



Australian Government

CPCCBS6012 Conduct and report on initial construction inspections of residential buildings up to three storeys

Release: 1

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Modification History

Release 1.

This version first released with CPC Construction, Plumbing and Services Training Package Version 1.

Application

This unit of competency specifies the outcomes required to inspect for compliance the site preparation, foundations, footings and framing of class 1 and 10 buildings and structures, as defined in the Building Code of Australia (BCA) and up to three storeys and not more than 2000 square metres in floor area.

The unit supports the work of private or municipal building surveyors or certifiers who conduct mandated inspections of class 1 and 10 buildings and structures at the following initial stages of construction:

- site preparation, foundations and footings
- framing.

It applies to planning and conducting inspections, reporting on issues of non-compliance, and preparing certificates of compliance according to legislative and regulatory requirements.

The certificate of compliance for each stage must be completed and processed before the next stage of construction may commence.

The building surveyor or certifier must be satisfied that remedial work required in cases of non-compliance is understood by the building contractor and completed within required timeframes. This involves developing and maintaining professional and cooperative relationships with building contractors throughout a highly regulated process.

Licensing, legislative, regulatory or certification requirements apply to this unit in some States. Relevant state and territory regulatory authorities should be consulted to confirm those requirements.

Pre-requisite Unit

Nil

Competency Field

Building surveying

Unit Sector

Construction

Elements and Performance Criteria

Elements describe the essential outcomes.

Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the range of conditions.

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| 1. Plan and prepare to inspect site preparation and foundations and footings. | 1.1. <i>Site classification</i> is determined according to BCA definitions and <i>compliance requirements for site preparation, foundations and footings</i> are identified and interpreted. |
| | 1.2. Approved building design drawings and specifications are interpreted and variations from deemed-to-satisfy provisions for compliance are confirmed with senior personnel or statutory authority. |
| | 1.3. Inspections are scheduled according to project and legislative and regulatory requirements, and stakeholders are notified as required. |
| | 1.4. Missed inspections are recorded and reported according to legislative and regulatory requirements. |
| | 1.5. Work health and safety (WHS) requirements for inspections of site preparation, foundations and footings are identified. |
| 2. Inspect and report on site preparation, foundations and footings. | 2.1. Site preparation, foundations and footings are surveyed according to project, statutory and WHS requirements. |
| | 2.2. Features of site preparation, foundations and footings are assessed against compliance requirements, approved drawings, and discussed with on-site personnel as required. |
| | 2.3. Inspections undertaken to ensure compliance with waterproofing are validated and documented. |
| | 2.4. Details of non-compliant features are documented and reported according to workplace procedures and legislative and regulatory requirements. |

- 2.5. Non-compliant features are discussed with relevant contractors and work required to remedy non-compliance is negotiated according to scope of personal responsibilities.
 - 2.6. Timeframe for remedial action and rescheduled inspection is negotiated according to scope of personal responsibilities, and contractor's failure to comply is reported according to legislative and regulatory requirements if required.
 - 2.7. Certificate of compliance for foundations and footings is prepared and processed according to legislative and regulatory requirements and scope of personal responsibilities.
- 3. Plan and prepare to inspect framing.
 - 3.1. Climate zone is determined according to BCA definitions and ***compliance requirements for sub-floor ventilation*** are identified and interpreted.
 - 3.2. Yield-stress of steel frame material is determined and ***compliance requirements for steel framing and structural steel members*** are identified and interpreted.
 - 3.3. Extreme weather events for the area are determined and ***compliance requirements for timber framing*** are identified and interpreted.
 - 3.4. Approved building design drawings and specifications are interpreted and variations from deemed-to-satisfy provisions for compliance are confirmed with senior personnel or statutory authority.
 - 3.5. Inspection is scheduled according to project and legislative and regulatory requirements, and stakeholders are notified as required.
 - 3.6. Missed inspections are recorded and reported according to legislative and regulatory requirements.
 - 3.7. WHS requirements for inspections of framing are identified.
- 4. Inspect and report on framing.
 - 4.1. Framing is inspected according to project, statutory and WHS requirements.

- 4.2. Features of framing are assessed against compliance requirements and approved drawings, and discussed with on-site personnel as required.
 - 4.3. Details of non-compliant features are documented and reported according to workplace procedures and legislative and regulatory requirements.
 - 4.4. Non-compliant features of framing are discussed with relevant contractors and work required to remedy non-compliance is negotiated according to scope of personal responsibilities.
 - 4.5. Timeframe for remedial action and rescheduled inspection is negotiated according to scope of personal responsibilities, and contractor's failure to comply is reported according to legislative and regulatory requirements if required.
 - 4.6. Certificate of compliance for framing is prepared and processed according to legislative and regulatory requirements and scope of personal responsibilities.
5. Plan and prepare to inspect wet areas.
 - 5.1. Wall and substrate construction methods and materials are identified.
 - 5.2. ***Compliance requirements for waterproofing*** are identified and interpreted.
 - 5.3. Approved building design drawings and specifications are interpreted and variations from deemed-to-satisfy provisions for compliance are confirmed with senior personnel or statutory authority.
 - 5.4. Inspection is scheduled according to project and legislative and regulatory requirements, and stakeholders are notified as required.
 - 5.5. Missed inspections are recorded and reported according to legislative and regulatory requirements.
 - 5.6. WHS requirements for inspections of wet areas are identified.
6. Inspect and report
 - 6.1. Wet areas are inspected according to project, statutory

on wet areas.

and WHS requirements.

- 6.2. Waterproofing installation is assessed against manufacturer specifications, compliance requirements and approved drawings and discussed with on-site personnel as required.
- 6.3. Details of non-compliant features are documented and reported according to workplace procedures and legislative and regulatory requirements.
- 6.4. Non-compliant features of wet areas are discussed with relevant contractors and work required to remedy non-compliance is negotiated according to scope of personal responsibilities.
- 6.5. Timeframe for remedial action and rescheduled inspection is negotiated according to scope of personal responsibilities, and contractor's failure to comply is reported according to legislative and regulatory requirements if required.
- 6.6. Certificate of compliance for wet areas is prepared and processed according to legislative and regulatory requirements and scope of personal responsibilities.

Foundation Skills

This section describes the language, literacy, numeracy and employment skills essential to performance in this unit but not explicit in the performance criteria.

Skill

Performance feature

Learning skills to:

- independently access and interpret a range of complex technical information relating to compliance requirements for features of foundations, footings and framing for class 1 and 10 buildings and structures, including specific requirements for particular geographic and climatic areas and different planning schemes and codes.

Numeracy skills to:

- extract and interpret a range of mathematical information contained in technical documentation relating to foundations, footings and framing of class 1 and 10 buildings and structures
- measure and calculate dimensions, including bearer spans, floor areas and sub-floor clearances.

This section describes the language, literacy, numeracy and employment skills essential to performance in this unit but not explicit in the performance criteria.

Skill	Performance feature
Oral communication skills to:	• use communication style and technical construction vocabulary to develop and maintain cooperative and professional relationship with building contractors and exchange technical information • monitor the effectiveness of interactions with on-site personnel when negotiating remedial work and adjust communication style to facilitate a positive outcome.
Reading skills to:	• use different reading strategies to locate specific compliance requirements in a range of resources, including the BCA • understand technical texts with complex structures, specialised vocabulary, acronyms and diagrams specific to plans and compliance requirements for features of foundations, footings and framing for class 1 and 10 buildings.
Writing skills to:	• integrate and document information gathered from a range of sources, including on-site inspections and communications with builders • use accurately-spelled technical vocabulary specific to compliance of features of foundations, footing and framing when compiling detailed non-compliance reports.

Range of Conditions

This section specifies work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included. Bold italicised wording, if used in the performance criteria, is detailed below.

<i>Site classification</i> must include:	• advice from relevant authority or experts, especially where site classification is not defined by the BCA • determination of soil type, including arrangements for soil testing as required • identification of soil properties and characteristics and effects on site stability, including potential for: • collapsing soil • ground movement due to moisture change
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- land slips
- mine subsidence
- soil erosion.

Compliance requirements for site preparation, foundations and footings must include:

- AS2870 Residential slabs and footings
- BCA:
 - deemed-to-satisfy specifications
 - performance requirements for alternative solutions
- building control legislation and regulations
- requirements for concrete, steel or timber stumps specified in:
 - AS3600 Concrete structures
 - AS4100 Steel structures
 - AS1684 Timber framing code
- requirements for stormwater drainage and connections to street gutter and easements
- requirements relating to:
 - excavations
 - filling under concrete slabs
 - pest risk management
- requirements specified by relevant authority or experts.

Compliance requirements for sub-floor ventilation must include:

- AS1684 Timber framing code
- BCA:
 - deemed-to-satisfy specifications
 - performance requirements for alternative solutions
- building control legislation and regulations
- requirements specified by relevant authority or experts.

Compliance requirements for steel framing and structural steel members must include:

- AS4100 Steel structures
- AS/NZS4600 Cold-formed steel structures
- BCA:
 - deemed-to-satisfy specifications
 - performance requirements for alternative solutions
- building control legislation and regulations
- corrosion protection requirements
- National Association of Steel-Framed Housing (NASH) standards
- service penetration requirements
- requirements specified by relevant authority or experts.

Compliance requirements for timber framing must include:

- AS1684 Timber framing code
- BCA:
 - deemed-to-satisfy specifications
 - performance requirements for alternative solutions
- building control legislation and regulations
- requirements specified by relevant authority or experts
- requirements in high wind areas
- specific requirements for use in conjunction with:
 - concrete floors
 - steel members
- timber species scheduled for structural use.

Compliance requirements for waterproofing must include:

- AS3740 Waterproofing of wet areas within residential buildings
- BCA:
 - deemed-to-satisfy specifications
 - performance requirements for alternative solutions
- building control legislation and regulations
- requirements specified by relevant authority or experts.

Unit Mapping Information

No equivalent unit.

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=7e15fa6a-68b8-4097-b099-030a5569b1ad>

Assessment Requirements for CPCCBS6012 Conduct and report on initial construction inspections of residential buildings up to three storeys

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Performance Evidence

A person demonstrating competency in this unit must satisfy all of the elements, performance criteria and foundation skills of this unit. The person must prepare for and conduct inspections of:

- foundations and footings for the following class 1 and 10 buildings or structures as defined in the Building Code of Australia (BCA):
 - two types of class 1a buildings in different climatic, geographic or planning zones
 - one class 1b building
 - one swimming pool or other class 10 structure
- framing and wet areas for:
 - two types of class 1a buildings in different climatic, geographic or planning zones
 - two types of class 1b buildings in different climatic, geographic or planning zones.

In doing the above, the person must:

- identify and interpret relevant compliance requirements, including differences in requirements for:
 - types of building or structure
 - particular geographic, climatic or planning zones
- interpret working drawings, specifications and building permit conditions for each inspection
- identify and apply work health and safety (WHS) requirements for site visits
- develop and maintain professional and cooperative relationships with building contractors throughout a highly regulated process
- observe and document all non-compliant features of:
 - site preparation, foundations and footings
 - framing
 - wet areas
- prepare and process compliance documentation according to scope of personal responsibilities and legislative and regulatory requirements.

Knowledge Evidence

A person demonstrating competency in this unit must demonstrate knowledge of:

- BCA classification and definitions for class 1 and 10 buildings and structures
- legislative and regulatory requirements for inspecting class 1 and 10 buildings and structures at initial construction stages:
 - foundations and footings
 - framing
 - wet areas
- legislative and regulatory requirements for professional conduct in communications with building contractors in highly regulated building inspection and reporting processes
- principles and purpose of report in the context of conducting and reporting on initial construction inspections
- principles of negotiation and conflict resolution applicable to professional relationships in highly regulated building inspection and reporting processes
- drawing symbols, notations, acronyms and construction terminology used in the National Construction Code (NCC), Australian standards, working drawings, building design specifications, and building permit documentation
- constructions methods and materials used in class 1 and 10 buildings and structures
- range of, and variations in, compliance requirements for class 1 and 10 buildings and structures in different climatic, geographic and planning zones.

Assessment Conditions

Suitable assessment of performance requires:

- equipment:
 - computer with internet access and business software currently in use in building surveying practices
- materials:
 - tools and equipment for conducting inspections, including personal protective equipment (PPE)
- specifications:
 - access to relevant and current building control legislation, regulations, codes and standards and state, territory or local authority development policies.

Assessor requirements

Assessors must satisfy the assessor requirements in the *Standards for Registered Training Organisations* (RTOs) current at the time of assessment.

In addition, assessors must also demonstrate current membership of a relevant industry association and have current registration on the National Building Professionals Register in the Building Industry Control category (level 1) or be accredited under the Australian Institute of Building Surveyors (AIBS) National Accreditation Scheme at Building Surveyor level.

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