

Subject: THERMAL INSULATION FOR CLASS 1, 2 and 3 BUILDINGS

Description: This document describes Council’s policy regarding the thermal insulation of Class 1, 2 & 3 buildings (residential use).

- Objective:**
- To increase the amenity of dwellings in Uralla Shire and improve the thermal comfort of their occupants;
 - To improve energy efficiency through reduced reliance on artificial heating and cooling FOR THESE CLASSES OF BUILDINGS in the Shire;
 - To reduce consumption of finite energy sources such as fossil fuels;
 - To contribute to a reduction in greenhouse gas emissions created by energy production and use, consistent with national and international protocols;
 - To contribute to a reduction in local wood smoke pollution;
 - To reduce recurrent costs of energy use for residents and energy supply authorities.

PART 1 - POLICY

This policy applies to all new Class 1, 2 and 3 buildings which includes residential sections and additions. In this Policy “R-value” means the thermal resistance or insulating effect of an insulation material measured in m²K/W.

Provision of thermal insulation

Minimum insulation levels/thermal resistance

For all new floor space, the following minimum levels of thermal insulation shall be provided in addition to the other materials used in construction of the building:

ELEMENT	MINIMUM R-VALUE
Roof or ceiling	R 3.5
External walls - cavity brick <i>OR</i>	R 1.5
External walls - brick veneer, weatherboard or the like	R 2
Suspended floors	R 1.0

Notes

- *Higher levels of insulation are recommended where central heating or mechanical cooling is installed.*
 - *The Policy assumes that uninsulated construction has an R-value of 0.5.*
 - *See over for exemptions from these requirements.*
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PART 2 - EXEMPTIONS

This Policy does not apply to the following types of construction:

- (i) windows, vents and other similar openings in walls, roofs and ceilings;
- (ii) a garage forming part of a Class 1, 2 or 3 building which is separated from the habitable rooms of the building by a wall complying with the requirements for an external wall in the above Table;
- (iii) a building material used in the construction of an external wall, roof or ceiling of a dwelling which meets the relevant standard (above table) plus an additional R-value of 0.5 (for example certain forms of aerated concrete construction). *Allowances will also be made for building materials which provide a partial compliance with the standards in the above table;*
- (iv) walls or ceiling/roof areas of manufactured or relocated homes which are not readily accessible for the purpose of installing insulation.

PART 3 - CRITERIA

Council must take into account the following criteria in determining whether to approve or not approve an application.

Fire resistance - Building Code of Australia

When tested in accordance with Australian Standards 1530.2 & 3, thermal insulation materials must meet the following requirements, derived from Specifications C1.9 and C1.10 of the Building Code of Australia at the date of printing*:

CLASS OF BUILDING	SPREAD OF FLAME INDEX 1530.3	SMOKE DEVELOPED INDEX 1530.3	FLAMMABILITY INDEX 1530.2
1	N/A	N/A	≤5 (Spec. C1.8, C1.9)
2 & 3 for general areas	N/A	N/A	≤5 (Spec C1.10, C1.2(a))
2 & 3 for fire isolated exits	N/A	N/A	0 (Spec C1.10, C1.3(b))

Other insulation materials

CLASS OF BUILDING	SPREAD OF FLAME INDEX 1530.3	SMOKE DEVELOPED INDEX 1530.3	FLAMMABILITY INDEX 1530.2
1	N/A	N/A	N/A
2 & 3 for general areas	≤ 9 (Spec C1.10, C1.2(b))	≤ 8 (where SFI >5)	N/A
2 & 3 for fire isolated exits	0 (Spec C1.10, C1.3(a))	≤ 2	N/A
2 & 3 for public corridors leading to a fire isolated exit	0 (Spec C1.10, C1.4(a))	≤ 5	N/A

* Council will endeavour to keep this Policy updated to reflect future changes in the Building Code of Australia. However, where any discrepancy between this Policy and the Building Code of Australia is evident, the Building Code of Australia shall take precedence.

PART 4 - OTHER MATTERS

Notes

Installation

The installation of thermal insulation materials should be carried out in accordance with Australian Standards 1904 for reflective foil laminates and Australian Standards 3999 for batts, blankets, rigid boards and loose fill materials.

Australian Standard Compliance

Australian Standards have been published for various types of insulation materials.

Council holds copies of these for your perusal. You should also ask your chosen supplier about quality control testing for particular products.

Evidence of Compliance with Policy

Council will accept a compliance certificate provided by the installer as evidence of the use of adequate insulation in buildings subject to this policy. Compliance will also be subject to periodic audits during routine building inspections by council staff.

Review: This policy is to be reviewed as necessary or every four years in accordance with Section 165, Local Government Act 1993.

Resolution No: 350/97; Reviewed September 03: 452/03; March 05: 94/05; Revised September 09; Adopted without Change August 2013 (249/13).
