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- [Latest updates](#)

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## NZS 4214:2006 Methods of determining the total thermal resistance of parts of buildings

Table of Contents

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Abbreviation

NZS 4214:2006

Valid from

28/05/2006

Replaces

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Information provider

Standards New Zealand

Author

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New Zealand Standard

Format

PDF

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Description

This Standards provides methods of determining the thermal resistance of building components and

elements consisting of thermally homogeneous layers, in steady-state environmental conditions.

#### Scope

The methods may be applied to individual elements and components, or to complete assemblies such as walls, roofs and floors.

This Standard provides only limited methods for dealing with components, or elements containing reflective foil used as a radiant barrier, and the thermal performance of sub-floor spaces.

Three methods for the determination of thermal resistance are provided:

- (a) Laboratory measurement;
- (b) Site measurement; and
- (c) Calculation.

1) The methods are not intended to be applied to windows or glazing.

2) The methods for the calculation of the building envelope component R-values are not intended to be used in the calculation of R-values for use in computer thermal performance simulation programmes. The R-values in this Standard are intended to show compliance with the schedule and calculation methods in NZS 4218 and/or NZS 4243.

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- [E3/AS1 \(Second Edition, Amendment 4\)](#)

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- [G5/AS1 \(First Edition, Amendment 2\)](#)

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- [H1/AS1 \(Fourth Edition, Amendment 3\)](#)

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- [H1/VM1 \(Third Edition, Amendment 2\)](#)

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- [NZS 4218:2009](#)

NZS 4214:2006 is cited by NZS 4218:2009 Thermal insulation - Housing and small buildings

- [NZS 4243.1:2007](#)

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New Zealand Standards

- [AS/NZS 4859.1:2002](#)

NZS 4214:2006 cites AS/NZS 4859.1:2002 Materials for the thermal insulation of buildings - General criteria and technical provisions

- [NZS 4218:2004](#)

NZS 4214:2006 cites NZS 4218:2004 Energy efficiency - Small building envelope

- [NZS 4243:1996](#)

NZS 4214:2006 cites NZS 4243:1996 Energy efficiency - Large buildings

- [NZS ISO/IEC 17025:1999](#)

NZS 4214:2006 cites NZS ISO/IEC 17025:1999 General requirements for the competence of testing and calibration laboratories

Other

- Window Efficiency Rating Scheme (WERS). (a link to this resource is not available)
- [ASTM C1363:05](#)

NZS 4214:2006 cites ASTM C1363:05 Standard Test Method for Thermal Performance of Building Materials and Envelope Assemblies by Means of a Hot Box Apparatus

Back

Close

# **1 Scope**

## **1.1 Thermal Resistance**

## **1.2 Elements And Components**

## **1.3 Inclusions**

## **1.4 Exclusions**

## **1.5 Interpretation**

# **2 Objective**

# **3 Definitions**

# **4 Symbols And Units**

# **5 Thermal Resistance**

## **5.1 Materials Or Assemblies Of Materials**

## **5.2 Surface Thermal Resistance**

## **5.3 Thermal Resistance Of Air Gaps**

## **5.4 Sub-Floor Spaces**

## **5.5 Floors In Continuous Contact With The Ground**

## **5.6 Parts With Embedded Heating**

## **5.7 Thermal Bridges**

# **6 Total Thermal Resistance**

## **6.1 General**

## **6.2 Calculation Procedure**

## **6.3 Laboratory Determination**

## **6.4 Test Considerations**

## **Appendix**

### **A Verification Methods**

### **B Guidelines For Testing Laboratories**

### **C Thermal Conductivity Of Bulk Insulation Materials**

### **D Bibliography**

### **E Technical Data**

#### **Table**

#### **E1(A) – R-Values Of Board And Sheet Material**

#### **E1(B) – R-Values Of Masonry Materials**

#### **E1(C) – R-Values Of Framing, Floor And Cladding Materials**

#### **E1(D) – R-Values Of Other Common Building Materials**

#### **E2 – Surface Resistance For Air**

#### **E3 – Thermal Resistance For Listed Air Space Width And Total Emittance At A Mean Cavity Temperature Of 18 Oc**

#### **E4 – Emittance Values Of Various Surfaces And Effective Emittance Of Air Spaces**

#### **E5 – Thermal Resistance Of The Ground And Sub-Floor Space Under A Suspended Floor**

#### **E6 – Thermal Resistance Of The Un-Insulated Ground Under**

# A Slab Floor

## E7 – Multiplier Factor For Edge Insulated Slab-On-Ground Floors

### F Worked Examples

#### Figure

#### 1 – Transformation Method For Metal Frame Sections

#### F1 – Timber Frame

#### F2 – Brick Veneer And Timber Frame

#### F3 – Steel Frame

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