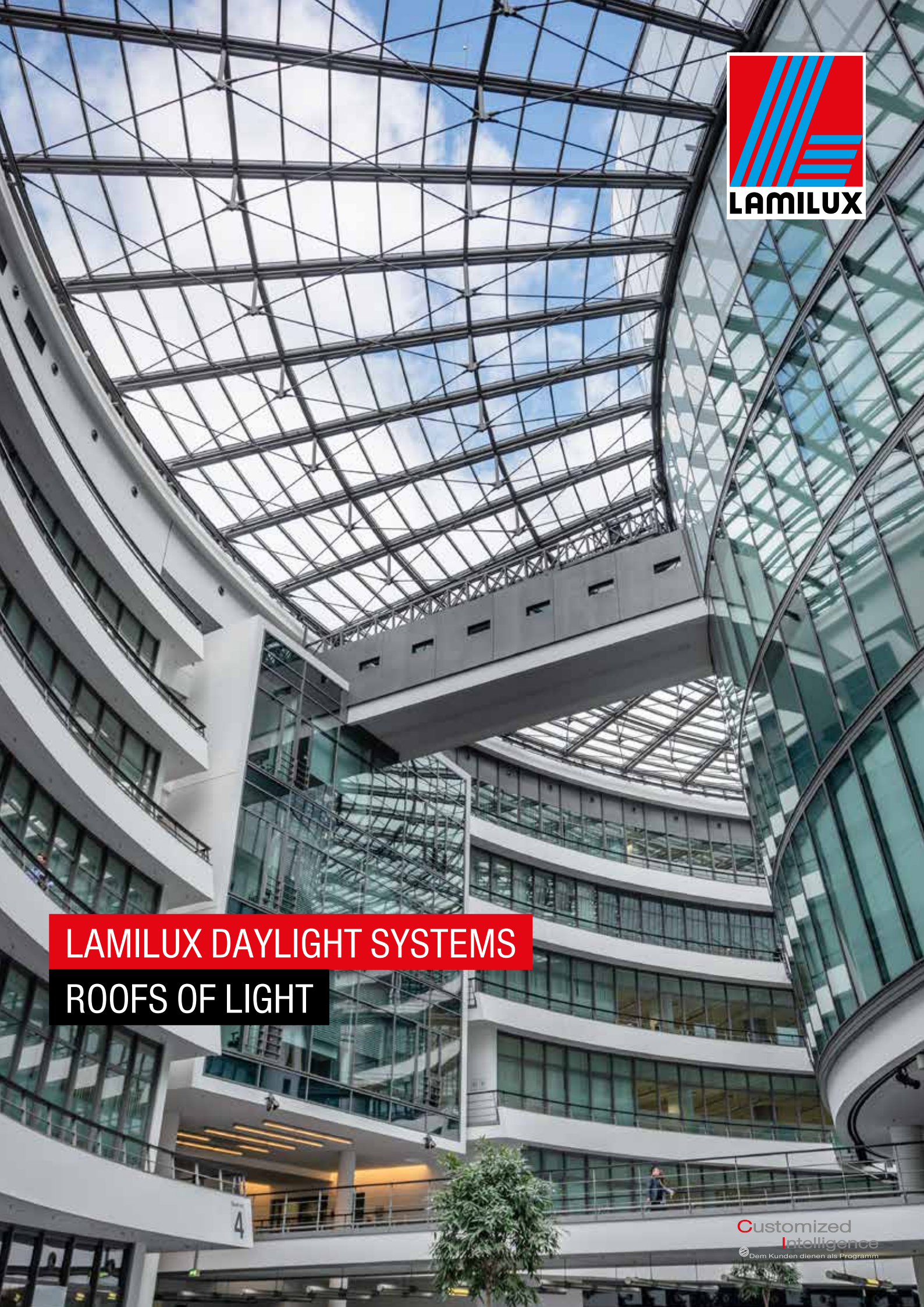


LAMILUX

LAMILUX DAYLIGHT SYSTEMS
ROOFS OF LIGHT

Customized Intelligence
Dem Kunden dienen als Programm

LAMILUX CI SYSTEMS
MAXIMUM EFFICIENCY

"Modern construction is shaped by the topic of energy efficiency. Daylight systems in industrial and administrative buildings, aesthetic showpiece buildings and private residences are regarded as an integral part of energy-efficient building constructions. At LAMILUX, we focus on the permanent development of innovative daylight solutions for sustainable and energy-efficient construction of the future."

Dr. Heinrich Strunz
Executive Manager LAMILUX Heinrich Strunz GmbH

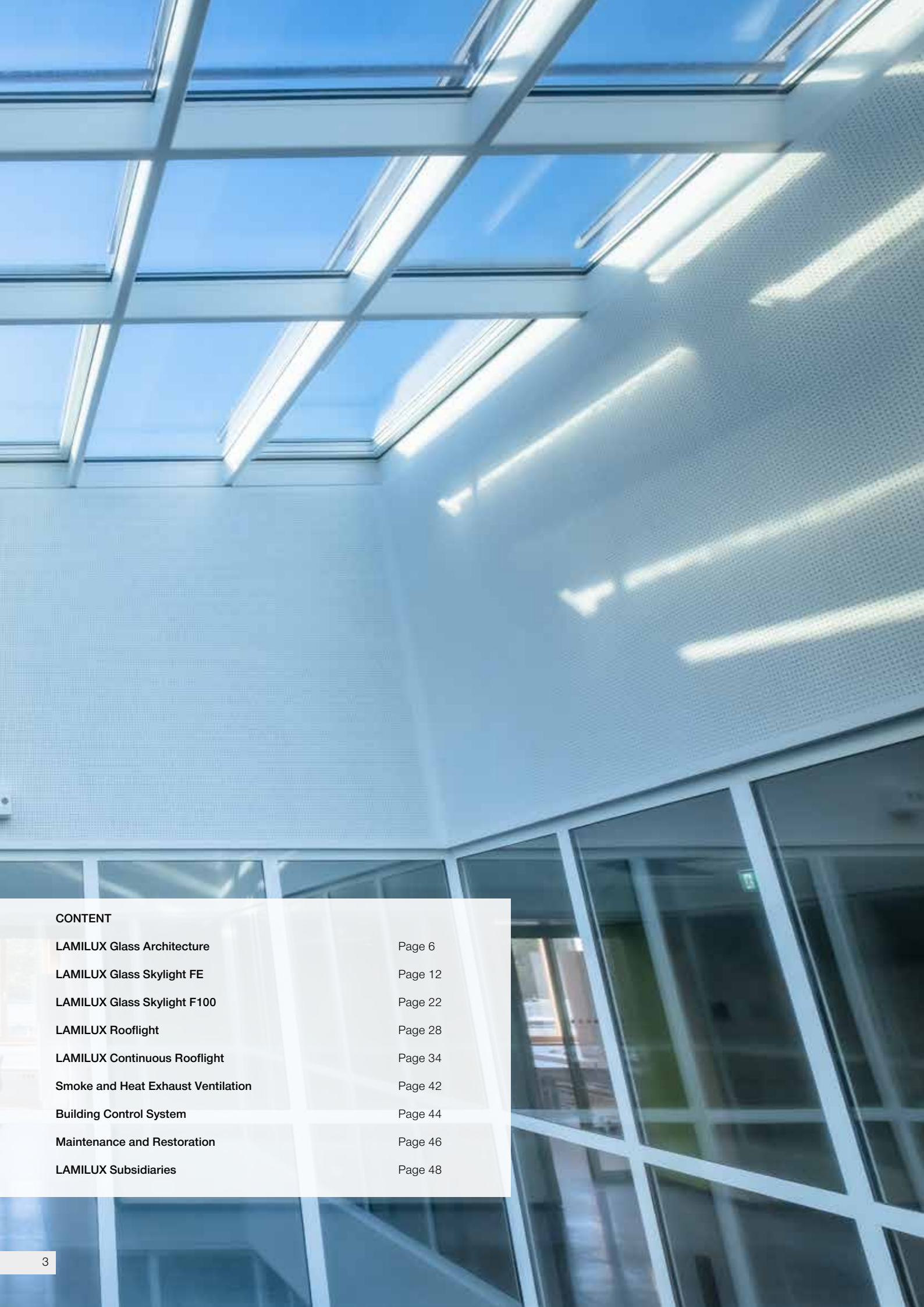
The LAMILUX CI Philosophy

Customer value is the reason we exist – and the focus of our activities. This requires harmony, identity and a balance between customer value and company strategy.

The principles that guide our company's actions and customer relations are set out in LAMILUX's company philosophy:

Customized Intelligence – serving customers is our first priority:
This requires outstanding performance and leadership in all areas relevant to customers, particularly in the role of:

- A leader in quality – optimum benefit for customers
- A leader in innovation – at the cutting edge of technology
- A leader in service – fast, uncomplicated, reliable and friendly
- A leader in expertise – optimum sales and technical advisory services
- A leader in solving problems – customised, made-to-order solutions



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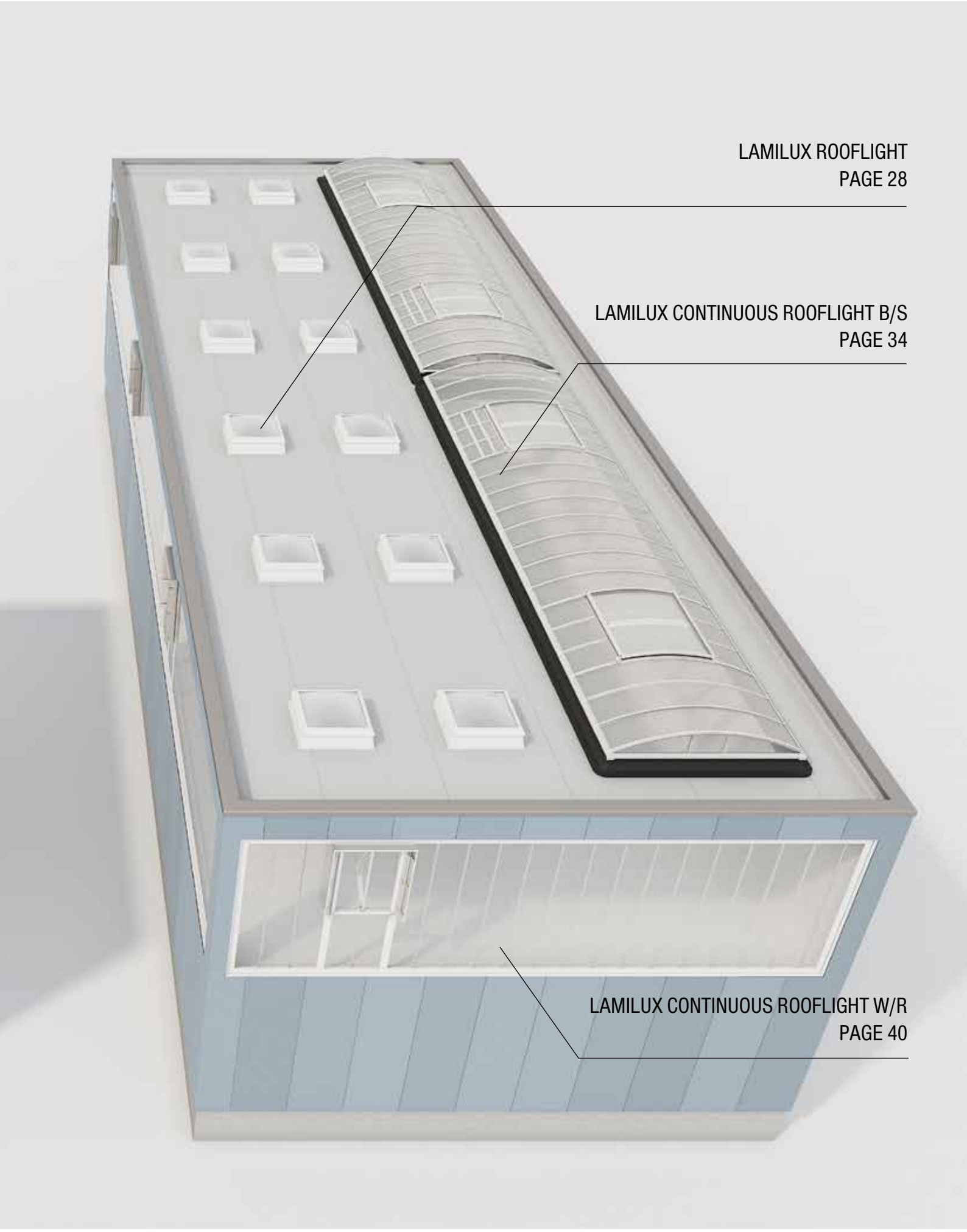

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LAMILUX
GLASS ARCHITECTURE

See in this video how the LAMILUX Glass Roof PR60 was implemented in a successful project.

LAMILUX
GLASS ROOF PR60

Design glass roofs that are tailored to the individuality of your building project: The LAMILUX Glass Roof PR60 is based on a highly flexible mullion-transom system and enables almost all conceivable shapes at angles between zero and 90 degrees: from saddleback and hipped roofs, pyramids and arched roofs to fully customised geometries.

The system has considerable dimensional stability, particularly at the supporting joints, thanks to the specially interlocking slide-in connectors. This even facilitates complicated profile joints without any difficulty.
In addition, the narrow face width of the profiles (60 millimetres) ensures a high level of daylight intake – hence the 60 in the name of our mullion-transom construction. The LAMILUX Glass Roof PR60 is available in many glazing types, such as heat insulation glass, sun protection and sound insulation glass as well as light-guiding and light-dispersing glazing types. The large number of optional shade systems ensure controlled daylight intake.

Cover strips with splash water duct
(available with optional cover profile)

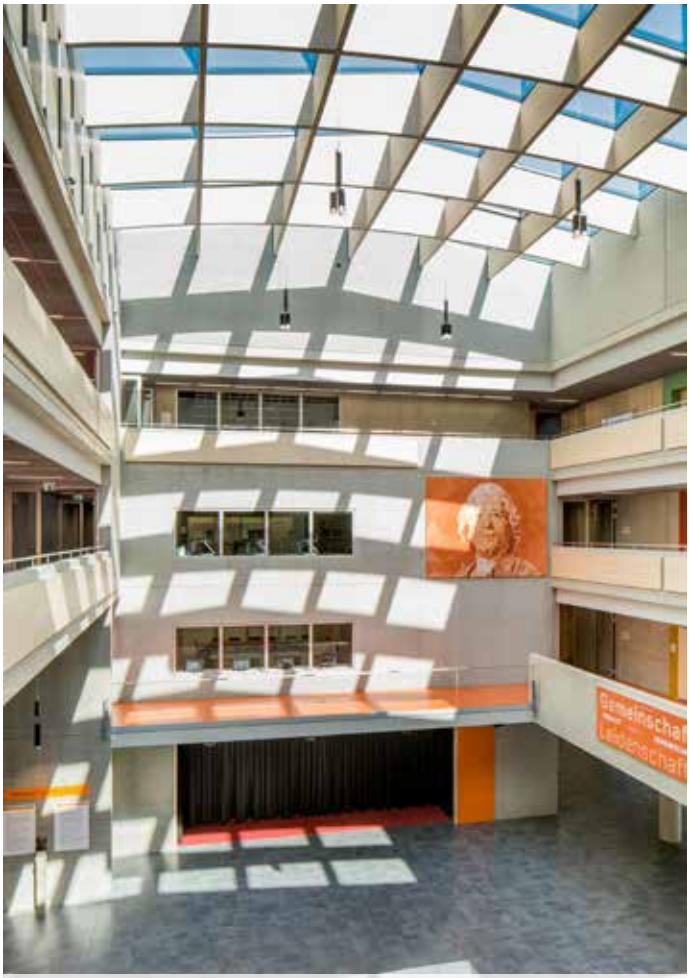
High degree of driving rain tightness and airtightness thanks to **continuous EPDM outer seal**

Thermally optimised insulation core

Double or triple glazing
available in many glazing types

Internal, multi-stage seal system
with secondary water drainage

High intake of daylight thanks to **narrow support profiles**



Product variant LAMILUX Glass Roof PR60 Passivhaus

Product variant LAMILUX Glass Roof Fire Resistance REI30

ENERGY EFFICIENCY

Savings on heating costs and minimised risk of condensation thanks to optimal isothermal characteristics

All-round optimum thermal insulation in a thermally separated overall construction

Preservation of a lot of thermal energy in the building thanks to the tight overall system

Passivhaus-certified variant (phA) with optimised thermal insulation and excellent airtightness values

COMFORT & DESIGN

Unique full service thanks to planning, construction and installation of the glass structure from a single source

Made-to-order complete solutions for daylight, SHEV, ventilation and control technology

Narrow supporting profiles ensure an unobstructed view to the outside and a high intake of daylight

LAMILUX Ventilation Flap PR60 in an architecturally appealing design with a roof upstand of only 40 mm

FUNCTIONALITY IN EXTREME WEATHER CONDITIONS

Tested watertightness in heavy rain and during storms (impervious to driving rain, in accordance with DIN EN 13830, Class RE1950)

High resistance to wind loads (2000 Pa as per DIN EN 13830)

Outstanding airtightness (AE 3000 positive test pressure as per DIN EN 13830)

Optimised soundproofing and minimised rain noise thanks to special glazing (R_w = 46 dB as per EN 10140-2)

BMW GROUP FIZ, MUNICH

Project:

Complete renovation of a four-storey building, used for product development, to reconfigure the layout giving best use of space. Covering of the area located between the main and outer building with a special glass construction.

Systems:

- Glass roof construction composed of 60 axes each with 15 panes
- A total of 900 panes, 225 of which have a unique shape
- Removal of the old and installation of the new glass roof while normal operations continued
- Elevated installation of the glass panes to compensate for any deflection

NURSERY, WIGGENSBACH

Project:

New construction of a nursery with a play area as a multifunctional zone covered by a glass roof. Clients' focus on biologically harmless materials where possible.

Systems:

- Two LAMILUX Glass Roofs PR60 each 2.8 m wide and 6.8 m long and with 5° inclination
- Consists of five glass panels with triple thermal insulation glazing
- Installed onto a green roof

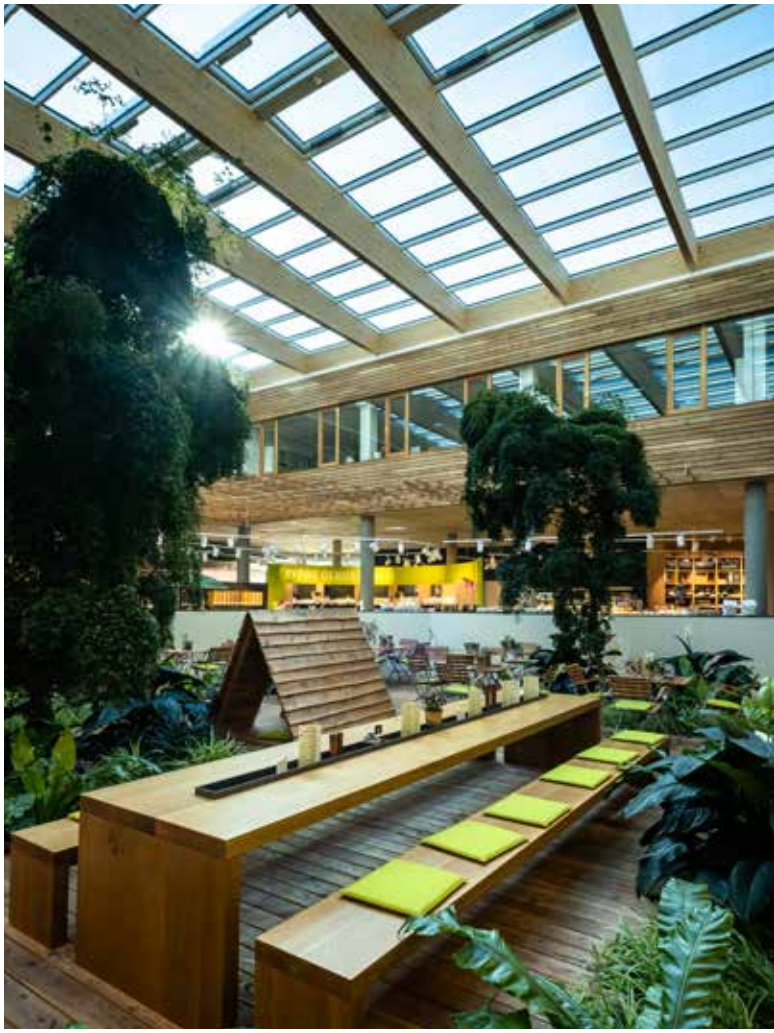
SINGLE FAMILY HOUSE, NORTH GERMANY

Project:

New construction of a spacious single family house with a focus on maximum, show-stopping daylight intake.

Systems:

- One LAMILUX Glass Roof PR60 in a pyramid shape with a surface inclination of 25° and top roof edge size of 4 x 4 m
- Two integrated LAMILUX Ventilation Flaps PR60 for daily ventilation



BYODO NATURKOST, MÜHLDORF

Project:

Nature first: Natural food centre with high light transmission to illuminate the hall.

Systems:

- One LAMILUX Glass Roof PR60 with a surface inclination of 3° and top roof edge size of 14.5 x 16 m in 84 glass panels
- Integration of twelve LAMILUX Ventilation Flaps PR60 made of thermally separated, extruded aluminium profiles


LAMILUX
GLASS SKYLIGHT FE

LAMILUX
GLASS SKYLIGHT FE

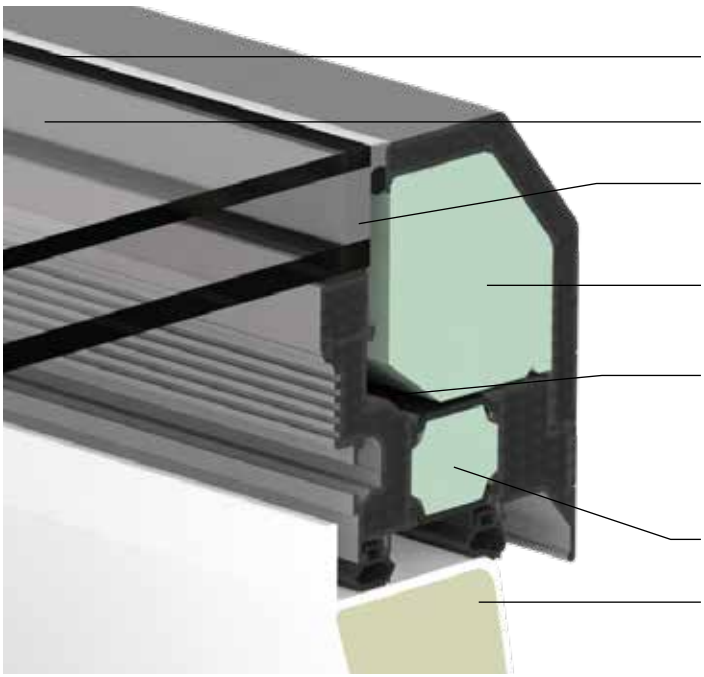
Sophisticated design in a number of variants: The redevelopment of the LAMILUX Glass Skylight FE represents a milestone in product development at LAMILUX. Architects, builders and building users benefit from an innovative frame profile and sophisticated design features with a wealth of additional benefits. For this, the skylight received the German Design Award 2019, the Red Dot Award 2019 as well as two Plus X Awards.

The design of the new LAMILUX Glass Skylight FE can also be adapted to any construction project's overall architectural concept. Design freedom is offered with a wide variety of glazing and sizes up to 2.5 x 2.5 metres. In addition the drive concealed within the profile frame and the freely selectable exterior and interior colours of the skylight offer choice and flexibility. Just as impressive is its all-round optimum thermal insulation in a compact overall system free of thermal bridges and certification in Passivhaus class phC.

PLUS X AWARD®

reddot award 2019
winner

GERMAN DESIGN AWARD SPECIAL 2019



Structural Glazing design

Flat drainage surface

"Warm edge" (spacers between the panes, made of materials with low thermal conductivity) **as a standard feature**

Integration of all drives and components in the profile frame

TAD – Thermo Active Design: A patented component below the glazing support for surface enlargement absorbs more heat energy from the room air contributing to the optimised isothermal curve

Thermally optimised insulation core

Insulated GRP upstand: Manufactured without joints (optional) and with a continuous insulation core made of 60 mm thick PU foam

ENERGY EFFICIENCY

Savings on heating costs and minimised risk of condensation thanks to flawless isothermal characteristics

All-round optimum thermal insulation in a compact overall system free of thermal bridges and certification in Passivhaus class phC

Preservation of thermal energy in the building thanks to the tight overall system

Seamless and vapour-tight upstand made of glass-fibre reinforced composite with integrated insulation

COMFORT & DESIGN

Uniform appearance throughout thanks to new joining technology: no visible screw joints or weld seams as well as four-sided flat water drainage

Easy installation thanks to completely pre-assembled delivery of the skylight

The integration of all drives, power adapters, cables and other components into the frame of the skylight creates a smooth interior design

Variety of design and colours thanks to freely selectable exterior and interior colours of the flat roof skylight

FUNCTIONALITY IN EXTREME WEATHER CONDITIONS

Tested watertightness in heavy rain and during storms (highly impervious to driving rain, in accordance with DIN EN 12208, Class E 1950)

High stability against wind load (highest wind load class C5 according to DIN EN 12210)

Excellent air permeability (performance class 4 – DIN EN 12207)

Optimised sound insulation and minimised rain noise due to special glazing (R_w = 38 dB)

SAFETY

Approved fall-through protection and accessibility for cleaning and maintenance purposes as per DIN 18008-6

Preventive fire protection according to DIN 18234: Prevents fire spreading on the roof without additional measures

Use as a smoke outlet in stairwells

High hail resistance due to TSG exterior pane as standard

Product variant LAMILUX Glass Skylight FE 3°

Product variant LAMILUX Glass Skylight FE Pyramid or Hipped

Product variant LAMILUX Glass Skylight FE Circular

Product variant LAMILUX Glass Skylight FE Passivhaus

LAMILUX
FLAT ROOF EXIT COMFORT

What some may regard as the garden is the roof terrace for others – ideally with direct and convenient access. The LAMILUX Flat Roof Exit Comfort offers a new dimension for the roof access. For exclusive top floor apartments, this achieves unprecedented light incidence and creates even easier and more convenient roof access.

The indoor climate also benefits from the systems' high energy efficiency and their unrestricted use as a ventilation system. LAMILUX Flat Roof Exit Comfort is completely pre-assembled upon delivery to the construction site, lifted onto the roof by a crane provided by the client and then positioned in place making installation very quick and straightforward.

LAMILUX Flat Roof Exit Comfort Swing
The LAMILUX Flat Roof Exit Comfort Swing opens its glass element (optionally 300 or 350 cm) hydraulically using a key switch. The exit folds open like a horizontal door to grant access to the path to the roof, which is roughly 100 cm wide. This saves valuable space on the terrace and also happens quite quickly: The element needs roughly only 25 seconds to fold open by 84 degrees. The 5° inclination provides an ideal self-cleaning effect. The Flat Roof Exit received the 2020 German Design Award in the 'Special Mention' category.

LAMILUX Flat Roof Exit Comfort Solo
The Flat Roof Exit of 120 x 350 cm opens horizontally via a built-in rack drive. This creates an even more comfortable access to the roof. The indoor climate also benefits from the high energy efficiency of the system as well as triple glazing. Thanks to the self-cleaning effect of the 6° inclination and the concealed drive units, the element remains permanently attractive. The Flat Roof Exit received the 2017 German Design Award in the 'Special Mention' category.

LAMILUX Flat Roof Exit Comfort Duo
A special version is the 2-flap roof exit hatch. This opens two flaps, each measuring 60 x 300 cm, towards the longitudinal sides. This two-leaf roof hatch can also be fitted with functional glazing and can be used without limitation as a ventilation system. The element has no unsightly edges or visible drive units on the inside and ensures very good heat insulation.


GERMAN
DESIGN
AWARD
SPECIAL
2020

APARTMENT, BERLIN

Project:

Creation of a luxury living space with an exclusive ambience thanks to generous daylight intake with controllable ventilation and convenient access to the roof terrace.

Systems:

- One LAMILUX Flat Roof Exit Comfort Duo as a two-part, horizontally opening flat roof element (automatic opening and closing)
- Compact, extremely energy-efficient overall structure, placed on a glass-fibre reinforced composite upstand with an integrated core insulation block
- Low-noise sliding on stainless steel telescopic rails

PAULUSKIRCHE, TRAUNREUT

Project:

Renovation of the old skylights in the bell tower, which provide direct daylight intake in the chancel.

Systems:

- Eight fixed LAMILUX Glass Skylights FE 3°
- Eight Renovation Frames 11 to use the existing upstands with the new skylights

NORRKÖPING SCHOOL, SWEDEN

Project:

Conversion of a former industrial building into a school building. Supply of the building with natural daylight even on cloudy winter days.

Systems:

- LAMILUX Glass Skylight FE Pyramid in the dimensions 180 x 180 cm with a U_g value of 1.1 W/(m²K) and a sound insulation value of 35 dB
- Upstands made of glass-fibre reinforced composite, 50 cm in height
- Condensate detector

MILTON KEYNES UNIVERSITY HOSPITAL, ENGLAND

Project:

New construction of an administration building with a focus on aesthetic, natural lighting.

Systems:

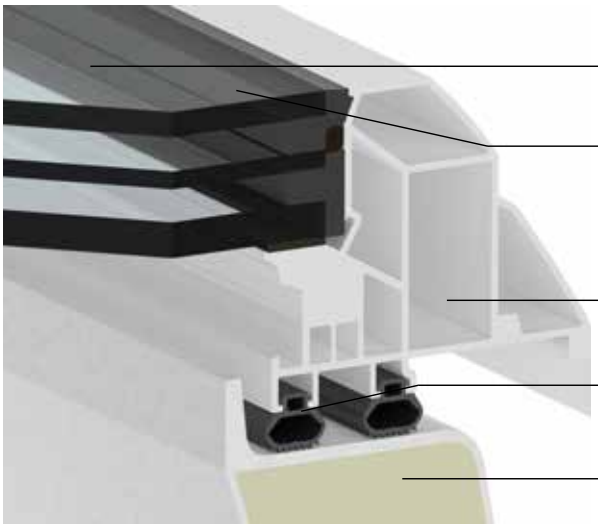
- Six LAMILUX Glass Skylights FE Circular opening for ventilation
- 17 LAMILUX Smoke Lifts Glass Skylight F100
- Six motors in special design for flat roof windows
- Wind and rain sensor set
- SHEV central units and CO_2 alarm stations

LAMILUX
GLASS SKYLIGHT F100

LAMILUX
GLASS SKYLIGHT F100

The LAMILUX Glass Skylight F100 is an energy-efficient skylight for rooms with high optical demands. Particularly in residential, administrative and office buildings, it floods rooms with daylight and fresh air. Various shading options can be used to control the amount of light and heat entering the room – conveniently controlled up to a comfortable climate.

Not only the building user, but also the builder benefits from practical advantages: The skylight is very quick and easy to install. It is completely pre-assembled on the upstand when it is delivered to the construction site and it can be fixed onto the flat roof immediately – both the ventilated and the fixed variant.



First flat roof window with national technical approval featuring a **Structural Glazing design**

Flat drainage surface: The unique frame profile provides a smooth transition between the glazing and the border frame, creating an unobstructed drain for rainwater

Thermally optimised PVC border frame

Outstanding, certified air-tightness due to the **balloon double sealing system**

Insulated GRP upstand: Manufactured without joints (optional) and with a continuous insulation core made of 60 mm thick PU foam; Optional ventilation drives concealed in the upstand

Product variant LAMILUX Glass Skylight F100 Circular

ENERGY EFFICIENCY

Savings on heating costs and minimised risk of condensation thanks to flawless isothermal characteristics

All-round optimum thermal insulation in a compact, thermal-bridge-free overall system

Preservation of thermal energy in the building thanks to the tight overall system

Seamless and vapour-tight upstand made of glass-fibre reinforced composite with integrated insulation

COMFORT & DESIGN

Optional concealed integration of all drives, cables and other components into the frame

Avoidance of internal plastering work thanks to smooth, silk-white interior finish of the upstand

Permanently clear view, infinitely variable water drainage and generous daylight incidence due to scratch-resistant glazing and uniquely designed frame profile

Optional simplification of connection work through optimum structural attachments for a wide variety of sealing techniques

FUNCTIONALITY IN EXTREME WEATHER CONDITIONS

Tested watertightness in heavy rain and during storms (impervious to driving rain, in accordance with DIN EN 12208, Class E 1950)

Optimised sound insulation and minimised rain noise due to special glazing (R_w = 38 dB)

High stability against wind and snow loads (wind load – class C4 according to DIN EN 12210)

Optional internal or external shading as well as UV-resistant edge seal against strong solar radiation

SAFETY

Approved fall-through protection according to GS-Bau 18

Preventive fire protection according to DIN 18234: Prevents fire spreading on the roof without additional measures

Use as a smoke outlet in stairwells

Available as fully certified smoke and heat exhaust ventilation device according to DIN 12101-2

FRONIUS, NEUHOF

Project:

New construction of a production and administration building for the manufacturer of electrical appliances.

Systems:

- Eight LAMILUX Glass Skylights F100
- 30 LAMILUX Rooflights F100
- One LAMILUX Continuous Rooflight B
- Five LAMILUX Smoke Lifts Continuous Rooflight B with Safety Stripes
- Two LAMILUX Glass Roofs PR60
- Eight LAMILUX Ventilation Flaps PR60

CARITAS, HAGEN

Project:

Renovation of the roof of the Caritas workshop for people with disabilities: Natural illumination of the premises with around 70 LAMILUX Glass Skylights F100. Flush surface allows rainwater and dirt to run off.

Systems:

- LAMILUX Glass Skylight F100
- LAMILUX Glass Skylight FE

WORKSHOPS, STRAUBING

Project:

Modernisation of a workshop building with over 120 LAMILUX Glass Skylights F100. Increase of natural daylight and reduction of running energy costs.

Systems:

- LAMILUX Glass Skylights F100 in different sizes
- Interior sun protection

ST. SEVERIN NURSERY, GARCHING

Project:

New construction of the nursery with a rippled roof shape. Integration of daylight systems in the large recreational and dining area.

Systems:

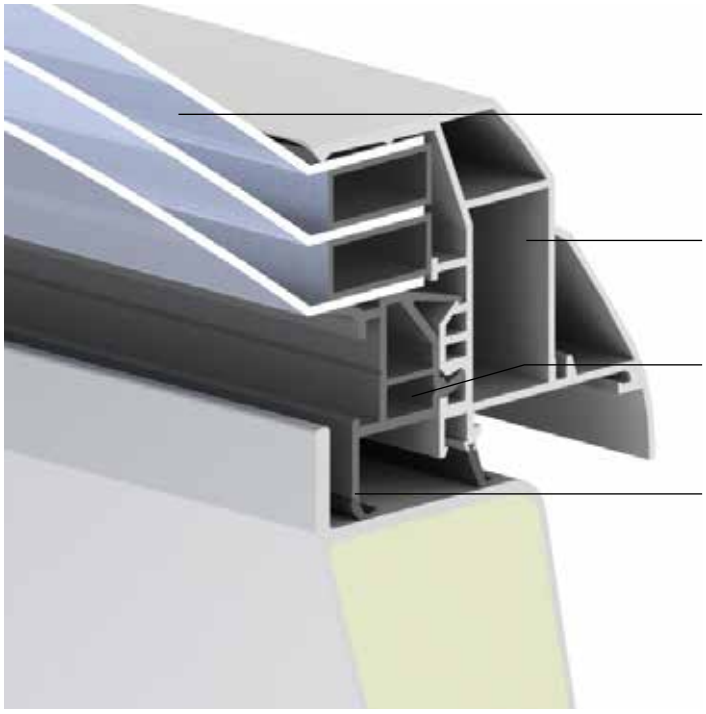
- 13 LAMILUX Glass Skylights F100 Circular in a fixed design and a top roof edge size of 150 cm
- Nine LAMILUX Glass Skylights F100 Circular opening for ventilation with a stroke height of 300 mm


LAMILUX
ROOFLIGHT

LAMILUX
ROOFLIGHT F100

The domed rooflight is the ideal skylight on flat roofs of production halls, warehouses, sports and exhibition halls. It not only brings daylight and fresh air into the building, but also ensures the personal and property safety as a smoke and heat exhaust ventilation unit. Thanks to a multi-layered seal system and up to quadruple glazing, the rooflight boasts exceptional heat-insulation values.

The innovative border frame and the thermally insulated upstand made of glass-fibre reinforced composite also contribute to the considerable heat insulation performance. The rooflight is available in both a fixed and ventilated design as standard in dimensions up to 3 x 3 metres. Other dimensions are possible on request.



Customised glazing systems for optimal daylight utilisation in the different variants

Partial long-fibre reinforcement for warp-resistant border frame

Composite glazing bead with surrounding functional groove for retrofitting fitting components

Multi-layered seal system for compact, impermeable system

Product variant LAMILUX Rooflight F100 Circular

ENERGY EFFICIENCY

All-round optimum thermal insulation with minimised condensation risk thanks to the overall construction completely free of thermal bridges

Preservation of the thermal energy in the building thanks to the internal, multi-layered seal system

Fully heat-insulated upstand made of GRP, optionally available with heat-insulated base flange

Rooflight with good life cycle assessment and comprehensive environmental product declaration as per DIN EN ISO 14025 and DIN EN 15804 (EPD - modules A1 - D)

FUNCTIONALITY IN EXTREME WEATHER CONDITIONS

Tested watertightness in heavy rain and during storms (Driven Rain Index DRI up to 14.7 m^2/s)

High stability in heavy rain and during storms

High resistance to wind loads up to UL 1780 as per DIN EN 1873

Hail resistance as per VKF No. 10 test regulations

COMFORT & SAFETY

Easy processing thanks to completely pre-assembled delivery of the skylight

Lockable ventilation as standard with the option of retrofitting ventilation drives at any time

Passive fire protection: Compliance with DIN 18234 for the prevention of fire spread on rooftops without additional measures

Available as certified smoke and heat exhaust ventilation device according to DIN 12101-2

METRO SIMMERING, VIENNA

Project:

New construction of a warehouse with a total of 125 LAMILUX Rooflights F100 and five LAMILUX Continuous Rooflights B for optimal daylight inside the warehouse as well as daily aeration and ventilation function as natural smoke and heat exhaust ventilation units (NSHEVs).

Systems:

- 125 LAMILUX Rooflights F100 in various dimensions
- Rooflights with double composite glazing
- Additionally five LAMILUX Continuous Rooflights B
- Continuous Rooflights designed with two overlaid PC sheets (each 10 mm) for excellent thermal insulation

GROB, MINDELHEIM

Project:

New construction of a production facility. Realisation of daily aeration and ventilation via cylinders with spring connection as well as actuation of the SHEV and ventilation function through only one pipe.

Systems:

- 493 LAMILUX Rooflights F100 in 180 x 240 cm
- Partial implementation as LAMILUX Smoke Lift Rooflight F100
- CO_2 alarm stations

FRONIUS, NEUHOF

Project:

New construction of a production and administration building for the manufacturer of electrical appliances.

Systems:

- 30 LAMILUX Rooflights F100
- One LAMILUX Continuous Rooflight B
- Five LAMILUX Smoke Lifts Continuous Rooflight B with Safety Stripes
- Two LAMILUX Glass Roofs PR60
- Eight LAMILUX Ventilation Flaps PR60
- Eight LAMILUX Glass Skylights F100

PNK LOGISTICS PARK, VALISCHEVO

Project:

New construction of an 18,000 m² logistics centre for a Russian pharmaceutical manufacturer. 300 LAMILUX Smoke Lifts Rooflight F100 are installed on the large roof surface of the warehouse complex near Moscow. These are used for natural illumination of the building and as smoke and heat exhaust ventilation in the event of a fire.

Systems:

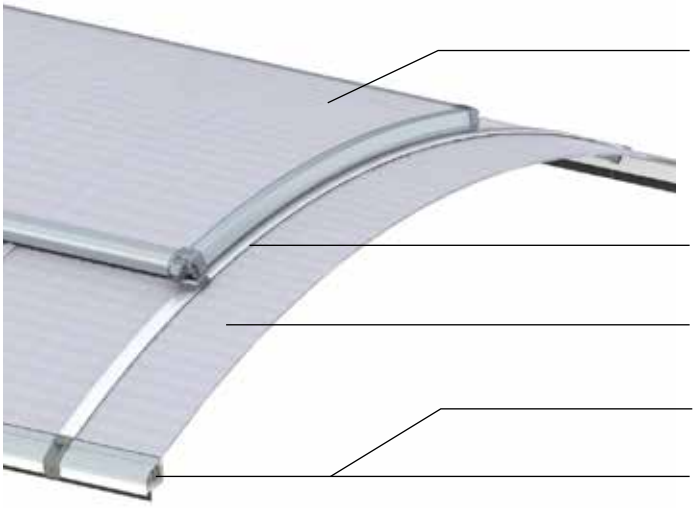
- 300 LAMILUX Smoke Lifts Rooflight F100 in 120 x 150 cm
- CO_2 alarm stations

LAMILUX
CONTINUOUS ROOFLIGHT

LAMILUX
CONTINUOUS ROOFLIGHT B

Our LAMILUX Continuous Rooflight B is a pioneering daylight system, both in terms of energy and structural design. The arched, modular skylight system has outstanding thermal installation with excellent heat insulation and U_f values. Optimum smoke removal and ventilation solutions for the building are available as a result of the extensive range of ventilation and smoke and heat exhaust flaps that can be integrated within the continuous rooflight.

The LAMILUX Continuous Rooflight B is suitable for using daylight to provide extensive illumination in halls and for using as an extensive heat exhaust system with melt-out glazing types in the event of a fire. The system is optimised for use as an inexpensive solution in industrial halls and warehouses as standard, but can also be manufactured for installation in sports halls and sales outlets by using glazing with improved heat insulation properties, for example.



Arched flap as ventilation or certified smoke and heat exhaust ventilation **with optimised U_f values,** excellent thermal values and perfected flap adjustment system

Tension bar with active expansion absorber

Wide range of variants for polycarbonate glazing for every use

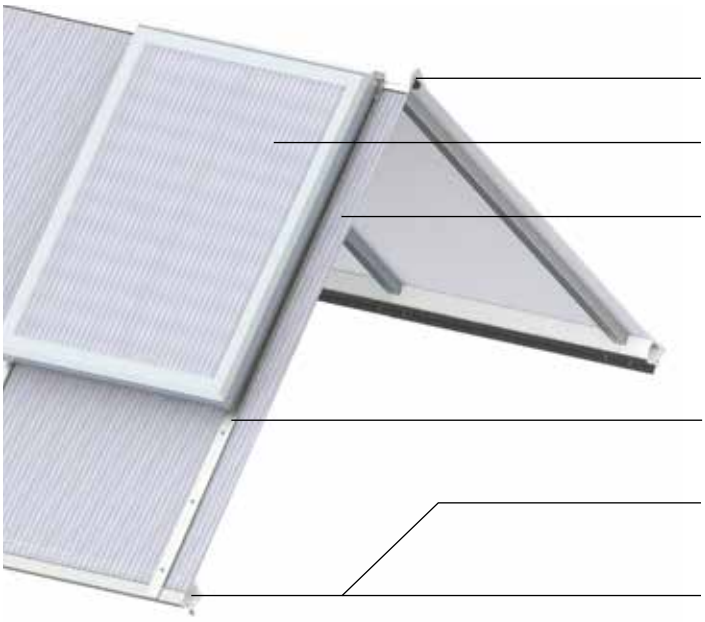
Isothermal Load Converter

Base profile: Effective prevention of fire spreading on the roof as per DIN 18234

LAMILUX
CONTINUOUS ROOFLIGHT S

The LAMILUX Continuous Rooflight S is a modular, ridged roof continuous rooflight system and can be fitted with different composite glazing types according to requirements. Its completely thermally separated profile system ensures optimum thermal protection and minimises the risk of condensation on the construction's surfaces compared with conventional, non-thermally separated structures.

Combined with the frame system, which has been optimised for the construction, ideally matched solutions are possible without additional upstands provided by the client. Optimum smoke removal and ventilation solutions for the property for almost every use as a result of ventilation and smoke and heat exhaust flaps that can be integrated.



Ridge cover profile

Flap as ventilation or certified smoke and heat exhaust ventilation

Wide range of variants for polycarbonate glazing for every use

Tension bar with active expansion absorber

Isothermal Load Converter

Base profile: Effective prevention of fire spreading on the roof as per DIN 18234

Product variant LAMILUX Continuous Rooflight B Passivhaus

ENERGY EFFICIENCY

Tested and certified heat insulation values (ETA – European Technical Assessment)

Optimisation of isothermal characteristics and rebate base ventilation as well as minimisation of the condensate risk due to thermal separation on all construction components

Optimal insulating effect and air-tightness for the overall structure, suitable for air-tight shells of buildings (blower door)

Customised intake of daylight and solar heat input thanks to object-specific composite glazing with heat transmission coefficients of up to 1.0 W/(m²K)

FUNCTIONALITY IN EXTREME WEATHER CONDITIONS

Durability thanks to the active expansion absorber as optimal protection of the construction in the event of snow, ice, wind and excessive heat

High level of stability and safety under wind and snow loads thanks to the dynamic torque control in the flaps

Resistance to hail tested as per VKF Bern guidelines and tested watertightness in heavy rain and during storms (DRI 3.0 m²/s)

Impervious to driving rain thanks to welded sealing frames for flap systems and certified airtightness for the overall system

SAFETY

Preventive fire protection according to DIN 18234: Prevention of fire spreading on the roof as a result of the Linear Burn-through Protection

Melt-out of the glazing in the event of a fire to ensure heat extraction

Integration of natural smoke and heat exhaust ventilation devices (NSHEV) and smoke and heat exhaust control systems for smoke removal from the building in the event of a fire

Glazing types that are resistant to flying sparks and radiating heat

LAMILUX Continuous Rooflight B

LAMILUX Continuous Rooflight S

STUTE, PADERBORN

Project:

Renovation following storm damage at the premises of food manufacturer Stute.

Systems:

- 18 LAMILUX Continuous Rooflights B in different sizes
- 15 LAMILUX Smoke Lifts Continuous Rooflight B integrated as single flaps

EVENTS HALL, WURZEN

Project:

Renovation and conversion of a former production hall into an events hall.

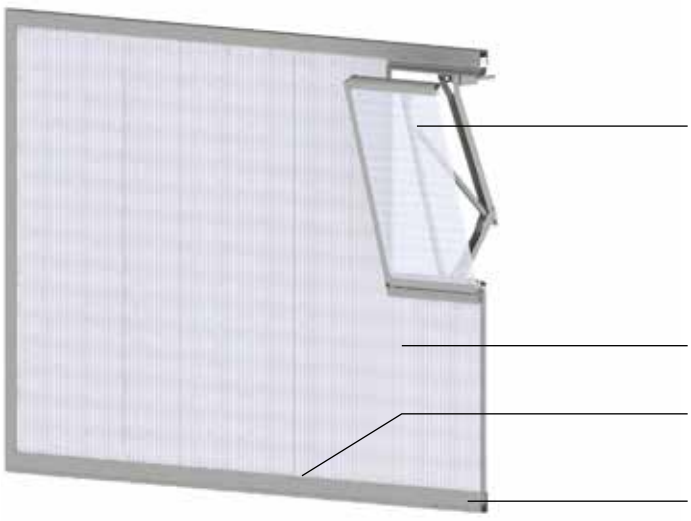
Systems:

- 21 LAMILUX Continuous Rooflights S 30° with lengths of up to 28 metres
- Eight LAMILUX Smoke Lifts Continuous Rooflight S

LAMILUX
CONTINUOUS ROOFLIGHT W | R

The system from LAMILUX enables energy-optimised, break-proof glazing of lateral light surfaces. Non-supporting walls can be used as lighting, ventilation, and smoke and heat extraction surfaces. Ventilation flaps and smoke and heat exhaust ventilation flaps, as well as their various ventilation and activation variants, can be easily integrated into the continuous rooflight.

We differentiate between the Continuous Rooflight R system, which is installed as shed glazing, and the Continuous Rooflight W system, which is installed as a front-mounted facade or in the reveal. With both systems, the daylight can be optimally used through lateral light intake. It enables a clear-cut architectural division of the facade. Its completely thermally separated profile system ensures optimum thermal protection and minimises the risk of condensation on the construction's surfaces.



Flap as ventilation or certified smoke and heat exhaust ventilation

Range of variants for polycarbonate glazing

Capping section

Thermally separated aluminium profile

ALTE POSTBAHNHOF, LEIPZIG

Project:

Renovation of Alte Postbahnhof in Leipzig to create commercial and office spaces.

Systems:

- Ten LAMILUX Continuous Rooflights W/R as shed roof with a surface inclination of 60°
- 47 single flap “PHÖNIX” ventilators of our subsidiary roda

COROPLAST, WUPPERTAL

Project:

Supplying a production hall with maximum daylight.

Systems:

- LAMILUX Continuous Rooflight W/R as a shed construction with a length of 18 metres in an overall system completely free of thermal bridges
- 15 Smokejet louvered ventilators of our subsidiary roda

LAMILUX SMOKE AND HEAT EXHAUST VENTILATION SYSTEMS

Natural smoke and heat exhaust ventilation units (NSHEVs) save lives and protect property. This is why all LAMILUX product groups are also available as NSHEV. LAMILUX smoke and heat exhaust ventilation (also SHEV) systems are synonymous with safety in compliance with DIN EN 12101-2, DIN 18232, the German Industrial Building Guidelines and various VdS guidelines.

These systems use thermal lift to channel smoke, heat and fumes into the open air. As fresh air is drawn in, a smoke-free layer forms near to the ground: As a result, people are able to escape quickly into the open air and the rescue services can extinguish the fire and save lives safely and do so with the necessary visibility.

LAMILUX Smoke Lift Rooflight F100

CONTROL TECHNOLOGY – LAMILUX AS A SYSTEM INTEGRATOR

Building control systems determine a building's safety, energy efficiency and comfort. They are key to ensuring sustainable, value-based construction of the future. As a manufacturer and installer of SHEV systems, we have complex trigger and control technologies at our disposal. As a system integrator, we are able to network all movable elements in a building envelope which perform SHEV and air conditioning functions. This is done via control panels. We integrate automation systems in the central building control system.

- Actuation of pneumatic and electric systems as well as drives for ventilation and SHEV units
- Design, installation and commissioning of the signalling sensors, the triggering units and the drives
- Routing of pneumatic and electric lines
- System integrator for third-party systems
- Interface with building control system

Everything for all project phases from a single source
From small control solutions to comprehensive building automation in large facilities, we provide all services in all of the relevant trades from a single source to ensure reliable implementation: From planning and designing the electrical and pneumatic control systems and components to their installation, commissioning and maintenance.

Control with our systems
- Smoke and Heat Exhaust Ventilation Systems
- Flap systems for natural ventilation
- Solar protection and light direction
- Sensor-controlled switching of electric lighting
- Temperature-dependent switching of air conditioning units

... and benefit from intelligent networking of building safety, energy efficiency and building comfort.

Here you can find out more about our LAMILUX Building Control System.

MAINTENANCE

Smoke and heat exhaust ventilation systems must trigger and respond quickly and correctly in case of fire. In other words, 100 percent reliability and functionality of the SHEV system. For this reason, regular maintenance is a must for SHEV system operators, as they are legally required to take any necessary measures to keep people out of danger in the event of a fire.

Key maintenance items:

- Examination of the overall system for modifications performed by the operator
- Test activation via CO_2 lines
- Testing of electrical wiring and accumulators
- Inspection of CO_2 cartridge filling levels
- Cleaning of SHEVs to remove dust, oily deposits and corrosion
- Complete activation of the SHEV system
- Transparent documentation of the work carried out

RENOVATION

Retrofitting of daylight systems with LAMILUX means: All processes take place transparently and in accordance with a customer and result-oriented methodology – from planning through to installation. We record the many parameters involved in a renovation using a detailed checklist and then implement the clearly regulated steps in practice and on time.

The overall LAMILUX renovation package:

- Survey by LAMILUX
- Clarification of requirements
- Drafting of a proposal
- Organisation of coordinated measures
- Assembly, including control technology
- Maintenance in accordance with the applicable guidelines
- Short renovation times
- Disassembly and assembly also during on-going production
- High level of planning and cost security

RENOVATION EXAMPLE DANTE GYMNASIUM, MUNICH

Before the renovation

Heat energy was shown to escape from the old glass roof. The supporting structure had become unstable and the partly opaque glass panes were only letting a small amount of daylight into the building.

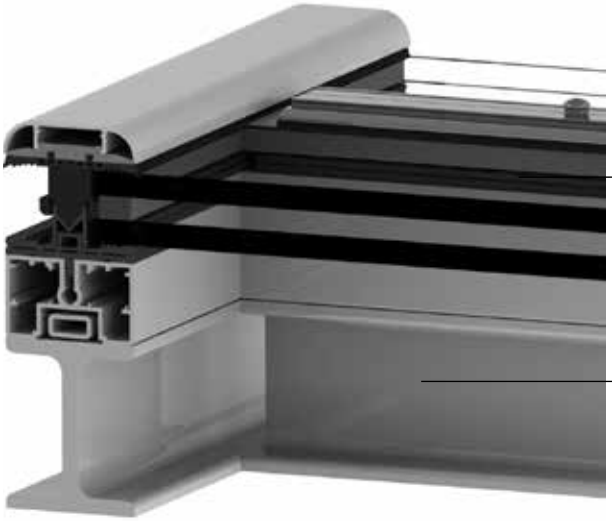
After the renovation

- Two hipped glass roofs with a surface inclination of 20° with dado wall panelling
- Coating of both constructions in customised RAL colours
- Option of daily ventilation with 24 LAMILUX Ventilation Flaps PR60
- Activation of the systems by means of 24 motor openers as flap drives for ventilation and SHEV function
- Installation of supply cable and ventilation control connection to the existing building control system

STEEL CONSTRUCTIONS WITH MIROTEC

Large glass roofs can no longer support aluminium alone. This is where steel supporting constructions come into play – and we can offer you these as well: Our subsidiary Mirotec, which has its HQ in Wettringen (Germany), is a well-known European steel-glass construction specialist. Using state-of-the-art technology which makes it possible to create highly complex constructions via CAD, we are able to make your architectural ideas a reality.

In this regard, we attribute great importance to aesthetics, modernity and environmental compatibility which we believe are fundamental requirements of modern building constructions. Your biggest benefit from the LAMILUX and Mirotec combination: You reduce the number of interfaces you need by one and you hire two experts who have already implemented many projects together. You benefit from synergy effects which you will notice both in terms of time and cost.



LAMILUX Glass Roof PR60 with reduced profile height

Mirotec steel supporting structure

See in this video how the LAMILUX Glass Roof PR60 was implemented in a successful project.

VENTILATION TECHNOLOGY WITH RODA

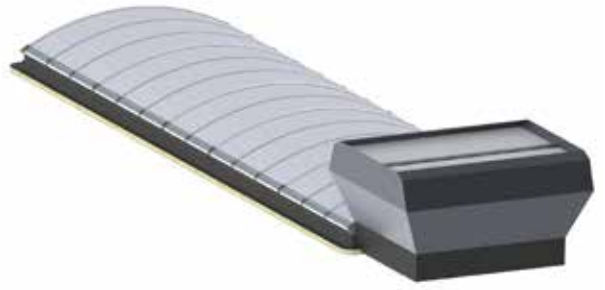
roda Licht- und Lufttechnik GmbH has been part of the LAMILUX Group since January 2018. The subsidiary's product portfolio covers four core competences: smoke and heat exhaust ventilation, industrial ventilation, daylight technology and translucent facade technology. roda takes care of all project planning up to on-site acceptance. In addition, roda offers maintenance for SHEV systems of all manufacturers as well as renovations within the scope of the four stated core competences.

LAMILUX and roda work together very closely in both development and sales. The benefit for you as a customer: One central contact, no interfaces, larger product portfolio and volume of services.

The first collaborative product is a thermally separated continuous rooflight with rainproof ventilation: The connection between the LAMILUX Continuous Rooflight B and the MEGAPHÖNIX double flap from roda. The element guarantees all-weather ventilation through its weather-resistant side opening flaps. These open automatically as soon as the top-mounted flaps closed when it starts to rain.

The MEGAPHÖNIX can be mounted directly on the continuous rooflight frame with a continuous rooflight width of up to three metres. From a continuous rooflight width of more than three metres, the MEGAPHÖNIX is mounted as a "rider" directly on the glazing bars of the continuous rooflight without interruptions.

A further collaborative solution is the integration of roda's louvered ventilators into the LAMILUX Continuous Rooflight S.



roda MEGAPHÖNIX on the frame of the LAMILUX Continuous Rooflight B

roda MEGAPHÖNIX on the glazing bar of the LAMILUX Continuous Rooflight B

Scan this to discover more about LAMILUX daylight systems!


ROOFLIGHT F100


GLASS SKYLIGHT F100


GLASS SKYLIGHT FE


GLASS ARCHITECTURE


RENOVATION


MIROTEC STEEL CONSTRUCTIONS


CONTINUOUS ROOFLIGHT B


CONTINUOUS ROOFLIGHT S


CONTINUOUS ROOFLIGHT W|R


SMOKE AND HEAT EXHAUST VENTILATION SYSTEMS


BUILDING CONTROL SYSTEMS


RODA LIGHT AND AIR TECHNOLOGY

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