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NZS 4243.1:2007 Energy efficiency - Large buildings - Building thermal envelope

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Abbreviation

NZS 4243.1:2007

Valid from

29/04/2007

Replaces

Information provider

Standards New Zealand

Author

Standards New Zealand

Information type

New Zealand Standard

Format

PDF

Cited By

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Description

This Standard specifies performance requirements for large buildings to achieve an adequate level of energy efficiency in respect of their building envelope. The requirements for lighting have been

updated and placed in a separate Standard (NZS 4243 Part 2).

Scope

This Standard provides three methods of demonstrating compliance as set out in figure 1.

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Description

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This document CITES:

New Zealand Standards

- [NZS 4214:2006](#)

NZS 4243.1:2007 cites NZS 4214:2006 Methods of determining the total thermal resistance of parts of buildings

- [NZS 4243.2:2007](#)

NZS 4243.1:2007 cites NZS 4243.2:2007 Energy efficiency - Large buildings - Lighting

- [NZS 4303:1990](#)

NZS 4243.1:2007 cites NZS 4303:1990 Ventilation for acceptable indoor air quality

Other

- [BRANZ House Insulation Guide 2014 \(5th Edition\)](#)

NZS 4243.1:2007 cites BRANZ House Insulation Guide, 5th Edition 2014

- [NREL/TP-472-6231 1995](#)

NZS 4243.1:2007 cites NREL/TP-472-6231 1995 Judkoff R. and Neymark J. International Energy Agency building energy simulation test (BESTEST) and diagnostic method. Golden, Colorado, USA; National Renewable Energy Laboratory

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Appendix

A Climate Zones

B Worked Examples – Building Thermal Envelope

C Modelling Method – Building Energy Use Comparison

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1 – Minimum R-Values For Schedule Method (Wwr 50 %)

2 – R-Values For Building With Heated Walls, Ceilings And Floors

B1 – Worked Examples

C1 – Default Power Densities For Internal Gains From Occupants And Plug Loads

C2 – Default Schedules For Occupancy, Plug Loads And Lighting (Percentage Of Maximum Load Or Percentage Of Power Density)

Figure

1 – Decision Flow Chart

A1 – Climate Zones

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