



Consumer attitudes to exceeding minimum standards in refurbishments and retrofits

A survey investigated homeowners' decisions to exceed the minimum requirements of the New Zealand Building Code during refurbishment and retrofitting of their properties. 97% of the homeowners surveyed said they had installed features that exceed minimum standards, most commonly insulation. However, the biggest perceived barriers to exceeding the minimum are the cost and finding information, and people who are aware of and concerned about exceeding the minimum tend to be those on higher incomes. Further areas of investigation were identified.

Homes that exceed the minimum performance requirements of the Building Code may offer many benefits including greater energy efficiency and warmer, drier and healthier indoor environments. However, earlier research showed that homeowners' perceptions of the process of retrofitting, especially those that include beyond Code features such as increased insulation, are often inaccurate and present the issue as one that is more complicated and expensive than reality.

General resistance can be a strong barrier to adopting higher-performing design and features within refurbishment or retrofitting, even when no additional cost is involved. Having relevant and clear information from a trusted source is an important factor in overcoming uncertainty about exceeding the Building Code, but previous research has shown that it is difficult for many consumers to find relevant information, especially relating to the range of options and their cost. Lack of general recognition of the value of higher-performing retrofits and being unable to recoup the investment when it comes to selling the property may also be a factor.

Recent BRANZ research sought to better understand the attitudes and experiences of people who recently undertook residential

refurbishment or retrofitting to learn more about their choices and their decisions to exceed the minimum or not.

Survey approach

BRANZ organised an online survey to be sent to 2,952 randomly selected people who had applied for a building consent for additions or alterations (excluding garages). The survey aimed to include a sample of active or completed refurbishment or retrofitting projects at residential properties. 245 completed surveys were returned. Many of the responses were from the Greater Wellington (32%), Auckland (26%) and Canterbury (11%) regions.

The research aimed to gain insight into the experiences of owners throughout the whole building process:

- The information and advice sought and

used by consumers for the refurbishment or retrofit during the planning stage.

- The issues consumers face when considering a refurbishment or retrofit of their house with features that go beyond the requirements of the Building Code.
- The cost and time commitment for projects.
- For people undertaking a project with features that go beyond the requirements of the Building Code, does the performance exceed the Code, meet their expectations and why/why not?
- Whether going beyond the requirements of the Building Code was justified in terms of cost and benefit.
- Which Code-exceeding features are people interested in, and what value do they place on them?
- Demographic questions including age, gender, household income and housing tenure type.

Findings

Where homeowners look for information

Homeowners looked for relevant information in a range of places. The most popular sources were the local council (28%) and architects, builders or building firms (26%) (Figure 1). Specialist sources, including the sources most likely to advocate exceeding the minimum requirements in the Building Code were rarely used, such as BRANZ's Up-Spec web resource (1%) and the EcoDesign Advisor service (one survey respondent only). 15% did not seek any information.

Why homeowners undertake refurbishments and retrofits

People often organise home improvements during changes in their lives, such as having children or retiring. Overall, the reasons given in the survey were varied, ranging from repurposing existing space (27%), performing maintenance (22%) or increasing the house size (11%) (Figure 2). Saving on the cost of energy was highlighted by 10%.

When asked about the most important consideration for the work, most wanted to create more space (39% of responses) (Figure 3) or a healthier, comfortable indoor environment (21%). Only three people chose an increase in energy efficiency or implementing other sustainability features as their main motivation. Although many used energy-efficient products and systems, they were rarely the main motivation behind completing the work.

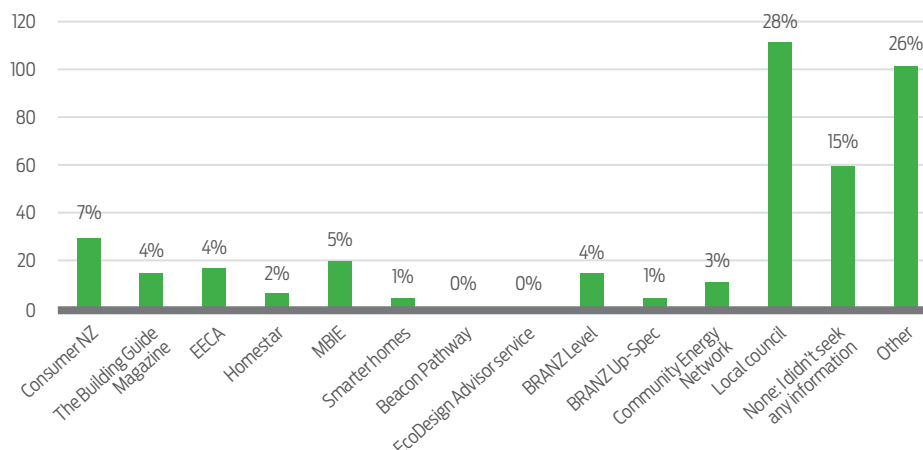


Figure 1. Where the survey participants sought information for their refurbishment or retrofit.

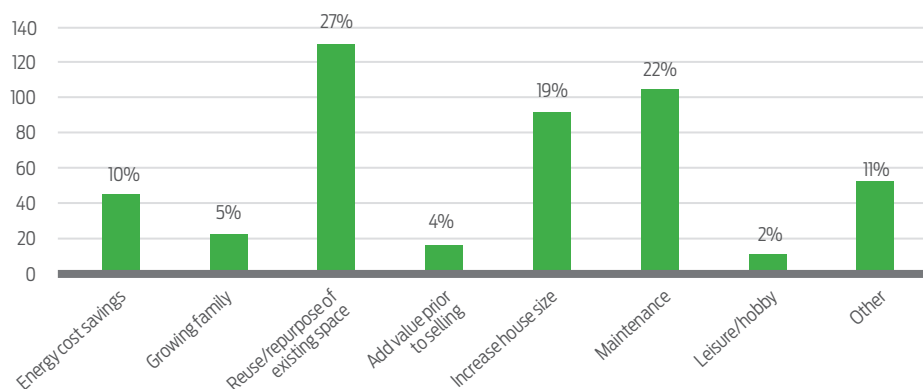


Figure 2. Reasons given for undertaking a home refurbishment or retrofit.

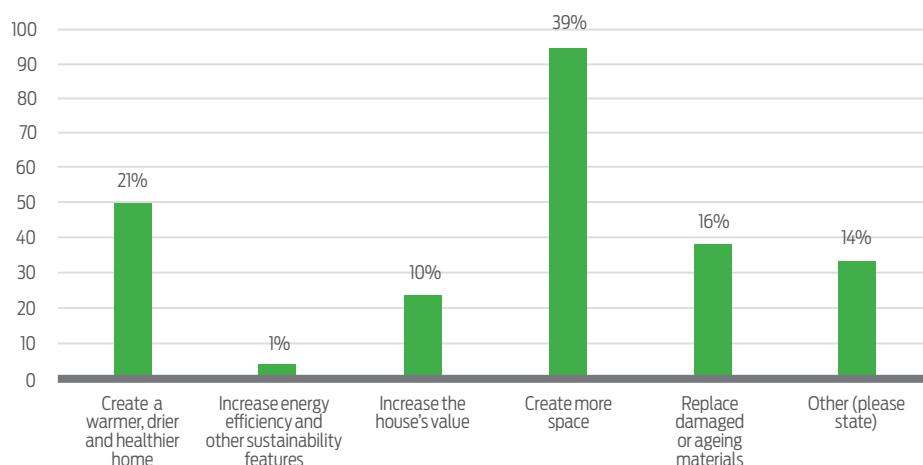


Figure 3. The most important reason for undertaking a home refurbishment or retrofit.

The responses were also influenced by demographics. Aucklanders were more concerned with increasing the square metre size of their dwelling than people living in Greater Wellington and Canterbury regions. People aged 31-50 were more concerned with increasing the size of their dwelling than those over 50.

How the refurbishments and retrofits exceeded the minimum

Nearly all responding to the survey (97%) indicated that they had installed features that exceed minimum standards, meaning most New Zealanders are willing to invest in housing quality as well as features that can help enhance personal health.

Upgrading insulation was most common (22%), followed by energy-efficient products (20%) (Figure 4). Least popular were water-efficiency processes such as rainwater collection and greywater recycling (2%), renewable power generation such as solar panels (1%) and external solar shading (1%).

Barriers to exceeding the minimum

The biggest barrier was cost, which was ranked first by 102 people. This was followed by people perceiving there were no barriers (48 people ranked this first) and lack of knowledge of the owner (29 people).

The survey also showed that people who are aware of and concerned about exceeding the minimum are generally those on higher incomes. The costs for retrofitting were high. 57% spent over \$100,000, and the median cost was \$110,000.

Experience during the refurbishment or retrofit

Most refurbishments and retrofits were carried out by building professionals (85%). The high demand for skilled professionals created frustration and delays for some customers.

Overall, the average duration of refurbishment/retrofit projects was 3-6 months. However, in the major regions (Auckland, Wellington and Canterbury), the average duration was 7-11 months. The Auckland region had the highest number of projects that took more than 2 years to complete.

Delays were experienced by 75% of people who responded to the survey. Their areas of concern tended to focus on issues with

contractors – both a lack of availability and a general perception of slackness. Councils also received a significant share of remarks around delays in the survey, especially in Auckland, where a higher proportion of people reported delays with their council than the rest of the country.

Recommendations

Future research

- Determining how changing future demographics will impact house design and the composition of existing housing stock would help to identify the types of house New Zealand may need as our population changes. This would also provide insight into the market impact of expanding house sizes when we have an ageing population and would help industry planning and workflow.
- Understanding the workflows and pressure points of building professionals and local councils for refurbishments and retrofits that go beyond the requirements of the Building Code could shed light on industry and market-wide pressure points to be addressed to create greater industry and market efficiency.
- Investigate the financial implications of refurbishments and retrofits, such as whether overcapitalisation is taking place within the New Zealand market.
- Research into living conditions before and after refurbishment or retrofitting would be useful to understand the value of exceeding the minimum.

Support for industry and consumers

- The concept and benefits of higher-performing homes that exceed the minimum requirements of the Building Code and how to build them may not be widely known to consumers and some parts of industry. A targeted communications approach could include:
 - finding out what sort of information is preferred by consumers and how they would like to receive it.
 - Developing messaging about a range of features and products that go beyond the requirements of the Building Code, including benefits gained
 - appropriate marketing towards industry and consumers to promote and foster acceptance towards this type of building approach within industry and among consumers
 - collaboration with local councils, which could help provide more accessible information and create greater awareness for existing services – for example, the Eco Design Advisor service could be promoted more widely and frequently, as consumers are seeking advice from building professionals but underutilising this free service.
- Banks could be incentivised to create financial packages (such as home loans) that reward projects that seek to go beyond the requirements of the Building Code. This approach could give financial support to a greater number of homeowners to build beyond the requirements of the Building Code and receive the benefits. Where possible, financial initiatives should support low-carbon, sustainable, climate-resilient improvements that would benefit the health and wellbeing of consumers.

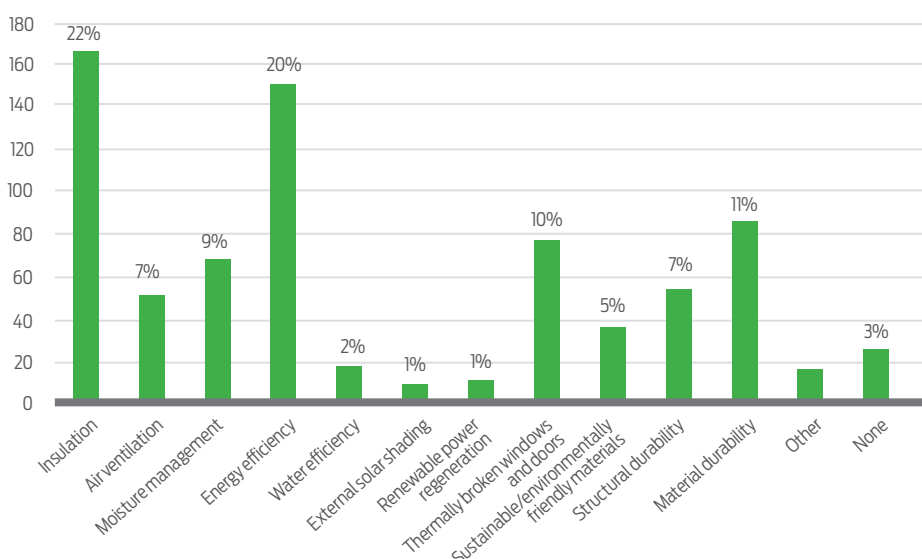


Figure 4. Building features installed that exceed the minimum requirements of the Building Code.

More information

BRANZ Study Report SR402 *The choice to exceed: Consumer perspectives on building beyond code in New Zealand*

BRANZ Study Report SR419 *A consumer survey of attitudes to exceeding minimum standards for refurbishments and retrofits*

BRANZ Study Report SR451 *Mapping the consumer landscape*