



ARCHITEN  
LANDRELL

ARCHITEN LANDRELL

CAPABILITIES OVERVIEW





## > *Welcome*

Welcome to our brochure, the following pages will give you an overview of the services which Architen Landrell offers.

Additional information including specialist technical detail and imagery can be accessed through our website - just use the fast-track links listed at the bottom of the page.

With over twenty five years of experience, Architen Landrell has the breadth of knowledge needed to transform your creative vision into a reality.





## > *Who we are, what we do.*

With more than 25 years' experience, Architen Landrell is an organisation that has the technical knowledge and flair to provide unrivalled capabilities in the design, manufacture and erection of membrane architecture.

Our structures can be found on every continent and they all bear the hallmarks of our close-knit teamwork and attention to detail. When we started out in the 1980s the idea of using tensile membranes for permanent buildings was considered very exotic.

We have enjoyed playing a significant part in evolving this type of architecture into a widely accepted and much admired method of construction. Our track record of achievement has provided the foundation of trust that is essential for the increasingly adventurous ambitions of our clients and their design teams.

We pride ourselves on being a forward-thinking and multi-disciplinary organisation that has the appetite and professionalism to create extraordinary architecture. Our team encompasses construction professionals who are accustomed to aggressive building programmes and considerable complexity.

Whether creating a landmark venue or a subtle design statement, our involvement ensures a depth of talent that invariably enhances a project.





## > *Tensile Architecture - shaping a new structural generation*

Few methods of building match the drama and delight of lightweight tensile structures. Expressing the natural qualities of architectural membranes brings curvature, translucency and clear spans to external and internal space.

Uniquely, the material forms both the structure and the skin of a building envelope and acts with optimum efficiency by assuming the minimum three-dimensional surface under tension. Tensile membranes enable us to consider new methods of creating environments - building skins that wrap space, rather than box it in.

Since Frei Otto developed his groundbreaking architectural concepts in the early 1950s, the use of tensile fabric as an unconventional building material has blossomed. Its translucency gives designers scope to bring soft, even light into spaces, dissolving the boundaries between exterior and interior and acting as an excellent foil to the glare of glazing. Modern architectural fabrics are capable of unprecedented spans, enabling the creation of volumes where the sensation is of lightness rather than massive engineering.

The flexible nature of tensile fabric means that individual areas of any size can be pre-fabricated, transported to site and installed, with maximum efficiency of time and cost. With a design life often exceeding 30 years, fabric buildings span generations and are built to the same structural codes as other permanent buildings.







## > *Exteriors - thinking outside the box*

Experience has taught us that our clients place great emphasis on originality and innovation. At Architen Landrell, our team builds outstanding exterior structures and is always striving to push the boundaries of tensile architecture.

The ingenuity and scale of Architen Landrell's structures is as boundless as the imagination of our clients. Fabric membrane structures offer extensive creative freedom and lend themselves particularly well to curved shapes with complex geometry. New generations of architectural forms can maximise this potential, often with stunning results.

Ever increasing legislation and strict codes for thermal efficiency have led to significant developments in fabrics. We have developed lightweight yet energy efficient systems resulting in high performance building envelopes with increased architectural freedom.

Utilising the creative and technical knowledge of our staff we work closely with each client so that their ideas can be fully realised. We take on a wide range of projects; from small walkway canopies and solar shades to large roofing systems, bridges and entire building skins. We are constantly evolving new and unique ways to use tensile fabric, always keen to get involved with sculptural and artistic installations that push possibilities towards the limit.

Inspiration and innovation form the basis for the exterior structures created by Architen Landrell, an ethos that has led our team to create some of the landmark structures of the last 25 years - winning many awards in the process.





## > *Exterior Fabrics, an overview*

We install structures all over the world across a range of climates and conditions, so the materials themselves must provide maximum versatility, durability and strength. For exterior structures, we use fabrics that suit a range of purposes and adapt to fit all briefs – ensuring our clients realise their concept ideas using tensile fabric.

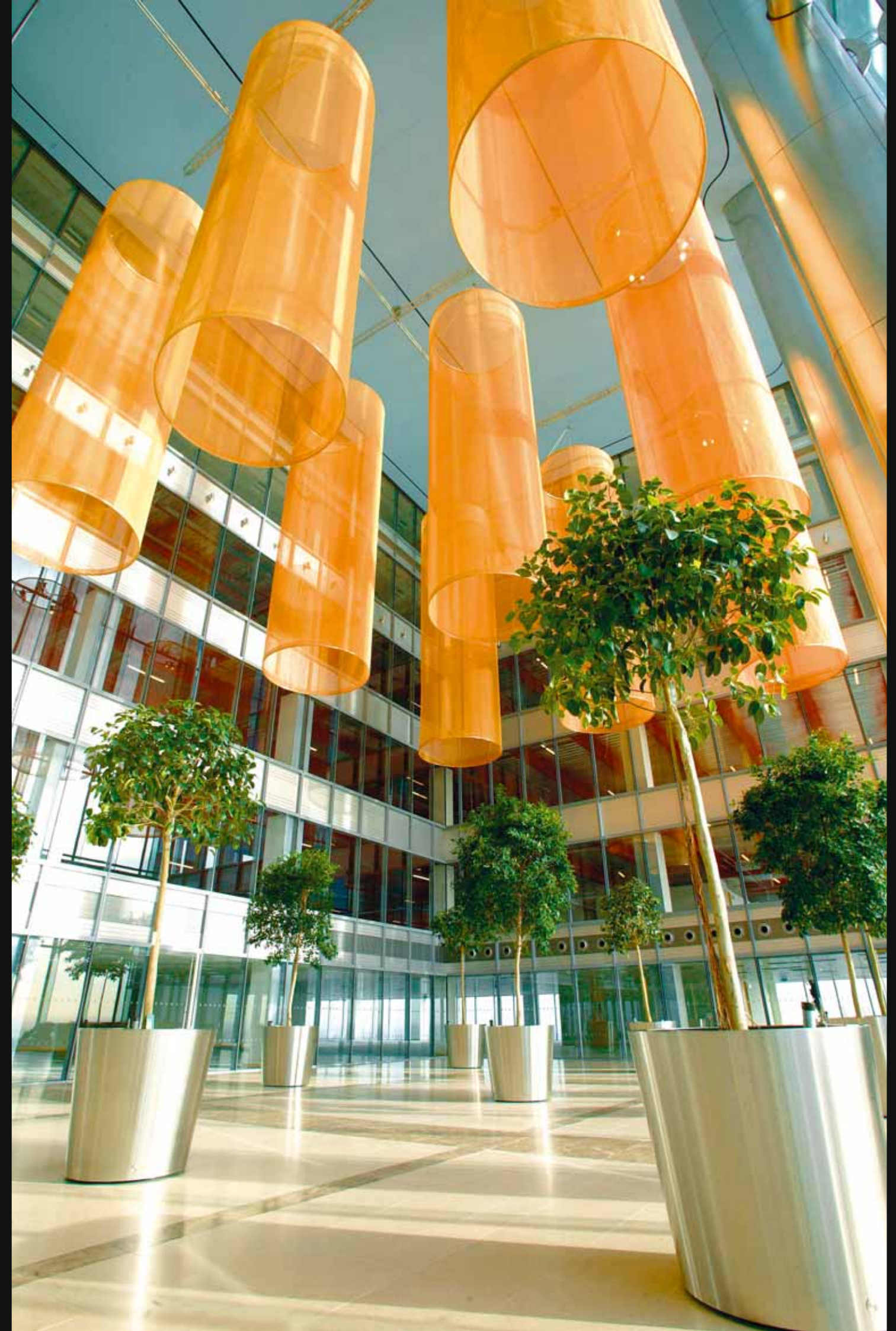
PVC Coated Polyester is the most common and least expensive of fabrics used for tensile structures. Besides its excellent strength, flexibility and translucency, it has an impressive design life of between 15 and 20 years. It's also robust, relatively crease-resistant and easy to transport and erect. Its main use is for exterior canopies, but its wide range of colours and suitability for printing also makes it ideal for banners.

PTFE Coated Glass Cloth is a widely-used material for permanent exterior structures. Its strength, durability and low maintenance give it a 30-year-plus design life. It has the added benefits of being completely chemically inert and resistant to moisture and micro-organisms. It also has good self-cleaning properties.

ETFE provides a roofing system exploiting modified copolymer Ethylene Tetra Fluoro Ethylene, an extruded film with high corrosion resistance and strength over a wide temperature range. We engineer it into air-filled cushions supported by perimeter frames to provide effective insulation. The foil can also be printed with a range of patterns to provide solar shading or decoration.

Gore TENARA is UV resistant, chemically inert, easy to maintain, and is a versatile material to include in any architectural fabric project. Essentially it is a weldable form of PTFE that offers strength, flexibility and longevity alongside unrivalled aesthetics. Its high crease resistance makes it effective for retractable and demountable structures and its ability to withstand temperature extremes means it can be used in all climates around the world.





## > *Interiors - a multitude of possibilities.*

Lightweight tensile structures offer a wide range of aesthetic benefits to designers of interior spaces and architectural environments. They present real practical advantages and more creative opportunities compared with traditional products, construction methods and materials.

Different levels of translucency and varying mesh densities offered throughout the fabric range make tensile structures ideal for controlling or enhancing light. Interior shading can be used to reduce solar glare or to harness natural illumination and reflect it deeper into a building. Another bonus of fabric is its ability to soften and reflect artificial lighting or act as a projection surface to produce startling kinetic visual effects.

Enormous scope and design potential exist when using fabric as the alternative to standard ceiling and lining systems. Design freedom is enhanced by a variety of possible approaches, including suspending framed fabric panels or kites from drop wires or by tensioning sail-like membranes directly to a building structure. The natural flexibility of tensile fabric means that dramatic free-flowing forms are easily achieved and its relative light weight makes it a rapidly installable, cost-effective option compared to conventional products.

Our fabric structures can also provide original and flexible ways to define and distinguish spaces in open-plan environments, either as bespoke partitions or sculptural elements to break up large atrium voids. Subtle use of lighting and printing on semi-translucent screening can also create the illusion of depth and space where, in reality, none exists.

Our extensive industry experience and innovative approach with tensile membranes, coupled with the wide range of fire-rated technical fabrics available, mean we can deliver an enormous range of original and varied visual effects to suit any particular design or application.





## > Interior standard products - cost effective innovations

Architen Landrell is renowned for originality in design and the evolution of innovative tensile fabric structures. However, not everything we install is bespoke.

Alongside our custom-designed interiors we have developed a product range of versatile pre-engineered systems. These are the most economical way of using fabric structures in your building.

Simple enough to be installed by anyone, these off-the-peg designs are available in a range of sizes to suit a variety of applications.

Integral frames on simple drop wires provide a flexible approach to let you fine-tune positioning.

These systems add an innovative and distinctive dimension in form and texture to any installation - and do so in a way that is as cost-effective as it is impressive.



Hypar



Quadrofoil



Blade



Trisail







## > *Architen Lighting - leading the way*

The translucent, curving form of architectural fabric naturally invites the integration of lighting systems. At Architen Landrell our understanding of tensile forms enables us to enhance and enliven our structures to their full potential.

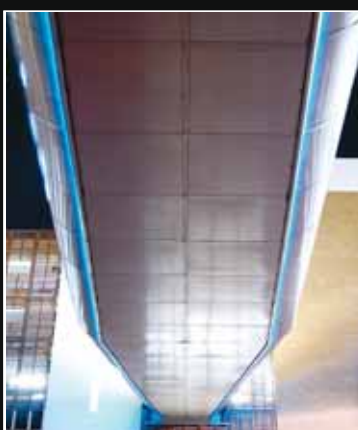
We have long gone past the stage of simply linking creative lighting with tensile structures. Today we provide a service that specialises in innovative lighting. We are in the unique position to provide state-of-the-art lighting systems with the same guarantee and quality worldwide service for which Architen Landrell is renowned. Our clients are ensured not only a total design service but also experienced fabricators and installers; specialists with all the skills to manufacture and install complex intelligent lighting systems.

We design and manufacture bespoke lighting systems to our clients specifications, using the best equipment available from a diverse range of leading manufacturers. From generic architectural lighting systems to speciality LED lighting, our team design to the requirements of each individual project, and the importance of environmentally sound, energy-saving capabilities is a priority we constantly address.

We often form a partnership with lighting designers to achieve their vision in a cost effective, timely and aesthetic way.

The extraordinary and varied effects of well-designed lighting systems upon internal and external architectural spaces are second nature at Architen Landrell, where our lighting team harnesses the power of light to its maximum potential.





## > *Intelligent Lighting Systems - you're in control*

At Architen Landrell we believe that lighting control plays a very important part of any installation. Whether it is a simple light switch or a complex computer-controlled system, its role can often be crucial.

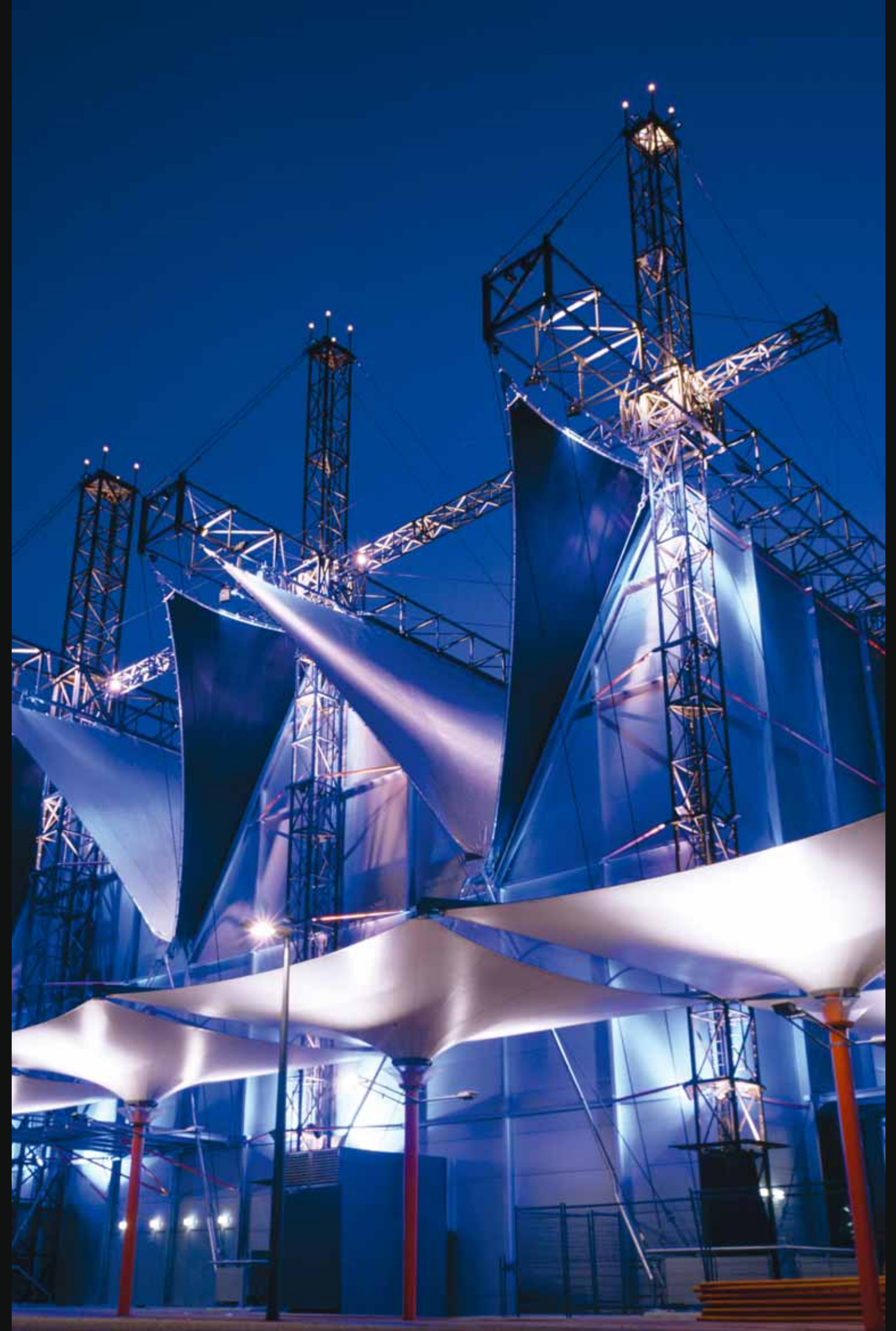
We design, build and install intelligent lighting control systems that incorporate the latest technological features, from LCD touch-screen control panels to wireless remote control from a mobile phone. Our clients can be confident that their lighting is designed to suit their requirements. We achieve this using manual control systems or automated systems that we can monitor and adjust remotely as necessary.

Lighting control systems can be complex, so we offer complete maintenance and support. With the full diagnostic capabilities of lighting control, we can test and reprogramme from anywhere in the world. Our systems are self-monitoring, reporting problems either to the client or directly to us, enabling maintenance work to be scheduled without the need for any client interaction.

Lighting control allows for an intelligent, creative approach to lighting, using either a single on/off switch or a colour control system programmed to create dynamic effects across the installation. Sensors can be incorporated to make the lighting change and reflect its surroundings. Sensors also contribute a vital role in the interactivity between the lighting and its effects, such as reacting to changing weather conditions, human actions, time of day or any other specialist requirements.

Not least, here at Architen Landrell we are fully conscious of our responsibility to the environment - and we know the importance of that off  button!





## > *Rock & Pop - we've got our act together*

The flexibility of tensile fabric means it's especially suited to the fast-moving worlds of exhibitions and the entertainment industry. Architen Landrell has extensive experience in working with major international staging companies to provide quick-to-install set features and high quality exhibition structures for a wide range of leading acts and brands.

Our vast combined knowledge and experience of designing, manufacturing and installing demountable structures means we can deliver with unmatched speed and flexibility.

Our multiple award-winning team produce the essentials for any requirement, from printed banners to one-off exhibition features and quick-to-install staging structures. As a coloured and printable material, fabric offers the chance to integrate artwork into the structural skin and as a 'blank canvas' it can be used as a backdrop for theatrical lighting effects and image projection.

Typically fast-track, Rock and Pop projects are an exciting challenge. From our client's specifications, our design and production teams will work around the clock to meet a deadline - and our site crew will travel world-wide to ensure efficient installation.

This quick installation process, together with the ability of tensile fabric to be compacted and transported easily, has built an enviable reputation for Architen Landrell in the field of Rock and Pop.





## > *Maintenance - Keeping structures at their best*

The essential process of maintaining tensile structures is understood best by those who design, manufacture and install them. The Architen Landrell maintenance team is in prime position to ensure the integrity and longevity of tensile structures around the world.

With a design life often exceeding 30 years, most tensile structures are long-term investments and should be cared for as such.

At Architen Landrell, we offer cleaning and maintenance services for all tensile structures, regardless of size or location.

Our skilled diagnostic teams inspect the structures, provide detailed reports for clients and offer maintenance contracts tailored to each specific structure. We provide on-site cleaning and maintenance services and can repair damaged structures either on the spot or at our specially equipped factory.

All our staff are fully qualified in plant handling, have rope access certification, and are SafeContractor approved. To develop our extensive knowledge our maintenance team gather all details from completed structures, including samples and test results, and collate them to create a comprehensive resource for our research and development.

Whether interior or exterior, permanent or seasonal, and no matter where, our maintenance services ensure our clients' structures remain at their very best - and, if problems should arise, we are ready and able to sort them out.







## > *Services - completely comprehensive*

Architen Landrell has consciously developed as a company that brings together the disciplines of architecture, engineering, manufacturing and construction to provide a comprehensive service on a worldwide basis.

### **Design**

Architen Landrell offers the services of a multi-disciplinary in-house design team to all clients. Using the latest computer and CAD technologies, we offer everything from concept advice, visualisations and sketch drawings to detailed engineering and patterning analysis.

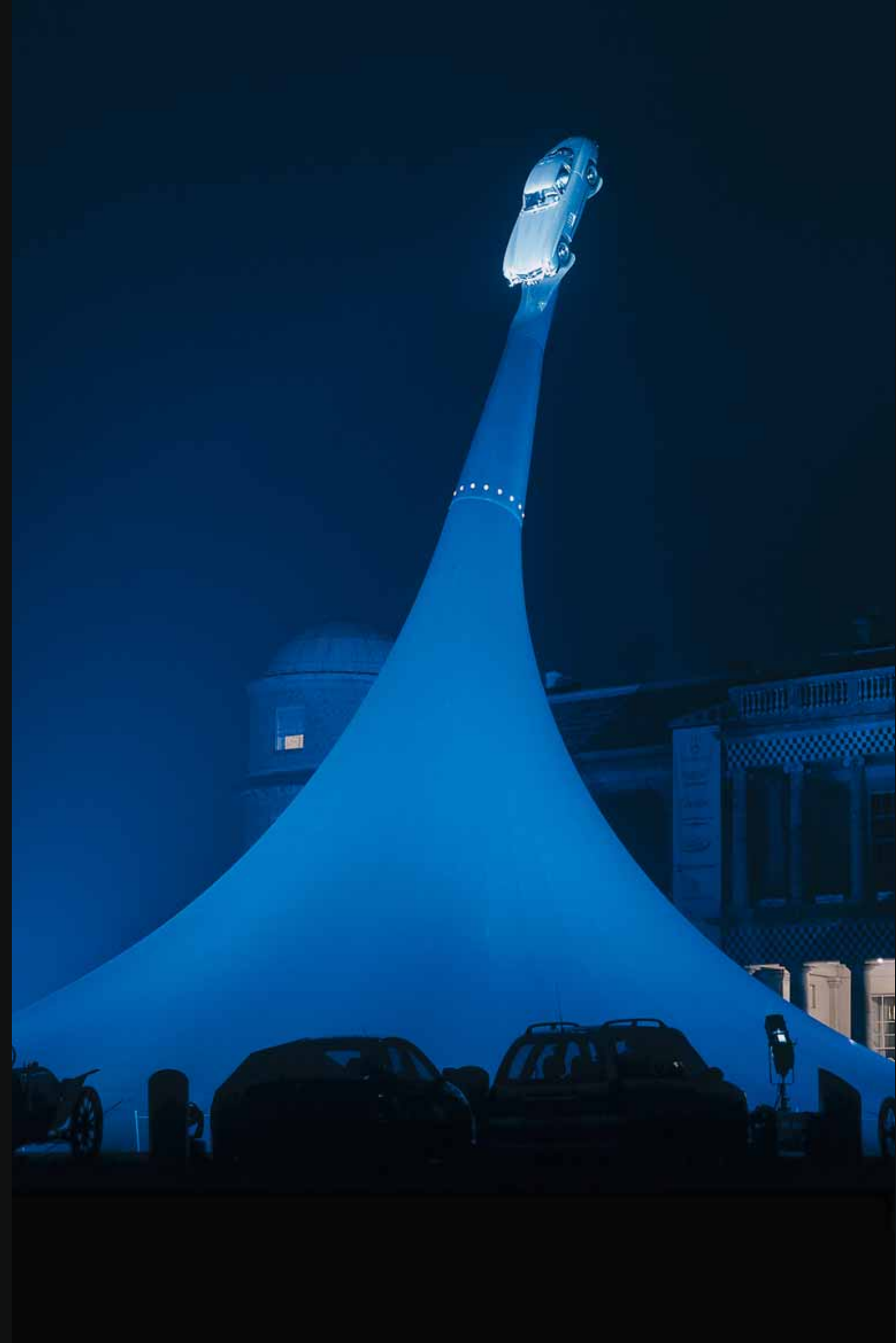
### **Engineering**

Tensile structures under stress require careful engineering to ensure they look good, perform well and survive years of use. Our design team incorporates a strong engineering element and all our designers have engineering experience. This makes the company a productive contributor to any construction project.

### **Research & Development**

At Architen Landrell we are constantly seeking opportunities to improve and modernise our techniques and our structures. Using biaxial test rigs and other specialist equipment our testing laboratory enables us to examine samples of fabric to determine their relative load capacities and other physical properties. This information is stored to form a detailed reference library.





## > *Completely Comprehensive continued...*

At Architen Landrell we embrace the total process of taking an initial concept through to full completion. The key to this is our multi-disciplinary project management team, advanced production facility and team of dedicated installers who together transform designs into the finished article.

### **Project Management**

Our project management teams build progress based on research, innovation and problem-solving. We offer a fully inclusive service that involves our project managers. They oversee all aspects of every project, ensuring smooth running from the outset.

### **Manufacture**

Within our 3,000 sq m production facility, we ensure the link between design intent and finished structure is seamless and predictably accurate. Exploiting traditional skills and state-of-the-art computer-controlled manufacturing techniques, our staff embrace the challenges of tensile structure fabrication. Our comprehensive knowledge of fabrics and their varied uses allow us to meet and surpass our clients expectations.

### **Installation**

Architen Landrell has an established team of experienced and accomplished riggers, fabricators, site and installation managers who specialise in the installation of tensile fabric structures. Our installers are all CSCS certified, fully trained in plant operation and rope access, and we are SafeContractor approved. All installations are carefully planned and covered by comprehensive risk assessments and method statements.



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