



BI-FOLDING DOORS

BI-FOLDING DOORS FROM SOLARLUX

Generous living space in open-plan rooms

For more than 35 years, Solarlux has stood for the outstanding quality of versatile glazing solutions for public and private spaces. The bi-folding door has been the beating heart of the international, family-owned company right from the very beginning. Unlike traditional sliding doors, which can leave a large section of the opening covered by glass even when fully open, the individual elements of the bi-folding door gather up into a slender bundle of panels to one side. This produces generous glass fronts that can be opened across almost 100% of their large area while still offering maximum protection when closed.





DESIGN, MATERIAL, OPENING - *freedom* IN EVERY RESPECT

FLEXIBLE DESIGN WITH BI-FOLDING DOORS

SPACE FOR YOUR INDIVIDUAL TOUCH

Enjoy limitless possibilities

Thanks to its perfect functionality, the creative freedom offered by its high-quality materials, and the limitless possibilities for combining it with other elements, the bi-folding door is the ideal solution for a wide range of projects. Systems from the bi-folding door family, non-insulated variants and versions with high-performance thermal insulation for use in passive houses - with bi-folding doors, the possibilities are almost endless.



APPLICATIONS

The possibilities offered by a bi-folding door are almost limitless. It can be used as a substructure element for a wintergarden that can be opened across almost its entire width, as an entrance to a swimming pool, or used as an alternative to a traditional patio door or window. It is also suitable for public spaces, of course! Use it to build your shop entrance, glaze the VIP box in your stadium, or create a facade on your balustrade – whatever you're building, make the bi-folding door your first choice.



Bespoke solutions for the
wintergarden • Frisia, Netherlands



The alternative to
traditional windows
Hamburg, Germany

Bring air and light to
your pool · Nottuln,
Germany



Flexible use of space - the bi-folding door as a partition · Best, Netherlands



Glazing balconies, creating space · Hattingen, Germany

Flexibility for restaurants &
business entrances
Olpe, Germany

Sports facilities with the
perfect view
Mainz, Germany

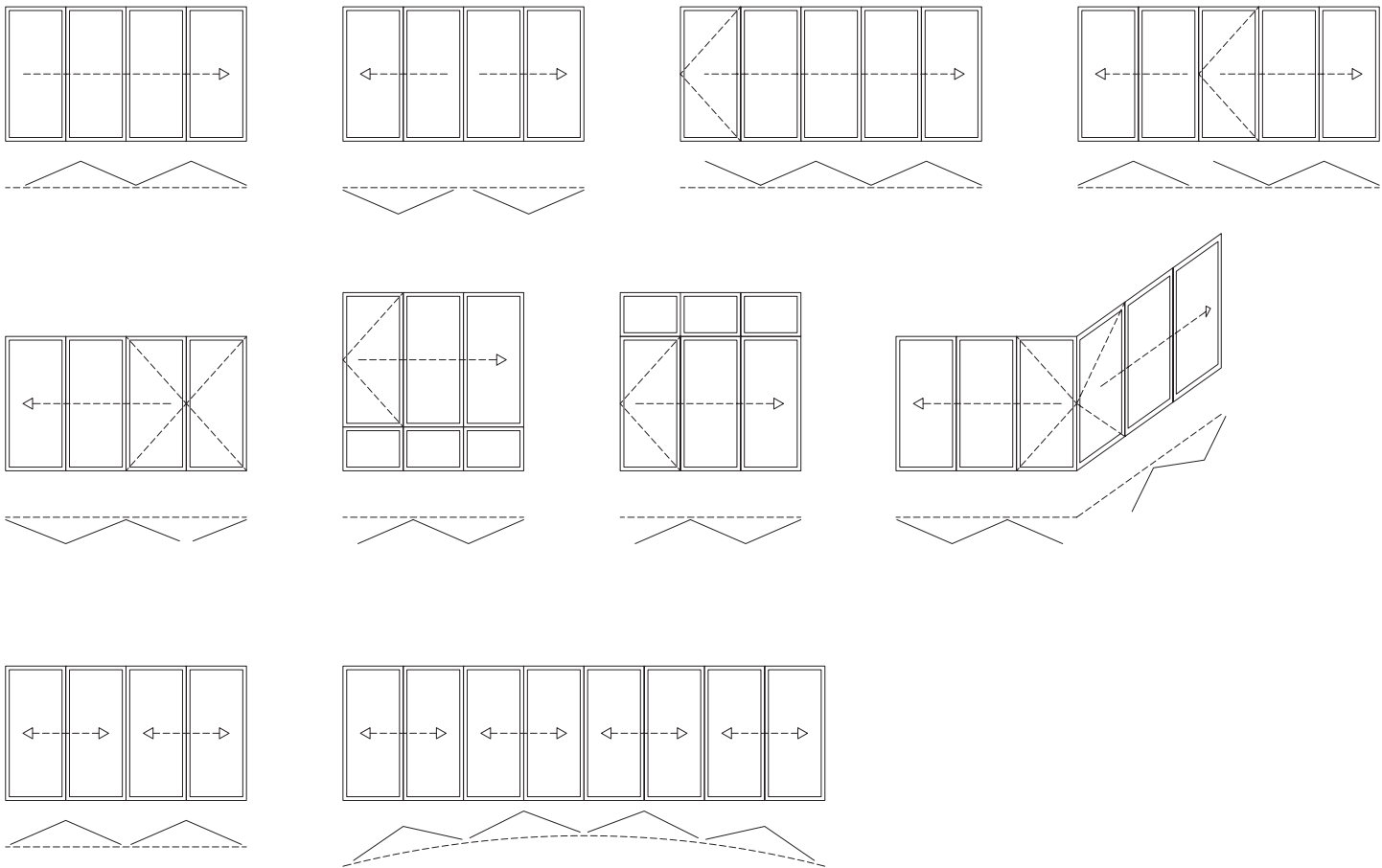




MAXIMUM CREATIVE FREEDOM

Inwards or outwards, folding to the left and/or to the right – Solarlux bi-folding doors offer countless opening system possibilities. The individual glass elements can be opened or closed in just a few simple steps, across their whole area, while integrating tilt-and-turn panels and window elements can help you enjoy even more creative freedom.

CONFIGURATION EXAMPLES



OUR COLOURS

When you choose a Solarlux bi-folding door, 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 finish s, at no extra cost. This allows every bi-folding door 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.

THE SOLARLUX WORLD OF COLOURS

 RAL 1015	 RAL 3011	 RAL 5003	 RAL 5008
 RAL 5014	 RAL 6005	 RAL 6009	 RAL 7004
 RAL 7006	 RAL 7015	 RAL 7016	 RAL 7021
 RAL 7024	 RAL 7035	 RAL 7038	 RAL 7039
 RAL 7040	 RAL 8017	 RAL 8019	 RAL 8022
 RAL 8077	 RAL 9001	 RAL 9003	 RAL 9004
 RAL 9005	 RAL 9006	 RAL 9007	 RAL 9010
 RAL 9011	 RAL 9016		



SOLARLUX SPECIAL COLOURS

Distinctive finishes for unique projects

It goes without saying that we also offer special DB, RAL and Eloxal colours, as well as special surface finish s (e.g. Tiger) for anyone looking to give their bi-folding doors a unique twist. We can make almost any wish come true - and we also offer coatings for special climate requirements (such as coastal properties).

**THE SOLARLUX COATING IS CERTIFIED
TO INTERNATIONAL STANDARDS**



THE ADVANTAGES OF THE SOLARLUX
BI-FOLDING DOOR - AN OVERVIEW



**MAXIMUM OPENING AND
SLIM SIGHT LINES**

The most important feature of the bi-folding door is its accordion-like folding technique, which allows it to be opened almost 100%. When closed, it boasts incredibly slim sight lines of just 99mm for the Ecoline and Highline systems across the panel joint.



**SECURITY AND ANTI-BURGLARY
PROTECTION**

Bi-folding doors are high-quality and extremely sturdy. They fulfil the requirements of the standard European anti-burglary protection class RC2. This even applies to systems with an even number of panels - which is a benefit you won't find anywhere else on the market.



THERMAL AND SOUND INSULATION

A bi-folding door guarantees optimum thermal insulation and, depending on the system and packages, can also be used for passive houses. The soundproofing certification that can be achieved with these elements guarantees a quiet living space, even in bustling, built-up areas.



ACCESSIBILITY AND CONVENIENCE

Bi-folding doors are extremely convenient, with accessible floor tracks available with durable stainless steel carriages and rollers.



WHAT SOLARLUX OFFERS

- In-depth consultation and planning
- Patented technical details
- Durability and high quality
- Made in Germany
- Systems certified by national and international institutes
- Filigree sight lines of 99 mm in the panel butt joint for the Ecoline and Highline
- Maximum transparency and flexibility
- Sophisticated technical design and assembly
- Compliance with all applicable standards and specifications



**INCREASED
SECURITY**

RC2 certified or comparable security equipment possible



A NEW DIMENSION FOR OPEN *living*

BI-FOLDING DOORS TO SUIT ANY REQUIREMENT

ECOLINE AND HIGHLINE

ALUMINIUM

Incredibly slim sight line, patented technology

Despite their differences in overall depth (67 mm and 84 mm), both our thermally insulated bi-folding door systems, Ecoline and Highline, boast a slim sight line of 99 mm at the panel butt joint. This is thanks to the heart of the bi-folding door: the bionicTURTLE®, a multi-functional break profile that combines a range of technical details. Its shape helps to keep profiles extremely slim – even when using large and heavy panels. It also houses the locking mechanism and fittings that ensure perfect insulation.

AWARD-WINNING DESIGN

The Ecoline and Highline are more than merely functional – they also boast an impressive design, as has been confirmed by renowned international experts. This is reflected in the fact that the new bi-folding door has already won four awards.



ECOLINE

- Overall depth: 67 mm
- Sight line: 99 mm
- Glass thickness: 5 - 36 mm
- $U_w \geq 1.1 \text{ W/m}^2\text{K}$
- Panel width: Up to 1 m;
- Panel height: Up to 3 m
- Panel weight: Up to 90 kg

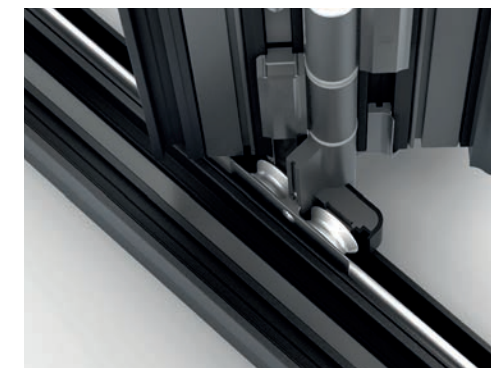
HIGHLINE

- Overall depth: 84 mm
- Sight line: 99 mm
- Glass thickness: 22 - 60 mm
- $U_w \geq 0.8 \text{ W/m}^2\text{K}$
- Panel width: Up to 1.1 m;
- Panel height: Up to 3.5 m
- Panel weight: Up to 110 kg



TAKE A LOOK INSIDE THE BI-FOLDING DOOR FAMILY

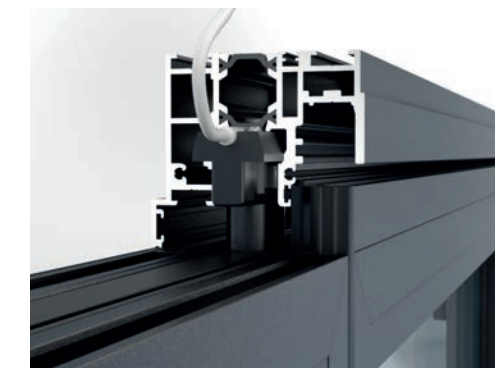
Inter-system harmony was one of our greatest concerns when developing the bi-folding door family: all four variants use the patented technical details described in the following pages. The benefits of this approach are reflected in both the fitting process for the bi-folding doors and their ease of operation.



CARRIAGE

Optimum load transfer

The stainless steel carriage with double-layered grooved ball bearings runs smoothly and quietly. It offers optimum load transfer onto its carriage and running track, allowing it to carry even heavy panels with little effort. The entire stainless steel sliding mechanism is extremely low-maintenance and non-wearing.



LOCKING MECHANISM

Certified to security standard RC2

With its 24 mm upward and downward stroke in the frame, the Solarlux special gearbox provides a high level of security. It can be fitted with a reed-contact lock monitoring system and concealed wiring, available in RC2 or RC2N design.



TWINX®

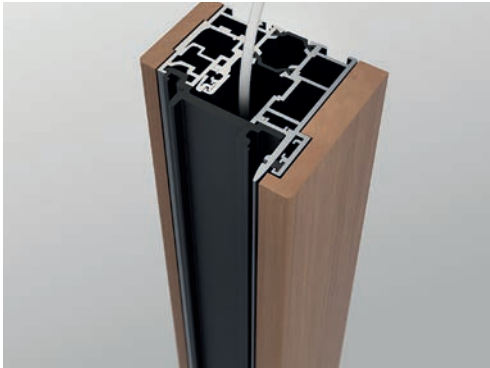
Uniform panel design

The TwinX® concealed panel centring mechanism stands for uniform, homogeneous panel design (only the top and bottom hinges are visible). Keeping the panels centrally aligned with one another, it provides stability even when the system is subjected to high wind loads, and ensures that the joint alignment remains even. It also ensures that the sealing levels remain unchanged and uninterrupted throughout the system.



PANEL CATCH
Secure opening and closing

The “Comfort Snap” functional panel catch offers incredibly convenient operation when operating your bi-folding door. The swing panel can be opened and closed easy and securely by following the set sequence: once fully opened, the swing panel snaps onto the next panel, and is not released until it is closed again.



FRAME COVER
Homogeneous sight lines

The black polyamide frame cover conceals all the fix ures, and the hollow space between the base of the profile and th cover can be used to lay concealed cables or house an additional convection chamber interruption seal.



IMPACT PROTECTION
A safe step

The Solarlux 3s aluminium impact protection clips into the floor t ack. It also keeps dirt out of the running track, and can be removed again easily if required.



CLEANING PIN
Top user-friendliness

The cleaning pin with “Easy Clean Technology” is convenient to lock and unlock, and makes cleaning the outer faces of the panels easy, even on the upper floo s of tall buildings. Thanks to its new locking technology, it is impossible to operate incorrectly. The new safety lock prevents the hinge pin from falling out.



ADJUSTABLE PROFILE
Quick compensation

The adjustable side profile p ovides a quick and easy means of compensating for panel tolerances. The width of the panels is adjusted in the sub-frame, and this operation no longer needs to be carried out separately for each panel. As a result, the seal contact pressure between the panels is maintained at every point. The adjustable profile do s not interrupt the sealing level.



FITTING PANELS
Optimum load transfer

The stainless steel fi tings offer optimum load transfer in the most stable section of the laminated profile when fitting the frame. A sealing cushion behind the screw head seals the mounting hole to prevent any moisture ingress.



A NEW CLASS OF ACCESSORY

FITTING OPTIONS

Equipment packages are available for the entire bi-folding door family. By choosing the appropriate package, customers can place greater focus on aspects such as security, thermal or sound insulation, lighting, or convenience. This range of options for picking and mixing individual options to personalise your system makes the bi-folding door even more attractive.

SHADING

Solarlux pleated blinds are great at both shading you from sunlight and protecting your privacy. They can be adjusted up and down to any position or length, making them the perfect solution. They are available as single or two-part elements, and can be easily positioned simply by moving them up or down. They also offer one other great advantage: they can be fitted without the hassle of drilling or gluing, by simply clipping them into the profiles. They can even be easily retrofitted to any existing bi-folding door.

FLOOR TRACKS WITH LIGHTING

In many types of floor track, the 3s impact protection can be fitted with LED lights and concealed cabling. The lighting creates a great ambience, especially in the evening. What's more, this orientation aid also ensures that the access and entry area is easy to find for the visually impaired, as required by German standard DIN 18040.

