



Unit and Assessment Specification

Unit title	Report on the Energy Assessment of New and Existing Non-Dwellings Using the Dynamic Simulation Model (DSM)
SQA Code	H1VJ 04
SCQF Level	
SCQF Credit Points	
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History of changes

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Title	Report on the Energy Assessment of New and Existing Non-Dwellings Using the Dynamic Simulation Model (DSM)	
Learning Outcomes	Assessment Criteria	
The learner will:	The learner can:	
<p>1 Understand how to produce Recommendations Reports for non-dwellings using SBEM.</p>	<p>1.1 Describe the prescribed format and content of an Energy Performance Certificate (EPC) Recommendations Report.</p> <p>1.2 Identify the range of energy efficiency measures that may be included within an EPC Recommendations Report.</p> <p>1.3 State the approved software used to generate energy efficiency measures for the property.</p> <p>1.4 Explain the principles underpinning the approved software used to calculate energy ratings and produce Recommendations Reports.</p> <p>1.5 Explain how to correctly use the approved software used to produce energy Performance Certificates.</p> <p>1.6 Explain the importance of checking that data has been inputted correctly and how to review data if the calculation will not process or if the result appears incorrect.</p> <p>1.7 Explain the effect of choosing default data options on the energy efficiency measures offered by SBEM.</p> <p>1.8 Explain how to check the Energy Performance Certificate Recommendations Report for cost-effective improvement, ensuring compliance with relevant requirements and conventions.</p> <p>1.9 Identify the level of detail within your records required to produce a complete and comprehensive Recommendations Report and justify your decisions on the values recorded and energy efficiency measures selected.</p> <p>1.10 Explain the importance of making and maintaining records that are complete, accurate and legible.</p> <p>1.11 Explain the reasons why it is necessary and important to record where and why accurate inspection has not been possible.</p>	

	<p>1.12 Identify the circumstances in which records can include the fact that information is 'unknown' and the evidence required to support this choice</p> <p>1.13 Explain the importance of storing records securely allowing for future access & the purposes for which your records may be used.</p>
<p>2 Understand how to provide a clearly defined and robust hierarchy of energy efficiency measures for non-dwellings.</p>	<p>2.1 Explain how to use approved software to generate energy efficiency measures for the property.</p> <p>2.2 Explain the way in which energy efficiency measures are generated and circumstances when it is appropriate to delete them.</p> <p>2.3 Explain the importance of checking the energy efficiency measures generated, deleting any that are inappropriate, and providing your reasons.</p> <p>2.4 Identify the factors that could affect the choice of energy efficiency measures for improvements to the property, including issues that make them unsuitable for the property, interactions between building fabric and building services and listed building status / conservation areas.</p> <p>2.5 Identify the issues that could make energy efficiency measures unsuitable for the property, including:</p> <ul style="list-style-type: none"> ◆ property situation, eg subject to extreme weather ◆ property condition, eg state of repair of external walls ◆ inadequate ventilation ◆ traditional construction, ◆ any other features of the property, or its site/location, which might adversely affect the performance of the recommended improvement, or the building's performance after improvement <p>2.6 Explain how to make appropriate deletions/amendments based on the practical and economic feasibility for the building under consideration.</p> <p>2.7 Identify current typical costs of energy efficiency measures.</p> <p>2.8 Explain how to estimate typical costs, for the particular building, of any proposed energy efficiency measures.</p>

	<p>2.9 Explain how to assess the carbon impact and payback period of energy efficiency measures in order to provide an hierarchy of improvement measures.</p> <p>2.10 Identify the data and information required to be lodged on the relevant central register.</p> <p>2.11 Identify appropriate advice on the implementation of the energy efficiency measures that may be given to the client.</p>
<p>3 Understand how to communicate the value of a recommendations report and how it can be used.</p>	<p>3.1 State the objective of producing Recommendations Reports.</p> <p>3.2 Explain the difference between high, medium and low carbon impact energy efficiency measures, and the scale of savings that each may achieve.</p> <p>3.3 Identify which elements have greater impact on the energy performance of the building in question, and why.</p> <p>3.4 Explain how estimates of costs for energy efficiency measures have been arrived at and how robust they are.</p> <p>3.5 Explain how to communicate and explain the energy efficiency measures to the client</p> <p>3.6 Explain the importance of retaining documentation for audit purposes or legal compliance.</p> <p>3.7 Explain how to convey essential information in a written report in a way which will be comprehensible to the client.</p> <p>3.8 Identify where to refer clients for further help and advice.</p>
<p>4 Be able to produce Recommendations Reports for non-dwellings using DSM.</p>	<p>4.1 Describe the prescribed format and content of an Energy Performance Certificate (EPC) Recommendations Report.</p> <p>4.2 Identify the range of energy efficiency measures that may be included within an EPC Recommendations Report.</p> <p>4.3 Use approved software to generate energy efficiency measures that improve energy performance.</p> <p>4.4 Check the EPC Recommendations Report, ensuring compliance with relevant requirements and current conventions.</p>

	<p>4.5 Produce and maintain accurate and legible records which are clear, complete and conform to accepted professional and statutory requirements.</p> <p>4.6 Include in records investigations carried out, values recorded and options considered, to the level of detail required to produce a complete and comprehensive Energy Performance Certificate and justify your decisions on values recorded and energy efficiency measures selected.</p> <p>4.7 Describe the circumstances in which records can include the fact that information is 'unknown' and the evidence required to support this choice.</p> <p>4.8 Store records securely allowing for future access and explain the purposes for which the records may be used.</p>
<p>5 Be able to provide a clearly defined and robust hierarchy of recommendations for reducing the energy use of non-dwellings.</p>	<p>5.1 Use the approved software to generate energy efficiency measures to improve energy performance.</p> <p>5.2 Check the energy efficiency measures generated and make appropriate deletions, additions and amendments based on the practical and economic feasibility for the building under consideration, providing and documenting your reasons.</p> <p>5.3 Take account of factors that could affect the choice of energy efficiency measures for improvements to the property, including issues that make them unsuitable for the property, interactions between building fabric and building services and listed building status / conservation areas.</p> <p>5.4 Describe the technical specifications, features and benefits of energy efficiency measures that may improve the energy performance of Level 5 buildings.</p> <p>5.5 Appreciate the relative costs of any energy efficiency measures which may be proposed.</p> <p>5.6 Provide a hierarchy of improvement measures based on carbon impact and payback period.</p>

	<p>5.7 Identify the data and information required to be lodged on the relevant central register and show understanding of the lodging procedures.</p> <p>5.8 Produce a valid EPC Recommendations Report, in accordance with approved guidance.</p> <p>5.9 Provide initial advice on the implementation of the recommendations made.</p>
<p>6 Be able to communicate the value of a recommendations report and how it can be used.</p>	<p>6.1 Explain the objective of producing recommendations reports.</p> <p>6.2 Explain the difference between high, medium and low carbon impact measures, giving examples of the scale of savings which may be achieved by each.</p> <p>6.3 Explain which elements have greater impact on the energy performance of the building in question and why.</p> <p>6.4 Explain how estimates of costs for energy efficiency measures have been arrived at and how robust they are.</p> <p>6.5 Communicate and explain the energy efficiency measures to the client.</p> <p>6.6 Understand the importance of retaining documentation for audit purposes or legal compliance.</p> <p>6.7 Highlight the essential information contained in the Recommendations Report to the client, in writing, in a way which will be comprehensible to the client.</p>

Additional information about the Unit
Unit purpose and aim(s)
This Unit will help to develop the knowledge and skills needed to prepare a report on the energy assessment of new and existing non dwellings using Dynamic Simulation Model (DSM).
Details of the relationship between the Unit and relevant national occupational standards (if appropriate)
Asset Skills NOS for Building Energy Assessment (Non-dwellings) on Construction, Sale or Rent, ASTNDEA9 — Report on the energy assessment of new and existing non-dwellings using Dynamic Simulation Model (DSM).
Details of the relationship between the Unit and other standards or curricula (if appropriate)
Energy assessment standards.
Assessment requirements specified by a sector or regulatory body (if appropriate)
Please refer to Asset Skills Assessment principles at www.assetskills.org

Assessment (evidence) Requirements
Guidance on Instruments of Assessment