

**CITY OF BUCKLEY**  
**DEPARTMENT OF COMMUNITY DEVELOPMENT**  
**ENERGY FORM**

811 Main Street/PO Box 1960  
Buckley WA 98321  
Ph: 360-761-7811 Fax: 360-829 2659

**2015 International Energy Conservation Code, as amended by WAC 51-11 (IECC)**  
*Effective July 1, 2016.*

*Ventilation code provisions are located in the 2015 International Residential Code (IRC),  
2015 International Mechanical Code (IMC), & 2015 International Building Code*

A complete energy code application form will include information that clearly identifies compliance methods for heat sizing, thermal envelope, and whole-house ventilation. This form includes compliance instructions and information needed. Energy code compliance information, forms, worksheets, and educational information is also available on the Washington State University Extension Energy Program (WSU-EP) website. To access the website go to <http://www.energy.wsu.edu/BuildingEfficiency/EnergyCode.aspx#TEXT>

The website includes a heat system sizing calculator. Submit a completed heat sizing calculator worksheet when the building permit is submitted. In addition to the heat sizing calculator the website has helpful compliance information and worksheets for prescriptive and component performance options along with a glazing schedule.

**INSTRUCTIONS:** Complete the City of Buckley Energy Code application and submit with a heat sizing calculator available on the WSU-EP website, see item # 4 below:

- 1 Identify the compliance method. The most common and simplest approach is the prescriptive method for energy code compliance. See prescriptive table R402.1.1 located at the end of the instructions. The component performance approach referenced in IECC Section R402.1.4 may also be used for energy code compliance. For more information contact City of Buckley building department staff at 360-761-7811 or WSU Energy Program at (360) 956-2042.
- 2 Identify the whole-house ventilation compliance method. A ventilation system shall be installed in accordance with The International Residential Code, Section M1507. The most common ventilation methods include a whole-house ventilation system using exhaust fans (M1507.3.4) and a whole-house ventilation system integrated with a forced-air system (M1507.3.5). Other ventilation systems include whole-house ventilation system using a supply fan (M1507.3.6) and whole-house ventilation system using a heat-recovery ventilation system (M1507.3.7). If you need additional information we recommend that you discuss with your heating and ventilation system professional. In addition City of Buckley staff will be happy to discuss the options if you are not sure which compliance option will work for you.
- 3 Identify the Additional Energy Efficiency Requirements listed in Table R406.2. The drawings included with the building permit application shall identify which options have been selected and the point value of each option. Each one and two-family dwelling unit and townhouses are required to achieve the following minimum number of credits:

- a) Small dwelling units less than 1500 sq. feet of heated or cooled area and less than 300 sq. feet fenestration area (skylights, doors, windows, etc.). Additions to an existing building that are greater than 500 square feet of heated floor area but less than 1500 square feet. -1.5 points
  - b) Medium dwelling units not included in a) above {small dwelling}, **OR** c) below {large dwelling} -3.5 points **Exception:** Dwelling unit serving R-2 occupancies shall require 2.5 points
  - c) Large dwelling unit is a dwelling unit that exceeds 5000 sq. ft. of heated or cooled floor area. -4.5 points.
  - d) Additions less than 500 square feet. -0.5 points
- 4 Provide a completed heating/cooling system size worksheet to verify compliance to IECC R403.6. The calculator/worksheet is available on the WSU-Energy Program website at: <http://www.energy.wsu.edu/BuildingEfficiency/EnergyCode.aspx#TEXT>. Staff can also assist with preparation of the worksheet.
- 5 To meet the prescriptive option all fenestration products shall comply with the required U-factor listed in Table R402.1.4. Windows, doors, and glazed doors shall have a tested U-factor or .30 or less. When using the small dwelling option for energy credits (a) or component performance approach provide a fenestration schedule that identifies the square feet and U-factor of each item. *Fenestration is defined in the IECC as skylights, roof windows, vertical windows, opaque doors, glazed-doors that include products with glass and non-glass glazing materials.*
- 6 Identify the location and fuel type of the heating system, water heater, location of exhaust fans (bathroom, laundry, kitchen, etc.) and R-factor of proposed insulation for walls, floors, ceilings, and concrete slab floors on the building plans.
- 7 Not less than 75% of all permanently installed lamps in lighting fixtures shall be high efficacy lamps. High efficacy lamps are defined in IECC Chapter 2 and are considered compact fluorescent lamps, T-8 or smaller diameter linear fluorescent lamps, or lamps with a minimum efficacy 40 lumens per watt for lamps 15 watts or less, 50 lumens per watt for lamps over 15 watts to 40 watts, and 60 lumens per watt for lamps over 40 watts.

Questions? Call City of Buckley Building Department at 360-761-7811. WSEC compliance information and code text is also available on the WSU-Energy Program website at: <http://www.energy.wsu.edu/BuildingEfficiency/EnergyCode.aspx#TEXT>

**Prescriptive Requirements<sup>0,1</sup> for City of Buckley  
Climate Zone 4-C, Table R402.1.1**

Option	Glazing Area % of Floor	Fenestration factor U-		Ceiling	Vaulted Ceiling i	Wall Above Grade	Wall int e below grade	Floor	Slab d on Grade
		Vertical (Includes doors, windows, etc)	Skylight b						
4C	Unlimited	.30	.50	R-49	R-38	R-21 int k.l	10/15/21 int TB	R-30	R-10

Visit the WSU Energy Program website at: <http://www.energy.wsu.edu/BuildingEfficiency/EnergyCode/2012EnergyCode.aspx> or call (360) 427-9670 ext. 352 for footnote information. Log & solid timber wall with a min. avg. thickness of 3.5" are exempt from the above grade wall insulation requirements.

CITY OF BUCKLEY DEPARTMENT OF COMMUNITY DEVELOPMENT  
WSEC/ Ventilation Code Compliance Application  
Submit with heating/cooling system size worksheet (see instructions #4)

Owner:		Parcel#:		Type of project:	
Total Sq. Ft. of heated area:		1 <sup>st</sup> Floor :	2 <sup>nd</sup> Floor:	Heated Basement:	
Heating System Type: <input type="radio"/> Electric wall heater <input type="radio"/> Electric Central Furnace <input type="radio"/> LPG Furnace <input type="radio"/> Heat Pump with electric furnace <input type="radio"/> Heat pump with gas furnace <input type="radio"/> Ductless Heat Pump <input type="radio"/> Boiler, specify fuel type: _____ <input type="radio"/> Other: Specify: _____					
Compliance Method <i>Check one:</i>		<input type="checkbox"/> Prescriptive Option Table R402.1.1			
		<input type="checkbox"/> Component Performance, R402.1.3 – <i>Calculation worksheets required</i>			
		<input type="checkbox"/> Other ( <i>Specify</i> ): _____			
<i>Check one</i> <b>Ventilation System</b>		<input type="checkbox"/> Whole House Ventilation system using exhaust fans & window or wall fresh air vents ( <i>M1507.3.4</i> )		<input type="checkbox"/> Whole House Ventilation Integrated with a Forced Air System ( <i>M1507.3.5</i> )	
		<input type="checkbox"/> Other, describe: _____			
Additional Energy Efficiency Requirements  <i>Energy credits required:</i>  _____		Referencing Table R406.2, "Additional Residential Energy Efficiency Requirements," all residential units must develop credits as specified in Table 406.2. Identify and describe which option(s) will be used to comply. If the table is not attached to this form you can access the table on our website at: <a href="http://www.cityofbuckley.com">www.cityofbuckley.com</a> <ol style="list-style-type: none"> <li>a) Description: Small dwelling units with less than 1500 sq. feet of heated or cooled space and less than 300 square feet fenestration (see definition below) or additions to an existing building that are greater than 500 square feet but less than 1500 square feet of heated area. To use this option complete a window schedule in order to verify that the fenestration area does not exceed 300 sq. ft. <b>Fenestration</b> is defined in the IECC as skylights, roof windows, vertical windows, opaque doors, glazed-doors that include products with glass and non-glass glazing materials. -1.5 points</li> <li>b) Medium dwelling units not included in a) above, or b) below - 3.5 points</li> <li>c) Large dwelling unit is a dwelling unit that exceeds 5000 square feet of heated or cooled floor area. -4.5 points.</li> <li>d) Additions less than 500 square feet -0.5 points</li> </ol>			
Using Option number(s):  _____		Describe Energy Credit Option(s):			

