

H1 Energy Efficiency Building Code changes and what it means for you

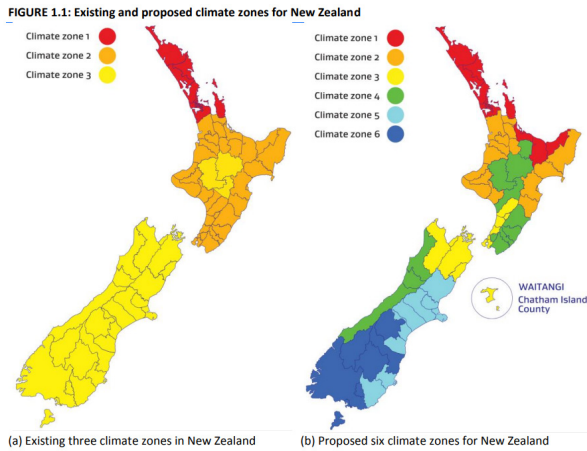
With recent changes to the H1 Energy Efficiency Building Code, there are several positive outcomes that will benefit homeowners in the long run. In this article, we discuss the advantages of these changes and how, from a central heating perspective, they might affect the house design.

One of the significant benefits of the H1 energy efficiency building code changes is the increased insulation requirements for new homes. This H1 requirement ensures that homes have higher insulation levels, resulting in increased energy efficiency and reduced energy bills. This change is particularly beneficial for those who enjoy the luxurious comfort of a central heating system, as it reduces heat loss through walls, roofs, and floors resulting in a more responsive system with lower running costs.

With increased insulation, and a lower heat loss through the walls/floor, the heat source for the central heating system can work more efficiently and will require less energy to maintain a comfortable temperature inside the home. With a lower heat loss, the boiler or heat pump can be set at a lower temperature compared with previous insulation levels. This will result in a higher appliance efficiency.

In some situations, these increased insulation levels will allow a smaller or different heat source option to be used to provide the home's heating. This provides the homeowner with more choices that fit within their budget and in most cases a lower installed cost compared with the same home insulated to the previous insulation standards. The reduced install and running costs that will occur as a result of the home's higher insulation levels will provide a significant saving to the homeowner over the life of the home, keeping in mind that unlike other systems, a water-based hydronic system will have a longer life expectancy ensuring these running cost savings are achieved for many years.

When it comes to incorporating hydronic underfloor heating into a building project, it's important to consider the H1 insulation requirements for the heated floor. In the past, the standard insulation requirement for heated floors was R1.9, however, this standard has changed, and the new minimum insulation requirement for heated floors is now between R2.5 and R3 depending on the region's climate zone where the project is located.



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When does it come into effect?

Minimum Construction R-Values by Element and 5th Edition Climate Zone

	Today	3 Nov 2022	1 May 2023	3 Nov 2023
WINDOWS / Climates 1 + 2	R 0.26	R 0.37	R 0.37	R 0.46
WINDOWS / Climates 3 + 4	R 0.26	R 0.37	R 0.46	R 0.46
WINDOWS / Climates 5 + 6	R 0.26	R 0.37	R 0.50	R 0.50
ROOFS / Climates 1 + 2 + Lower North Island	R 2.9	R 2.9	All Climate Zones - R 6.6	All Climate Zones - R 6.6
ROOFS / South Island + Central North Island	R 3.3	R 3.3	All Climate Zones - R 6.6	All Climate Zones - R 6.6
FLOORS / All Climate Zones	R 1.3	R 1.3	Slab on Grade R 1.5 - R 1.7 / Suspended Floors R 2.5 - R 3.0	Slab on Grade R 1.5 - R 1.7 / Suspended Floors R 2.5 - R 3.0
WALLS / Climates 1 + 2 + Lower North Island	R 1.9	R 1.9	All Climate Zones - R 2.0	All Climate Zones - R 2.0
WALLS / South Island + Central North Island	R 2.0	R 2.0	No change - R 2.0	No change - R 2.0

The changes to the H1 energy efficiency building code are a positive step towards making homes in New Zealand more energy-efficient and comfortable. At Central Heating New Zealand, we are excited about these changes and welcome the opportunity to help homeowners achieve greater energy efficiency and reduced heating cost, while still providing them with the same high level of comfort that they have come to know from our custom-designed central heating systems. With higher insulation levels, better glazing, and efficient heating systems, homeowners can look forward to a more comfortable energy-efficient home.

Please contact our friendly team if you would like to discuss any of these options further.

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