



Oregon High Performance Home™ Pamphlet

A High Performance Home (HPH) is built to HPH standards, certified as an *Energy Star* new home, constructed by a licensed builder, which has its own space conditioning and water heating systems, complies with specifications listed in the Oregon Business Energy Tax Credit (BETC) Administrative Rules, and is intended for sale to an end-use homebuyer. A HPH must include a Home Builder Installed Renewable Energy System. The information below summarizes the HPH requirements. More detailed information is available at www.oregon.gov/ENERGY/CONS/BUS/tax/BETC-Homebuilders.shtml.

- A single family dwelling unit with its own space conditioning and water heating facilities that is intended for sale to an end-use homebuyer.
- Home is certified through the Energy Star Homes NW Program.
- Home meets one of the following requirements

An ODOE certified “Green Building” Program such as Earth Advantage
Central, Whole House, Heat or Energy Recovery Ventilation System-sensible recovery efficiency shall be >50% at 32 °F & EUI is <1.5 Watts/cfm
Gas-fired tankless water heater with minimum EF of 0.80 for primary water heating

- A Renewable Energy Facility is providing on-site energy savings or generation of not less than 1kWh/yr per square foot of conditioned space.

Solar Water Heater - SWH
Photovoltaic - PV
Ground Source Heat Pump - GSHP
Wind Power - Wind
Passive Solar Space Heating - PS
Active Solar Space Heating - AS
Other Renewable Energy System - Other
Passive House Certification*
Renewable Equivalent Envelope

*6,667 kWh annual savings, \$4,000 tax credit

- Heating and Cooling system requirements:

Gas or Propane Furnace	Two-Stage, Min. 92% AFUE
Ducted Heat Pump, Air Source	Min. ≥8.5 HSPF/SEER 14 – Air Source
Ductless Mini-Split Heat Pump	An inverter drive & no incorporated electric backup heat
Ground-Source Heat Pump	Min. ≥3.0 COP
Gas or Propane Boiler	Min. 88% AFUE
Air Conditioner (if installed)	Min. SEER 14

All forced air ducts shall be incorporate into conditioned space. Improved HVAC measures are not allowed as trade-off measures to reduce minimum shell requirements.

● Minimum HPH Building Envelope Requirements

Glazing	Max Glazing Area	16% of Heated Floor Area
	Windows*	U-0.32 max. (area weighted average)
	Skylights	Code-compliant, area included in max glazing area
Infiltration		5.0 ACH at 50 Pa
Doors		U-0.20 (R-5 insulated doors w/thermal brk edge)
Ceiling	Flat	U-0.030 max. (e.g. R-49 std truss or R-38 Adv truss)
	Rafter Vault	U-0.030 max. (e.g. 2x12 R-38HD or R-38 Adv scissor)
	Std Scissor Truss	U-0.030 max. (e.g. 6/12 roof pitch-2/12 ceiling pitch R-60)
Floor over Uncond. Space		U-0.025 max. (e.g. crawlsp, 16"o.c., R-38 – post & beam prohibited)
Above-Grade Wall		U-0.050 (e.g. R-21, intmdt frame+R-3 cont or R-19, intmdt frame+R-4 cont or R-15 std frame+R-7 cont)
Below-Grade Wall		U-0.060 (e.g. R-21 interior furred wood wall)
Slab Floor	No Heat	F-0.52 (R-15 perimeter 2' from slab top downward)
	Heated/Radiant	R-15 perimeter + R-10 under entire slab

* A qualified passive solar design may have higher U-factor.

● Minimum Renewable Energy Facility Equivalent* Envelope

Glazing	Max Glazing Area	15% of Heated Floor Area
	Windows*	U-0.22 max. (area weighted average)
	Skylights	U-0.60 , (area ≤2% of heated floor area)
Infiltration		2.5 ACH at 50 Pa
Mechanical Ventilation		70% Efficiency Heat or Energy Recovery Ventilator
Lighting		100% Energy Efficient (CFLs)
Water Heating	Electric	0.93 EF located in conditioned space
	Gas-Fired	0.82 EF w/sealed combustion located in cond. space
Doors		U-0.20 (e.g. R-5 insulated doors w/thermal brk edge)
Ceiling	Flat	U-0.030 max. (e.g. R-49 std truss; R-38 Adv truss)
	Rafter Vault	U-0.030 max. (e.g. 2x12 R-38HD; R-38 Adv scissor)
	Std Scissor Truss	U-0.030 max. (e.g. 6/12 roof pitch-2/12 ceiling pitch R-60)
Floor over Uncond. Space		U-0.025 max. (e.g. crawlsp, 16"o.c., R-38 – post & beam prohibited)
Above-Grade Wall		U-0.027 (e.g. R-21, intmdt frame+ R-20 cont or R-15 std frame+ R-25 cont , or R-35 SIP or R-36 ICF)
Below-Grade Wall		U-0.060 (e.g. R-21 interior furred wood wall)
Slab Floor - All		R-15 perimeter + R-10 under entire slab

*3,333 kWh annual savings, \$2,000 tax credit