

NATURAL LIGHT AND ARCHITECTURE

NATURAL LIGHT AND ARCHITECTURE

04	AXEL TOWER COPENHAGEN, DENMARK	36	PRIMARY SCHOOL LIBEZNICE LIBEZNICE, CZECH REPUBLIC	68	MUSEUM NATIONAL GALLERY LONDON, UNITED KINGDOM
80	THE KIMPTON FITZROY HOTEL LONDON, UNITED KINGDOM	40	UNIVERSITY OF ROEHAMPTON LONDON, UNITED KINGDOM	72	HOTEL FAIRMONT WINDSOR PARK LONDON, UNITED KINGDOM
12	AVANTRA RESIDENCES SYDNEY, AUSTRALIA	44	FLORIST SHOP KRIVAN, SLOVAKIA	76	PRIVATE APARTMENTS HERASTRAU RESIDENCE BUKAREST, ROMANIA
16	BICESTER BUSINESS CENTER BICESTER, UNITED KINGDOM	58	PENRHOS COLLEGE SCIENCE BUILDING PERTH, AUSTRALIA	80	OFFICE BUILDING AGRISTO WIELSBEKE, BELGIUM
20	ROBERTO MAZZETTI PRIMARY SCHOOL LOIANO, ITALY	52	CHRIST'S HOSPITAL SCHOOL WEST SUSSEX HORSHAM, UNITED KINGDOM	84	OFFICE BUILDING E&Y HOVEDKONTOR FREDERIKSBERG, DENMARK
24	STABLE MASTERS COTTAGE CHRISTCHURCH, NEW ZEALAND	56	PRIVATE APARTMENTS PARIS, FRANCE		
28	HOTEL FALCONER CENTER COPENHAGEN, DENMARK	60	CAR DEALERSHIP GDANSK, POLAND		
32	SPORTS FACILITY SZEGED SZEGED, HUNGARY	64	SHOPPING CENTRE CITY CONCORDE BERTRANGE, LUXEMBOURG		

OFFICE BUILDING AXEL TOWER

COPENHAGEN, DENMARK

LAMILUX has accomplished a remarkable feat by delivering and seamlessly installing five cuttingedge Glass Roofs PR60 at the iconic Axel Tower in Copenhagen. This contemporary architectural marvel, completed in 2016, comprises of five distinctive cylindrical towers, housing a mixture of office spaces, retail establishments, and more. The distinctively sloping design of the Glass Roofs, inclined at a 5° angle, was meticulously crafted on-site to accentuate both aesthetics and functionality. To elevate its performance, these Glass Roofs feature advanced triple glazed sun protection glazing, showcasing a dedicated commitment to achieving the perfect indoor climate.

Furthermore, the Glass Roofs feature an impressive Ug-value of 0.7 W/(m²K), underlining its exceptional energy efficiency. Not only does this installation enhance the architectural charm of Axel Tower, but it also serves as a testament to our unwavering dedication to performance and sustainability. It stands as a true embodiment of the perfect combination of art and innovation, setting a new standard for contemporary urban design.









HOTEL THE KIMPTON FITZROY LONDON

LONDON, UNITED KINGDOM

Within London's enchanting Bloomsbury district, the Kimpton Fitzroy London Hotel stands as the inaugural gem in the United Kingdom for this illustrious luxury hotel brand. This architectural wonder has been graced by the artistry of LAMILUX, adorning it with a remarkable Glass Roof PR60, spanning 3.5 metres in width and stretching 14 metres in length. It is destined to become a cherished sanctuary, inviting guests to bask in the serene beauty of this captivating space while indulging in the panoramas that it offers.

The architectural appeal of this boutique luxury hotel stands as a testament to the brand's unwavering pursuit of excellence. Every facet of its design pays homage to the historical significance of the building, with recreated beams adorning the conservatory. Meanwhile, the inclined 13° Glass Roof, a masterpiece from LAMILUX, provides an enchanting advantage point from which to admire the awe-inspiring interior architecture that graces the hotel.

The arrangement of the roof's glazing has been thoughtfully orchestrated to seamlessly align with the faux beams. Each of the nine expansive glass panels, each spanning an area of approximately 5 square meters and bearing the substantial weight of 214 kilograms, contributes to the hotel's ambience of opulence and refinement. This installation, a fusion of historical homage and contemporary grandeur, redefines the art of hospitality in London's heart.







APARTMENT AVANTRA RESIDENCES

SYDNEY, AUSTRALIA

Avantra Residences, nestled in the vibrant city of Sydney, stand as a shining example of cutting-edge technology and design excellence. Among its outstanding features, the installation of 34 LAMILUX Glass Roofs PR60 seamlessly integrates into the building's structure, delivering an exquisite balance of form and function while allowing an abundance of natural daylight to grace its interiors.

The Glass Roofs, strategically diverse in size, feature customised glazing and hold certification to affirm their safety and durability. The LAMILUX Glass Roofs PR60 provide resistance to external fire exposure from flying sparks and radiant heat with classification B roof (t1) according to DIN EN 13501-5.

For the well-being of residents, these Glass Roofs play a central role. Their design helps to create a comfortable and inviting living environment and highlights the importance of natural light in improving the overall quality of life for residents.











BUSINESS CENTER BICESTER ECO BUSINESS CENTER

BICESTER, UNITED KINGDOM

The Bicester Eco Business Center, as the pioneering Passivhaus Plus building in the United Kingdom, stands as a trailblazer in energy efficiency and sustainability. Among its outstanding features are the 25 LAMILUX Glass Skylights FE, generously flooding the interior spaces with natural light. These state-of-the-art Skylights, distinguished by their top-tier efficiency class, offer not only aesthetic appeal but also exceptional functionality.

The availability of a comprehensive Environmental Product Declaration (EPD) according to ISO EN 15804 complements the environmental consciousness of the Business Center. This declaration allows for the evaluation of the ecological footprint of the materials and components used concerning their production and usage. In the case of LAMILUX Glass Skylights FE, this tool facilitates transparent and informed decision-making in building design, underlining the Business Center's commitment to eco-friendly and sustainable construction projects.

In addition to the Environmental Product Declaration, the Life Cycle Assessment becomes an indispensable tool for assessing the Bicester Eco Business Center. This assessment considers the entire life cycle of the building, from material production to disposal at the end of its useful life. In the context of the Business Center, the Life Cycle Assessment demonstrates that the LAMILUX Skylights used are not only environmentally friendly during manufacturing but also offer a sustainable and energy-efficient solution over the years. This is crucial as it reflects not only the current environmental awareness but also ensures that the building remains energy-efficient and environmentally friendly in the long term.

In summary, the Environmental Product Declaration and Life Cycle Assessment underline the complete sustainability philosophy of the Bicester Eco Business Center. They not only provide an attractive and modern working environment but also ensure that this environment remains friendly and efficient in the long run, meeting both environmental goals and the needs of the building's users.











PRIMARY SCHOOL ROBERTO MAZZETTI

LOIANO, ITALY

By incorporating two LAMILUX Glass Roofs PR60 into the design of the Roberto Mazzetti Primary School in Loiano, Italy, LAMILUX not only prioritised safety with built-in SHEV (Smoke and Heat Exhaust Ventilation) flaps but also elevated the aesthetics of the building with the Skylights. These installations seamlessly blend into the school's modern and efficient design, adding a distinctive touch to its overall ambiance.

The amplified influx of natural daylight and improved indoor air quality go hand in hand, enhancing the learning environment and aiding children in sharpening their concentration skills. These thoughtful enhancements underscore the commitment to creating an optimal space for the young minds of tomorrow.











RESIDENTIAL BUILDING STABLE MASTERS COTTAGE

CHRISTCHURCH, NEW ZEALAND

In the enchanting city of Christchurch, New Zealand, a beautifully renovated cottage seamlessly combines historical charm with contemporary eco-conscious living. This remarkable dwelling has been fully certified as a Passive House, exemplifying its commitment to sustainability. Two exquisite LAMILUX Glass Skylights FE Passivhaus have been artfully installed within vaulted ceilings above the kitchen and living room, bestowing an extraordinary infusion of natural light.

The Glass Skylights, measuring 120 x 120 cm, feature uninterrupted polyurethane thermal insulation, boasting an impressive Ug-value of approximately 0.53 W/($m^{3}K$). Additionally, these Skylights are equipped with laminated safety glazing comprised of triple glazing.

The LAMILUX Glass Skylights, once installed, demonstrate their energy-efficient prowess within vacation homes while also adding a subtle visual allure. During the winter months, they contribute to reduced heating needs, and in the summertime, they offer an exceptional panoramic view of the surrounding beautiful nature.











HOTEL FALCONER CENTER

COPENHAGEN, DENMARK

On the Falkoner Centre, a hotel and conference complex, in Copenhagen, two distinctive barrelshaped LAMILUX Glass Roofs PR60 were carefully installed. These roofs feature an ingenious design with three built-in vents, each powered by a 24 Volt chain drive. These vents not only ensure sufficient light flooding, but also facilitate daily ventilation, which increases the overall comfort of the complex. The Glass Roof PR60, which is cleverly divided into 96 smaller glass panes, not only has a remarkable U-value of 1.3 W/(m^{2} K), but is also an essential architectural element of the building. In addition, it enhances the aesthetics with an impressive light transmittance of approx. 54%.

As a method of proactively combating condensation and ensuring a comfortable indoor environment, the edge seal has been innovatively designed and thermally optimised, forming what is known as a "warm corner." This design contributes to the overall performance and sustainability of the structure.











SPORTS FACILITY SZEGED

SZEGED, HUNGARY

In Szeged, Hungary, a cutting-edge sports facility has recently emerged, enhanced with 25 LAMILUX Glass Roofs PR60, ingeniously integrated into a shed-style structure. Complementing these installations are a series of Rooflight Domes strategically positioned throughout the facility. These Skylights have been thoughtfully placed above both the swimming pool and the spectator stands within the swimming hall.

The Glass Roofs are gracefully adorned with a double-glazed thermal insulation glass, providing both efficiency and elegance. The PR60, meticulously crafted from extruded aluminum profiles, showcases an innovative insulation core and a precision-engineered sealing system. This combination not only ensures exceptional thermal separation but also enhances the overall energy performance and durability of the structure, exemplifying a commitment to both aesthetics and sustainability.







PRIMARY SCHOOL LIBEZNICE

LIBEZNICE, CZECH REPUBLIC

Nestled within Libeznice, Czech Republic, the innovative new primary school has been thoughtfully equipped with a total of 89 LAMILUX Glass Skylights FE and 16 ME double flaps. These carefully integrated Skylights do more than just harmonise with the building's design—they contribute to an educational atmosphere that is bathed in natural light.

The installation of the Glass Skylights makes the aesthetics of the school more appealing, and also significantly improves the learning conditions in the primary school. An environment is created in which pupils can unfold and discover, making their educational journey all the more inspiring. The result is a space where education meets innovation, where architecture and learning come together to create a better future.

Furthermore, the primary school is well-equipped to face the challenges of winter. This is evident in the fact that the installed elements have been designed to withstand a snow load of 0.56 kN/m^2 , ensuring the safety and functionality of the school even during the colder months.










UNIVERSITY SIR DAVID BELL BUILDING

LONDON, UNITED KINGDOM

LAMILUX was responsible for the design, fabrication, and installation of a distinctive glazed roof for the Sir David Bell Building at Roehampton University. This remarkable Glass Roof PR60 features an unconventional configuration, comprised of 59 triangular and square glass panels. The atrium's Glass Roof exhibits a unique design, characterised by a gradual transition from a 3° pitch to a 30° angle. This remarkable roof stands out for its impressive light penetration, generating a luminous and welcoming ambiance within the interior. Simultaneously, the structure facilitates the effective utilisation of natural daylight and energy throughout the building.

Its lightweight design is yet another noteworthy attribute. Despite being light in weight, it complies with snow load requirements, ensuring the building's resilience and functionality under diverse weather conditions.

In addition to its concentration and health-promoting effect on the students, the Skylights meets all the design and economic requirements set by the architect. A precise plan and detailed design work in the stages of the project guarantees air tightness, precise compatibility of elements as well as a harmonious overall appearance.







FLORIST FLORISTRY KRIVAN

KRIVAN, SLOVAKIA

In Krivan, Slovakia, a 15° pitched LAMILUX Glass Roof PR60 measuring 11 x 8 metres was thoughtfully installed over the sales area of a florist. This glass construction creates a bright space in which both employees and flowers feel comfortable. In addition, the sloping roof provides ventilation, supplying the room with fresh air and making the plants last longer.

The innovative pitched roof design seamlessly incorporates a ventilation system, ensuring a comfortable and fresh environment throughout the day. The combination of abundant natural light and integrated ventilation not only enhances the aesthetics of the shop but also contributes to a more enjoyable and refreshing shopping journey for all who enter.

The entire structure spans across 28 glass panels, with a combined weight of approx. 7,000 kilograms. Furthermore, these glass panels feature double thermal insulation, enhancing their energy efficiency and performance.







EDUCATION FACILITY PENRHOS COLLEGE SCIENCE BUILDING

PERTH, AUSTRALIA

In collaboration with our partner, EBSA Pty Ltd, we successfully installed a 56 square meter LAMILUX Glass Roof PR60 featuring integrated ventilation flaps in Perth, Australia. This cuttingedge system finds its home at the heart of the newly established Science Innovation Centre within Penrhos College, meeting the most demanding architectural standards. This thermally insulated construction not only offers effective ventilation but also harnesses the power of natural light, fostering an ideal environment advantgeous to both creative thinking and scientific endeavors.

The Glass Roof comprises of meticulously designed, thermally decoupled molded aluminum profiles. Additionally, it incorporates an external eaves pan with effective insulation and a noise-protected adhesive seal, ensuring not only thermal efficiency but also a quiet and comfortable environment.











EDUCATION FACILITY CHRIST'S HOSPITAL SCHOOL WEST SUSSEX

HORSHAM, UNITED KINGDOM

LAMILUX was responsible for the comprehensive design, supply, and installation of a low-pitch mono-angled atrium rooflight using their cutting-edge Glass Roof PR60 system at the brandnew Catering Facility located at Christ's Hospital School in West Sussex.

This innovative system, meticulously tested for water-tightness, was precisely configured at a 3° pitch and strategically divided into 27 distinct glass sections, each spanning approximately 4 by 14 metres in size. The solution was crafted to securely attach to the atrium roof's entire perimeter. The bright space creates a pleasant atmosphere in the hospital canteen.







PRIVATE APARTMENTS ROOF TERRACE

PARIS, FRANCE

High above the enchanting rooftops of Paris, the LAMILUX Flat Roof Access Hatch Comfort Solo seamlessly blends the easy access to a rooftop terrace with an unprecedented infusion of natural light for attic apartments.

This innovative system, completely free of thermal bridges, enhances isothermal processes, and offers the flexibility of special glazing options, all in alignment with contemporary requirements for sustainability, energy efficiency, and climate control.

The LAMILUX Flat Roof Access Hatch Comfort Solo offers an uncomplicated access to where the roof terrace is created and the residents can enjoy the view over imposing Paris. The operational mechanism is managed by two external rack-and-pinion actuators situated on telescopic stainless steel rails.







CAR DEALERSHIP VW CAR DEALERSHIP GDANSK

GDANSK, POLAND

Recently, two striking LAMILUX Glass Roofs PR60 were elegantly installed above the Volkswagen dealership's showroom and service area in Gdansk, Poland. These two graceful Glass Roofs, inclined at a subtle 8° angle, stretch across impressive lengths of 20 and 29 metres. Their primary function is to elevate the workspace by inviting copious amounts of natural daylight to gently filter through, thereby creating a delightful and invigorating ambiance. Additionally, they play a pivotal role in providing the ideal illumination for showcasing the finest automobiles in the showroom, turning each vehicle into a star in its own right.

Furthermore, other sections of the building were equipped with LAMILUX Skylights. Continuous Rooflights B were installed above the workshop area, offering consistent daylight, while a Rooflight F100 was installed in the stairwell for smoke and heat extraction, providing both additional daylight and safety features.











SHOPPING CENTRE CITY CONCORDE

BERTRANGE, LUXEMBOURG

As part of the expansion of the "City Concorde" shopping centre in Bertrange, Luxembourg, two LAMILUX Glass Roofs PR60 were installed above the newly added area. These Glass Roofs allow the interior of the building to shine and contribute to a pleasant indoor climate with integrated ventilation openings and smoke and heat extraction devices.

The architectural finesse of the glass construction is noteworthy, taking the form of an irregular pentagon that adds a distinctive and contemporary aesthetic to the shopping center. This pioneering design is complemented by a robust steel substructure meticulously crafted by LAMILUX.

Beyond its structural integrity, the steel framework serves as an artistic canvas, elevating the overall visual appeal of the installation. As a striking highlight, the steel structure accommodates three additional decorative lifts, seamlessly blending functionality with elegance.











MUSEUM NATIONAL GALLERY

LONDON, UNITED KINGDOM

LAMILUX played a pivotal role in the transformation of the prestigious National Gallery Museum in London, supplying and installing a continuous self-spanning 20° mono-pitch atrium rooflight construction. This remarkable glass structure, spanning 8.6 metres in length and 5 metres in width, integrates vertical elements and occupies the space once defined by an open courtyard.

The LAMILUX Glass Roof PR60 now gracefully covers this area, converting it into a spacious atrium that significantly enhances the usability of the space. Given the atrium's vertical extension through multiple floors, the design addressed the need for smoke ventilation. This requirement was seamlessly met by incorporating four double smoke vents with tandem actuators into the roof glazing.

In the planning phase, LAMILUX collaborated closely with the architect and main contractor to devise a comprehensive glass and frame solution. This solution underwent rigorous testing and certification to meet demanding standards for airtightness, watertightness, and sound reduction. During the installation process, special attention was given to the careful trimming around the non-flush wall and ledge, requiring meticulous care and consideration.







HOTEL FAIRMONT WINDSOR PARK

LONDON, UNITED KINGDOM

The esteemed 5-star Fairmont Windsor Park Hotel extends a gracious welcome to guests seeking a luxurious sanctuary amidst exquisitely landscaped gardens, nestled on the outskirts of Windsor Great Park. The hotel places a profound emphasis on health and well-being, offering a serene haven to escape the urban hustle and bustle.

One of the most remarkable features of this opulent establishment is the exquisite glass dome, a masterpiece meticulously designed, supplied, and installed by LAMILUX. Stretching impressively with an internal length of 8.5 metres, this bespoke Glass Roof stands as a testament to the versatility of the LAMILUX Glass Roof PR60 system, showcasing its capability to provide uniquely crafted and individually shaped glass roof solutions.

The custom design of the Glass Roof seamlessly integrates with the contemporary elegance of this luxury hotel, serving as a captivating focal point that bathes the foyer in an abundance of natural light. This architectural marvel not only enhances the aesthetics of the Fairmont Windsor Park Hotel but also serves as a shining example of LAMILUX's dedication to innovative and personalised Glass Roof solutions. It is a testament to the harmonious blend of form and function, enriching the guest experience at this extraordinary destination.










PRIVATE APARTMENTS HERASTRAU RESIDENCE

BUKAREST, ROMANIA

Situated in the industrial hub of Bucharest, the capital of Romania, the Heraustrau Residence stands as a testament to contemporary living in the economic heart of the country. This sophisticated residential building was fitted with the LAMILUX Flat Roof Access Hatch Comfort Solo, a premium offering from our Comfort range that seamlessly blends design and comfort.

Residents of the attic apartments can now enjoy the view on their private roof terrace while basking in the maximum daylight streaming into their living spaces, creating an ideal fusion of style and convenience. The frame's flush glazing facilitates efficient shallow water drainage, preventing the accumulation of debris.









OFFICE BUILDING AGRISTO

WIELSBEKE, BELGIUM

The Agristo office building in Wielbeke, Belgium is another showcase project! To cultivate a space filled with brightness and natural light, we incorporated 36 LAMILUX Glass Skylight FE units with a 3° inclination and an aluminum profile designed in a unique "waffle" structure. This innovative construction ensures unobstructed drainage of water and dirt.

Each element spans an area of 2x2m, presenting a consistent and harmonious aesthetic. For enhanced functionality, hidden motors were seamlessly integrated into six of the LAMILUX Glass Skylight FEs, allowing for efficient ventilation and night cooling. The outcome is a brilliantly illuminated atrium that fosters a natural and pleasant atmosphere, adding a touch of sophistication to the Agristo office building.

The window's flush glazing facilitates effective rainwater drainage and safeguards the glass surface from dirt buildup. It comes fully pre-assembled on a 150 mm high composite upstand, crafted from closed, torsion-resistant fiberglass-reinforced polyester resin, with a white pigment for a sleek appearance.

LAMILUX are pleased to have been able to contribute to creating an optimal working environment that meets the needs of our clients.









OFFICE BUILDING E&Y HOVEDKONTOR

FREDERIKSBERG, DENMARK

The E&Y Hovedkontor building in Frederiksberg has undergone a remarkable transformation, both in its interior and exterior, resulting in a delicate and harmonious design. This conversion has been orchestrated to welcome an abundant infusion of natural daylight, courtesy of the installation of LAMILUX Glass Skylight FE Circular elements.

Supplied and expertly installed by LAMILUX, these Skylights are thoughtfully inclined at 5°, enhancing their self-cleaning capabilities. To further enhance accessibility to the roof, consealed motors have been seamlessly integrated into the Skylights and their upstands.

The newly designed canteen is an inviting space, fostering a sense of community during shared meals and inspiring creative conversations among the staff. It greatly contributes to the overall well-being of the employees, a factor known to significantly influence productivity and motivation in the workplace. This transformation not only enhances the aesthetics of the E&Y Hovedkontor building but also ensures a beneficial and uplifting environment for its workforce.











LAMILUX Heinrich Strunz GmbH Zehstraße 2 · P.O. Box 1540 · 95111 Rehau · Tel +49 (0) 92 83 / 5 95-0 · Fax +49 (0) 92 83 / 5 95-29 0 information@lamilux.de · www.lamilux.com