



Syllabus

Certificated Surveyor of Dampness in Buildings

Certificated Surveyor of Timber and Dampness in Buildings

Introduction

The syllabus outlines the knowledge candidates are expected to obtain for either the Certificated Surveyor of Dampness of Buildings (CSDB) or Certificated Surveyor of Timber and Dampness of Buildings (CSTDB) qualifications.

This includes the following modules:

Module 1 - Legal, Health & Safety Aspects for the Investigation and Control of Timber & Dampness in Buildings

- *Legal Requirements*
- *Assessments*
- *Product Safety*
- *Safe Methods of Use*

Module 2 - The Identification and Control of Dampness

- *Building Construction*
- *Diagnosis of Dampness*
- *Surveying and Reporting*
- *Methods of Control, Product Safety, and Safe Use*
- *Ancillary Procedures & Alternative Methods of Control*

Module 3 - The Identification and in-situ Treatment of Infested and Decayed Timber

- *Building Construction*
- *Structure of Wood*
- *Surveying and Reporting*
- *Wood Borers*
- *Fungi*
- *Timber Preservatives & Product Safety*

Qualification requirements

Certificated Surveyor of Dampness of Buildings (CSDB)

To achieve this qualification, candidates need to pass the following modules:

- **Module 1** - Legal, Health & Safety Aspects for the Investigation and Control of Timber & Dampness in Buildings.
- **Module 2** - The Identification and Control of Dampness

Upon passing Modules 1 & 2 the candidate is entitled to use the designation CSDB.

Certificated Surveyor of Timber and Dampness of Buildings (CSTDB)

To achieve this qualification, candidates need to pass the following modules:

- **Module 1** - Legal, Health & Safety Aspects for the Investigation and Control of Timber & Dampness in Buildings.
- **Module 2** - The Identification and Control of Dampness
- **Module 3** - The Identification and In-situ Treatment of Infested and Decayed Timber

Upon passing all three modules the candidate is entitled to use the designation CSTDB.

In instances where CSDB has already been achieved and Module 3 is passed at a later stage, the candidate should only use CSTDB.

Note: As of 31st December 2017, the CSTDB qualification will be issued instead of the Certificated Surveyor in Remedial Treatments (CSRT) qualification.

Module 1

Legal, Health & Safety Aspects for the Investigation and Control of Timber & Dampness in Buildings.

1. Legal Requirements

A Surveyor should:

- 1.1 Understand the legal implications of a report and estimate.
- 1.2 Be able to demonstrate knowledge of the correct procedures and checks before undertaking a survey or writing a report.
- 1.3 Have knowledge of the various Codes of Practice and Guidance Notes relating to surveying, reporting and conducting treatment work, structural waterproofing and associated works.
- 1.4 Understand the legal responsibilities placed on them for the health and safety and welfare of anyone that may be affected by their actions or inactions.
- 1.5 Be able to demonstrate knowledge of legislation concerning the protection of animals and the environment including the Wildlife and Countryside Act 1981 (revised 1991) and the Conservation (Natural Habits etc) Regulations 1994 (revised 2007).
- 1.6 Have general awareness of all other Acts and Regulations which could be applicable to treatments, structural waterproofing and ancillary works.

2. Assessments

A Surveyor should be able to demonstrate knowledge of:

- 2.1 The differences between **hazard** and **risk**, as defined by the Health and Safety Executive.
- 2.2 Procedures for undertaking assessments required by regulations made under the Health and Safety at Work etc Act 1974, in particular the Control of Substances Hazardous to Health Regulations (COSHH) 2002, the Management of Health and Safety at Work Regulations 1999 and other relevant health and safety legislation.
- 2.3 Asbestos awareness in buildings
- 2.4 Information on product labels and in other sources of safety data.

3. Product Safety

A Surveyor should be able to:

- 3.1 Demonstrate knowledge of the product hazards, limited to information on labels and in manufacturers' material safety data sheets.
- 3.2 Demonstrate knowledge of the safe handling of products and materials, the labeling of containers and how to deal with any fluid spillage.
- 3.3 Describe the correct procedures for storing and transporting products and materials.

4. Safe Methods of Use

A Surveyor should:

- 4.1 Understand the correct procedures for protecting the public and the environment.
- 4.2 Demonstrate knowledge of the precautions to be taken by users of products, materials and machinery including appropriate protective clothing and equipment.
- 4.3 Demonstrate knowledge of the relevant legislation governing the disposal of products, other materials used, contaminated waste and general building waste.
- 4.4 Have an understanding of ancillary risks associated with work in buildings such as fire, electrocution, falls, confined spaces, access equipment and temporary support.
- 4.5 Understand the correct procedure in the event of accidents including fires.

Module 2

The Identification and Control of Dampness

1. Building Construction

A Surveyor should have general knowledge of building construction and materials in all types of building in the United Kingdom and in particular should be able to:

- 1.1 Identify the various types of masonry and their permeability to moisture.
- 1.2 Understand the methods of damp control used in construction.
- 1.3 Demonstrate an understanding of the need for ventilation in buildings.
- 1.4 Understand the implications of dampness affecting timber in buildings, identify timbers that have been affected by decay fungi or wood boring insects and give suitable advice on the need for specialist assessment.
- 1.5 Understanding how alterations, and additions such as retrofit insulation and other energy saving measures, may result in dampness in buildings.

2. Diagnosis of Dampness

A Surveyor should have knowledge of the theory of moisture movement and the practical methods of diagnosis including:

- 2.1 The causes and effects of dampness in buildings, including the ingress of water, capillary moisture, hygroscopic moisture, and atmospheric moisture and its associated problems, and their cure.
- 2.2 Characteristic features of all sources of moisture found within the built environment and how to distinguish between them.
- 2.3 Physical aids for detection of moisture including the use of moisture meters, hygrometers, surface thermometers, calcium carbide meters, interpretation of the data they provide, and limitations to their use.
- 2.4 Psychrometric charts and how to extract information from them.
- 2.5 The use of laboratory analysis as an aid to diagnosis.

3. Surveying and Reporting

A Surveyor should be able to:

- 3.1 Identify and report on all causes of dampness in buildings.
- 3.2 Advise on safe corrective measures and any appropriate ancillary works.
- 3.3 Following assessment, prepare a full and comprehensive report and appropriate specification.
- 3.4 Demonstrate knowledge of the financial and practical implications of the defect and the repair strategies proposed.

4. Methods of Control, Product Safety, and Safe Use

A Surveyor should be able to demonstrate knowledge of:

4.1 Atmospheric moisture

- 4.1.1 Be familiar with BS5250:2011 Code of practice for control of condensation in buildings
- 4.1.2 Understand methods to control atmospheric moisture
- 4.1.3 Be able to provide guidance to occupants on moisture production and control.

4.2 Rainwater penetration

- 4.2.1 Be familiar with methods and products to control the ingress of rainwater into construction.

4.3 Rising Damp

- 4.3.1 Be fully conversant with BS6576:2005 Code of practice for diagnosis of rising damp in walls of buildings and installation of chemical damp-proof courses.
- 4.3.2 Be familiar with damp control products that may be specified including active ingredients and their method of action.
- 4.3.3 Understand the performance characteristics of the commonly used chemical damp-controlling products including creams, injection mortars, solvent and water-based variants, and where each may be relevant.

5. Ancillary Procedures & Alternative Methods of Control

A Surveyor should have general knowledge of the ancillary and supporting procedures and other methods which are employed in the control of dampness including:

- 5.1 Vertically applied damp-proofing and waterproofing materials and lining systems.
- 5.2 Re-plastering and decorating products that are utilized to control the migration moisture and salts.
- 5.3 Alternative methods, for example:
 - a) Electro-osmosis
 - b) Siphon systems (evaporation tubes)
 - c) Physical systems.

Module 3

The Identification and In-situ Treatment of Infested and Decayed Timber

1. Building Construction

A Surveyor should have general knowledge of building construction in all types of building in the United Kingdom and in particular should be able to:

- 1.1 Identify the structural and joinery timbers in a property and their purposes.
- 1.2 Evaluate the structural implications of any treatment to be advised and to decide if it is within competence of the company concerned.
- 1.3 Demonstrate knowledge of the ventilation requirements of timber elements in a building.
- 1.4 Demonstrate knowledge of the moisture contents normally found within buildings.
- 1.5 Identify any source of dampness affecting the timbers in a building and give suitable advice to correct the fault or faults, or the need to seek specialist assessment.

2. Structure of Wood

A Surveyor should have general knowledge of the structure and composition of wood and be able to:

- 2.1 Identify sapwood and heartwood.
- 2.2 Differentiate between softwoods and hardwoods as sawn timbers.
- 2.3 Demonstrate some knowledge of the natural durability of timber.
- 2.4 Identify physical and chemical degradation of timber in buildings.
- 2.5 Understand the effect of timber permeability on the penetration of preservative when applied by various methods, including pre-treatment.

3. Surveying and Reporting

A Surveyor should:

- 3.1 Be able to identify and report on the causes of degradation of the timbers.
- 3.2 Be able to advise on safe measures and any appropriate ancillary works required, including the in situ use of wood preservative if necessary.
- 3.3 Understand 'alternative' or 'non-pesticide based' approaches to the treatment of timber decay.
- 3.4 Where necessary, be able to specify an appropriate preservative treatment for replacement timbers.
- 3.5 Following assessment, be able to prepare a full and comprehensive report and specification.
- 3.6 Be able to demonstrate knowledge of the financial and practical implications of the defect and the repair strategies proposed.

4. Wood Borers

Correct identification of wood destroying insects attacking the timbers is essential if the appropriate treatment is to be advised. A Surveyor should:

- 4.1 Understand the environmental conditions suitable for insect attack.
- 4.2 Be able to recognise the following from the damage to the timber and the frass when present:

- Beetles**
- *Anobium punctatum*
 - *Ernobius mollis*
 - *Lyctus* spp
 - *Hylotrupes bajulus*
 - *Xestobium rufovillosum*
 - *Naccerdes melanura*
 - *Ptilinus pectinicornis*
 - Forest longhorn
 - Pinhole borer

Weevils

Marine borers

Wood wasps

Termites (details of treatment will not be required)

Non wood-boring insects

4.3 Understand the significance of the insect attack in terms of the treatment required.

5. Fungi

The presence of fungi in buildings indicates that damp conditions exist or have existed. A Surveyor should:

5.1 Know the moisture content of timber necessary for the development of fungi.

5.2 Be able to identify the following fungi from fungal growths, including any fruit-bodies, strands or mycelium present and damage of timber where present:

Decay fungi

- *Asterostroma* spp
- *Coniophora puteana*
- *Donkioporia expansa*
- *Fibroporia vaillantii*
- *Paxillus panuoides*
- *Phellinus contiguus*
- *Pleurotus ostreatus*
- *Serpula lacrymans*

Plaster fungi

- *Coprinus* spp
- *Peziza* spp

Moulds and slime moulds

Blue stain in service

Pocket rot

5.3 Understand the significance of fungal growths in terms of the treatment required.

6. Timber Preservatives & Product Safety

A Surveyor should be able to demonstrate knowledge of:

6.1 Assessments required under the Control of Pesticides Regulations 1986 (as amended 1997).

6.2 Wood preservative products that may be specified including:

- a) Active ingredients, their method of action and spectrum of activity.
- b) Preservative types, their composition and performance characteristics.
- c) Methods of application and their effect on preservative performance.

6.3 The dilution of concentrated products, the labeling of containers for the diluted product.

6.4 The Specification of the correct application rate and calculation of the quantities of product required to complete the works.

6.5 The relevant legislation governing the disposal of products, empty containers and treated wood.

6.6 The generic forms of pre-treatment, the common industrial methods employed and the preservative types used. Understand the advantages and disadvantages of commonly used methods.

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Property Care Association
11 Ramsay Court, Kingfisher Way, Hinchingsbrooke Business Park, Cambs, PE29 6FY

Tel: 01480 400 000
Email: pca@property-care.org Website: www.property-care.org

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