



ENERGY STAR® Homes Northwest Certification Requirements Single Family Homes



BOP 1
Electric Heat Pumps &
Natural Gas Fired Furnaces

Builder Option Packages (BOPs) are a prescriptive method for labeling new homes ENERGY STAR. All requirements of the BOP shall be met in order to qualify a home for ENERGY STAR Homes Northwest certification and verified by a ENERGY STAR Homes Northwest Verifier. Additional details are contained in the ENERGY STAR Homes Northwest Specifications. Local code requirements apply where they are more stringent. Trade-off options are detailed in the ENERGY STAR Homes Northwest Technical Compliance Options.

Insulation				
Ceiling		R-38	Flat or vaulted.	
Wall		R-21	R-19 is option with advanced framing techniques.	
Floors Over Unconditioned Space		R-30	Insulation in floor joist cavity. Perimeter insulation not allowed.	
Slab Floors	Unheated	R-15 Perimeter	Applies to all concrete slab floors above or below grade. R-5 thermal break at slab edge. Perimeter insulation shall be installed for a distance of 4 feet vertical, horizontal, or combined distance.	
	Heated Radiant	R-15 Full Slab		
Basement Wall		R-19	Below grade walls can extend up to 24 inches above grade.	
Windows & Doors				
Glazing	Windows	U-0.35		
	Skylights	U-0.50	Skylight area shall not exceed 5% of heated floor area.	
	Max. Glazing Area	21% of Heated Area	Combined window/skylight area. Up to 1% of heated area exempt.	
Doors		R-5	One door up to 28 ft ² exempt.	
Ducts				
Insulation		R-8	Ducts inside heated space exempt	
Sealing		Mastic	Cloth duct tapes not allowed.	
Max. Leakage		<0.06 CFM per ft ² Floor OR 75 CFM Total @ 50 Pa	All forced air heating and cooling system ducts shall be installed according to ENERGY STAR Homes Northwest Specifications for sizing and leakage. Performance testing is required.	
Ventilation & Air sealing				
Ventilation System		Exhaust Ventilation	Local code requirements are deemed to satisfy this requirement.	
Envelope tightness		7.0 ACH @ 50 Pa	Local code requirements for air sealing are deemed to satisfy this requirement.	
Heating & Cooling Equipment				
Air Source Heat Pump		8.5* HSPF / 14 SEER	*As of June 1, 2006. Installed according to ENERGY STAR Homes Northwest Specifications (including supplemental specifications) for sizing, controls, airflow and refrigerant charge. Performance testing is required.	
Ground Source Heat Pump		IGSHPA Certified		
Gas Furnace		90 AFUE		
Air Conditioner		SEER 13		
Water Heating				
Electric		All sizes	0.93 EF	Natural gas water heaters ≤ 60 gal must be 0.61 EF; >60 gal, 0.60 EF
Appliances & Lighting				
Appliances		ENERGY STAR Qualified	<u>Built-in appliances only</u> (typically Dishwasher only). Clothes Washers & Refrigerators are rebated separately.	
Lighting (required)		ENERGY STAR Qualified	A minimum of 50% of sockets to be either ENERGY STAR bulbs, fixtures, or both	
Lighting Upgrade (optional)		ENERGY STAR Qualified	After the required minimum of compact fluorescent bulbs and/or fixture sockets have been met, Midstate will offer additional rebates for the additional ENERGY STAR compact fluorescent bulbs installed that are greater than 5 Watts	

