



San Juan County
Community Development & Planning
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2006 RESIDENTIAL ENERGY
PRESCRIPTIVE COMPLIANCE FORM

PRESCRIPTIVE REQUIREMENTS ¹ FOR GROUP R-3 OCCUPANCY
CLIMATE ZONE 1

RESIDENTIAL COMPLIANCE UNLIMITED GLAZING

Option	Glazing Area % of Floor	Glazing U-Factor		Door ⁹ U-Factor	Ceiling ²	Vaulted Ceiling ³ FIRST 500SF ONLY*	Wall Above ¹² Grade	Wall Int ⁴ Below Grade	Wall Ext ⁴ Below Grade	Floor ⁵	Slab ⁶ On Grade
		Vertical	Overhead								
IV.	Unlimited Group R-3 Occupancies Only	0.35	0.58	0.20	R-38	R-30	R-21	R-21	R-10	R-30	R-10

1. Nominal R-values are for wood frame assemblies only or assemblies built in accordance with Section 601.1*
2. Requirement applies to all ceilings except single rafter or joist vaulted ceilings.
3. Requirement applicable only to single rafter or joist (<12") vaulted ceilings (Limited to 500sf only). **(Joists or rafters greater than 13" and areas over first 500sf must comply with "Ceiling" requirements.)**
**** SEE TABLE 6.1 ON OTHER SIDE****
4. Below grade walls shall be insulated either on the exterior to a minimum level of R-10, or on the interior to the same level as walls above grade. Exterior insulation installed on below grade walls shall be a water-resistant material, manufactured for its intended use, and installed according to the manufacturer's specifications. See Section 602.2.***
5. Floors over crawl spaces or exposed to ambient air conditions.
6. Required slab perimeter insulation shall be a water resistant material, manufactured for its intended use, and installed according to manufacturer's specifications. See Section 602.4. ****
9. Doors, including all fire doors, shall be assigned default U-factors from Table 10-6C.
12. Log and solid timber walls with a minimum average thickness of 3.5" are exempt from this insulation requirement.

(SEE OTHER SIDE FOR SECTIONS WITH ASTERICKS * * * *)**

IF YOUR PROJECT IS IN COMPLIANCE WITH THE ABOVE TABLE:
"RESIDENTIAL COMPLIANCE UNLIMITED GLAZING"

&

THE PROJECT WILL MEET ALL OTHER PROVISIONS OF THE WSEC AND VIAQ CODES.
PLEASE SIGN:

() YES _____
Signature (Owner/Agent) **Date**

- IF NOT: OTHER OPTIONS:** (A.) ENERGY FORM FOR GLAZING 10% OR LESS
 (B.) COMPONENT ENERGY FORM
 (C.) COMPUTER APPROACH.

CALPAS 3 ---- DOE 2 ---- F-LOAD ---- MICROPAS ---- SUNDAY (ACCEPTABLE SYSTEMS ANALYSIS SOFTWARE)

- FORMS FOR OPTIONS A & B AVAILABLE UPON REQUEST

***SECTION 601.1** For wood frame assemblies, the building envelope requirements of this chapter may be met by installing one of the prescriptive packages in Table 6-1. Installed components shall meet the requirements of Section 602. Compliance with nominal R-values shall be demonstrated for the thermal resistance of the added insulation in framing cavities and/or insulated sheathing only and shall not include the thermal transmittance of other building materials or air films, but shall permit interruption by occasional framing members. Other than wood frame assemblies with continuous insulation uninterrupted by framing shall also be allowed to comply with nominal Rvalues.

****The following table shows typical insulation requirements for a single rafter joist.**

(If the table notes R-38, then R-38 is required)

Footnote 3, Table 6-1 or 6-2 Prescriptive Rafter Insulation Based on Fiberglass Batts				
Nominal	Actual	Max depth with 1 " ventilation	First 500 SF R-value	Over 500 SF R-value
2X10	9 1/4"	8 1/4"	R-30 HD ²	Note ¹
2X12	11 1/4"	10 1/4"	R-30	R-38 HD ²
2X14	13 1/4"	13 1/4"	R-38	R-38
I-Joist	9 1/2"	8 1/2"	R-30 HD ²	Note ¹
I-Joist	11 7/8"	10 7/8"	R-30	R-38 HD ²
I-Joist	14"	13"	R-38	R-38
I-Joist	16"	15"	R-38	R-38

Note ¹ Upsize joist or provide an alternative method meeting U-.027.

HD² Refers high density fiberglass batt or equivalent.

A take off noting rafter area will be required.

*****SECTION 602.2 Exterior Walls Both Above and Below Grade:**

Above grade exterior walls shall be insulated to not less than the nominal R-value specified in Table 6-1 as applicable. The following walls should be considered to meet R-21 without additional documentation:

1. 2 x 6 framed and insulated with R-21 fiberglass batts.
2. 2 x 4 framed and insulated with R-15 fiberglass batts plus R-4.0 foam sheathing.
3. 2 x 4 framed and insulated with R-13 fiberglass batts plus R-5.0 foam sheathing.

******SECTION 602.4 Slab-on-Grade Floors:** Slab-on-grade floors shall be insulated along their perimeter to not less than the nominal R-values specified for slab-on-grade floors in Table 6-1 as applicable. Slab insulation shall be installed in compliance with Section 502.1.4.8. See Chapter 5, Section 502.1.4.9, for additional requirements for radiant slab heating.

SECTION 502.1.4.8 Slab-On-Grade: Slab-on-grade insulation, installed inside the foundation wall, shall extend downward from the top of the slab for a minimum distance of 24 inches or downward and then horizontally beneath the slab for a minimum combined distance of 24 inches. Insulation installed outside the foundation shall extend downward to a minimum of 24 inches or to the frost line. Above grade insulation shall be protected. EXCEPTION: For monolithic slabs, the insulation shall extend downward from the top of the slab to the bottom of the footing.

SECTION 502.1.4.9 Radiant Slabs: The entire area of a radiant slab shall be thermally isolated from the soil with a minimum of R-10 insulation. The insulation shall be an approved product for its intended use.

