







Extension

# "Architecture is the continuation by man of nature's constructive work."

Karl Friedrich Schinkel, painter and architect



# Contents

Glass canopies by Solarlux	08
Application areas	12
Canopy shapes	16
Shapes and colours	20
The Solarlux Design Line	28
SDL Acubis	30
SDL Alerio	34
SDL Atrium Plus	38
SDL Aura	42
System comparison	46
Transparent protection against the elements	50
Solar and glare protection	54
A new class of accessory	56
Technology	62
A sustainable, family-run company	72
Solarlux digital	78

#### Glass canopies by Solarlux

#### Outdoors is the new indoors

Being outside - or, even better - being able to cultivate your outdoor life in line with your own individual expectations is something of huge emotional value to many people, and can improve their well-being, help them relax, and provide them with the perfect atmosphere to thrive. Being close to nature helps us feel grounded in our lives, transforming the outdoors into an extension of our man-made living spaces. It can even act as a daring alternative to the traditional concept of having your "own four walls" emotional benefits guaranteed. When we

make a glass canopy at Solarlux, we also create something much more valuable, something special - a joyous experience for your senses that will soon become part of your "everyday" life. Ask yourself this: how many walls do you really need around you? One thing's for sure - we've got the answers. Read on, and let us inspire you.

#### Enjoy more time outdoors

The demands placed on a glass canopy can vary greatly depending on the situation: protection from wind and weather is often a priority - but the desire to be able to spend more time outdoors is also a common factor in opting for a glass canopy. In addition to this, a glass canopy also provides a permanent location for storing garden furniture and plants over the winter months. Solarlux is a company that has stood for premium quality for almost 40 years. Glazed extensions such as wintergardens are made at our headquarters near Osnabrück, Germany, together with all our glass canopies, bi-folding doors and complete facade solutions. Whether you're looking for the best possible protection from the elements or simply want to be able to enjoy the outdoors more, Solarlux is on hand to make your dreams a reality - with certified quality and compliance with the applicable regulations guaranteed.



# Knowing what matters

<u>Variety</u>

Application areas

Roof shapes

Shapes and colours



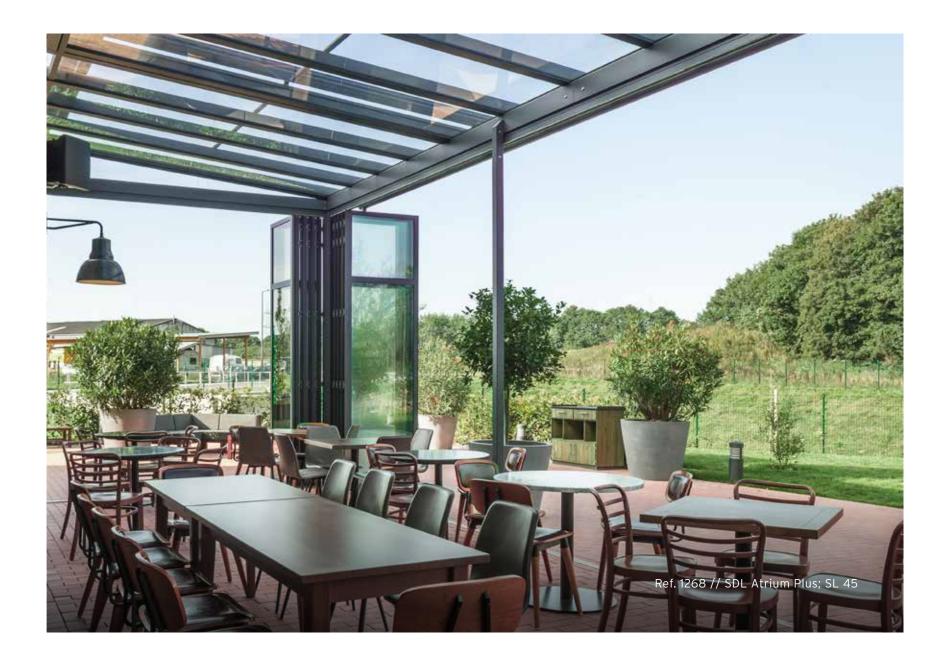
### Application areas

#### Individual solutions for your individual needs

Perfectly tailored solutions by Solarlux: whether you choose a glass canopy or a glass house with vertical glass elements, every system will be the perfect match for both the architecture of your building and your own needs. Our bespoke solutions are also impressive in terms of their design - the canopies, shade features and vertical glass elements are conceived precisely to work in perfect harmony with one another, right down to the smallest detail. All Solarlux products come from a single source - thus guaranteeing full

functionality for many years to come. Glass canopies and glass houses cater to a wide range of application areas - "traditional" patio roofing is just one of many possibilities. Our wide range of canopy designs - each of which is perfectly tailored to suit your individual project - is also suitable for use as an integrated roof system, a sheltered pergola, a detached designer construction, or to extend outdoor seating areas in the hospitality industry.





### Roof shapes





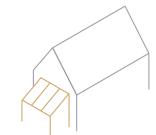
#### The perfect solution for any architecture

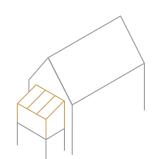
Whatever your stylistic tastes, and regardless of whether you're looking for a glass canopy, a glass house, a statement design piece, a car port or an entrance canopy, our in-depth planning and consultation services allow us - together with you, the client - to determine the perfect shape and size to suit your ideas and wishes. Design, structural specifications, drainage, shading and ventilation - these are the key factors that help us to design the perfect roof construction and bring it to life.



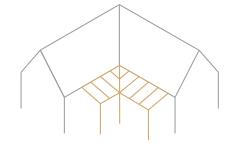


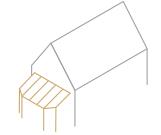


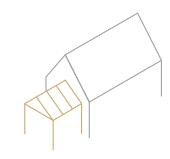














Traditional monopitch roofs, detached structures with no roof pitch, pitched roofs, corner structures, and even canopies built into the roof of your house - with Solarlux glass canopies, the possibilities are almost endless. As a result, they always fit in perfectly with your current house architecture. And of course, we always take the individual structural requirements (e.g. snow load) into account for every project we work on.



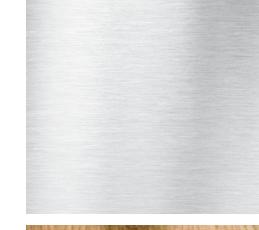


### Shapes and colours

#### Our materials

Test certificates from reputable national and international institutes guarantee the highest level of quality for every Solarlux glass canopy and glass house. The fully tested structural specifications offer peace of mind in extreme weather conditions, such as snowfall leading to snow drifts, high winds and even hurricanes. All our systems come with the CE mark as a matter of course. This European seal of approval confirms that Solarlux products comply with DIN EN 1090, which has been mandatory for all manufacturers of steel and aluminium supporting structures since 2014. This system is used throughout Europe to demonstrate when a factory has been certified and carries out its own production control.

DIN EN 1090 is extremely important. If this certification is not provided, your planning permission may be rejected.











#### <u>Wood - The natural material</u> for a cosy environment

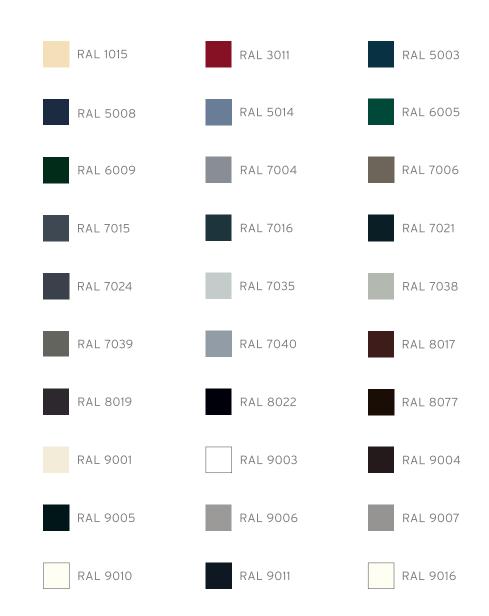
#### <u>Aluminium - The material for durability</u> <u>and conservation of resources</u>

Durable and almost completely zeromaintenance - this is the promise that aluminium keeps as a material. We also apply environmental awareness to our aluminium production - Solarlux is certified in accordance with the German A.U.F. Recycling Loop, which has confirmed that 98% of our aluminium is recycled in an environmentally conscious manner that saves on resources. All of our aluminium glass canopies are available in any colour - including special colours such as Eloxal and DB with metallic iron effect. The woods used by Solarlux are FSC® and PEFC<sup>™</sup>-certified, and are sourced from sustainable forestry. Both our certificates in this area set high standards, particularly in terms of sustainability, the environmental sustainability of the forest cultivation, the quality of the work, and the social expertise of the forestry companies we work with. Our use of water-based finishes and energy-saving production with recycling of water and heat provide further evidence of the care with which we handle our natural resources. This means that when you choose wood as your material, you are opting for a natural raw material that will provide individual and cosy living.

Solarlux fulfils this preference in every respect. In addition to spruce and pine, we also offer a wide range of other timbers, depending on the grain. Our surface treatments are completely individual, too. Whether you opt for a varnish, a handoiled surface or an opaque lacquer, we can provide your product in any colour of your choice, regardless of the manufacturer.

#### Our colours

When you choose a Solarlux glass canopy, you opt for individuality. Solarlux standard colour options, which include around 30 RAL colours, offer all the colours of the rainbow in matt and gloss finishes, at no extra cost. This allows every glass canopy to match its building's interior and exterior design. We use our own in-house coating plant - one of the most modern in Europe - for top surface quality.



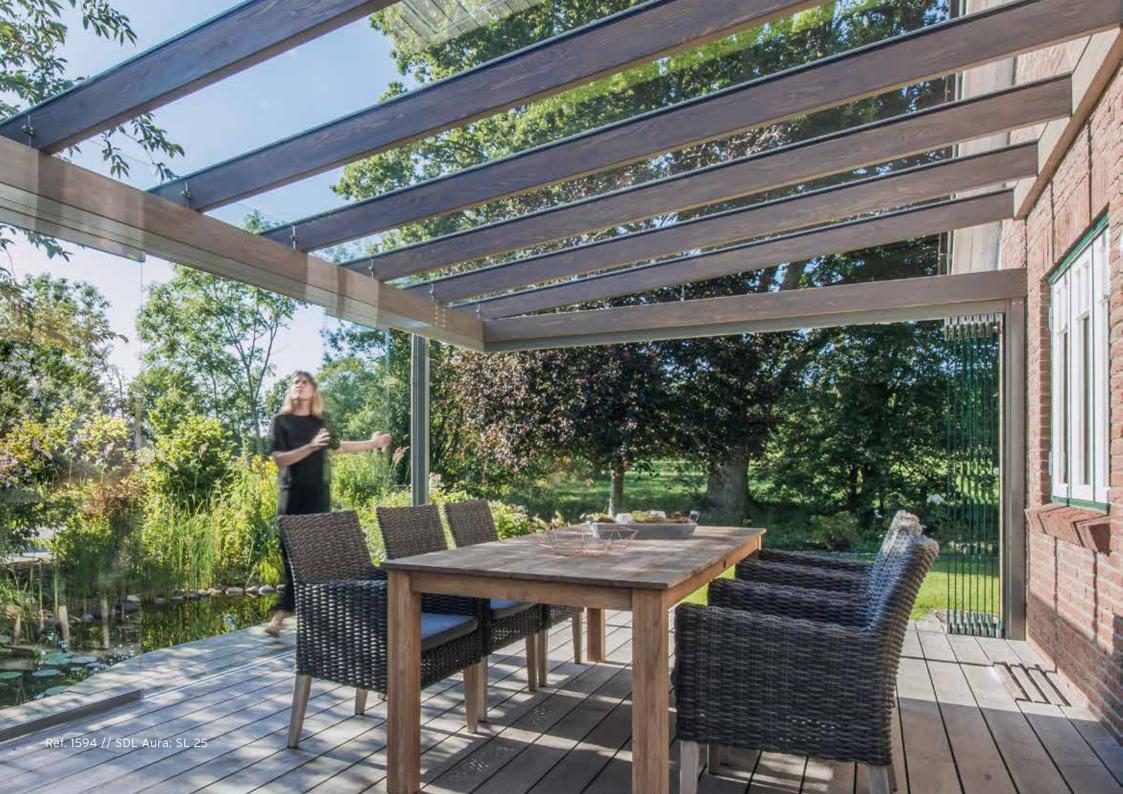


Solarlux coating is certified to international standards

#### Special colours

It goes without saying that we also offer special DB (metallic iron effect) and RAL colours, as well as special surface finishes (e.g. by Tiger) for anyone looking to give their glass canopy a unique twist. We can make almost any wish come true - and we also offer coatings for special climate requirements (e.g. coastal properties).





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#### Protection from wind and weather

With a glass house, you can enjoy your garden and patio at any time of year. The versatile glass elements provide additional protection from draughts without obscuring your view. And with our all-round weather protection, you'll soon find your evenings on the patio stretching out into the small hours - whatever the weather.

# F

#### Boost the value of your property

Glass canopies and glass houses are a sure-fire way of increasing your property's value. Thanks to their different shapes, colours and materials, you can always find a Solarlux glass canopy to match the architecture of your home. Their functionality and, above all, their high-quality design represents guaranteed added value, for new builds and renovations alike.

# P

Protection for plants and garden furniture

No more wasting time constantly carrying your garden furniture and patio plants in and out of the house! A glass house will provide excellent protection for your plants and furniture, all year round.

# ſ°

#### <u>Heat barrier</u>

The glass house does more than offer protection from the wind and rain - it also acts as a heat barrier: simply open the door to your main living area on a warm autumn or winter day and let the heated air from the glass house warm up the rest of your home.

#### What Solarlux offers

- + In-depth consultation and planning
- + Free visualisation (e.g. virtual reality model)
- Wide range of shapes, materials and colours guarantees perfect harmony with the building's existing architecture and allows you to express your individual style
- + Delicate profile sight lines, maximum transparency
- Silicone-free assembly
- + Sophisticated technical construction in terms of drainage, sealing, structural specifications and substructure
- + Compliance with all applicable standards and specifications

Your choice makes all the difference

# The systems at a glance

The Solarlux Design Line

SDL Acubis

SDL Alerio

SDL Atrium Plus

SDL Aura

System comparison

The Solarlux Design Line

#### Tailored to your needs

Every Solarlux glass canopy is a bespoke solution that is tailor-made to suit your individual needs. With the wide range of systems we offer, anything is possible: from quickly and efficiently made constructions and sophisticated designer roofing to complex custom solutions.





Ref. 0105 // SDL Atrium Plus; SL 25 XXL



### SDL Acubis

#### Aluminium

#### A flat roof for modern elegance

The SDL Acubis flat canopy is a winner in terms of design and functionality, and can be built as a stand-alone construction or an extension to an existing building. The internal rafters of the non-insulated profile system lend the canopy an air of elegance. The 2° roof pitch is barely visible to the naked eye, but is enough to ensure that water drains off the canopy. A low, single-piece wall joint lends the canopy a lightweight look and makes on-site installation a breeze.

- Top-quality design and ingenious engineering concept
- Invisible 2° roof pitch
- Low facia just 253 mm
- Stand-alone construction or connected to your existing architecture
- Can be adapted to form a glass house
- Comprehensive range of accessories available: lighting, shading, etc.









# SDL Alerio

#### Internal structural reinforcement for added elegance

The SDL Alerio glass canopy is Solarlux's latest system. It is a great fit for any style of building architecture, from elegant to modern - thanks in no small part to its flat roof profile and internal rafters. Its profiles, which have been specially designed for this canopy concept, can be used to build incredibly delicate-looking constructions. The system can be designed with a monopitch roof with a pitch of between 5° and 20°. The SDL Alerio can be built to suit your requirements in terms of size and structural dynamics - while still maintaining an impressively slender and delicate appearance.

- Outstanding value for money
- Roof pitch: 5° to 20°
- Single glazing made of laminated safety glass with a thickness of 8, 10 or 12 mm
- Variable pillar positioning
- Concealed drainage available in pillars
- System can be adapted using a variety of vertical glazing options to create a closed-off or partially closed-off glass canopy or non-insulated glass house







### SDL Atrium Plus

Aluminium

### The all-round solution to suit any situation

The perfect glass canopy for any application: the SDL Atrium Plus allows you to create extremely large areas of glass with great distances between the posts - and also complex custom shapes. Its elegant design and delicate Softline profile lend the canopy an incredibly airy character, while the optional permanent roof ventilation system keeps the climate comfortable at all times. It also offers an impressively high level of prefabrication and short installation times. When combined with the SL 20e vertical sliding system, fixed glazing or the tried-and-tested SL 25 slide-and-turn system, the glass canopy can be transformed into a glass house with protection on all sides.

- For universal use
- Roof pitch: 5° to 45°
- Suitable for very large canopy and roof areas
- Available in almost any shape
- Can be adapted to form a glass house
- Comprehensive range of accessories available: lighting, shading, etc.
- With optional roof overhang at side
- Eaves available with or without roof overhang



Ref. 1051 // SDL Atrium Plus; SL 25





### SDL Aura

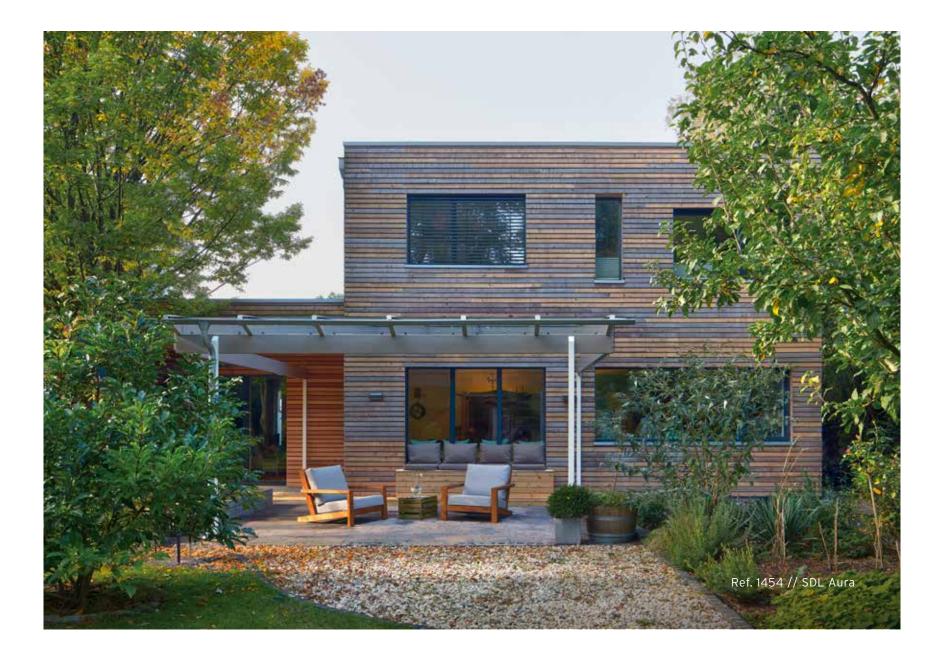
Wood/aluminium

#### Close to nature

This glass canopy system will bring you closer to nature in two ways: the wood on the inside of the canopy makes it a unique, natural product, while the aluminium cover on the outside allows you to be closer to the natural world while still being protected from the weather. The cover is available in any RAL colour, thus ensuring that the SDL Aura matches the exterior design of your building perfectly. The system also offers a number of design benefits, such as optimum protection from the elements and surface-mounted spotlight rails. The SDL Aura comes in laminated spruce as standard; other types of wood areavailable on request.

- Combined benefits: the wood/aluminium classic
- Roof pitch: 5° to 25°
- Wood: Spruce
- Slender dimensions and incredibly sturdy thanks to use of the perfect wooden materials
- High level of prefabrication
- Optimum weatherproofing for rafters and eaves thanks to the externally mounted crossbeam
- Optional roof overhang at side
- Interior or exterior shading available





### System comparison

	SDL Acubis	SDL Alerio	SDL Atrium Plus	SDL Aura
Material				
Aluminium	•	•	•	0
Wood/aluminium	0	0	0	•
Roof shapes				
Monopitch roof	•	•	•	•
Segmented roof shape	0	0	•	0
Customised designs	0	0	•	0
Dimensions (2)				
Max. distance between supports	7 m	7 m	7 m <sup>(1)</sup>	5 m <sup>(1)</sup>
Max. width	Unlimited	Unlimited	Unlimited	Unlimited
Max. depth	6.1 m	7 m	7 m	5 m
Roof pitch	2°	5-20°	5 - 45° (3)	5 - 25° (3)
Drainage				
Designer gutter	•	•	•	•
Drainage via downspout	0	•	•	•
Drainage via downpipe	•	•	•	•

<sup>(1)</sup> Additional canopy shapes available on request <sup>(2)</sup> Depending on snow load, beam spacings and weight of glass <sup>(3)</sup> Additional roof pitches available on request

SDL Acubis	SDL Alerio	SDL Atrium Plus	SDL Aura

Shade				
On outside	0	•	•	•
On inside	•	•	•	•
Vertical	•	•	•	•
Ventilation				
Permanent roof ventilation with fly screen	0	0	•	0
Motorised sliding windows	•	•	•	•
Lighting				
Rafters with LEDs	•	•	0	0
Spotlight rail with LEDs	•	0	•	•
Cable duct	•	•	•	•
Substructures for Solarlux glass houses				
SL 25/SL 25R/SL 25 XXL slide-and-turn system	•	•	•	•
SL 20e/SL 20Re/SL 23 sliding system	•	•	•	•
SL 35/SL 45 bi-folding door	•	•	•	•
Fixed glazing	•	•	•	•

## Everything included

<u>Comfort</u>

Transparent protection against the elements

Solar and glare protection

A new class of accessory

### Transparent protection against the elements

### Sliding systems, slide-and-turn systems and bi-folding doors

A glass canopy is a good place to shelter under on rainy days. Yet if you add vertical, sliding glass elements, it becomes a glass house that will protect you against all types of wind and weather. Almost any Solarlux glass canopy can be converted into a cosy glass house - even after the original installation. The benefits: a Solarlux glass house is transparent on all sides, presents no reduction in daylight, and can be opened up fully on all sides. Enjoy the fresh air to its fullest when the weather is nice, then close the transparent vertical glazing for protection against wind and rain when the conditions change.





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Ref. 608 // SDL Acubis; SL 25 XXL

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COLUMN T

### <u>SL 20e sliding system</u> <u>All-glass, non-insulated</u>

The SL 20e sliding system can be used in glass canopies to protect from wind and weather, or as a simple partition. Its ease of use is particularly impressive: the intelligent catching function makes moving the all-glass elements child's play. The individual panels are guided along two to five-track flat running tracks, providing an accessible transition to the outdoors. In addition to this, the SL 20e sliding system can be used as a fully transparent corner solution without any loss of impermeability. The elements can be set up to slide to the left and/or the right, and a framed variant and a locking mechanism with a range of different handle designs are available as options.

### <u>SL 25/SL 25 XXL slide-and-turn system</u> <u>All-glass, non-insulated</u>

The SL 25 and SL 25 XXL slide-and-turn systems are an excellent choice for anyone looking for protection from the wind and weather, and are also available with frames for more demanding conditions. The elements can be set up to slide to either the left or the right, and to swing either inwards or outwards. The carriages can move through any angle between 90° and 180°, which makes the systems perfect for a wide range of floor plans and offers unrestricted creativity when designing your patio. Thanks to this technology, the elements can be opened across almost their entire width, with only a thin bundle of panels stacked to one side. This allows you to enjoy the full effect of the fresh air on your patio when the weather is good.

### <u>SL 35/SL 45 bi-folding door</u> Aluminium, non-insulated

The SL 35 and SL 45 bi-folding doors offer excellent protection from the wind and weather thanks to their use of two continuous sealing levels. They fold up like an accordion, leaving a large opening to let the fresh air into your glass house. Depending on the system, the slender bundle of panels can be slid to the left or right and fold inwards or outwards, leaving a panel bundle of just 50 cm in a five-metre opening, for example.



Ref. 1319 // SL 20e sliding system



Ref. 1429 // SL 25; SL 25 XXL slide-and-turn system



Ref. 1268 // SL 35; SL 45 bi-folding door

### Solar and glare protection

### Solarlux awnings made by Warema

Maximum shading convenience for Solarlux glass canopies: Solarlux awnings made by Warema, which are tailored exactly to fit our glass canopies, guarantee a wide range of technical and functional benefits. They can even be used to fit awnings onto large-area canopies. The range of different materials and colours available offers plenty of creative freedom, while all-glass sliding elements can also be combined with the vertical awning. The Solarlux awning made by Warema is available in four variants: above glazing, below glazing, vertical and corner. Both the awning and the glass canopy are delivered to the building site in the same shipment and can be ordered directly through Solarlux, who act as a one-stop shop for service and delivery to both building owners and on-site installers.





A new class of accessory

### Everything from a single source

We don't just offer optimum shading, pleasant temperatures on colder days, ventilation on hot days, lighting or special glazing as ways of making your glass house the perfect cosy corner for your home - we also make it easy for you to control these components at the push of a button. And the convenience and practicality don't stop there: everything is provided directly by Solarlux - the onestop shop for all your glass canopy needs.



### Mobile control system

The innovative Solarlux control system not only allows you to control your high-quality awning remotely - you can also use it to dim your lighting or switch it on and off. It is also easy to expand the control system so that it can be used on up to eight different products (e.g. radiant heaters). You can even download an app to control all your components using your smartphone.



### Ventilation

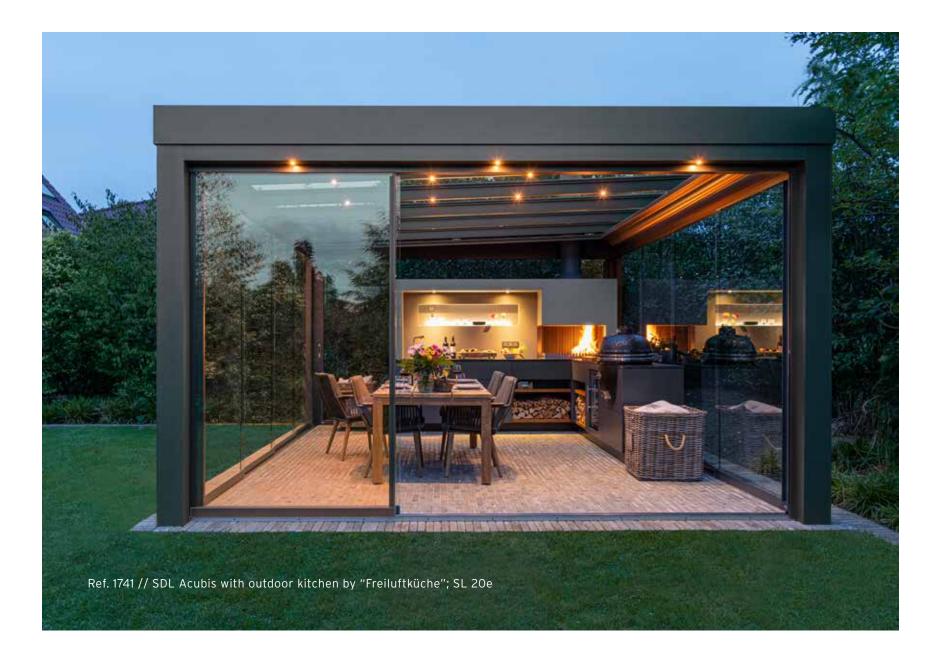
Permanent roof ventilation with two panes of glass provides a constant flow of fresh air to your glazed patio or glass house, stopping it from getting too stuffy even on hot days. Optional electric skylights, lift-and-slide windows and sliding skylights are also available.

### Lighting

Enjoy balmy summer nights on your patio. Integrated LED spotlights create a cosy twilight atmosphere and provide pleasant illumination under your glass canopy.

### Radiant heater

Our designer radiant heater is the perfect temporary heating solution for your glass house. Simply switch it on shortly before you start using the glass house and you'll be enjoying its pleasant warmth in no time - with great accuracy, whenever you need it.





Behind the scenes <u>Technology</u>

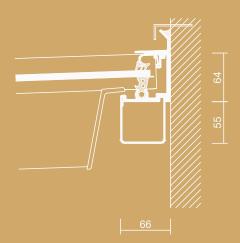
Detail sections of all the systems:

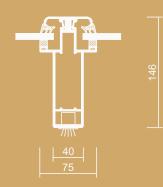
Wall joints, rafters

and eaves

### SDL Acubis

Aluminium



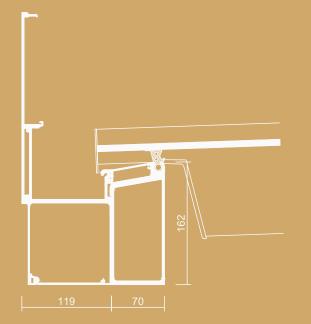


### Wall joint

- One-piece wall joint
- Cable duct for concealed cable routing

#### <u>Rafters</u>

- · Delicate-looking internal rafters with lighting
- · Available with steel reinforcement for heavy snow loads

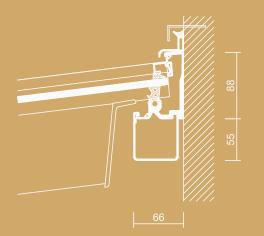


#### Eaves without roof overhang

- Three-piece component comprising eaves, gutter and the 253 mm facing
- Available with optional lighting or shading profile

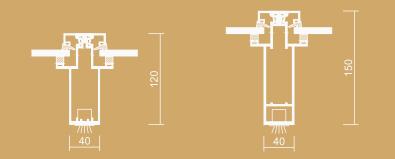
### SDL Alerio

Aluminium



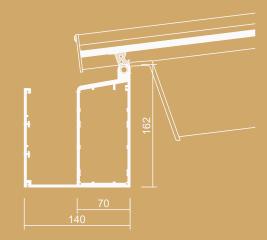
### Wall joint

- One-piece wall joint
- · Cable duct for concealed cable routing



### **Rafters**

- · Delicate-looking internal rafters with lighting
- Available in two different sizes depending on structural requirements for high snow loads

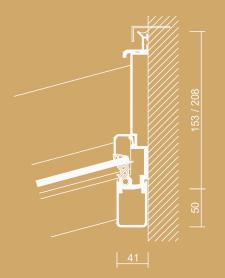


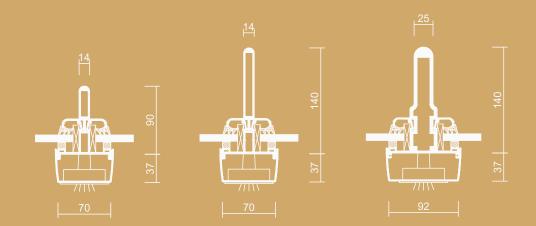
<u>Eaves</u>

· One-piece eaves with square gutter profile

### SDL Atrium Plus

Aluminium





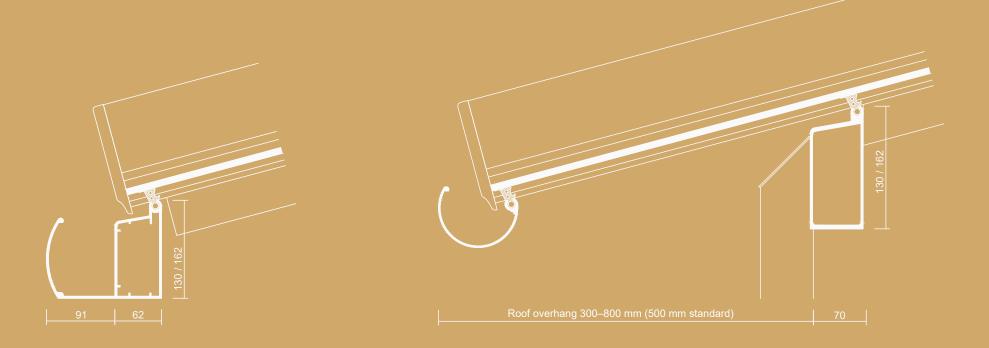
#### Wall joint

One-piece wall joint for outside rafters

· Cable duct for concealed cable routing

### <u>Rafters</u>

- Three delicate-looking rafter types depending on structural requirements
- With optional spotlight rail



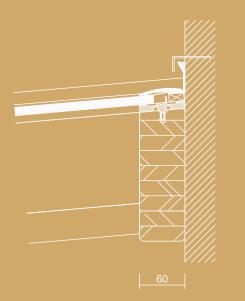
#### Eaves without roof overhang

• One-piece eaves with rounded Softline profile on the outside

#### Eaves with roof overhang

- · Eaves for variants with variable roof overhang
- · Drainage via external gutter

## SDL Aura



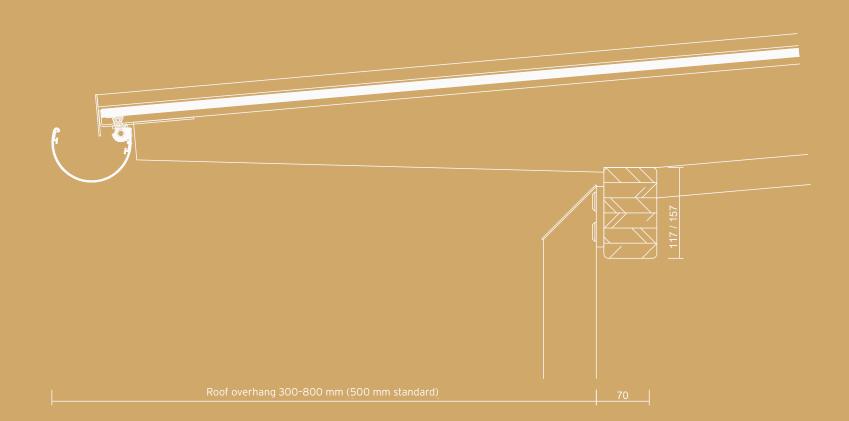


### Wall joint

- · Inside wall joint made of multi-laminate wood
- No visible screw connections
- With optional cable duct

### Rafter

- Delicate-looking internal rafters made of multi-laminate wood from certified forestry sources
- With optional surface-mounted spotlight rail (does not affect structural integrity of rafters)



#### Eaves with roof overhand

Eaves made of laminated wood with variable roof overhang; rafter taper increases with length of roof overhang

# Place your trust in a strong company

<u>About Solarlux</u>

A sustainable, family-run company

Our world

Solarlux digita

### A sustainable, family-run company

#### Down-to-earth, innovative and passionate

For almost 40 years, Solarlux has represented exceptional quality in the production of bi-folding doors, wintergardens and facade solutions. Founded by Herbert Holtgreife and Heinz-Theo Ebbert (+ 1990) and based in the town of Melle, north-west Germany, the company is now managed by Holtgreife's son, Stefan. But the real driving force behind Solarlux is its employees: a workforce of around 1,000 imaginative staff is vital to the success of the leading system provider. The company's environmentally friendly approach to production, in-house

production control structure and compliance with the highest quality standards are reflected in its ISO 9001, ISO 50001 and DIN EN 1090 certificates. When combined with the extensive community outreach that has been part of Solarlux ever since it was founded, this truly makes the family-owned company something special.

#### The Solarlux Campus

We see ourselves as pioneers of solar architecture. Large-scale transparency dissolves the boundaries between inside and the outdoors - but it also offers much more besides. The double-skin facade acts as a climate buffer zone in summer. while in winter and the cooler months it generates a yield of solar energy. By combining this with geothermal energy and a cogeneration unit, the Solarlux Campus is able to reach an energy level well above the average for an industrial building of its size. The gigantic photovoltaic system on the roofs of the production areas generates an output of 1.5 MWp and covers almost 70% of the building's electricity requirements. The rest is provided by the cogeneration unit. The resulting carbon offset is more than the combined emissions of 400 four-person households - per year. As a result, the Solarlux Campus is already almost completely energyneutral - and we're working on achieving full energy neutrality, too.





Solarlux Campus



### Our world



### What does Solarlux stand for?

- Family-owned company
- Certified in accordance with ISO 9001
- · In-house research and development
- Partner to renowned architects' bureaus all around the world
- · 1,000 employees worldwide
- Projects successfully completed in more than
- 60 different countries
- $\cdot$  Community outreach, sense of responsibility for people and nature



### **Production**

- A 57,000 m<sup>2</sup> production site
- High-tech industrial production with a manufacturing philosophy
- · In-house painting line and powder coating plant
- · Sustainable and energy-saving
- Certified energy management in accordance with ISO 50001

### Products

- Designed, engineered and made in Germany
- $\cdot$  CE-approved
- Certified and independently tested
- Winners of national and international design awards
- Equipped with the best profile surfaces
- · Comply with the strictest quality standards
- · Individual custom products made to order



### <u>Service</u>

- Top-class consultation, everything from a single source
- Professional implementation of private and public building projects
- Digital customer portal with personal project documents
- Professional partner network
- Maintenance and service agreements that
  also extend beyond project completion
- $\cdot$  Tidy installation

### Solarlux digital

### More inspiration

Projects, references, news - the world of Solarlux moves fast, and an image is sometimes worth a thousand words. What more reason do you need to visit our website or the mySolarlux portal, or to follow us on social media? You can open our my-customer portal by simply scanning a QR code attached to your system, allowing you to access all the information relating to your project or order accessories, for example. But even in this digital age, it should go without saying that we love

hearing from you directly and answering your questions in person or on the phone. So don't delay - contact us today! Whether you'd like a zero-obligation consultation, a sketch of your personal idea, or simply an answer to a question, there are plenty of ways to get in touch with us.



