



design

Irons Foulner provide a full design service for mechanical and electrical installations in buildings including:

heating, ventilation, air conditioning, water services, lighting, electrical supply and distribution, fire detection and alarms, security installations, structured datacoms cabling.

We are also able to provide design services for specialist installations such as medical and laboratory gas installations, steam distribution and special process services.

The projects profiled under the various sectors on our web site provide an illustration of just some of the buildings in which we have been involved and the range of different services design challenges we have successfully faced.



cost advice

We can offer a cost advice service for mechanical and electrical installations ranging from preliminary cost estimates for systems to bills of quantities and post contract cost control. We work with our design team quantity surveying colleagues on most projects, but can also provide a completely independent service when required.



investigations

Irons Foulner are often engaged to carry out investigations of problems with the mechanical and electrical installations in buildings, or to make an independent appraisal of designs.

We have engineers with a breadth of experience underpinned with sound theoretical knowledge who are able to carry out forensic analysis of the design and /or performance of systems to determine how they operate and what can be done to address any perceived deficiencies.



expert reports & expert witness services

As an extension to our capacity to investigate perceived problems with existing installations, Irons Foulner are also able to provide expert reports and expert witness services as part of adjudication processes or full legal proceedings. Details of this area of our work are sensitive, but some broad examples of the kind of disputes in which we have provided advice are noted below:

A large biotechnology research facility where problems arose with containment suites, air conditioning, process steam generators and effluent disposal systems. Legal action was initiated by the Employer against the designers and a settlement was eventually reached.

A large Weapons Effect Simulator facility for the MoD where the client had concerns about the design of the engineering support services for critical areas of the installation and required a design audit prior to construction. Major changes were implemented on our advice.

A large hotel chain where problems arose with a number of areas in their newly constructed hotels including bedroom air conditioning systems and kitchen ventilation. A number of Adjudications and on-going legal actions were involved.

An underground car park smoke extract and general ventilation system in a large office building developed serious problems due to the repeated catastrophic failure of the main fans. A settlement was reached between the contractor and the fan manufacturer.

Various significant problems with the mechanical and electrical services in a large entertainment and leisure complex were alleged and legal action was initiated against the designers. We acted for the defender in an interim Adjudication and then subsequently in the preparation of the defence for a court action. The pursuers subsequently withdrew with a minor settlement over costs incurred thus far in the actions.