

VOXELL

THE H1 COMPLIANCE GUIDE

Energy efficiency under the Building Code, and what changes in November 2026.



What H1 is

H1 is the energy efficiency clause of the New Zealand Building Code. For housing, it governs the thermal performance of the building envelope: the roof, walls, floors, windows, and doors, and how much heat the building is allowed to lose. Every building consent has to demonstrate H1 compliance, and how you demonstrate it is about to change.

The change every project should know about

A new sixth edition of the acceptable solution for housing (H1/AS1) came into force on 27 November 2025.

26 Nov 2026

The previous fifth edition can still be used for consent applications until 26 November 2026. After that, the sixth edition is the only game in town, and it removes the simplest compliance route entirely.

Under the old editions there were three ways to show compliance:

- 1 The schedule method.** Look up the minimum R-value for each element in a table, meet them all, done. Simple, rigid, and often the most expensive way to comply, because it allows no trade-offs.
- 2 The calculation method.** Compare your building's total heat loss against a reference building. This allows trade-offs: more glazing here, better walls there, provided the whole building performs. Available where glazing is no more than 40 percent of the wall area.
- 3 The modelling method.** A full thermal simulation of the actual design, compared against a reference building. The most flexible route: it accounts for orientation and solar gain, and it's the pathway for designs the other methods can't accommodate.

THE CHANGE, CONTINUED

The sixth edition deletes the first option. From 27 November 2026, every new housing consent demonstrates H1 compliance by calculation or by modelling. MBIE's position is that the required level of energy efficiency hasn't changed, only the method of demonstrating it. In practice it means every design now gets treated as a whole building rather than a checklist of parts, which rewards exactly the kind of design thinking that was optional before.

The six climate zones

H1 requirements vary across six climate zones, assigned by territorial authority. The zone determines the reference levels your design is measured against. Some placements worth knowing, because they're often got wrong:

Auckland and Northland	ZONE 1
Napier, Hastings, and Central Hawke's Bay	ZONE 2
Wellington City, Lower Hutt, Porirua, and Kāpiti	ZONE 3
Upper Hutt and the Wairarapa a different zone from Wellington City, despite being the same region	ZONE 4
Christchurch and most of Canterbury	ZONE 5
Queenstown-Lakes and Central Otago the most demanding	ZONE 6



NEW ZEALAND
CLIMATE ZONE MAP

The reference insulation levels

The table below shows the schedule-method R-values from the fifth edition. With the schedule method nearly phased out, treat these as reference levels rather than minimums: the calculation and modelling methods measure your whole building against a reference built to these levels, then let the design trade elements off against each other. Your home's actual values may sit above or below these figures element by element, because the answer is holistic and tailored to the building, not a per-part checklist:

ELEMENT	ZONES 1-4	ZONES 5-6
Roof	R6.6	R6.6
Walls	R2.0	R2.0
Slab-on-ground floor	R1.5	R1.6 (zone 5) / R1.7 (zone 6)
Suspended floors	R2.5-R2.8	R3.0
Windows and doors	R0.46	R0.50

Two practical notes. First, the window values are a big part of why thermally broken frames and double glazing have become the norm in new builds. Second, that trade-off flexibility is the point of the newer methods: a weaker element can be balanced by a stronger one, within limits, as long as the whole building performs no worse than the reference. That's what the schedule method never offered.

The sixth edition also tightens how framed walls are assessed: the calculation now assumes a 38 percent framing fraction unless you can justify a lower one, which is a more honest account of thermal bridging, the heat that leaks through the timber rather than the insulation.

What this means for your project

If you're consenting before late 2026: both editions are usable, and the choice is strategic. We'll tell you which suits your design.

If you're consenting after 26 November 2026: the design will comply by calculation or modelling. That isn't a burden; done early it's an advantage, because trade-offs let the budget go where it earns comfort rather than where a table said.

Either way, decide early. H1 outcomes are set by the same first-week decisions as everything else: form, orientation, glazing area, and construction build-ups. A cladding change late in design changes R-values and can unravel a compliance path. The expensive version of H1 is the patched-at-consent version.

How Voxell handles H1

H1 compliance is part of our standard building consent documentation, run in-house alongside the related code clauses for ventilation and daylight. We work the calculation method routinely, use the modelling route where the design warrants it, and coordinate specialist input on larger and more complex buildings. When your window schedule changes, our H1 calculations change with it, because compliance isn't a report bolted on at the end, it's carried through the documentation.

LET'S CONFIRM YOUR PATHWAY

TALK TO US

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This guide is general information about the Building Code as at mid-2026, not advice on a specific building. Requirements and editions change; we confirm the current compliance pathway for every project at the time of consent.

Sources: MBIE, building.govt.nz, H1 Energy Efficiency acceptable solutions and verification methods (edition status and transition dates); H1/AS1 fifth edition amendment 1 (insulation tables and climate zone schedule); H1/VM1 sixth edition (modelling method); MBIE, Get to know H1/AS1 Sixth edition.

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