

CPCBC4001A Matrix Map

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ELEMENTS AND PERFORMANCE CRITERIA

Element	Performance Criteria	Task / Question Map
1. Access and interpret relevant code and standard requirements.	1.1. Relevant performance requirements from the BCA that apply to individual projects (described as low rise) are identified.	NCC performance based code: Q1 Q2 Q3 Q4 Q5 Building regulation introduction: Q1 Q2 Q3 Q4 Q5 NCC (formerly BCA) hierarchy : Q1 Q3 Building codes and standards: Q1 Meeting performance: Q1 Q2 Q3 Developing performance solution: Q1 Q2 Q3 Verification of Assessment Requirements: Q1 Q2 Q3 Q4
	1.2. Requirements of relevant BCA deemed-to-satisfy (DTS) provisions are determined.	Building regulation introduction: Q1 Q2 Q3 Q4 Q5 NCC (formerly BCA) hierarchy : Q1 Standards: Q1 Q2 Q3 Q4 Building codes and standards: Q1 Verification of Assessment Requirements: Q1 Q2 Q3 Q4
	1.3. Requirements of relevant Australian standards referenced in the BCA are accessed and interpreted accordingly.	Building regulation introduction: Q1 Q2 Q3 Q4 Q5 Standards: Q1 Q2 Q3 Q4 Building codes and standards: Q1 Verification of Assessment Requirements: Q1 Q2 Q3 Q4 AS3740:1994 Waterproofing of wet areas: Q1 Q2 Q3
2. Classify buildings.	2.1. Nature of a building is determined according to its use and arrangement.	Apply defined classification: Q1 Q2 Q3 Q4 Q5 Q6 Q7 Q8 Q9 Q10 Determine nature of building: Q1 Q2 Q3 Building classification: Q1 Verification of Assessment Requirements: Q5 Q6 Q7

	2.2. BCA criteria to determine the defined classification are applied.	Apply defined classification: Q1 Q2 Q3 Q4 Q5 Q6 Q7 Q8 Q9 Q10 Determine nature of building: Q1 Q2 Q3 Building classification: Q1 Verification of Assessment Requirements: Q5 Q6 Q7
	2.3. BCA requirements for multiple classification are identified and interpreted.	Apply defined classification: Q1 Q2 Q3 Q4 Q5 Q6 Q7 Q8 Q9 Q10 Building classification: Q1 Verification of Assessment Requirements: Q5 Q6 Q7 Multiple classifications: Q1 Q2 Q3
3. Analyse and apply a range of solutions to a construction problem for compliance with the BCA.	3.1. Range of criteria that will ensure that construction methods comply with BCA performance requirements is determined.	NCC performance based code: Q1 Q2 Q3 Q4 Q5 Building codes and standards: Q1 Developing performance solution: Q1 Q2 Q3 Verification of Assessment Requirements: Q8 Q9
	3.2. Alternative solutions to a design or construction problem that will comply with BCA requirements are discussed and proposed in accordance with company policies and procedures.	NCC (formerly BCA) hierarchy : Q1 Developing performance solution: Q1 Q2 Q3 Verification of Assessment Requirements: Q8 Q9
	3.3. Performance-based solutions are identified and documented in accordance with BCA requirements.	NCC (formerly BCA) hierarchy : Q1 Developing performance solution: Q1 Q2 Q3 Verification of Assessment Requirements: Q8 Q9
	3.4. Assessment methods referenced in the BCA to determine whether a building solution complies with performance requirements or DTS provision of the BCA are analysed and applied.	NCC performance based code: Q1 Q2 Q3 Q4 Q5 Building codes and standards: Q1 Developing performance solution: Q1 Q2 Q3 Structural reliability verification method: Q1 Q2 Q3 Verification of Assessment Requirements: Q8 Q9
	3.5. Relevant documentation is identified and completed in accordance with BCA requirements.	Developing performance solution: Q1 Q2 Q3 Verification of Assessment Requirements: Q8 Q9

<p>4. Apply fire protection requirements.</p>	<p>4.1. Passive and active fire control elements for low rise building required by the BCA and other legislation are identified and applied.</p>	<p>Apply fire protection requirements: Q1 Q2 Q3 Q4 Q5 Fire prevention systems: Q1 Q2 BCA volume 2 Part 2.3 Fire Safety: Q2 Q3 Q4 Verification of Assessment Requirements: Q10 Q11</p>
	<p>4.2. Level of fire resistance required for the construction of various low rise buildings is determined.</p>	<p>Apply fire protection requirements: Q1 Q2 Q3 Q4 Q5 Fire prevention systems: Q1 Q2 Verification of Assessment Requirements: Q10 Q11</p>
	<p>4.3. Check of existing buildings for compliance with passive and active fire protection requirements is carried out in accordance with BCA requirements.</p>	<p>Apply fire protection requirements: Q1 Q2 Q3 Q4 Q5 Fire prevention systems: Q1 Q2 Verification of Assessment Requirements: Q10 Q11</p>

REQUIRED SKILLS

Required Skill	Task / Question Map
Required skills for this unit are:	
<i>analysis and interpretation skills relating to documentation from a wide range of sources, including BCA and referenced documents</i>	Standards: Q1 Q2 Q3 Q4 Verification of Assessment Requirements: Q1 Q2 Q3 Q4
application of design concepts and principles in accordance with BCA, namely:	
<i>Class 1 and 10</i>	NCC Volumes: Q3 Q4 Q5 Apply defined classification: Q1 Q2 Q3 Q4 Q5 Q6 Determine nature of building: Q1 Q2 Q3 Building classification: Q1 Verification of Assessment Requirements: Q5 Q6 Q7
<i>Classes 2 to 9 with a gross floor area not exceeding 2000 square metres, not including Type A or Type B construction</i>	NCC Volumes: Q3 Q4 Q5 Apply defined classification: Q7 Q8 Q9 Q10 Determine nature of building: Q1 Q2 Q3 Building classification: Q1 Verification of Assessment Requirements: Q5 Q6 Q7
<i>attention to detail in applying building codes and standards</i>	NCC Volumes: Q1 Q2 Q3 Q4 Q5 Standards: Q1 Q2 Q3 Q4 BCA volume 2 Part 2.3 Fire Safety: Q2 Q3 Q4 Verification of Assessment Requirements: Q1 Q2 Q3 Q4 AS3740:1994 Waterproofing of wet areas: Q1 Q2 Q3
communication skills to:	
<i>discuss and propose alternative solutions</i>	Verification of Assessment Requirements: Q8 Q9
<i>enable clear and direct communication, using questioning to identify and confirm requirements, share information, listen and understand</i>	Verification of Assessment Requirements: Q1 Q2 Q3 Q4 Q5 Q6 Q7 Q8 Q9 Q10 Q11

read and interpret:	
documentation from a variety of sources, including BCA and referenced documents	Standards: Q1 Q2 Q3 Q4 Verification of Assessment Requirements: Q1 Q2 Q3 Q4
drawings and specifications	Verification of Assessment Requirements: Q1 Q2 Q3 Q4
use language and concepts appropriate to cultural differences	Verification of Assessment Requirements: Q1 Q2 Q3 Q4 Q5 Q6 Q7 Q8 Q9 Q10 Q11
use and interpret non-verbal communication	Verification of Assessment Requirements: Q1 Q2 Q3 Q4 Q5 Q6 Q7 Q8 Q9 Q10 Q11
written skills to complete documentation in accordance with BCA requirements	Verification of Assessment Requirements: Q1 Q2 Q3 Q4 Q5 Q6 Q7 Q8 Q9 Q10 Q11
numeracy skills to interpret and apply mathematical information included in building codes and standards.	Verification of Assessment Requirements: Q1 Q2 Q3 Q4 Q5 Q6 Q7 Q8 Q9 Q10 Q11

REQUIRED KNOWLEDGE

Required Knowledge	Task / Question Map
Required knowledge for this unit is:	
<i>basic design principles and the behaviour of structures under stress, strain, compression, bending or combined actions</i>	Verification of Assessment Requirements: Q1 Q2 Q3 Q4
<i>BCA performance hierarchy</i>	NCC performance based code: Q1 Q2 Q3 Q4 Q5 NCC (formerly BCA) hierarchy : Q1 Q2 Q3 Q4 Developing performance solution: Q1 Q2 Q3 Verification of Assessment Requirements: Q1 Q2 Q3 Q4
<i>definitions and common technical terms or usage specified under general provisions of BCA</i>	NCC Volumes: Q1 Q2 Q3 Q4 Q5 Verification of Assessment Requirements: Q1 Q2 Q3 Q4
<i>general nature of materials and the effects of performance</i>	Standards: Q1 Q2 Q3 Q4 Developing performance solution: Q1 Q2 Q3 Verification of Assessment Requirements: Q8 Q9 AS3740:1994 Waterproofing of wet areas: Q1 Q2 Q3
<i>relevant Australian standards</i>	Building regulation introduction: Q1 Q2 Q3 Q4 Q5 Standards: Q1 Q2 Q3 Q4 Verification of Assessment Requirements: Q1 Q2 Q3 Q4 AS3740:1994 Waterproofing of wet areas: Q1 Q2 Q3
<i>relevant legislative and OHS requirements, codes and practices</i>	Building regulation introduction: Q1 Q2 Q3 Q4 Q5 Verification of Assessment Requirements: Q1 Q2 Q3 Q4
<i>types of working drawings and specifications</i>	Verification of Assessment Requirements: Q5 Q6 Q7
understanding of the BCA relating to:	

<p><i>Class 1 and 10</i></p>	<p><i>NCC Volumes: Q3 Q4 Q5</i> <i>Apply defined classification: Q1 Q2 Q3 Q4 Q5 Q6</i> <i>Determine nature of building: Q1 Q2 Q3</i> <i>Building classification: Q1</i> <i>Verification of Assessment Requirements: Q5 Q6 Q7</i></p>
<p><i>Classes 2 to 9 with a gross floor area not exceeding 2000 square metres, not including Type A or Type B construction.</i></p>	<p><i>NCC Volumes: Q3 Q4 Q5</i> <i>Apply defined classification: Q7 Q8 Q9 Q10</i> <i>Determine nature of building: Q1 Q2 Q3</i> <i>Building classification: Q1</i> <i>Verification of Assessment Requirements: Q5 Q6 Q7</i></p>

CRITICAL ASPECTS

Critical Aspects	Task / Question Map
A person who demonstrates competency in this unit must be able to provide evidence of the ability to:	
<i>comply with organisational quality procedures and processes</i>	<i>Verification of Assessment Requirements: Q10 Q11</i>
<i>apply and interpret relevant documentation and codes</i>	<i>Verification of Assessment Requirements: Q1 Q2 Q3 Q4</i>
<i>accurately apply BCA performance requirements relating to the design and construction of a building</i>	<i>NCC performance based code: Q1 Q2 Q3 Q4 Q5 Building codes and standards: Q1 Developing performance solution: Q1 Q2 Q3 Verification of Assessment Requirements: Q5 Q6 Q7</i>
<i>understand assessment methods available to determine compliance with the BCA</i>	<i>Verification of Assessment Requirements: Q5 Q6</i>
<i>identify faults and problems and proposed action to rectify.</i>	<i>Verification of Assessment Requirements: Q8 Q9 Q10 Q11</i>

RANGE STATEMENTS

Range Statements	Task / Question Map	
<i>Low rise is described as falling within the BCA classes:</i>	<i>Class 1 and 10</i>	NCC Volumes: Q1 Q2 Q3 Q4 Q5 Apply defined classification: Q1 Q2 Q3 Q4 Q5 Q6 Determine nature of building: Q1 Q2 Q3 Building classification: Q1 Verification of Assessment Requirements: Q5 Q6 Q7
	<i>Classes 2 to 9 with a gross floor area not exceeding 2000 square metres, not including Type A or Type B construction.</i>	NCC Volumes: Q1 Q2 Q3 Q4 Q5 Apply defined classification: Q7 Q8 Q9 Q10 Determine nature of building: Q1 Q2 Q3 Building classification: Q1 Verification of Assessment Requirements: Q5 Q6 Q7
<i>Assessment methods include:</i>	<i>comparison with BCA DTS provisions</i>	<i>Building codes and standards: Q1</i>
	<i>evidence of suitability as described in the BCA</i>	Meeting performance: Q1 Q2 Q3 Developing performance solution: Q1 Q2 Q3 Structural reliability verification method: Q1 Q2 Q3 PROJECT: Suitable assessment method: Q1
	<i>expert judgement as defined in the BCA</i>	<i>PROJECT: Suitable assessment method: Q1</i>
	<i>verification method as defined in the BCA.</i>	<i>Structural reliability verification method: Q1 Q2 Q3</i>
<i>Performance requirements include:</i>	<i>performance requirements contained within other legislation applicable to a specific project</i>	NCC performance based code: Q1 Q2 Q3 Q4 Q5 Building codes and standards: Q1 Meeting performance: Q1 Q2 Q3 Developing performance solution: Q1 Q2 Q3
	<i>performance requirements of the BCA determined to be relevant to a specific project</i>	NCC performance based code: Q1 Q2 Q3 Q4 Q5 Building codes and standards: Q1 Meeting performance: Q1 Q2 Q3 Developing performance solution: Q1 Q2 Q3

	<i>performance-based contractual requirements that must be fulfilled by any party.</i>	<i>NCC performance based code: Q1 Q2 Q3 Q4 Q5 Meeting performance: Q1 Q2 Q3 Developing performance solution: Q1 Q2 Q3</i>
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