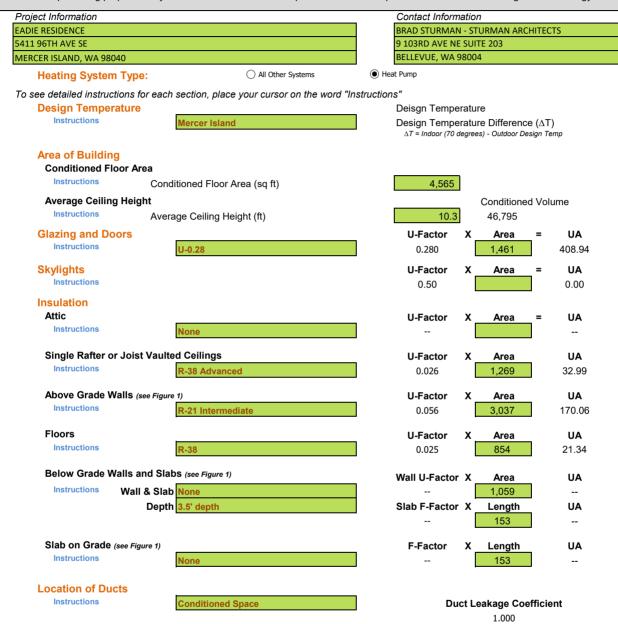
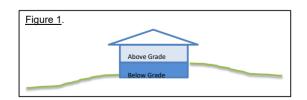
Simple Heating System Size: Washington State

This heating system sizing calculator is based on the Prescriptive Requirements of the 2018 Washington State Energy Code (WSEC). This tool will calculate heating loads only. ACCA procedures for sizing cooling systems should be used to determine cooling loads.

Please complete the green drop-downs and boxes that are applicable to your project. As you make selections in the drop-downs for each section, some values will be calculated for you. If you do not see the selection you need in the drop-down options, please contact the WSU Energy Program at energycode@energy.wsu.edu or (360) 956-2042 for assistance.

This tool is for the permitting purposes only. A Manual J calculation is required to meet the requirement of the 2018 Washington State Energy Code.





Sum of UA	633.34	
Envelope Heat Load	28,500	Btu / Hour
Sum of UA $\times \Delta T$		
Air Leakage Heat Load	22,743	Btu / Hour
Volume x 0.6 x ∆T x 0.018		
Building Design Heat Load	51,243	Btu / Hour
Air leakage + envelope heat loss		
Building and Duct Heat Load	51,243	Btu / Hour
Ducts in unconditioned space: sum of building heat loss x 1.10 Ducts in conditioned space: sum of building heat loss x 1		
Maximum Heat Equipment Output	64,054	Btu / Hour
Building and duct heat loss x 1.40 for forced	d air furnace	

Building and duct heat loss x 1.25 for heat pump

25

45