



ORION ENCLOSED Fabric Canopies

ORION Enclosed Canopies combine the highly popular ORION Barrel Vault tensile membrane canopy with a selection of side cladding, doors, heaters, lighting and surfacing options to create enhanced weather protected spaces. Clear span structures with tall centre lines create a spacious feel, and the soft membrane provides an ambient environment as well as absorbing the sound of rain, voices and echo to a greater extent than a hard roof covering such as polycarbonate or steel.

The flexible design aesthetic and distinctive elegant form of a tensile fabric canopy results from the characteristics unique to membrane tension. In daylight, fabric membrane translucency provides diffused, naturally lit spaces, while at night, artificial lighting can be used to create an ambient exterior luminescence. The lightweight nature of tensile membrane design requires less structural steel compared with conventional roof coverings, enabling clear spans of column-free space.

Streetspace undertakes dynamic thermal analysis modelling during the detailed design stage of each enclosed canopy project, taking into account the specific site conditions and the orientation of the structure. The specification of the roof, size and positioning of ventilation gaps, doors and heaters are adjusted as required to ensure temperatures in summer and winter fall within accepted parameters for the use.

The Streetspace experienced multi-disciplinary team coordinates the design and delivery of ORION Enclosed Canopies as a single package, including liaison with building control, civil engineering works, surfacing and electrical installation.



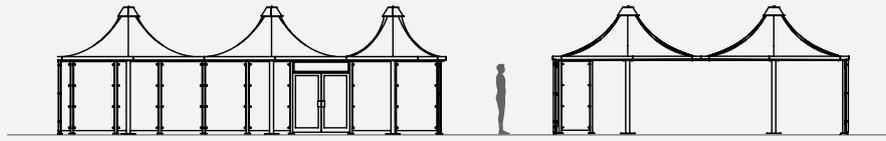
Clear span widths of up to 15m

Enclosure Options

Enclosure options include toughened glass and aluminium glazed curtain walling.

Post Centres

Standard post centres are between 3.5m and 6m with variations within the structure possible to avoid doorways, access routes or underground services



Design Features



High Sunlight Reflectivity

High sun reflectivity results in a lower energy requirement to maintain room temperatures of adjacent buildings.



All Weather Protection

Enclosure options include polycarbonate, planar glass, aluminium glazed curtain walling and fabric façade panels.



Sound Absorption Qualities

Soft membrane fabrics absorb echo, the sound of rain and voices to a much greater extent than a hard roof.



One-Piece Fabric Membrane

No joints to trap dirt or moisture and advanced fabric coatings provide a smooth, low maintenance surface.



Tall Centreline

Free from lattice beam obstructions, the clear span rafter design is ideal for sport and creates a spacious feel.



Positive Light Transmission

The combination of 'no-glare' ambience with excellent light transmission eliminates the need for lighting during the day.

Product Specification

ORION Enclosed Canopies are available with a number of different forms and support options. With each structure being designed on a site specific basis, challenges such as level changes or adjacent door and window positions can easily be accommodated.

Canopy Form

ORION Enclosed Canopies can be specified as either barrel vault or conic design forms with a fixed edge for rainwater systems.

Canopy Dimensions

ORION Barrel Vault fabric canopies can be constructed in widths of 3.5m - 6m.

Additional Options

Lighting

Various lighting solutions are available to extend safe use of your covered space or walkway outside of daylight hours.

IR Heaters

External grade radiant electric heaters can be fitted to ORION canopies to provide warmth to users in colder weather.

Glazed Aluminium Doorsets

Including doorsets in the perimeter of your enclosed canopy formalises the entrance.

Façade Mesh Infill Panels

Enclosed canopies can incorporate perforated fabric infill panels to ventilate the space while keeping out precipitation.

Rainwater Systems

ORION canopies can be specified with integral steel guttering, powder-coated to match the steel frame for durability and easy maintenance. Custom aluminium downpipes with integral connections ensure maximum durability, with matching powder-coated finishes.

PVC Fabric Colours

Specified with the FTO Series Architectural PVC Fabric which is an advanced, high quality and hard wearing product, with a smooth PVDF surface coating that stops dirt getting ingrained in the fabric, reducing the level of maintenance required to keep the roof clean.



Frame Finishes

Highly durable polyester powder coatings are applied as the standard finish on steel frame with colours selected from a basic range or from the RAL colour selector. Steelwork is cold grit-blasted to SA2.5, with a zinc coating and anti-corrosive primer, followed by the high gloss polyester colour powder coat finish. Alternatively, hot-dip galvanised coatings can be specified for the harshest environments where a decorative finish is not required.



Hot-Dip Galvanised



Colour Polyester Powdercoat

