



# COMMISSIONING

Such is the importance of commissioning in the successful delivery and operation of buildings that we have teamed up with the Commissioning Specialists Association to increase awareness of the benefits of a sound approach to commissioning — starting early in the design stage. Readers are encouraged to visit the association's web site at [www.csa.org.uk](http://www.csa.org.uk)

## Managing commissioning to deliver design performance

With the commissioning of buildings and their services now enshrined in the Building Regulations, **Nick Till** explains how to achieve those expectations.

**C**ommissioning today's buildings requires a systematic process of ensuring equipment performs to meet the client's requirements, the design and the contract conditions.

Buildings today are complex in both their design and construction, so commissioning needs to be thought over from the very start of a project. That way procedures for testing and commissioning are developed throughout the design phase ready for implementation in the commissioning phase and, ultimately, future operation.

How commissioning is managed depends very much on the type of facility, and the approach can be very different. The level of effort also required also varies at different phases of the project life cycle.

If the commissioning process is planned and detailed clearly, and then agreed at this very early stage, project completion should be achieved within programme. The process will also ensure delivery of a fully compliant quality building-services installation at handover and beyond.

Commissioning managers have proven to benefit the construction and handover process, and their involvement is now called for under the Building Regulations L2A Quality of Construction, which stresses two main points.

- A commissioning plan has been followed so that every system has been inspected and commissioned in an appropriate sequence and to a reasonable standard.
- The results of tests confirm the performance is reasonably in accordance with the actual building designs

It would be helpful if such declarations were signed by someone suitably qualified by relevant training and experience. A way of achieving this would be to employ a member of Commissioning Specialists Association.\*



The very early stages of the building design is when commissioning should be considered and planned.

### Commissioning engineers as leaders at the construction stage

Having planned the commissioning process as called for by the Building Regulations, effective commissioning and management can be defined to ensure the installation is commissionable, that it meets the contract and achieves quality standards. Taken together,

**“If the commissioning process is planned and detailed clearly, and then agreed at this very early stage the desired quality and performance of the installation will be achieved at handover and beyond”**

these will minimise potential deficiencies and delays at a later stage.

By collaborating with the project team, commissioning engineers can improve scheduling, thereby reducing construction costs and potential delays.

A managed process also drives the commissioning stage and helps the consultant understand what is being tested and how to ensure the design is being achieved. It also helps building operators understand what they are inheriting, which in the long run optimises future building performance.

The end objective is to deliver a building that achieves its design criteria and, at the same time, deliver a series of benefits to the its owner or operator.

- Consistent energy performance to deliver long-term savings.
- Improved thermal comfort by achieving proper environmental control.
- Improved indoor air quality.
- Improved operations and maintenance through the provision of good documentation.
- Improved system functions that ease facility.
- Improved turnover from contractor to owner.

### The end result

It is essential buildings are handed over fully compliant with the design specifications and contract conditions. With the Part L requirements it is also important to ensure systems are commissioned efficiently; with commissioning managers on board this process can be fully managed in conjunction with the project team.

*Nick Till is managing director of Banyard Group and chairman of the Commissioning Specialists Association.*

\* [www.csa.org.uk](http://www.csa.org.uk)