Can industry aim higher?

Recent Building Levy-funded BRANZ research surveyed the industry on the quality of New Zealand housing. It's part of a push to design and build beyond Code and to lift the standard of residential buildings.

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IT IS WELL DOCUMENTED that much of New Zealand's housing conditions are considered suboptimal, with some requiring urgent action. The New Zealand Building Code sets clear expectations of the standards buildings should meet, but these are legal minimums rather than good practice.

Increasingly, there are greater options available in the market that enable the design and construction of homes that go beyond Code.

Industry surveyed on quality of new houses

BRANZ recently conducted a building industry-wide survey exploring views on exceeding the Code minimum. The idea was to give a snapshot of how the industry feels it is performing in creating higher-performing houses that exceed the minimum.

A total of 500 survey responses were received, mostly from builders/installers (33%), designers (30%) and architects (20%).

Respondents were asked to describe the last house they worked on, using three possible categories:

1. Meets the minimum Building Code standard.
2. Exceeds the current minimum standard - incorporates selected high-performance aspects, such as renewable energy, but is not comprehensive across the whole house.
3. Exemplifies international best practice, leading in design and efficiency standards.

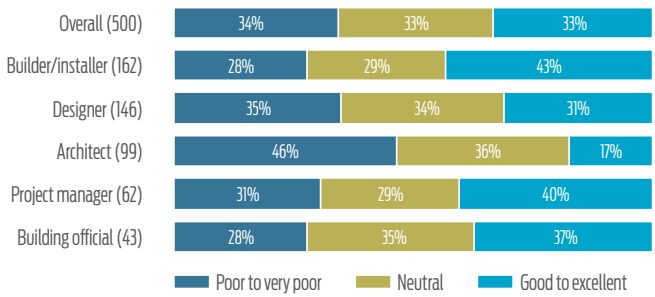

Figure 1: Perception of housing quality in New Zealand. (Number of respondents shown in brackets.)

Varying perceptions of quality of last house

Architects had the lowest perception of housing quality, with 46% considering it very poor or poor, while builders were more likely to rate the quality of housing as good to excellent (43%) (see Figure 1).

Over half of respondents (53%) rated the last house they worked on in the second category - exceeding current minimum standards. Very few (6% overall) fell into the best-practice category (see Figure 2).

Performance of last house

Unlike the results for quality ratings, architects had a slightly more positive perception of performance, with 78% rating the last house they worked on as exceeding the current minimum standards.

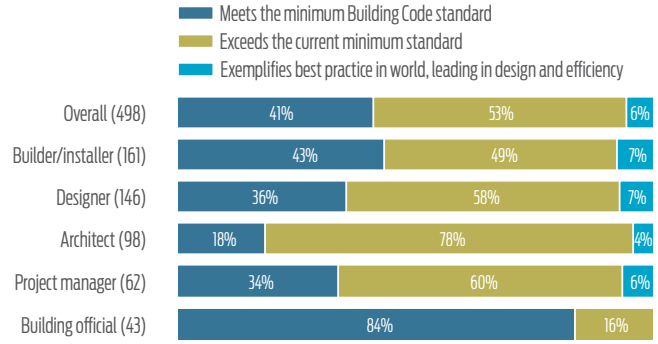

Figure 2: Performance of last house worked on.

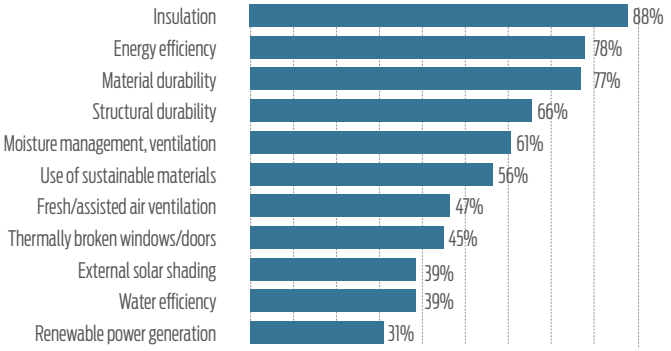

Figure 3: Features used by respondents in new houses that exceed the minimum standards. (Base count=496.)

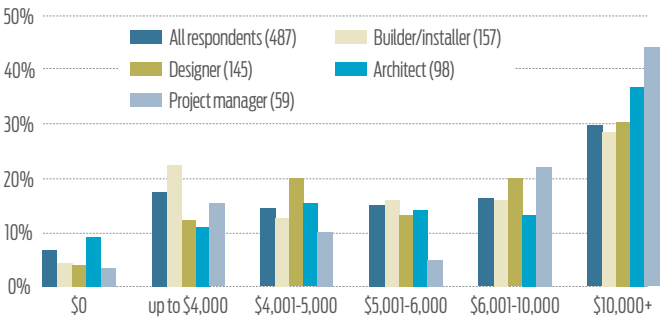

Figure 4: Client's willingness to pay for high-performance features. (Base count for each category of respondent shown in legend.)

Conversely, only 16% of building consent officers selected this option, with the majority (84%) describing performance (of their most recent house) as meeting the minimum standard only.

Respondents were asked what features they were currently using in the construction of new homes that exceed the minimum standard. Insulation, energy efficiency and material durability were named as the top three (see Figure 3).

Cost the biggest barrier to exceeding minimum

Respondents were asked to select the three barriers from a list of 12 that were most prohibitive to them in exceeding the minimum building standard. Built cost was most commonly selected as the most significant barrier - 43% of respondents.

Features that could help professionals deliver high-performance houses include:

- having show homes or providing case studies to demonstrate the benefits of different options to consumers
- more research and funding into materials and testing of high-performance features.

How much are clients prepared to pay?

The willingness to pay for high-performance features was also explored (see Figure 4). Based on their industry experience, 30% of respondents said clients were willing to pay over $10,000 on average to incorporate high-performance features into their new house.

There was some variation in experience of clients' willingness to pay by respondent role type, with builders tending slightly towards the lower end and project managers to the upper payment bracket.

Level website top source of information

Finally, the question of where industry is sourcing their information about high-performance houses was explored. Sources include colleagues and organisations such as BRANZ, EECA, MBIE, NZGBC and others. It is good to see that the BRANZ Level website is number one but concerning that many biased sources are still being used.

Perception or reality?

From the survey, industry perception is that the bulk of the industry is going beyond Code. However, it is impossible to determine from this survey whether this is an ongoing trend, how much is just perception and how significant the efforts to 'go beyond' really are.

Encouraging better building

The survey has helped highlight the diverse views on building beyond Code within the industry. It illustrates that Code-minimum housing is a choice, and industry perceives it is doing better despite facing challenges.

Perhaps one of the greatest challenges facing the industry is transformative change so that designing and building beyond Code becomes the norm.

Several barriers are limiting going beyond Code, such as build cost, clients' willingness to pay and systems-based issues such as project liability, uncertain demand and economies of scale.

Recent examples of initiatives that have successfully overcome barriers to change include the Superhome movement, the Zero Energy House project and the Passive House Institute of New Zealand. Initiatives such as these are saying that health, sustainability and reducing environment impacts are important issues. By responding to the principles of health and ecological citizenship, buildings can better represent the society we wish to live in.

Note A BRANZ report on the research will be published in 2018. For more information, contact casimir.macgregor@branz.co.nz. For more on building beyond Code, see the Aiming higher feature in *Build* 159, pages 57–74.