



Design & Display GRP Structures

case study: Barton Square Rotunda



DESIGN & DISPLAY STRUCTURES TOPS CLASSICAL VISION

Market leading GRP expert Design & Display Structures has exhibited its classical design prowess with a stunningly elaborate rotunda – 15m in diameter with turret and 19m wide simulated stone entablature – that perfectly rounds off Manchester's landmark £70 million Barton Square retail project.

Brief

The latest instalment in a string of contracts at Barton Square required a comprehensive design, manufacture and installation solution to realise the architect's neo-classical bold vision.

Calling on influences from Italian classical architecture, the Rotunda's size and complex detail meant success relied heavily on Design & Display Structures' off-site construction methods, efficient project management skills and dedication to partnering.

Its completion follows Design & Display Structures' design, manufacture and installation of the project's award winning Campanile Belfry last year. Altogether, the company's collective contract value on the development has now exceeded £1.2 million.

Solution

In a highly recognisable classical style, the dome features beautiful and ornate aesthetics inside as well as out. Internally, a shallower GRP liner with central boss and decorative cornice encases the supporting steelwork. Design & Display Structures also provided the huge GRP entablature immediately below, manufactured to match perfectly with the low level stone cladding.

From the exterior, the archetypal blue-green rotunda, crowned by a detailed turret elevating from its centre, cannot be missed. Together with the Campanile Tower, located at the opposite end of the building, it provides a striking landmark that is visible to shoppers, far and wide. Night time illumination via strings of light bulbs applied to the GRP surface add a further marketing dimension.

Benefits

The finished products were delivered to site in modular pieces and assembled at ground level into much larger sections, complete with waterproofing seals between panels. These were then lowered by crane onto the steelwork structure, which reduced the time working at height and, therefore, the scaffolding and access costs.

Using traditional materials it would have been impossible to construct a design as vast as this in the same time and budget. However, with Design & Display Structures' expertise, it was able to utilise GRP's lightweight nature and strength to produce the desired structure with maximum efficiency, on time and within the tender sum.

Client:

Bovis Lend Lease

Architects:

Leach Rhodes Walker

Project:

Barton Square Rotunda
Trafford Centre, Manchester

Products:

Design, manufacture and installation of 15m diameter rotunda with turret and 19m wide simulated stone entablature

Project Duration:

9 Months

"Design & Display met our full brief and the team were very helpful in finding the most cost-effective approach to the designs we had. Their expertise in the design/fabrications and solution of complex GRP structures was an enormous benefit to us."

Adrian Davidson, Bovis Lend Lease.