

The Chartered Society for Worker Health Protection

# **Certificate of Competence**

# Control of the Working Environment

**Qualification Guide** 

PQA-POL00X Version 5

August 2020

#### Contents

1. Qualification Overview	3
1.1 Qualification Introduction	3
1.2 Entry Requirements	4
1.3 Application Procedure	4
1.4 Using the Online System	4
2. Pathway 1: Report	5
2.1 General Information	5
2.2 Subject of the Report	5
2.3 Preparing a Report	6
2.4 Submission of Curriculum Vitae	7
2.5 Submission	7
2.6 Assessment and Results	8
2.7 The Next Step	8
3. Pathway 2: Portfolio of Evidence	9
3.1 Objective of the Portfolio of Evidence	9
3.2 Contents of the Portfolio of Evidence	9
3.3 Format of the Portfolio of Evidence	10
3.4 Submitting a Portfolio of Evidence	10
3.5 Assessment and Results	11
3.6 The Next Step	11
4. Professional discussion	12
4.1 Booking your professional discussion	12
4.2 Information about the Professional Discussion	12
4.2.1 General Information	13
4.2.2 Specific Requirements	13
4.2.3 Further Information	13
4.3 Results	13
Appendix 1 - Progression Routes to the CoC Control of the Working Environment	
Qualification	15
Appendix 2 Competency Matrix- CoC Control of the Working Environment	16

#### **1. Qualification Overview**

#### **1.1 Qualification Introduction**

The Certificate of Competence [CoC) in Control of the Working Environment is for candidates wanting to establish their competence in the specific field of Control of the Working Environment and follows on from successful completion of the appropriate Proficiency Modules or Occupational Hygiene module.

Having passed the Proficiency modules P601, P602, P603 and P604 or alternatively the Occupational Hygiene W505 module, candidates should accumulate three years of relevant experience in order to be eligible to apply for a Certificate of Competence in Control of the Working Environment. [Candidates with previous experience may apply to have this taken into account].

There are two routes to this qualification depending on a candidate's previous experience and qualifications (see appendix 1).

- Pathway 1: Candidates taking this pathway may need to complete a report, submit a curriculum vitae and then a professional discussion.
- Pathway 2: Candidates taking this pathway need to complete a portfolio of evidence, submit a curriculum vitae and then a professional discussion.

A combination of assessment methods aims to probe the candidate's knowledge and understanding of UK legislation as well as operational and practical skills in the subject area.

The Certificate of Competence in Control of the Working Environment is only awarded to those candidates who satisfy the examiners as to their knowledge in that subject and demonstrate by their education, training and experience that they are competent to practice in the subject field.

Successful candidates are awarded the **Certificate of Competence in Control of the Working Environment** and are entitled to use '**CoC Control**' as post nominal letters after their names. Successful candidates who wish to proceed on to The Certificate of Operational Competence in Occupational Hygiene may also claim exemption from the relevant section of their PLP required for that qualification.

The allowed timeframe for this qualification is **18 months** from the point of acceptance, and candidates are advised to check the BOHS website for information to help them with planning their time effectively.

#### **1.2 Entry Requirements**

Applicants for this qualification are expected to demonstrate that they have **3 years' professional experience.** This experience needs to include some management including preparation of quotations/tenders, discussions with workers /colleagues/clients regarding relevant subject matters, development of procedures and control recommendations.

The first route (see appendix 1) to this qualification is for candidates who have taken the P601, P602, P603 and P604 modules.

The second route to this qualification is for candidates who should have completed the W505 module or the earlier M103 module (this course is no longer available). These candidates will follow **Pathway 2** (see appendix 1).

Candidates will be required to complete an application form showing their previous qualifications and experience and submit this to BOHS. The team at BOHS will review the application and allocate the candidate to the appropriate pathway according to the qualifications they hold.

Applicants should note that some of the components of this qualification are assessed online, and therefore access to a computer and the internet is essential.

#### **1.3 Application Procedure**

Applicants may request to complete this qualification by submitting a completed application form. The form is located on the BOHS website on the 'Certificate of Competence' page. Applicants should follow the instructions for completion carefully. Applications are considered on an academic and relevant professional experience basis to ensure that entry requirements have been met, using all information provided. Candidates will be sent an email to inform them of the outcome of their application.

There is no charge for the application. Candidates are liable to pay fees for each component as they progress through their qualification. A full list of current fees is available on the BOHS website.

#### 1.4 Using the Online System

Candidates will create their own account for the www.bohs-hub.org website which will give them access in order to:

- Pay for each qualification component
- Submit the necessary assessment documents such as a report or portfolio of evidence
- View feedback comments and assessment results
- Book the professional discussion appointment

#### 2. Pathway 1: Report

#### 2.1 General Information

Candidates following Pathway 1 who completed their P604 before September 2018 are required to produce and submit a report and a CV [Curriculum Vitae]. Candidates who have completed the advanced proficiency module P604 after September 2018 will have already successfully submitted a full commissioning or recommissioning report and are exempt from the report requirement but will still need to submit a CV. Provided that their experience profile as submitted in the CV is appropriate and more than meets the minimum experience requirements in section 1.2, they can then proceed to the professional discussion. Where there is a delay of more than 6 months between the P604 report submission and the application for Certificate of Competence, candidates may be asked to resubmit their original report.

The submitted report must cover work which has been personally undertaken by the candidate within the last six months and **must** not have previously been submitted for examination purposes. The report will be examined for qualification purposes. When the Society has completed its assessment of the report it will be destroyed. It is the responsibility of the candidate to hold a copy (or the original and submit a copy) of their report for any alternations which might need to be made upon grading.

Before submitting any documents, candidates will be asked to electronically accept a statement of authenticity to indicate that the work is their own.

The submission **must** demonstrate the candidates' technical knowledge and ability, be a piece of practical work carried out by the candidate themselves and must be directly concerned and relevant to the subject area of examination.

#### 2.2 Subject of the Report

The report submitted must involve both qualitative and quantitative assessments of a complex local exhaust system and the candidate <u>must</u> provide evidence that all measurements were taken by themselves. The report <u>must</u> also include a copy of any certificate of analysis where appropriate, along with discussion and recommendations.

In order for the examiner to judge a candidate's competence, the report will need to be structured with an introduction, a full description of the reason for the system assessment

and any proposed corrective actions (where applicable), which must include appropriate conclusions and recommendations.

### The report must be the candidates own work and not wholly generated from a generic company format.

The report submitted can cover any of the aspects outlined below:

	Examples of the types of Reports that could be produced by the candidate;
(a)	Report on a commissioning or recommissioning of a significant ventilation system. [A significant ventilation system will involve at least two or more separate inlets where measurements are required]. Evaluation of a single inlet system will not be considered to be of sufficient complexity and will be rejected.
(b)	Report on the design of a control system designed for a specific task along with supporting measurements confirming the effectiveness of the system. The report should include the treatment and discharge system.
(c)	Report on the design of a significant ventilation system for a process or series of tasks with supporting measurements to confirm effectiveness of system. The report should include the treatment and discharge system.
(d)	Report on a general building ventilation system that could include evaluation of air change rate and/or effectiveness in providing suitable working environment for employees.
(e)	Technical report for legal purposes as a specialist witness. Other technical reports are acceptable in situations where candidates are no longer active with site activities. For example, those who carry out quality or technical manager roles, laboratory management, project management etc. The report submitted will need to consider the role undertaken, including why it is required and how it is achieved, along with appropriate conclusions. The legal framework in which the role sits will also need to be referenced, along with the details of how compliance is achieved.

For confidentiality purposes, reports may be edited to delete the name of the company/organisation commissioning the report. However, the report and the certificate of authorship must bear the full address of the premises where the task was carried out.

If at any time the submitted report or accompanying documents are found to be deliberately misleading, plagiarised or fraudulent, BOHS will immediately withdraw any issued Certificate of Competence in Control of the Working Environment and will not allow the candidates to resubmit reports. This sanction will have no exceptions but can be subject to an appeal procedure.

#### 2.3 Preparing a Report

There is no restriction on the maximum length of each report.

The report must be structured and contain the following sections:

a. Title page, including a title and a unique number by which the report can be identified.

- b. Concise or Executive Summary.
- c. Introduction or Background. This must include a detailed description of the task and an outline of the location.
- d. Methodology for the task(s) being reported, including all relevant risk assessments and safety procedures.
- e. The report should include both positive and negative information and data.
- f. A copy of the original handwritten field notes, as an appendix to the report or as an attached document where appropriate.
- g. Copy of Analysis Reports with appropriate authentication.
- h. Discussion and Recommendations. All reports must reach conclusions in a clear and logical way so that they are easily understandable to the recipient. Where action is required by the recipient, the report writer could be deemed to be negligent if the report did not contain this advice.
- i. Reference tables and graphs etc. as appropriate.
- j. Plans (architect or sketch).
- k. Where reference is made in the report to legislation, approved codes of practice or other documentation, they must be current and should not contain out of date references.

Studies and reports carried out by a team will only be acceptable if ownership of the report can be claimed by the candidate alone. Only in very exceptional circumstances will reports for assessment of a control system carried out on the same premises be allowed to be submitted. Use of exceptional circumstances for planned multiple assessments must be notified and acknowledged, as there are additional requirements for these reports. Please contact BOHS prior to any such study.

The report must be written by each individual candidate.

If a report is generated from a computer generic report and requires the author to input specific information about the study, please ensure that the information required has been input and that it is a free-standing document.

Reports will also be rejected for correction and resubmission where they contain misleading or inconsistent information.

#### 2.4 Submission of Curriculum Vitae

In addition to the report, candidates **<u>must</u>** also submit a full curriculum vitae.

#### 2.5 Submission

Having completed the report and/or the curriculum vitae, candidates will be able to submit this for marking through the www.bohs-hub.org website. Instructions on how to create an online account and how to make a submission will be included in the qualification acceptance email.

The items must be submitted in either Microsoft Word or a PDF format and use the candidate's name as the file name - e.g. smithj.pdf. The submission may be submitted as a series of documents labelled with sequential numbers following the candidate's name e.g. smithj1.pdf, smithj2.pdf etc. Candidates are able to submit a maximum of 20 files and each one may be a maximum of 1mb; candidates should consider this when preparing their documents.

Full details on how to submit the documents are provided in the online submission facility on the www.bohs-hub.org website.

#### 2.6 Assessment and Results

The submission is allocated to an assessor who will review the submission.

The assessment will consider the quality of the individual items and evidence of the application of the core competencies at a required level for this qualification.

If they are assessed as acceptable, the candidate will be notified through email that they have passed this component. The email will contain information about the next stage of the qualification, which is the professional discussion.

If they are assessed as unacceptable in terms of content or quality, or if the assessor requires further information to evaluate the submission, the candidate will be contacted directly through the www.bohs-hub.org website and asked to upgrade the submission. The candidate has two further attempts to update the submission to meet the required standard. If the submissions are still unacceptable, then the application will lapse, and the fee will be forfeited.

#### 2.7 The Next Step

Once a candidate has successfully completed or has been exempted from this or part of this component, they will move on to book an appointment for the professional discussion. Instructions on how to do this will be sent by BOHS through email.

#### 3. Pathway 2: Portfolio of Evidence

The Portfolio of Evidence is a required component for candidates following **Pathway 2** towards the **Certificate of Competence in Control of the Working Environment.** 

The portfolio of evidence will allow candidates to demonstrate their knowledge, operational and practical skills in the subject.

#### 3.1 Objective of the Portfolio of Evidence

To prepare a portfolio of evidence that demonstrates the breadth and depth of technical competence in occupational hygiene practice within the field of Control of the Working Environment.

The purpose of the written assessment is for the candidate to demonstrate:

a) continued knowledge and experience of systems for control of the working environment.

b) experience in designing, commissioning, managing and maintenance of control of the working environment systems in buildings.

#### 3.2 Contents of the Portfolio of Evidence

The portfolio of evidence should contain <u>at least 3</u> of the 4 items listed below all <u>dated</u> <u>within the last five years</u>:

Assess	sment Method	Evidence Criteria					
1.	Confirmation of the candidates' participation in thorough examination and test of local exhaust ventilation systems.	1 x documented piece of evidence (e.g. Text report).					
2.	Confirmation of the candidates' ability to diagnose and correct faults on LEV systems.	Documented pieces of evidence (e.g. verified copies of measurements before and after corrective action).					
3.	Confirmation of the candidates' ability to design systems to control a hazardous material in the workplace.	Documented pieces of evidence (e.g. a design as presented to a client or as a case study from practical work during an appropriate course).					
4.	Verified documentation detailing the candidate's involvement in Control of the Working Environment complex systems evaluation/management and/or system remediation projects.	1 documented piece of evidence (e.g. a report where the candidate has evaluated or managed a Control of the Working Environment remediation/verification project on a complex system).					

<ol> <li>Confirmation of the candidate's ability to provide appropriate training for both staff and clients in the measurement instrumentation used for LEV evaluations and testing including personal and static air sampling.</li> </ol>	1 documented piece of evidence for a suitable lecture or course (must include slides and handout notes).
--	--

In addition to the items listed above, all candidates <u>must</u> include the following item in their portfolio:

Assess	sment Method	Evidence Criteria			
6.	In order to assess the candidate's knowledge and understanding of UK	A topic should be chosen from:			
	legislation relating to Control of the Working Environment, candidates	1. Carrying out a Pitot traverse to determine duct velocity.			
	should provide a written summary for one of the identified topics.	2. Requirements for carrying out a thorough examination and test [TExT].			
		3. Carrying out personal and static air sampling as part of control measure assessment.			
		<ul> <li>4. Undertaking project management of a Control of the Working Environment Installation or a commissioning project.</li> <li>5. Producing and implementing a Control of the Working Environment design plan.</li> </ul>			
		The written summary should be 1000 words in length (+/- 10%) and demonstrate their understanding of applicable legislation and available guidance on the chosen topic.			

#### 3.3 Format of the Portfolio of Evidence

The portfolio of evidence should be compiled in an electronic format (either a Microsoft Word or PDF document). The online submission facility allows either one document or a collection of individual documents to be submitted. Candidates are able to submit a maximum of 20 files and each one may be a maximum of 1mb; candidates should consider this when preparing their documents. The portfolio of evidence should be submitted as a series of documents labelled with sequential numbers following the candidate's name e.g. smithj1.pdf, smithj2.pdf etc.

#### 3.4 Submitting a Portfolio of Evidence

Having completed the portfolio of evidence, candidates will now be required to submit the documents through the <u>www.bohs-hub.org</u> website in accordance with the onscreen instructions.

Before submitting any documents, candidates will be asked to electronically accept a statement of authenticity to indicate that the work is their own.

#### **3.5 Assessment and Results**

The submission is allocated to an assessor who will review the submission.

The assessment will consider the quality of the individual items and evidence of the application of the core competencies at a required level for this qualification.

If they are assessed and are acceptable, the candidate will be notified through email that they have passed this component. The email will contain information about the next stage of the qualification, which is the professional discussion.

If they are assessed and are unacceptable in terms of content or quality, or if the assessor requires further information to evaluate the submission, the candidate will be contacted directly through the www.bohs-hub.org website and asked to upgrade the submission. The candidate has two further attempts to update the submission to meet the required standard. If the submissions are still unacceptable, then the application will lapse, and the fee will be forfeited.

#### 3.6 The Next Step

Once a candidate has successfully completed this component, they will move on to book an appointment for the professional discussion. Further information can be found in Section 4 of this guide.

#### 4. Professional discussion

The final component required to achieve this qualification is the professional discussion. This section explains how to book your professional discussion, how to prepare for it and what to expect on the day.

#### 4.1 Booking your professional discussion

Once a candidate has received a successful assessment of their report and written summary of portfolio of evidence (according to their pathway) or have received a confirmation of exemption from this requirement, they will receive notification from BOHS advising them to proceed and book a professional discussion.

Candidates will book the professional discussion through www.bohs-hub.org, which they have used previously in this qualification to make assessment submissions. Full instructions on how to do this will be included in the notification email from BOHS.

The professional discussion is conducted online, through a video conference facility. BOHS will provide candidates with the appropriate links to set this up on their computer. Candidates will need to have access to a computer with a microphone or headset (which is preferable) and a camera (either built in or as a peripheral device), a good internet connection and a private room or office in which to conduct the professional discussion. Once the appointment has been booked, the candidates receive an automatic confirmation email.

#### 4.2 Information about the Professional Discussion

#### 4.2.1 General Information

In order to pass the professional discussion, candidates **must** be able to satisfy the examiners with regard to their knowledge including UK legislation, operational and practical skills in the full range of subject areas. The examiners will have access to the application form and assessment feedback and may refer to their contents during the examination.

Three examiners will conduct the professional discussion and will, in turn, ask questions covering all aspects of the relevant syllabus. They will expect the candidate to be forthcoming with appropriate answers. The questions will test knowledge and understanding of the information covered by the syllabus. A candidate should seek clarification from examiners if they are unsure of what is being asked.

The professional discussion normally lasts up to 60 minutes.

On some occasions it will be necessary, as part of the BOHS quality assurance scheme, for an observer to sit in on the professional discussion in assessment of examiner conduct and performance. They will have no impact upon the results of the professional discussion. Candidates <u>must</u> be able to demonstrate to the examiners that they have carried out relevant work and have knowledge in <u>all</u> areas of the syllabus.

Candidates are expected to have prepared themselves for this professional discussion by ensuring that they have appropriate knowledge of all the areas of the subject areas and that it is up to date. A lack of knowledge in any part of the subject areas (e.g. those duties do not form part of the candidate's day-to-day responsibilities) will not be accepted by the examiners, and candidates presenting will automatically fail the examination.

#### 4.2.2 Specific Requirements

The professional discussion will test the candidates' knowledge and include the following areas:

- > The hierarchy of control including substitution and/or replacement of materials.
- The legislation, including: Control of Hazardous Substances COSHH regulations and other statutory documents; exposure limits and relevant guidance such as HSG258 etc.
- The systems and their component parts used to control hazardous substances, hoods and their types and application, ducting types and transport velocities, treatment systems and discharges.
- The assessment techniques that can be used to assess performance of control systems, visualisation and measurement techniques.
- > Personal and/or area monitoring and the interpretation of results.
- The health hazards that can occur as a result of exposure to common hazardous substances.
- Exposure prevention including all safety procedures (including the appropriate use of PPE and RPE).
- > Basis of design using case studies/examples.

#### 4.2.3 Further Information

Additional information is available about professional discussions on the www.bohs-hub.org website.

#### 4.3 Results

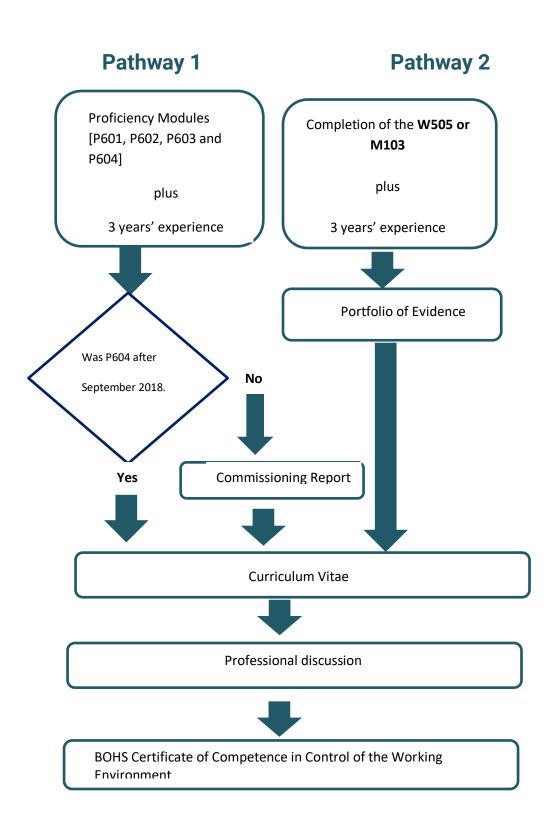
Results are issued to the candidates via email within two weeks of attending the professional discussion.

If the candidate has passed the professional discussion, they receive notification by email followed by the certificate of successful completion of the qualification by post.

If the candidate has not passed the professional discussion, they will receive information from BOHS by email detailing how to rebook the professional discussion. In this case, PQ Qualification Guide for CoC Control of the Working Environment Version 5 20 Aug 2020 Document Reference: PQA-POLOOX Document Status: Final feedback is given in order to help the candidate prepare for a further attempt. Candidates will be allowed to retake the

professional discussion for two further attempts (at the current fee for a professional discussion) provided that they are completed within 18 months for the qualification. If candidates exceed the 18-month allowable timeframe or are unsuccessful after their third attempt at the professional discussion, they will be required to reapply for the qualification.

# Appendix 1 - Progression Routes to the CoC Control of the Working Environment Qualification



PQ Qualification Guide for CoC Control of the Working Environment Version 5 20 Aug 2020 Document Reference: PQA-POL00X Document Status: Final

#### Appendix 2 Competency Matrix- CoC Control of the Working Environment

Торіс	Knowledge requirements:	BOHS Qualifications					
		P600: Methods for testing the performance of LEV systems	P601: Thorough examination and testing of LEV systems	P602: Basic design principles of LEV systems	P603 Personal Protective equipment	P604: Performance evaluation and management of LEV systems	Certificate of Competence Control
	Properties of airborne contaminants: principles		~	~		~	~
	Recognition of hazards from process materials		√	√		√	√
Preparation of LEV	Recognition of hazardous substances generated by the process			$\checkmark$		$\checkmark$	√
specification and quotation	Understanding of the nature of sources of airborne contaminants in the process			$\checkmark$		$\checkmark$	$\checkmark$
	Understanding of process requirements						~
	Understanding of statutory requirements for control		$\checkmark$	~		~	$\checkmark$
	Selection of a control benchmark			~			~
	Selection of a control requirement			~			√
	Components of LEV systems	√		~		~	√
Design of LEV system	Characteristics of different hood types		√	√		√	√
	Principles of LEV hood design		√	$\checkmark$		V	$\checkmark$
	Selection of appropriate hoods for the application			~			$\checkmark$
	Principles of good ductwork design	√	√	$\checkmark$		$\checkmark$	√
	Need for system monitors & alarms			~			$\checkmark$

PQ Qualification Guide for CoC Control of the Working Environment Version 5 20 Aug 2020 Document Reference: PQA-POLO0X Document Status: Final

	Characteristics of fans/air movers		√	V		V	$\checkmark$
	Characteristics of air cleaners/filters		√	V		V	~
	Air discharge and filtrate removal arrangements		$\checkmark$	$\checkmark$		~	$\checkmark$
	DSEAR/ATEX Requirement inc. explosion relief		√	~		$\checkmark$	$\checkmark$
	Recirculation of filtered air		√	$\checkmark$		V	$\checkmark$
	Provision of makeup air/ impact on general workroom ventilation		$\checkmark$	$\checkmark$		~	$\checkmark$
	Impact on workroom and external environment		V	$\checkmark$		$\checkmark$	$\checkmark$
	Ergonomic and safety considerations		√			$\checkmark$	√
	Arrangements for maintenance, cleaning, inspection and test		~			$\checkmark$	~
	Installation of hardware: mechanical						
	Installation of hardware: electrical						
	Balancing of system		~	~		√	~
	Technical performance testing		√			$\checkmark$	$\checkmark$
Installation and	Qualitative assessment of control effectiveness	$\checkmark$	$\checkmark$			~	~
commissioning of LEV system	Quantitative assessment of control effectiveness	V	$\checkmark$			$\checkmark$	$\checkmark$
	Commissioning report					$\checkmark$	√
	Provision of System manual					V	$\checkmark$
	Provision of System logbook					V	$\checkmark$
	Training					√	√
Personal Protection	Overview of personal protective equipment and position in Hierarchy of control				$\checkmark$		√
	Respiratory protective Equipment				V		V
	Eye protection				~		$\checkmark$

	Chemical protective Clothing			~		$\checkmark$
	Gloves and Dermal Care			$\checkmark$		$\checkmark$
	Decontamination Procedures			$\checkmark$		$\checkmark$
	Pre-work risk assessment	√	$\checkmark$		$\checkmark$	$\checkmark$
Thorough	Visual examination of system		V		$\checkmark$	V
examination and test of LEV	Technical performance measurement	$\checkmark$	$\checkmark$		V	$\checkmark$
system	Assessment of control effectiveness	$\checkmark$	$\checkmark$		V	$\checkmark$
	Thorough examination and test report		V		V	$\checkmark$
	Completion of Logbook		V			$\checkmark$
Maintonanaa	Routine inspections		V			$\checkmark$
Maintenance	Routine maintenance		V			$\checkmark$
	Repairs and remedial works					
Changes & modifications	Modifications & changes		$\checkmark$		V	$\checkmark$
	Re-commissioning		$\checkmark$		V	V
	User training		$\checkmark$	 		$\checkmark$

For convenience this matrix uses the similar knowledge requirements as given in ILEVE/CiBSE Guide