SIMPLE HOUSE CONSTRUCTION

One government initiative to improve the affordability of homes has been the development of the 'Simple house construction' compliance document.

By Duncan Joiner, Chief Architect, Department of Building and Housing

In 2007, a range of initiatives was announced to improve the supply of affordable houses and to encourage designers and house buyers to choose simple houses of good quality. The initiatives included the Starter Home Design Competition completed last March, and the development of a simple house compliance document Simple house construction to be launched later this year.

All information in one document

Simple house construction will bring together in one place, for the first time, all the information needed to design a simple house, including compliance requirements and building standards. This new compliance document is intended to encourage market-based solutions for simple houses and to provide opportunities for cost savings for designers and owners, through simplified design and consent processes. It will be applicable to houses with a floor area of up to 120 m² that are constructed from the most commonly used building products.

It will be an Acceptable Solution for simple housing that minimises risks to health and safety and sets appropriate standards of building quality, without inhibiting creative house design.

Simple house construction will be primarily for designers and officials in Building Consent Authorities (BCAs). It will meet industry preferences and government priorities for streamlined and simple house solutions under the New Zealand Building Code.

A separate companion guidance document for simple house design is being developed as a resource for designers and homeowners on how to site and plan a house to best advantage.

No complications for earthquakes, wind or snow

Simple house construction takes a simplified approach to earthquake, wind and snow loadings. This means the parameters will be applicable across a wide range of climatic and geographic conditions. A house may be sited on any plot of land in New Zealand with respect to earthquake loads, the majority of sites with respect to wind and in most populated areas...
with respect to snow load. A house designed in accordance with *Simple house construction* will also be of low weathertightness risk and include a drained cavity for all claddings.

Other components and constructions, such as bay windows or proprietary foundations, can be combined with the design, but these may require separate consideration by a BCA for compliance with the Building Code. It is likely that additional components will be included in future revisions.

*Simple house construction* will present a straightforward, deemed-to-comply route for the building consent process and may be regarded by some as being too simple or constraining to be useful to some residential designers. However, those requiring a wider choice of materials or design options may use other existing compliance documents or alternative solution proposals.

User experience incorporated

Updates will be required on a regular basis, and being the first document of its kind under the Building Code, it is especially important for user experience to be taken into account. When it is launched, *Simple house construction* will already have been through a number of refinements.

Draft versions were tested against individual house designs and trial subdivision layouts that were prepared for the Department of Building and Housing as an integral part of the compliance document development process.

**Competition showed quality possible with affordability**

The draft compliance document was publicly tested in the Starter Home Design Competition, launched by the Department of Building and Housing in September 2008, with awards made in March 2009 (see *Build 112 June/July 2009*, pages 16–17).

The competition sought designs based on the (then draft) document and encouraged high-quality, simple house designs that were attractive to first home buyers. It stimulated keen interest from designers, with over 140 entries. The entries proved that high-quality, innovative and affordable designs are achievable using the document parameters.

Designers also suggested some additions and refinements to the document. After reviewing the competition entries, the DBH has incorporated further options for insulation, cladding and special foundation conditions. For the first time, a New Zealand document will now include Code compliant conditions for expansive clays.

**Winning design to be constructed in Mangere**

The design that received the supreme award in the competition is to be built by Housing New Zealand Corporation on a site in Mangere. Responses to its construction from users and the public are expected to provide further information for development and refinement of the *Simple house construction* document.

Designs from all finalists will also be used in an education and information programme on simple house construction for builders, designers and homeowners, and will assist BCAs in consenting simple housing designs according to this all-in-one approach.