

Unit Standard 24167 <http://www.nzqa.govt.nz/nqfdocs/units/doc/24167.doc>

Title: **Demonstrate knowledge of surface water, and external and internal moisture control in the Building Code**

Level **5** Credits **5**

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 available at <http://www.dbh.govt.nz/UserFiles/File/Publications/Building/Compliance-documents/handbook.pdf>.

- 3 Reference documents:
The Building Code Compliance Documents
<http://www.dbh.govt.nz/building-code-compliance-documents>;
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 the objectives, functional requirements and performance measures of Clause E1 – surface water in the Building Code.

Performance Criteria	Candidate	Assessor
1.1 The objective of Clause E1 - surface water is described in accordance with the New Zealand Building Code 1992	Describe the objectives and functional requirements of Clause E1 - surface water in accordance with the New Zealand Building Code 1992	The description includes reference to: <ul style="list-style-type: none">• Protecting people from injury or illness and other property from damage caused by surface water.• site works will be constructed in a way that protects people and other property from adverse effects of surface water
1.2 The functional requirements relating to Clause E1 – surface water are described in terms of the Building Code.		
1.3 The performance measures relating to Clause E1 – surface water are described in terms of the Building Code and applied to a given scenario.	Describe the performance measures of E1 - surface water with reference to Scenario 3, to mitigate concentrated surface water runoff	

Element 2

Demonstrate knowledge of the objective, functional requirements and performance measures of Clause E2 – external moisture in the Building Code.

Performance Criteria	Candidate	Assessor
2.1 The objective of Clause E2 – external moisture is described in terms of the Building Code.	Describe the objective and functional requirements of Clause E2 - external moisture in accordance with the New Zealand Building Code with reference to scenario 2	The description includes reference to: <ul style="list-style-type: none">• Protecting people from injury or illness which could be caused by external moisture entering the building.• Buildings constructed to provide adequate resistance to penetration and accumulation of moisture form outside.
2.2 The functional requirements of Clause E2 – resistance to penetration and accumulation of external moisture are described in terms of the Building Code.		
2.3 The performance measures of Clause E2 - external moisture are described in accordance with the New Zealand Building Code 1992.	Describe the performance measures of Clause E2 - external moisture that apply to Scenario 1, with reference to internal gutters.	Referring to Scenario 1 The description should include at least four from the following: <ul style="list-style-type: none">• Roof should shed water• Roof and walls should prevent water penetration• Ground water should not enter the building• Water should dissipate without damage to building elements• Roof should shed water from snow melts• Building elements should not absorb or transmit moisture

Element 3

Demonstrate knowledge of the objectives, functional requirements and performance measures of Clause E3 – internal moisture in the Building Code.

Performance Criteria	Candidate	Assessor
3.1 The objectives of Clause E3 – internal moisture are described in terms of the Building Code	Describe the objective and functional requirements of Clause E2 - internal moisture in accordance with the New Zealand Building Code 1992	The description includes reference to: <ul style="list-style-type: none">• Protecting people from injury or illness could result from the accumulation of internal moisture;• protect household units from damage caused by free water from another occupancy in the same building• fungal growth,• accumulation of contaminants,• free water overflow to adjoining household units,• damage to building elements
3.2 The functional requirements of clause E3 – internal moisture are described in terms of the Building Code.		
3.3 The performance measures relating to Clause E3 – measures used to prevent internal moisture are described in terms of the Building Code and applied to a given scenario.	Describe the design considerations that would need to be addressed under Clause E3 - internal moisture to prevent internal moisture in relation to Scenario 2	The description must include consideration to prevent accidental overflow to other occupancies and should include at least two from the following three points: <ul style="list-style-type: none">• Adequate combination of thermal resistance and ventilation is required• Floor and wall surfaces are impervious to moisture and easily cleaned• Surfaces of building elements show evidence of water splash containment and control