



Suitability of Building Products

Australian Building Codes Board



Presentation Outline

- Building control systems
- Verification of construction
- Product identification
- Product variation
- Summary



Building control systems

- Respective State and Territory governments are responsible for legislation governing building work
- The scope and content of these various systems are similar in many respects
- The BCA is adopted in legislation as a mandatory technical standard for the design and construction of buildings



Building control systems

- Legislation will require the design and construction of new buildings to comply with the Building Code of Australia (BCA)
- Legislation will establish administrative processes relating to ensuring that a completed building complies with an approved design
- Verification of construction may be included in some legislative systems



Verification of construction

- Verification of construction may be addressed through various systems -
- Legislative requirements (State and Territory)
- Building Code of Australia (Part A2)
- Conditions of approval (Approval authority)
- Contract requirements (Client/builder)



Legislative systems

- Requirements in State or Territory legislative systems may vary - but generally make the relevant approval authority responsible for verifying construction.
- Approval authorities may undertake inspections or may rely upon, or require, inspections undertaken by others to verify quality of a material or form of construction



Legislative systems

- When relying on certification provided by others, an approval authority would not validate a certificate because that action may transfer liability to the approval authority
- An approval authority would assume that the independent certifier was ethical and has issued a legitimate certificate



Legislative systems

- To facilitate ethical practices some States and Territories require certificates to be issued by accredited practitioners
- When a certificate is issued by an accredited practitioner, the recipient of the certificate may be relieved of any consequential liability



Legislative systems

- Some legislative systems do not allow a designer to certify/verify subsequent construction due to perceptions of 'conflict of interest'
- Relying on inspections undertaken by others is becoming a more common practice in Australia

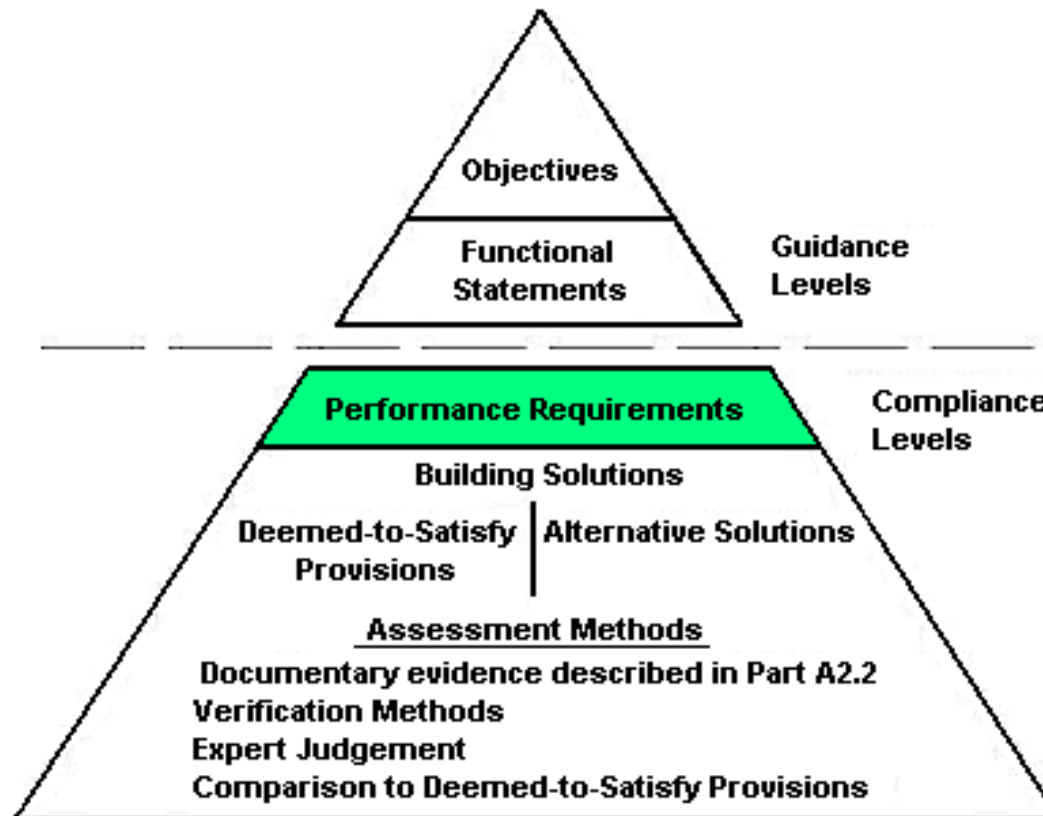


Building Code of Australia

- The Building Code of Australia (BCA) is a performance-based code
- Performance-based codes set mandatory levels of performance - called 'Performance Requirements'
- 'Performance Requirements' specify outcomes that must be achieved



Structure of the BCA





Acceptance of design and construction

- Section A of the BCA is titled 'General Provisions' and it is not performance-based, i.e. its content is mandatory
- Part A2 of the BCA is titled 'Acceptance of design and construction'
- A2.1 'Suitability of materials' requires every part of building to be constructed in a manner that achieves compliance with the BCA.



Acceptance of design and construction

- The intent of A2.1 is that:
 - o all people involved with construction must work skilfully in accordance with good trade practice; and
 - o all materials must be of a quality to fulfil their functions within a building,
for matters normally covered by the BCA



Acceptance of design and construction

- A2.2 'Evidence of suitability' describes forms of evidence that may be used to support a claim that a material, form of construction or design achieves compliance with the BCA.
- A2.1 and A2.2 may be applied at the design approval stage and during the construction stage



Acceptance of design and construction

- Therefore Part A2 of the BCA –
 - o requires materials to be of a quality to fulfil their functions within a building,
 - o lists forms of evidence that may be used to demonstrate compliance with the BCA, and
 - o applies to design approval and construction for matters covered by BCA



Approval Systems

- Most building designs need to be approved by relevant approval authorities
- Approval authorities may approve designs subject to specified conditions



Approval Systems

- Legislative systems can require an approval authority to be 'satisfied' that a design complies with the BCA.
- Conditions of approval (applied by the approval authority) may require evidence of compliance of a design, a material or a form of construction to be provided



Approval Systems

- Conditions of approval may require verification that construction complies with the approved design.
- Methods used to verify compliance include those listed in BCA A2.2



Building Contracts

- Requirements for verification of construction may also be included within a building contract.
- These requirements would typically be specific to a project and agreed between a client and a building contractor.



Building Contracts

- Typically, a builder would be responsible for certifying that construction is in accordance with technical specifications and terms of contract
- A certificate issued to fulfil contractual obligations may not attract the liability waiver of a certificate required by legislation



Product identification

- BCA A2.2 'Evidence of suitability' allows the use of 'any form of documentary evidence that correctly describes the properties and performance of the material'
- This provision allows an approval authority to apply judgement as to what is suitable.



Product identification

- Properties and performance of a material may be indicated by a label or similar form of evidence – such as a 'Standards' mark
- A 'Standards' mark is a means of advertising that a material complies with an Australian Standard



Product identification

- Use of a 'Standards' mark is optional
- Use of a 'Standards' mark is administered by the provider of the mark
- Acceptance of a 'Standards' mark is discretionary

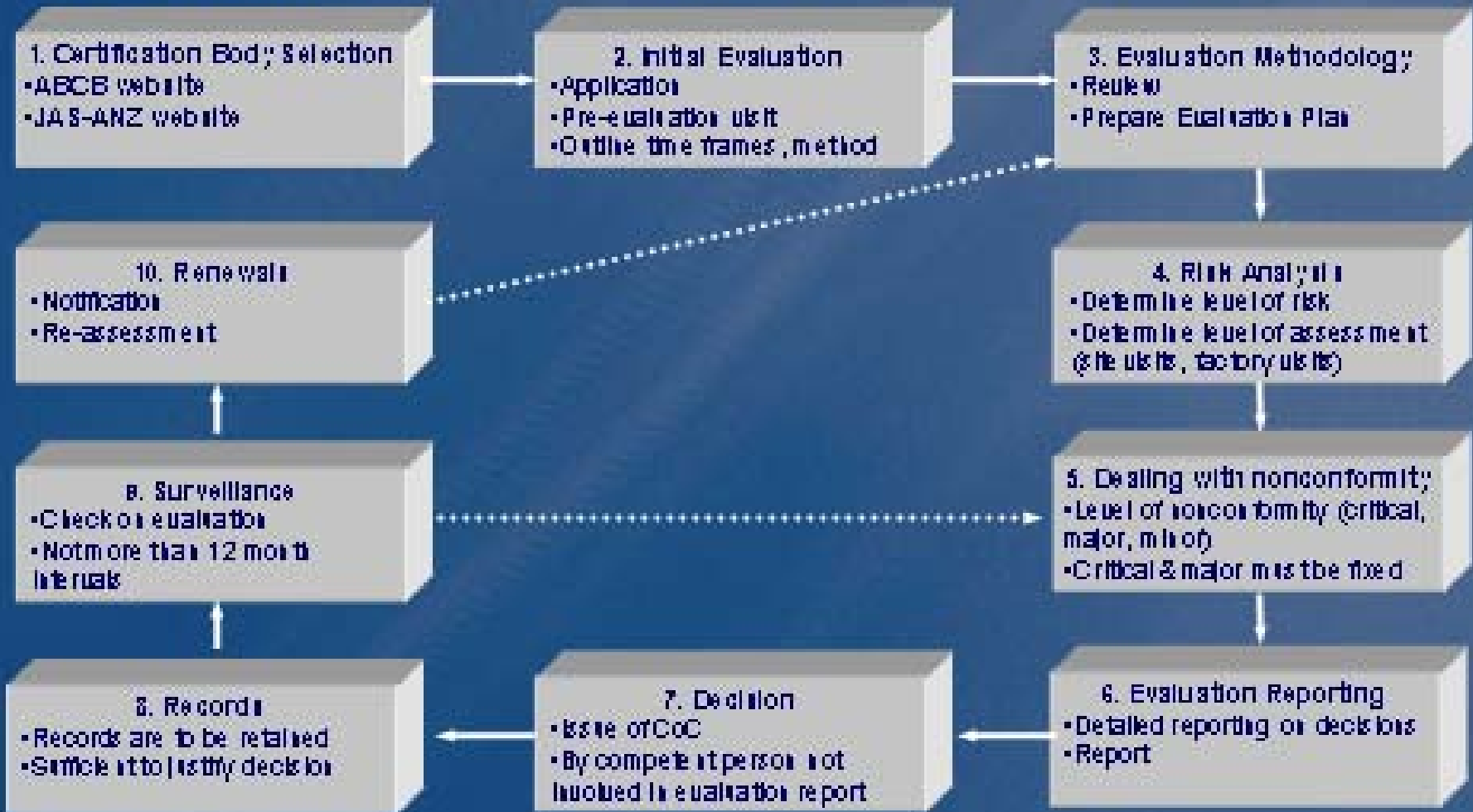


Product identification

- CodeMark product certification scheme
 - CodeMark is a building product certification scheme. Third-party CodeMark certification bodies evaluate and certify products to ensure they meet specified requirements of the Building Code.
 - Relevant legislation requires building control authorities to accept CodeMark certified products



Requirements for Product Evaluation





Product variation

- The scope of documentation required to obtain building approval is determined by an approval authority
- Detailed specifications may not be required for the purposes of an approval
- An approval will relate to the documentation provided, as well as conditions applied by an approval authority



Product variation

- An approval authority should be notified of a variation to approved documentation.
- A significant variation may require a new application for approval.
- Significant issues of non-compliance with an approval may result in legal action.



Summary

- Verification of construction may be addressed through various systems -
 - o legislative requirements
 - o Building Code of Australia
 - o conditions of approval
 - o contract requirements



Summary continued..

- Processes used to verify construction can be influenced by legislative or contractual responsibilities
- Processes used to verify construction can also depend on the capabilities of individual inspectors and certifiers
- Independent certification is a popular process