



Clark County Department of Building & Fire Prevention

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Division:	Building Plans Exam	Code Interpretation	BP-CI-015
Subject:	LOG WALL THERMAL INSULATION VALUES	Effective Date:	05/01/2007
Code:	IECC 402.1.1 and 402.1.2	Revised Date:	09/04/2013

A. CODE REQUIREMENT

For simplified prescriptive requirement, the building thermal envelope shall meet the requirements of Table 402.1.1 based on the climate zone specified in Chapter 3.

IECC Section 402.1.2 states that “Insulation material used in layers, such as framing cavity insulation and insulating sheathing, shall be summed to compute the component *R*-value....”

B. INTERPRETATION

1. The following thermal insulation, *R*-Values will be allowable for use in log homes.

<u>Log Type</u>	<u>R-Value per Inch Thickness</u>
Cedar	3.78
Douglas Fir- Larch	3.00
Hem Fir	3.58
Spruce Pine Fir	3.58
Redwood	3.75
Southern Pine	2.76

C. RATIONALE

1. National Association of Home Builders research report No. 2132, dated April 1991, compares conventionally framed homes to log homes. Based on average insulation *R*-values for wood as given in the ASHRAE Fundamentals Handbook, acceptable thermal insulation values can be obtained as shown in the table above.

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Revision History:

Policy #	TITLE	Effective Date	Revised Date	Review Date
PE-CI-ECC-001	Log Wall Thermal Insulation Values	May 1, 2007		
BP-CI-015	Log Wall Thermal Insulation Values			August 15, 2008
BP-CI-015	Log Wall Thermal Insulation Values		September 4, 2013	

Approved by:

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Concurred by:

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