The engineer in his own way is an artist too - and not just a dead fish with a slide rule.
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MECHANICAL ENGINEERING

STEENSEN VARMING

39 Russell Square: Proposed cooling installations

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1.0 Introduction

This paper has been written to provide confirmation of the cooling installations proposed to be installed at 39 Russell Square as part of the planned refurbishment.

2.0 Existing installations

The are two existing external condensers which are linked to two indoor fan coil units providing cooling to existing archive stores at basement level.

There are no further existing cooling systems serving the building.

3.0 Proposed installations

The existing stores will be retained as part of the proposed refurbishment of 39 Russell Square, and as such, it is proposed that the existing cooling system will be retained to continue to meet the cooling demand for these stores.

In addition to the existing store cooling system, the design proposals include the provision of cooling to a ground floor communications/ rack room. The proposed rack room is an internal space with no windows and as such, an active cooling system is required to mitigate the heat rejected from the server racks that will be installed in this space.

The proposed system comprises two internal fan coil units, and two new external condensers, to be mounted in the same lightwell as the two existing condensers. The two new external condensers will operate in a duty/ standby configuration to help improve resilience and ensure cooling to the rack room can be maintained when required.

4.0 Summary

Under the proposed refurbishment works, the existing cooling system comprising two internal fan coil units and two external condensers will be retained. In addition, it is proposed to install a new cooling system comprising a further two internal fan coil units and two external condenser units to serve a proposed ground floor rack room.

To confirm, the only cooling proposed for the building is to serve archive stores (as existing) and a new rack room. No cooling systems are proposed to serve any other areas of the building including those that will be occupied by building users.