

Always live life in the
right light.

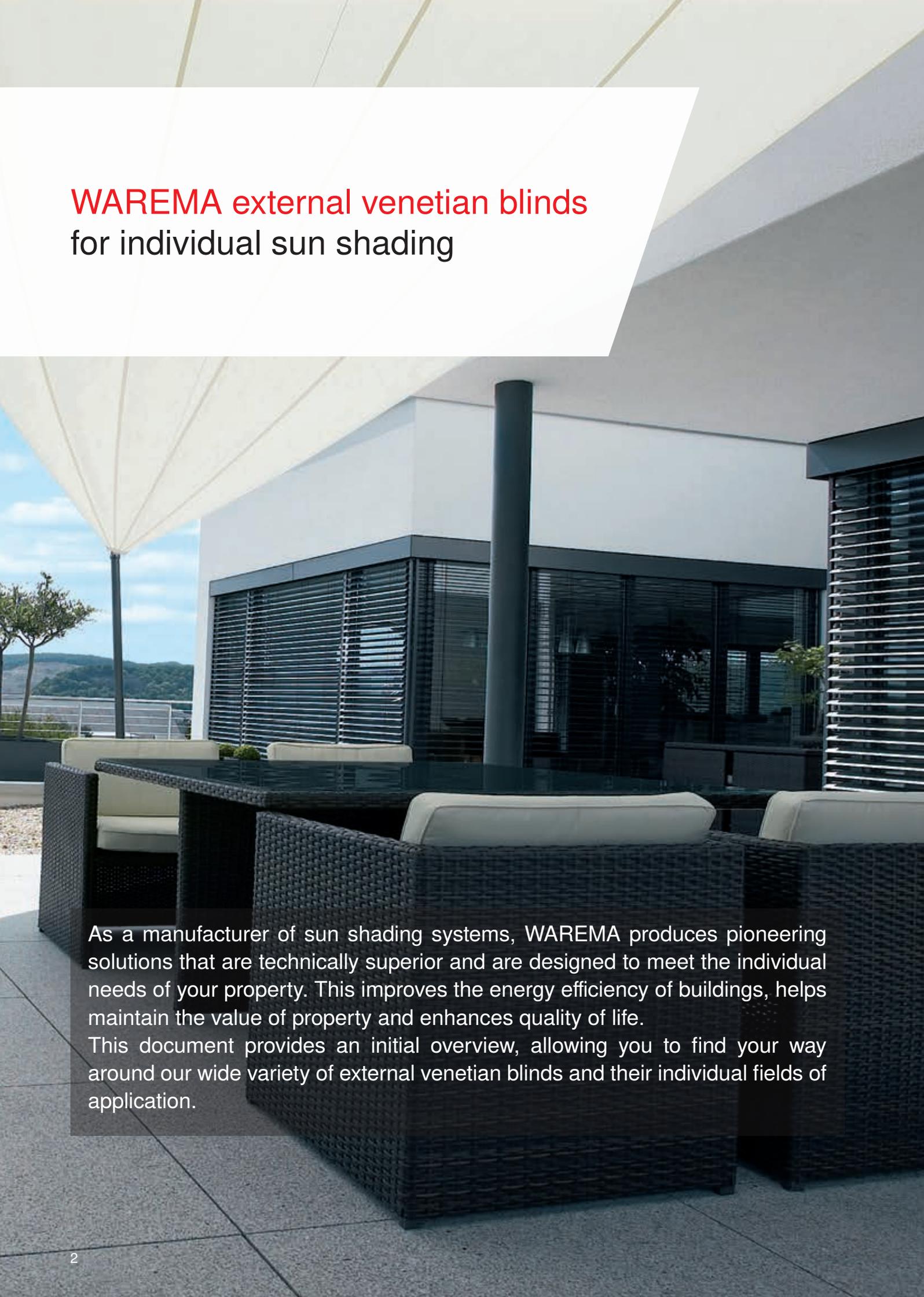
With WAREMA external venetian blinds



Der SonnenLichtManager



WAREMA external venetian blinds for individual sun shading

A photograph of a modern outdoor terrace. In the foreground, there is a dark wicker sofa with light-colored cushions and a matching table. To the left, a large white umbrella is partially visible. In the background, a building with large windows and external venetian blinds is shown. The blinds are dark and have a horizontal slat design. The building has a white facade and a dark roofline. The sky is blue with some clouds, and there are hills in the distance.

As a manufacturer of sun shading systems, WAREMA produces pioneering solutions that are technically superior and are designed to meet the individual needs of your property. This improves the energy efficiency of buildings, helps maintain the value of property and enhances quality of life. This document provides an initial overview, allowing you to find your way around our wide variety of external venetian blinds and their individual fields of application.



The leading SunLight Manager 2

Energy efficiency 10

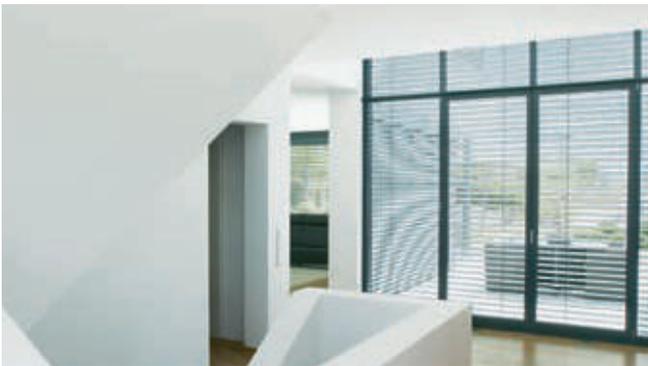
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- Venetian blind facade systems
- vivamatic®
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- Venetian blind window systems
- Front-mounted external venetian blinds
- Top-mounted external venetian blinds for new buildings
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- WAREMA Colour World
- Slat function
- Cover panels
- Bottom rails
- Guide rails
- Cable guidances
- Drives
- Control systems





The right products for your dream house

We develop and produce modern and functional sun shading solutions which enable active SunLight Management. We rely very consciously on the strengths of a family-owned company based in Germany. As a full-range provider, we deliver expert solutions with reliable quality from a single source. Our actions and approach are consistently geared towards increasing benefits for our customers. To this end, we now offer a growing range of products and services tailored to your requirements and demands.



Our varied and innovative product developments from seasoned experts, our high standards of quality, the individually manufactured products and the extensive services are indispensable for our position as the leading SunLight Manager.

Our order-based production of sun shading systems relies both on the latest in production technology and on hand-crafting expertise, and all processes are geared toward sustainability and the conservation of resources. In addition to first-rate products, we offer our partners a comprehensive range of services that support them in their day-to-day operations.

We offer contractors a multitude of possibilities for external heat protection, internal glare control and control systems - from a selection from our wide product range to individual special solutions. We guarantee competent service and comprehensive information on our products, taking into account current energy saving regulations and development of the standards for the building sector.



Sun shading systems from A to Z

Unattractive and boring functional buildings are a thing of the past – continuous glazed facades and special shapes have become a given in modern architecture. And the desire for individual style is constantly growing. This new diversity demands the same diversity in sun shading systems. WAREMA offers a perfect, individual solution for every architectural style – for inside and outside.



External venetian blinds

Venetian blind facade systems, metal system venetian blinds, venetian blind window systems, front-mounted external venetian blinds, top-mounted external venetian blinds for new buildings, asymmetrical external venetian blinds, wind-stable external venetian blinds, daylight guiding venetian blinds



Roller shutters

Front-mounted roller shutters, top-mounted roller shutters, top-mounted roller shutters for new buildings, renovation roller shutters, asymmetrical roller shutters, security roller shutters



Large slats

Single-walled slat systems, hollow slat systems, large slat systems



Internal sun shading systems

Venetian blinds, vertical louvre blinds, roller blinds, pleated blinds, curtain panels, sun shading system for skylights





Patio awnings

Articulated arm awnings, cassette awnings, conservatory awnings, patio side screens, canopy awnings, horizontal awnings

Pergola awnings and patio roofs



Window awnings

Window awnings with ZIP guidance, vertical awnings, facade awnings, drop-arm awnings, markisolettes

Sun sails



Insect screens

Fixed frames, swivel frames, sash frames, roller blinds, insect screen pleated blinds, light well covers

Black-out blinds

Vertical black-out blinds, horizontal black-out blinds, ZIP black-out blinds

Control systems

Radio remote controls, central control systems, WAREMA climatronic® 2.0, sensors, KNX technology, LonWorks® technology, BAline

WAREMA OPTI SYSTEM

Intelligent room climate control



Optimal sun shading systems and significant energy savings are of interest to every home owner today. The WAREMA OPTI SYSTEM provides an ideal room climate – pleasantly cool in summer and comfortably warm in winter. And it does all this with full automation and maximum convenience. With existing heat protection glazing, the combination of external adjustable sun shading, internal glare control and an intelligent control saves up to 40 percent in energy costs. For more information, visit www.warema.com/optisystem

External sun shading systems

An external WAREMA sun shading system reduces the incidence of solar energy. The incidence of light is optimised to enable sufficient glare-free daylight utilisation. The concept is quite simple: depending on the time of day or year, the system lets more or less sun into the room and utilises the solar energy gain to a greater or lesser extent.



Internal sun shading systems

The internal WAREMA product delivers additional glare control throughout the entire year, and therefore a pleasant atmosphere and high level of comfort. It also allows individual adjustment of visual privacy and the view out. High-grade materials and a diverse colour pallet give each room its own character.

Intelligent control system

WAREMA control systems create the perfect room climate while providing optimal daylight utilisation. They ensure that solar energy is used appropriately at all hours of the day.

Summer day

On a hot summer day, the incidence of solar energy has to be kept low. The incidence of light should be high enough to enable adequate daylight utilisation. The internal glare control can also be used in the case of special requirements.



Summer night

At the end of a hot summer day, the building will have heated up. At night, the control system raises all existing sun shading components that could block the flow of heat from the inside to the outside. This facilitates the cooling down of the building.



Winter day

Solar energy gains should be used on a cold winter day. When the sun is low, the glare control requirements are especially high. Only the internal glare control with low transmission is used. Dark colours ensure that a large quantity of solar energy can be used.



Winter night

On a cold winter night, the building must be protected against heat loss. Therefore all sun shading products are lowered. The resulting air pockets between the individual components improve heat insulation.





Improving energy efficiency – with WAREMA sun shading systems

Improving quality of life, saving energy and reducing CO₂ emissions: Modern sun shading systems possess enormous potential for improving climate protection and economising the use of fossil fuels. When used consistently, an intelligently controlled sun shading system saves energy for cooling, heating and artificial lighting.

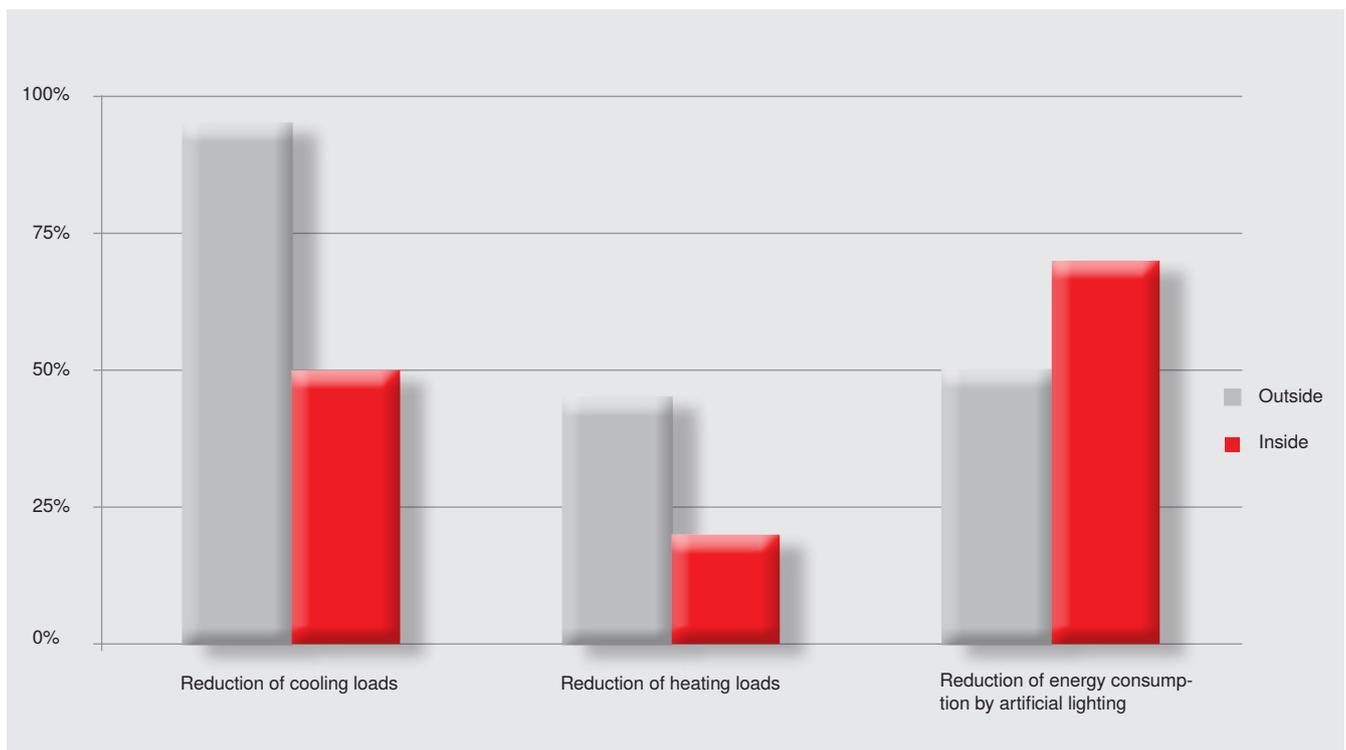
Energy savings with technical sun shading systems

Roughly 40% of energy consumed in Europe is used to light, heat, cool and ventilate buildings. Half of which goes towards heating alone. A study conducted by the European Solar-Shading Organization (ES-SO) shows that by combining efficient sun shading systems with an intelligent control solution, roughly 110 million tonnes of CO₂ can be saved annually in the EU alone. This is an important topic, especially in light of energy saving regulations and the impacts on building contractors and homeowners.



The trend towards larger glass surfaces means that sun shading systems are absolutely essential. A sun shading system keeps rooms from heating up on summer days and limits room cooling during winter nights. This allows daylight to be utilised in such a manner that artificial lighting is no longer needed during the day. Personal well-being increases, while energy costs are reduced.

Energy savings with technical sun shading systems in conjunction with an intelligent control system



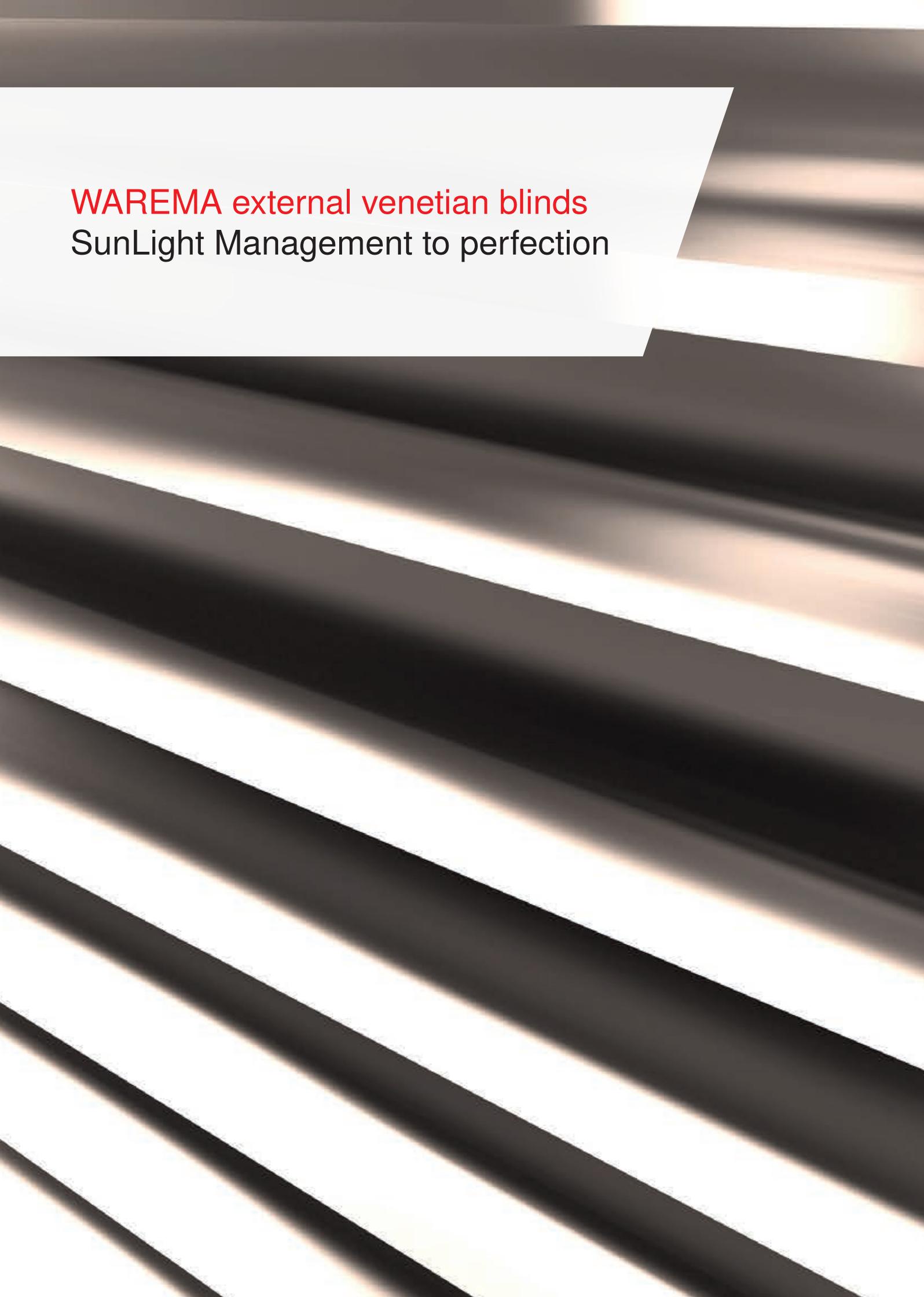
The sun can't be controlled,
but it can be managed.



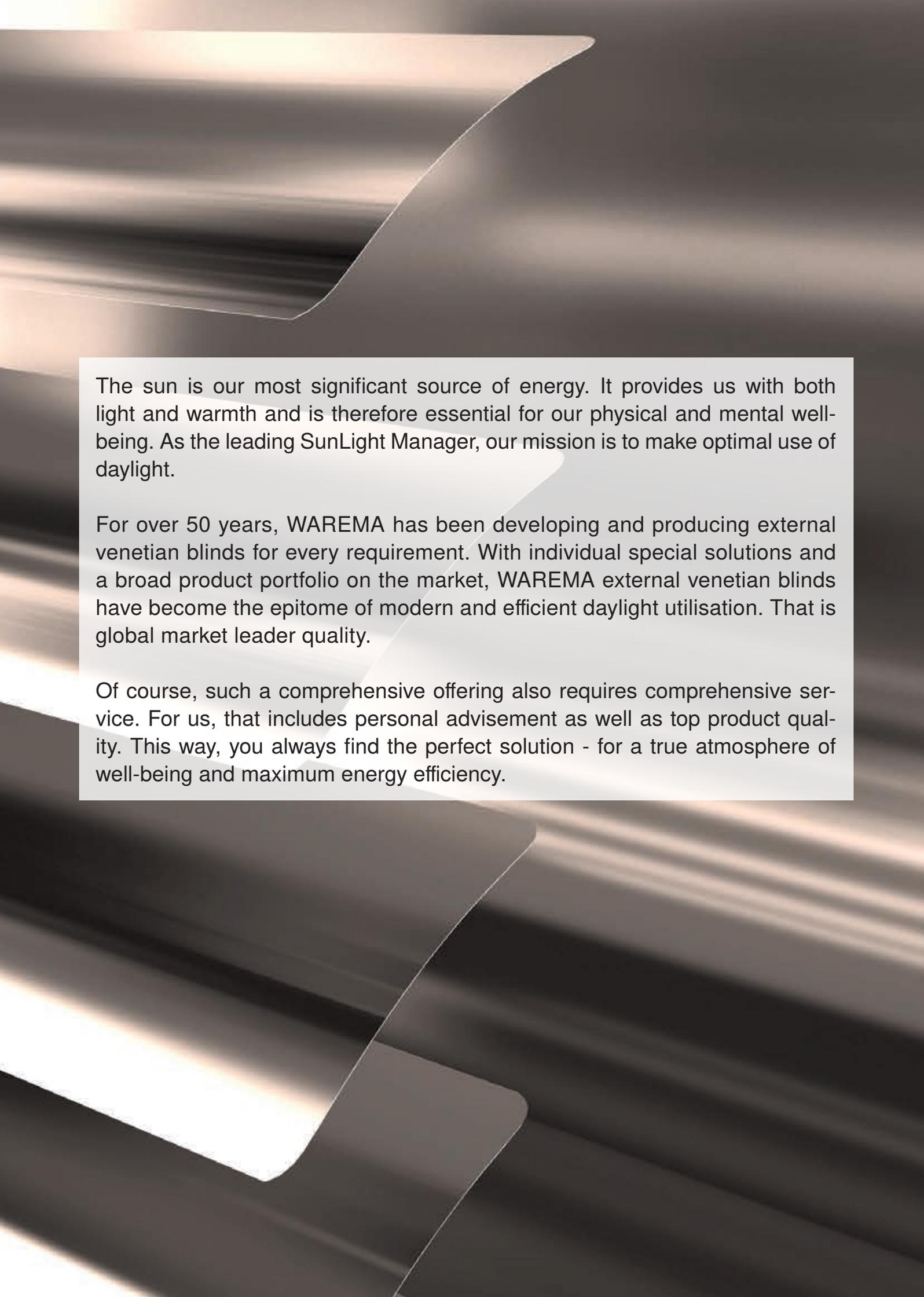
Der SonnenLichtManager

As important as sunlight is for all of us, people still need products and technologies that create a comfortable atmosphere. These days a tap of the finger is often all it takes to supply any room with just the right lighting – for a better quality of both work and life. It's a big part of what we're working on at WAREMA.

Our goal is to develop customer oriented solutions with a continuously expanding range of products featuring superior quality. As a manager, we also see it as our job to provide comprehensive advising and the fastest possible delivery while offering customised manufacturing. For us, fair cooperation at every level of the business relationship is a fundamental part of the process.



WAREMA external venetian blinds
SunLight Management to perfection



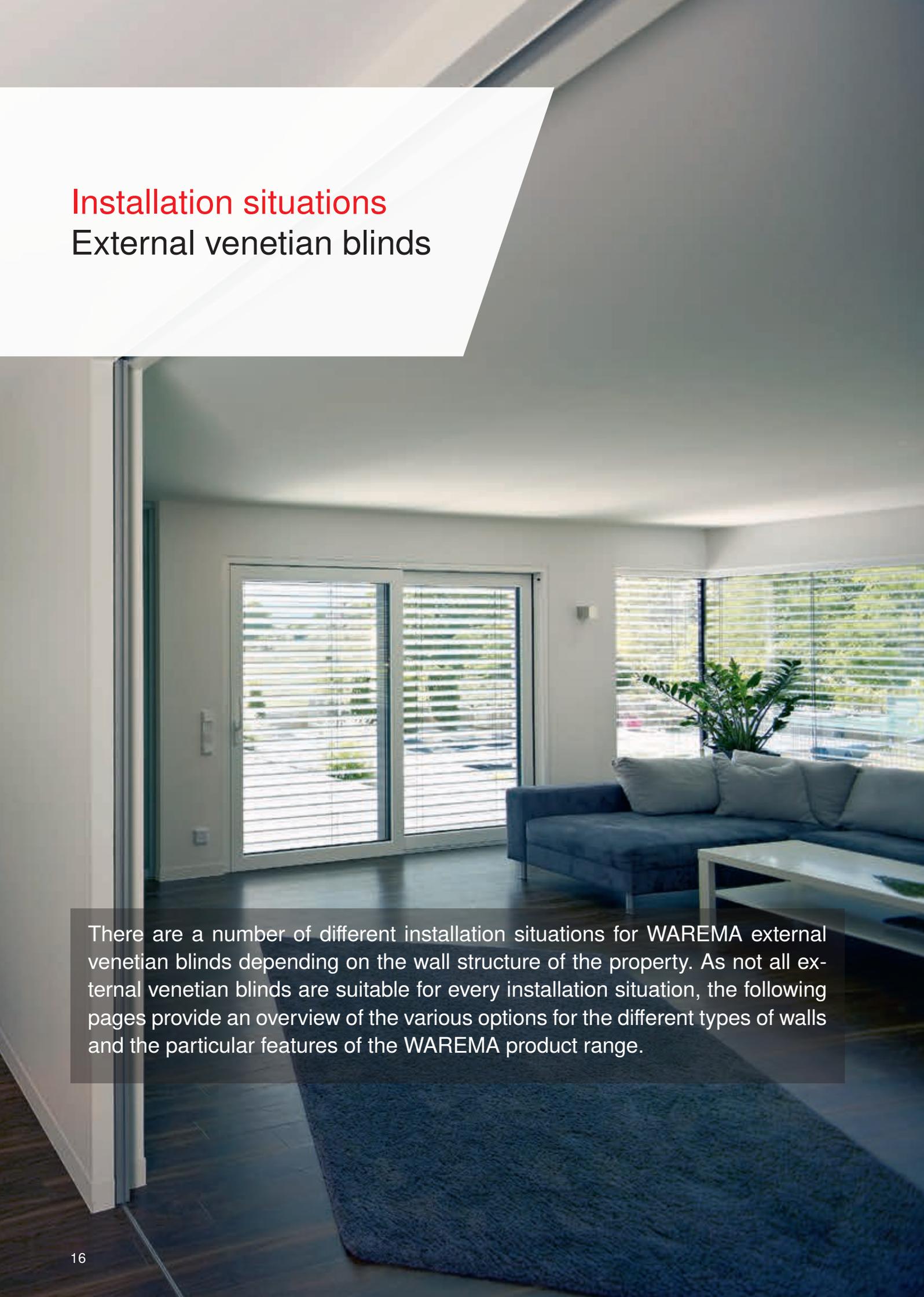
The sun is our most significant source of energy. It provides us with both light and warmth and is therefore essential for our physical and mental well-being. As the leading SunLight Manager, our mission is to make optimal use of daylight.

For over 50 years, WAREMA has been developing and producing external venetian blinds for every requirement. With individual special solutions and a broad product portfolio on the market, WAREMA external venetian blinds have become the epitome of modern and efficient daylight utilisation. That is global market leader quality.

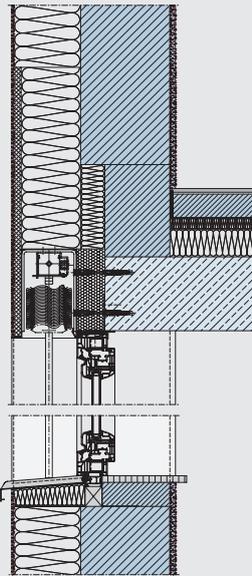
Of course, such a comprehensive offering also requires comprehensive service. For us, that includes personal advisement as well as top product quality. This way, you always find the perfect solution - for a true atmosphere of well-being and maximum energy efficiency.

Installation situations

External venetian blinds

A photograph of a modern living room with large windows and external venetian blinds. The room features a blue sofa, a white coffee table, and a large potted plant. The blinds are partially open, allowing natural light to enter the room. The ceiling is white with recessed lighting. The floor is dark wood. The overall atmosphere is bright and airy.

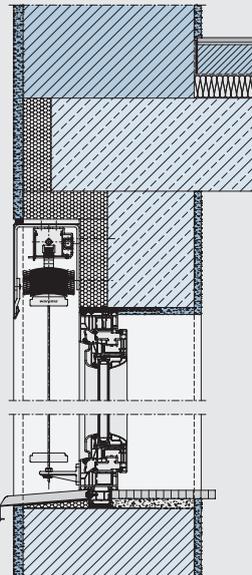
There are a number of different installation situations for WAREMA external venetian blinds depending on the wall structure of the property. As not all external venetian blinds are suitable for every installation situation, the following pages provide an overview of the various options for the different types of walls and the particular features of the WAREMA product range.



Masonry with an exterior installation and finish system

Usable types

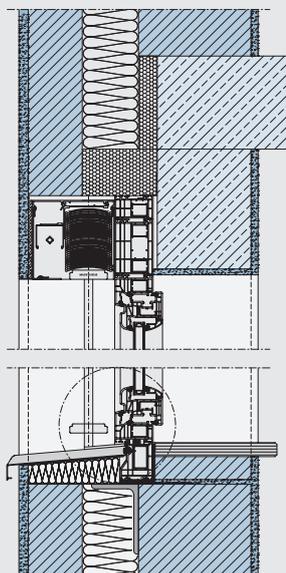
- Venetian blind window systems
- Metal system venetian blinds
- Venetian blind facade systems
- Front-mounted external venetian blinds
- Top-mounted external venetian blinds for new buildings
- Asymmetrical external venetian blinds



Monolithic masonry

Usable types

- Venetian blind facade systems
- Metal system venetian blinds
- Top-mounted external venetian blinds for new buildings
- Front-mounted external venetian blinds
- Asymmetrical external venetian blinds



Double-wall masonry

Usable types

- Venetian blind facade systems
- Metal system venetian blinds
- Top-mounted external venetian blinds for new buildings
- Venetian blind window systems
- Front-mounted external venetian blinds
- Asymmetrical external venetian blinds

Installation situations

External venetian blinds





Facades with timber frame construction

Usable types

- Venetian blind facade systems
- Metal system venetian blinds
- Front-mounted external venetian blinds
- Venetian blind window systems
- Top-mounted external venetian blinds for new buildings
- Asymmetrical external venetian blinds



Transom and mullion facades/ conservatories

Usable types

- Venetian blind facade systems
- Metal system venetian blinds
- Asymmetrical external venetian blinds

Venetian blind facade systems

Individual design



Venetian blind facade systems can be integrated as elements into virtually any facade. The range of slats, from simple standard slats to extremely wind-stable slats, allows you individual design freedom for nearly any requirement. Venetian blind facade systems are suitable for heat protection as well as glare control. But venetian blind facade systems are also ideal for dim-out using the special dim-out slats.



► The benefits for you

- Maximum number of slat geometries for a great variety of structural requirements
- Numerous slat colours for individual facade accents
- Universally applicable for any installation situation



Features

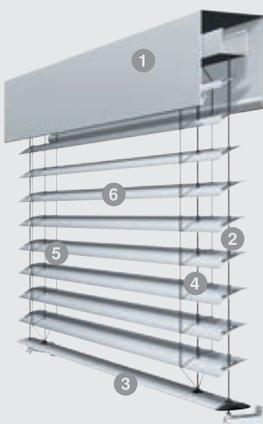
- Construction limit values*:
 - max. width: 5000 mm
 - max. height: 5000 mm
 - max. area: 25 m²
- Slats:
 - beaded 60 S / 80 S mm,
 - flat slat 50/60/80/100/150 mm,
 - dim-out slat 73/90/93 mm
- Available with vivamatic® (VM), slowturn (ST), daylight transport element (TLT)
- Drive: 230V middle motor, solar drive, crank

*depending on type and equipment

Fields of application and mounting

- For new buildings
- For refurbishments
- In front of the facade
- In the reveal
- Ventilated facade
- Transom and mullion facade/conservatory
- Double skin facade – inside

E 80 A2 S



E 80 A6 S



Venetian blind facade systems

- 1 cover panel
- 2 lateral guidance
- 3 bottom rail
- 4 lifting tape
- 5 tilting tape
- 6 slats

Venetian blind facade systems

Variants for every challenge



External venetian blinds with beaded slats

- Flexible use for nearly any installation situation
- Rolled beads increase slat stability
- Visual feature for facade design

Installation situation

- For new buildings
- For refurbishments
- In the reveal
- Ventilated facade
- Transom and mullion facade/conservatories
- Double skin facade
- Inside



External venetian blinds with dim-out slats

- Room dimming through special slat design
- High stability, even with wind
- All classic functions of external venetian blinds are retained, even for dim-out external venetian blinds

Installation situation

- In living areas and bedrooms
- Wherever the incidence of light could be disruptive
- For new buildings
- For refurbishments
- In conference rooms
- On transom and mullion facades
- On conservatories



External venetian blinds with flat slats

- Slender design
- Low cover panel heights
- Very good view to the outside

Installation situation

- For new buildings
- For refurbishments
- On transom and mullion facades/ conservatories
- In the reveal
- Ventilated facade
- Double skin facade
- Inside



Self-supporting external venetian blinds

- Cover panel fixed to the guide rails
- No need for additional cover panel fixation to the facade
- Can be mounted either on or between the guide rails
- Ideally suited for retrofitting

Installation situation

- For new buildings
- For refurbishments
- On conservatories
- On transom and mullion facades
- For retrofitting on insulated facades
- As a facade design feature



vivamatic®

Daylight management for external venetian blinds

vivamatic® is not visible. Its result, however, is: The intelligent Daylight Management automatically sets the external venetian blind slats to the ideal angle even before lowering – depending on the current position of the sun, time of day and time of year. This allows vivamatic® to create an ambience of well-being, permanently. The slat position continuously and automatically adapts to the position of the sun. External venetian blinds with vivamatic® therefore score points for heat regulation as well as for energy savings. The comfortable vivamatic® technology enhances private homes as well as offices and large commercial buildings.



Easy to install or retrofit

Whether new buildings or refurbishment – vivamatic® is possible wherever external venetian blinds are planned. Installing vivamatic® is no problem even if a building is nearly finished. This allows you to enjoy tomorrow's quality of life today.

Convenient control

Just rely on WAREMA climatronic® 3.0 with sun-controlled slat tracking. With the superordinate sun shading control system WAREMA climatronic® 3.0, you can set your personally preferred slat angle for all your external venetian blinds. Or you can rely on the control system, which adapts to the position of the sun at any time of day and year to automatically control your external venetian blinds with the correct slat angle for the position and orientation of your building.



Maximum daylight utilisation

No matter where the sun is - WAREMA external venetian blinds with vivamatic® create a true atmosphere of well-being and thus offer the greatest comfort at home.



Metal system venetian blinds

Customised perfection

You are looking for a particularly exclusive solution? Then the WAREMA metal system venetian blind is the right choice for you. Metal components provide a particularly elegant appearance and impress across the board. This design also makes it possible to achieve more precise positioning of the individual slats, significantly improving the dim-out effect and light yield. Compared to standard solutions, metal system venetian blinds impress with their high-quality appearance, and the absence of holes in the slats reliably prevents distracting spots of light.



► The benefits for you

- Improved dim-out through omission of holes for lifting tapes
- No visible lifting components
- The design of the bottom rail impedes pushing up of a lowered external venetian blind and prevents collision when obstacles are encountered



Features

- Construction limit values*:
 - max. width: 4000 mm
 - max. height: 4300 mm
 - max. area: 10 m²
- Slats:
 - dim-out slat 90/93 mm
- Available with daylight transport element (TLT)
- Drive: 230 V motor

*depending on type and equipment

Fields of application and mounting

- For new buildings
- For refurbishments
- As a facade design feature
- In living areas and bedrooms
- Wherever the incidence of light could be disruptive
- On transom and mullion facades
- On conservatories

Metal system venetian blind



Lifting chain



- 1 top rail
- 2 guide rails
- 3 slats
- 4 loop cord
- 5 bottom rail
- 6 lifting chain

Venetian blind window systems

Perfect sun shading, optimally integrated

Venetian blind window systems can be integrated into the facade as an unobtrusive or as a visible element. As the units fit seamlessly into the exterior insulation and finish systems (EIFS), these external venetian blinds easily meet the continually increasing requirements for thermal insulation. Aside from classic guide profiles, external venetian blinds with slender cable guidance or a combination of cable and guide rails are also a possibility.



► The benefits for you

- Concealed or visible integration in the facade
- No need for additional fixing of cover panels – prevention of thermal bridges
- Front sides of guide profiles can be entirely plastered
- Insect screen can be integrated



Features

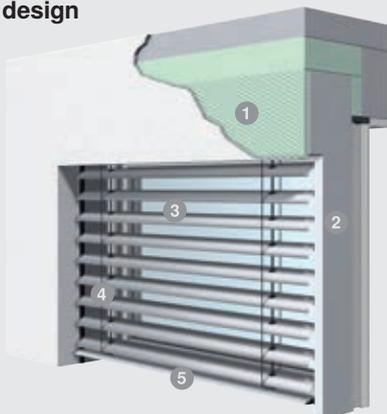
- Construction limit values:
 - max. width: 4000 mm
 - max. height: 4000 mm
 - max. area: 16 m²
- Slats:
 - beaded 60 S/80 S mm
 - flat slats 60/80 mm
 - dim-out slats 73/90/93 mm
- Available with vivamatic® (VM), slowturn (ST), daylight transport element (TLT)
- Drive: 230 V motor

*depending on type and equipment

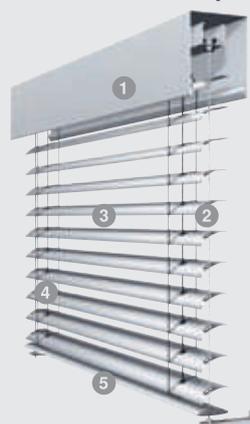
Fields of application and mounting

- For new buildings
- For refurbishments
- As a facade design feature
- In living areas and bedrooms
- Wherever the incidence of light could be disruptive

**Venetian blind window system P
with cover panel in flush mount
design**



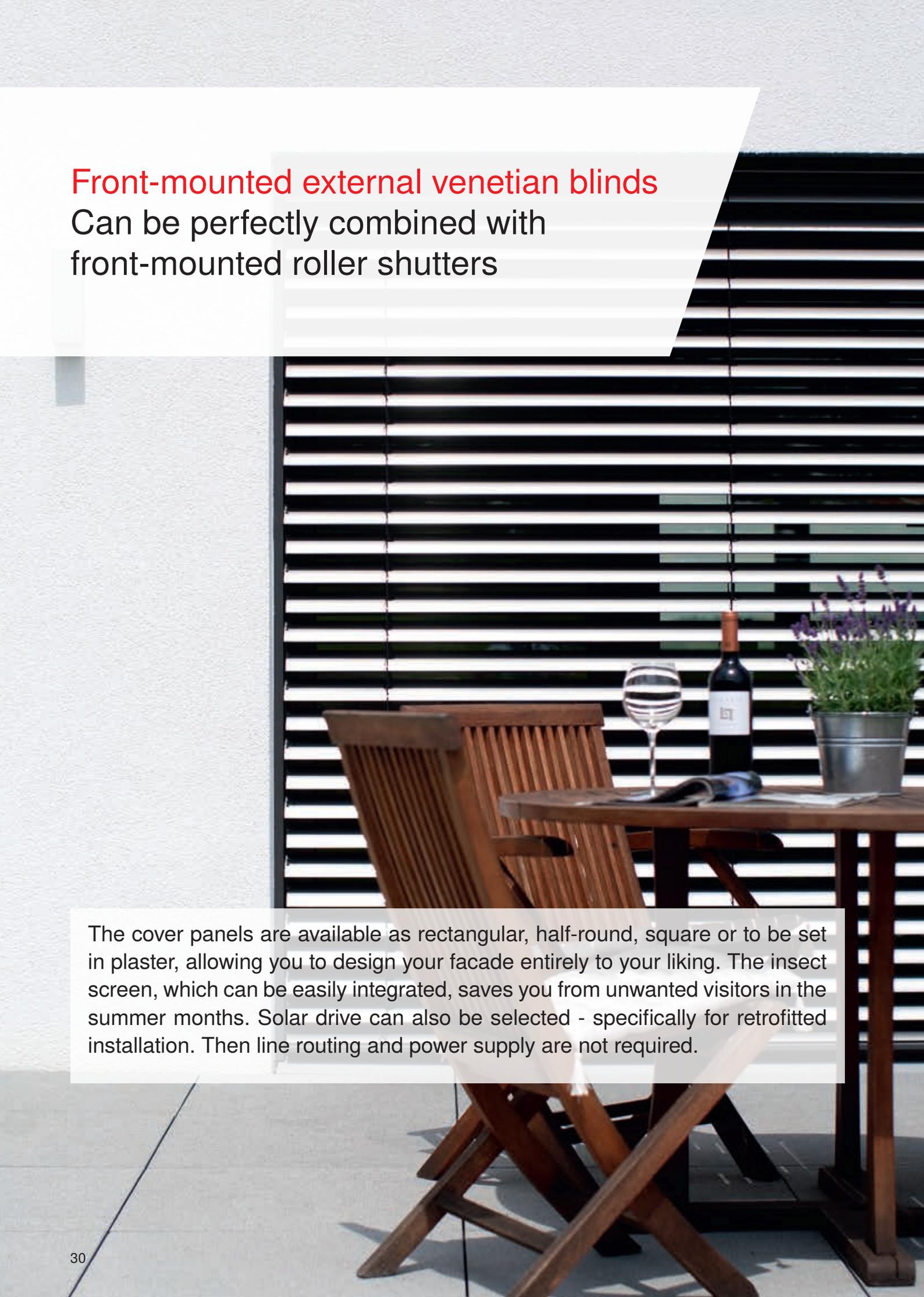
**Venetian blind window system E
with visible cover panel**



- 1 cover panel
- 2 lateral guidance
- 3 slats
- 4 tilting tape
- 5 bottom rail

Front-mounted external venetian blinds

Can be perfectly combined with front-mounted roller shutters



The cover panels are available as rectangular, half-round, square or to be set in plaster, allowing you to design your facade entirely to your liking. The insect screen, which can be easily integrated, saves you from unwanted visitors in the summer months. Solar drive can also be selected - specifically for retrofitted installation. Then line routing and power supply are not required.



► The benefits for you

- Compatible with front-mounted roller shutters in terms of installation and appearance
- No need for additional box fastening – prevention of thermal bridges
- Insect screen can be integrated



Features

- Construction limit values:
 - max. width: 4000 mm
 - max. height: 4000 mm
 - max. area: 16 m²
- Slats:
 - beaded 80 S mm
 - flat slats 80 mm
 - dim-out slats 73 mm
- Available with vivamatic® (VM), slowturn (ST), daylight transport element (TLT)
- Drive: 230V motor, solar, crank

*depending on type and equipment

Fields of application and mounting

- For new buildings
- For refurbishments
- As a facade design feature
- In living areas and bedrooms

Front-mounted external venetian blind R10 with insect screen and solar drive



Front-mounted external venetian blind R6



- 1 box
- 2 guide profile
- 3 slats
- 4 tilting tape
- 5 bottom rail
- 6 insect screen

Top-mounted external venetian blinds for new buildings

For new buildings and refurbishments

A photograph of a balcony with a dining table and chairs. The balcony is furnished with a wooden table, a glass pitcher, a bottle, and some fruit. There are four dark wicker chairs with white cushions. In the background, there is a white building facade with windows covered in top-mounted external venetian blinds. A tall, dark planter with a green plant is also visible. The balcony floor is made of light-colored tiles. The sky is blue and clear.

WAREMA top-mounted external venetian blinds for new buildings are built-in together with the window. They are concealed unobtrusively within the facade, enabling them to be combined ideally with WAREMA top-mounted roller shutters for new buildings. Optionally available with insect screens. A patented guide profile for flush mounting is optionally available: a plaster base plate is integrated between the window and the guide profile. As a result, the external venetian blinds are almost completely hidden in the raised position.



► The benefits for you

- Unobtrusive integration in the facade
- Installed directly with the windows
- Front sides of guide profiles can be plastered
- Insect screen can be integrated



Features

- Construction limit values:
 - max. width: 4000 mm
 - max. height: 4000 mm
 - max. area: 16 m²
- Slats:
 - beaded 80 S mm,
 - flat slat 80 mm,
 - dim-out slat 73/90/93 mm
- Available with vivamatic® (VM), slowturn (ST), daylight transport element (TLT)
- Drive: 230V motor, crank

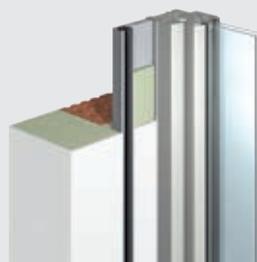
Fields of application and mounting

- For new buildings
- Refurbishment
- On the window frame
- Can be used in the reveal, even in clinker brick facades

Top-mounted external venetian blind for new buildings



Guide profile with integrated plaster base plate



- 1 box
- 2 guide profile
- 3 bottom rail
- 4 lifting tape
- 5 tilting tape
- 6 slats



Asymmetrical external venetian blinds for asymmetrical windows

A customised sun shading system for innovative windows – WAREMA asymmetrical external venetian blinds are suitable for almost any asymmetrical window shape.

The asymmetrical external venetian blind visually blends in with our other external venetian blind designs to create a uniform visual appearance. Special equipment and accessories from WAREMA are also available for these special external venetian blinds.



► The benefits for you

- Visually adapted to other WAREMA external venetian blind types
- Suitable for use with nearly all asymmetrical windows with angles between 5° and 52°
- Low cover panel heights
- Very good view to the outside

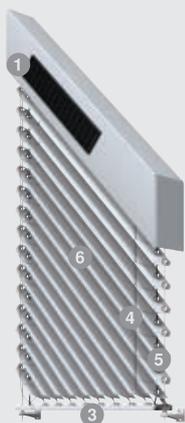


Features

- Construction limit values:
 - max. width: 1670-2510 mm
 - max. height: 3900 mm
 - max. area: 7 m²
- Slats: flat slat 80 mm
- Drive: 230 V middle motor, solar drive

Fields of application and mounting

- For new buildings
- For refurbishments
- Transom and mullion facade / conservatory
- In front of the facade
- In the reveal



Asymmetrical external venetian blind E 80 AF SR with flat slats for angles between 5° and 52°

- 1 cover panel
- 2 cable guidance
- 3 bottom rail
- 4 tilting tape
- 5 lifting tape
- 6 slats

Slats

Geometries and colours



Beaded slats

- Slat widths: 60 and 80 mm
- Slat thickness: approx. 0.44 mm
- Rail-guided, cable-guided



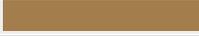
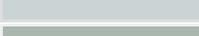
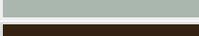
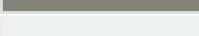
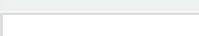
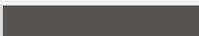
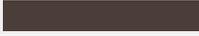
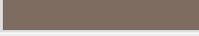
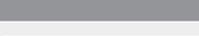
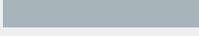
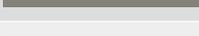
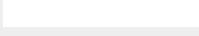
Dim-out slats

- Slat widths: 73 and 93 mm
- Slat thickness: approx. 0.44 mm
- Rail-guided, cable-guided



Flat slats

- Slat widths: 50, 60, 80, 100 and 150 mm
- Slat thickness: approx. 0.45 mm
- Rail-guided, cable-guided

Colours for external venetian blind slats			External venetian blind slats				
			80/80 AF	73/90/93	60 /60 AF	100 AF	50 AF/ 150 AF
RAL 1015	Light ivory		•	•			
RAL 1019	Grey beige		•	•			
RAL 1036	Pearl gold		•	•			
RAL 3004	Purple red		•	•			
RAL 5011	Steel blue		•	•			
RAL 6009	Fir green		•	•			
RAL 7016	Anthracite grey		•	•	•		
RAL 7035	Light grey		•	•	•		
RAL 7038	Agate grey		•	•	•		
RAL 8014	Sepia brown		•	•			
RAL 9006	White aluminium		•	•	•	•	•
RAL 9007	Grey aluminium		•	•	•	•	•
RAL 9010	Pure white		•	•			
RAL 9016	Traffic white		•	•	•	•	
DB 502	Blue iron mica effect		•	•			
DB 603	Green iron mica effect		•	•			
DB 702	Grey iron mica effect		•	•			
DB 703	Anthracite iron mica effect		•	•	•		
W 3005	Wine red pearl glimmer		•	•			
W 4800	Light beige		•	•			
W 4919	Earth brown iron mica effect		•	•			
W 4922	Cappuccino		•	•			
W 7329	Dark bronze		•	•			
W 8000	Selective slat ¹⁾		•	•			
W 8100	Millfinish II ¹⁾		•	•			
W 8780	Light bronze		•	•			
External venetian blind slats with Reynolux® EcoClean™ coating							
RAL 9006 EcoClean™ ²⁾	White aluminium, matt		•	•			
RAL 9007 EcoClean™ ²⁾	Grey aluminium, matt		•	•			
RAL 9016 EcoClean™ ²⁾	Traffic white, matt		•	•			
DB 703 EcoClean™ ²⁾	Anthracite iron mica effect, matt		•	•			

¹⁾ Slat back side RAL 9006.

²⁾ Slat surface with Reynolux® EcoClean™ coating matt, similar to the indicated colour number.

Colour deviations can be due to printing technology!

WAREMA Colour World

Maximum colour selection x 5

With its extensive selection, the WAREMA Colour World offers you perfect configuration options for all powder-coated aluminium parts, such as guide rails, cover panels, profiles and boxes. The colours impress with excellent, durable coating quality and intense colour brilliance. The powder colours have been grouped into the three categories: Highlight, Variation and Individual. “Highlight” offers you a consistent foundation, “Variation” opens up additional possibilities and “Individual” is your trump card in colour selection.

WAREMA Colour World - Highlight

12 DB and RAL basic colours form the foundation of our WAREMA Colour World. We offer you selected standard colours, which satisfy all of the latest colour trends. In addition, choose from 5 surfaces to perfectly coordinate gloss level and structure with the respective structural situation.



WAREMA Colour World - Variation

Take advantage of the opportunity to vary your design with an additional 50 RAL basic colours and 4 surfaces. Any architectural colour concept can be realised.



WAREMA Colour World - Individual

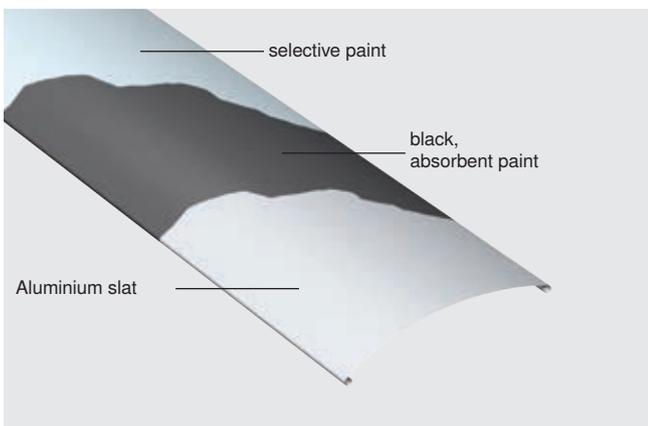
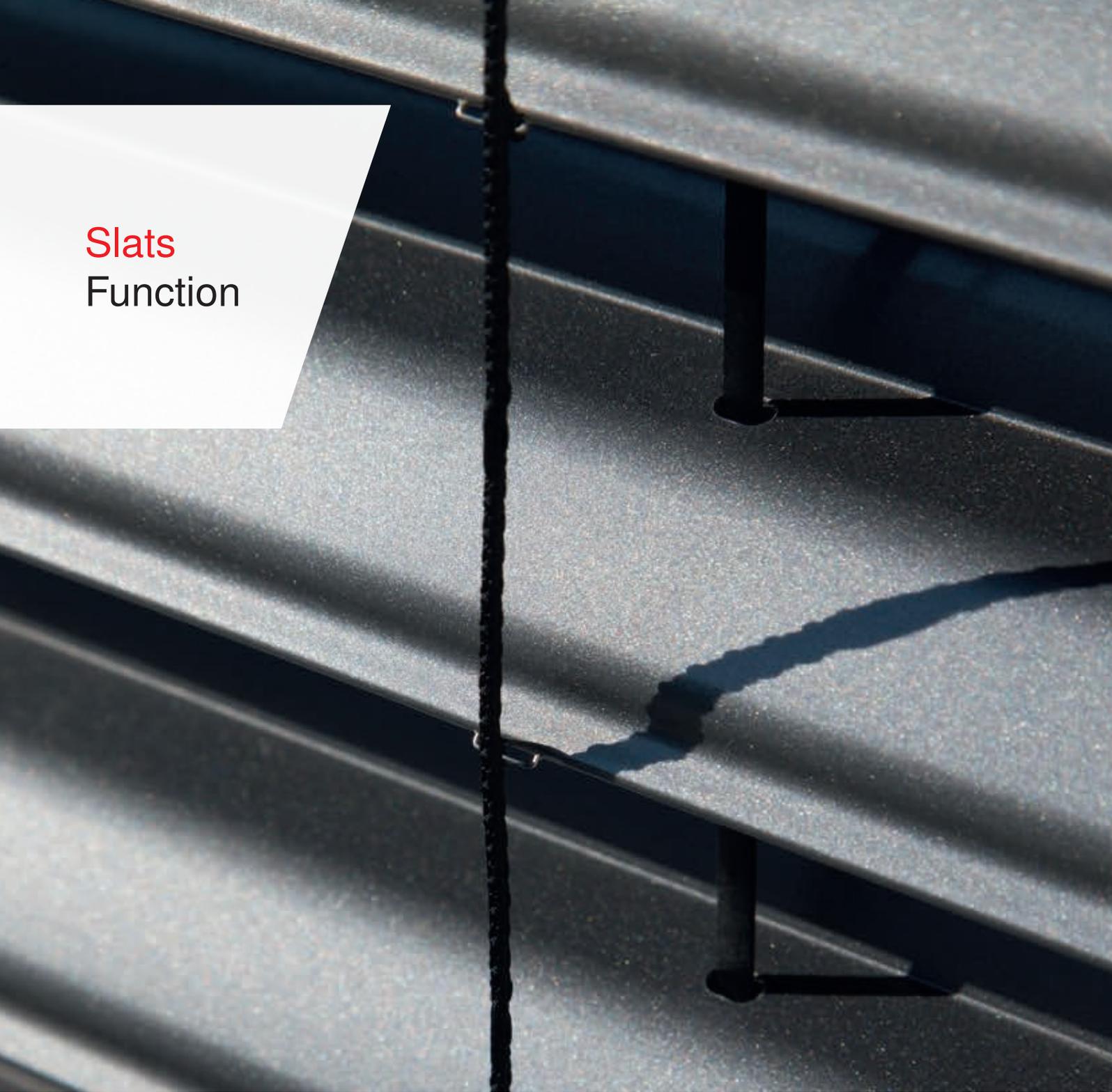
Rounding out the WAREMA Colour World is the "Individual" category, with over 180 additional powder colours. The available surface quality for this category is available by request.



Surface qualities

Five different surfaces allow you the perfect selection to suit your personal requirements. Satin finish is a not entirely glossy surface with a smooth finish and optimal light and weather resistance. A matt surface, on the other hand, is distinguished by its smooth matt finish. "Microstructure" adds impressive effects. The highly weather-resistant coating is characterised by significantly improved weathering behaviour with regard to gloss retention, weathering, chalking and colour stability. This is available in "matt" and "microstructure".

Slats Function



Selective slat – the all-rounder

The use of slats with selective paint can increase the entry of daylight into a building while reducing the incidence of energy. The slat colour is similar to the colour RAL 9006 (white aluminium). Visible daylight is guided into the room, largely leaving the heat radiation outside the window. Ultraviolet and infrared wavelengths are absorbed by the slats and emitted outside of the building as heat radiation. The selective coating directs approx. 30 % more daylight and approx. 50 % less heat into the building than external venetian blinds with similar slat colours.

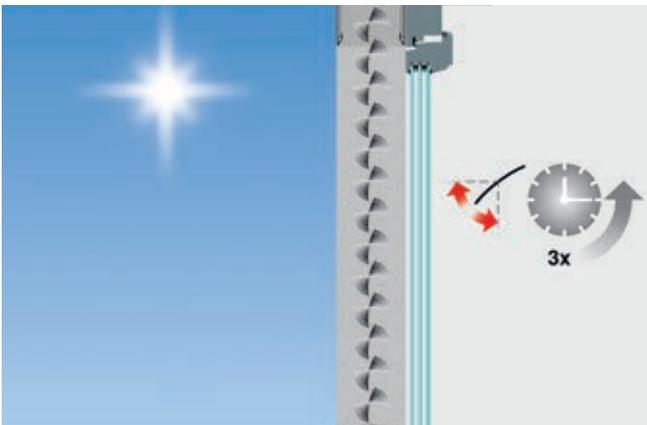


Self-cleaning slat

Our new slat with Reynolux® EcoClean™ coating makes it possible: In combination with UV light and water, the photo-sensitive titanium dioxide coating (Eco-Clean™) on the top surface of the slats acts like a catalytic converter, decomposing dirt and smog particles. By constantly freeing themselves of dirt, the slats always stay clean and thus maintain the attractiveness of your building. Even the air is purified: 1000 m² of slats with Reynolux® EcoClean™ neutralises as much smog as 80 trees. That's sustainability in action!

Slat Millfinish II

Showing rooms in a favourable light. The brushed surface design and the highly reflective top coat disproportionately improve daylight utilisation of external venetian blinds with a timeless stainless steel look. This surface supports diffused light distribution, the back of the slat is painted in the colour RAL 9006 matt (white aluminium), reliably preventing excessive, selective luminances.

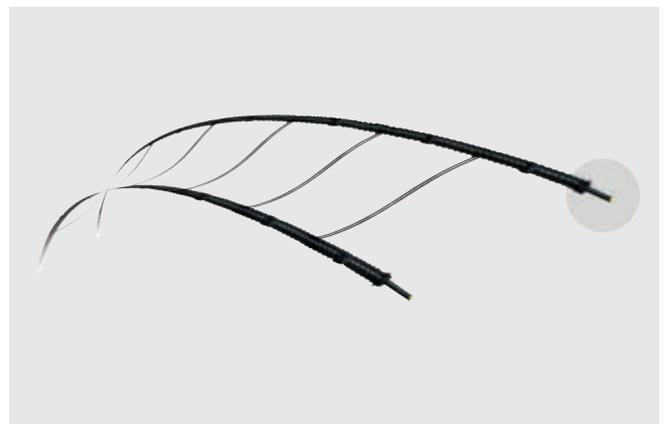


slowturn - slows slat tilting for external venetian blinds

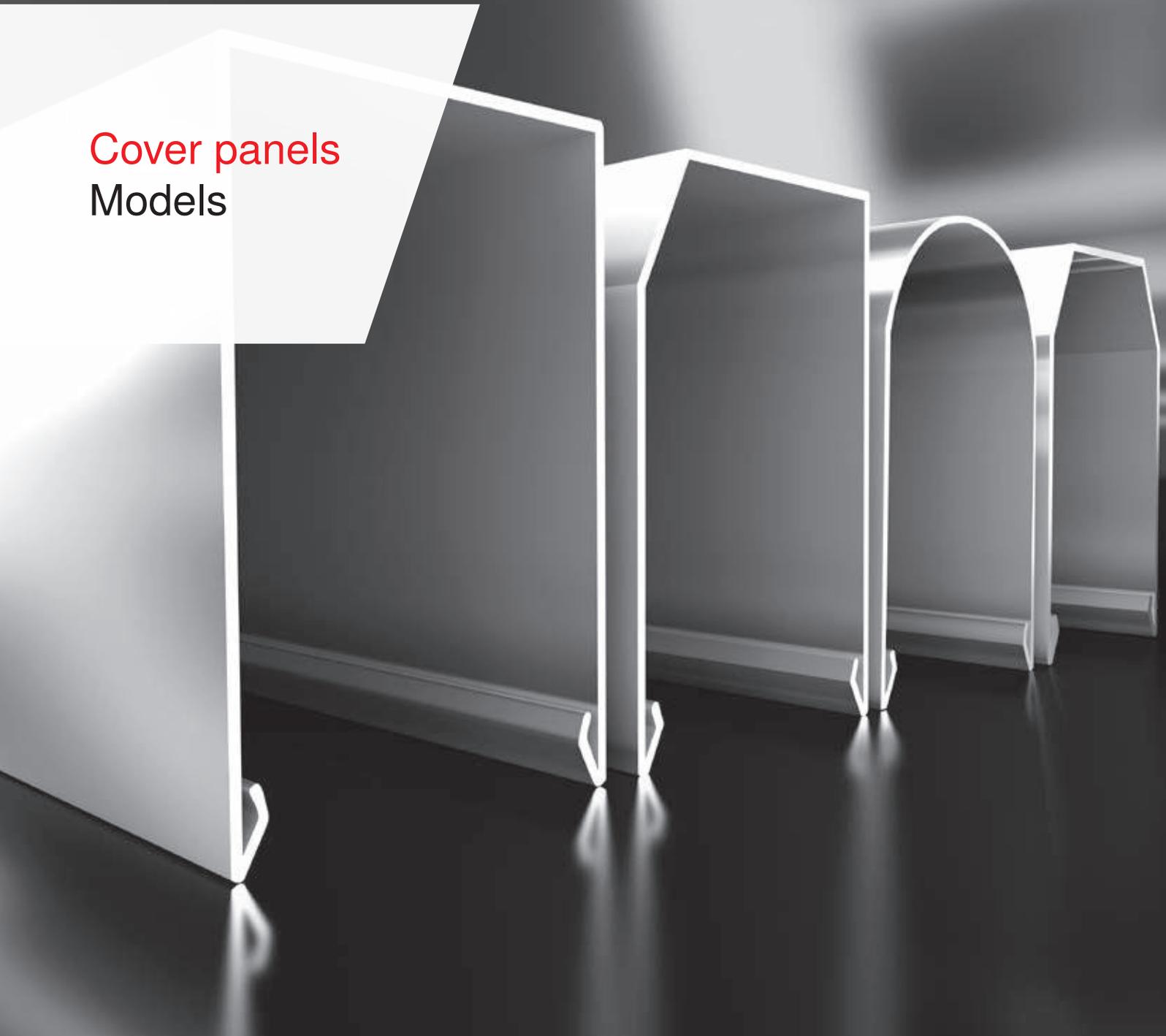
External venetian blinds with the additional slowturn function feature a reduced slat tilting speed. The tilt time is three times as long as that of standard external venetian blinds. This increases the precision of slat positioning. Use of a higher-level sun shading control system allows slowturn to improve the energy efficiency of the building sustainably. slowturn is available for nearly all types of external venetian blinds. The interactive slowturn animation can be found at apps.warema.com.

Kevlar-reinforced tilting tapes and loop cords

WAREMA uses tilting tapes and loop cords with Kevlar cores on all external venetian blinds. The Kevlar fibres reinforce the fabric tapes considerably, improving slat closure and stack arrangement through more clearly defined folds.



Cover panels Models



Cover panels for external venetian blinds

- Rectangular, round or square - nearly any cover panel edging is possible
- Visible cover panels as a design element for facade design



T/M system cover panel

- Ready-to-use system for special installation on transom and mullion facades
- Available for beaded, flat and dim-out slats

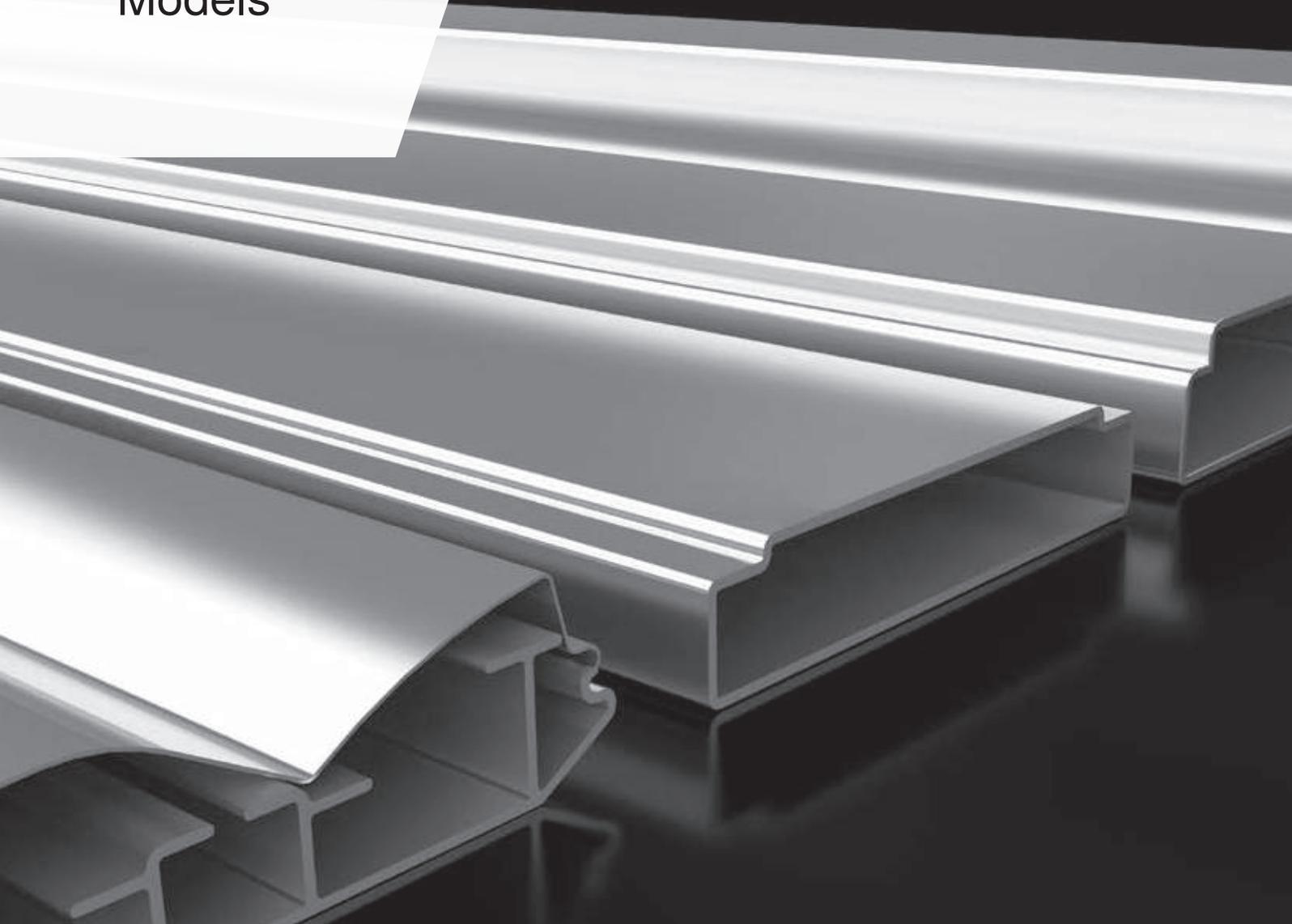


Self-supporting external venetian blinds

- Cover panel fixed to the guide rails
- No need for additional cover panel fixation to the facade

Bottom rails

Models



Standard bottom rail

width x height:

50/100/150 x 20 mm, 60/80 x 15 mm

- Highly rigid profile prevents sagging or turning
- Suitable for all slat shapes



Metal system venetian blinds bottom rail

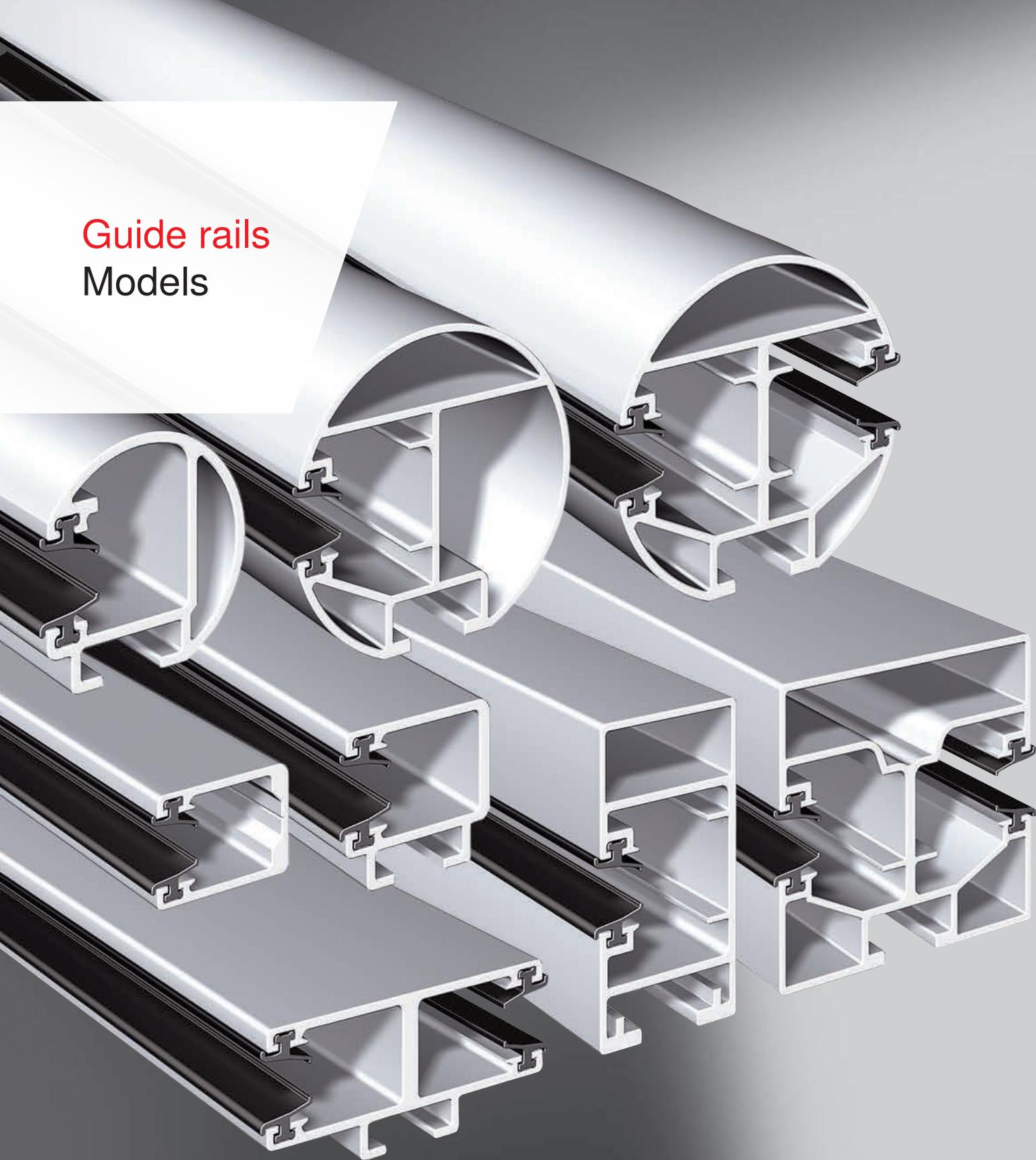
- Especially sturdy profile
- Approx. 104 x 33 mm
- Guide neck with integrated push-up guard and collision protection



Bottom rail for dim-out external venetian blinds

- Flat, unobtrusive geometry
- Approx. 73/93 x 15 mm
- With clip-on slat
- Tilts with the slats
- Flattened sides for smallest possible light gap between external venetian blind and window sill

Guide rails
Models





Type 1, rectangular
 – 25 x 18 mm
 – Wall-mounted



Type 2, rectangular
 – 25 x 18 mm
 – Fits on guide rail brackets



Type 3, rectangular
 – 50 x 18 mm
 – Central guide rail to guide two curtains
 – Fits on guide rail brackets



Type 4, round
 – Ø 32 mm
 – Fits on guide rail brackets



Type 7, round
 – Ø 52 mm
 – For installing self-supporting external venetian blinds



Type 8, round
 – Ø 52 mm
 – Central guide rail to guide two curtains
 – For installing self-supporting external venetian blinds



Guide rails FSCH 27-95
 – 27 x 95 mm, axial dimension of slat tracking 80 mm
 – 27 x 122 mm, axial dimension of slat tracking 107.5 mm
 – Also available with dimensions 27 x 87 mm, axial dimension of slat guidance 72.5 mm
 – Also available with dimensions 27 x 70 mm and 27 x 80 mm
 – Continuous fixing profile
 – Front side can be set in plaster
 – Can be used as a fascia to reduce lateral incidence of light



FSCH 27-95P
 – 27 x 95 mm
 – Optionally 27 x 87P and 27 x 122P
 – continuous fixing profile with plaster base plate
 – Can be set in plaster at the front and side in the reveal



Angle-adjustable corner guide rail
 – Enables mounting on building corners and bay windows
 – Significantly reduces measurement and mounting
 – Practically unlimited field of application



Guide rail bracket H1
 – bracket for guide rail type 1, 2, 3, 4



Guide rail bracket H 101
 – bracket for guide rail type 7, 8, 9, 10



Guide rail bracket for corner guide rail Version 1
 – bracket for 90° external corner with 40 x 40 mm square tube and guide rail type 1

Cable guidances

Models





Tension cable bracket
– Type S 01



Tension cable bracket
– Type SH 02 with cross plate



Tension cable bracket for transom and mullion facades
– Type SF 21



Tension cable bracket for transom and mullion facades
– Type SF 22



Tension cable bracket for transom and mullion facades
– Type SG 21



Tension cable bracket for transom and mullion facades
– Type SG 22



Tension cable bracket for floors and window sills
– Type S 03



Tension cable bracket for floors and window sills
– Type S 04



Tension cable bracket for corner positions
– Model 1



Tension cable bracket for corner positions
– Model 2

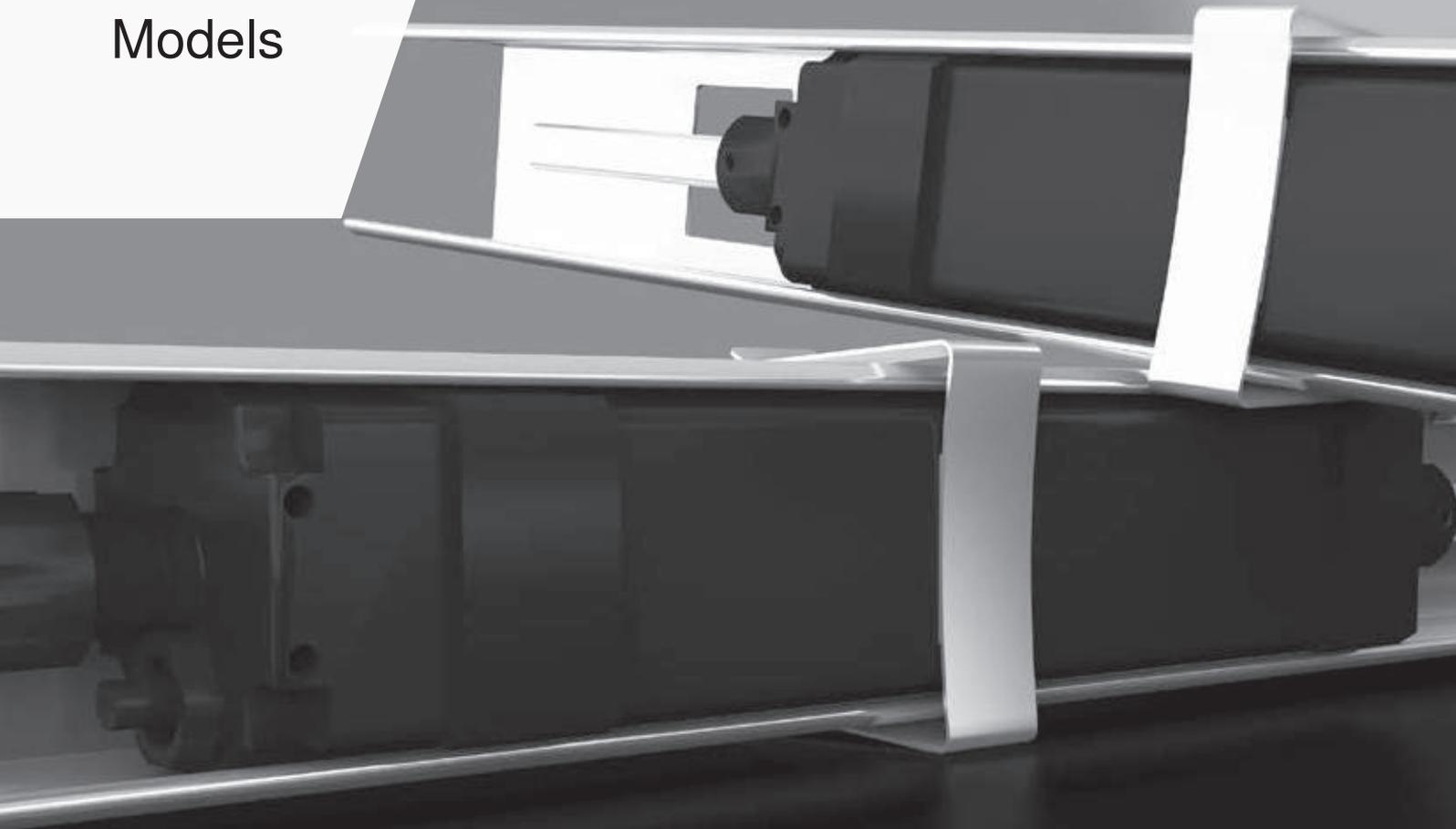


Spring tension device
– Unobtrusively integrated into the top rail of the external venetian blind to avoid longitudinal expansions of the tension cable



Tension bracket, large

Drives Models



WAREMA external venetian blinds are used almost exclusively in the motorised design in new buildings and refurbishments. To enhance the efficiency of the external venetian blinds, we recommend the use of WAREMA control systems. These are specifically adapted for use with WAREMA external venetian blinds, they improve your well-being and guarantee a perfect room climate.



Standard motor

- 230-V middle motor
- Conveniently adjustable upper and lower limit positions



Motor with anti-icing protection

- With thermal protection switch
- Suitable for up to 8 m² curtain area
- Operation not possible when components are iced over, therefore preventing damage



Super-fast terrace motor (STM)

- Clears patio and balcony doors with triple processing speed
- Speed and slat tilting remain unchanged
- Basic functions same as standard motor
- Addition information at: www.warema.de/stm



Motors for bus controls

- Motors with SMI interface
- Motors with incremental encoder
- Feedback of slat angle position to a higher-level control system
- Slat angle tracking according to sun position



Noise-optimised top rail bracket

- Fitted as standard with motor-operated external venetian blinds
- Nearly inaudible raising and lowering of the external venetian blind
- No transfer of vibration to the facade



Battery-operated emergency retraction set¹⁾

- External venetian blind motor with auxiliary drive and battery-operated control
- Super fast retraction of curtain, approx. 1 m/sec.
- Battery-operated control with fail-safe function
- Specially designed for emergency exits



¹⁾ Availability see www.warema.com

Control systems
Convenient operation



WMS – WAREMA Mobile System

Radio remote controls are particularly beneficial for retrofitting, as no additional line routing is required. With the WAREMA Mobile System, the only components needed are the transmitter and receiver. Users receive feedback about all of their sun shading system's move commands. Distant units can also be reached by transmitting commands from one receiver to another (routing function).



Wisotronic

With the Wisotronic, the position of both the internal and external sun shading systems adjust continuously to the weather conditions outside. In conservatories, homes and office buildings, the Wisotronic independently creates a pleasant room climate and a comfortable living and working environment.

WAREMA climatronic®

WAREMA climatronic® is a package solution for controlling sun shading, ventilation, windows, heating, cooling and much more in your conservatory or home.



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