



Australian Government

CPPHES5001 Conduct thermal performance assessment of complex residential buildings

Release: 2

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Modification History

Release 2 This version first released with CPP Property Services Training Package Release 14.0.

Updated reference to reflect correction in Modification History from CPC Property Services 5.0 to CPP Property Services 9.0.

Release 1 This version first released with CPC Property Services Training Package Release 5.0.

Supersedes and equivalent to CPPHSA5001A Assess thermal performance of complex residential buildings. Updated to meet the Standards for Training Packages.

Application

This unit specifies the skills and knowledge required to analyse information to assess the thermal potential of the building envelope of planned residential buildings and the thermal performance of existing residential buildings, including alterations and additions, involving complex construction methods and materials. Assessments are conducted using the regulatory mode of software accredited under the Nationwide House Energy Rating Scheme (NatHERS) and require client consultation to devise solutions to achieve required energy ratings.

This unit is suitable for those using a broad range of cognitive, technical and communication skills to select and apply methods and technologies to analyse information and provide solutions to sometimes complex problems.

This unit forms part of the licensing requirements for thermal performance assessments. For further information, check with the relevant regulatory authority.

Pre-requisite Unit

CPPHES4004 Conduct thermal performance assessment of residential buildings.

Unit Sector

Home Sustainability.

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe what needs to be done to demonstrate achievement of the element.

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| 1 Prepare for thermal performance assessment. | 1.1 Consult with client to confirm scope and purpose of assessment and respond to questions to clarify issues and concerns. |
| | 1.2 Check and apply relevant jurisdictional requirements to planned thermal performance assessment. |
| | 1.3 Obtain documentation and drawings required for the assessment and check to verify consistency and sufficiency to meet software and regulatory requirements. |
| | 1.4 Refer inconsistencies in documentation back to client for clarification and amendment. |
| | 1.5 Analyse complex features of building envelope and construction methods and materials, and source technical advice to clarify requirements for thermal performance assessment. |
| | 1.6 Source additional information required to conduct assessment to meet client and regulatory requirements. |
| | 1.7 Check computer equipment to ensure correct operation and confirm software version and libraries are current and meet regulatory requirements. |
| 2 Collate and input information into NatHERS software tool. | 2.1 Extract information required for input into software tool from building documentation and NatHERS technical notes. |
| | 2.2 Enter extracted information into software tool according to regulatory requirements for all relevant building zones. |
| | 2.3 Source and enter information about non-standard building materials and designs, alterations and additions correctly according to software and regulatory requirements. |
| | 2.4 Check inputted data and make necessary adjustments to ensure accuracy and compliance with regulatory |

requirements.

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| 3 Model thermal performance of building. | <p>3.1 Apply software tool functions and modelling methods suitable for building type and construction methods and materials.</p> <p>3.2 Run simulation to determine if the potential thermal performance of the building complies with regulatory requirements.</p> <p>3.3 Check simulation against latest documentation and amend identified discrepancies.</p> <p>3.4 Analyse software tool outputs to clarify assumptions, identify limitations and correct errors in data entry.</p> <p>3.5 Interpret software tool outputs and profile thermal performance strengths and weaknesses of building.</p> |
| 4 Identify options to improve thermal performance of building. | <p>4.1 Analyse profiled strengths and weaknesses in thermal performance of building.</p> <p>4.2 Access technical advice and identify cost effective options for improving thermal performance considering outputs of thermal performance assessment, client needs, practicality and building type.</p> <p>4.3 Identify interactions of suggested improvements on other aspects of building performance.</p> <p>4.4 Use software tool to reassess building and impact of identified options on thermal performance.</p> |
| 5 Evaluate options to achieve required energy rating. | <p>5.1 Conduct further analysis to identify changes to building design features to achieve required energy rating.</p> <p>5.2 Consult with client to present options, discuss viability of changes and seek direction for building reassessment.</p> <p>5.3 Apply software tool functions and modelling methods to generate thermal performance simulations based on recommended changes to design features.</p> <p>5.4 Negotiate with client to agree on the use of alternative</p> |

materials or features to achieve required energy rating.

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| 6 Report and certify thermal performance assessment outcomes. | 6.1 Finalise thermal performance assessment and collate design and assessment documentation in line with relevant jurisdictional regulatory requirements and for auditing and quality assurance. |
| | 6.2 Document options and recommendations for achieving required energy efficiency rating according to regulatory requirements. |
| | 6.3 Discuss assessment outcomes with relevant persons and obtain approval to proceed with certification according to organisational requirements. |
| | 6.4 Submit NatHERS report through required portal to generate universal certificate. |
| | 6.5 Confirm stamping is complete and secure documentation according to regulatory requirements. |
| | 6.6 Store assessment documentation according to regulatory requirements and to enable recovery for audit and quality assurance purposes. |

Foundation Skills

As well as the foundation skills explicit in the performance criteria of this unit, candidates require:

- oral communication skills to interact with clients from diverse social, economic and cultural backgrounds
- numeracy skills to interpret thermal performance outputs including U-values and R-values.

Unit Mapping Information

Supersedes and equivalent to CPPHSA5001A Assess thermal performance of complex residential buildings.

Links

Companion volumes to this training package are available at the VETNet website - <https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=6f3f9672-30e8-4835-b348-205dfcf13d9b>

