



2018 Residential Energy Code Update

The New 2018 Washington State Energy Code will be adopted July 1, 2021.

WSU has designed Excel spreadsheets to assist in showing compliance, and has informational webinars available for both prescriptive and alternative methods.

References:

Washington State University link to support for the residential energy codes:

<http://www.energy.wsu.edu/buildingefficiency/energycode.aspx>

For assistance and updates:

- Email energycode@energy.wsu.edu
- Call the WSEC Residential Code Hotline at 360-956-2042
- **Join the distribution list** at energycode@energy.wsu.edu to get updates about tools and training opportunities

Training link to webinars on the energy code compliance and duct testing:

<http://www.energy.wsu.edu/EventsTrainings.aspx#EnergyCode>

Residential Energy Code in PDF format:

https://sbcc.wa.gov/sites/default/files/2021-01/2018%20WSEC_R%20Final%20package2.pdf

State Building Code Council link to PDF for codes and errata:

<https://sbcc.wa.gov/state-codes-regulations-guidelines/state-building-code/energy-code>

What's Significant – This is not a comprehensive list of changes.

- More energy credits required, more options for credits
- Energy credits now include a fuel normalization factor
- Certified Passive Homes are recognized as a compliance method
- Show the option on the plans to claim the credit
- Energy star programmable thermostat required for forced-air furnaces
- Prohibits continuously burning pilot lights for certain natural gas equipment
- Install ductwork within the heated envelope to avoid duct testing
- Ducts buried in the envelope insulation require additional insulation
- Alternative Performance aka component performance has new mandatory measures for compliance for air leakage, maximum fenestration (glass), mechanical systems and lighting

Thurston County Building Development Center

3000 Pacific Ave SE, Suite 100, Olympia, WA 98501

Phone: (360) 786-5490; TTY/TDD Line: 711 or 1-800-833-6388; Fax: (360) 754-2939

www.thurstoncountybdc.com

Examples of credits:

A home more than 1500 square feet, but less than 5000 square feet. Limited to one option per section; 6 points required.

Home #1 Electric Resistance Heat

OPT	Description	PTs
	Fuel Normalization Credit Electric Zone Heating	-1
1.5	Windows u.22, R49 advanced roof, entire slab R10, R21+R12 continuous exterior	2
2.4	.6 Air Changes Hour at 50 Pascals and having a heat recovery ventilation system	2
5.6	UED 2.9 heat pump water heater	2.5
7.1	credit for the energy star appliances	.5

Home # 2 Heat Pump Meeting the Referenced Table's Efficiency

OPT	Description	PTs
	Fuel Normalization Credit Heat Pump	1
1.3	R-38 Floors and U.28 windows	.5
2.1	3 Air Changes Hour at 50 Pascals with whole house ventilation	.5
3.2(a)	HSPF 9.5 centrally ducted heat pump	1
4.2	All duct and furnace inside conditioned space	1
5.5	Heat pump water heater NEEA Tier III	2

Home #3 Ductless Mini-Split

OPT	Description	PTs
	Fuel Normalization Credit Ductless mini split	.5
1.2	U.20 windows	1
2.2	2 Air Changes Hour at 50 Pascals with whole house ventilation	1
3.4	Ductless HPSF 10. with no electric resistance heating	1.5
5.4	NEEA advanced water heating system Tier I	1.5
7.1	Credit for the energy star appliances	.5

A home that is more than 5000 square feet. Limited to one option per section; 7 points required.

Home #4 Air/Water Heat Pump

OPT	Description	PTs
	Fuel Normalization Credit AHRI 550/590 air-water heat pump	1
1.2	U.20 windows	1
2.2	2 Air Changes Hour at 50 Pascals with whole house ventilation	1
4.2	All duct and furnace inside conditioned space	1
5.6	Electric heat pump water heater UEF 2.9 split system with heat exchanger	2.5
7.1	Credit for the energy star appliances	.5