

# Prescriptive Approach – Simple Form Climate Zone 1 For the Washington State Energy Code (2006 Edition)

## Site Information

Lot: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 City: \_\_\_\_\_  
 State: \_\_\_\_\_ Zip: \_\_\_\_\_  
 Contact: \_\_\_\_\_  
 Phone: \_\_\_\_\_  
 Phone 2: \_\_\_\_\_  
 Fax: \_\_\_\_\_

## Building Department Use Only

Permit #: \_\_\_\_\_  
 Notes: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

This set of forms has been developed to assist permit applicants documenting compliance with the Washington State Energy Code, (2006 edition). This set is for type R-3 and R-4 structures located in climate zone 1.

The following forms provide much of the required documentation for plan review. The details noted here must also be shown on the drawings (WSEC 104.2).

This form is not a substitute for the energy code itself. To obtain a copy of the energy or ventilation codes, go to the following web address. <http://www.energy.wsu.edu/code/code2006.cfm>

Option	Glazing Area <sup>10</sup> : % of Floor	Glazing U-Factor		Door <sup>9</sup> U-Factor	Ceiling <sup>2</sup>	Vaulted Ceiling <sup>3</sup>	Wall <sup>12</sup> Above Grade	Wall· int <sup>4</sup> Below Grade	Wall· ext <sup>4</sup> Below Grade	Floor <sup>5</sup>	Slab <sup>6</sup> on Grade
		Vertical	Overhead <sup>11</sup>								
	<b>10%</b>	0.32	0.58	0.20	R-38	R-30	R15	R-15	R-10	R-30	R-10
	Unlimited Group R-3 and R-4 Occupancies Only	0.35	0.58	0.20	R-38	R-30	R-21	R-21	R-10	R-30	R-10

See WSEC table 6-1 for footnotes

### Glazing Schedule Attached to Document

- Does not apply. (**SEE INSTRUCTIONS**) Using Prescriptive Option IV.  
 All glazing and doors meet maximum U-factor.  
 Using Prescriptive Option IV. All glazing and doors meet maximum U-factor.  
 All glazing and doors meet maximum U-factor.  
 Alternate heating size method submitted
- Option I, Glazing to floor area limit (WSEC 602.7.2)
- Area weighted window, skylight or door U-factor (WSEC 602.7.2)
- As part of the heating and cooling system sizing calculation (IRC M1401.3 & WSEC 503.2.2)

### Single Rafter Joist R-value (Table 6-1 or 6-2, footnote 3)

Rafter Area (square feet)  Rafter Depth (inches)   
 First 500 Square feet: R-30 R-38 required, joist depth exceeds 13"  
 Area exceeding 500 Square feet: R-38 required in all cases

### Radiant slab:

- R-10 foam insulation, continuous with thermal break (WSEC 502.1.4.9)

0. Nominal R-values are for wood frame assemblies only or assemblies built in accordance with Section 601.1.

1. Minimum requirements for each option listed. For example, if a proposed design has a glazing ratio to the conditioned floor area of 13%, it shall comply with all of the requirements of the 15% glazing option (or higher). Proposed designs which cannot meet the specific requirements of a listed option above may calculate compliance by Chapters 4 or 5 of this Code.

2. Requirement applies to all ceilings except single rafter or joist vaulted ceilings complying with note 3. 'Adv' denotes Advanced Framed Ceiling.
3. Requirement applicable only to single rafter or joist vaulted ceilings where both (a) the distance between the top of the ceiling and the underside of the roof sheathing is less than 12 inches and (b) there is a minimum 1-inch vented airspace above the insulation. Other single rafter or joist vaulted ceilings shall comply with the "ceiling" requirements. This option is limited to 500 square feet of ceiling area for any one dwelling unit.
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.
7. Int. denotes standard framing 16 inches on center with headers insulated with a minimum of R-10 insulation.
8. This wall insulation requirement denotes R-19 wall cavity insulation plus R-5 foam sheathing.
9. Doors, including all fire doors, shall be assigned default U-factors from Table 10-6C.
10. Where a maximum glazing area is listed, the total glazing area (combined vertical plus overhead) as a percent of gross conditioned floor area shall be less than or equal to that value. Overhead glazing with U-factor of  $U=0.40$  or less is not included in glazing area limitations.
11. Overhead glazing shall have U-factors determined in accordance with NFRC 100 or as specified in Section 502.1.5.
12. Log and solid timber walls with a minimum average thickness of 3.5" are exempt from this insulation requirement.