

Improving efficiency in the inspection process

Increasing the use of Remote Inspections and Accredited Organisations

NZIBS Submission:

Overview

The New Zealand Institute of Building Surveyors (NZIBS) is a national body of skilled, professional building consultants who possess extensive knowledge and experience in construction and building-related matters.

NZIBS was founded in 1994 and currently has over 224 members. Membership increased significantly following the Hunn Report in 2002 and the identification of the “Leaky Building Crisis,” as building surveyors were tasked with investigating the multitude of building failures resulting from deregulation across the building industry.

Foreword

When the government first announced intentions to introduce remote inspections as the default NZIBS took a bold approach and formed an industry policy working group to assess this proposal and to ensure that any submission considers all factors.

The remote inspection policy working group members include, NZIBS Executive and Members, HOBANZ, Professor Kim Lovegrove, Naylor Love Construction, Fixation Builders Queenstown, Lane Neave Lawyers, BCCG, Maynard Marks, Auckland Council and BOINZ.

The general consensus of the group is that we are not opposed to the proposal provided the correct mechanisms are in place such as robust QA and audit processes. The group agreed that setting remote inspections as the default setting may introduce unnecessary risk and that face-to-face inspections will still be required dependant on the risk profile for particular projects.

Questions about the Proposed Criteria

1. Do you agree these are the right outcomes/criteria to evaluate the options? Are there any others that should be considered?

The group agrees in part with the outcomes or criteria presented. However, recommend the following points are considered and implemented as part of any changes, which in our opinion could lead to better results.

- Risk profiling for each project needs to be considered in respect of whether remote inspections are appropriate. Some projects such as complex architecturally designed residential homes, multi-unit residential complexes and remedial projects are high risk and may not be suitable for remote inspections.
- Any failure to identify defects during remote inspections that results in litigation needs to be considered given current joint and several liability framework. The BCA will be reliant on the LBP to provide accurate viewing of Building elements. Items are being missed during face-to-face inspections so there is a greater chance of this occurring with remote inspections.
- The evaluation of Quality Assurance (QA) processes should be included in this policy review. In our experience projects with well documented and robust QA plans tend to have lower inspection failure rates.
- In building projects like multi-unit complexes, where the units are identical in appearance, remote inspections would likely rely on a high trust model. However, there is a risk that compliant units are substituted for non-compliant units in order to pass inspection. This needs to be considered, particularly with group home builders. Question about the opportunity/benefits of remote inspections:

2. Do you agree with our description of the opportunity (i.e., benefits) of increasing the uptake of remote inspections? Are there any other benefits? Please explain.

As proposed the benefits of increasing the uptake of remote inspections appears limited, whilst it is encouraging to hear that the government is considering ways to improve efficiency in the building inspection process, both in terms of time and cost, we are of the opinion it would be prudent to also assess whether the current process, if operating properly (or with necessary adjustments), contributes to the overall time and cost of construction compared to the implementation/ increased uptake of remote inspections.

If that proposed was to proceed, it must be accompanied by enhanced LBP training and accreditation, along with robust Quality Assurance procedures. Without these measures, any perceived benefits could be overshadowed by the risk of defective workmanship, rectification costs, and/ potential litigation.

We note that the section on page 10 entitled, "How are remote inspections currently being used overseas?" of the discussion document states that "most overseas jurisdictions use remote inspections for lower risk work" However, the second paragraph clearly articulates that in Australian (Victoria) only non-mandatory inspections can use remote inspections if deemed suitable. The document further states that on-site inspections are the standard approach in the UK, USA and Canada. As a result, the first paragraph is misleading as it contradicts the second.



Questions for builders/sector

3. What savings and costs have you experienced with remote inspections? Do they differ depending on whether a remote inspection is real time or evidence-based?

Other than Auckland Council operating under the BRANZ Artisan app for preselected builders, the group does not have an opinion on what savings may have been experienced.

Certainly, during COVID the ability to have remote inspections was beneficial to ensuring projects progressed, However, in the Auckland region during this period we understand that most remote inspections were conducted for foundation pre-pour stages, where an Engineer would review and provide a PS4 report in any case.

We understand that remote inspections during COVID tended to be evidence based involving review of the engineer's report and certification. There is no reason why this evidence-based process cannot be used more frequently moving forward.

Findings from the Auckland Council video remote inspection pilot using Zyte in Auckland, generally showed an increase in time due to the inspector's needing to see more due to the lack of peripheral scanning. On average an additional 10-12% time increased was recorded. Refer table below courtesy of Auckland Council.

Building Inspection Type	On-site Inspection Time	Remote Inspection Time
Res 1 Concrete Block Concrete Reinforcing	30min	33min
Res 2 Concrete Block Concrete Reinforcing	40min	48min
Res 3 Concrete Block Concrete Reinforcing	40min	45min
Res 1 Drainage	40min	45min
Res 2 Drainage	40min	45min
Res 3 Drainage 40min/45min	40min	45min
Res 1 Foundation	40min	48min
Res 2 Foundation	40min	48min
Res 3 Foundation	45min	55min
Res 2 Site Meeting	36min	36min
Res 3 Site Meeting	36min	36min
Res 1 Postline	40min	50min
Res 2 Postline	40min	45min
Res 3 Postline	40min	45min
Res 1 Plumbing	40min	50min
Res 2 Plumbing	40min	45min
Res 3 Plumbing	45min	50min
Res 1 Concrete Floor Slab	40min	48min
Res 2 Concrete Floor Slab	40min	48min
Res 3 Concrete Floor Slab	50min	59min
Res 1 Membrane Tanking	40min	50min
Res 2 Membrane Tanking	40min	50min
Res 3 Membrane Tanking	40min	44min



4. Do you have any concerns about taking part in remote inspections (whether real time or evidence-based)?

Yes, the group is concerned about remote inspections generally, and this is based on statistics provided to the group by Auckland Council. The current inspection fail rates in the Auckland region are approx. 24% of an average of 225,000 inspection per year. These rates relate to the Building Consent set inspections and generally residential projects and therefore LBPs.

There is more opportunity that the overall risk and creation of defects will not be observed during a remote inspection. Face to face inspections provides the inspector an overview of the quality of the work being produced by simply entering the site e.g. if the site is untidy and dangerous this is an indication of potential quality issues which will prompt the inspector to be more thorough.

We also find the potential costs associated with failures arising from defective or substandard building work due to oversights in a more 'relaxed' system deeply concerning. The proposition of remote inspections is particularly alarming for many of us who have been involved in the industry through the leaky building crisis and, more recently, the aftermath of defective earthquake repair claims in the Canterbury region. As Building Surveyors, we have been extensively engaged in litigation following these events and have witnessed firsthand the profound impact that building defects have had on families and communities.

Questions about barriers/risks

5. Do you agree these are the main risks associated with increasing the use of remote inspections? Are there any other risks that should be considered? If yes, please explain.

Yes, the group agrees with the risks outlined.

We also note remote inspections pose significant risks under health and safety law (HSWA), as inspectors may inadvertently expose themselves to liability and breach their duty of care. By guiding builders around sites during inspections, inspectors may unintentionally prompt risky behaviour, such as climbing ladders or accessing hazardous areas. We have been provided an example from Auckland Council where on one occasion, a builder had climbed onto a roof after being asked by the inspector to video the terminal vent. The builder knew there was no edge protection but wanted to pass the inspection. The inspector was not aware the builder was going to climb on the roof. He thought we would film from the ground and zoom in. Such incidents raise critical questions about an inspector's liability and duty of care if an accident occurs under their guidance.

With reference to Auckland's remote inspection data, there is a clear difference in fail rates between remote inspections and face to face for the same type of inspection on similar building types. Inspection fail rates from plumbing and drainage inspections carried out between Dec 2020 and Dec 2021- Fail rates for face-to-face was 11.53% compared to Artisan at 5.62% and Zyte video inspections at 8.41%. The data clearly shows that Artisan remote inspections failed at half the rate of face-to-face inspections. (Note: Plumbers were chosen for this data because there was no quality threshold for plumbers to use Artisan at the time). Therefore, it appears on face

value that one reason for this disparity in fail rates is due to more non-compliance being missed during the remote inspections.

Remote inspections face several challenges, including language barriers, timing issues, and technological limitations. In areas like Auckland, where many builders speak English as a second language, it is crucial to have someone on-site who can communicate in English and understands the technical aspects of the inspection. Delays are also a concern, as builders arriving late prevent inspectors from starting assessments remotely. In contrast, in-person inspections allow for immediate initial observations. Additionally, the quality of mobile devices can be problematic—scratched lenses, outdated phones, or slow devices often hinder the effectiveness of the inspection process.

There is also a risk that if any of the outlined risks materialise as a result of the introduction of remote inspections the lack of trust for the industry as a whole could have a greater impact than the savings that might be achieved using remote inspections.

6. Are current occupational regulation and consumer protection measures fit for purpose to manage risks associated with higher uptake of remote inspections? If not, what changes would be required?

No, these measures are not fit for purpose and offer very little consumer protection measures. Introduction of remote inspections will likely increase the risk of defective workmanship/ buildings. We would recommend the following additional measures are required regardless of whether remote inspections are introduced,

- A new Act (similar to the Homeowner Protection Act in Canada) introduced to support homeowners in the event of defective works and remediation requirements. Funded via levies included within the cost of a Building Consent application similar to the systems used in other countries.
- Greater training and accreditation processes for LBPs,
- Mandatory insurance backed warranties for all building works noting that the Master Build Guarantee is not insurance backed and provides limited cover.
- Mandatory indemnity insurance for LBPs undertaking remote building inspections.
- Joint and Several liability changed to proportional liability.

Questions about options to increase the uptake of remote inspections

7. Which option(s) do you prefer? Please explain why by commenting on the benefits, costs, and risks compared to other options.

We support options 2 and 4 for the following reasons,

- Option 2 is the preferred option as this will allow BCA's to take a risk-based approach when deciding whether remote inspections are suitable for a particular project. As a group we discussed this at length and a suggested approach was using a risk matrix, similar to the E2 risk matrix. This could then allow the applicant to assess the risk of the project using a check sheet and scoring system with the BCA to decide the weighting in respect of score level where remote inspections are not applicable.

If this option were to be preferred, we would recommend a national framework was created by the government and administered centrally. That may avoid the effort and costs of implementation on BCA's and ensure consistency. A national framework could somehow be tied to the LBP scheme and registers, which would enable poor practices by LBPs to be monitored.

- Option 4 is partly preferred on the basis that current penalties for deceptive behaviour are not severe enough, however we caveat this and note that greater penalties and more robust training/accreditation requirements go hand in hand and therefore training/accreditation should be the priority. Rather than relying solely on punitive measures, a balanced approach could include rewarding good practices. For instance, builders or trades that consistently align with the intended outcomes of these changes could benefit from discounted inspection fees. This would not only reduce construction costs but also incentivise compliance.

A tiered system, such as a 1–5-star rating, could be implemented to reflect builder quality. Such a system would provide consumers with greater confidence in the builders they engage with, fostering a culture of accountability and advancing industry standards.

8. Are there any other options we should consider?

There are many options available to improve efficiency and quality, however these options will likely increase the cost of construction in the short term. In the long term there are massive benefits to improving training and accreditation for LBPs. Looking at examples from around the world, Canada introduced the Homeowner Protection Act following their own leaky building crisis and this system has provided greater consumer protection, high quality construction with less defects. In summary the following additional options should be considered,

- A new Act introduced to support homeowners in the event of defective works and remediation requirements. Funded via levies included within the cost of a Building Consent application similar to the systems used in other countries.

- Mandatory training requirements including greater emphasis on quality management requirements for LBPs and those quality management requirements being demonstrated within the Building Consent application.
- Some form of incentive-based rewards for LBPs delivering high quality defect free projects. A rating system as outlined in Question 7 above could be integrated into the existing LBP register. Which is already an established platform that could be extended to evaluate and showcase the LBP's performance.
- Mandatory training requirements in respect of business and financial management, which again demonstrates that penalties go hand in hand with training.

Option One

9. What can be done to help reduce inspection failure rates?

The following actions would reduce inspection failure rates,

- Training and accreditation processes for LBPs needs to be overhauled to include, but not limited to, building science awareness, Building Code and Building Act education, business and financial management.
- Information gathered by the policy working group indicates that failed inspections are associated with poor quality/time/cost management otherwise known as the cost/time/quality triangle. The triangle is a basic project management practice and when one of the three are missing the project will suffer. Improvement with training will not fully solve this issue but it will certainly improve it.
- The policy working group note that if remote inspections become mandatory and failure rates increase, quality has obviously dropped, however if fail rates decrease either quality has increased, or defects are being missed. The group believe the later outcome will occur if other measures such as training and accreditation are not improved at the same time.

Option Three

10. What inspections could generally be conducted remotely with confidence?

- Based on current knowledge base and accreditation requirements for LBPs the group believe the only inspections that could be conducted remotely would have to be based on the project risk analysis completed by way of a risk matrix approach.
- The BCAs should be able to have some discretion when deciding if remote or face to face inspections are required (guided by a national framework) based on both the risk of the project and the LBPs track record, no matter the complexity of the project.
- Some inspection where a professional is providing PS4 observations and certification may be more suitable for evidence based remote inspection. Real time inspections may also be suitable, however in these situations it is likely that the professional will hold more relevant qualifications and insurance than the BCA officer carrying out the remote inspection.



11. Are there any inspections that should never be carried out remotely (e.g., based on the type of inspection or building category)? Please explain why.

As per the response to Q10 determination of which inspections must be face to face should be based on the risk analysis of the project. The group agree that highly complex projects such as architecturally designed residential dwellings, multi-unit residential complexes, all remediation projects and all Building works considered to be a specific design and outside of E2:AS1 and NZS 3604 would not be suitable to conduct remote inspections.

12. Do you agree with the proposed exclusions under Option Three? Is there anything else that should be added to this list?

Yes, the group does agree with the proposed exclusions and add to the list as follows,

- Architecturally designed residential dwellings.
- Multi-unit residential complexes.
- All remediation projects.

Option Four

The offence relates specifically to 'deliberate actions to hide, disguise, or otherwise misrepresent non-compliant building work'.

13. If a new offence were to be created, does the above description sufficiently capture the offending behaviour? If not, is there anything else that should be considered?

The group do not believe that the new offence and penalties will deter behaviour without introduction of other measures such,

- Prevention of phoenixing of companies.
- Improved training and accreditation for LBPs. There is a level of self-awareness on the part of the LBP, however it would be unfair to subject the industry to increased penalties without setting new criteria and a higher level of compliance to be met.
- Mandatory insurance backed latent defect warranties for all building works over a certain value.

14. Would the maximum penalty of \$50,000 for individuals and \$150,000 for a body corporate or business be a fair and sufficient deterrent?

No other matters need to be considered as per the responses to Q13

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- Improved training and accreditation for LBPs. There is a level of self-awareness on the part of the LBP, however it would be unfair to subject the industry to increased penalties without setting new criteria and a higher level of compliance to be met.
- Mandatory insurance backed latent defect warranties for all building works over a certain value.

15. Are there any other ways to discourage deceptive behaviour besides creating an offence?

Yes. Incentive schemes and a register where deceptive behaviour is recorded and open to the public and BCAs to view. All projects regardless of whether they are approved for face-to-face inspections or remote inspections should be subject to a pre-start inspection meeting (Remote is suitable for this inspection) where the BCA is provided the details of the LBP, and the LBP is approved based on track record. We acknowledge that the current Building Consent application process does cover this process, however that is at the time of the application and the information provided within the application may change when construction commences.

Current LBP complaints take too long to process, and this open register could save considerable time and send a message to the industry to improve practices. The register would have a direct impact on an LBPs reputation and provide some assurances to their clients.

Additional Comments.

We are of the opinion that recommendation 4 within the 2002 Hunn Report remains highly relevant in today's context. Any proposal or implementation of changes to the current regime should keep that outlined within at the forefront of decision-making process.

a) discuss with the Department of Internal Affairs the philosophy of “minimise compliance cost” with a view to ensuring that the current or any future review of the Building Act promotes the concept of improving compliance process efficiency without compromise to building standards or quality;

b) in any review of Approved Documents consider the concept of optimised ‘whole-of-life’ costs as opposed to minimised capital cost; and

c) in reviewing the role and responsibilities of territorial authorities and building certifiers with regard to the building consent checking process and code compliance inspection regime, ensure that any guidelines or implied or expressed incentives do not inadvertently promote “down to cost” as opposed to “up to standard” behaviour.

We note that the reference on page 6 to the cost of building in New Zealand being about 50 per cent more expensive than in Australia is misleading and does not provide data to evidence this statement. Whilst we accept building costs are higher in New Zealand than Australia is this due to our population sizes and Australia's economies of scale compared to New Zealand's. We note that the foot note at the bottom of this page does state that the New Zealand m2 rates include demolition costs and 15% GST whereas the Australian figures exclude demolition costs and includes 10% GST. Has the analysis that this statement is based on considered these factors?

There are also comments relating to the length of time to build a house and receive the CCC. It states that on average it takes over 16 months to reach final inspection, however it does not define if the 16 months, or over, commences from when the Building Consent application is lodged, is approved and is when construction commences. This is very misleading as the first two processes; application lodgement and approval have nothing to do with inspection. We agree that poor coordination and sequencing of trades on-site can lead to delays, which is why we promote more robust training rather than remote inspections. Remote inspections will have no impact on poor site management processes.

Finally: Would you buy a second-hand car over a video link or based on photographs without an in-person inspection? Similarly, would you be comfortable driving a car that had been the subject of a WOF under a similar remote inspection process?