



Australian Government

**Assessment Requirements for CPPHES4002
Advise clients on thermal performance of
residential buildings**

Release: 2

Assessment Requirements for CPPHES4002 Advise clients on thermal performance of residential buildings

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 CPPHSA4019A Inform clients about thermal performance of residential buildings. Updated to meet the Standards for Training Packages.

Performance Evidence

To demonstrate competency, a candidate must meet the performance criteria of this unit by providing accurate oral and written advice to three different clients on the thermal performance of residential buildings involving three different building designs and climate zones.

Knowledge Evidence

To be competent in this unit, a candidate must demonstrate knowledge of:

- Australian climate zones, characteristics and data used in thermal performance assessments:
 - diurnal temperature range
 - humidity
 - irradiance
 - minimum and maximum temperature
 - solar geometry
 - wind speed and direction
- building elements included in thermal performance assessments
- definition of thermal comfort:
 - factors influencing thermal comfort
 - models of thermal comfort
 - role of thermal comfort in building thermal performance assessments
 - thermal sensitivity of individuals

- environmental and social impacts of energy use:
 - climate change
 - energy cost
 - energy security
 - global warming
 - greenhouse gas emissions
 - operational costs
 - resource depletion
- impact of climate on thermal performance of residential buildings
- industry terminology for energy use associated with thermal performance of buildings
- passive building design principles
- process of heat transfer in residential buildings:
 - key terms used to describe heat transfer
 - impact on heating and cooling
 - mechanisms: radiation, convection and conduction
 - modelling
 - U and R-values of building materials
 - R-values of wall constructions
- principles of thermal performance:
 - factors that diminish and enhance the thermal performance of residential buildings
 - impact of local climatic conditions on building thermal performance
 - relationship between building thermal performance, heating and cooling and energy consumption.

Assessment Conditions

Assessors must meet the requirements for assessors contained in the Standards for Registered Training Organisations.

This unit must be assessed in the workplace or a close simulation using realistic workplace conditions, materials, activities, responsibilities, procedures, safety requirements and environmental considerations.

Candidates must have access to:

- relevant codes, standards and regulations associated with building thermal performance assessments
- computer equipment and software suitable for sourcing and transmitting information on the thermal performance of buildings to allow achievement of the performance evidence
- technical reference library and/or (online) access to current technical publications on:
 - passive building design
 - thermal performance of building materials
 - building thermal performance
 - manufacturers' product information on building products and materials.

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>