Updated: March 2021



## **Ornate Temple Dome**



## **Design & Display Structures**

Location	Guru Nanak Gurdwara, West Bromwich, B70
Description	An ornate profiled temple dome 7.6m tall plus khanda mounted to flat roof plinths.
Partners	Design & Display Structures (D&D - supplier), TLD Building Services (client), John R Bradbury (architect).
The challenge	Working within a very tight site space and programme schedule D&D had to bring in the fully finished segments, site assemble, hoist it out of the space to an interim lorry bed before a final lift into place.
The solution	To produce the 360 degrees ornate band on top of a double curved dome structure would have been very labour intensive and hugely expensive. By creating a modular piece of tooling that could be cast as repeating glass fibre reinforced polymer (GRP) segments the initial sculpting work only had to be done once to just 30 degrees.
Material used	<ul> <li>GRP shell</li> <li>Mirror polished stainless steel khanda</li> <li>Galvanised steel cross bracing and brackets</li> </ul>
Specific design details	D&D used a combination of Vectorworks and Rhino to produce the necessary 3D/2D fabrication and installation drawings.
Benefits	GRP is a lightweight yet robust material resulting in a less loads being placed upon the flat roof structure below.
	Modular tooling made for dramatic economies of scale and the segments prefinished to client chosen RAL or BS colour meaning no site decoration cost or programme time needed whilst affording an easy to maintain long lasting finish.
	D&D design team collaborated with the builder to ensure the plinths were constructed to the appropriate sizes and positions. With all in place before D&D arrival the site installation was undertaken in swift fashion, taking just three days start to finish.
Further details	www.design-and-display.co.uk