

2018 to 2021 WSEC RESIDENTIAL CREDIT OPTION COMPARISON

2018 WSEC Preferred Path DUCTED HVAC HEAT PUMP	EXAMPLE: 1800 Square Foot Heated Living Space	2021 WSEC Comparable Path DUCTED HVAC HEAT PUMP
Total Required Credits 6		Total Required Credits 8
Fuel Normalization Credits 1	Cost increase from 2018 to 2021 Code	Fuel Normalization Credits 3
Option 1.3 .28 Windows+ R38 Floor Insulation .5	Increased credits for selecting a Heat Pump unit as primary heat.	Option 3.3 Primary Heating system= 9.5 hspf Heat pump .5
Option 2.1 3 Air Changes/Blower Door Test .5	Removed as option in 2021	Option 3.11 Smart Thermostat .5
Option 3.2 Primary Heating system= 9.5HSPF Heat pump 1	4 Air changes is now baseline in 2021 code. (2021 removed 3ACH credit option) Original Baseline ACH was 5 in 2018.	Option 5.6 Teir 3 Heat Pump Water Heater 2
Option 5.5 Teir 3 Heat Pump Water Heater 2	No Change	Option 6.1 2400 kWh of annual solar production 2
Option 6.1 1200 kWh of annual solar Production 1	No Change	
	\$150 Increase	
	Pay Back incentive for homeowners	
	\$2500 Cost Increase. 1 Additional Credit required	

2018 WSEC Preferred Path HEAT PUMP MINI SPLITS ALL BEDROOMS & Largest Living Room	EXAMPLE: 1800 Square Foot Heated Living Space	2021 WSEC Comparable Path HEAT PUMP MINI SPLITS ALL BEDROOMS & Largest Living Room
Total Required Credits 6		Total Required Credits 8
Fuel Normalization Credits 1	Cost increase from 2018 to 2021 Code	Fuel Normalization Credits 2
Option 1.3 .28 Windows+ R38 Floor Insulation .5	Increased credits for selecting a Heat Pump unit as primary heat.	Option 3.7 Mini split heads in all bedrooms and largest living area. 10 HSPF 2
Option 2.1 3 Air Changes/Blower Door Test .5	Removed as option in 2021	Option 5.6 Teir 3 Heat Pump Water Heater 2
Option 3.6 Mini split heads in all bedrooms and largest living area. 10 HSPF 2	4 Air changes is now baseline in 2021 code. (2021 removed 3ACH credit option) Original Baseline ACH was 5 in 2018.	Option 6.1 2400 kWh of annual solar production 2
Option 5.5 Teir 3 Heat Pump Water Heater 2	No Change	
	No Change	
	Pay Back incentive for homeowners	
	2 Additional solar credit required Approx \$5000	

Cost Increase from 2018 to 2021 Code	Base Line Code Compliance Cost Increase Analysis	
	Attic Insulation change from R49 to R60 \$.40c Per Square foot cost average	R4 Ridgid Continuous Foam Insulation on Exterior Walls \$1.50 Per Square foot cost to install
1500 Square Foot Residence	\$600.00	\$2160.00
2500 Square Foot Residence	\$1000.00	\$3375.00
4000 Square Foot Residence	\$1600.00	\$6840.00
		Install Cost provided by Better built Northwest.

Homes less than 1500 square feet will not see a substantial increase from the costs associated with the required credits. Fuel normalization credits have increased to offset the increase from 3 credits required in the 2018 code to the 5 credits required in the proposed 2021 code.

Possible solutions to limit the impact of the base line code increases on affordable housing. Homes designed with shed style rafter roof systems would not see an increase in r60 attic insulation. Homes designed with raised heal trusses would not see an increase from the 2018 r49 attic insulation. Homes less than 1500 square feet, with minimized window fenestration, and upgraded attic insulation could possibly off set the R values required by the continuous foam insulation and meet baseline WSEC compliance and avoid those additional costs.