



Definition for building complexity – Exposure Draft

SUBMISSION TO AUSTRALIAN BUILDING CODES BOARD

NOVEMBER 2020

ABOUT US



Consult Australia is the industry association representing consulting businesses in design, advisory and engineering. Our industry comprises some 48,000 businesses across Australia, ranging from sole practitioners through to some of Australia's top 500 companies, providing solutions for individual consumers through to major companies in the private sector and across all tiers of government. Our industry is a job creator for the Australian economy, directly employing 240,000 people. The services we provide unlock many more jobs across the construction industry and the broader community.

Our members include:



INTRODUCTORY REMARKS

Consult Australia welcomes the opportunity to provide this response to the Australian Building Codes Board (ABCB) on the *Definition for building complexity – Exposure Draft*. We understand this is one part of a broader suite of consultation ABCB is undertaking to support a national approach to implementing the recommendations of the *Building Confidence Report* by Shergold & Weir (BCR).¹

At the outset, Consult Australia would like to stress how important certainty and consistency is to our members (and the broader building industry) as we strive to recover from the impacts of COVID-19. The work of the ABCB to find a nationally consistent approach, and then adoption by the states and territories (rather than development of conflicting schemes and approaches) is critical to ensuring that our members have a stable regulatory environment in which to operate.

It is important to acknowledge the hardening in the insurance market, particularly in relation to professional indemnity (PI) insurance that provides cover for the professional services provided by our members. This hardening has resulted in reduced capacity due to market consolidation, significantly increased premiums, and a reduction in policy coverage with carve-outs for risks associated with building work. Where the insurance policy does not provide cover, businesses and practitioners are exposed. While larger businesses can weather the changes better than smaller operators, the hardening of the insurance market affects all business. By way of example, we were contacted by one of our SME members gravely concerned about the affordability of their PI insurance. Their newly quoted premium for 2020/21 has gone from \$30,000 for a \$2million policy in the previous year, to over \$100,000 for a \$1million policy. This is not an isolated case.

The building and construction sector is now further impacted by COVID-19. The second *Consult Australia COVID-19 Pulse Survey* (published in September 2020 and showing trends from our first survey in May 2020) indicates that over half of our members (54%) are experiencing a reduction in work from COVID-19. The building sector is a significant area of concern with 60% of businesses reporting a reduction in residential buildings and 70% reporting a reduction in commercial buildings. This impact cannot be ignored when exploring reforms that can impact the market.

It is noted that 'building complexity' is a new definition proposed to be inserted in the National Construction Code (NCC). Prior to May 2020 our members raised concerns about the lack of certainty provided by the draft definition of 'building complexity'. The further consultation on the definition is appreciated. Our members advise that there is still much uncertainty about the definition and its application. We set out those concerns in this submission.

1

www.industry.gov.au/sites/default/files/July%202018/document/pdf/building_ministers_forum_expert_assessment_-_building_confidence.pdf

UNCERTAINTY

From the outset it should be noted that Consult Australia and its members support the concept of 'complexity' but with the overriding caveat that it should not make the design process unnecessarily complicated.

Our members had significant concerns about the lack of certainty with the first draft of the proposed definition of 'building complexity'. We note that in the ABCB's Exposure Draft, more detail is included in the risk levels presented. However, there is still too much uncertainty.

For example, some questions from our members about the building complexity definition are:

- To what extent will the complexity level of a building impact on its design, construction and certification requirements? For example, will building complexity have a direct influence (similar to the that of the building classification) or will it be used more for flagging potential risks to relevant stakeholders?
- If building complexity will have a direct impact on the way that a building is designed, constructed and certified, what is the impact on those processes? For example, could a building with a higher complexity require; greater fire-resistance levels, more inspections during construction and/or approval from more stakeholders?
- What does 'non-compliance' within the definition for building complexity relate to? Does this relate to non-compliance with the performance requirements or the deemed to satisfy (DTS) provisions?

At the moment the definition is open to a lot of interpretation and perhaps as a result of that, susceptible to circumvention. We understand the need for the definition to be applied in a consistent manner but with the flexibility needed to cover a variety of circumstances. We suggest there are four key elements to address in order to bring about this consistency and flexibility in application:

1. Boundaries must be clear and certain
2. Boundaries must avoid unexpected perverse consequences
3. Treatment of 'risky' materials or design methods
4. Avoid unnecessary complication through duplication.

Boundaries must be clear and certain

The concept of complexity should be one of defining risk, and therefore enable the development of risk management strategies by professionals. ISO 31000-2018 'Risk management – Guidelines', for example, establishes the *context* of a risk management process as one of the critical aspects to consider in terms of the management of risk.

To ensure that there is that balance between consistency and flexibility we suggest that the definition of risk (complexity) needs to be prescriptive but the strategies need to be flexible. This requires the boundaries of complexity to be clear and certain.

Boundaries must avoid unexpected perverse consequences

It is acknowledged that when setting clear boundaries for the steps in complexity, care must be taken not to introduce unexpected perverse consequences.

For example, if one boundary for complexity is set as '*compressive strength > 50MPa required for adequacy*' there could be an unexpected (and perhaps detrimental) consequence, where a designer opts for 45MPa concrete (to avoid crossing the complexity boundary), and inadvertently decreases the design reliability or increases the cost.

Therefore, the boundaries should relate to the risk introduced through building geometry and building use rather than through design decisions.

Definition for building complexity

Response to the ABCB's Exposure Draft



Treatment of 'risky' materials or design methods

If it is required to differentiate between 'risky' and 'less risky' materials and designs, this should be applied in the design rules, not in the definition of the complexity boundaries.

One way to achieve this is to differentiate in the designs (not in the boundaries) between materials/methods that are DTS acceptable and those that are not. It is noted this may disadvantage performance solutions, which may or may not be warranted. However, this is consistent with having the same quantified performance requirements for performance solutions and DTS solutions.

Avoid unnecessary complication through duplication

It is noted that NCC 2019 (and proposed NCC 2022) uses the concept of 'importance level'. Consult Australia is concerned about 'complexity' and 'importance' both being used in the NCC and effectively describing the same thing. This creates unnecessary confusion which will do nothing to alleviate the high disputation levels in the construction industry.

CONCLUSION

In conclusion, Consult Australia submits that more work need to be done to ensure clarity of the building complexity definition and its application. We suggest that:

1. The steps in complexity be defined using quantified prescriptive building geometry and quantified prescriptive building uses
2. Complexity should not be defined in terms of 'risky' materials or design processes, but rather cater for these within the various verification methods (including in DTS standards)
3. There is a need to ensure that there are no unforeseen perverse consequences
4. Amend proposed NCC 2022 Table BP1.1 to reflect 'complexity' rather than 'importance', if it becomes likely that both could be in use.

CONTACT

We would welcome the opportunity to further discuss the issues raised in this submission. To do so, please contact:

Nicola Grayson

Chief Executive

Consult Australia

nicola@consultaaustralia.com.au

Kristy Eulenstein

Policy Lead (Procurement & Practice)

Consult Australia

kristy@consultaaustralia.com.au