CASE STUDY



THE SHARD LONDON BRIDGE

Mace Ltd obtains down-to-earth answers from i-Clean Systems – about the cleaning of 5,500 triple-glazed windows in Europe's highest building

'The Shard of Glass', in the London Bridge area, will be a 310 metres high 'vertical city' comprising 28 storeys of office space, 12 floors of residences, 6 mid-levels of public space, and 18 storeys for the Shangri-La's flagship European hotel. The project contractor Mace Ltd, and its professional partners, needed to know which design would allow the cleaning of the thousands of windows, set in a sloping façade, in the safest and most efficient way, and with the minimum intrusion for occupiers.

"There were technical challenges in abundance," comments Roger Beswick, Mace Ltd's project manager for the external envelope of the building. "The i-Clean Systems people understood what the different parties wanted from the consultation, and supplied the information for us to reach our decision on the final construction."

The Shard of Glass



The specialists from i-Clean Systems conducted trials on a prototype structure, located at the Netherlands factory of window manufacturer Scheldebouw. Three design options were considered, all with access from inside the planned building. Risk analyses, methods statements and video demonstrations were produced, with commentary on the economics of cleaning The Shard's 51,000 sq m of façade window glass and its sunblinds.

"The i-Clean Systems people were very professional in their approach, and they listened well when we explained our needs and interests," concludes Mr Beswick. "I am happy to make public our appreciation of their contribution."

The Shard was designed by the celebrated architect Renzo Piano. The tower, whose construction is planned to be complete in 2012, will have a naturally-ventilated radiator at its tip, and a public viewing gallery on the 72nd floor which offers 360° views of London and far beyond.

It is expected that The Shard will welcome more than 2 million public visitors a year, and more than 8 thousand workers, residents and hotel guests a day. Mace Ltd will deliver the project for its client Teighmore Construction Ltd, with Turner & Townsend Ltd the project managers.

Since its introduction in August 2005, the i-Clean® Cleaning Management System has attracted interest from a variety of organisations in the commercial, manufacturing, service and public sectors.