Independent Third Party Review - A response to the Building Confidence Report

Discussion paper

2020

Copyright

Enquiries about this publication can be sent to:

Australian Building Codes Board
GPO Box 2013
CANBERRA ACT 2601
Phone: 1300 134 631
Email: ncc@abcb.gov.au
Web: abcb.gov.au

Attribution

Use of all or part of this publication must include the following attribution:

© Commonwealth of Australia and States and Territories 2020, published by the Australian Building Codes Board.

Disclaimer

By accessing or using this publication, you agree to the following:

While care has been taken in the preparation of this publication, it may not be complete or up-to-date. You can ensure that you are using a complete and up-to-date version by checking the Australian Building Codes Board website (abcb.gov.au).

The Australian Building Codes Board, the Commonwealth of Australia and States and Territories of Australia do not accept any liability, including liability for negligence, for any loss (howsoever caused), damage, injury, expense or cost incurred by any person as a result of accessing, using or relying upon this publication, to the maximum extent permitted by law. No representation or warranty is made or given as to the currency, accuracy, reliability, merchantability, fitness for any purpose or completeness of this publication or any information which may appear on any linked websites, or in other linked information sources, and all such representations and warranties are excluded to the extent permitted by law.

This publication is not legal or professional advice. Persons rely upon this publication entirely at their own risk and must take responsibility for assessing the relevance and accuracy of the information in relation to their particular circumstances.

Version history

Original

Publish date: 7 December 2020
Print version: 1.0

This version

Publish date: 7 December 2020
Print version: 1.0

Table of Contents

Independent Third Party Review

Context

Building Ministers' authorised an assessment of the effectiveness of compliance and enforcement systems for the building and construction industry across Australia. The resulting Building Confidence Report (BCR) highlighted shortcomings in the implementation of the National Construction Code (NCC) and made 24 recommendations to address these issues.

The predominant goal of the BCR recommendations is to enhance public trust and confidence in the building industry, achieved through a national best-practice model of building and construction standards that aims to strengthen the effective implementation of the NCC and protect the interests of those who own, work, live, or conduct their business in Australian buildings.

Recommendation 17 of the BCR proposes 'that each jurisdiction requires genuine independent third-party review for specified components of designs and/or certain types of buildings'.

The BCR notes that building surveyors are not always competent to review and confirm compliance of all building design documentation particularly for complex and high risk fire safety and structural designs. In the case where the building surveyor doesn't have the required level of competence, they may rely on the competence of the designer, with no detailed review undertaken. This introduces the potential for significant risk of non-compliance with the NCC and other state and territory regulations.

In most states and territories the building regulatory system allows independent review of design documents by persons other than the statutory building surveyor[1]. However, the decision to require a review is at the discretion of the statutory building surveyor and the practice of requiring an independent review varies from jurisdiction

[1] ***Statutory building surveying work*** means approval work, assessment and certifying which building approval legislation requires to be done by a registered building surveyor.

to jurisdiction and between building surveyors. It is understood that some building surveyors rely on self-certification of complex and high risk building designs assuming it will give them a level of immunity. Not only is this unlikely to be the case, but the consequences for self-certification are that there is no substantive review of the design by an independent person with the skills to determine whether the design is adequate, acceptable and complies with the NCC.

In some jurisdictions, fire authorities conduct the third-party reviews of fire engineering designs, which might provide the necessary independent oversight for this feature of design, noting that this may not be the most efficient use of fire authority resources. However, in many jurisdictions, consultation with the fire authority is limited to seeking comment on fire Performance Solutions that impact fire brigade intervention. This does not sufficiently meet the requirement for third-party review because an independent review of the entire fire safety design is necessary.

The Building Confidence National Framework, agreed by Building Ministers, identifies the deliverable for recommendation 17 as national 'model provisions'. It is proposed that this Discussion Paper and responses from stakeholders inform the development of model provisions that can be considered for implementation by the states and territories. The nationally consistent adoption of model provisions, requiring independent third-party review, would provide significant benefit to a national building industry and assist those practitioners who already work or plan to work across borders. It is also considered that the implementation and nationally consistent adoption of requirements for mandatory third-party review would positively impact the availability and cost of professional indemnity insurance.

Purpose

Independent third-party review should be considered as part of any building approval[2] process. Its purpose is to ensure a more robust, transparent and independent review of building designs. Recommendation 17 proposes a draft model

[2] **Building approval** is defined as the final certification that is required before building activity can commence, where building activity includes construction of new buildings, alterations and additions to existing buildings, the relocation of buildings between sites and other structural work.

process for independent third-party review proportionate to the building complexity (risk) and as a means of improving building outcomes through greater NCC compliance. Third-party review would assist in ensuring designs are independently reviewed where the statutory building surveyor does not hold the necessary skills and experience for checking a component(s) of the design. The process would ensure design issues are identified and rectified earlier in the process, resulting in enhanced public confidence in the building industry.

A risk based approach would ensure the right level of resources, time, effort and costs are directed to those buildings or aspects of design that require third-party review. Other potential benefits of third-party review are improved regulatory compliance and higher quality building design documentation.

A draft model process (Figure 1 and Figure 2) for the regulation of independent third-party review has been developed in response to recommendation 17. The draft model process includes the following:

- the proposed approach and process
- the scope of review, including elements of the design that must be reviewed
- roles of the building surveyor and independent reviewer, including competency and criteria of the independent reviewer
- inclusion of fire authorities for specific risk levels
- mechanisms to source the independent reviewer
- cost and dispute resolution
- the timing of the review and the extent of the design review process
- documentation associated with the review process.

Proposed model

Figure 1 Risk based model for independent third-party review

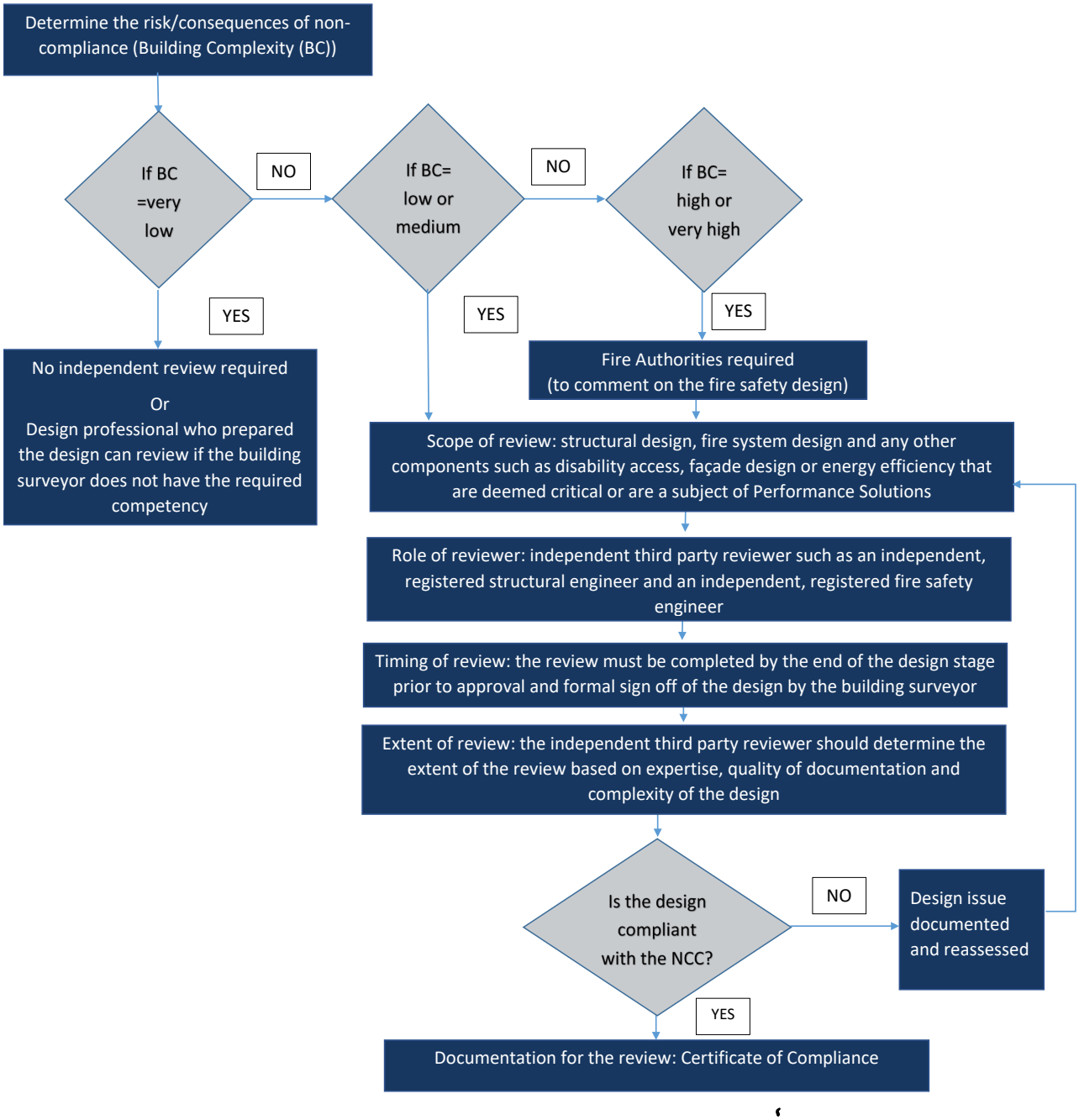


Table 1 Potential areas for independent review

Potential areas for independent review

• Structural design
  • Steelwork
  • Concrete required to have compressive strength greater than 60MPa
  • Fatigue-sensitive components
  • One or more members or connections that support more than 5 tonnes of mass which would collapse if removed; and/or
  • Overhangs weighing more than 1 tonne above public walkways.
• Accessibility
• Façade/cladding
• Energy efficiency
• Fire safety
  • Fire suppression systems
  • Fire hydrant systems, pumps, tanks and boosters
  • Means of escape (fire isolated exits, pathways and stairways)
  • Fire detection system
  • Emergency communication systems (Occupant Warning System (BOWS) and Emergency Warning and Intercommunication System (EWIS)
  • Bushfire Attack Level assessment
  • Bushfire safety certification (if applicable)
  • Sprinkler system and vehicle access
• Any design relating to Performance Solutions or DTS interaction with Performance Solutions

Under the draft model process it is proposed that all buildings are first subject to a risk assessment by the statutory building surveyor to determine the independent third-party review process pathway (Figure 1). The risk based model would use the **Definition of Building Complexity (Building Complexity)**. **Building Complexity** means those attributes that increase the likelihood of non-compliance, and situations where the consequences for safety and/or health of non-compliance would be significant.

Building Complexity criteria are used to determine whether all or part of a *building* is low, medium, high or very high building complexity. The Building Complexity criteria are:

A) **Attributes** – the building is designed or constructed with any of the following sub-criteria:
   i) an *effective height* of more than 25 metres;
   ii) one or more *Performance Solutions* used to demonstrate compliance with *Performance Requirements* relating to material and systems for structural safety;
   iii) With one or more *Performance Solutions* used to demonstrate compliance with *Performance Requirements* relating to material and systems for fire safety;
   iv) in an area prone to natural disaster or adverse environmental conditions;
B) **Class 2** – all or part of the *building* is *Class 2* of three or more *storeys*;
C) **Occupant numbers** – the *building* is to be occupied by more than 100 people determined in accordance with D1.13 (NCC Volume One);
D) **Occupant characteristics** – the *building* is to be occupied by more than 10 people who will require assistance to evacuate the building in an emergency;
E) **Building Importance Level 4** – the *building* is determined to be *Building Importance Level 4* under B1.2a (NCC Volume One).

The results of applying the criteria are then used to determine the building complexity level. This is done as follows:

Low building complexity is where a *building* meets one only of *building complexity criteria* A (Attributes), B (Occupant numbers), C (Occupant characteristics) or D (Class 2).

Medium building complexity is where a *building* meets two of *building complexity criteria* A (Attributes), B (Occupant numbers), C (Occupant characteristics) or D (Class 2).

High building complexity is where a *building* meets three of *building complexity criteria* A (Attributes), B (Occupant numbers), C (Occupant characteristics) or D (Class 2).

Very high building complexity is where a *building* meets:

i) *building complexity criteria* A (Attributes), B (Occupant numbers), C (Occupant characteristics) and D (Class 2); or

ii) *building complexity criteria* E (Building Importance Level 4).

For the purposes of this paper, if a building does not meet any of the criteria, it will be considered to be of very low building complexity.

Examples of buildings for each risk level:

- **Low**: typical single family home in a fire prone area; a warehouse with a Performance Solution related to material or systems for structural or fire safety;
- **Medium**: a single use office building with an effective height of over 25m and/or Performance Solutions related to material or systems for structural or fire safety, and over 100 occupants;
- **High**: an apartment building of over three storeys with Performance Solutions related to material or systems for structural or fire safety, and over 100 occupants, such as Lacrosse, Mascot Tower, or the Forte Building; a small hospital in a cyclone area, for over 100 occupants and over 10 occupants who will need assistance to evacuate.
- **Very high**: a multiple use building including an apartment building of over three storeys, with Performance Solutions related to material and systems for structural or fire safety, over 100 occupants and over 10 occupants who will require assistance to evacuate, such as the Opal Tower which has a child care facility; or buildings essential to post-disaster recovery or associated with hazard facilities (i.e. *Building Importance Level 4*) such as an emergency services facility, a major hospital, or a gas fired power plant.

Question

1. **Do you agree the risk based model is the correct approach to identify the need for independent third-party review? If you answered No, what is an alternative approach?**

Definitions

Independent third-party review is an examination and assessment of a component of a building's design, reports and documents for compliance with the NCC, by an individual who is completely separate to the building designer.

Independent third-party reviewer is an independent, registered and competent practitioner who is engaged to review and assess the design, reports and documents for compliance of a building with the NCC, prepared by an appropriately qualified and experienced professional in a relevant field. Independence is assured by not having participated in any component of the original design or in the process of design decisions. The independent reviewer must not work for the same organisation as the designer that prepared the original design.

It is expected that an independent third-party reviewer would:

- meet the education, competency and experience requirements as prescribed in the National Registration Framework for BCR recommendations 1 and 2
- undertake ongoing continuous professional development
- declare any real or potential conflict of interest with the statutory building surveyor or relevant building designer
- be responsible for independently reviewing and validating the design, reports and documents as meeting all relevant NCC design requirements
- provide certificates of compliance to the statutory building surveyor when satisfied that the design complies with the NCC.

Declaration of Design Compliance is a written document provided by a responsible design practitioner stating that the design work complies with the requirements of the NCC and any additional requirements of the jurisdiction.

Certificate of Compliance is a certificate issued by a prescribed person for a prescribed components or element of design which, if accepted by the statutory

building surveyor, may give the statutory building surveyor immunity in relation to the matters certified. [3]

Question

2. This Discussion Paper proposes terminology which, if agreed by Building Ministers, would be consolidated into a Preferred Terms Publication for consideration and adoption into State and Territory laws. Current legislative terminology used across Australia has been considered when developing the proposed terminology. The agreed terminology used in the Preferred Terms Publication would not be legal definitions unless adopted by jurisdictions.

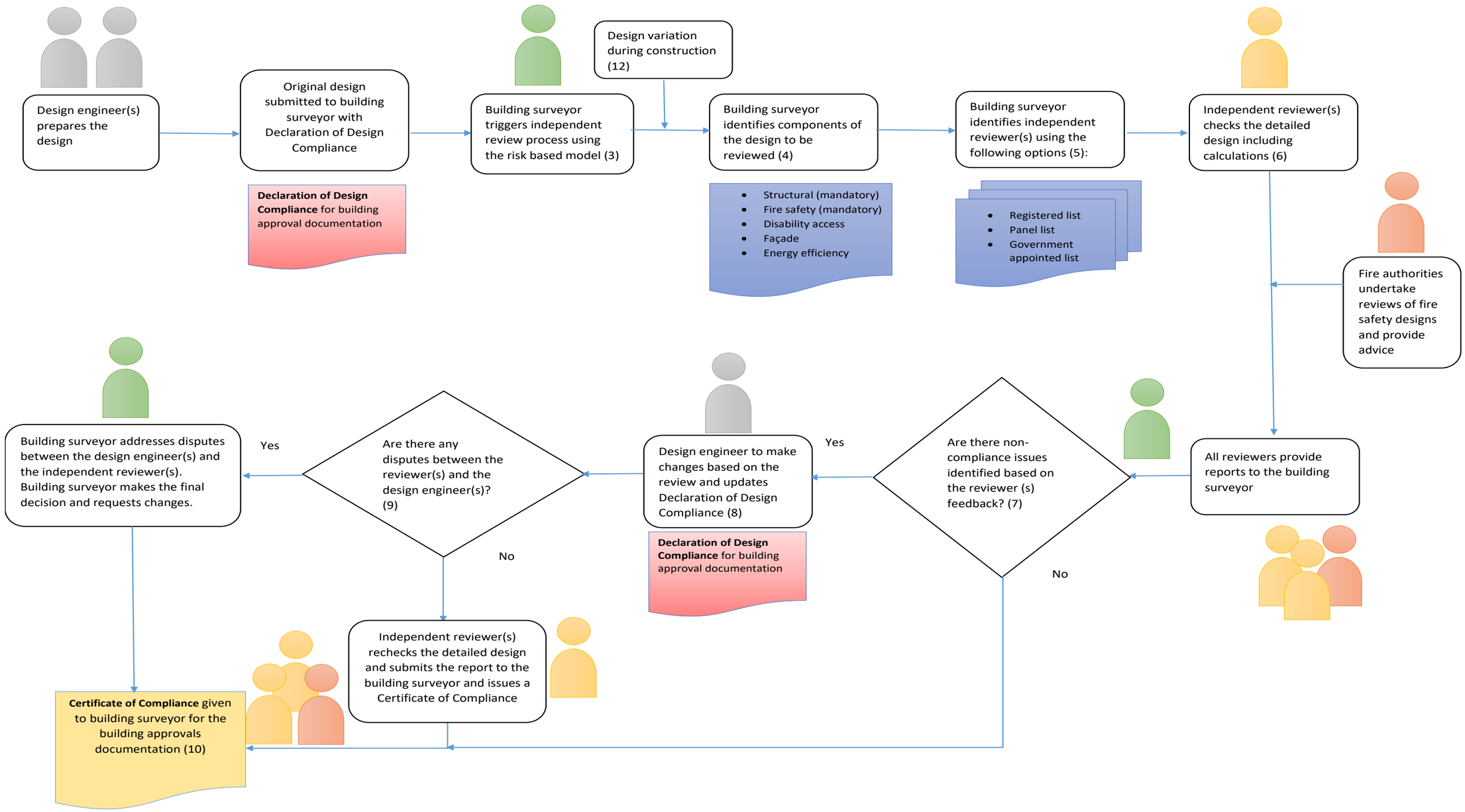
What are your views on the terminology proposed for a:

- **Independent third-party review**
- **Independent third-party reviewer**

[3] Certificates of Compliance can also be issued in relation to inspections of work (not considered in this paper)

Process for independent review

Figure 2 Process for independent third-party review



The stages documented in Figure 2 are as follows:

1. There are simple designs (e.g. Class 1a single dwelling) that do not fall into a Building Complexity level and therefore do not require independent third-party review. The statutory building surveyor can accept either a Declaration of Design Compliance or a Certificate of Compliance from the designer.
2. All other buildings that fall into building complexity levels low, medium, high and very high (Figure 1), require the registered designer(s) to sign off at the end of the design process that the building (or the specialist system) as a whole complies with the NCC and provide a Declaration of Design Compliance to the statutory building surveyor.
3. The statutory building surveyor uses the risk based model in Figure 1 to trigger the independent third-party review process.
4. The statutory building surveyor separately determines which elements of the design need to be reviewed.
    a. Structural and fire safety design reviews are mandatory for all risk levels.
    b. Disability access, facade and energy efficiency can be determined based on design risk or where the design relies on a Performance Solution(s).
5. All buildings that fall into building complexity levels low to very high require a registered independent third-party reviewer[4].
6. The nominated independent reviewer(s) would check the detailed design of the building and determine the extent of the design review, and provide recommendations to the statutory building surveyor.
    a. For buildings of high and very high building complexity (Figure 1), the statutory building surveyor must involve fire authorities in the process to provide advice and undertake reviews of fire safety designs.
7. The statutory building surveyor reviews the recommendations from the reviewer and can request a change to the design based on non-compliance issues that have been identified.
8. The registered designer makes the proposed changes to the design and provides a revised Declaration of Design Compliance.
9. If there are disputes between the reviewer and the principal designer, the statutory building surveyor would resolve the issues and make the final determination, with full documentation justifying the decision.

[4] The statutory building surveyor identifies a registered independent third party reviewer (s) through a registered list of individual practitioners, panel of experts or a government appointed list.

10. The independent reviewer(s) provides a Certificate of Compliance to the statutory building surveyor once satisfied that the design complies with the NCC.
11. The statutory building surveyor grants building approval to the building approval applicant[5].
12. If changes to the design occur during construction, the statutory building surveyor may require additional independent design review (step 4 onwards).
13. The documentation supporting the building approval must record details of all decisions, reports and Declarations of Design Compliance and Certificates of Compliance provided by all parties in the design and independent review process.
14. The cost for the independent review process is the responsibility of the building approval applicant.

Elements of third-party review

This section describes elements of the process in detail and as highlighted in Figure 1 and Figure 2.

What is reviewed?

The BCR highlights key features of the building design that need to be considered. Structural and fire safety design are specific attributes called out in the Definition of Building Complexity and form part of the mandatory review, including any element that the statutory building surveyor may consider introduces a risk to life safety.

Other elements not linked to life safety, but should be considered for third-party review, are disability access, façade design and energy efficiency. These elements may be determined by the statutory building surveyor at the time of review and should not form part of the mandatory review but are strongly recommended for buildings with a medium or higher building complexity level. If not independently reviewed, it is expected that the statutory building surveyor would take responsibility for assessing and determining compliance.

[5] **Building approval applicant** is an individual who is the owner, an agent of the owner or the builder who applies for a building approval application seeking certification that a proposed building complies with the relevant building regulations and NCC.

Question

3. **The Discussion Paper proposes structural and fire safety review is mandated for buildings with a low to very high building complexity (BC) levels and must be reviewed by an independent third-party reviewer. What elements of the design do you believe must be reviewed by an independent third-party reviewer for each BC level?**

Table 2 Mandated list of design reviews for different BC levels

BC level	Structural design	Fire safety design	Disability access design	Façade design	Energy Efficiency design	Other
Low						
Medium						
High						
Very high						

Who conducts the review?

The statutory building surveyor is required to act in the public interest at all times and is responsible for triggering the design review process using the risk framework for buildings. Additionally, the statutory building surveyor can request an independent third-party review of any part of the design regardless of the building's complexity level. An independent reviewer must also act in the public interest and be accountable to a jurisdiction's building regulator.

The statutory building surveyor is responsible for identifying and nominating the independent reviewer(s) to use, such as an independent structural engineer, fire safety engineer and any other independent practitioners (e.g. accessibility designers for disability access) using one of the mechanisms outlined in the section 'How is an independent reviewer identified?'. The statutory building surveyor, when satisfied, accepts the reviewer's Certificate of Compliance and includes as part of the building approval documentation.

A single independent reviewer can review multiple features of the design (e.g., structural, fire and disability access) provided the reviewer is registered in those

disciplines and holds the pre-requisite qualifications and experience requirements[6], or multiple independent reviewers may be involved based on the features of the design, building complexity and where Performance Solutions have been used.

The statutory building surveyor must also ensure the relevant fire authority has been consulted as part of the fire safety design review for buildings with a building complexity level of high and very high. A fire safety engineer is still required to undertake an independent third-party review even when the fire authority is included in the review process. This is because the fire authority is engaged only to review the impact of the design on firefighting activities and not holistic compliance with the NCC.

Question

4. Do you agree that independent structural and fire safety designers must conduct the structural and fire safety reviews for all building complexity (BC) levels? Choose ALL appropriate practitioners that are acceptable for independent reviews for the corresponding BC level.

Table 3 Practitioners to conduct reviews for different BC levels

BC level	Independent Fire Safety Designer	Independent Structural Designer	Lead Structural Designer who was involved in the structural design	Lead Fire Safety Designer who was involved in the fire systems design	Fire Authorities	Other
Low						
Medium						
High						
Very high						

[6] National Registration Framework in response to BCR recommendations 1 and 2

How is an independent reviewer identified?

The statutory building surveyor is accountable to the building regulator and is required to act in the public interest at all times. It is an offence and a breach of their statutory duty of care and code of conduct, their ability to be a licensed professional and their professional indemnity insurance if they undertake reviews when they are not competent to do so or fail to implement any legislated review process due to reasons such as cost/time.

This Discussion Paper has identified and consistent with discussion in the BCR, a number of options for the statutory building surveyor to nominate an independent third-party reviewer. The implementation of one or more of these options would be a matter for the jurisdictions to determine.

Table 4 Options to nominate independent third-party reviewers for different building complexity (BC) levels

BC level	Registered list of individual practitioners	Panel of experts	Government appointed list of third-party reviewers
Low	Yes	Yes	
Medium	Yes	Yes	
High		Yes	Yes
Very high		Yes	Yes

Registered list of individual practitioners must be registered in their jurisdictions and hold the necessary qualifications and experience[7] to perform independent reviews. The statutory building surveyor can appoint a registered practitioner to undertake the review.

[7] The National Registration Framework in response to BCR recommendations 1 and 2

Panel of experts is an arrangement where the building regulatory authority establishes a panel of practitioners to undertake reviews. The statutory building surveyor can choose from the panel of qualified practitioners.

Government appointed list is a list of approved third-party reviewers where the process and appointment of specific reviewers to specific projects is administered by government. This works well for high risk buildings and significantly reduces the potential for conflicts of interest.

Question

5. **The Discussion Paper identifies three mechanisms for sourcing independent reviewers for the different building complexity (BC) levels. Which option would work best and do you agree with the options provided? If you have alternative mechanisms in mind, let us know in the text box below (include the appropriate BC levels).**

Table 5 Options to nominate independent third-party reviewers for different BC levels

BC level	Registered list of individual practitioners	Panel of experts	Government appointed list of practitioners
Low			
Medium			
High			
Very high			
List alternative options (and their suitable BC level)			

What percentage of the design is reviewed?

The independent third-party reviewer should, determine the extent of the review based on expert judgement, the quality of documentation and the complexity of the design. This applies to all reviews of any design where an independent reviewer is appointed.

Question

6. **Do you agree the independent third-party reviewer can exercise judgement to determine the extent of the review or should this be prescribed for various building complexity levels?**

When is the review conducted?

The independent third-party review must be completed by the end of the design stage and there should be no outstanding issues prior to the statutory building surveyor issuing the building approval. Future design changes (variations) or changes to the building approval application documentation, impacting the reviewed design, must be resubmitted for third-party review.

How are disputes resolved between the various practitioners?

The statutory building surveyor is responsible for accepting the review decision as part of the compliance process. If any disputes arise between designers and reviewers, the statutory building surveyor would address and document the issues, and be the ultimate decision maker, as accountability for issuing a building approval ultimately rests with the statutory building surveyor.

Holistic assessment of all design documentation

Although the independent reviewer would be required to issue a Certificate of Compliance which the statutory building surveyor can rely on, responsibility for the coordination of multiple independent reviewers and holistic assessment of design documentation, consistent with the requirements of the NCC, remains with the statutory building surveyor.

Who bears the cost of the independent review process?

The cost is borne by the applicant for the building approval. The fee for independent review would be market driven.

What documentation/record keeping is required?

The details of the building approvals documentation is addressed in BCR recommendations 13-16 and is not detailed in this Discussion Paper. It is noted that any third-party review should be documented in a report that sets out the:

- details about the date of review and who conducted the review
- scope of the review with details of any specific inclusions and exclusions
- compliance assessment process including details of all issues identified by the reviewer, and calculations or verification work undertaken to assess compliance
- outcome(s) of the review, including decisions and any amendments that were made to the design as a result.

Once the design has been reviewed and is deemed compliant, a Certificate of Compliance is issued and recorded as part of the building approval documentation. This gives owners, future owners and any other individuals' transparency about who assessed which parts of the design. This will improve confidence in the building design, and compliance with the NCC. This also helps to maintain a record of any issues that were raised and rectified during the design stage. It also provides accountability to those who participated in the review.

Question

7. **Does the proposed approach address all the issues related to independent third-party reviews? If your answer is No, what items are missing to ensure independent third-party review of building design is compliant with the NCC and meets the intent of BCR Recommendation 17?**

All questions

Question 1: Do you agree the risk based model is the correct approach to identify the need for independent third-party reviews? If you answered No, what is an alternative approach?

Question 2: This Discussion Paper proposes terminology which, if agreed by the Building Ministers, would be consolidated into a Preferred Terms Publication for consideration and adoption into State and Territory laws. Current legislative terminology used across Australia has been considered when developing the proposed terminology. The agreed terminology used in the Preferred Terms Publication would not be legal definitions unless adopted by jurisdictions.

What are your views on the terminology proposed for a:

- Independent third-party review
- Independent third-party reviewer

Question 3: The Discussion Paper proposes structural and fire safety review is mandated for buildings with a low to very high building complexity (BC) levels and must be reviewed by an independent third-party reviewer. What elements of the design do you believe must be reviewed by an independent third-party reviewer for each BC level

Table 2 Mandated list of design reviews for different BC levels

BC level	Structural design	Fire safety design	Disability access design	Façade design	Energy Efficiency design	Other
Low						
Medium						
High						
Very high						

Question 4: Do you agree that independent structural and fire safety designers must conduct the structural and fire safety reviews for all building complexity (BC) levels? Choose ALL appropriate practitioners that are acceptable for independent reviews for the corresponding BC level.

Table 3 Practitioners to conduct reviews for different BC levels

BC level	Independent Fire Safety Designer	Independent Structural Designer	Lead Structural Designer who was involved in the structural design	Lead Fire Safety Designer who was involved in the fire systems design	Fire Authorities	Other
Low						
Medium						
High						
Very high						

Question 5: The Discussion Paper identifies three mechanisms for sourcing independent reviewers for the different building complexity (BC) levels. Which option would work best and do you agree with the options provided? If you have alternative mechanisms in mind, let us know in the text box below (include the appropriate BC levels).

Table 5 Options to nominate independent third-party reviewers for different BC levels

BC level	Registered list of individual practitioners	Panel of experts	Government appointed list of practitioners
Low			
Medium			
High			
Very high			

List alternative options (and their suitable BC level).

Question 6: Do you agree the independent third-party reviewer can exercise judgement to determine the extent of the review or should this be prescribed for various BC levels?

Question 7: Does the proposed approach address all the issues related to independent third-party reviews? If your answer is No, what items are missing to ensure independent third-party review of building design is compliant with the NCC and meets the intent of BCR Recommendation 17?