



ISLAND COUNTY PLANNING & COMMUNITY DEVELOPMENT

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Project Information

Contact Information

This set of forms has been developed to assist permit applicants documenting compliance with the Washington State Energy Code, (2009 edition). This set is for structures built under the IRC and located in Climatic 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 code, go to the following web address. <http://www.energy.wsu.edu/code>.

Option	Glazing Area % of Floor	Glazing U-Factor		Door U-Factor	Ceiling	Vaulted Ceiling	Wall Above Grade	Wall -int. Below Grade	Wall - ext. Below Grade	Floor	Slab On Grade
		Vertical	Overhead								
<input type="radio"/> I	13%	.34	.50	.20	R-49 or R-38 Adv.	R-38	R-21 Int.	R-21 TB	R-10	R-30	R-10 2'
<input type="radio"/> II	25%	.32	.50	.20	R-49 or R-38 Adv.	R-38	R-21 Int.	R-21 TB	R-10	R-30	R-10 2'
<input type="radio"/> III	Unlimited	.30	.50	.20	R-49 or R-38 Adv.	R-38	R-21 Int.	R-21 TB	R-10	R-30	R-10 2'

Glazing schedule attached to document

- Does not apply. (SEE INSTRUCTIONS) Using Prescriptive Option III. All glazing and doors meet maximum U-factor. Alternate heating size method submitted.
- Option I or II, 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 system sizing calculation (IRC M1401.3 & WSEC 503.2.2)

Radiant Slab:

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



Choose a minimum of one credit below
 *Homes exceeding 5000 square feet require two credits, see #7 below

Option	Description	Credit
<input type="checkbox"/> 1a	HIGH EFFICIENCY HVAC EQUIPMENT 1: Gas, propane or oil-fired furnace or boiler with minimum AFUE of 92%, OR Air-source heat pump with minimum HSPF of 8.5.	1.0
<input type="checkbox"/> 1b	HIGH EFFICIENCY HVAC EQUIPMENT 2: Closed-loop ground source heat pump; with a minimum COP of 3.3.	2.0
<input type="checkbox"/> 1c	HIGH EFFICIENCY HVAC EQUIPMENT 3: DUCTLESS SPLIT SYSTEM HEAT PUMPS, ZONAL CONTROL: In home where the primary space heating system is zonal electric heating, a ductless heat pump system shall be installed & provide heating to at least one zone of the housing unit.	1.0
<input type="checkbox"/> 2	HIGH EFFICIENCY HVAC DISTRIBUTION SYSTEM 1: All heating and cooling system components installed inside the conditioned space. All combustion equipment shall be direct vent or sealed combustion. Locating system components in conditioned crawl spaces is not permitted under this option. Electric resistance heat is not permitted under this option. Direct combustion heating equipment with AFUE less than 80% is not permitted under this option.	1.0
<input type="checkbox"/> 3a	EFFICIENT BUILDING ENVELOPE 1: Prescriptive compliance is based on Table 6-1, Option III with the following modifications: Window U= 0.28 floor R-38, slab on grade R-10 full, below grade slab R-10 full. OR Component performance compliance: Reduce the Target UA from Table 5-1 by 5%, as determined using Equation 1.1	0.5
<input type="checkbox"/> 3b	EFFICIENT BUILDING ENVELOPE 2: Prescriptive compliance is based on Table 6-1, Option III with the following modifications: Window U = 0.25 and wall R-21 plus R- 4 and R-38 floor, slab on grade R-10 full, below grade slab R-10 full, and R-21 plus R-5 below grade basement walls. OR Component performance compliance: Reduce the Target UA from Table 5.1 by 15%, as determined using Equation 1.1	1.0
<input type="checkbox"/> 3c	SUPER-EFFICIENT BUILDING ENVELOPE 3: Prescriptive compliance is based on Table 6-1, Option III with the following modifications: Window U= 0.22 and wall R-21 plus R-12 and R-38 floor, slab on grade R-10 full, below grade slab R-10 full and R-21 plus R-12 below grade basement walls and R-49 advanced ceiling and vault. OR Component performance compliance: Reduce the Target UA from Table 5.1 by 30%, as determined using equation 1.1	2.0
<input type="checkbox"/> 4a	AIR LEAKAGE CONTROL AND EFFICIENT VENTILATION: Envelope leakage reduced to SLA of 0.00020 building envelope tightness shall be considered acceptable when tested air leakage is less than specific leakage area of 0.00020 when tested with a blower door at a pressure difference of 50 PA. Testing shall occur after rough in and after installation of penetrations of the building envelope, including penetrations for utilities, plumbing, electrical, ventilation, & combustion appliances. AND All whole house ventilation requirements as determined by Section M1508 of the Washington State Residential Code shall be met with a heat recovery ventilation system in accordance with Section M1508.7 of that Code.	.5
<input type="checkbox"/> 4b	ADDITIONAL AIR LEAKAGE CONTROL AND EFFICIENT VENTILATION: Envelope leakage reduced to SLA of 0.00015 building envelope tightness shall be considered acceptable when tested air leakage is less than specific leakage area of 0.00015 when tested with a blower door at a pressure difference of 50 PA. Testing shall occur after rough in and after installation of penetrations of the building envelope, including penetrations for utilities, plumbing, electrical, ventilation, and combustion appliances. AND All whole house ventilation requirements as determined by Section M1508 of the Washington State Residential Code shall be met with a heat recovery ventilation system in accordance with Section M1508.7 of that Code.	1.0
<input type="checkbox"/> 5a	EFFICIENT WATER HEATING 1: Water heating system shall include one of the following: Gas, propane or oil water heater with a minimum EF of 0.62. OR Electric Water Heater with a minimum EF of 0.93. And for both cases All showerhead and kitchen sink faucets installed in the house shall meet be rated at 1.75 GPM or less. All other lavatory faucets shall be rated at 1.0 GPM or less.2	0.5
<input type="checkbox"/> 5b	HIGH EFFICIENCY WATER HEATING 1: Water heating system shall include one of the following: Gas, propane or oil water heater with a minimum EF of 0.82. OR Solar water heating supplementing a minimum standard water heater. Solar water heating will provide a rated minimum savings of 85 therms or 2000 kWh based on the Solar Rating and Certification Corporation (SRCC) Annual Performance of OG-300 Certified Solar Water Heating Systems. OR Electric heat pump water heater with a minimum EF of 2.0.	1.5
<input type="checkbox"/> 6	SMALL DWELLING UNIT 1:1: Dwelling units less than 1500 square feet in floor area with less than 300 square feet of window + door area. Additions to existing building that are less than 750 square feet of heated floor area.	1.0
<input type="checkbox"/> 7	LARGE DWELLING UNIT 1:1: Dwelling units exceeding 5000 square feet of floor area shall be assessed a deduction for purposes of complying with Section 901 of this Code.	-1.0
<input type="checkbox"/> 8	RENEWABLE ELECTRIC ENERGY: For each 1200 kWh of electrical generation provided annually by on-site wind or solar equipment a 0.5 credit shall be allowed, up to 3 credits. Generation shall be calculated as follows: For solar electric systems, the design shall be demonstrated to meet this requirement using the National Renewable Energy Lab. calculator PVWATTS. Documentation noting solar access shall be included on the plans. For wind generation projects designs shall document annual power generation based on the following factors: The wind turbine power curve; average annual wind speed at the site; frequency distribution of the wind speed at the site and height of the tower.	0.5