

# KING'S MILL HOSPITAL



## AMBULANCE CANOPY DESIGNED WITH THE ENVIRONMENT IN MIND

The development of King's Mill Hospital incorporates a wide range of innovative features to achieve a practical yet striking building with exemplary environmental performance.

The scheme includes the largest geothermal lake loop scheme in Europe and a tri-generation plant that, together, provide all the hospital's cooling requirements without the need for chillers and 40% of the hospital's heating requirements, reducing the re-developed hospital's carbon footprint by 400 tonnes a year.

The hospital's design called for an ambulance canopy for the diagnostics and treatment centre which would protect waiting patients and crews arriving at the hospital from the elements, without blocking natural light from the building. This tensile structure had to be delivered against strict budgetary restrictions and offer a specification that was aligned to the scheme's sustainability goals. It also had to be specified in accordance with BS 5950 with loadings to B.S 6399.

## THE ROLE OF J & J CARTER

J & J Carter was approached to answer the brief for the ambulance canopy by the main contractor, Skanska, following a recommendation from another contractor on site. The original design came in over budget and the J & J Carter team was then able to modify the design to bring it in within budget whilst still meeting all the technical, design and sustainability criteria.

The steel tensile structure was fabricated from circular, hollow mild steel and each column was hot dip-galvanised prior to painting to ensure effective rainwater drainage and provide corrosion protection. The columns were also used as containment for electrical cables to power the canopy's lighting units and these were housed within conduit inside the hollow struts.

## DISCOVER MORE ABOUT OUR TENSILE STRUCTURES

The ambulance canopy we designed and built for King's Mill Hospital is one of many projects we have undertaken in the healthcare industry. Our range of products extends to shade sail canopies, sports domes and residential fabric canopies. [Find out more about the different types of tensile structures available at J & J Carter.](#)

### KEY FACTS

**LOCATION:** United Kingdom

**STRUCTURES:** Frame Supported

**INDUSTRY:** Healthcare

**ROOF FORMS:** Conic

**MATERIALS:** Silicone Coated Glass Fibre