

SIMON BARROWS
CEng FCIBSE MSLL MAE MEWI MCI Arb
CHARTERED ELECTRICAL ENGINEER & EXPERT WITNESS

Practicing Chartered Electrical Engineer, Expert Witness and Forensic Engineer, focused on working with independence, with high integrity and impartiality, an articulate mediator with over forty years' experience, highly developed proactive interpersonal skills, very experienced at obtaining and disseminating information, extensive technical knowledge of all aspects of electrical building services engineering, numerate and financially astute



Contact Details

Simon Barrows
Managing Director
Serendipity Chartered Engineers
PO Box 704
JE4 0HP

(W) + 44 (0) 1534 565 829
(M) + 44 (0) 7797 791 025
(E) simon@serendipitycharteredengineers.co.uk

Accreditations

- Chartered Engineer, Engineering Council
- Fellow of Chartered Institution of Building Services Engineers
- Member of The Academy of Experts
- Member of the Expert Witness Institute
- Member of the Society of Light and Lighting
- Member of The Chartered Institute of Arbitrators

Electrical Building Services Technical Specialisms

- Non-essential and essential electrical infrastructures
- Emergency standby generation and uninterruptable power control logic and supplies
- Building management systems
- Sustainable wind and photovoltaic power supply systems
- Telecommunication and computer data infrastructures
- Interior, exterior, emergency, laser, and feature lighting
- Fire alarm and smoke ventilation systems
- Closed circuit television, intruder alarm and access control systems
- Conventional and fire fighting lift installations
- Lightning protection, conventional, clean earth and computer earthing systems

Expert Witness and Forensic Engineering Expertise

- Mediation, arbitration, litigation, technical and contractual assistance to legal profession
- Liaison with Claimants, Defendants, Advocates, Solicitors, Insurers & Loss Adjusters
- Single and Joint Expert Witness in accordance with Part 35 of the Civil Procedure Rules
- Attendance at court, case cross examination of expert witness reports
- Compilation of desk top study and site investigation expert witness reports
- Compilation of detailed forensic inspections and expert witness report compilation
- Building inspections for compliance to Electrical British Standards & other codes of practice
- Compilation of bankable studies and Scott Schedules
- Identification of causation, production of remedial work strategies
- Quantum and commercial analysis of cost claims and losses
- Due diligence and dilapidation surveys
- Legislative compliance to national and international standards

Insurance

- Expert work, mediation, and arbitration professional indemnity insurance
- Public and Products Liability Insurance

Recent Cases Snapshot

Pulsant v John Heaney Electrical

Quantum of cost expert witness report produced to ascertain if the cost of remedial work undertaken on a data centre's critical electrical infrastructure was reasonable and were not enhanced (Betterment).

Microlights v AV Lichtplanners BV

Microlights UK had entered into a formal agreement to provide luminaires to Lichtplanners BV Holland. In contravention of the formal agreement, the lighting designer/installer sold similar alternative luminaires. A technical and physical comparison expert witness report was produced, which in AV Lichtplanners striking Microlights out of their supply chain.

The Extra Care Charitable Trust v Willmott Dixon

Willmott Dixon had installed recessed downlighters into a care village comprising of 350 apartments. Downlighter lamps were continually failing and had a very short life. Extensive testing was undertaken in a British Standard approved lighting laboratory, which confirmed that the lamps were overheating and failing due to poor downlighter design and inadequate false ceiling void ventilation. An expert witness report identifying non-conformance to relevant British Standards was produced. Willmott Dixon capitulated and initiated an extensive remedial British Standard certified downlighter retrofit program of work.

Beesley Builders v Scottish and Southern Energy

Scottish and Southern Energy incorrectly insisted that a substation must be constructed specifically on site to serve a small residential apartment development. The substation was subsequently removed by Scottish and Southern Energy, resulting in Beesley Builders accruing substantial increased cost and programme delays. Beesley Builders, the Solicitor and I discussed the issue and quantum of cost at a pre-action meeting, which was mediated in Beesley Builders favour.

Uninterruptible Power Supplies Ltd v Shield Batteries

Uninterruptible Power Supplies Ltd, issued proceedings against Shield Batteries stating that they had manufactured defective batteries which resulted in several Uninterruptible Supply Units suffering thermal runaway and catastrophic failure. Site inspection of the Uninterruptible Supply Units ascertained that their batteries were overheating due to poor battery cabinet ventilation and location without considering the manufacturers installation guide. An expert witness report was produced, which resulted in Uninterruptible Supplies Ltd withdrawing their claim.

Anchor Trust v Galliford Try

Extensive electrical inspections and production of an expert witness report demonstrated widespread non-compliant defective electrical services installations within an assisted living development comprising 65 apartments. Attempts were made to mediate a solution with Galliford Try, which failed. Due to urgent Health and Safety concerns, Anchor Trust undertook remedial work at their cost. Anchor Trust took this case to court. They were successful in obtaining significant compensation costs from Galliford Try.

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The Extra Care Charitable Trust v Galliford Try

An extensive site survey was undertaken to ascertain why the warden call system pull cord switches installed within a care village comprising of 327 apartments intermittently initiated an alarm when triggered. Intensive laboratory testing was undertaken of the pull cord switches, which demonstrated that the actuating mechanism of the ceiling mounted pull cord switches was not fit for purpose. An expert witness report was produced. Galliford Try admitted liability and replaced several thousand defective ceiling mounted pull cord switches at their cost.

Medway Maritime Hospital NHS Trust v Crown House Engineering

The Hospital claimed that their life critical support electrical infrastructure had failed several times in the event of power failures. I reviewed an expert witness report commissioned by the Hospital and attended site to inspect the electrical installation, plus produced an alternative expert witness report. My expert witness report concluded that the Hospital had detrimentally modified the electrical switchgear. A mediation meeting quashed claims made by the Hospital's Expert Witness and the case was immediately dropped.

Mr Wilcox v Meridian Blinds

Mr Wilcox instructed a desk top study expert report to be produced to ascertain why two large second floor power operated external vertical window blinds had failed to operate correctly. Meridian Blinds had produced a bespoke design, plus supplied, installed, tested, and commissioned the blinds and power supplies to them. The expert report concluded that Meridian Blinds were not accredited Electricians and had installed electrical equipment that did not have sufficient Ingress Protection rating to withstand a maritime climate. Meridian Blinds agreed to remove their equipment and compensate Mr Wilcox for loss of money and inconvenience.

Orkney Health Board v G & A Barnie

G & A Barnie was contracted by Orkney Health Board to install new fibre optic cables within an existing buried duct and chamber infrastructure. Whilst undertaking their work G & A Barnie broke an existing fibre optic cable housed within an existing buried duct. This resulted in a loss of connectivity to the internet and Council hosted IT services at 48 sites in total, some of which supported critical life safety services belonging to Orkney Health Board. I was appointed by Orkney Health Board to produce a desk top study expert report, which identified G & A Barnie's failure of their duty of care to insure no loss of IT services, whilst undertaking their work. The expert report was successfully used in a court case by Orkney Health Board's lawyer, which resulted in significant compensation being awarded to Orkney Health Board.

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Attorney General v Rok Homes

Rok Homes were charged with acting in contravention of the Health and Safety at Work (Jersey) Law, by being a relevant contractor, who had breached Regulation 21 of the Health and Safety (Management in Construction) (Jersey) Regulations. The Attorney General claimed Rok Homes had failed to ensure that an existing Jersey Electricity cable connected to one of their sites known as Pine Ridge house had not been properly identified and the risk assessed to prevent potential harm to any persons carrying out construction work. This failure supposedly resulted in two Jersey Electricity operatives receiving electrical shocks. On behalf of Rok Homes I was appointed to produce a desk top study expert report, which explained the Operatives could not have received electrical shocks. During the court case I was cross examined, Rok Homes were found not guilty and were awarded costs and financial compensation.

W1 Development v Casais Construction Gibraltar

A 12-story luxury apartment block was constructed by Casais Construction Gibraltar. During the 12-month defects liability period, numerous serious electrical services defects identified by the Building Services Consultant were not completed satisfactorily in accordance with the terms of Casais Construction Gibraltar's contract. I was appointed by W1 Development to undertake a comprehensive visual survey of the apartment block and compile an expert witness report to present my findings. After a series of mediation meetings and site inspections with W1 Developments the Building Services Consultant and Casais Construction which were held over a 12-month period, all electrical services defects were rectified to the satisfaction W1 Development and me.