

SAMPLE ASSIGNMENT BRIEF

UNIT 3 - DESIGN THE BUILT ENVIRONMENT: PHYSICAL AND ENVIRONMENTAL INFLUENCES



**Construction and the Built Environment
Advanced (Level 3) Unit 3
Design the built environment:
physical and environmental influences (CBE3U3)**

**Sample Assignment Brief
(Approximately eighteen hours under controlled conditions)**

Evidence requirements

You must produce evidence of achievement of the assessment criteria. Upon completion of this unit you should:

1. understand the factors that influence good design practice in terms of health, safety and welfare: risk management: and the environment.
2. know how primary services utilities are planned, distributed and installed to maximise environmental efficiency.
3. understand issues associated with climate change, the potential impact on the community and the actions that must be taken to reduce this impact

In order to attain a high mark in this unit, you must address all of the above. A table showing how the Assessment Criteria topics are weighted should be shown to learners in order that they understand how the final mark is determined.

You are required to provide a report on three assessed tasks to achieve the assessment criteria which are set out in the marking grid for the unit.

Scenario

You are to use a residential property as a basis to complete this assignment. Your tutor will provide further advice on the choice of property. You are to take pictures and provide drawings that indicate an understanding of the factors that influence good design practice. You should show how primary services are planned and describe the issues associated with climate change.

Include sketches/images along with your written work; this will provide evidence of your ability, knowledge and understanding of this task and others.

Task 1

Understand the factors that influence good design practice in terms of health, safety and welfare; risk management and the environment.

You can do this by the following:

Describe the environmental, health, safety and welfare factors that influence the built environment.

Analyse the factors that influence the built environment in terms of: regulatory requirements, risk and environmental assessments, risk management and safe security of people using the built environment.

Consider the design implications of adhering to the above factors.

Evaluate good design practice in health, safety and welfare and environmental terms.

Task 2

Know how primary services utilities are planned, distributed and installed to maximise environmental efficiency.

You can do this by the following:

Consider the design implications of the primary services.

Describe the main features and characteristics of primary services within a building such as location, entry point to building, accessibility, maintenance, environmental considerations and effective management.

Describe the basic operating principles and the different types of materials used in primary services.

Task 3

Understand the issues associated with climate change, the potential impact on the community and the actions that must be taken to reduce this impact.

You can do this by the following:

Describe the climate change issues in terms of: global warming, water extraction, emission to air land and water and waste disposal.

Describe the importance of minimising energy demand and maximising energy efficiency within the built environment.

Evaluate the impact of renewable energy within the UK in terms of technical, social and economic issues.

Assess a range of sustainable construction techniques.

Suggested learning resources:

Books

Building Construction Handbook Chudley, R & Greeno, R. Published by: Butterworth-Heinemann, 2006 ISBN: 0-750-66822-9

Architecture: Form, Space, and Order Ching, F D K. Published by: John Wiley & Sons, 2007
ISBN: 0-471-75216-9

Sustainable Practices in the Built Environment ed. Langston. Published by: Butterworth-Heinemann, 2001. ISBN: 0-750-65153-9

Websites

- Architecture Centre Network www.architecturecentre.net
- bConstructive www.bconstructive.co.uk
- Building Connections www.buildingconnections.co.uk
- The Carbon Trust www.thecarbontrust.co.uk/energy
- Chartered Institute of Architectural Technologists www.ciat.org.uk
- Chartered Institute of Building www.ciob.org.uk
- Chartered Institution of Building Services Engineering www.cibse.org
- Commission for Architecture and the Built Environment www.cabe.org.uk/teachingresources
- Construction Industry Research and Information Association www.ciria.org.uk
- ConstructionSkills www.cskills.org
- Design Quality Indicator www.dqi.org.uk
- Eden Frame www.edenframe.com
- European Commission Directorate-General for Energy and Transport www.managenergy.net
- Green Building Magazine www.greenbuildingmagazine.co.uk
- Green Building Press www.greenbuildingpress.co.uk
- Institution of Civil Engineers www.ice.org.uk
- Institution of Structural Engineers www.istructe.org.uk
- Royal Institute of British Architects (RIBA) www.architecture.com
- Royal Town Planning Institute www.rtpi.org.uk