RIMKUS



Robert (Rab) Eadie, BSc, LLM, CEng

Director, Technical Expert

5th Floor, 40 Lime Street
London, EC3M 7AW

+44 (0) 7783 848 728

ExpertWitness@rimkus.com

Background

Rab Eadie is a Chartered Engineer with over 20 years of global experience specialising in the design, installation, and commissioning of mechanical, electrical, and plumbing (MEP) systems. Since 2017, he has been appointed as a technical expert on more than 40 occasions and has provided expert services in international arbitration, litigation, adjudication, and mediation for disputes exceeding GBP £300 million, supporting projects valued at over GBP £3 billion.

Rab has extensive experience across many sectors such as technology (data centres), healthcare, energy, aviation, retail, and accommodation (high-rise and mixed-use developments). He has served as an independent expert for cases heard at the Technology and Construction Court (TCC) and in arbitration under SIAC, ICC, and ACICA rules, providing opinions on complex technical matters.

Previously, Rab worked as a principal contractor on major projects in the aviation, technology, and energy sectors, leading large building services teams and managing subcontract packages, including design, installation, and commissioning. His technical expertise includes systems such as adiabatic cooling, BMS, CHP, fans, gasifiers, heating and cooling circuits, pumps, steam, condensate loops, VAV, VRF, VRV, and life safety systems with a focus on performance, validation, energy efficiency, and soft landings.

Education and Certifications

- **Building Services Engineering, BSc:** Glasgow Caledonian University, UK (2009)
- **Construction Law, LLM with Merit:** University of Strathclyde, UK (2020)
- **Chartered Engineer, CEng:** Engineering Council, UK (2017)

Professional Memberships

- **Member:** Chartered Institute of Building Services Engineers (CIBSE)
- **Member:** Commissioning Specialists Association, Grade 6 (CSA)
- **Associate:** Chartered Institute of Arbitrators (CIArb)
- **Associate:** The Academy of Experts

Geographies

- **APAC**
- **Middle East**
- **UK and Europe**

Sectors

- **Buildings**
- **Energy**
- **Infrastructure**
- **Water and Utilities**

Expert Witness Experience

Buildings

Data Centre, Germany

Engaged by a global engineering firm to provide expert consulting services in a U.S. federal court case concerning the design and construction of a hyperscale data centre in Germany. The case involved allegations of design deficiencies, errors, and omissions attributed to the client and its subconsultants.

The role required an analysis of the technical design issues, whilst coordinating with other expert quantum and delay teams. Rab's expertise supported the client in a complex litigation, demonstrating his proficiency in resolving high-stakes technical disputes within the data centre industry.

Data Centre (Flight Training Facility), Singapore

Appointed as the independent expert on MEP matters for a Singapore International Arbitration Centre (SIAC) arbitration involving a dispute between a construction contractor and a developer regarding a data centre for a flight training facility. The arbitration centred on the mechanical cooling; design, installation, and commissioning issues which require independent expert analysis and opinion to assist the Tribunal.

New Hospital, UK

Appointed by a leading MEP subcontractor as an independent expert to assess the adequacy of the design which included BIM for the construction of a large hospital estate in Scotland. The project faced delay and cost overruns due to alleged deficiencies in the initial Stage 4A design and subsequent design changes.

Mixed Use Development, UK

Appointed as an independent expert by a MEP trade contractor to assess responsibilities related to the design and specification of a life safety generator for a development in London. The dispute, to be heard at the Technology and Construction Court (TCC), centred on whether the consultant’s design constituted a complete specification, and whether subsequent issues fell within the contractor’s responsibility.

Mixed Use Development, UK

Produced multiple expert reports for a series of adjudications. A construction development of more than a billion (GBP) comprised of several blocks for retail and commercial use. Commenting on the adequacy of a novated building services design with specific regards to the coordination of the MEP plantrooms and risers.

Student Accommodation Blocks, UK

Produced an expert report in preparation for adjudication. The development comprised of two blocks totalling over 200 apartments. Commenting on building specifications, British Standards, and guidance with regard to the testing and commissioning period. The testing and commissioning period considered all the systems and items of equipment that serviced the development.

High-Rise Apartment Block, UK
Appointed as the expert witness in preparation for a case to be heard at the Technology and Construction Court (TCC). Commenting on building regulations and British Standards with regard to workmanship issues, specifically ventilation and domestic hot and cold water systems.

New Hospital, Australia
Assisting the appointed expert on an international arbitration (ACICA). Carried out investigation and provided analysis relevant to the role of the independent certifier. Specifically, the technical completion testing, validation, and construction defects.

Mixed Use Development, UAE
Assisted the appointed expert on a mixed-use hotel, commercial, and retail tower block. Specifically, on issues relevant to MEP such as commissioning, chilled water systems, and providing analysis of utility services and co-ordination of on-site works.

Military Base, South Korea
Assisted the appointed mechanical expert on a multi-discipline international arbitration. Investigated defective works in a military compound and provided guidance on HVAC systems and commissioning activities.

University, UAE
Assisted the appointed building services expert as part of a multi-discipline team on an international arbitration regarding design liability and development. Responsible for investigating multiple claims in relation to building services (laboratory gases, fire suppression, ventilation, and commissioning).

Energy

Energy from Waste Plant, UK
Assisted the appointed expert in an advisory role on behalf of a major UK contractor on an Energy from Waste (EfW) plant. The insurance claim considered the American National Fire Protection Association (NFPA) industry standards and guidelines for fire protection and their application to the EfW plant.

HV Interconnector Substation, UK
Appointed by a major energy operator as an independent expert to provide interpretation of a method statement which considered the installation of a fire suppression system at a critical facility. The adjudication proceedings followed an environmental incident which occurred during testing, the role focused on assessing compliance with procedural requirements and clarifying responsibilities.

Infrastructure

Major Airport, Netherlands
Appointed as lead expert on a mediation and subsequent legal proceedings *Hoge Raad* (Supreme Court). Advisory in matters relevant to building services engineering (MEP). Specifically, providing opinion on the technical design level of detail regarding the MEP systems. Further identifying deficiencies, errors, and coordination issues in the design.

Major Airport, Qatar
Appointed as assistant to the lead expert on an international arbitration (ICC), advisory in matters relevant to building services engineering (MEP). Specifically, the site utility requirements, such as design and co-ordination of the potable water, wastewater, and fire water systems.

Major Airports, Oman
Appointed as assistant to the lead expert on an international arbitration, advisory in matters relevant to building services engineering (MEP). Specifically, the design, installation, and commissioning of the BMS, SCADA, firefighting, fire detection, and access control. Further providing opinion on the co-ordination of the MEP services and interface with baggage conveying.

International Airport, Australia
Assisted the appointed experts as part of a multi-discipline team in the preparation of expert evidence to be heard at the Supreme Court of Western Australia. Specifically investigating issues in relation to design liability and development of the mechanical systems.

Water and Utilities

Water Storage and Recovery Facility, UAE
Assisted the appointed expert in an advisory role, on behalf of the project manager (local authority), for a large water reserve in UAE. Specifically investigating and providing technical analysis of the contract variations.

Desalination Plant, Qatar
Assisted the appointed expert in an ICC arbitration on behalf of the claimant, an Italian specialist sub-contractor, for a desalination and power plant in Qatar. Specifically investigating and providing technical analysis of the contract variations and providing technical input for an Extension of Time (EOT) claim.

Project Experience

Buildings

New Stadium, Qatar
Part of a multi-discipline team appointed by the building services contractor. With an initial “build only” contract value of USD$236 million, the contractor was responsible for the installation of the MEP services, including a fully air-conditioned pitch and stadium amounting to 100MW of cooling for the players and fans. Supported the client through the dispute resolution process, assessing claims and contractual entitlement; in particular, preparation of an EOT, variations, and costs associated with systems such as mechanical cooling and commissioning.

New Hospital, UK
Appointed as part of a multi-discipline team of technical, quantum and delay consultants in a Cost to Complete (CTC) exercise on behalf of the project insurers following the liquidation of the main contractor. Responsible for the investigation and reporting of the mechanical and commissioning packages on the hospital’s critical path to completion; in particular, medical gases, sprinklers, water treatment, and hydraulic balancing of ventilation, heating, and cooling systems.

Data Centre, North Lanarkshire, UK
Mechanical lead for the principal contractor in the construction of a prospective 10MW data centre, one of the first purpose built in Scotland. Responsible for design diligence, mechanical installation, and commissioning of the tier 3, uptime institute accredited facility.

Data Centre, London, UK
Principal contractor responsible for the design implementation of a critical data centre for a global bank. Pre-construction role involved developing a design that met the client’s engineering and facility teams’ expectations whilst satisfying a requirement to manufacture and assemble the building services package off site.

Schools, Edinburgh, Perth and Kinross, UK
Mechanical package manager responsible for design diligence, delivery, and commissioning of specific mechanical systems including heating, cooling, ventilation, public health, and sprinkler systems.

Various Construction Sites, UK
Between 2004 and 2008 (pre-qualification), undertook various site roles on construction projects across the UK, including schools and retail developments. Roles included labourer, CAD technician, scholar/trainee, and apprentice engineer, before earning a degree and professional qualification in 2009.

Energy

Energy Centre, Caithness, UK
Acted as principal contractor on a 5MW facility on behalf of a London-based investment firm. Leading the project, responsible for contract negotiation, design, commercials, programme, and commissioning. Managed the direct labour force and sub-contract packages including civils, builders, façade and other specialist suppliers.

Infrastructure

Heathrow Airport, UK
Managed and co-ordinated a global building services design team. The longest-serving mechanical engineer on the contract, responsible for the design development and implementation of the Terminal 2 building. Led the installation of departures and mezzanine levels which involved over 300,000 direct labour man hours and multiple specialist contractors.

For the final 18 months, led the commissioning team on the largest building services contract in the company's history. Following the delivery of the Terminal 2 project, the client invested further in the cat A+ fit out of the building, expanding the security search area, enhancing the tenant back-of-house facilities, and passenger front-of-house experience. Acted as principal contractor and led the building services team responsible for 141 direct employees and multiple sub-contracts at peak construction.

Professional Experience

- **Rimkus (Formerly Capital Consulting International, CCi)** **2024 – Present**
  - Director
- **HKA** **2017 – 2023**
  - Associate / Technical Director
- **FES Group** **2015 – 2017**
  - Project Manager
- **Laing O'Rourke** **2008 – 2015**
  - Mechanical Engineer

Publications

- **Data Centre Ventilation Fine Tuning and Performance Analysis**, Commissioning Specialist Association, 2017
- **Energy Performance Guaranteed… Protecting Energy Investments**, HKA, 2018
- **Championing the Year of Engineering**, HKA, 2019
- **Completions Provisions in the Built Environment, a Study of Handover Mechanisms with Consideration for Future Building Operations**, Strathclyde University, 2020

- **Picking Up the TAB… The Importance of Commissioning in the Built Environment**, Building Magazine, 2021
- **The Art of Performance… Post Occupancy Evaluation – will it cause additional litigation owing to building performance not measuring up to POE studies versus original claimed performance levels?,** RIBA Journal, 2022