

Par louvres - a breath of fresh air for Wembley...



The new spiritual home of English football forms an iconic landmark on the skyline of London. With a capacity to seat 90,000 fans it is the largest covered football stadium in the world! The statistics are quite staggering:

- The London Eye could fit between the top of the arch and the pitch
- The sliding roof alone weighs 7000 tonnes and covers 11 acres
- There are 2,618 toilets (more than any other building in the world)
- The rows of seating if placed end to end would stretch 54 kilometres
- It can be quickly converted into a world class athletics venue
- It will generate an expected 8000 permanent jobs

When building on such a scale and catering for so many peoples needs, the building services have to be able to cope with all eventualities. A crucial part of these services is the supply of air to the vast HVAC systems within the building. Par Louvre Systems were chosen by Permasteelisa, the global curtain-walling specialists, to supply and install a major installation of active and passive louvre screens into the envelope of the building. The louvre system chosen was a 33mm pitched anodised blade to provide a functional performance as well an architectural feature.

The active louvre areas are acoustically treated where required by Par, who have a specialist division that designs and manufacture acoustic systems for the HVAC and industrial noise control market sectors.

The passive areas are blanked off at the rear, but in either case, when viewed from outside, the louvre maintains a uniform appearance.

In addition to the site installed louvres, Par also worked closely with Scheldebouw (part of the Permasteelisa Group) by supplying specially fabricated louvred panels for them to factory-fit into curtain walling panels.

Par also factory fitted louvre into rain screen cladding and then installed the pre-fabricated units on site thereby saving time and money.

Specialist steelwork supports have been included for the attenuation system and 1000m² of louvre which runs around the top of the curtain wall façade providing fresh air for the plant rooms. Specially fabricated curved louvre was also supplied for the cores.

Wembley Stadium - London