



Position: Principal Building Physics Engineer

Qualifications:

- BSc(Hons) Industrial Design
- STROMA Level 5 Non-Domestic Energy Assessor (IES-VE)
- STROMA Level 3 & 4 Non-Domestic Energy Assessor (SBEM)
- STROMA On Construction Domestic Energy Assessor (SAP)
- STROMA Display Energy Certificate Assessor (DEC)
- STROMA Level 3 & 4 Air Conditioning Inspector (ACI)

Memberships:

CIBSE

Neil joined Zero Energy Design in January 2021 as a Principal Building Physics Engineer.

He previously worked as a Building Energy Consultant, being responsible for achieving Part L building compliance, the reduction of CO2 emissions and the implementation of low and zero carbon technologies to achieve and exceed planning, BREEAM and compliance requirements.

Duties include the construction and analysis of thermal models utilising the IES Virtual Environment. Dynamic simulation for Part L2A assessment, heat loss & gain calculations used for correct sizing of heating and cooling equipment, overheating analysis of naturally and mechanically buildings using CIBSE TM52 & TM59 methodologies and associated BREEAM evidence and reports to satisfy ENE01, ENE04 HEA04 project requirements.

CAREER EXPERIENCE

- Site surveys of new and existing buildings for the production of Energy Performance Certificates.
- Comprehensive knowledge of design software package IES Virtual Environment including modules ApacheSim, ApacheCalc, Macro-Flo, Flucs DL, Radiance, Suncast, Vista, Vista Pro and VE Compliance
- On-Construction Domestic Energy Assessor (OCDEA) utilising Stroma FSAP to carry out domestic assessments for large scale domestic developments.

KEY EXPERIENCE

Project / Client	Details	Value	Date
London School of Economics – New student centre for LSE in Westminster	As Built Part L analysis using IES to produce final Part L compliance documents and Energy performance certificate. The new Student Centre won the 2012 New London Award (NLA) in the Education category. NLA is an Architectural competition that recognises the very best in architecture, planning and development in London.	£35m	May 2016
Ludlow Healthcare Facility	Full Dynamic simulation modelling of all aspects of the building including natural ventilation strategy, heat loss & gain calculations, Part L2A compliance and daylight analysis. The new healthcare facility was constructed to a high environmental standard and achieved a BREEAM Healthcare Excellent Rating.	£27m	March 2015
University of Cambridge – Department of Chemical Engineering & Biotechnology	Working directly for the University of Cambridge carried out a post occupancy overheating study. Site survey work and utilising IES Virtual Environment to model current internal conditions and rectify existing overheating issues. Dynamic modelling demonstrated the required adjusted supply air flow rates to maintain optimal internal conditions for staff and students.	£38m	Jan 2014

PROJECT EXPERIENCE