



R-3 WSEC Prescriptive Requirements

SF 86

Development Services Department

865 S.E. Barrington Dr. ~ Oak Harbor, WA 98277 ~ Phone (360) 279 4510 ~ Fax (360) 279-4519

Prescriptive Energy Code Compliance for Single Family and Duplex Housing: Marine Zone 4

This project will use the requirements of the Prescriptive Path below and incorporate the minimum values listed. In addition, based on the size of the structure, the appropriate numbers of additional credits are checked as chosen by the permit applicant.

Insulation and Fenestration Requirements by Component ^a

Climate Zone Marine 4		
	R-Value ^a	U-Factor ^a
Fenestration U-Factor ^b	0.30	0.30
Skylight ^b U-Factor	0.50	0.50
Glazed Fenestration SHCC ^{b,e}	NR	n/a
Ceiling R-Value ^j	49 ^j	0.026
Wood Frame Wall R-Value ^{g,k,l}	21 int.	0.056
Mass Wall R-Value ^l	21/21 ^h	0.056
Floor R-Value	30 ^g	0.029
Below Grade Wall R-Value ^{c,k}	10/15/21 int + TB	0.042
Slab R-Value & Depth ^d	10, 2ft	n/a

See reverse side of this sheet for WSEC table R402.1.1 footnotes

Table 406.2 Energy Credits Total of 1 Credit Required

Opt.	Description		
1a	Efficient Building Envelope 1a	0.5	
1b	Efficient Building Envelope 1b	1.0	
1c	Efficient Building Envelope 1c	2.0	
2a	Air Leakage Control and Efficient Ventilation 2a	0.5	
2b	Air Leakage Control and Efficient Ventilation 2b	1.0	
2c	Air Leakage Control and Efficient Ventilation 2c	1.5	
3a	High Efficiency HVAC Equipment 3a	0.5	
3b	High Efficiency HVAC Equipment 3b	1.0	
3c	High Efficiency HVAC Equipment 3c	2.0	
3d	High Efficiency HVAC Equip . ductless Split system Heat Pumps, Zonal control 3d	1.0	
4	High Efficiency HVAC Distribution System	1.0	
5a	Efficient Water Heating 5a	0.5	
5b	Efficient Water Heating 5b	1.5	
6	Renewable Electric Energy	0.5	
	Required Credits	Small SFR < 1,500	1.0
		Medium SFR 1,501 to 4,999	1.5
		Large SFR > 5,000	2.5
Total Credits			

Authorized Representative _____ Date _____

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WSEC table R402.1.1 footnotes

For SI: 1 foot = 304.8 mm, ci. = continuous insulation, int. = intermediate framing

- a *R*-values are minimums. *U*-factors and SHGC are maximums. When insulation is installed in a cavity which is less than the label or design thickness of the insulation, the compressed *R*-value of the insulation from Appendix Table A101.4 shall not be less than the *R*-value specified in the table.
- b The fenestration *U*-factor column excludes skylights. The SHGC column applies to all glazed fenestration. Exception: Skylights may be excluded from glazed fenestration SHGC requirements in Climate Zones 1 through 3 where the SHGC for such skylights does not exceed 0.30.
- c R-15/21 + TB+ means R-10 continuous insulation on the exterior of the wall, or R-15 on the continuous insulation on the interior of the wall, or R-21 cavity insulation plus a thermal break between the slab and the basement wall at the interior of the basement wall. R-15/21 + TB+ shall be permitted to be met with R-13 cavity insulation on the interior of the basement wall plus R-5 continuous insulation on the interior or exterior of the wall. R-13+ means R-10 continuous insulation on the interior or exterior of the home or R-13 cavity insulation at the interior of the basement wall. TB+ means thermal break between floor slab and basement wall.
- d R-10 continuous insulation is required under heated slab or on grade floors. See R402.2.9.1.
- e There are no SHGC requirements in the Marine Zone.
- f Basement wall insulation is not required in warm-humid locations as defined by Figure R301.1 and Table R301.1.
- g Reserved
- h First value is cavity insulation, second is continuous insulation or insulated siding, so R-13 + 5+ means R-13 cavity insulation plus R-5 continuous insulation or insulated siding. If structural sheathing covers 40 percent or less of the exterior, continuous insulation *R*-value shall be permitted to be reduced by no more than R-3 in the locations where structural sheathing is used to maintain a consistent total sheathing thickness.
- i The second *R*-value applies when more than half the insulation is on the interior of the mass wall.
- j For single rafter- or joist. vaulted ceilings, the insulation may be reduced to R-38.
- k Int. (intermediate framing) denotes standard framing 16 inches on center with headers insulated with a minimum of R-10 insulation.
- l Log and solid timber walls with a minimum average thickness of 3.5 inches are exempt from this insulation requirement.