

Ongoing issues

Rather than being confined to the 1990s and 2000s, stakeholders BRANZ surveyed believe the problem of weathertightness failures in homes is ongoing and possible solutions go far wider than building design.

BY MICHAEL NUTH, BRANZ SOCIAL SCIENTIST

THE BUILDING ACT 2004 saw a range of regulatory changes enacted in response to the leaky housing crisis of the 1990s and 2000s. However, anecdotal feedback from the building industry has since indicated that the potential of weathertightness failure remains a pressing issue in residential construction.

BRANZ sought to understand this, surveying over 200 building professionals and holding focus groups and interviews with industry stakeholders throughout the country. Of specific interest was whether legacy issues from the leaky housing crisis are seen to have an ongoing effect or whether the prevailing belief is that new issues have emerged.

Failure fairly widespread

Survey responses suggest that the experience of weathertightness failure in modern New Zealand homes is reasonably common. Sixty-four percent of survey participants from around the country indicated that they have observed weathertightness issues in dwellings aged 10 years or less.

According to survey respondents, weathertightness failure is especially present in complex structures whose design ventures beyond that of traditional homes - dwellings



Part of a building needing remediation.

with multiple junctions and different cladding types. This indicates a possible correlation between the persistence of weathertightness failure in modern homes and consumer preferences for more diverse building aesthetics.

Range of reasons cited

However, rather than solely blaming trends in contemporary architecture, industry feedback gathered from the research suggests that several factors underlie the continued vulnerability of New Zealand homes to weathertightness failure. This encompasses issues such as:

- variable levels of skill and professionalism amongst contractors within the building workforce
- variable levels of practical building knowledge amongst designers
- a licensing scheme for builders that some industry professionals believe has failed to raise building standards
- the limited independent construction observation
- a regulatory environment that some professionals believe is predicated on compliance rather than building performance. ➤

Feedback from the research further indicates that these issues may be underpinned by a consumer environment in which the desire for housing affordability is prioritised above construction quality.

Suggests building industry systems failure

Collectively, the views expressed to BRANZ suggest the persistence of weathertightness issues can be attributed to a systems failure in the industry existing partly outside of regulatory control.

Diverse views on solutions

Industry feedback about how to address weathertightness failure was as diverse as the problems identified as contributing to the issue. At a high level, many of the solutions posited seek to address facets of how the building and construction industry operates.

Educating clients on consequence of decisions

There was a view that a lack of client education about procurement creates flow-on effects associated with contractor performance and traditional means of ensuring quality control. The prevalence of low-skilled contractors and lack of on-site checks by independent consultants were examples provided.

An overriding answer to these concerns, according to some survey participants, is for the industry to better inform clients about the consequences of their procurement decisions to reframe what constitutes value for money.

Some survey participants emphasised the importance of procuring qualified and capable contractors. Others stressed the importance of ensuring clients understand the benefits of appointing an independent quality assurer to catch issues as soon as possible.

Introducing proportional liability

Joint and several liability invoked a belief from some survey participants that this rule paradoxically exacerbates construction risk in an attempt to minimise it.

As a result of joint and several liability, some participants reported that some builders were reluctant to register as Licensed Building Practitioners in fear of being unjustifiably held responsible for their work. It was also

reported that architects were reluctant to act as quality assurers on site, unless engaged on a full contract, due to lack of liability insurance protection.

Again, owing to concerns about liability, it was commented that building consent authorities (BCAs) were often unwilling to grant consent to Alternative Solutions.

To address this, an alternative identified by participants in the survey was proportional liability, where parties are held liable in proportion to their fault as determined through a judicial process.

Introducing additional solutions to E2/AS1

E2/AS1 was held by most survey participants as a sufficient, yet basic, guide to ensuring weathertightness. However, some held the belief that the efficacy of the clause is undermined by some BCAs' reluctance to approve Alternative Solutions. This causes architects to rely on a limited range of Acceptable Solutions that are not suitable for all building scenarios.

In lieu of BCAs taking a more admissible approach to assessing Alternative Solutions, some survey participants maintained that the industry would benefit if E2/AS1 is updated to include more acceptable design options.

Improving skills and education

There was broad agreement among survey participants that a skills deficit in the industry contributes towards persistent weathertightness failure.

A lack of adequate apprenticeship training for some builders and insufficient architectural training in basic building methodology were examples given. Although it is anticipated that graduate architects gain site experience on the job, participant feedback suggests this does not always occur as architectural firms are less involved in construction observation.

Accordingly, several industry representatives we spoke to felt that reform to how trainees are educated is needed to resolve these issues with greater focus on weathertightness for building apprentices and trainee architects necessary.

Reforming the LBP Scheme

While most survey participants believed that the Licensed Building Practitioners (LBP)

Scheme has the potential to further increase construction quality in New Zealand, it was felt by some to have a low bar for admission.

To address this, our research participants recommended that the scheme should raise its qualification standards and that registering as an LBP should be mandatory for all who wish to apply a trade.

It was also proposed by our participants that amendments to the LBP complaint system should be made to help identify tradespeople who are not performing to the expected level.

Easily accessible information

Communication of building information was frequently raised by respondents as a necessary component in the upskilling of industry. However, feedback from our participants suggests that some information needs to be purchased or is difficult to find in voluminous quantities of installation specifications received for each job. This means it is not immediately accessible for those who need it. Accordingly, a number of research participants felt that more work is needed within the industry to tailor information to meet the needs of tradespeople who lack time to read complex resources.

To address this, there was broad advocacy among survey participants for more information to be made freely available rather than solely accessible through a BRANZ subscription.

Research participants also largely felt that greater use of digital technology within the industry has a way to achieve this. Several participants promoted greater integration of mobile apps in the workplace to make information easier to find.

Underlying issues point to wider review

In summary, the survey suggests that our research participants think a different range of issues from that seen during the leaky housing crisis presently underlies ongoing susceptibility to weathertightness failure in modern homes. This is broadly seen to encompass issues with procurement, skills and education, regulation and quality control. ◀

For more See BRANZ Study Report SR442, available at www.branz.co.nz/pubs.