

FAÇADE ACCESS BMU V ROPE ACCESS- CASE STUDY (P.1)

Case Study: Getting it Right at Height

A large corporate client had commissioned a new 12-storey headquarters building in a city-centre location - a significant, landmark building valued at approximately £100m. The building was designed to be three sided in plan with curved corners, the roof sloped from front to back in a series of steps and the office space was distributed round the perimeter of the building leaving the centre as an open space with a full-height atrium, allowing natural daylight to flood all areas of the offices.

The appointment of a professional CDM co-ordinator (CDM-c) had been made by the client at a very early stage in the development of the project. Although an outline building design had been produced, the client had not yet selected a site from three possible locations, and no detailed design work had been carried out.

In the early stages of the design development process the CDM-c organised a Hazard Identification Workshop (HIW). Unlike a traditional design team meeting, an HIW allows all members of the design team to partake in a brainstorming meeting chaired by the CDM-C; the purpose of such meetings is to identify areas of significant health and safety concern, both during the construction and operational phases, which can be logged and considered during the design development phase.

Responsibilities are allocated to specific team members for further review with the aim of eliminating the hazard or reducing the risk prior to the construction phase, if at all possible.

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One issue that was highlighted and discussed was the cleaning and minor maintenance of the external envelope and internal surfaces of the atrium. It was suggested that this issue needed further discussion and that a further workshop be set up primarily to review the options. Initially, a cradle system was considered the favourite means of access both to the external vertical facades and the underside of the atrium glazing.

As a major landmark project, the HSE had shown a great interest in the design stages of the scheme and it was decided to invite them to the second workshop. At this session the pros and cons of the proposed cradle scheme were discussed. The problems with this traditional solution were the stepped nature of the roof, the relatively 'sharp' corners of the three-sided building and the curved vertical facades that created a 'belly' shape, all of which limited the extent to which cradle operatives could access the surfaces to be cleaned.

An alternative solution of rope access techniques was then proposed for the external envelope.

The relative merits of the two options were explored by the whole team...

