

Title	Identify environmental impacts, design, and construction techniques, on and of the built environment		
Level	5	Credits	10

Purpose	People credited with this unit standard are able to: identify environmental aspects of building construction and services, and evaluate design and construction techniques and/or impacts that may apply to the built environment.
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Classification	Construction > Core Planning and Construction
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Available grade	Achieved
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Explanatory notes

- 1 Definition
Sustainability means the ability to complete building works using a minimum of the earth's resources, and having minimal negative effect on the environment.
- 2 Range for internal environment may include – control of temperature, moisture, air quality, passive solar, sound, light, selection of materials, sustainability.
- 3 Range for external environment may include – control of the effects of climate, seismic activity, corrosion, wind, moisture and thermal movement, moisture control, sound, pollution, services wastes, the greater environment and the effects on and of the built environment, sustainability.
- 4 Range of buildings – new and existing.
- 5 Published data are supplied by an established authority and can be applied in standard construction situations that are acceptable in New Zealand where a specific design may not be required. Published data relevant to this unit standard include manufacturer's instructions and industry specifications.
- 6 Assessment of this unit standard can be by simulation and/or observation.
- 7 Legislation relevant to this unit standard includes: Health and Safety in Employment Act 1992 and Health and Safety in Employment Regulations 1995;
Resource Management Act 1991;
Building Act 2004;
New Zealand Building Code.

Outcomes and evidence requirements

Outcome 1

Identify environmental aspects of building construction and services.

Evidence requirements

- 1.1 Environmental aspects are identified for building types from documentation, built examples and published data.
- 1.2 The effects are identified on, and of, the internal and external environment of building construction and services.

Outcome 2

Evaluate design and construction techniques and/or impacts that may apply to the built environment.

Range passive and active solar design, recycling, renewable resources, energy embodiment of materials, waste disposal.

Evidence requirements

- 2.1 Sustainable design and construction techniques are identified from documentation and from built examples.
- 2.2 Sustainable design and construction techniques are identified for building types.
Range two case studies – one new and one existing building.
- 2.3 Cost implications and regulatory requirements are described for identified techniques.

Planned review date	31 December 2015
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	21 March 1997	31 December 2014
Revision	2	10 December 1997	31 December 2014
Revision	3	7 June 2000	31 December 2014
Review	4	20 March 2003	31 December 2014
Revision	5	19 July 2004	31 December 2014
Review	6	18 March 2011	N/A

Accreditation and Moderation Action Plan (AMAP) reference	0048
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This AMAP can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Please note

Providers must be granted consent to assess against standards (accredited) by NZQA, or an inter-institutional body with delegated authority for quality assurance, before they can report credits from assessment against unit standards or deliver courses of study leading to that assessment.

Industry Training Organisations must be granted consent to assess against standards by NZQA before they can register credits from assessment against unit standards.

Providers and Industry Training Organisations, which have been granted consent and which are assessing against unit standards must engage with the moderation system that applies to those standards.

Consent requirements and an outline of the moderation system that applies to this standard are outlined in the Accreditation and Moderation Action Plan (AMAP). The AMAP also includes useful information about special requirements for organisations wishing to develop education and training programmes, such as minimum qualifications for tutors and assessors, and special resource requirements.

Comments on this unit standard

Please contact the Building and Construction Industry Training Organisation national.office@bcito.org.nz if you wish to suggest changes to the content of this unit standard.