



BIM Project of the Year: Winner 2016

Land Rover BAR Americas Cup HQ and Facilities Building



Contract value: £15 million Type of work: New build – mixed use Approx m²: 6,900

Judges comments

An open procurement approach led to the team focusing on the outcome – the project progressed straight into integrated delivery. Collaboration was as critical to the success of the project as it is to Land Rover BAR Racing Team's training and strategy for winning.

For more information about the project:

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Home of Land Rover BAR Racing, and built to BREEAM excellent standards, this purpose-built facility comprises 6,874sqm of multi functioning space that brings together three key functions of boat design, boat building and racing team training; the Education Centre sits alongside and the whole project is a showcase for the collaboration of sport, innovation and sustainability. Situated on the peninsula of the Camber in the conservation area of Old Portsmouth, these headquarters are integral to Ben Ainslie and Land Rover BAR Racing. The Team has been brought together from a fragmented set of facilities to train in a single location – a really positive influence in their quest to bring the Cup home to Britain.

Building Information Modelling (BIM) played a major role in the success of the project, allowing design and construction teams to collaborate in 3D to progress at speed. The majority of base build elements were manufactured off site and installed perfectly, reliant on the accuracy of the model. Collaboration was required at all stages to realise the closely scheduled milestones. This allowed Land Rover BAR's goals to be achieved in good time: to be physically sailing, fully competitive, and in a good position to host the first round of the Americas Cup World Series Events.

Actions:

- Consultant led BIM with Soft Landings approach including client, consultants and main contractors.
- Early engagement of specialist manufacturers and suppliers to inform design decisions.
- Significant change to traditional procedures and attitudes.
- Relationships fostered throughout the supply chain and with all stakeholders.
- Major elements reliant on accuracy of the BIM model were manufactured off site.
- BIM was the design delivery tool.
- Progression of model for POE.

Results:

- A sustainable project focused on housing a sustainable team with sustainable goals.
- Innovation, including the largest fabric doors currently installed in the UK.
- Designers and contractors worked in parallel rather than usual sequencing to achieve a challenging programme.
- Fit out commenced well in advance of the building being weather tight.
- Open dialogue allowed decisions to be made in real time without compromising deadlines.
- Offsite elements installed perfectly, including curved glazing to the seven storey high prow of the building.
- Strict programme maintained.

Lessons learned/recommendations:

- POE development for research case study will be valuable for facilities and asset management of the building.
- No time for drawings – interactive review based around the model drove collaboration and led to integrated delivery.
- BIM is invaluable for precise coordination.
- BIM interoperability issues did not limit the opportunity. They were discussed and resolutions shared in-house and with software developers to improve work flows for future projects.

LAND ROVER BAR



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