

Unit Standard 24171 <http://www.nzqa.govt.nz/ngfdocs/units/doc/24171.doc>

Title: **Demonstrate knowledge of Clause H1 – energy efficiency in the Building Code**

Level 5 Credits 3

Special notes

- 1 Compliance with the following legislation, regulations, and codes is required:
Building Act 2004
The Building Code
Building (Forms) Regulations 2004.
- 2 The scope of buildings assessed within this unit standard fall generally within the coverage of NZS 3604:1999 Timber Framed Buildings, NZS 4229:1999 Concrete masonry buildings not requiring specific engineering design, and NZS 3109:1997 Concrete construction, available from <http://www.standards.co.nz/default.htm>. Please note other Standards are referenced in the Building Code Handbook.
- 3 Reference documents:
The Building Code Compliance Documents
<http://www.dbh.govt.nz/building-code-compliance-documents>;
Building Code Handbook <http://www.dbh.govt.nz/UserFiles/File/Publications/Building/Compliance-documents/handbook.pdf>;
Building Officials – Building Act 2004 overview
<http://www.dbh.govt.nz/bofficials-buiding-act-2004-overview>.
- 4 All activities must comply with: any policies, procedures, business protocols, and requirements of the organisation/s involved; and ethical codes and standards of relevant professional bodies.

Element 1		
Demonstrate knowledge of Clause H1 – energy efficiency in the Building Code.		
Performance Criteria	Candidate	Assessor
1.1 The objective of Clause H1– energy efficiency is described in terms of the Building Code.	Describe in your own words the objective and functional requirements of Clause H1 - energy efficiency in the New Zealand Building Regulations 1992	Description to include reference to: <ul style="list-style-type: none"> the efficient use of energy Construction to achieve adequate energy efficiency when that energy is used for modifying temperature or humidity or providing hot water, and for providing artificial lighting
1.2 The functional requirements relating to Clause H1– energy efficiency is described in terms of the Building Code.		
1.3 The performance measures relating to Clause H1– energy efficiency is described in terms of the Building Code and applied to a given scenario.	<p>With reference to Scenario 1, describe four physical conditions likely to affect the energy efficiency of this building under Clause H1 - energy efficiency</p> <p>Describe two physical effects on the building performance index, assuming the building has 40% glazing</p>	<p>Description to include four from the following six points:</p> <ul style="list-style-type: none"> thermal mass building orientation and shape air tightness of the building envelope heat gains from services and occupants local climate heat gains from solar radiation <p>Description to include two from the following three points:</p> <ul style="list-style-type: none"> requirement for uniform, continuous indoor temperature throughout the building contribute to heat loss contribute to heat gain