

With new energy code requirements now in place, below are a few options/examples of how to obtain compliance with the new 2018 Energy Code. The following options/examples are not mandatory and applicants may wish to choose alternative compliance options.

(*Tables used are for dwellings 1,500 to 5,000 SF Energy Efficiency Credits)

Option 1:			
<p>2 Electrically Operated Unitary and Applied Heat Pump, VRF Air-to-Air, Unitary Conditioners and Condensing Unit.</p> <p>1.3 Prescriptive insulation per Table R402.1.1 other than an R-38 floor and windows are U 0.28 (area weighted average).</p> <p>2.1 Conduct blower door test at 50 pascals with a maximum air leakage of 3.0 air changes per hour versus 5 ACH.</p> <p>3.2 Air-source centrally ducted heat pump with minimum HSPF of 9.5. An alternative heating source sized at a maximum of 0.5W/sf of heated floor area or 500 W, whichever is bigger, may be installed.</p> <p>4.2 Install heating appliance and all ducts within the thermal envelope (with limited ducts outside per R403.3.7, 3.1 and 3.2).</p> <p>5.5 Install electric heat pump water heater rated for Tier III per NEEA.</p>			
Check the following options on your Energy Code Worksheet:			
Heating Options	Fuel Normalization Descriptions	Credits - selected options	
2	Heat pump	1.0	<input type="checkbox"/>
1.3	Efficient Building Envelope	0.5	<input type="checkbox"/>
2.1	Air Leakage Control and Efficient Ventilation	0.5	<input type="checkbox"/>
3.2	High Efficiency HVAC	1.0	<input type="checkbox"/>
4.2	High Efficiency HVAC Distribution System	1.0	<input type="checkbox"/>
5.5	Efficient Water Heating	2.0	<input type="checkbox"/>
		6 Credits	

Option 2:			
<p>1 Install Combustion Furnace or Boiler.</p> <p>1.1 Prescriptive insulation per Table R402.1.1 other than the windows are U 0.24 (area weighted average).</p> <p>2.3 Conduct blower door test at 50 pascals with a maximum air leakage of 3.0 air changes per hour versus 5 ACH.</p> <p>3.1 Increase HVAC to 95% AFUE.</p> <p>4.2 Install heating appliance and all ducts within the thermal envelope (with limited ducts outside per R403.3.7, 3.1 and 3.2).</p> <p>5.4 Install an electric heat pump water heater rated for Tier 1 NEEA.</p> <p>7.1 Install Energy Star Appliances (dishwasher, refrigerator, washing machine and ductless dryer with a minimum rating of 5.2 CEF).</p>			
Check the following options on your Energy Code Worksheet:			
Heating Options	Fuel Normalization Descriptions	Credits - selected options	
1	Combustion heating minimum NAECA	0.0	<input type="checkbox"/>
1.1	Efficient Building Envelope	0.5	<input type="checkbox"/>
2.3	Air Leakage Control and Efficient Ventilation	1.5	<input type="checkbox"/>
3.1	High Efficiency HVAC	1.0	<input type="checkbox"/>
4.2	High Efficiency HVAC Distribution System	1.0	<input type="checkbox"/>
5.4	Efficient Water Heating	1.5	<input type="checkbox"/>
7.1	Appliance Package	0.5	<input type="checkbox"/>
		6 Credits	

Option 3:

- 2 Electrically Operated Unitary and Applied Heat Pump, VRF Air-to-Air, Unitary Conditioners and Condensing Unit
- 1.4 Insulate Floors to R38, Walls to R21+R4 continuous insulation, Ceiling to R49 (38) with U 0.25 windows (area weighted average)
- 2.1 Conduct blower door test at 50 pascals with a maximum air leakage of 3.0 air changes per hour versus 5 ACH
- 3.5 Air-source centrally ducted heat pump with minimum HSPF of 11. An alternative heating source sized at a maximum of 0.5W/sf of heated floor area or 500 W, whichever is bigger, may be installed.
- 4.2 Install heating appliance and all ducts within the thermal envelope (with limited ducts outside per R403.3.7, 3.1 and 3.2)
- 5.3 Install a water heating system that is Energy Star rated gas or propane with a minimum UEF of 0.91

Check the following options on your Energy Code Worksheet:

Heating Options	Fuel Normalization Descriptions	Credits - selected options	
2	Heat pump	1.0	<input type="checkbox"/>
1.4	Efficient Building Envelope	1.0	<input type="checkbox"/>
2.1	Air Leakage Control and Efficient Ventilation	0.5	<input type="checkbox"/>
3.5	High Efficiency HVAC	1.5	<input type="checkbox"/>
4.2	High Efficiency HVAC Distribution System	1.0	<input type="checkbox"/>
5.3	Efficient Water Heating	1.0	<input type="checkbox"/>
		6 Credits	

Please note that additional structural plan details are required, including but not limited to:

- 1: Selected Appliance Cut Sheets (efficiency ratings) and Manufacturer Installation Instructions must accompany the permit submittal
- 2: The building permit construction drawings must indicate the selected blower door test option being used
- 3: The building permit construction drawings must indicate the location of all heating appliances and associated ducts, including lengths of all ducts located outside the thermal envelope.