

Workshops in the sky

A highly innovative access solution – which includes extensive use of Layher Allround Lightweight Scaffolding – has been achieved by contractor PHD Modular Access on one of the UK's newest, yet most iconic, structures.

Roof strengthening on the Olympic stadium, which included inspection, blasting, welding and painting processes, has increased the structure's weight from 1400 tonnes to 4000 tonnes, making it the largest cantilevered roof of its type. PHD's access solution was to use a 'top down' approach which, as Bernard Dwyer at PHD Modular Access explains, had to avoid contact with the stadium's three compression trusses.

"We utilised chains with lockable grab hooks and clutches to create a series of scaffold 'pods' fixed to every node connection point of the truss," he says. "A total of 56 high level pods were created more than 30 metres in the air above a further series of 112 lower pods, which also gained from a number of bespoke items that were developed specifically for the project. For both loading and speed benefits, we utilised the Layher Allround Lightweight system including metal decks, fire-rated ply and shrink wrap with zipped access doorways also installed at key points – the entire structure has been likened to a 'Workshop-like environment, 30 metres in the air'."

Stored on the field of play during construction, some 480 tonnes of Layher scaffold was used. With the project undertaken by main contractor, Balfour Beatty, for London Legacy, the access solution delivered by PHD also fulfilled specific timeframes associated with the use of the stadium for the Rugby World Cup in 2015.



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