



Building Amendment Regulations 2000

Michael Hardie Boys, Governor-General

Order in Council

At Wellington this 26th day of June 2000

Present:

The Right Hon Helen Clark presiding in Council

Pursuant to section 48 of the Building Act 1991, His Excellency the Governor-General, acting on the advice and with the consent of the Executive Council (given on the advice of the Minister of Internal Affairs following the recommendation of the Building Industry Authority, in compliance with subsection (4) of that section), makes the following regulations.

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Regulations

- 1 Title**
- (1) These regulations are the Building Amendment Regulations 2000.

- (2) In these regulations, the Building Regulations 1992¹ are called “the principal regulations”.

¹ SR 1992/150

2 Commencement

These regulations come into force on the day 6 months after the date of their notification in the *Gazette*.

3 Clause A2 of code (interpretation) amended

- (1) In this regulation, **clause A2** means clause A2 of the First Schedule of the principal regulations.

- (2) Clause A2 is amended by revoking the definitions of **building performance index** and **degree-day**, and inserting, in their appropriate alphabetical order, the following definitions:

“**building performance index**, in relation to a *building*, means the energy from a network utility operator or a depletable resource (measured in kilowatt-hours per square metre of floor area and per *degree-day*, and calculated using the Building Research Association of New Zealand’s *Annual Loss Factor Design Manual 1990* or some other method that can be correlated with that manual) needed to maintain the *building* at a constant internal temperature for the period from 1 May to the close of 31 August under the following standard conditions:

“(a) a continuous temperature of 20°C throughout the *building*;

“(b) an air change rate of 1 change per hour or the actual air leakage rate, whichever is the greater;

“(c) a heat emission contribution arising from internal heat sources for that period of 1000 kWh for the first 50 m² of floor area, and 10 kWh for every additional square metre of floor area;

“(d) no allowance for—

“(i) carpets; or

“(ii) blinds, curtains, or drapes, on windows;

“(e) windows to have a shading coefficient of 0.6 (made up of 0.8 for windows and recesses and 0.75 for site shading)

“**cool location** means a location in New Zealand where the *degree-day total* is 920 or more

“**degree-day**, in relation to any location on any day,—

“(a) if a base temperature of 15°C is greater than the mean of the maximum and minimum outdoor temperatures at that location on that day, means the number of degrees Celsius by which that base temperature is greater than that mean:

“(b) if a base temperature of 15°C is not greater than the mean of the maximum and minimum outdoor temperatures at that location on that day, means 0

“**degree-day total**, in relation to any location, means the sum of the *degree-days* for that location for the period of 1 May to 31 August, as derived from *Average Degree-day Tables—Selected NZ Stations* (Miscellaneous Publication 159, 1978 of the New Zealand Meteorological Service)

“**warm location** means a location in New Zealand where the *degree-day total* is less than 920”.

- (3) Clause A2 is amended by revoking paragraph (b) of the definition of **network utility operator**, and substituting the following paragraph:

“(b) is an electricity operator or an electricity distributor as defined by section 2(1) of the Electricity Act 1992 for the purposes of any works as defined by that Act; or”.

- (4) Clause A2 is amended by inserting in the definition of **thermal resistance**, before the word “temperature”, the word “air”.

- (5) Regulation 3(2)(d) of the Building Regulations 1992, Amendment No 1 is consequentially revoked.

4 Amendments to code consequential on Health Reforms (Transitional Provisions) Act 1993

- (1) The First Schedule of the principal regulations is amended by omitting from the limits on application to clauses D1.1(c), D2.1(c), F8.1(c), G1.1(c), G2.1(b), G3.1(c), G5.1(d), G9.1(b), and G12.1(d) the expression “section 25 of the Disabled Persons Community Welfare Act 1975”, and substituting in each case the expression “section 47A of the Act”.

- (2) The Second Schedule of the principal regulations is amended by omitting from Part E2 of form 3, form 12, form 13, and form 14 the expression “section 25 of the Disabled Persons Community Welfare Act 1975” in both places where it

occurs, and substituting in each case the expression “section 47A of the Act”.

5 Clause H1 of code (energy efficiency provisions) replaced

The First Schedule of the principal regulations is amended by revoking clause H1, and substituting the following clause:

Clause H1—Energy efficiency provisions

Provisions

Limits on application

Objective

H1.1 The objective of this provision is to facilitate efficient use of energy.

Objective H1.1 applies only when the energy is sourced from a *network utility operator* or a depletable energy resource.

Functional requirement

H1.2 Buildings must be constructed to achieve an adequate degree of energy efficiency when that energy is used for—

- (a) modifying temperature or humidity, or both; or
- (b) providing hot water to *sanitary fixtures* or *sanitary appliances*, or both; or
- (c) providing artificial lighting

Requirement H1.2(a) does not apply to *assembly service buildings*, *industrial buildings*, *outbuildings*, or *ancillary buildings*, or to plant and equipment provided to modify temperature, humidity, or both.

Requirement H1.2(c) applies only to *commercial buildings* and *communal non-residential buildings* whose floor area is greater than 300 m².

Performance

H1.3.1 The *building* envelope enclosing spaces where the temperature or humidity (or both) are modified must be constructed to—

- (a) provide *adequate thermal resistance*; and
- (b) limit uncontrollable airflow.

H1.3.2 Buildings must be constructed to ensure that the *building performance index* does not exceed:

- (a) 0.13 kWh in a *warm location*; and
- (b) 0.12 kWh in a *cool location*.

Performance H1.3.2 applies only to *housing*.

Provisions**Limits on application**

H1.3.3 Account must be taken of physical conditions likely to affect energy performance of *buildings*, including—

- (a) the thermal mass of *building elements*; and
- (b) the building orientation and shape; and
- (c) the airtightness of the building envelope; and
- (d) the heat gains from services, processes and occupants; and
- (e) the local climate; and
- (f) heat gains from solar radiation.

H1.3.4 Systems for the heating, storage, or distribution of hot water to *sanitary fixtures* or *sanitary appliances* must, having regard to the energy source used,—

- (a) limit the energy lost in the heating process; and
- (b) be constructed to limit heat losses from storage vessels, and from distribution systems connected to storage vessels.

Performance H1.3.4(b) applies only where individual storage vessels are 700 litres or less in capacity.

H.1.3.5 Artificial lighting fixtures must—

- (a) be located and sized to limit energy use, consistent with the *intended use* of space; and
- (b) be fitted with a means to enable light intensities to be reduced, consistent with reduced activity in the space.

Performance H1.3.5 does not apply to lighting provided solely to meet the requirements of clause F6.

Marie Shroff,
Clerk of the Executive Council.

Explanatory note

This note is not part of the regulations, but is intended to indicate their general effect.

These regulations, which come into force 6 months after notification in the *Gazette*, amend the Building Code (which is a schedule of the Building Regulations 1992) so as to increase the standard of energy efficiency required in housing.

They have the effect of requiring buildings to be constructed with an adequate degree of energy efficiency, in relation to energy from a network utility operator or a depletable resource used to—

- (a) modify temperature or humidity in a building; or
- (b) provide hot water for sanitary fixtures and appliances in a building; or
- (c) provide artificial lighting in a building.

Also, they introduce the concept of cool and warm locations. In practice, cool locations have average temperatures as cool as or cooler than those in Christchurch and warm locations have average temperatures warmer than those in Christchurch. The standard of energy efficiency required for any housing will depend on whether it is in a cool location or a warm location.

The opportunity has been taken to correct some statutory references that had become out of date.

Issued under the authority of the Acts and Regulations Publication Act 1989.

Date of notification in *Gazette*: 29 June 2000.

These regulations are administered in the Department of Internal Affairs.
