TROX® TECHNIK
The art of handling air

CONQUEST HOUSE, HOLBORN, LONDON (UK)

view

Application range
Office

Type
Reference

Project Stakeholder: GMS Estates
Architect: Emrys
Structural and Civil Engineers: Elliott Wood
Images: Alan Williams

A 1950s mock Georgian building required complete refurbishment to modernise the facilities. The unusually low floor-to-ceiling heights of this six-storey, 1950's steel framed, brick-clad office building made its refurbishment far from straight forward.

Conquest House won a London and South East BCO award.

Based around TROX's standard passive chilled beams, TROX UK designed and manufactured MSCB incorporating luminaires for the Conquest House project. Exposed outer profiles were manufactured from architectural grade aluminium extrusions. TROX exposed passive chilled beams are finished with polyester powder cost finish in white to RAL 9010 (20%) as standard.

Passive chilled beams are a very simple yet effective cooling device comprising of a cooling coil (heat exchanger), held within an architectural casing. The cooling coil is constructed from aluminium fins mechanically bonded on copper tube which promotes high levels of heat transfer between the surface of the copper and the aluminium fins. Chilled water, typically 1°C above the theoretical dew point, is supplied to the coil, cooling the air within the casing. The sides of the casing promote a 'stack' effect within the beam which directs the cooled air down into the occupied zone. This air is then replaced by warm air from above the coil in a continuous motion until the chilled water supply is stopped.