



BUILDING ENVELOPE

VISIONS BECOME REALITY.



Lindner

Building New Solutions

A photograph of the Lindner Group headquarters building. The building has a modern facade with large glass windows and a grey metal grid. The Lindner logo, a stylized 'L' in a square, is mounted on the wall above the word 'Lindner' in large, white, sans-serif letters. In the foreground, several people are walking on a set of stone steps leading up to the entrance. One person is wearing a blue shirt with 'LINDNER' on the back. The overall scene is bright and professional.

ANYTHING IS POSSIBLE

Over the years Lindner Group has developed into a financially sound, technically strong, solution-oriented as well as reliable partner. In everything we do, we always keep the environment in mind as “healthier construction” is self-evident for us. New concepts challenge us to become even better at implementing projects. According to the motto “Anything is possible” we make the impossible possible for our customers.

STABILITY AND GROWTH

Since the founding by Hans Lindner in 1965, our headquarter is located in Lower Bavarian Arnstorf, where we have grown enormously during the last decades. With about 7,100 employees around the world, we are proud to be the largest employer in the district of Rottal-Inn. Every day we work on 2,500 projects which revolve mostly around our core business, the construction industry. We are complemented by our foundation, the mk | hotels, the house breweries and more recently by a sustainable agriculture and forestry.

BUILDING ENVELOPE

VISIONS BECOME REALITY.

The Lindner Facade Group is your competent partner for the complete building envelope. Whether for the building's facade, the roof or free form and special structures – our worldwide teams of specialists will deliver individual solutions for your requirements.

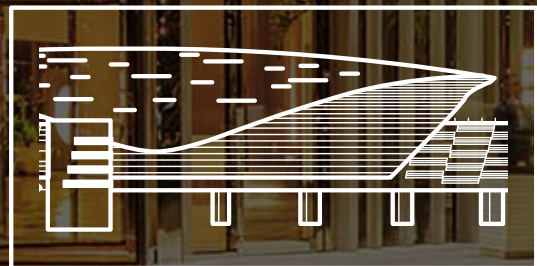
FACADES



STEEL AND GLASS



ROOFING





The ART Rotana, Manama, Bahrain

Photo: © Zmyasa Fotograf

A GLOBAL PLAYER... WITH OUR ROOTS IN ARNSTORF

As a major specialist facade contractor, Lindner Facades designs, manufactures and installs high quality, bespoke unitised curtain wall facades for worldwide construction projects.

We have set new standards in facade technology as we have been involved in some of the most iconic buildings worldwide, providing technologically advanced solutions to satisfy the complex project requirements in construction today.

Focused on product quality, occupational health & safety and environmental protection, Lindner Facades has a highly skilled and well-trained workforce and offers a wide range of products. And although we act locally for the benefit of all of our employees, clients and suppliers, we have the backing of a world-class organisation.

Lindner Facades Group
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RANGE OF BUILDING ENVELOPE SOLUTIONS

MADE WITH LINDNER FACADES – OUR RANGE OF BUILDING ENVELOPE SOLUTIONS

FACADES

- + Unitised Curtain Walling (aluminium and glass)
- + Aluminium and Steel Windows, thermally insulated
- + Ventilate Single and Double Skin Facades
- + Automatic Doors
- + Aluminium and Steel Elements (secure by design & ballistic performing, blast enhanced, smoke/fire protection)
- + Customised Bespoke or Standard Solutions
- + Metal Facades

STEEL & GLASS

- + 3D Free Forms
- + Space Frame Structures
- + Cable Stiffened Structures
- + Tensile Structures
- + Glass Structures
- + Smart Structures

ROOFING

- + Metal Roofing
- + Glass Roofing
- + Green Roofs
- + Membrane Roofs
- + Structural Waterproofing
- + Solar PV







FACADES

SPECIALIST TAILORED FACADE SOLUTIONS.

A facade is more than just the shell of a building. It has to fulfill the most exacting aesthetic requirements, whilst providing intelligent functionality and a completely effective solution.

With years of experience in the design, supply and installation of high quality bespoke curtain walls, Lindner Facades has been involved in creating some of the most iconic buildings in the world.

Developed and manufactured throughout our production facilities worldwide, our products combine aesthetically appealing materials that offer superior quality and performance. Ecologically tested and approved materials are used, for both occupational health and safety and environmental protection reasons.

Our systems are designed to complement each other or to be used independently. The prerequisite for successful completion is individual design, manufacture and installation. However, it's Lindner's commitment to its Integrated Management System that ensures perfect coordination of all the different areas, resulting in effective scheduling and a comprehensive service right from the initial system design to technical installation and beyond to product maintenance.

Share your ideas with us and let us make your visions reality.

↳ **SWISS-RE HEADQUARTER, LONDON**

With its height of 180 metres the SwissRe Headquarter is the most significant addition to the City of London Skyline and one of the most impressive office buildings in London. To realise the whole complex facade of this skyscraper Lindner used element- and structural glazing facade systems.

ARCHITECT Foster + Partners

CLIENT Swiss Re´

SCOPE OF WORK curtain wall/unitised facade, structural glazing facade



Swiss-Re Headquarter, London, UK

↳ THE CORNICHE, LONDON

The three spectacular towers of "The Corniche" lie on the southern bank of the Thames. They measure 85 m at their highest, counting 15 to 27 storeys and 253 apartments. The towers also offer office spaces, a restaurant and café as well as a bar, a gym, a pool and spa area. Situated on the Albert Embankment, the towers provide stunning views of the Westminster Palace, the Tate Britain and the London Eye. Its exterior view shows distinctive forms that visually distinguish the complex from its surroundings.

ARCHITECT Foster + Partners

CLIENT Berkeley Homes

SCOPE OF WORK curtain wall/unitised facade, structural glazing facade



The Corniche, London, UK

↳ BUCKINGHAM GATE, LONDON

No 62 Buckingham Gate is a 11 storey commercial building with retail and a public realm at the ground floor. Situated in central London, only a short walk from Buckingham Palace, it offers 13,000 m² of space in total.

Lindner Facades was responsible for the facade of this project, including production, project management and installation. The complex 3D unitised curtain wall features eleven fold lines, creating various inclinations over the total area. Furthermore, the facade visibly sails at the first and roof levels. Other unique facettes of the project are a curved entrance glazing, steel & glass canopies to two elevations and a terrace glazing.

ARCHITECT Pelli Clarke Pelli/Swanke Hayden Connell

CLIENT Landsec

SCOPE OF WORK curtain wall/unitised facade



Buckingham Gate, London, UK

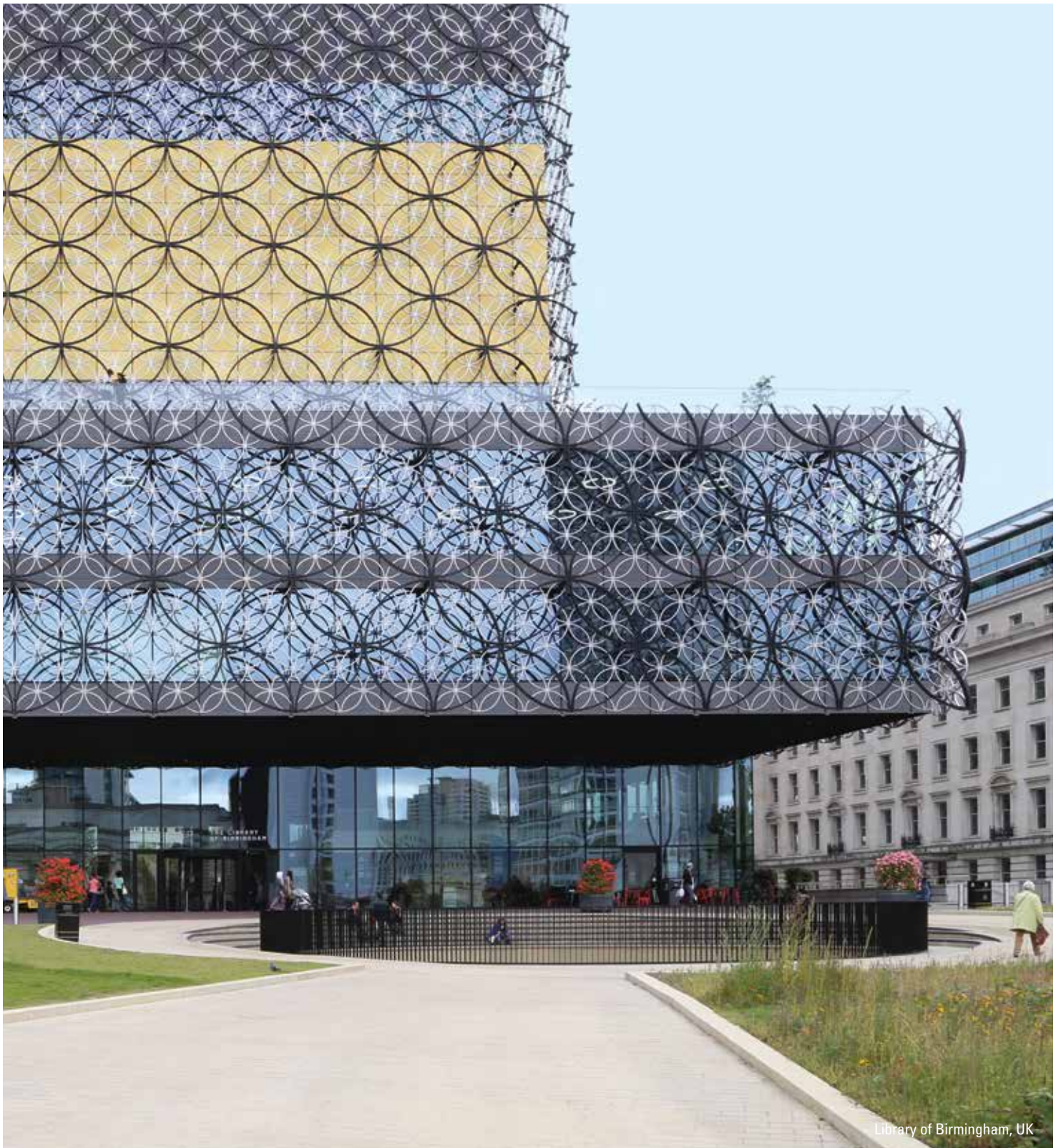
LIBRARY OF BIRMINGHAM

The Library of Birmingham is one of the most important urban renewal projects in Europe. The total investment volume for its construction amounts to 188.8 Pounds. The Library was opened in September 2013, becoming the largest regional library in Europe. Over 400,000 books are stored there. Amongst the most valuable items is a Shakespeare collection with originals from 1623. The library is open seven days a week and has more than 3 million visitors per year. One of the reasons for the high number of visitors is the remarkable interior and exterior design of the building. The Library has already become one of the most popular attractions in Birmingham.

ARCHITECT Mecanoo International

CLIENT Birmingham City Council

SCOPE OF WORK curtain wall/special facade 13,000 m²



Library of Birmingham, UK

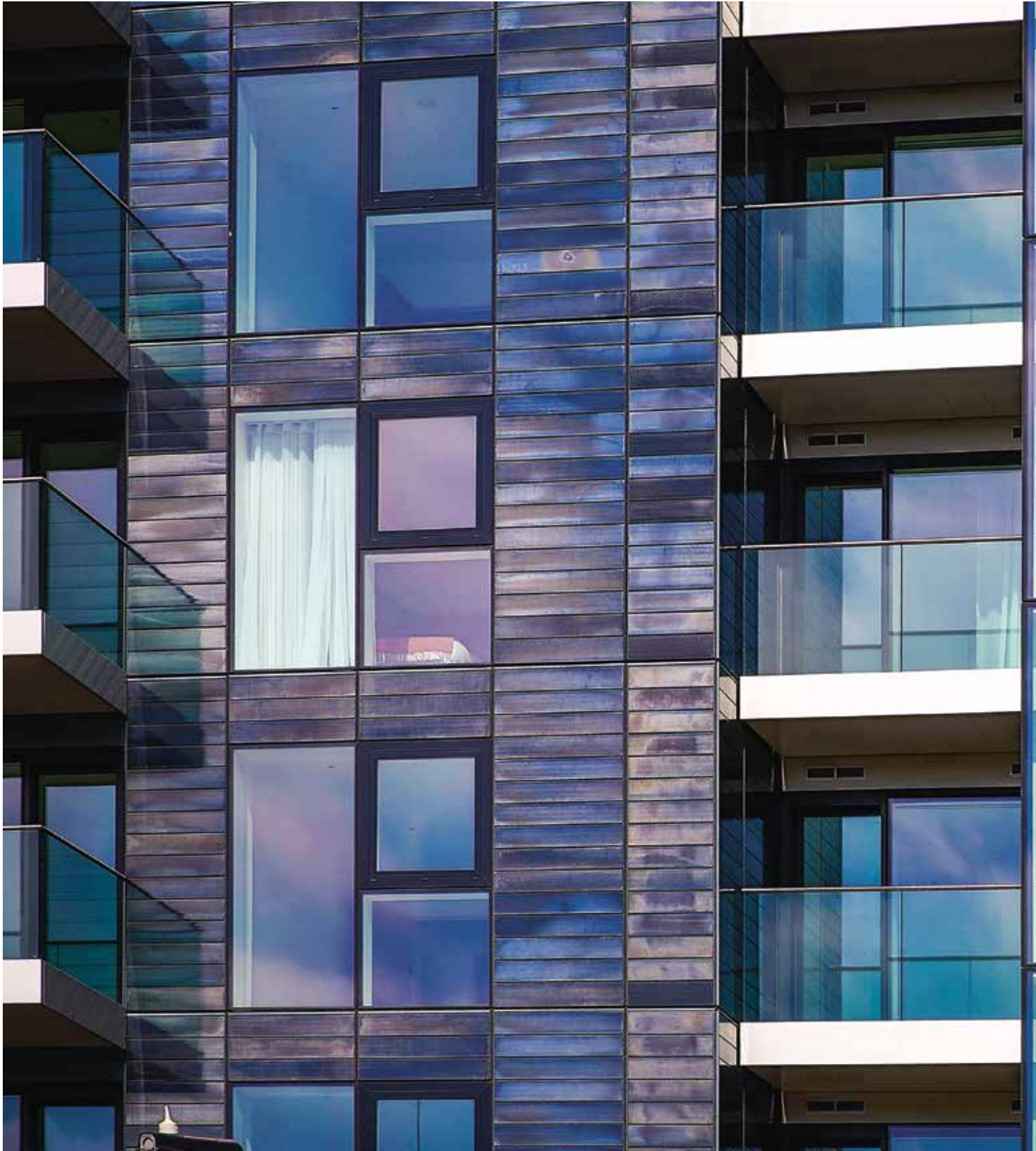
↳ **WOODBERRY DOWN KSS III, LONDON**

Woodberry Park is one of the largest urban revitalisation projects in London. It is set to create over 4,500 residential units in a natural environment and with excellent connection to the city centre. The quarter is easily distinguished from afar through the 30-storey residential tower Woodberry KSIII, which houses 130 luxury apartments. Its modern design features large glazed areas with integrated aluminum panels.

ARCHITECT Stock Woolstencroft

CLIENT Berkeley Homes

SCOPE OF WORK curtain wall/unitised facade, steel construction and locksmith works, balconies, metal plate covering and attics





Woodberry Down KSS III, London, UK



**MADE BY LINDNER FACADES –
OUR RANGE OF SERVICES**

Woodberry KSS3, London, UK

MADE BY LINDNER FACADES

A RELIABLE PARTNER FROM START TO FINISH AND BEYOND

You can rely on Lindner's professional service at every stage of your project. With an exclusive partner network, going back many years, Lindner provides the ultimate in knowledge and expertise for guaranteed superior quality.

Our excellent manufacturing capacity ensures quick delivery and efficient installation of all products and, once the handover is complete, rest assured you will continue to receive Lindner's personal service and top-quality customer care.

Lindner Facades is one of the world's leading specialists for the complete building envelope; a single source supplier capable of providing complete solutions from design and planning to manufacture and installation, with branches and reliable partners all over the world. Our strong global supply chain allows for highest service, quality and competitiveness.

Known for our iconic buildings, Lindner Facades has cooperated closely with some of the most renowned architects of our time. Our vast experience in the development and implementation of individual, high-quality facade solutions has set new standards in facade technology.

Being a solid partner with proven financial security and a proactive approach to health and safety, clients choose us for our vast experience, technical expertise, quality of delivery, global supply chain excellence and close working relationship.

Whatever your project's facade requirements may be – aesthetically elaborate or technically challenging: with the expertise available in-house at Lindner Facades, we are confident that we will deliver the right facade solution and the very best client experience from start to finish.



Villingen Schwennin

DESIGN AND ENGINEERING— EXPERIENCED TECHNICAL EXPERTS

The design of quality, bespoke, unitised facades requires a high level of technical ability and experience. At Lindner we have some of the most technically competent and experienced people in the business.

Our specialist Facade System Design Offices can take a facade from concept to reality, no matter how challenging, applying state of the art methodologies as e.g. 3D design worldwide. Supported by our own in-house facade, structural, thermal and acoustic engineers, facade designs are tailored to suit individual project performance specifications and aesthetic requirements.

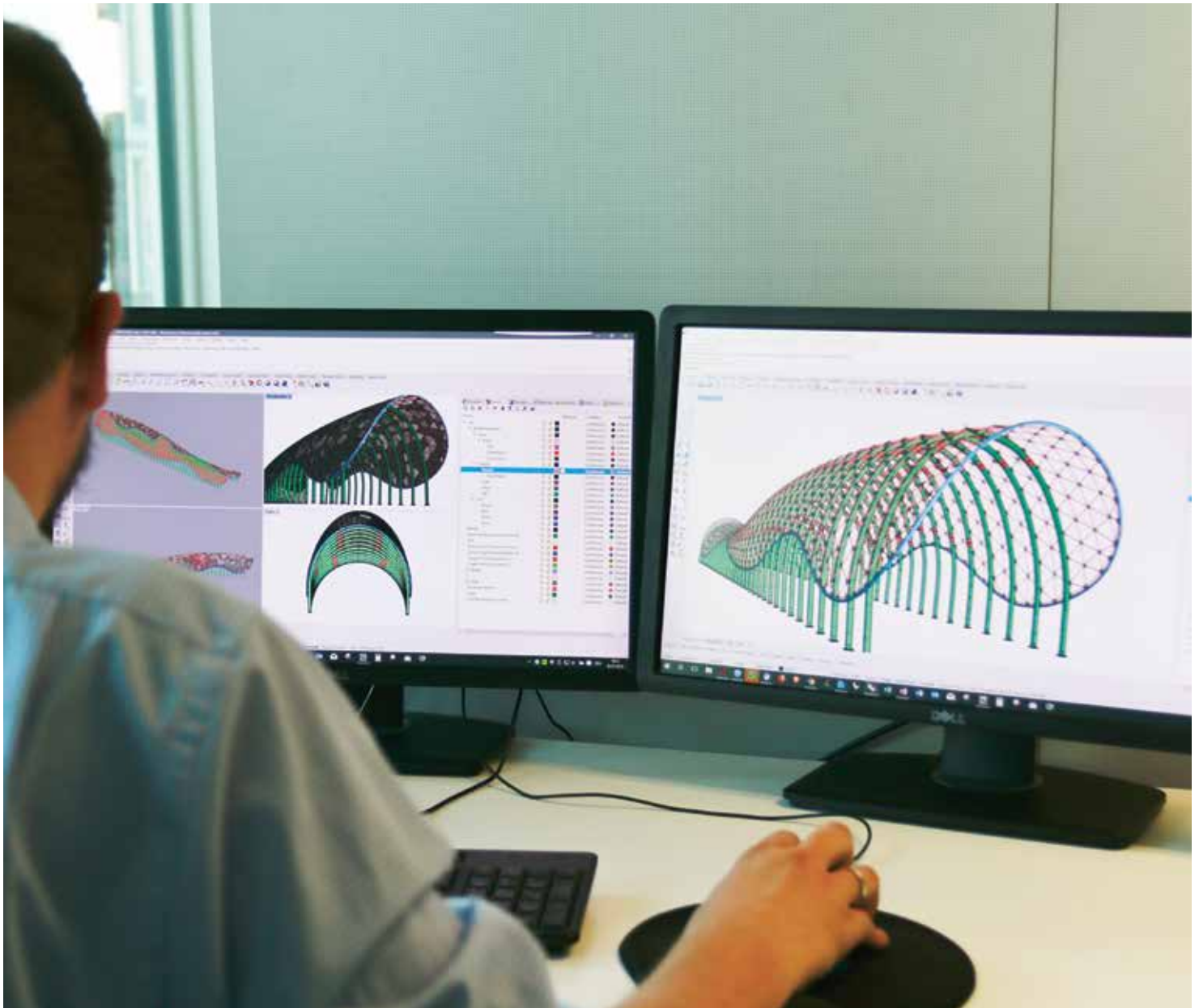
We are able to provide early stage support for all Architects, Consultants and Contractors to help develop their aspirations into realised solutions.

Our system designers and engineers are available to develop early stage architectural intent into engineered solutions to meet the demands of all modern day facades.

We are able to offer commercial advice and support at the earliest possible phase of a project so that budget expectations are understood by the client team from the very outset. Value-engineered solutions can be proposed in parallel offering the client choices as designs evolve.

In conjunction with the technical and commercial challenges, our highly experienced operations teams are able to provide planning and installation resolutions for the most complex of facades ensuring that safe and efficient methodologies are implemented with our proposals in line with programme constraints.

Comprehensive bid proposals are prepared through our sales and estimating resources, incorporating Group expertise during the tender phase and beyond. This ensures that continuity of all the necessary tender information is maintained and carried forward into awarded projects.



PROJECT MANAGEMENT – EFFECTIVE PLANNING FROM START TO FINISH

At Lindner Facades we know the key to a successful project is meticulous planning, communication and, above all else, experienced specialist facade project management. All of our project managers are experienced in bespoke unitised facades, and our management structure ensures that each project team has hands-on support and guidance operationally at director level.

For us, a successful project starts even before it is awarded. Right from the beginning, our operations staff is involved actively in all tenders to ensure our client proposals are based on well-thought-out programmes, and that our logistics and installation methodologies are tailored to the particular project challenges and constraints. By doing this, if we are successful then both, our clients and our team, have the confidence that our schemes are based on sound planning and workable methodologies.

Dedicated project teams

Unlike many of our competitors, all of our projects have dedicated full-time project teams. These teams are based in our various offices during the off-site, lead-in activities but when the project approaches the site phase, the whole project team bases itself full-time onsite, thereby ensuring direct control over operations on a day-to-day basis and face-to-face client communication.

Our project managers have direct contact with all of our design offices and, of course, our production facilities where each project has its own full-time dedicated internal project manager to ensure the day-to-day project priorities are achieved.

Communication-driven project management

Regular internal face-to-face focus meetings ensure our project managers have full control over all aspects of the project at all times and, again unlike our competitors, can give up-to-the-minute information to our clients across all aspects of their projects.

Our project management structure, systems and procedures ensure our teams follow a collaborative approach with open and honest communication both internally and externally with regular reports on each project strand.

PRODUCTION – IMPRESSIVE PRODUCTION CAPABILITY AND STATE OF THE ART MACHINERY

Lindner Facades' extensive manufacturing capability enables quality to be maintained strictly whilst allowing maximum flexibility to meet individual project requirements. Developed and manufactured throughout our high-capacity and state of the art production facilities worldwide, our products combine aesthetically appealing as well as ecologically tested and approved materials that offer superior quality and performance.

INSTALLATION – DELIVERING HIGH QUALITY FACADES ON TIME, SAFELY

At Lindner Facades we understand just how important the planning and management of the installation phase is to the successful handover of a completed high quality facade to our clients, safely and on time. For this reason, our planning starts from the very first project meetings, and our installation managers are engaged early on in the process to ensure their valuable experience is fed into our design, planning and logistics strategies.

Our site set-up is substantial in comparison to most of our competitors, with the whole project team being based full-time on site. And to ensure that everyone can communicate and work efficiently, our site office networks have fast broadband connections to all our various offices worldwide.

Our innovative installation methodologies are tried, tested and tailored to suit individual project constraints. Installing unitised curtain wall at height is our core business and, as such, we have robust systems to manage and control all aspects of our installation activities.

Safety is at the heart of everything we do of course and in contrast to many of our competitors, we allocate a full-time safety manager to each of our major projects, not only to ensure our own works are installed safely but also to engage actively with the client teams and those of our fellow trade contractors, making sure the whole site environment is one where everyone can go home safe at the end of their shift. Lindner Facades has recently completed over one million man hours RIDDOR-free, an achievement of which we are very proud.

All of our projects are audited monthly on-site for health and safety, environmental and quality performance, with the results reviewed at board level. This ensures that the service and performance we promise our clients are being achieved on-site.

MAINTENANCE AND AFTER SALES

Lindner Facades has its own dedicated service team which carries out a full range of maintenance and after sales works to the building envelope, ranging from the replacement of a single pane of glass through to the re-cladding of an entire facade.

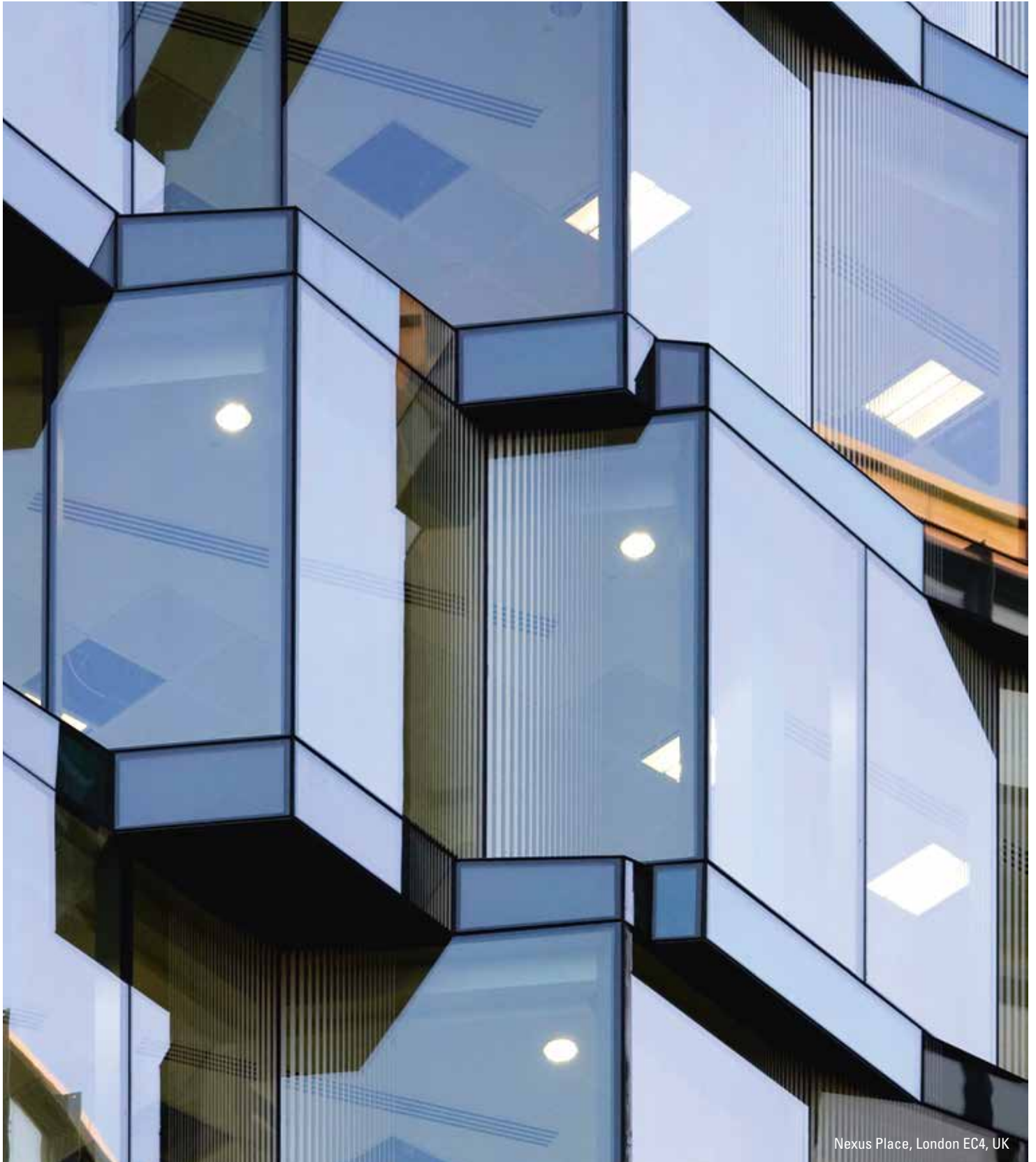
↳ NEXUS PLACE, LONDON EC4

The main goal of this project was the redevelopment of an existing building by modernizing the facade from the ground floor up to the eighth floor. Furthermore the building was extended by four additional floors. The highly complex 3D construction of the facade is a bespoke solution. To achieve the comb-shaped character, a chrySTALLine structure has been applied to the facade's surface.

ARCHITECT Sturgis Associates

CLIENT ISG InteriorExterior plc

SCOPE OF WORK rainscreen cladding, metal surface, curtain wall/unitised facade, stick system, structural glazing facade



Nexus Place, London EC4, UK

↳ 30 CROWN PLACE, LONDON

Being a striking addition to the London skyline this headquarter was built at an important location close to the Liverpool Street Station. For this project Lindner produced and manufactured several thousand square metres of curtain wall, scenic lift shaft glazing, glass balustrades plus a glass roof to the atrium.

ARCHITECT Horden Cherry Lee Architects Ltd

CLIENT City Offices Real Estate (CORE)

SCOPE OF WORK curtain wall/unitised facade



30 Crown Place, London, UK

➤ **NO 4 ST PAUL'S SQUARE, LIVERPOOL**

No 4 St Pauls Square is a stunning 8 storey BREEAM "Excellent" awarded office building extending to an area of 109,000 m². It constitutes the third and final phase of the development. Lindner assembled unitised facades, feature fins with Kapilux insulation, a bolt fixed glazed entrance, motorised doors, copings and metal panels.

ARCHITECT RHWL

CLIENT Sheperd Construction Ltd

SCOPE OF WORK curtain wall/unitised facade





No 4 St Paul's Square, Liverpool, UK
Photo: © HUFTON CROW

➤ **KÖ-BOGEN, DUSSELDORF**

The Kö-Bogen, designed by New York architect Daniel Libeskind, is the highlight of Düsseldorf's Königsallee, one of Europe's most famous shopping boulevards.

The distinctive design of the Kö-Bogen, with its unique curved shape, sharp corners and interplay of glass and natural stone, as well as landscaped areas and baffles, has made it a much-loved landmark in the city. In addition, the project received the MIPIM Award for the best urban renewal project, the 'real estate Oscar', and was awarded the Platinum LEED label, the highest award available for sustainability.

ARCHITECT Daniel Libeskind

CLIENT die developer Projektentwicklung GmbH

SCOPE OF WORK curtain wall/special facade 15,000 m²



Kö-Bogen, Düsseldorf, Germany

➤ PROVIDENCE TOWER, LONDON

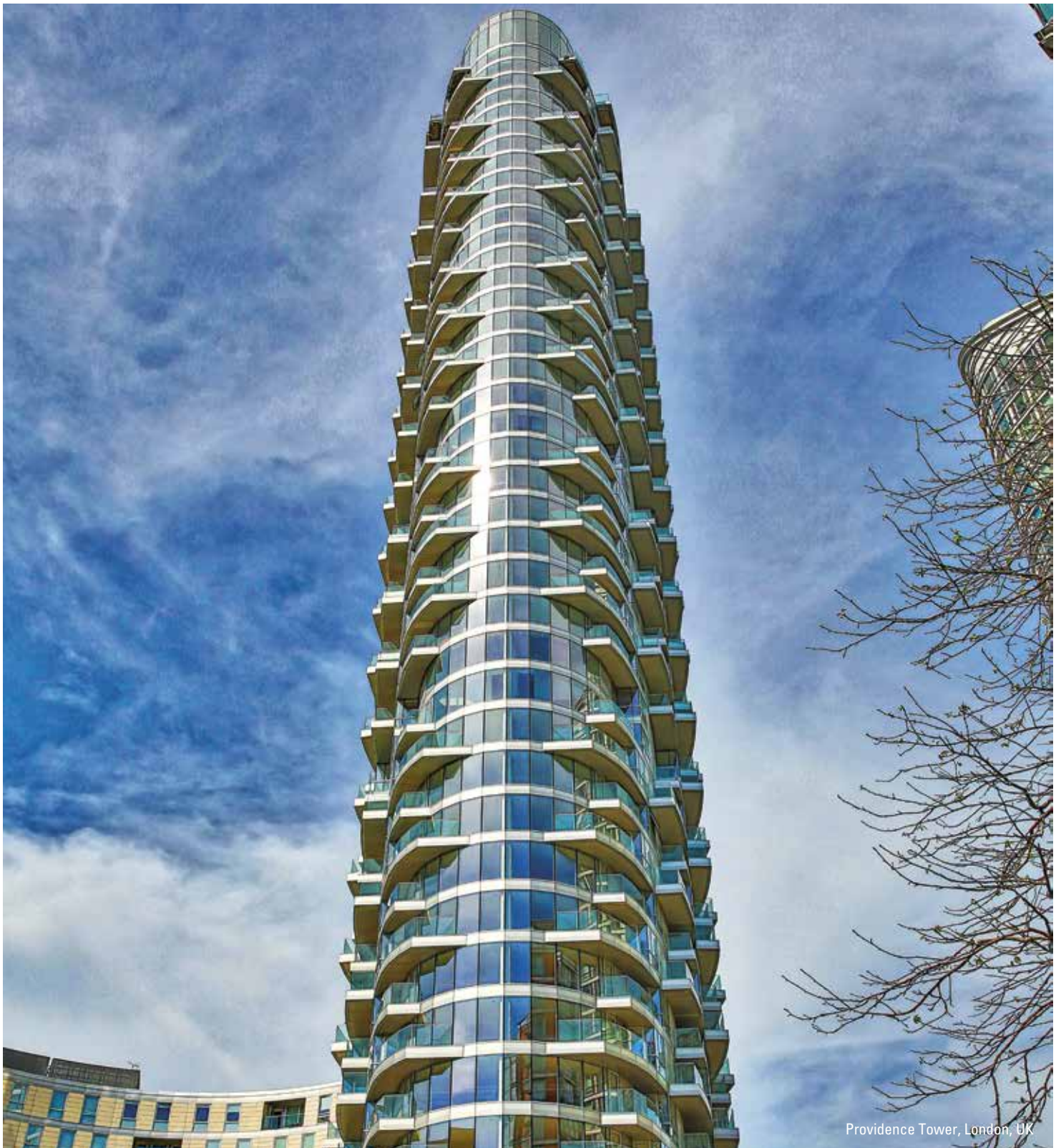
This 136 m tall elliptical tower, a 45-storey luxury residential building, is located in Canary Wharf in London's Docklands area, formerly part of the Port of London and now one of the world's most important financial centres. A special highlight is the viewing gallery on the top floors, which offers a panoramic view over the whole of London.

As well as being awarded the contract for this highly distinctive landmark project, we also supplied the facade for the adjacent Bar Building, a crescent-shaped 12-storey annex with affordable residential units.

ARCHITECT Skidmore, Owings & Merrill LLP

CLIENT Ballymore Properties Ltd

SCOPE OF WORK unitised facade 13,000 m², rainscreen cladding, stone surface 5,400 m²



↳ THE FONTENAY, HAMBURG

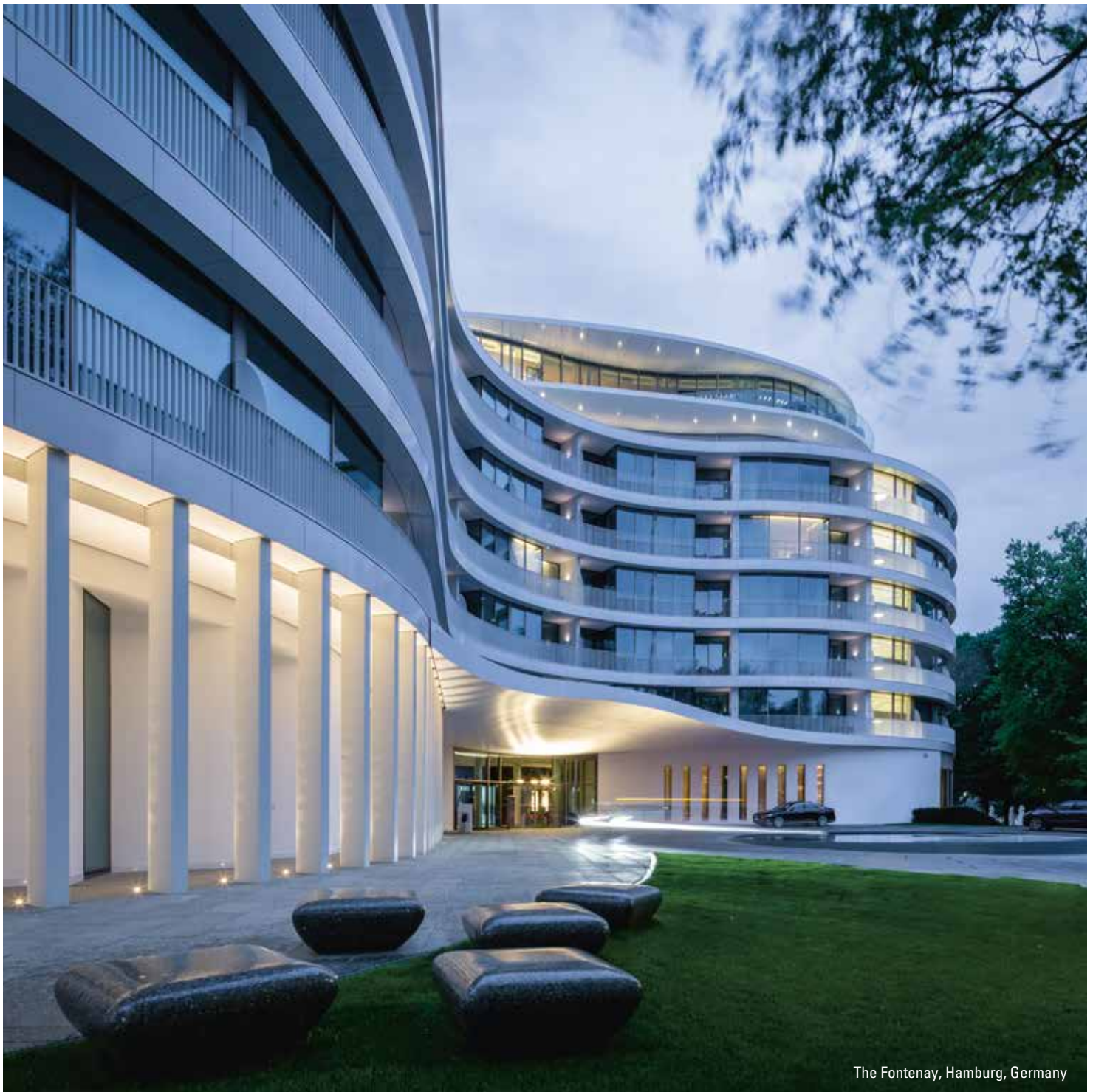
The luxury hotel "The Fontenay" is a 5-star-superior establishment with a view on the Außenalster in the heart of Hamburg. The seven-storey building integrates itself easily into the surrounding park-like scenery. The Fontenay offers 130 high-class rooms and suites, the restaurants Parkview and Lakeside, the 1,000 m² Fontenay Spa, a 320° Panorama Bar on the 6th floor as well as numerous conference rooms.

The visual appearance of The Fontenay is characterised by organically flowing lines that manifest themselves in convex and concave waves. The resulting layout displays three intertwined circles, which leads to a construction with hardly any right angles. The shining white effect is created by the building's facade, featuring horizontal bands with glass areas and white glazed ceramic tiles.

ARCHITECT Störmer Murphy and Partners

CLIENT Kühne Immobilien GmbH

SCOPE OF WORK rainscreen cladding, metal surface 2,300 m², stone surface 1,750 m², steel construction and locksmith works, banisters, curtain wall, stick system 3,000 m², special facade 5,500 m²



The Fontenay, Hamburg, Germany

↳ **MERCK INNOVATION CENTER & EMPLOYEE RESTAURANT**

The Merck Innovation Center (MIC) in Darmstadt symbolises Merck's Headquarter's development from a production site to an international hub of knowledge and innovation. The building's architecture represents a clear statement of the innovative processes and methods applied by the people who are promoting cutting edge research inside.

Lindner Facades engineered, manufactured and installed the facades of the Innovation Center and Employee Restaurant. The project was characterised by highest requirements regarding explosion protection, statics demanding the massive use of steel and last, but not least Henn Architekten's filigrane design.

ARCHITECT Henn Architekten

CLIENT Merck KGaA

SCOPE OF WORK curtain wall stick system 8,000 m², skylight roofing 220 m², rainscreen cladding, glass surface 400 m², metal surface 200 m², steel construction and locksmith works, maintenance walkways 5,000 m²



Merck MIC Darmstadt, Germany

↳ THE LEXICON, BRACKNELL

The Lexicon is a 580,000 m² shopping and leisure area in north Bracknell, part of Greater London, England, and is the centerpiece of a £240 million regeneration project. The development consists of eight buildings of which Prater was awarded the contract to supply the outer shell for all of them – each being an individual project.

The Lexicon is a model project in the Prater portfolio, highlighting the importance and value of a cooperative work ethic. Its success resulted not only from the skills and expertise of our specialist teams, but also from the partnership-based approach that enabled eight new buildings to be handed over in just under 18 months.

ARCHITECT BDP Architects

CLIENT Bracknell Regeneration Partnership

SCOPE OF WORK rainscreen cladding, metal surface, curtain wall/unitised facade, stick system, sandwich facade, roof, hot melt waterproofing, singly ply waterproofing





The Lexicon, Bracknell, UK





STEEL AND GLASS

GLASS IS OUR SPECIALITY.

Our Lindner Steel & Glass (LSG) division specialises in complex steel, membrane and glass structures, and provides a complete design, delivery and management service.

As a member of the Lindner Facades Group we recognise the importance of good customer relationships in terms of ensuring the successful outcome of a project. We work closely with our clients in order to establish their precise requirements before tailoring the appropriate solution.

The Sphere, Astana, Kazakhstan

Photo: © Nikolay Kazakov



**3-DIMENSIONAL FREE FORMS
SPACE FRAME STRUCTURES
CABLE STIFFENED STRUCTURES
TENSILE STRUCTURES
GLASS STRUCTURES
CUSTOM-MADE STEEL AND
GLASS SOLUTIONS**

3-DIMENSIONAL FREE FORMS

Commonly known as Grid Shell Structures, the Geometry is a 'Free Form' shape and needs to be curved in order to provide inherent stiffness. The steel structure can be made using single elements, with bolted nodes, or can be welded in ladder segments.

SPACE FRAME STRUCTURES

Space frame structures are an efficient form of lightweight steel structure. Members and machined nodes are bolted together on site to form a complete load bearing frame structure with a wide range of geometrical options.

CABLE STIFFENED STRUCTURES

High strength cables in stainless steel or galvanized steel are used to create super transparent structures. The cables are usually prestressed on site in order to increase the rigidity in the overall structure.

TENSILE STRUCTURES

Tensile or Membrane Structures rely on the integral strength of the covering membrane, covering the supporting steel structure. This can be a woven fabric i.e. PTFE Coated Glass Fibre Fabric, or PVC coated Polyester Fabric. Also available is ETFE which is similar to a PTFE material which is not woven. ETFE can be used in a single layer covering or more commonly in cushions filled with air.

GLASS STRUCTURES

Using modern lamination techniques, as well as new developments within Glass production, LSG is able to design large-span complex glass only structures. Incorporating the latest glass technology almost any design is now achievable.

CUSTOM-MADE STEEL AND GLASS SOLUTIONS

Custom-made steel and glass solutions are specialist developed systems which meet the clients' demands in almost any aspects. The combination of variable supporting structures together with almost all kind of envelopes (e.g. photovoltaic panels, curved glass, stone, composite panels or louvres) is nearly unlimited. Our experienced engineers will be able to determine the technical feasibility of any kind of structure even at a very early stage of the project.



➤ **HAZZA BIN ZAYED STADIUM, ABU DHABI**

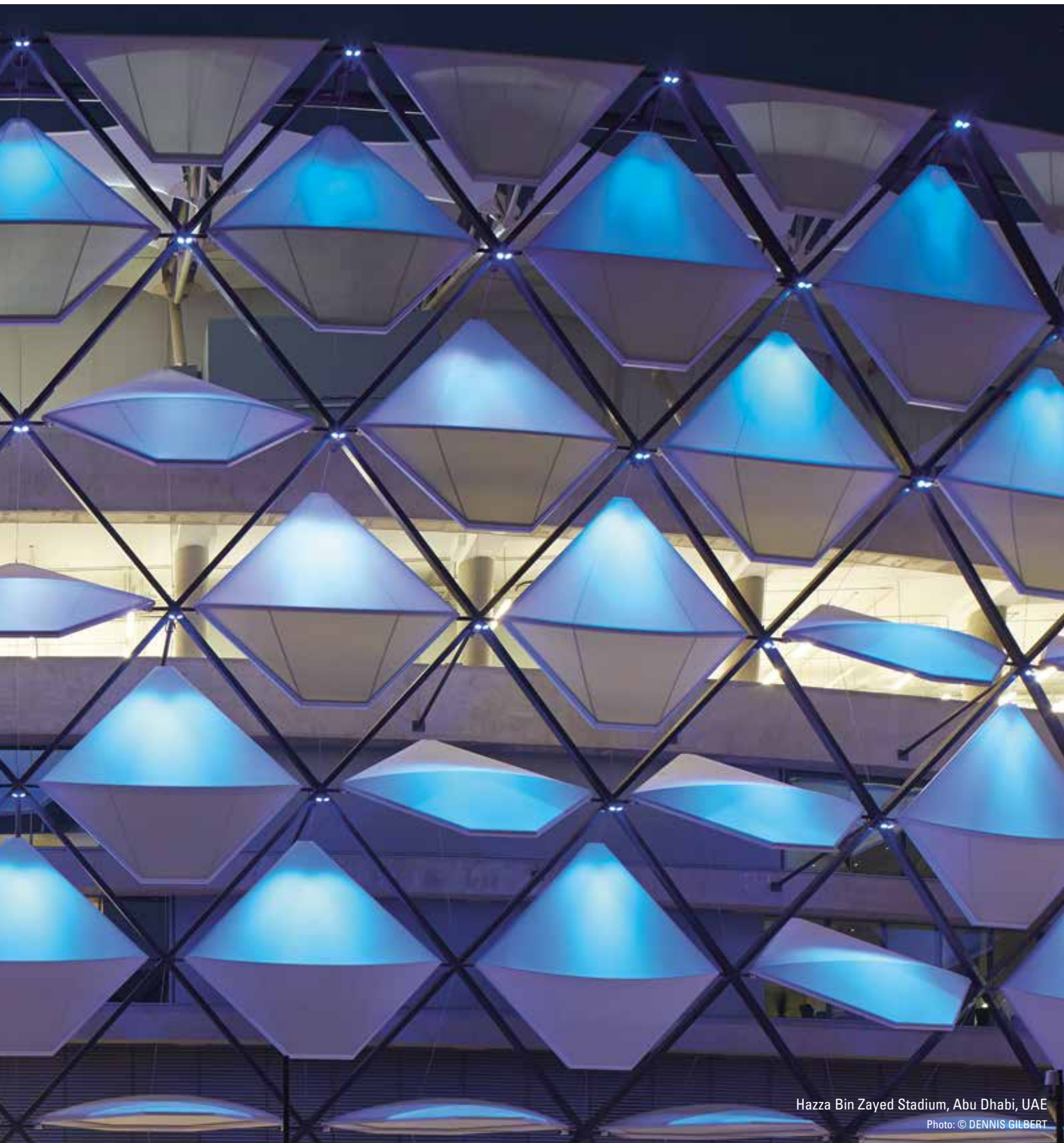
The Hazza Bin Zayed Stadium represents Phase 1 of a mixed use development comprising the sports stadium, a commercial office building, a sports centre and further site infrastructure facilities in the heart of Al Ain. With the opening of the stadium, the local football club received one of the most modern, state-of-the-art stadia in the Middle East. The aesthetic treatment of the stadium represents a modern facility combined with the traditional cultural elements. The design integrates the palm tree in the palm bowl facade design concept.

ARCHITECT Pattern Design Ltd

CLIENT BAM International

SCOPE OF WORK steel and glass, tensile structures





Hazza Bin Zayed Stadium, Abu Dhabi, UAE
Photo: © DENNIS GILBERT

↳ **HOTEL ART ROTANA*****, BAHRAIN**

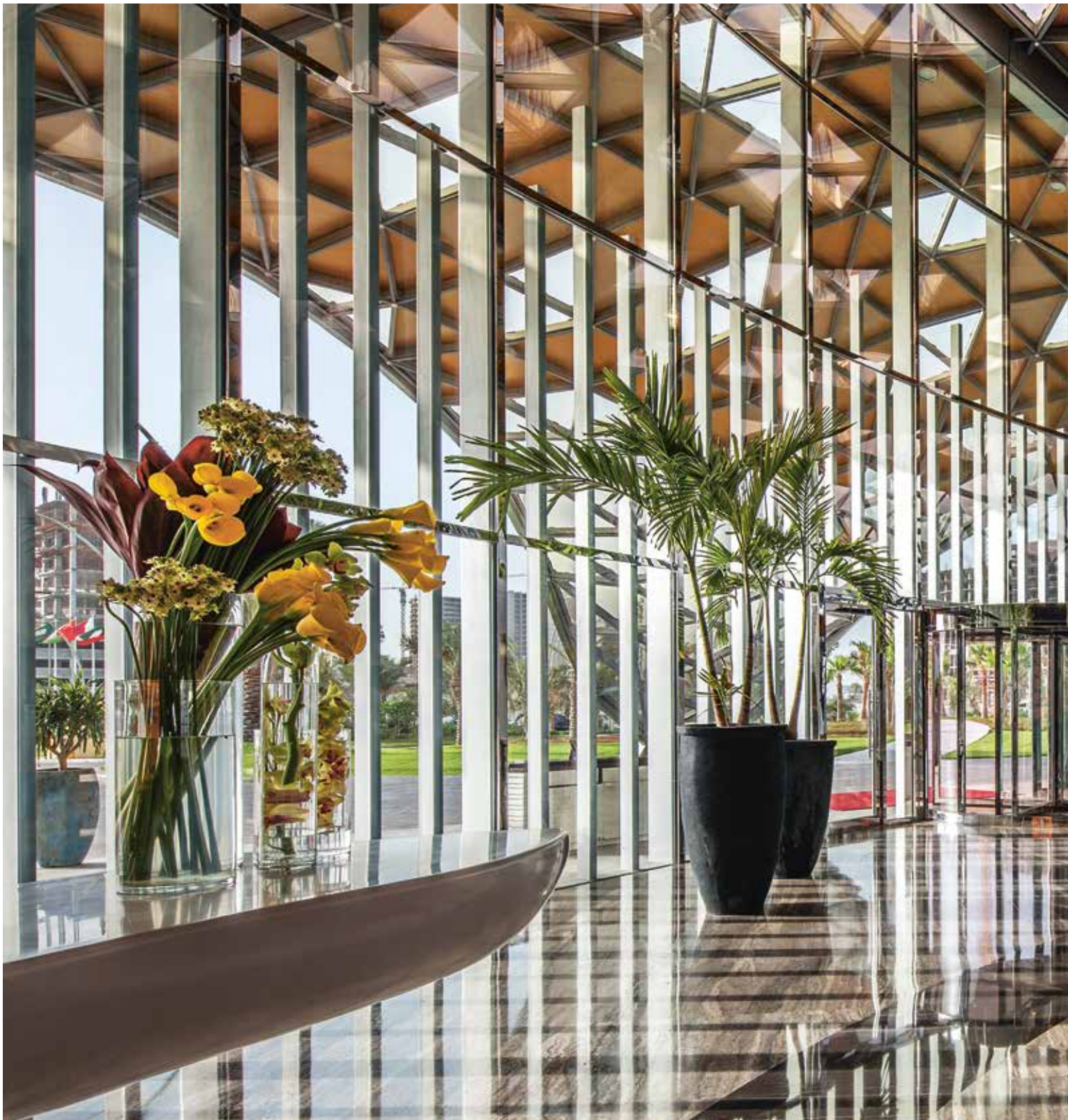
The five-star hotel ART Rotana is located on the Amwaj Islands, a group of man-made islands in Bahrain, north of Manama. The hotel has 311 luxury rooms and suites, all with sea views. Our scope of services included the canopy and facade.

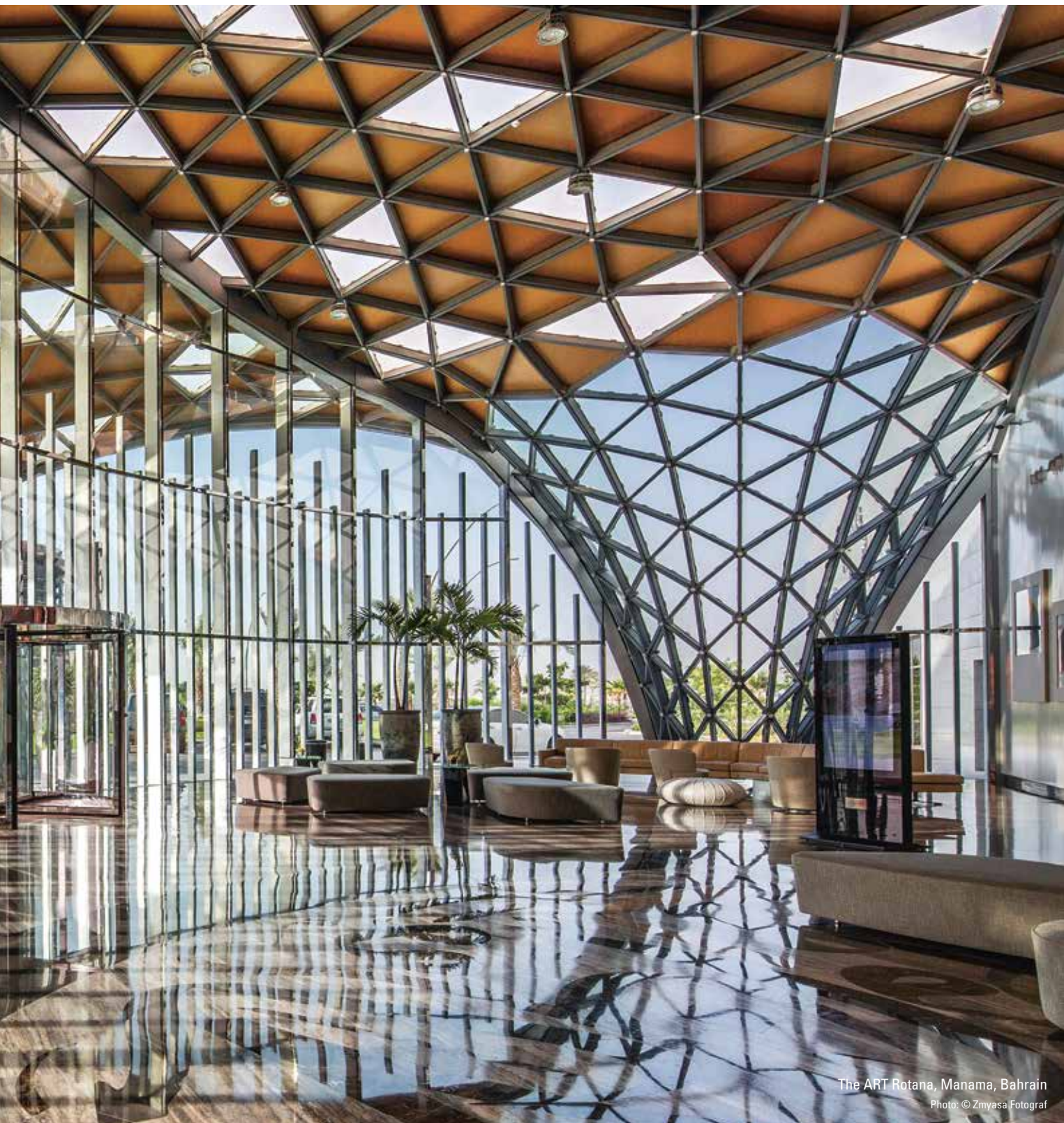
The 1,650 m² canopy consists of a free-form, single-layer steel supporting structure made of triangular hollow sections connected by solid steel nodes and supported by three funnels. It is covered with insulating aluminium and glass panels above the entrance area. The facade includes a 10 m high curved foyer, with insulated glass panels supported by a customised steel structure.

ARCHITECT Middle East Architects SPC

CLIENT Argon Properties Co. W.L.L.

SCOPE OF WORK steel and glass/3-Dimensional free forms, curtain wall/stick system





The ART Rotana, Manama, Bahrain
Photo: © Zmyasa Fotograf

↳ THE SPHERE, ASTANA

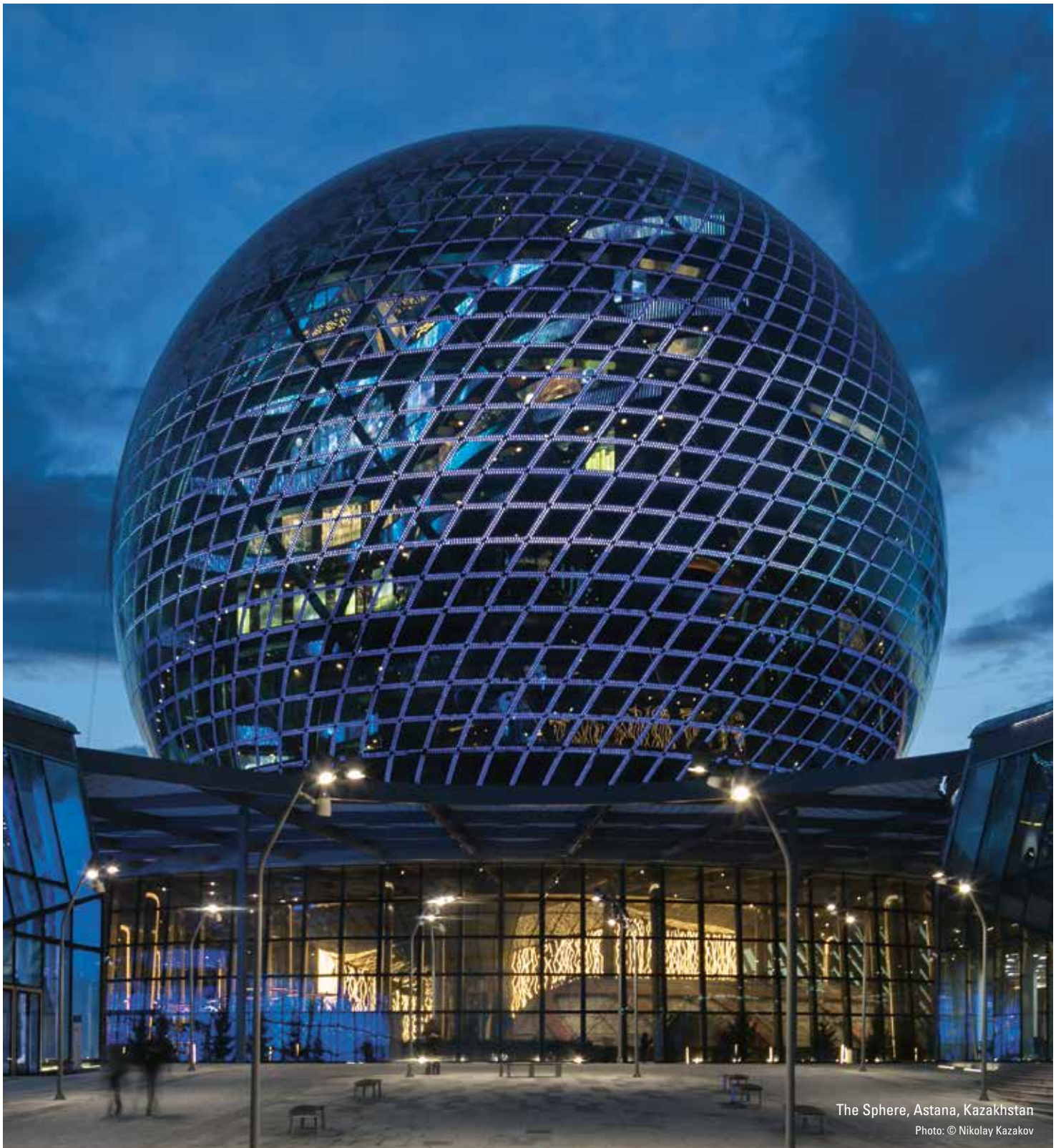
The Sphere is a stunning 80 m diameter structure created as the architectural centerpiece of the Astana Expo 2017 Exhibition in Kazakhstan. Standing 100 m high, this steel and glass structure is believed to be the world's largest spherical building.

The structure houses Kazakhstan's national exhibition, the Museum of Energy, as well as large viewing platforms and open atriums. We were responsible for the production of the steel facade construction as well as the assembly of the entire building envelope, including the pre-stressed atrium cable net.

ARCHITECT Adrian Smith + Gordon Gill Architecture

CLIENT EXPO 2017 – Future Energy

SCOPE OF WORK custom solutions 18,000 m²



The Sphere, Astana, Kazakhstan
Photo: © Nikolay Kazakov

IZMIR AIRPORT

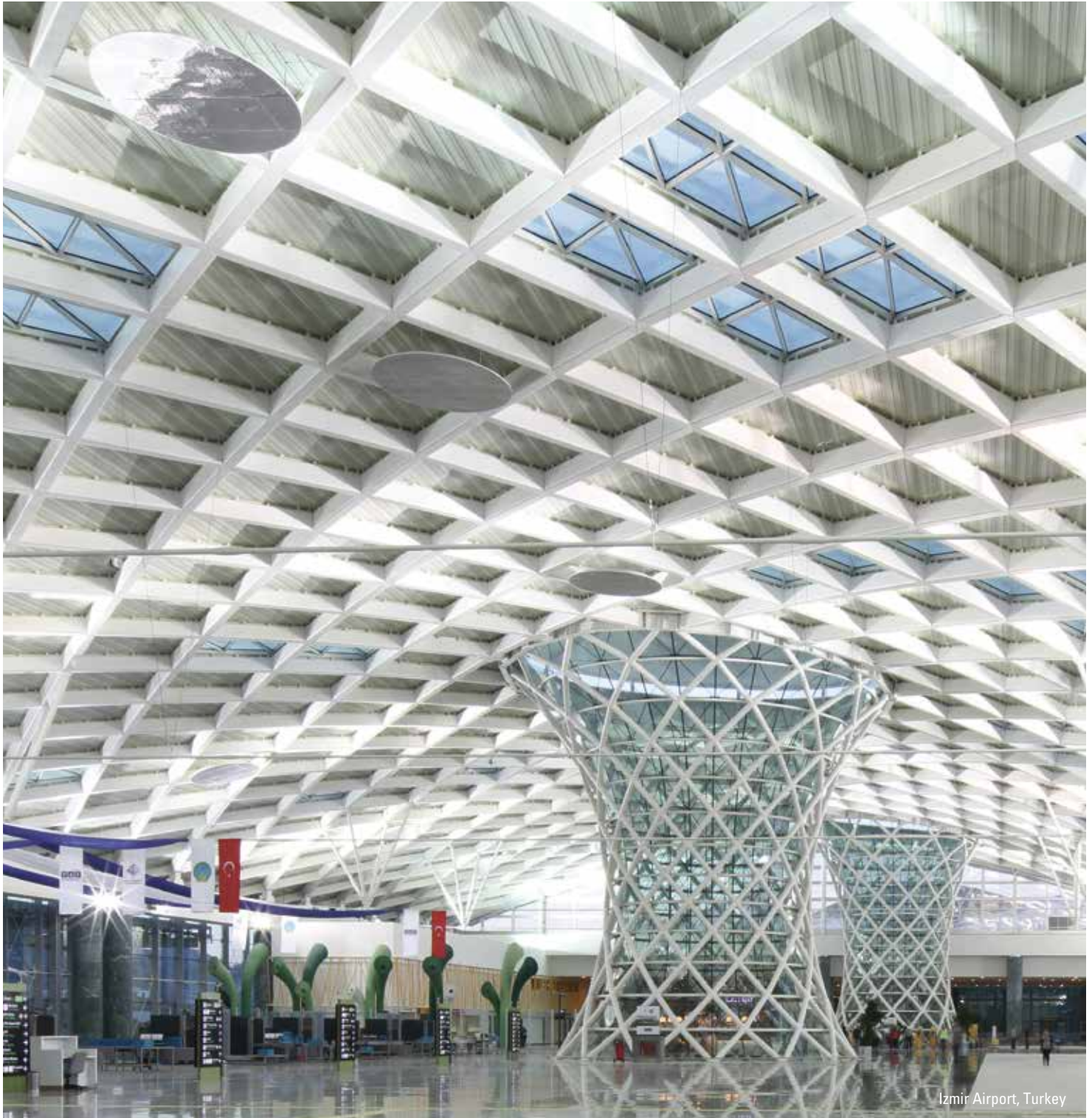
Four highly distinctive 'funnel' structures were designed using tubular elements. The choice of pipe cross-sections was an architectural decision, but also ensured the structural rigidity that limits horizontal displacements under seismic loads. Full penetration welds were made on nodes located halfway along the height of the 'funnel' from ground level. Site welding was kept to a minimum due to pre-production in the factory.

Following completion of the welding work, fire-resistant coating was applied on site. The four structures were glazed inside the funnel.

The tops of the funnels were covered with a membrane roof. The connection between the membrane and the roof of the terminal, on the other hand, remained open to ensure natural ventilation within the structure.

ARCHITECT Hazan Architecture TAV TEPE AKFEN YATIRIM INSAAT VE ISLETME A.S.

SCOPE OF WORK steel and glass, 3-Dimensional free forms



Izmir Airport, Turkey





ROOFING INDIVIDUAL SOLUTIONS FOR YOUR BUILDING.

Whether a new-build, conversion or refurbishment project, we work hand-in-hand with clients and partners to develop and deliver the most cost effective and technically compatible roofing solutions available. Our commitment to the highest standards of quality and to on-site safety management protects both the environment and the health of our specialists, and ensures optimised project delivery.

Our expertise in this area is enhanced by our ability to offer innovative green roof solutions and off-site construction, enabling us to combine excellent environmental compatibility with outstanding technical performance.

- ↳ Metal Standing Seam Roof Systems
- ↳ Composite Roof Systems
- ↳ Bituminous Systems
- ↳ Cold Applied Solutions
- ↳ Green Roofing
- ↳ Single Ply Membranes
- ↳ Photovoltaic Systems

↳ OLYMPIC STADIUM, LONDON

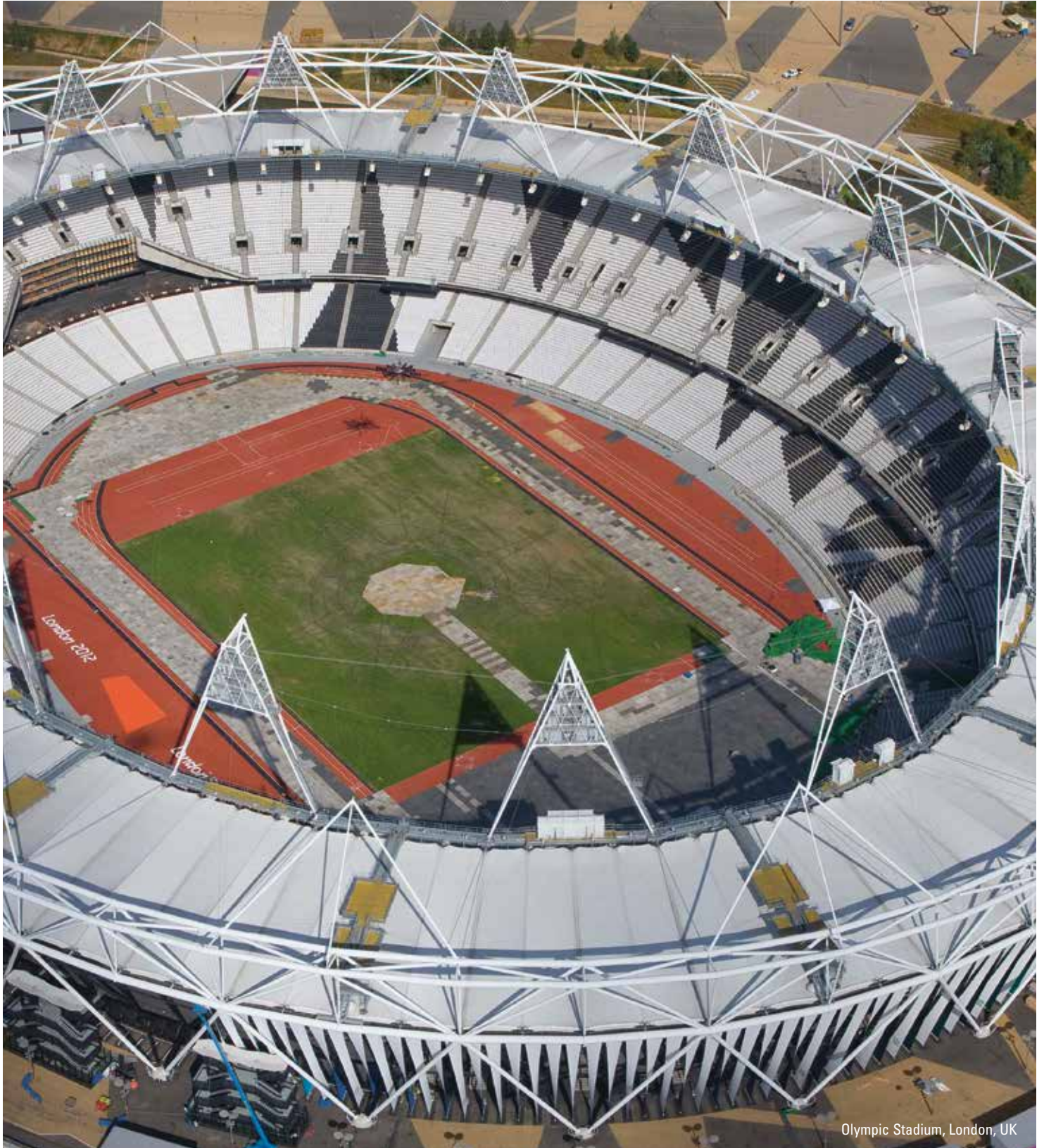
Central to the vision for the 2012 London Games was to create facilities that would provide world class venues and form a legacy of sustainable facilities for future use by the City.

Prater/Lindner detailed, procured and installed aluminium cladding combined with rigid phenolic boards to create an insulated rainscreen system, a capped curtain walling package as well as blast resilient glazing, brise soleil and steel rainscreen cladding to the two storey viewing platform of the ArcelorMittal Orbit Tower right next to the stadium.

ARCHITECT Populous

CLIENT Olympic Delivery Authority

SCOPE OF WORK aluminium cladding, roofing, rainscreen system, waterproofing, curtain walling



Olympic Stadium, London, UK

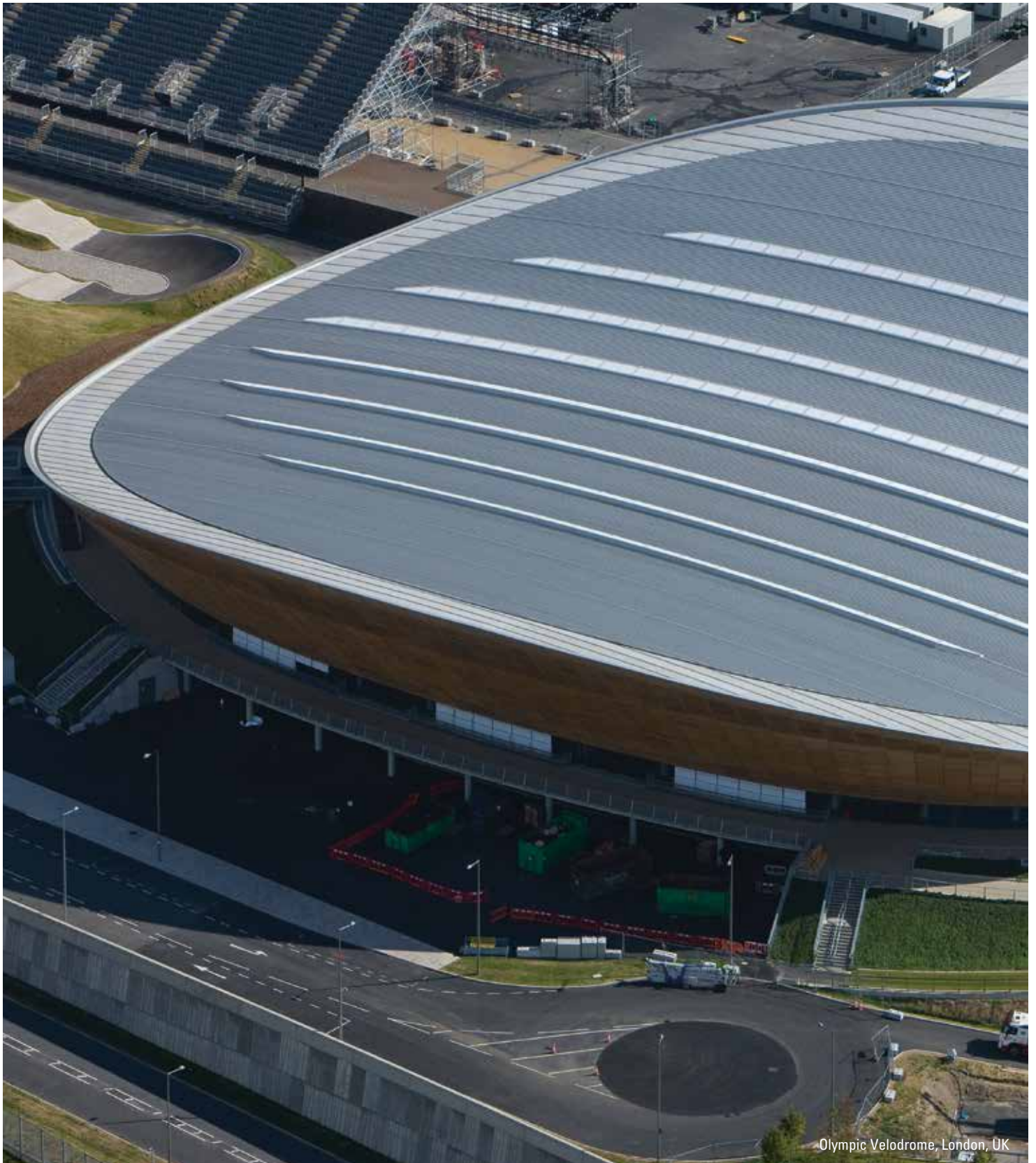
↳ OLYMPIC VELODROME, LONDON

The Velodrome is the most sustainable venue on the Olympic Park in terms of design and construction. Lindner/Prater specified recycled materials where possible, such as the aluminium coil used for the roof sheets, to ensure the roof met the sustainability targets. The roof lighting reduced the need for artificial lighting, natural ventilation minimised the need for air conditioning and water saving fittings were installed to collect rainwater for reuse.

ARCHITECT Michael Hopkins

CLIENT Olympic Delivery Authority

SCOPE OF WORK standing seam roof, rooflights, bullnose



Olympic Velodrome, London, UK

WEMBLEY STADIUM, LONDON

Wembley Stadium was built in 2007 on the site of the former legendary Wembley Stadium. It is one of the largest arenas in Europe and undoubtedly one of the world's most scenic. During the construction, Lindner delivered an extensive interior design package (and occasional exterior work) valued at around EUR 21 million. Overall, approximately 100,000 m² of various interior fit-out solutions were provided.

ARCHITECT Foster + Partners

CLIENT Wembley Stadium Ltd

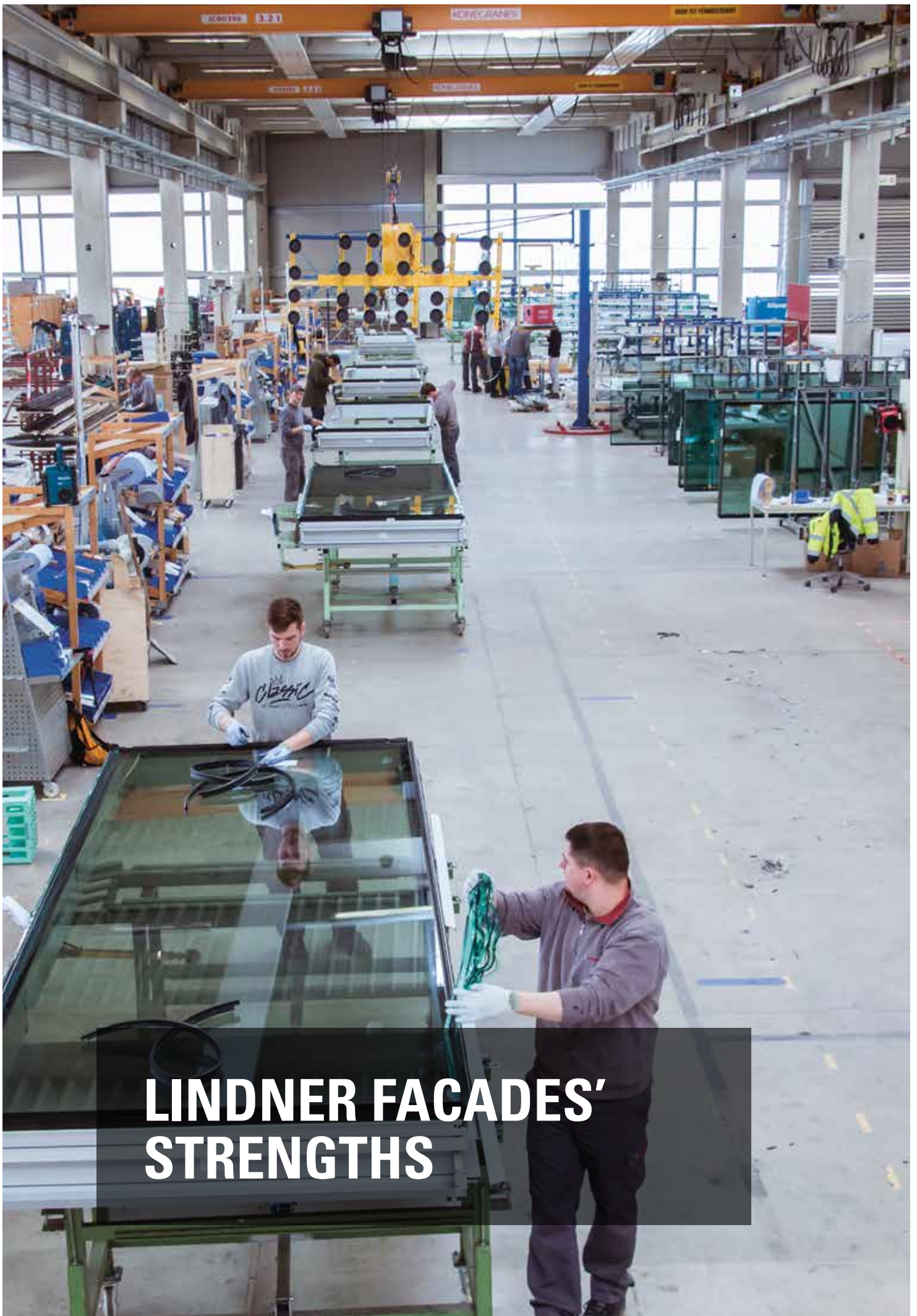
SCOPE OF WORK partial roofing





Wembley Stadium, London, UK

Photo: © Nigel Young/Foster + Partners
Use by courtesy of Wembley Stadium Ltd

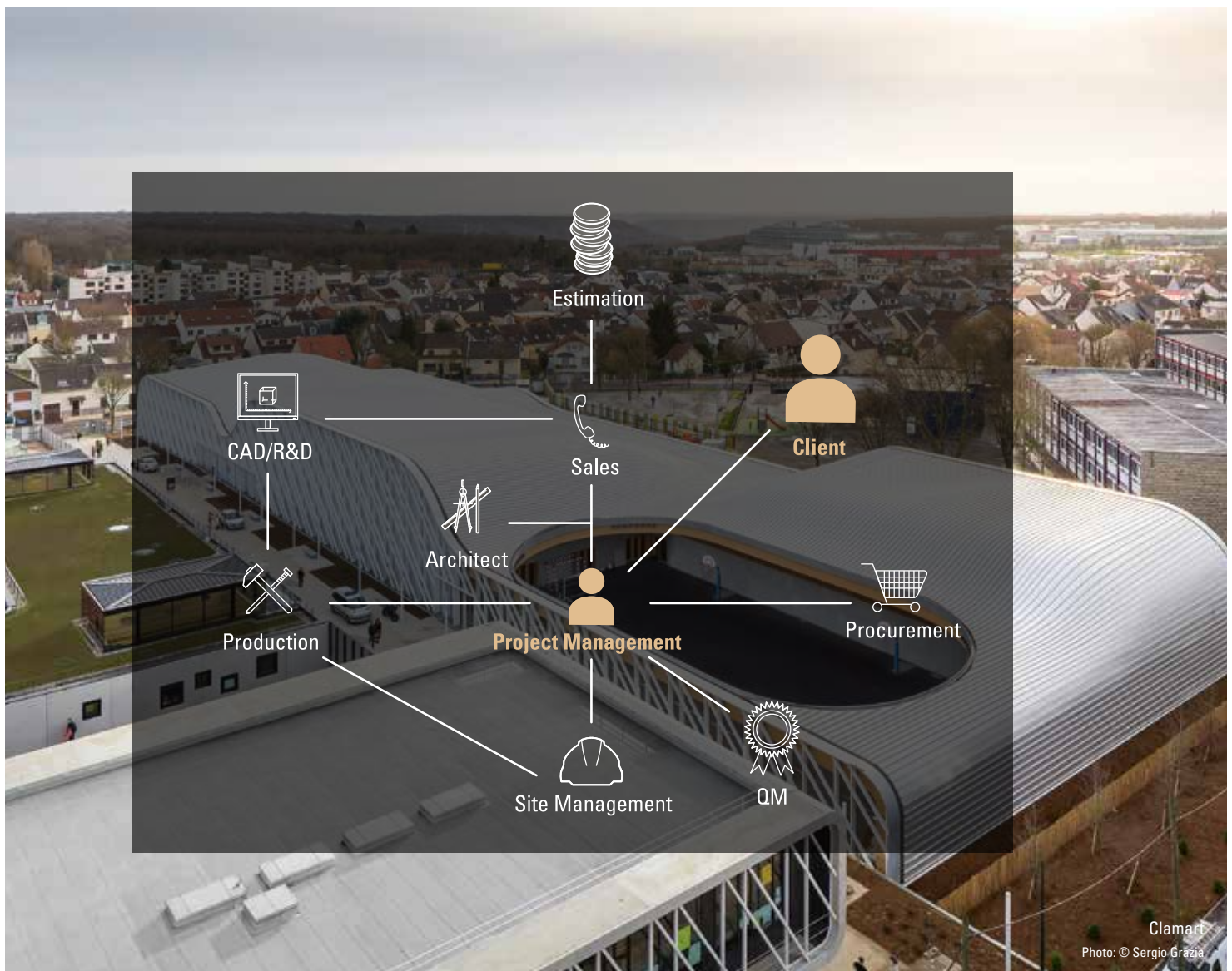


LINDNER FACADES' STRENGTHS

LINDNER FACADES' STRENGTHS

We are part of the Lindner Group, Europe's leading specialist interior fit-out and facades contractor. This means that, as well as offering technical expertise and customer focus, we can also provide the reassurance of dealing with a financially secure, globally active group. Furthermore, the skills that exist across our group enable us to offer the convenience of a single source procurement route for the external envelope and internal fit-out of a project.

- + engineering
- + technical team worldwide: Germany/Switzerland/UK/Dubai/USA/Austria
- + 3D design expertise
- + inhouse building physics department
- + global supply chain
- + multiply disciplines: facades + interior fit-out
- + innovative glass facades with Lindner Steel and Glass
- + no limitation of project size and scope
- + innovation potentials
- + reference to quality and price features
- + development of new facade systems together with architects – develop and build in own production facilities
- + maximum creativity & inspiration
- + development from sketch with implementation of latest art of materials
- + automatic facade components
- + realization of most challenging architecture
- + strong partner



Clamart
Photo: © Sergio Grazia



FACADES PRODUCTION





TESTING FACILITIES

TESTING FACILITIES

Our in-house testing facilities at the German headquarter are controlled and certified by independent 3rd party test institutes.

Our research and development department has the ability to test both in house or in conjunction with independent consultants:

- + water tightness
- + structural calculations
- + dynamic tests as well as air

Random testing of our products is carried out as company standard:

- + structural
- + acoustics
- + fire rating
- + climate
- + weathering effects

Testing is carried out to European and international standards to validate performance versus design criteria. Testing also presents value engineering opportunities to tackle buildability issues on the ground.

Discretionary tests performed at the laboratory include:

- + acoustic
- + building movement
- + seismic testing to AAMA standards
- + thermal cycling to CWCT standards

Curtain Walling – Standard Weathertightness and Impact Tests include			
	CWCT Section	American Standard	European Standard
Air Permeability	5	ASTM E283	EN12153
Static Water	6	ASTM E331	EN12155
Dynamic Water	7	AAMA 5011	EN13050
Wind Load	11 & 12	ASTM E330	EN12179
Impact	TN76	N/A	EN14019

PERFORMANCE TESTING AND MUCH MORE

As well as VMUs we also produce “Performance Mock-Ups or PMUs”. These mock-ups are produced from the final approved and project-specific materials for the sole purpose of performing CWCT testing to prove the air permeability, water resistance, and structural integrity of the system prior to going to full production. The facade units for these tests are produced in Germany and shipped to the UK for testing at an accredited test centre.

Our in-house R&D Department also carries out certified project-specific testing of system parts, such as impact testing of glass, cyclic testing of vents and many other types of tests which are often required when designing bespoke systems that must comply with the various standards and regulations. We can also provide acoustic testing in our own independently accredited laboratory within our Arnstorf factory.

MOCK-UPS

Bespoke unitised curtain walling is, by its very nature, unique and project-specific. To achieve each solution, it is necessary to design project-specific aluminium profiles and gaskets that meet both the aesthetics and specific performance criteria required by clients.

BRINGING DESIGNS TO LIFE IN MOCK-UP FORMAT

Taking project-specific profiles and gaskets from the drawing board to final production requires a significant lead-in. For this reason we also offer our clients the facility to see their designs come to life earlier in the process by building full size mock-ups made from timber and/or alternative materials prior to the production of the project-specific materials, which can have long lead times. These “Visual Mock-Ups” (or VMUs) can then act as a benchmark for the final design and materials, and are generally built and assembled for viewing at our factory in Arnstorf, offering clients the opportunity to visit our headquarters at the same time.

Main Picture: Woodberry Down KSS III, London, UK

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