

Unit Standard 24168 <http://www.nzqa.govt.nz/nqfdocs/units/doc/24168.doc>

Title: **Demonstrate knowledge of hazard management and the safety of users in the Building Code**

Level **5** Credits **7**

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 from <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; ethical codes and standards of relevant professional bodies.

Element 1

Demonstrate knowledge of the objective, functional requirements and performance standards of Clause F1 – hazardous agents on site in the Building Code.

Performance Criteria	Candidate	Assessor
1.1 The objective of Clause F1 – hazardous agents or contaminants is described in accordance with the Building Code.	Describe in your own words the objective and functional requirements of Clause F1 - hazardous agents or contaminants in accordance with the New Zealand Building Code 1992	Description to include reference to: <ul style="list-style-type: none">• Protecting people from the presence of hazardous agents or contaminants within the building and site.• Construction to avoid people being adversely affected.
1.2 The functional requirements of Clause F1 – protection of building users against hazardous agents or contaminants are described in accordance with Building Code.		
1.3 The performance measures for Clause F1 – hazardous agents on site are described in accordance with the Building Code and applied to a given scenario. Range may include but are not limited to – chlorine, LPG, lead, glue, heavy metals, asbestos, poisons, PCBs.	If the building site referred to in Scenario 4 was a potentially contaminated site, explain how you would identify the presence of hazardous agents on site and how would you protect people from exposure to these hazards.	

Element 2

Demonstrate knowledge of the objective, functional requirements and performance standards of Clause F2 – hazardous building materials in the Building Code.

Performance Criteria	Candidate	Assessor
2.1 The objective of Clause F2 – hazardous building materials is described in accordance with the Building Code.	Describe the objectives and functional requirements of Clause F2 - hazardous building materials performance criteria in accordance with the New Zealand Building Code 1992.	Description to include reference to: <ul style="list-style-type: none">• Protecting people from injury or illness caused by exposure to hazardous building materials.• protecting people from undue risk due to potentially hazardous building materials.
2.2 The functional requirements of Clause F2 – protection of building users against hazardous building materials are described in accordance with the Building Code.		
2.3 The performance measures for Clause F2 – hazardous building materials are described in accordance with the Building Code and applied to a given scenario.	With reference to Scenario 4, identify the potentially hazardous materials used in the construction of the building and describe options for protecting building users under F2 - hazardous building materials in accordance with the New Zealand Building Code 1992	Description should include reference to: <ul style="list-style-type: none">- vision rails- impact resistance

Element 3

Demonstrate knowledge of the objective, functional requirements and performance standards of Clause F3 – hazardous substances and processes in the Building Code.

Performance Criteria	Candidate	Assessor
3.1 The objective of Clause F3 – hazardous substances and processes is described in accordance with the Building Code.	Describe the objectives and functional requirements of Clause F3 - hazardous substances and processes in accordance with the New Zealand Building Code 1992	Description to include reference to: <ul style="list-style-type: none">• Protecting people from injury or illness and other property caused by exposure to hazardous substances and processes in the building.• The construction providing adequate protection to people and to other property from hazardous substances and processes.
3.2 The functional requirements of Clause F3 – hazardous substances and processes are described in accordance with the Building Code.		
3.3 The performance measures for Clause F3 – hazardous substances and processes are described in accordance with the Building Code and applied to a given scenario.	With reference to Scenario 4, identify the potentially hazardous substances and processes stored, handled or used. Describe the means of dealing with the hazardous substances.	Description to include reference to: <ul style="list-style-type: none">• means of restricting unauthorised access• rendering harmless by ventilation, containment or dilution• prevent escape or entrance into public drainage• chemicals used to treat swimming and spa pools

Element 4		
Demonstrate knowledge of the objective, functional requirements and performance standards of Clause F4 – safety from falling in the Building Code.		
Performance Criteria	Candidate	Assessor
4.1 The objective of Clause F4 – safety from falling is described in accordance with the Building Code.	Describe the objectives and functional requirements of Clause F4 - safety from falling in accordance with the New Zealand Building Code 1992	Description to include reference to: <ul style="list-style-type: none"> Protecting people from injury caused by falling The construction providing adequate protection to reduce the likelihood of accidental fall
4.2 The functional requirements of Clause F4 – safety from falling are described in accordance with the Building Code.		
4.3 The performance measures for Clause F4 – safety from falling are described in accordance with the Building Code and applied to a given scenario.	<p>With reference to Scenario 3, describe all performance standards of Clause F4 - safety from falling that are likely to apply.</p> <p>Describe specific performance criteria relating to barriers to swimming pools.</p>	<p>Description should include all of the following points:</p> <ul style="list-style-type: none"> barriers where the fall exceeds 1meter, or more barriers should be continuous and extend for the full length of the hazard barriers shall be of appropriate height and rigidity provide adequate impact strength withstand static pressure barriers should prevent people from falling through them restrict entry of children under the age of 6, in areas likely to be frequented by them <p>Description should include reference to the following points:</p> <ul style="list-style-type: none"> restrict entry of children under the age of 6, in areas likely to be frequented by them gates to be constructed so that they close and latch automatically <p>no permanent obstructions on the outside of barrier that could provide a climbing step</p>

Element 5

Demonstrate knowledge of the objective, functional requirements and performance standards of Clause F5 – construction and demolition hazards in the Building Code.

Performance Criteria	Candidate	Assessor
5.1 The objective of Clause F5 – construction and demolition hazards is described in terms of the Building Code	Describe the objectives and functional requirements of Clause F5 - construction and demolition hazards in accordance with the New Zealand Building Code 1992	Description to include reference to: <ul style="list-style-type: none"> • Protecting people from injury and other property from damage caused by construction or demolition site hazards • Construction or demolition of buildings should be performed to avoid the likelihood of falling objects, site hazards affecting and unauthorised entry of children to site hazards
5.2 The functional requirements of Clause F5 – construction and demolition hazards are described in terms of the Building Code. Range falling objects, site hazards, unauthorised entry.		
5.3 The performance measures for Clause F5 – construction and demolition hazards are described in terms of the Building Code and applied to a given scenario	With reference to Scenario 4, describe the performance standards of Clause F5 - construction and demolition hazards. Include reference to risk from falling objects and site barriers.	Description should include the following: Construction methods should avoid the likelihood of falling objects affecting people or other property. Description should include at least 4 of the following points: Barriers to protect people from hazards shall be constructed of: <ul style="list-style-type: none"> • appropriate height • difficult to climb • approved openings • no gates or doors projecting beyond the site when opened • no projections that will cause a hazard to people or traffic • clearly marked • prevent the access of children

Element 6

Demonstrate knowledge of the objective, functional requirements and performance standards of Clause F6 – lighting for emergency in the Building Code.

Performance Criteria	Candidate	Assessor
6.1 The objective of Clause F6 – lighting for emergency is described in accordance with the Building Code	Describe the objectives of Clause F6 – lighting for emergency in accordance with the New Zealand Building Code 1992	Description to include reference to protecting people from injury due to inadequate lighting being available during an emergency
6.2 The functional requirements of Clause F6 – lighting for emergency are described in accordance with the Building Code	Describe the functional requirements of Clause F6 – lighting for emergency in accordance with the New Zealand Building Code 1992	Description to include reference to building shall be provided with adequate lighting within all escape routes in an emergency
6.3 The performance measures relating to Clause F6 – lighting for emergency are described in accordance with the Building Code and applied to a given scenario.	With reference to Scenario 3, describe the performance standards of Clause F6 – lighting for emergency.	Description should include the following: <ul style="list-style-type: none">• - provide adequate illumination for one and a half times the period of the evacuation• - Signs to indicate escape routes

Element 7

Demonstrate knowledge of the objective, functional requirements and performance standards of Clause F7 – warning systems in the Building Code.

Performance Criteria	Candidate	Assessor
7.1 The objective of Clause F7 – warning systems is described in terms of the Building Code	Describe the objectives and functional requirements of Clause F7 –warning systems in accordance with the New Zealand Building Code 1992	Description should include the following: <ul style="list-style-type: none">• Protecting people from injury due to lack of awareness of an emergency• The building being provided with appropriate means of warning people to escape to a safe place
7.2 The functional requirements of Clause F7 – warning systems are described in terms of the Building Code		
7.3 The performance measures relating to Clause F7 – warning systems are described in terms of the Building Code and applied to a given scenario	With reference to Scenario 4, describe the performance standards Clause F7 –warning systems.	Description should include reference to fire detection and warning systems to alert people in adequate time to reach a safe place

Element 8

Demonstrate knowledge of the objectives, functional requirements and performance standards of Clause F8 – signs in the Building Code.

Performance Criteria	Candidate	Assessor
8.1 The objectives of Clause F8 – signs are described in terms of the Building Code. Range injury or illness, loss of amenity, accessibility.	Describe the objectives and functional requirements of Clause F8 – signs in accordance with the New Zealand Building Code 1992	Description should include the following: <ul style="list-style-type: none">• Protection of people from injury• Safeguard against loss of amenity• Adequate provision for people with disabilities
8.2 The functional requirements of Clause F8 – signs are described in terms of the Building Code. Range escape routes, emergency related safety features, potential hazards, accessible routes and facilities.		
8.3 The performance measures relating to Clause F8 – signs are described in terms of the Building Code and applied to a given scenario	With reference to Scenario 4, describe the performance standards Clause F8 – signs	Description should include reference to: <ul style="list-style-type: none">• Visibility of signs• Hazards signs in place and clearly defined• Signs to remain visible in event of emergency