

Building methods and construction technology

Unit code: L/501/4972

QCF Level: 2

Credit value: 3

Guided learning hours: 30

Unit aim and purpose

The aim of this unit is for learners to be able to apply their knowledge of building principles through producing programmes of work, drawings, internal finishes and protecting materials.

Unit introduction

This unit consists of three learning outcomes.

The first learning outcome examines how to produce a contract programme in the form of a bar chart with the correct sequencing for a two storey domestic property. Learners have to produce a cross section through some of the domestic dwelling elements.

The second learning outcome examines the materials that can be used for a range of internal finishes for the completion of a domestic dwelling. Learners will explore how these materials are affected by deterioration over time.

The final learning outcome examines how to protect and safely secure the building materials to be used in a domestic dwelling.

Learning outcomes and assessment criteria

In order to pass this unit, the evidence that the learner presents for assessment needs to demonstrate that they can meet all the learning outcomes for the unit. The assessment criteria determine the standard required to achieve the unit.

Learning outcomes	Assessment criteria
1 Be able to apply the principles of building methods and construction technology	1.1 produce a bar chart or programme of work showing the correct stages required to build a two-storey property 1.2 produce a sketch of a domestic dwelling showing section through building elements and components
2 Be able to apply the principles of internal building work	2.1 select appropriate decorative materials used for a range of internal finishes in domestic dwellings 2.2 assess internal building materials affected by short- and long-term deterioration
3 Be able to handle delivery and storage of building materials	3.1 protect and secure building materials correctly and safely and in accordance with organisational procedures

Unit content

1 **Be able to apply the principles of building methods and construction technology**

Contract programmes: tasks; durations; number; logical sequencing; milestones; layout; title block

Drawing Cross Sections: sketch details; window head detail; foundation and subfloor section; roof wall plate detail; proportional sketch; hatching; annotation

2 **Be able to apply the principles of internal building work**

Selection of internal finishes: selection of emulsion paints, gloss paints, lining papers, wall papers, coving; application; use; location; room function; aesthetics; colours

Suitability: wear qualities; colour fade; abrasion; humidity; ability to be cleaned; mould growth; recovering properties

3 **Be able to handle delivery and storage of building materials**

Protection: sheeting down; palletising; secure storage; bays; storage racks; storage inside building envelope; organisational procedures

Essential guidance for tutors

Delivery

This unit should be delivered so that it enables learners to develop their knowledge, understanding and skills of programmes, cross sections and finishes selection.

Learners need to be able to:

- apply the principles of building methods and construction technology
- apply the principles of internal building work
- handle delivery and storage of building materials.

Health, safety and welfare are paramount and must be strictly enforced through close supervision of all workshops and activity areas. Risk assessments must be undertaken before any practical activities take place.

Small-group discussions could be used to introduce the unit. This would give learners an opportunity to swap ideas and exchange their experiences of constructing programmes, drawing building elements and materials organisation. Tutors could record feedback from individual groups on a flipchart or whiteboard.

By engaging with employers and employees learners will gain more from their learning experience. It will also help demonstrate the unit's vocational relevance and currency and develop knowledge and understanding of constructing programmes, drawing building elements and materials organisation.

Guest speakers could deliver presentations to learners. For example, a decoration sales representative from a paint and wall paper supplier could give a presentation on appropriate domestic decorative materials which deals with learning objective 2. This could be supported with examples drawn from industry, perhaps in the form of a set of case studies.

Video/DVD training programmes can also be used.

Assessment

A variety of assessment methods can be used. Learners could produce written reports or give verbal presentations, supported by witness testimony. Alternatively, learners could produce logbooks or workbooks that they complete in the workplace or during visits to industry.

Assessment tasks and activities should enable learners to produce valid, sufficient and reliable evidence that relates directly to the assessment criteria. Centres are encouraged to emphasise the practical application of the assessment criteria.

Essential resources

Graph paper for the production of bar chart programs will be required.

A selection of appropriate decorative samples for discussion on appropriate finishes for a domestic dwelling will also be required.