The Building Log Book

Contents

1.0  The Building Log Book
     1.1  Summary

2.0  Relationship with other documents

3.0  Responsibility for Production

4.0  Statutory requirements
     4.1  New buildings
     4.2  Existing buildings

5.0  Compliance

6.0  Purpose

7.0  Contents

8.0  Format of the Building Log Book
     8.1  Size
     8.2  Style and content
     8.3  Copies
     8.4  Paper copy
     8.5  Electronic copy

9.0  Development of the Building Log Book

10.0 Completion and handover to the Council

11.0 Changes during the defects liability period

12.0 Premises Manager after Handover
1.0 Building Log books

1.1 Summary

The provision of a Building Log Book is a Statutory Requirement of The Building Regulation 2010, Approved Documents L2A and L2B.

The Building Log Book is a single copy of a separately produced document and is not to be confused with the any other documents required for building works e.g. the Operation and Maintenance (O&M) manuals or the Health and Safety File.

The Building Log Book is to provide a simple summary document, describing how the new or refurbished building is intended to work and be serviced. It also provides a means to log the energy performance and maintenance of the services within the building and an historical record of building alterations, maintenance and energy performance.

The intention of the Log Book is to ensure that sufficient information is available to the Council’s Premises Manager or equivalent responsible person to enable energy consumption to be monitored and controlled in accordance with the design intent. It will also improve the understanding, management and operation of buildings and result in more sustainable buildings with lower running costs for Cornwall Council.

The Lead Consultant/Designer is to be responsible for providing The Building Log Book for Handover and Practical Completion of the Building Works.

Target audience

- the Client, who briefs the design team to ensure that a good quality log book is produced
- the Lead Consultant/Designer, who is to be responsible for developing the building log book
- any specialist O&M manual authors who are likely to be carrying out final production of the log book.

2.0 Relationship with other documents

There are direct links between the Building Log Book and the O&M manual, record drawings and the Health and safety file etc. The Log Book is a summary of key information with the other relevant documents referred to within it.

It is acceptable to have overlap between the Building Log Book and these other documents but it is essential that the content and written style of the Log Book is simple and summary in nature.

Cornwall Council will not accept the O&M manual as the Building Log Book.
3.0 Responsibility for production

It is ultimately the client’s responsibility to produce the Log Book. However, while a building is being produced or altered, those employed to carry out the work have a responsibility to ensure that statutory requirements are met.

The Lead Consultant/Designer shall be the single point of responsibility and obtain, coordinate and provide the Council with the Building Log Book, being responsible for ensuring the content and completion of the Log Book, even if its final production is sub-contracted to specialist authors.

In order to satisfy the statutory requirements of the Building Regulations, Approved Documents the Lead Consultant/Designer shall be fully responsible for the preparation, production and submission of all information required to fulfil the contract requirements for the production of a Building Log Book.

Much of the information will be produced by the Design Engineer during the design process and implemented as part of the scheme. In some cases authorship may be sub-contracted, subject to the approval in writing by the Council.

The Mechanical and Electrical Services Designers shall ensure that in addition to the requirements for the O&M manuals, all the necessary information for the compilation of a Building Log Book, as described in ‘Building Log Book Toolkit, a guide and template for preparing log books’, CIBSE TM31:revised, suitable for the property shall be provided to enable completion by the Lead Consultant/Designer.

The production of the building log book is ongoing and should not be left until Handover/Completion of the projects.

CIBSE TM31 recommends that:
• clients make it a contractual requirement that the copyright of the log book is assigned to the client and
• the Lead Designer and the Log Book author should examine their respective professional indemnity insurance policies to ensure that it provides suitable protection against any future claims.

4.0 Statutory requirement

4.1 Generally


These two legislative documents provide guidance on meeting the requirements for providing the information for the building log book as follows.
4.2 New Buildings

*Regulation L2A, ‘Conservation of Fuel and Power’ – in new buildings other than dwellings*

Regulation L2A requires that the owner of the building shall be provided with sufficient information about the building and fixed building services and their maintenance requirements so that the building can be operated in such a manner as to use no more fuel and power than is reasonable in the circumstances.

This regulation requires that:
- the data used to calculate the TER (target emission rate) and BER (building emission rate) should be included in the building Log Book
- the Premises Manager should be provided with the recommended report generated in parallel with the ‘on-construction Energy Performance Certificate (EPC)’ – which will inform the occupier how the building might further be improved.

4.3 Existing Buildings


*AD L2B* covers works in existing buildings, in particular the replacement of controlled services or fittings. This could include the replacement or upgrading of systems and the installation of new systems.

Replacement boilers would therefore need appropriate metering and a new/updated metering strategy would need to be included in the new Log Book if an existing one did not exist.

For existing building it is the same requirement but applies only to the work that has actually been carried out.

The new or updated Log Book is also required to provide the following:
- any newly provided, renovated or upgraded thermal elements or controlled fittings
- any newly provided fixed building services, their method of operation and maintenance
- any newly installed energy meters;
- any other details that collectively enable the energy consumption of the building and building services constituting the works to be monitored and controlled.

5.0 Compliance

The Approved Documents suggest a way of showing compliance would be to produce the necessary information following the guidance in ‘Building Log Book Toolkit, a guide and template for preparing log books’, CIBSE TM31:revised, with information presented in templates as or similar to
those in the aforementioned toolkit or to add it to the existing logbook where this already exists.

The information shall be provided in summary form, suitable for day-to-day use. It can draw on, or refer to information available as part of other documentation, such as the O&M manuals and The Health and Safety File required by the CDM Regulations.

If an alternative guidance document is followed in preparing the Log Book, then the information conveyed and the format of presentation should be equivalent to CIBSE:TM31.

On completion of the work, the new or updated logbook should provide details of:

a) any newly provided, renovated or upgraded thermal elements*
b) any newly provided fixed building services, their method of operation and maintenance,
c) any newly installed energy meters
d) any other details that collectively enable energy consumption to be monitored and controlled. e.g., where boiler replacement is undertaken, a Log Book would need to be prepared covering that new boiler plant and, preferably, the whole heating system. Where a Log Book already exists then it would need to be updated.

AD L2B also suggests that where the work involves the provision of a controlled service, reasonable provision would be to:
e) demonstrate that reasonable provision of energy meters has been made for effective monitoring of the performance of newly installed plant
f) demonstrate that the relevant information has been recorded in a new Log Book or incorporated into an update of the existing one

The building regulations AD L2A also suggest that it is sensible to retain an electronic version of the TER/BER input file for energy calculation to facilitate any future analysis that may be required.

6.0 Purpose

A Building Log Book shall provide an overview of the fundamental principles behind the design to facilitate operation and maintenance.

The Logbook aims to: -

- span the gap between design and operation
- improve building users / Premises Manager understanding of the design intent
- enhance the commissioning and handover process
- provide more concise and accessible information than that contained in O&M manuals
- provide a vehicle for recording building alterations and performance
- provide useful information to letting agents and developers at the point of sale/letting.
The Log Book helps:

a) The Client:
   - to know more about the building he/she is acquiring / using
   - to sell/let the building with more confidence

b) The Designer:
   - to ensure that the client’s requirements are laid down throughout the process
   - to ensure that the actual design intent is passed to the facilities manager

c) The Premises Manager:
   - to have a better understanding of the building
   - to develop a historical record of the building

d) The Occupants:
   - to understand better how to use their space
   - improve levels of comfort and energy efficiency.

The Log Book should give the Premises Manager ready access to information on the design, commissioning and energy consumption of their building and enable fine tuning of the building with consequent improvements in energy efficiency.

It shall provide explicit information about the metering strategy implemented in the building, and on the scope for monitoring and benchmarking energy consumption.

Preparation of Log Books for existing buildings may be linked to refurbishment work, or to replacement and renovation of specific services or elements. The Log Book shall provide a better understanding of the design intent and improve building management. The ongoing use of the Log Book shall provide a means of recording the building performance and facilitate improved energy consumption and reduced emissions from most existing buildings.

7.0 Contents

The CIBSE Building Log Book Toolkit, (TM31)
The format of the Building Log Book will be as follows, with Proforma sheets for Log Book Updates & Annual Reviews.
The overall contents list of the main template (and hence all future log books) is shown below:
1. Building history Updates and annual reviews
2. Purpose and responsibilities
3. Links to other key documents
4. Main contacts
5. Commissioning, handover and compliance
6. Overall building design and conceptual design review
7. Summary of areas and occupancy
8. Summary of main building services plant
9. Overview of controls/building energy management system
10. Occupant information
12. Building energy performance records
13. Maintenance review (with list of Operational & Energy Saving works to be carried out to Optimise the Design Philosophy)
14. Results of in-use investigations including Statement of Calculation Results and Assessment for Carbon Emissions including Summary of overall fossil fuel consumption & CO2 against simple benchmarks.

Appendix: relevant compliance and test certificates

If any part of the template is omitted then designers/authors shall ensure that it will still meet the requirements of building control and the recommendations given in the Approved Documents.

8.0 Format of the Building Log Book

8.1 Size

Completed Log Books will vary in size depending on the size and complexity of the building. Guidance on how long each section in the Log Books in CIBSE:TM31 recommends that Log books greater than 50 pages are unlikely to function as an easily accessible management summary, even for very large complex buildings.

8.2 Style and content

The contents list and distinctive CIBSE style to be reasonably similar to the original TM31 templates so it is easily recognisable to anyone working in the industry. The templates provide an easy to use framework for developing log books and are provided in Microsoft® Word.

At handover, the Log Book should be between 20 and 50 pages (5-10 pages for premises less than 200m2) in order to make it a useful and easily accessible summary

8.3 Copies

Cornwall Council shall require one hard copy of the Building Log Book and one electronic copy on CD, structured to match that of the hard copies and shall include hyperlinks for quick access to the relevant sections and subsections of the manual.

8.4 Paper copy

It is anticipated that only one paper copy would be produced and given to the Premises Manager via the Project Manager at handover

The Paper based Log Book should generally be kept in a loose leaf ring binder to allow the Premises Manager to update the document easily. It is
preferable to use a distinctive, well-labelled ring binder to make this stand out.

8.5 Electronic copy

The Council will also require an electronic version that can be easily updated, to be provided at Handover.

Each new version of the electronic copy of the Log Book should be clearly dated. The electronic copy shall be produced using Microsoft® Word and the version to be used shall be agreed at the pre-contract meeting.

9.0 Development of the Building Log Book

The Log Book must be a summary document that will be easily understood by the Premises Manager and building operators, and non technical readers. It should not be a heavily ‘technical’ document but a management tool for running the building. Keep it easy to read and use with simple explanations with minimum jargon, utilising diagrams where possible.

Where possible, the Premises Manager should work with the author to develop a Log Book that specifically meets their particular needs.

The guide shall be prepared in draft prior to the instruction sessions presented to the Client’s staff and shall be amended as necessary to reflect any areas of concern voiced by the staff.

10.0 Completion and handover to the Council

Prior to handover, the design team and contractor should train the Premises Manager to use the Log Book. A user’s guide to building log books is available from the Carbon Trust GPG348 Good Practice Guide, Building Log Books – a users guide, Better information for better buildings, guidance for Facilities Managers.

The objective is to ensure that the Premises Manager would be able to use the Log Book to:

- operate and manage the building to its maximum potential
- record significant changes made to the building throughout its life and ensure that inappropriate changes are not made that would contradict the design intent
- summarise historical performance of the building; the Log Book would include a metering strategy setting out how to monitor performance
- educate the building management staff, incoming consultants/contractors and the occupants of the building as to the intended use of the building and, for example, the reasons for not leaving windows open etc.

The final information shall be produced 2 weeks prior to Handover to enable sufficient time for the collation/production of the completed Building Log Book.
The completed Log Book shall be available at handover. The Council will not accept handover or the responsibility for maintaining the equipment, plant and systems prior to being in possession of the Log Book.

Failure to produce the required format for the Log Book at the appropriate time may result in Building Regulations approval not being granted. It is therefore imperative that due allowance is made within the tender documentation for this element of work.

If Log Book is not completed to the full satisfaction of the Council’s representative, the Council shall be entitled to have the manuals prepared by another Consultant and recover the full costs incurred from the Consultant responsible for producing the Building Log Book. No claim for payment will be entertained for manuals partially completed.

After handover, the Premises Manager will take over responsibility for the log book and will therefore be required to sign the log book to record this transfer of responsibility.

11.0 Changes during the defects liability period

Where changes are made to the building or its services during the defects liability period, the Log Book needs to be updated. Updating the Log Book during this period would usually be the Designer’s responsibility although this will depend on the specific contractual arrangements.

Any changes shall be agreed and dated by the Premises Manager to ensure a clear historical record of the building.

12.0 Premises Manager after Handover

The Log Book is to be kept in a designated location and not to be removed without the Premises Manager approval.

To run the building effectively and efficiently the Premises Manager will need to be provided with a simple statement of how the building is intended to work and the maintenance requirements.

The Log Book is to be kept up to date by doing an annual review as part of the quality assurance system, particularly energy performance, maintenance and alterations to the building. The Premises Manager may decide to ask others to provide the information e.g. develop diagrams or energy figures, but there must be an authorising signature before this goes into the Log Book.

The Premises Manager should always ensure that they know who is accessing the information and why. Only the Premises Manager should be allowed to formally maintain, alter and update the Log Book.
Prepared by:

**Strategic Planning and Standards**

Property Services

July 2012

If you would like this information in another format please contact:

**Cornwall Council**
**County Hall**
**Treyew Road**
**Truro TR1 3AY**

Telephone: **0300 1234 100**

Email: **enquiries@cornwall.gov.uk**

www.cornwall.gov.uk