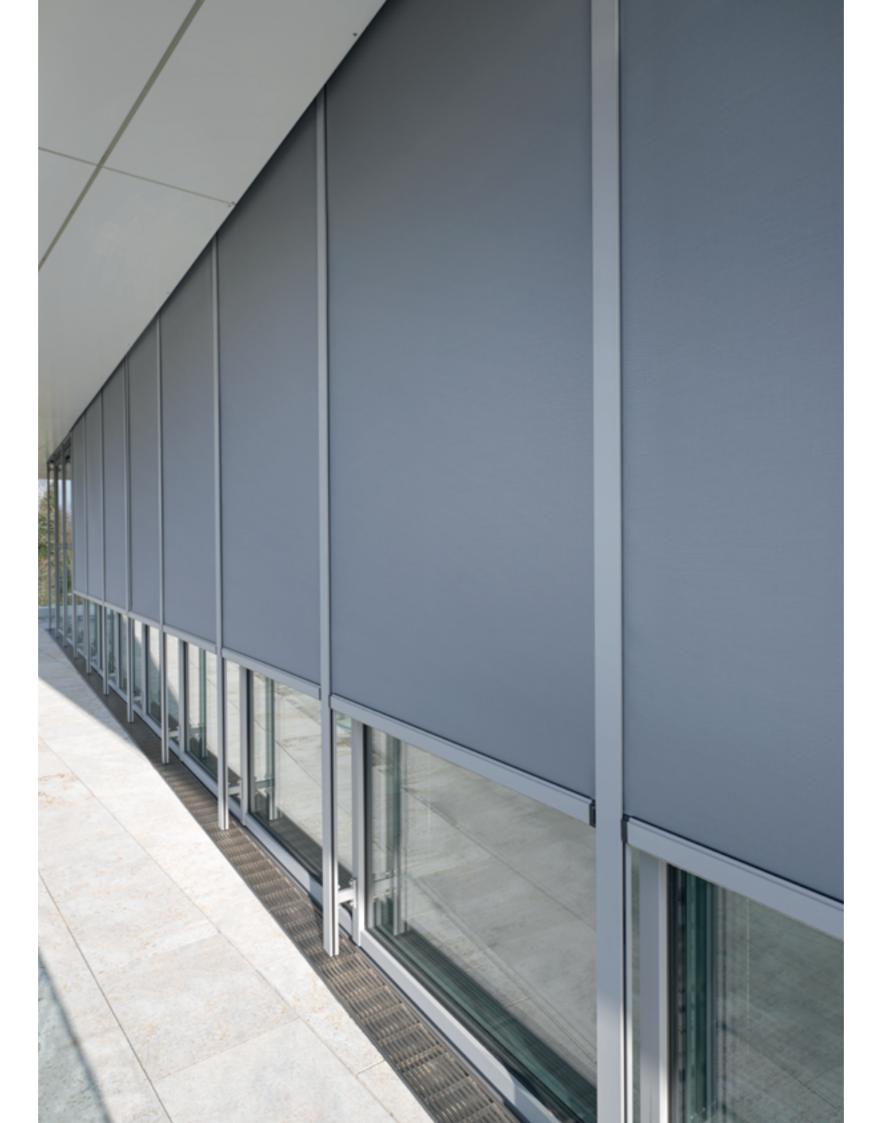


## Curtain wall and sun protection system from a single source

First-class materials, technically coordinated solutions down to the smallest detail and a wide variety of design options characterise the efficient system solutions from heroal. For decades, heroal has been the reliable partner for architects and planners, fabricators and building owners with innovative solutions made of aluminium and aluminium composite materials for the building shell.

heroal has designed the heroal VS Z CS sun protection system for the harmonious integration of sun protection systems into the heroal C 50 curtain wall system and post-transom curtain walls from other manufacturers. This system protects the interior from overheating, even with large glass segments, and offers effective protection against sun, glare and prying eyes. Thanks to the stable zip technology, the system offers certified ball impact resistance - even for shading areas up to 6 m wide and 18 m<sup>2</sup> big.

Two different installation variants meet architectural and functional requirements: the design of the semi integrated heroal VS Z CS sun protection system is system-compatible and provides for a particularly simple and efficient installation of prefabricated sun protection panel boxes directly on the pressure profiles of the curtain wall system. If a front-mounted installation is desired or required (e.g. when installing the sun protection system as a retrofit during building modernisation), heroal VS Z CS can be mounted on the post-transom curtain wall with visible traverses. This design creates effective and aesthetically appealing shading solutions for post-transom curtain walls.



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## heroal VS Z CS

#### Semi integrated sun protection system for curtain walls



heroal VS Z CS (curtain wall screen) semi integrated, and its heroal GR 25 guide rail, have been designed for a seamless integration of the sun protection system heroal VS Z into post-transom curtain walls such as heroal C 50. The system can be installed on standard post-transom systems with a minimum face width of 50 mm. It is front-mounted in the classic way using standard sun protection bolts. The screw-on base for heroal VS Z CS semi integrated is provided by an integration profile, which can already be machined with the curtain wall posts in the workshop - this saves time on the construction site. Due to the installation close to the curtain wall, heroal VS Z CS semi integrated is wind-stable up to 145 km/h.

## Fabrication and installation

#### Semi integrated sun protection system for curtain walls

The semi integrated heroal VS Z CS sun protection system can The cabling of the semi integrated heroal VS Z CS sun protection be installed on standard post-transom systems with a minimum system is invisible. A duo cable guide enables two motor cables face width of 50 mm. It is front-mounted in the classic way using to be guided on one curtain wall post. A cable box protects the standard sun protection bolts. The sun protection bolts have a plug connection reliably against the weather. It can be fitted either behind or on top of the sun protection panel box. special depth adjustment range. The screw-on base for heroal VS Z CS semi integrated is provided by an integration profile, which the metalworking company can already attach to the posttransom curtain wall during fabrication. This saves time on the construction site and also makes sure that the building curtain wall can be retrofitted with the semi integrated heroal VS Z CS sun protection system, if required. In addition, this allows the curtain wall builder and sun protection installer to work independently of each other, which increases flexibility during the course of the project. The stable connection of the sun protection bolt with the screw channel of the curtain wall post has been statically tested. Due to the installation close to the curtain wall, the system is wind-stable up to 145 km/h.

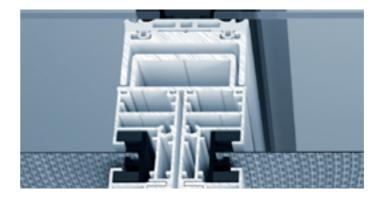
#### Versions and design

- » 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 W-LAN or bus systems
- » obstacle detection can be installed, which stops the curtain if it encounters resistance
- » certified ball impact resistance
- » high-quality colour design with heroal hwr powder coating, heroal SD surface designs and Les Couleurs® Le Corbusier for the aluminium components



#### System sizes and system features

- » max. element sizes: 3,000 mm wide, 4,000 mm high
- » max. area: 12 m<sup>2</sup> area (also possible with small 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
- » outstanding wind-resistance up to 145 km/h
- » electronic, motorised drive
- » curtain can be controlled remotely, manually by a wall button or with an app
- » available as systemware, textile assembly or finished element (heroal Ready VS Z)



integration profile



integration profile with sun protection bolts

cabling between integration profile and post

## heroal VS Z CS

#### Front-mounted sun protection system for curtain walls



heroal VS Z CS (curtain wall screen) front-mounted, and its heroal GR 37 guide rail, have been designed for the integration of the heroal VS Z sun protection system into post-transom curtain walls such as heroal C 50. An integrated safety catch holds the quide rails securely and reliably. Sliding blocks create a vertical adjustment range for the guide rails. The system can be installed on standard post-transom systems with a minimum face width of 50 mm. It is front-mounted in the classic way using standard sun protection bolts. The screw-on base for heroal VS Z CS is provided by traverses, which are available in three different versions, each with an adjustment range of 25 mm. This allows the sun protection system to be installed at an individual distance from the curtain wall, e.g. in front of guardrails. The traverses can be coated with the same material as the aluminium parts of the sun protection system. This way, they blend in perfectly with 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 W-LAN or bus systems
- » obstacle detection can be installed, which stops the curtain if it encounters resistance
- » wider curtain walls can easily be screened with connected systems or 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 with heroal hwr powder coating, heroal SD surface designs and Les Couleurs<sup>®</sup> Le Corbusier for the aluminium components

#### System sizes and system features

- » max. element sizes: 3,500 mm wide, 5,000 mm high
- » max. area: 15 m<sup>2</sup> area (also possible with small 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 systemware, textile assembly or finished element (heroal Ready VS Z)

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



heroal FME 20° front-mounted box



heroal FME 45° front-mounted box



heroal FME 90° front-mounted box

#### System features

- » extremely solid box end system comprised of a steel motor mount and aluminium decorative cap for all box designs and sizes
- » 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



Flush-mounted panel box heroal FMB 90° (for curtain wall panelling)

## Guide rails

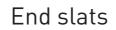
Guide rails tailor-made for every installation situation

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

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 open 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



#### 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



End slat type I



End slat type II



End slat type III



centre field guide rail heroal GR 25 CS



end segment guide rail heroal GR 25 CS





heroal GR 37 2-piece guide rail



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.

## 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 light transmittance – from semi-transparent to opaque.

The "Sergé & Satiné" fabric consists of woven and coated glass fibres. The fibreglass core and the PVC coating make the textiles exceptionally smooth, creating a pleasant atmosphere and ensuring a clear view 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 highly resistant to UV rays and boasts a dirt-repellent texture. This guarantees an attractive look even after many years of use. The PVC fabric is phthalatefree, 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 system fabrics can also be used. For a completely individual design, customised printing is also available (on request).

All shades in the RAL colour range, the natural shades of the Les Couleurs® Le Corbusier and heroal SD surface designs with wood, concrete or rust looks are available for the aluminium components of the textile screens.

#### Trend textiles

For the sun protection systems heroal offers 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 system	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 [m <sup>2</sup> ]	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			
Power unit	Motor, solar motor	Motor, solar motor			
Smart Building/Smart Home	Remote-control motor	Remote-control motor			
Installation options	Curtain wall integration	Transom-mullion curtain wall			
Also as heroal Ready finished element	•	•			
heroal C 50 curtain wall system	•	•			
heroal OR outdoor roof system	-	-			
heroal CR outdoor roof system	-	-			
heroal C 50 WG conservatory system	•	•			
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 [%] <sup>11</sup> UV radiation	100	98			

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				
<b>up to</b> [%] <sup>1]</sup>	UV radiation	100 98								
Box sizes heroal FME 20°, heroal FME 45°, heroal FME 90° and heroal FME HC N <sup>11</sup>										
Element heigh [%]		≤ 1,00	≤ 1,50	≤ 2,00	≤ 2,50	≤ 3,00	≤ 3,50	≤ 4,00		
Element widt [m] von ≤ 3,00		85	85	95	95	95	105	105		
1) Version hereal EME HC N available only in sizes 95, 105 and 125										

1) Version heroal FME HC N available only in sizes 95, 105 and 125

## heroal



#### simply better spaces for life

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

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

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