

ENGINEERING A BUILDING SYSTEM THAT DELIVERS FOR NEW ZEALAND

New Zealand deserves a building system that delivers high quality and safe buildings for everyone. Now is the time to ensure changes are sequenced, take a systemic approach and utilise the solutions that Engineering New Zealand has been advocating for.¹

There are a lot of great people working across the building system who achieve exceptional results despite challenges with the system. Together, we can help these people achieve greater impact more efficiently. Engineering New Zealand is committed to being part of the solution and advocating for the Government to accelerate change.

What we are doing

Engineering New Zealand is doing what we can within current settings. This includes:

- Strengthening the Chartered Professional Engineers' regime so that the public, regulators and registrants have confidence the system ensures an engineer is competent in their practice. We have made improvements to our system focusing on strong governance and transparency, including recently announced Rule changes.²
- Supporting members to undertake professional development through our guidance and training material – this includes practice notes and guidelines on complex engineering topics, including peer review.
- 3. **Providing a robust disciplinary process** to ensure competency issues can be raised and resolved professionally. This process gives the public, regulators and our members confidence that their concerns will be addressed in a timely and transparent manner. It also gives us the tools to investigate any concerns directly.
- 4. **Innovating Producer Statements** by developing an online tool for engineers to prepare Producer Statements PS1, PS2 and PS4, along with a range of guidance and training to help support their use. This tool is designed to increase accuracy and efficiency while also minimising the opportunity for fraud.
- 5. Helping Building Consent Authorities (BCAs) improve their capability and confidence, by building their understanding of what good engineering documentation looks like and developing standardised documents for building consent applications.
- Enabling our technical groups to continue to provide high quality advice to our members, the Government and the wider sector. These groups play a critical role in promoting exceptional technical engineering practice.

Government-enabled solutions needed for sector challenges

Some of the challenges facing the sector can only be resolved with Government leadership. We are concerned that there are documented cases of non-compliant buildings receiving consents, highlighting failures in the building system that need to be addressed. Engineering New Zealand wants to facilitate change in several critical areas as follows:

The building system lacks strategic direction The prioritisation and phasing of the Government reform programme is unclear

We acknowledge the Government's commitment to extensive regulatory reform in the building system, which is happening alongside many other significant reform programmes. However, more transparency is needed on the prioritisation, phasing and alignment of building system reform.

Quality outcomes are central to delivering the built environment New Zealand needs and expects. However, building system reform often prioritises efficiency and cost saving above quality outcomes.

We recommend the Government:

- Provide the sector with a roadmap for reform, which includes clear sequencing and packaging of proposals.
 A roadmap would help the sector engage with the reform programme, and support business investment and workforce planning.
- Ensure that quality outcomes are a central driver of change, rather than just efficiency or cost.

This position statement is based on Engineering New Zealand's Quality Issues report and submissions on Government consultations over the past few years.

² Registration Authority website

³ Our Quality Issues report covers the case studies of the Southland Stadium, residential properties in Tauranga, 230 High Street, and Masterton buildings (refer pages 15-18).

New Zealand's standards system is not fit for purpose

New Zealand's standards system is not delivering the results the building system needs. Poor quality standards can risk public safety and have costly consequences (poor building standards was a contributing factor to the leaky buildings' crisis.)⁴ Unsustainable funding of Standards New Zealand means New Zealand is missing the economic and social gains of standardisation.

We recommend the Government:

 Prioritise reform of the standards setting and funding system - ensuring building standards are up to date, leverage international expertise and are accessible. This must include sustainable funding that reflects the public good nature of standards.

New Zealand needs buildings to be resilient

With increasing natural hazards and extreme weather, buildings must be designed to withstand future conditions. Many engineers already factor resilience into designs, but councils often lack the tools to require it. New Zealand needs a national approach to resilience.

Earthquake prone building reform needs a more joinedup, systemic approach that considers health and safety, infrastructure, BCA reform and the role of local government, among other things.

We recommend the Government:

- Develop a national approach to resilience, ensuring buildings are constructed in the right places or, if they are in a risky area, they are designed with resilience in mind. A national approach must provide councils clear authority and tools to require resilient design in Building and Resource Management Acts. This could include access to quality hazard data, a risk-based consenting model, and the ability to require additional design responses in high-risk areas.
- Enable the workforce to design with the future in mind by developing practical guidance and training to enable resilient infrastructure design.

Challenges within the building consent system increase the risk of failure

Limited information on system performance means missed opportunities for the industry to learn from common mistakes

There is limited understanding or information shared on how the building system is performing or data available on the causes of building failure. Publicly accessible information on the performance of buildings would support practitioners to improve and learn from common issues.

We recommend the Government:

- Perform regular and transparent audits of building compliance to build understanding of building performance.
- Provide information on lessons learnt and systemic areas of concern based on audits.

Inconsistency across BCAs is a key problem

There are currently 67 BCAs working across New Zealand, all with differing levels of capacity and capability. There is little standardisation of quality assurance and processes are often highly variable.

There is no standardised process to support BCAs manage or assess risk in complex engineering work.

Producer statements are often used by BCAs to help mitigate risk but are not legally required. Therefore, BCAs can struggle to make informed decisions on the requirement for a peer or regulatory review.

We recommend the Government:

- Consolidate and centralise BCA functions to provide sustainable capacity and capability. We look forward to seeing the Government's work on this.
- Support BCAs to adopt consistent and robust quality and regulatory assurance processes to support compliant engineering content. This should include a risk matrix to enable a nationally consistent risk-based approach to processing complex consent applications.
- Legislate that all high-risk consent applications have relevant producer statements signed off by a CPEng.
- Enable BCAs to reject incomplete building consent applications. This will resolve poor practice and reduce the number of Requests for Information and average consent processing times.

The consenting system needs to reward high performers

The building consent system has mechanisms to penalise poor performers but is missing incentives for those who are consistently delivering exceptional results. Having a regulatory incentive will help encourage high performance and drive positive culture change.

We recommend that the Government:

• Introduce a way to incentivise and reward high-performing practitioners, such as a faster consent process, recognition programme to help with marketing or reduced levies.

⁴ Performance-Based Regulation and Regulatory Regimes: The Saga of Leaky Buildings