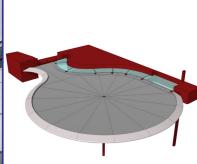


## **Main Entrance Canopy**







## **Design & Display Structures**

Location	London, SW10
Description	A $12m \times 15m$ organic shaped feature canopy enabling clients to arrive by car and enter the building whilst sheltering from the elements.
Partners	Design & Display Structures (D&D - Supplier), Radcliffes (Client), APT (Architects)
The challenge	Taking a clients freeform concept and configuring the complex geometry through 3D/2D modelling and careful analysis that met with the tough opposing restraints of providing an attractive profile, achieving appropriate rainwater falls and connections with adjacent buildings undergoing refurbishment whilst maintaining optimal modular manufacture opportunities.
The solution	Design & Display were responsible for the entire design, engineering, manufacture and installation of the canopy from the ground up. After erecting the primary steelwork support structure around a ground level rainwater pipe outlet point it was encased with GRP cladding. Topped it off with bespoke fabricated stainless steel mesh grating maintenance walkway, a fall restraint system and serpentine ribbon of sloped glazing to junction with the refurbished building. Bespoke formed armature covers completed the modern look.
	The GRP panel setting out was orchestrated such that it optimised standard repeating parts mixed in with a variety of specials achieved either from modifications of the standard unit tooling or completely unique panels in key identified zones to pull together the final spectacular scheme.  During the canopy design and construction phases D&D engineers liaised with the builder refurbishing the main buildings to ensure coordinated connections as well as the spotlight specialist to ensure cable runs and suitably positioned reinforced mounting points were available to them.
Material used	<ul> <li>GRP cladding with integral core and automotive paint finish</li> <li>Galvanised steelwork</li> <li>Toughened laminate glass low iron CNC cut</li> <li>Stainless steel grating, mansafe system and armature cladding</li> <li>Rubber supports</li> <li>Unistrut galvanised brackets</li> <li>Rainwater goods</li> <li>Marine ply</li> </ul>
Benefits of using fibre polymer composites	Due to its multicurve profiling this feature would have been difficult to economically construct in other materials. Because of D&Ds construction package capabilities the client achieved project savings knowing all the design development and interface issues would be handled and the components fit together to deliver a fantastic scheme within a fixed price package.  Offsite modular GRP manufacture translated to shorter on site periods and further economies achieved through strategic planning of work sequence and standing scaffold adaptions along the way.
Further details	www.design-and-display.co.uk