



heroal VS Z / VS sun protection

System installation



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This price list renders invalid all other price lists issued to date. All prices are non-binding and may be subject to errors and omissions. The prices stated are exclusive of VAT at the statutory rate. All deliveries are made in accordance with our General Terms and Conditions.

Regularly updated technical documentation and price lists, as well as order forms for vulcanised seals, can be found in our Partner Forum at www.heroal.com.

Subject to technical changes.

heroal system installation VS Z / VS

Contents

Important safety information	02
Proper use	02
Qualification of personnel	02
Basic safety measures	02
Warnings in this installation manual	02
Accompanying documents	02
Important information	03
Manufacturer's liability	03
Surface	03
Attachment system	03
Wind resistance classes	03
Security	03
Maintenance instructions	03
Care of heroal VS Z / VS textiles	03
Inspection of the heroal VS Z / VS by the operator	03
Technical conditions	04
Notes on heroal documents	04
Construction	04
Quality assurance	04
Dismantling and disposal	04
Dismantling	04
Disposal	04
Product description/ glare-free sun protection	04
Wind resistance classes	05
Heroal system installation VS Z / VS	07
Installation steps	08
Certification	13
EC Declaration of Conformity	13
Heroal performance features VS Z	14
Heroal performance features VS Z	15
General terms and conditions	16

heroal system installation VS Z / VS

Important safety information

The heroal VS Z / VS has been manufactured in accordance with the state of the art and the recognised safety regulations. There is, however, a risk of personal injury and damage to property if the following general safety notes and warnings regarding the instructions in this installation manual are not observed.

- » Please therefore read this installation manual thoroughly before installing the VS Z / VS System.
- » Keep this installation manual in a legible condition. Ensure that it is accessible to all installers at all times.
- » Never hand the element on to third parties without this installation manual and all accompanying documents.

Proper use

The heroal LC serves as sun protection and is designed exclusively for this purpose. Any other use is deemed as improper and is not permitted.

Safe operation of the heroal VS Z / VS can only be ensured through correct installation. The manufacturer shall accept no liability for malfunctions resulting from incorrect installation or use.

Qualification of personnel

The assembly and installation of this heroal VS Z / VS requires special expert knowledge as well as knowledge of the related technical terms.

- » All assembly and installation work must be carried out by specialists who are trained, briefed, instructed in aspects of safety and authorised.
- » Work on electrical connections or the control system must only be carried out by a skilled electrician and with all equipment switched off.
- » Specialists must be able to use their technical training, experience and knowledge of the applicable provisions, regulations and standards in order to evaluate the tasks assigned to them, recognise any potential dangers and adopt the appropriate safety measures.

Basic safety measures

The following safety measures must be observed for all work related to the assembly and installation of the heroal VS Z / VS.

- » The instructions and warnings in the installation manual must also be adhered to during assembly and installation of the heroal VS Z / VS.
- » Installation requires at least two people, particularly in the case of large units.
- » Protective gloves must be worn to protect against sharp edges. A protective helmet and protective footwear must be worn to protect against falling building components.
- » Prior to installation, ensure that the structure has a sufficient load-bearing capacity.
- » The load-bearing fastening materials (e.g. dowels and fixing screws) for meeting the load bearing requirement must be selected to suit the type of fixing and the characteristics of the structure.
- » A large cordon must be placed around the danger zone. Ensure that unauthorised persons who have not been commissioned with the installation do not enter the danger zone.

Warnings in this installation manual

There are specially marked warnings before an instruction that involves the risk of personal injury or damage to property.

- » The safety measures for risk prevention must be observed.



DANGER!

This indicates an immediate danger which can result in serious injury or death if the risk prevention measures are not observed.



WARNING!

This indicates a potential danger which may result in serious injury or death if the risk prevention measures are not observed.



ATTENTION!

This indicates a potentially dangerous situation which may result in minor or moderate injury if the risk prevention measures are not observed.



CAUTION!

This indicates a potentially dangerous situation which may result in damage to property if the risk prevention measures are not observed.

NOTE!

Provides additional information to simplify or improve the procedure for carrying out the work.

Accompanying documents

In addition to this installation manual, you will receive further documents relating to the heroal VS Z / VS. These documents also form part of the documentation and must be read and observed.

- » Operating instructions for the tubular motor.
- » Operating instructions for switches, hand-held transmitters and wind sensors.

heroal system installation VS Z / VS

Important information



The manufacturer shall not be liable in the event of incorrect installation.

The heroal VS Z / VS must only be installed by suitably qualified specialists.

To prevent installation errors and damage to the sun protection, the installation instructions contained in this manual must be followed. The installation manual must be given to the user and kept in a safe place, as it contains important information relating to testing and maintenance work. Only original spare parts may be used, otherwise the manufacturer's declaration of conformity shall also cease to apply.

Surface

The extruded profile from heroal are coated with highly weather-resistant [hwr] powder and then stove-enamelled. There may be slight colour deviations between the different carrier materials (extruded aluminium, plastic, etc.).

Fixing systems

The specialist company carrying out the installation work must select the fastening materials on the basis of the load bearing requirement, type of fastening and subsurface. Electrical work must only be carried out by a skilled electrician and with all equipment switched off.

Wind resistance classes

The wind resistance classes recommended for the relevant application must be observed in accordance with EN 13659.

Wind resistance classes	Description	(Beaufort) wind speed	Velocity of wind
Class 0	Undefined, product not tested or unsuitable. May not be used from class 1.		
Class 1	moderate wind	4	20 – 28 km/h
Class 2	Brisk wind	5	29 – 38 km/h
Class 3	Strong wind	6	39 – 49 km/h

Classification of VS System (without zip)

wind resistance class **0**

Classification of VS Z System

wind resistance class **3**



CAUTION!

Security

The user is responsible for the safety of the sun protection. Inspection of the heroal VS & VS z must be carried out by an expert!

Maintenance includes the visual and functional inspection of the textile, drive, control system and all fixing points (motor, bearings, brackets and guide rails). Maintenance must be carried out at regular intervals, but at least once a year. The installed parts are subjected to continuous quality controls, but not all parts or building components have an end-less service life. If a part has to be replaced, it must be ensured that only original spare parts are used.



CAUTION!

Before maintenance is carried out, it is essential that the following steps are observed. Secure system against unintentional operation and start-up. by means of complete disconnection from the power supply. The sun protection system can be disconnected from the mains by unplugging the mains plug or other all-pole disconnection device (main switch). On commercial premises, the mains plug must be secured against unintentional connection. For work that cannot be carried out at ground level, a suitable aid (ladder, scaffolding etc.) must be used. Safety equipment (gloves, protective footwear, etc.) must be worn. By removing safety devices from the heroal VS Z / VS and working up a ladder or on scaffolding, weak points on the heroal VS Z / VS, which are otherwise inaccessible, can be reached. In such cases, extreme care must be exercised to ensure no injury is sustained.

Notes on maintenance

The safety requirements for operating closure devices with or without burglary resistance are governed in the standard EN 13659. Maintenance and care include the visual and functional check of the textile, drive, control system and all fixing points (motor attachment profile, consoles, bearings, guide rails), and must be carried out at least once a year. All sun protection system components must be checked for fault-free, smooth operation and, if necessary, must be cleaned, lubricated or repaired so as to guarantee the fault-free and safe operation of the roller shutter system. For information on troubleshooting all electrical faults, please see the enclosed description of the corresponding control system or the drive operating instructions, as appropriate.

Care of heroal VS Z / VS textile

The textile can essentially be swept or vacuum-cleaned. In the event of heavy contamination, it can be cleaned with mild cleaning agent, without particularly hard scrubbing. On no account must strong chemical cleaning agents be used, since otherwise the fabric may be damaged. Electrical building components, such as control systems and switches, must be cleaned with a dry cloth only. Cleaning with water carries the risk of electric shock.

Inspection of the heroal VS Z / VS by the operator

Sun protection system users must inspect the condition of the system at regular intervals to ensure the safe operation of the heroal VS Z / VS at all times if problems arise. The following checks can be carried out by the operator:

» Visual check

The textile, guide rails and all parts visible from the ground should be inspected for damage. If damage is discovered that prevents fault-free operation of the heroal VS Z / VS, an expert must be called out.

» Noise check

The operator should listen out for unusual noises during operation of the shutter. If such noises should occur, an expert must be called out to assess the problem.

» Functional check

The heroal VS Z / VS is operated using all possible control devices. It is important to check that the stopping devices also work. In the event of a fault, an expert must be called out. The above-mentioned checks must be carried out at regular intervals (at least every 3 months) and after the system has been subjected to any external force (e.g. storm, attempted break-in, etc.).

heroal system installation VS Z / VS

Technical conditions

1.) Notes on heroal documents

All documents published by heroal concerning the combination, assembly, configuration, processing, finishing and installation of the specified items constitute non-binding proposals that act as recommendations to the operator or relate to completed combinations and systems. They do not release the processor from his duty to conduct independent tests.

2.) Design

Our designs represent the latest state of the art. The processor bears sole responsibility for selecting the right heroal designs for the intended constructions.

3.) Quality assurance

3.1. Cleaning

The assembled building units must be cleaned prior to acceptance, whereby any contamination caused by the contractor during installation must be removed. Only specified cleaning agents must be used. Further cleaning must also be performed according to the information sheet A5 "Cleaning of Aluminium in the Building Industry", as published by the German Aluminium Association (GDA).

Dismantling/disposal

Dismantling



WARNING!

Risk of injury if dismantled incorrectly

- » Dismantling must be carried out by specialists who are trained, briefed, safety-instructed and authorised.
- » Work on electrical connections or the control system must only be carried out by a skilled electrician and with all equipment switched off.



WARNING!

Risk of serious injury due to falling building components

- » For large units, dismantling should be carried out by at least two persons.
- » Wear protective gloves, a protective helmet and protective footwear.
- » Place two supporting blocks on the right and left inside the guide rails.
- » Lower the material in the closed position until it rests upon the supporting blocks.
- » Switch off the motor control system.
- » Dismantle the motor control system as described in the operating and installation manual for the motor control system.
- » To dismantle the heroal VS Z / VS, follow the installation steps in reverse order.

Disposal

- » Dispose of all materials in an environmentally friendly manner and in accordance with the national and local regulations.

Product description/glare-free sun protection

The heroal VS Z / VS meets the continually increasing requirements for sun protection and more than satisfies the demand for a large area of sun protection offering shade irrespective of wind conditions. The innovative sun protection system achieves a very good wind resistance class. The blind does not need to be retracted until wind strength reaches 145 km/h. The material's minimal winding diameter means that it can even be installed in small boxes without difficulty. For example, this means that a box only 95 mm high is needed for a window height of 3 m. Planners, constructors and heroal partners benefit from the simple installation as well as the durability of the system.

heroal system installation VS Z / VS

Wind resistance classes



Read off the wind load zone from the map. In borderline cases, always choose the higher zone! Determine the terrain category using Table 1. Read off the wind resistance class from Table 2.

Table 1

Terrain category	Properties
I	Open sea, lakes with at least 5 km unobstructed area downwind; smooth, flat landscape with no obstacles
II	Terrain with hedges, isolated farmsteads, houses or trees, e.g. agricultural land
III	Suburbs, industrial areas, business parks, forests
IV	Urban areas in which buildings with an average height in excess of 15 m make up at least 15% of the surface area

Table 2

Criteria		Installation height of connections in the middle range											
		0 - 8 m				> 8 - 20 m				> 20 - 100 m			
Terrain category	Requirements	Wind load zone				Wind load zone				Wind load zone			
		1	2	3	4	1	2	3	4	1	2	3	4
I	Wind resistance class	3	4	4	4	4	4	5	5	4	5	5	6
II		3	3	4	4	3	4	4	5	4	5	5	5
III		2	3	3	4	3	3	4	4	4	5	5	5
IV		2	3	3	3	3	3	3	4	4	4	4	5

heroal system installation VS Z / VS

Notes

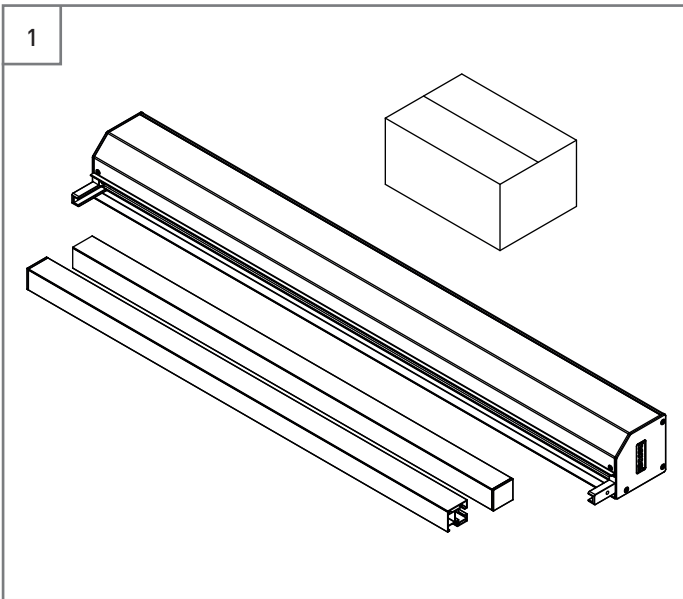
A large rectangular area filled with a fine grid pattern, intended for handwritten notes. The grid consists of small squares, with slightly thicker lines forming a border around the perimeter.

heroal system installation VS Z / VS

Installation manual & commissioning

heroal system installation VS Z / VS

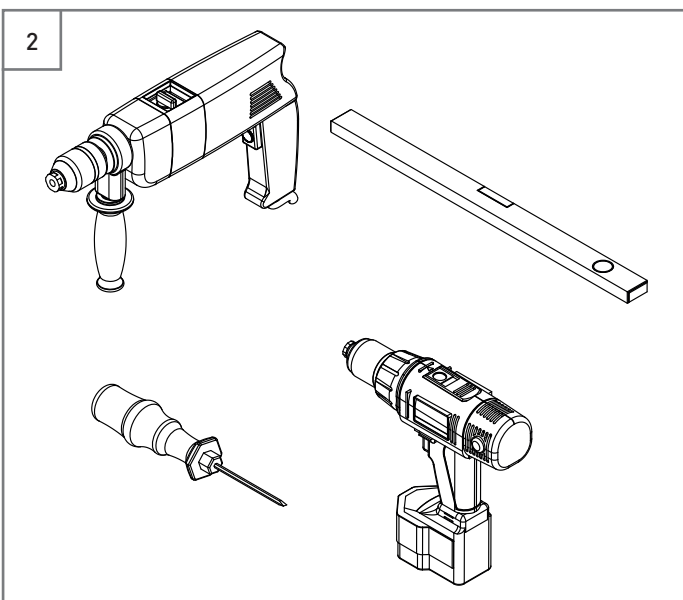
Installation steps



Scope of supply and assembly preparation

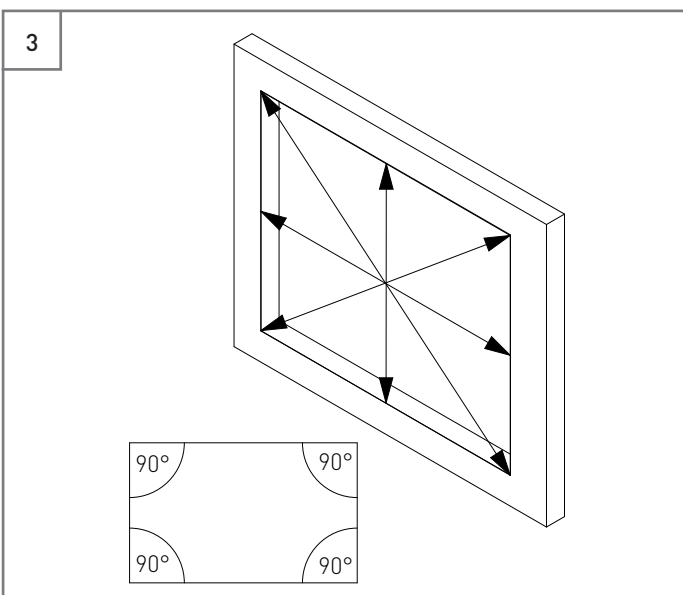
- VS Z & VS vertical awning blind with 2x guide rails incl. insert and if necessary, cover profile
- Installation and operating instructions
- Motor connection and setting instructions
- Handover protocol

Before start of installation, check whether the type and quantity of supplied material matches the order. Fastening material is not included in the scope of supply.



Installation aids

- Spirit level
- Power drill and drill
- Hinge
- Screwdriver and/or cordless screwdriver
- Test or setting cable for commissioning



Inspecting the structure

Check the clear width and height of the window opening and ensure that the dimensions correspond to the VS Z & VS System specification.

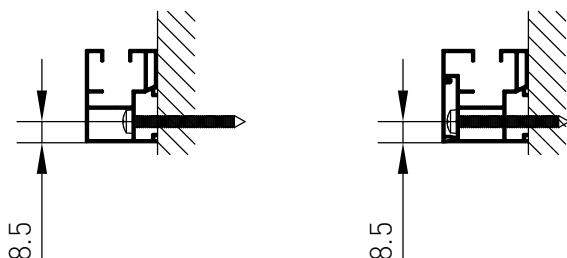
Ensure the following properties:

- The sides must be positioned plumb-vertical and parallel to one another.
- The lintel must be even and horizontal.
- There must be no protrusions into the room.
- If necessary, eliminate any unevenness on the lintel, on the sides and on the ground. The bearing surfaces of the box and the guide rails must be even.

heroal system installation VS Z / VS

Installation steps

4



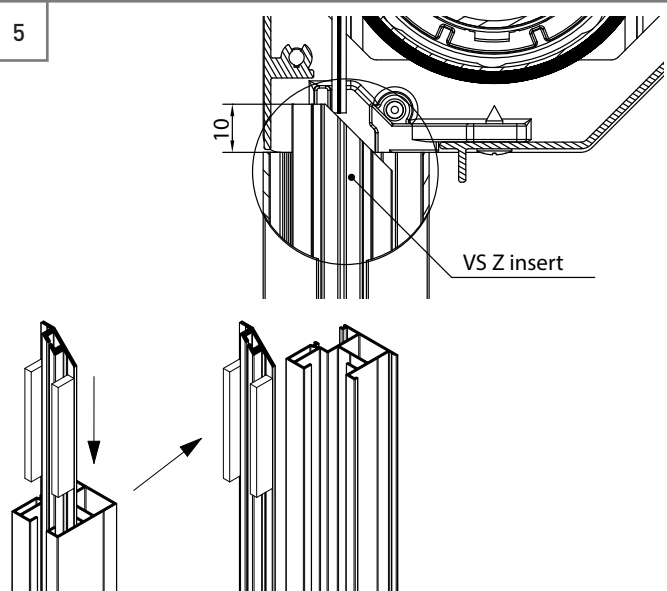
Wall-mounted VS & VS Z System

Installation of drilled guides:

- 1-part
- 2-part

Installation, with or without stepped hole and use of suitable fastening materials, is defined by the installer according to the type of subsurface.

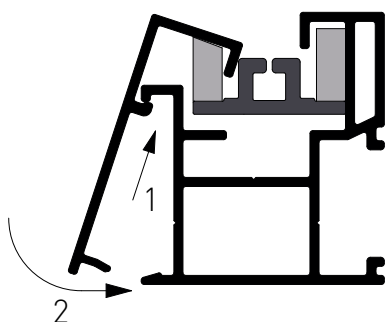
5



Fitting the insert

- a. If the guide is in 1 part, fit the insert before screwing together, following the drawing.
- b. If the guides are in 2 parts, the insert can be fitted after installing the bottom guide rail to the structure.
- c. Make sure that the slope is at the top and points in the direction of the inspection panel.

6

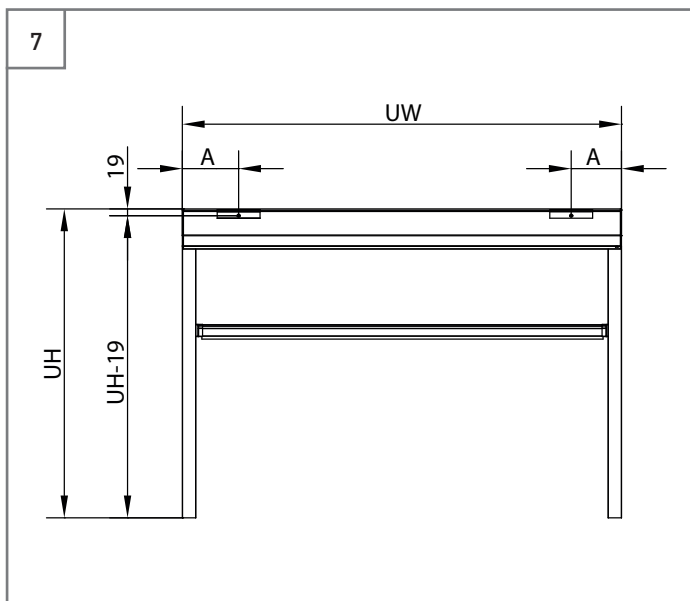


Install the cover profile (**2-part guide only**)

Engage the cover profile after fitting the insert. Then check whether the sponge strips are correctly fitted in the guides.

heroal system installation VS Z / VS

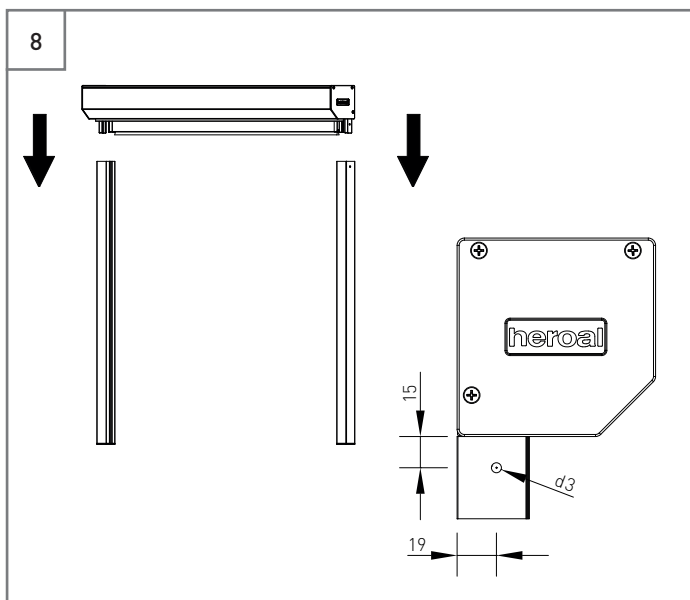
Installation steps



Mounting bracket for the box system 105/125

Provides additional stability.

Element width EW		Dimension A
	Requirement in units	
1500 - 3000	2	250 - 300
3001 - 5000	2	300 - 800

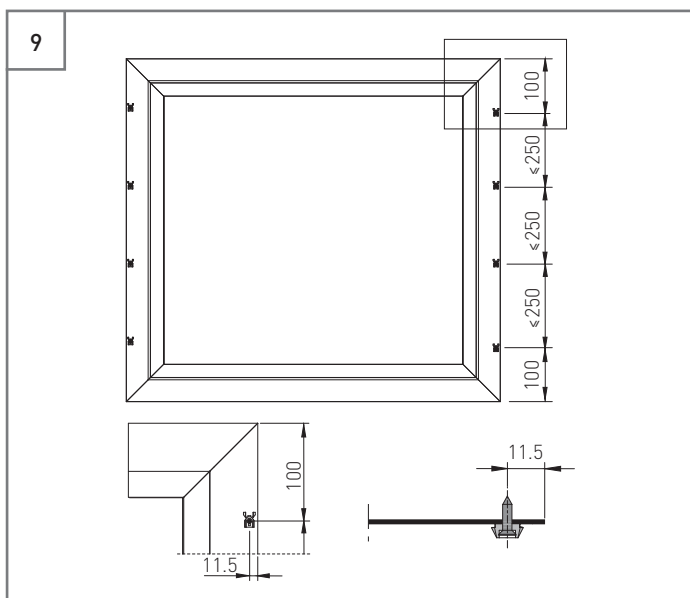


Fit the box and thread the curtain

First unwind the material by approx. 150 mm. This ensures that the textile is more easily threaded into the guide. This can be done using a motor adjustment cable. Insert the box end feet into the guides.

Secure the box

Secure the guides to the box ends using VA screws, 5.5 x 13 mm.



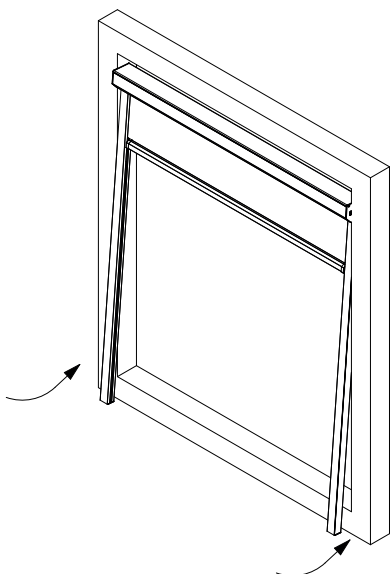
Install the clamping support

Install the clamping support to the panel frame according to the drawing with suitable fasteners.

heroal system installation VS Z / VS

Installation steps

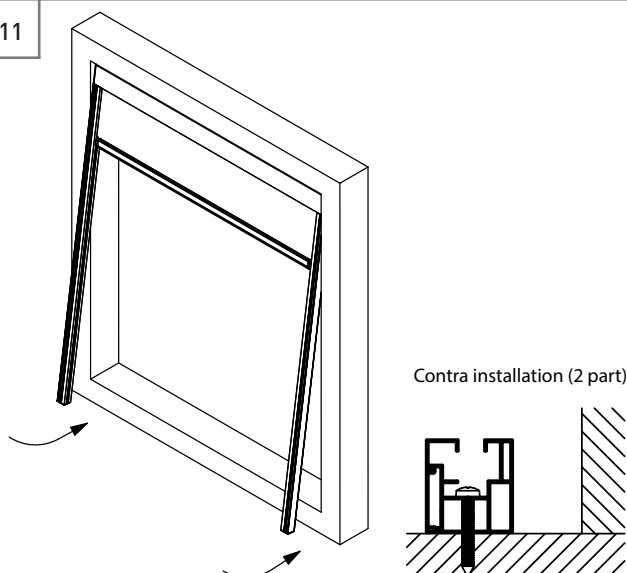
10



Insert the system into the reveal

Slide and secure the guides, incl. inserts onto the box end feet. When erecting the system, make sure that the box is fastened to the ends. It must be positioned level. Due to the risk of breaking, a one-sided load on the box end feet must be avoided. Fasten using fitted clips or screws.

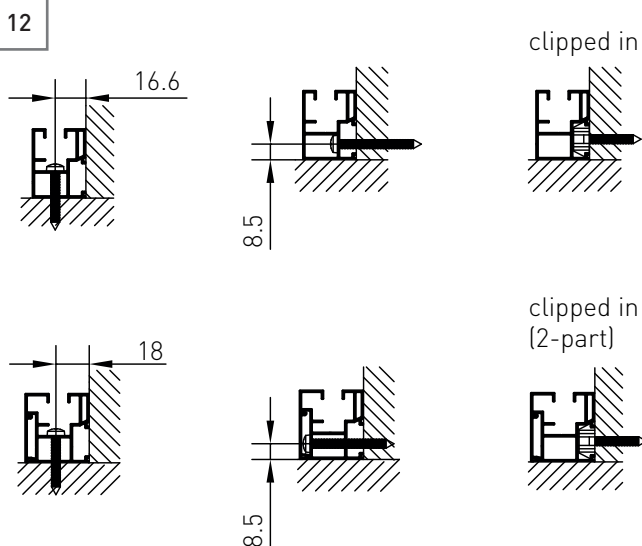
11



Insert the system into the reveal as contra installation

Slide the guides onto the box end feet, secure and put the System into the reveal. Fasten with screws.

12



Installation of the VS & VS Z System into the reveal

Installation of the guides clipped in by the clamping support or drill; see step 4 and 5.

heroal system installation VS Z / VS

Installation steps

13



Connect the system to the mains according to the drive manual.



DANGER!

Safety note:

Follow the safety notes on electrical connection! Permanent electrical installation may only be performed by a certified electrician according to VDE 100.

The end positions of the motor are not configured. These must be set according to the motor installation manual. Accessories such as switches, hand-held transmitters and wind and sun sensors must be connected and configured according to the relevant instructions.

14



Functional check

After professional installation, finish off with a functional check. Check that the VS Z & VS system is secure and that it works perfectly.

15



Commissioning

The installation company explains the operation of the VS Z & VS system to the user in full.

The wind class stated by the manufacturer is verified. If not, the installation company must document the actual wind resistance class attained. Automatic control systems must be set to this value.

heroal system installation VS Z / VS

EC declaration of conformity

EC Declaration of Conformity

in terms of EC Machinery Directive 2006/42/EC, Appendix II A

We, the company

heroal Johann Henkenjohann GmbH & Co. KG
Österwieher Str. 80
33415 Verl (Germany)
Telephone +49 (0) 5246 507-0
Fax +49 (0) 5246 507-222

hereby declare that the units

heroal VS Z
heroal VS

are in conformity with the following EC Directives:

2006/42 EC
2014/35/EU

Machinery Directive
Low Voltage Directive

Standards applied:

EN 13561:2015
EN 60335-2-97:2010

Awning blinds – performance and safety requirements
Household and similar electrical appliances – Safety

Responsible for documentation:

heroal Johann Henkenjohann GmbH & Co.

Management:


Name

Creation date:

01.05.2016

heroal system installation VS Z / VS

Heroal performance features VS Z

Declaration of performance

LE 01 0516.1

1. Product type identification code: **heroal VS Z**
2. Purpose: **EN 13561:2009-01 / vertical awning blinds**
3. Manufacturer: **heroal Johann Henkenjohann GmbH & Co. KG
Österwieher Str. 80
33415 Verl (Germany)
Telephone +49 (0) 5246 507-0
Fax +49 5246 507-222**
4. System for assessing constancy of performance: **4**
5. Harmonised standard: **EN 13561:2009-01**
6. Declared performance:

Key features	Performance	Harmonised technical specification
Wind-resistance classification	see table on page 2	EN 13561:2009-01

7. Information: The product performance according to 1 and 2 complies with the declared performance according to 6. The manufacturer is solely responsible for preparation of the declaration of performance according to 3.

Signed on behalf of and in the name of the manufacturer:

Management:



 Name

Creation date: 01.05.2016

heroal system installation VS Z / VS

Heroal performance features VS

Declaration of performance

LE 01 0516.1

1. Product type identification code: **heroal VS**
2. Purpose: **EN 13561:2009-01 / vertical awning blinds**
3. Manufacturer: **heroal Johann Henkenjohann GmbH & Co. KG**
Österwieher Str. 80
33415 Verl (Germany)
Telephone +49 (0) 5246 507-0
Fax +49 5246 507-222
4. System for assessing constancy of performance: **4**
5. Harmonised standard: **EN 13561:2009-01**

6. Declared performance:

Key features	Performance	Harmonised technical specification
Wind-resistance classification	0	EN 13561:2009-01

7. Information: The product performance according to 1 and 2 complies with the declared performance according to 6. The manufacturer is solely responsible for preparation of the declaration of performance according to 3.

Signed on behalf of and in the name of the manufacturer:

Management:



 Name

Creation date: 01.05.2016

General terms and conditions

heroal - Johann Henkenjohann GmbH & Co. KG, Österwieher Str. 80, 33415 Verl, Germany

§ 1 Scope of these terms and conditions

- Our deliveries, services and offers are provided solely on the basis of these terms and conditions. They thus also apply to all future business relations, even in the absence of a subsequent, explicit agreement to that effect. It shall be assumed that these terms and conditions are accepted, at the latest upon receipt of the goods or services.
- Conflicting confirmation by the customer, with reference to the customer's terms and conditions of business or purchase, is hereby excluded.
- Deviations from these terms and condition are only valid if we confirm them in writing.

§ 2 Conclusion of offer and contract

- Our offers are subject to confirmation. Services and calculations are realised according to the prices indicated on the day of dispatch or collection of goods. Significant changes in costs – e.g. due to increased raw material prices or wages – while the order is in progress entitle us to request a price adjustment or, in the event of disagreement, to withdraw from the contract. No freight is charged for deliveries realised with our own HGV, for orders valued at €3000.00 and above. For other means of dispatch and for order values of less than €3000.00, the freight costs are to be met by the customer.
- If a customer order qualifies as a binding offer (§ 145 BGB – German Civil Code), we can accept this offer within 2 weeks. This acceptance can occur in writing or by means of delivery of the goods.
- Unless otherwise stipulated upon order confirmation, upon delivery or dispatch of goods, risk is passed to the customer „ex works“ – i.e. as soon as the consignment has been transferred to the person responsible for transport or has left our warehouse or business premises for dispatch. If dispatch becomes impossible without culpability on our part, the risk shall pass to the customer upon notification of availability for dispatch. We do not provide transport insurance.
- Unless otherwise arranged, we do neither charge for, nor take back, single-use packaging. Retrieval is not among our obligations. Special packaging, e.g. steel pallets and crates, are billed at cost. Steel pallets are to be returned by the customer at the customer's expense, without charging freight. If they are returned free of all charges, in usable condition, we shall issue a credit note for the full value.

§ 3 Prices/payment conditions

- Unless otherwise arranged, all prices are in euros and are subject to VAT at the respective applicable rate.
- Unless otherwise arranged in writing, payment is to occur within 30 days after the invoice date, strictly net. Cash discounts (maximum 2%) can only be approved if payment occurs within 10 days after invoicing. Cash discounts are only granted if all due payment obligations, including those from previous deliveries, are fulfilled and the invoice sum is paid to us punctually in cash, or credited to our account, by the aforementioned due dates.
- If the aforementioned payment deadline is exceeded, we are entitled to charge statutory default interest, without the need for a specific notice of default. This does not exclude the assertion of additional claims for damages.
- Payment shall be deemed effected as soon as we have unconditional access to the sum. Cheques shall only be accepted on account of fulfilment. Payment shall only be deemed effected once the cheque has been honoured and we have unconditional access to the sum.
- We reserve the right to accept external or internal bills of exchange. The costs and discount charges are to be met by the customer. We do not guarantee prompt discharge of prolonged bills of exchange on our part.
- The customer is only entitled to offsetting rights if their counter-claims are determined to be legally valid, are undisputed or are recognised by us. Moreover, the customer is authorised to exercise a right of retention only insofar as the customer's counter-claim is based on the same contractual relationship.

§ 4 Deliveries

- The arrangement of binding deadlines or time periods must occur in writing and shall be agreed upon individually. The specified time period can only begin after all technical questions have been clarified. Upon failure to adhere to a binding deadline confirmed in writing, the customer is obliged to set us an appropriate extension period in writing. If fulfilment does not occur within the extension period either, the customer is entitled to withdraw from the contract.
- Insofar as we cannot meet binding delivery deadlines, for reasons not due to any failing on our part (non-availability of performance), we shall notify the customer immediately and inform them of the estimated new delivery period. If performance remains unavailable within the new delivery period, we are entitled to withdraw from the contract in whole or in part; we shall immediately reimburse the customer for any counter-performance already realised. In particular, if our suppliers fail to deliver to us punctually, this applies as non-availability of performance in this regard if we have concluded a congruent hedging transaction. Our legal rights of withdrawal and termination, as well as the legal regulations regarding contract remuneration upon exclusion of the obligation to perform (e.g. performance and/or subsequent performance become(s) impossible or unreasonable) shall remain unaffected. The customer's rights of withdrawal and termination according to these general terms and conditions shall also remain unaffected.
- The customer is entitled to assert claims of default insofar as we are responsible for the default. However, the customer must issue a warning in each case. In the event of only slightly negligent breach of obligations on our part or on the part of our vicarious agents, our liability is limited to the amount of damages typically foreseeable for the type of contract. This does not affect our liability for damages resulting from injury to life, bodily injury, damage to health, intent or gross negligence. Furthermore, our liability as defined by the German Product Liability Act (ProdHaftG) shall remain unaffected.
- If the customer defaults on acceptance or breaches any other obligation to cooperate, we are entitled to demand a lump-sum payment amounting to 3%, and no more than 10%, of the remuneration as compensation for our costs, without prejudice to other claims. However, the customer is permitted to submit evidence that we have not suffered any damages, or that our damages are substantially less than the lump sum referred to in sentence 1.

§ 5 Retention of title

- We retain ownership of the delivered goods until all claims with respect to the customer which result from the business relationship, including claims arising in the future – also from contracts concluded at the same time or at a later date – are settled. This also applies if individual claims, or all claims, have been included in an ongoing invoice and the balance has been struck or approved.
- The goods subject to retention of title may not be pledged to third parties or assigned as security until the secured claim is paid in full. If third parties acquire the goods which belong to us, the customer is to notify us immediately in writing, stating the extent of this access.
- The customer is entitled to sell the goods on, in the ordinary course of business, provided that the receivables from the onward sale are transferred to us as follows: The customer immediately assigns to us all claims and ancillary rights which accrue to the customer against the purchaser or against third parties as a result of the onward sale, irrespective of whether the goods subject to retention of title are sold on in an adapted or unadapted form.

The customer is entitled to collect these claims even after assignment. Our right to collect these claims ourselves shall remain unaffected. However, we undertake to refrain from collecting such claims, as long as the customer fulfils their payment obligations. Upon request, the customer is to provide us with all information necessary for identification of the third party and for assertion of the assigned claims. If the goods are resold together with other goods which belong to the customer, our claim against the purchaser is regarded as assigned, to the amount of the delivery price agreed between us and the customer.

- With regard to any handling and adaptation of the goods subject to retention of title, we qualify as the manufacturer within the meaning of § 950 BGB (German Civil Code), but without any further obligation. The adapted goods are regarded as goods subject to retention of title for the purposes of these terms and conditions. If the goods subject to retention of title are adapted, or inseparably mixed, with other items that do not belong to us, we shall acquire ownership of the new object in the ratio of the invoice value of the goods subject to retention of title to the invoice value of the other goods used at the time of adapting or mixing. The resulting co-ownership rights are regarded as goods subject to retention of title for the purposes of these terms and conditions. If our goods are combined and inseparably mixed with other movable objects to form a unified item and if the other item is to be seen as the main item, it is hereby agreed that the customer shall assign co-ownership to us proportionally, insofar as the main item belongs to the customer. In addition, the same conditions apply for the item created by adapting, combining and mixing as apply for the goods subject to retention of title.
- If the customer acts in breach of contract, particularly in the event of default on payment, we shall be entitled to withdraw from the contract after setting an appropriate payment deadline. We are then entitled to retrieve previously delivered goods and the customer is obliged to return them. In the event of attachments or other interventions by third parties, the customer must notify us immediately in writing, including a report of attachment and a statutory declaration as to the identity of the attached item.
- Notwithstanding the customer's payment obligations, we are entitled to sell the retrieved goods to the best of our ability and to credit the proceeds in full, or upon deduction of a 25% decrease in value. The original invoice price shall serve as a basis. The regular decrease in value is determined according to the worsened condition of material, the costs of collection and the worsening of the goods caused by the return transport. However, the customer is permitted to submit evidence that we have not suffered any damages, or that our damages are substantially less than the lump sum referred to in sentence 1.
- If the realisable value of securities exceeds our claims by more than 10%, upon the customer's request we shall release securities, as selected at our discretion.

§ 6 Legal guarantee

- The customer is obligated to unpack and inspect the delivered goods immediately upon receipt (§ 377 HGB – German Commercial Code). Complaints of any kind are to be made in writing within 8 days after delivery. We are to be notified of any concealed defects immediately upon discovery thereof, and no later than 10 days after discovery. After this deadline has passed, the goods are regarded as faultlessly delivered and approved.
- We shall rectify defects by means of repair or replacement. If subsequent performance fails, or would entail disproportionate costs, the customer retains the right to a reduction in price and the right of withdrawal. In the event of only slight defects, or only a slight breach of obligations on our part, withdrawal is excluded.
- We guarantee our goods in accordance with the respective legal guarantee period, as long as the customer uses the goods in the usual and intended manner. In this regard, we point out that the technical specifications which we issue, with respect to the contractual object and intended use, only represent the approximate character and type of the goods. Permissible tolerances defined by DIN are no grounds for complaint and do not denote defects. We shall not be held responsible for defects in the event of natural wear and tear, damage caused by improper handling, inadequate storage, or if the defect is due to the goods being used in a special manner which was not indicated to us in writing upon conclusion of the contract. The period begins when the goods are handed over to the customer.

§ 7 Compensation for damages/liability

- Unless provided otherwise below, claims for damages on the part of the customer – whatsoever the legal grounds – shall be excluded. We shall therefore not be held liable for damage not occurring to the delivery item itself; in particular we shall not be held liable for the customer's lost profit or other financial losses.
- In the event of solely negligent breach of obligations on our part or on the part of our vicarious agents, our liability is limited to the amount of damages typically foreseeable for the type of contract. For damages resulting from injury to life, bodily injury or damage to health on the part of the customer, as well as from intent or gross negligence, we accept liability according to the legal requirements. This also applies if the customer, due to the absence of a guaranteed characteristic of the item or due to fraudulent concealment, desires compensation for damages in lieu of performance. Furthermore, our liability as defined by the German Product Liability Act (ProdHaftG) shall remain unaffected.
- Insofar as our liability is excluded or limited, this shall also apply to the personal liability of our salaried employees, waged workers, hired staff, representatives and vicarious agents.

§ 8 Defence of insecurity

If, after conclusion of the contract, it becomes evident that the customer's insufficient ability to pay endangers our payment claim, we can withhold our performance. This right to refuse performance on our part shall not apply if the customer provides payment or security for payment. We are entitled to set an appropriate period, during which the customer is to progressively provide payment or suitable security against delivery. If this period expires unsuccessfully, we are entitled to withdraw from the contract.

§ 9 Applicable law/jurisdiction/partial nullity

- These terms and conditions, as well as all legal relationships between ourselves and the customer, shall be governed by the law of the Federal Republic of Germany.
- Our general terms and conditions of use also constitute part of our deliveries.
- If the customer is a trader as defined in the German Commercial Code (HGB), a legal entity under public law or a separate estate under public law, jurisdiction shall be solely that of the district court of Gütersloh (Amtsgericht Gütersloh) and the regional court of Bielefeld (Landgericht Bielefeld) for all disputes resulting directly or indirectly from the contractual relationship, according to the value of the claim.
- Should a provision in these terms and conditions of business be or become invalid, the validity of the remaining provisions shall remain unaffected. If the invalidity is based on a performance-related or time-related stipulation, the measure prescribed by law comes into force in its place.

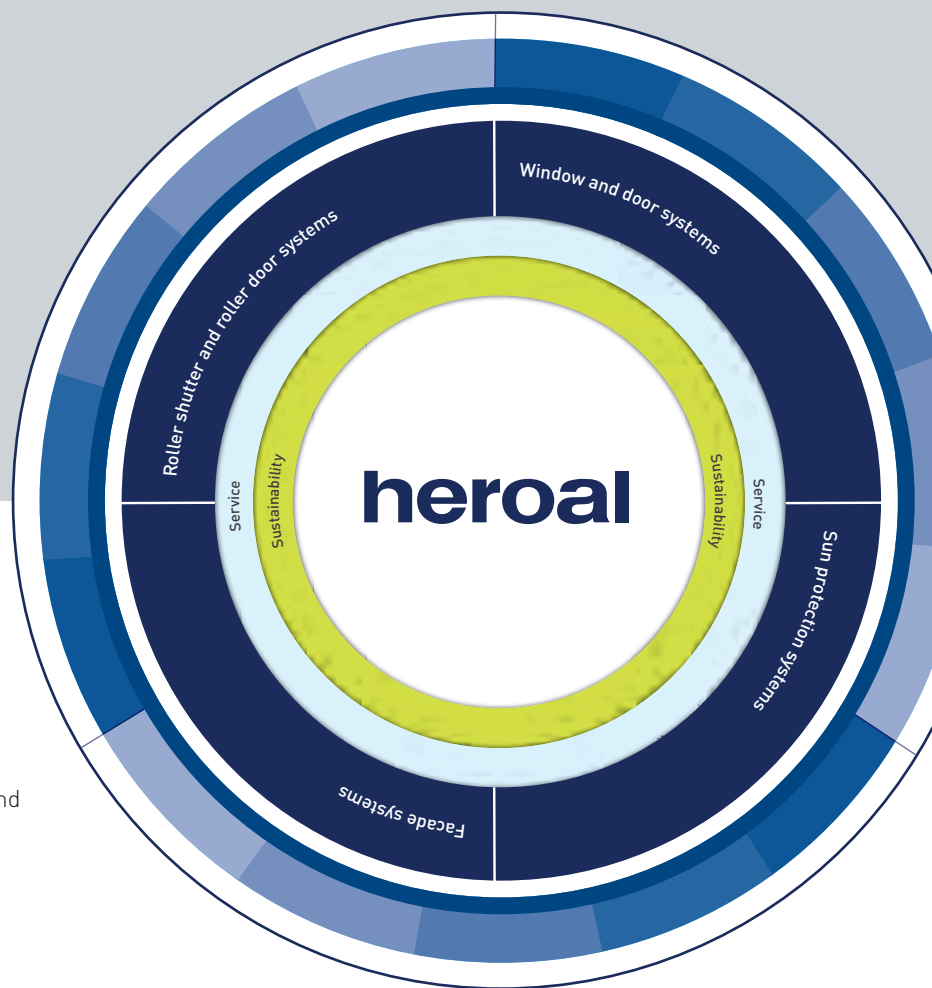
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