



CASE STUDY

# SPIE MATTHEW HALL, GENERATOR ACCESS PLATFORMS, RUBISLAW, ABERDEEN



## BACKGROUND

James Aiken was approached by facilities management company, SPIE Matthew Hall to provide a safe means of access for electrical engineers to work on essential roof top equipment. The building and FM specialist had installed five new electrical generators on the roof of a four storey office block in Rubislaw, Aberdeen.

The access doors on the units were at a height where engineers had to use step ladders to work on them. This was a huge concern for the HSE department as several doors overhung the edge of the building.



## CHALLENGE

As with most building and installation projects this came with its own set of challenges. The first was lifting all the heavy equipment on to the roof of a busy office environment. A large glass reception that protruded 10 metres out of the front of the building hindered crane operations.

Then there were HSE issues and the challenges of working on the edge of the roof. James Aiken and its client, SPIE Matthew Hall had to satisfy the London owners of the building and the HSE representatives of the two oil majors who leased it, that a thorough risk assessment had been undertaken. This was achieved through a series of detailed sketches and work scopes.



## SOLUTION

James Aiken employed the services of a structural engineer to test the existing roof supports and gauge the overall load that the equipment would add to the building structure.

The machine and fabrication teams built access gantries with handrails around all five units from its dedicated fabrication and machine shop facilities before delivering to site.

There was also a height issue to consider. In Aberdeen, all structures over seven metres require planning permission. In this instance a building warrant was sufficient, but James Aiken still had to employ the services of a local architect for this part.

A local scaffolding company was contracted to build temporary platforms for James Aiken's installation team, while a crane company was brought in to manoeuvre the load from the edge of the roof to the work areas. The crane had 15 lifts to make across three separate parts of the roof area. A 100 tonne capacity crane with an extended boom was deployed to reach over the glass reception canopy and carefully place the gantries and handrails on the roof for the installation team to assemble.

## RESULTS

The planning and execution went according to plan as detailed in the risk assessment and method statement prepared by James Aiken. All crane operations were conducted over the weekend and the building was closed off for safety and ease of access.

The five gantries were built and assembled in less than five days as estimated. This was the first contract that James Aiken had undertaken for SPIE Matthew Hall and subsequently led to several other important jobs that required the specialist machining and fabrication skills of the Aberdeen-based firm.

The SPIE contracts manager has since moved on and continues to use James Aiken to this day in his new facilities management role.



**JAMES AIKEN ENGINEERING SOLUTIONS IS A LEADING SUB-CONTRACTOR OF FABRICATED METAL AND PRECISION MACHINED COMPONENTS WITH EXTENSIVE FABRICATION AND MACHINE SHOP FACILITIES UNDER ONE ROOF.**



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