



Australian Government

**CPPHES4001 Research and assess impact
of building elements on thermal
performance of 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 CPPHSA4015A Assess impact of building elements on thermal performance of residential buildings. Updated to meet the Standards for Training Packages.

Application

This unit specifies the skills and knowledge required to research and assess the impact of construction materials and methods, design elements and building condition on thermal performance of residential buildings.

This unit is for individuals who work independently as home sustainability or Nationwide House Energy Rating Scheme (NatHERS) assessors using specialised knowledge to complete thermal performance assessments of residential buildings. It involves completing routine and non-routine tasks and dealing with predictable and sometimes unpredictable problems.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

Pre-requisite Unit

None.

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.

1 Assess impact of 1.1 Research building design features that influence thermal

building design features on thermal performance of building.		performance.
	1.2	Determine potential impact of building design features on thermal performance.
	1.3	Examine ways in which building design features can be altered to improve thermal performance.
2 Assess influence of common construction materials on thermal performance.	2.1	Research properties of construction materials that influence thermal performance.
	2.2	Research properties of glazing units that influence thermal performance.
	2.3	Determine impact of climate on choice of construction materials to improve thermal performance.
	2.4	Examine ways in which cost, practicality, size or space constraints can influence choice of building materials when improving thermal performance.
	2.5	Research construction materials that meet requirements for improving thermal performance.
	2.6	Research ways that correct use and installation of materials can improve thermal performance.
	2.7	Examine condition of materials and the effect that condition can have on degrading thermal performance.
3 Assess impact of construction methods on thermal performance.	3.1	Identify construction methods used in residential building.
	3.2	Identify key components of the building envelope.
	3.3	Identify methods of testing building envelope for efficiency.
	3.4	Examine construction methods used on building envelope components and effect on thermal performance.
4 Identify impact of common building	4.1	Evaluate influence of poor construction techniques and condition of building elements on thermal performance.

faults on thermal performance of building.	4.2	Research sources of professional advice on ways to respond to common building faults that may influence thermal performance.
	4.3	Examine potential impact of poorly designed or installed measures for improving thermal performance on other aspects of residential building.
5 Document information and research findings	5.1	Collate information and research results and check to confirm accuracy.
	5.2	Identify impact of building elements on thermal performance of residential buildings.
	5.3	Identify benefits of efficient building techniques and an efficient building envelope on thermal performance of residential buildings.
	5.4	Document findings according to workplace requirements.

Foundation Skills

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

- reading skills to interpret and consolidate a wide range of information on thermal performance of buildings
- numeracy skills to interpret and calculate statistical data on the thermal performance of different construction materials and methods.

Unit Mapping Information

Supersedes and equivalent to CPPHSA4015A Assess impact of building elements on thermal performance of 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>