

NORTHWEST ENERGY STAR® HOMES FEDERAL TAX CREDIT PRESCRIPTIVE PATH - Single Family Homes



This prescriptive path has been developed to meet the federal tax credit. All requirements of this path shall be met in order to qualify for the federal tax credit certification and verification by a federal tax credit approved Northwest ENERGY STAR Homes Verifier. By doing this, the homes also meets the requirements for ENERGY STAR certification.

- Applies to:
- *Single family homes 2,200 to 4,000 ft^2 in size, 2 or more stories, with vented crawlspaces
 - *All counties in Washington West of the Cascades
 - *All counties in Oregon West of the Cascades except Douglas, Jackson, Josephine, Klamath & Lake
 - *Base option covers homes that have 12% or less. For homes with more than 12% glazing see modifiers below.

Base Options

Ceiling		R-38 gr 2	Flat or Vaulted. Maximum 6/12 roof pitch for vault.																
Wall		R-21 gr 2	R-13+5 gr 3 or better and R-15+4 gr 3 or better will be deemed equivalent																
Floors over unconditioned space		R-30 gr 3	Insulation in floor joist cavity. Perimeter insulation not allowed.																
Ducts																			
Insulation		None	All ducts must be located within conditioned space.																
Sealing		Mastic	Tape not allowed																
Max Leakage		1.4% of CFA at 25Pa or 0.014 CFM/ ft^2 at 25Pa	All forced air heating and cooling system ducts shall be installed according to Northwest ENERGY STAR Homes Specifications for sizing and leakage. Performance testing is required.																
Ventilation & Air Sealing																			
Envelope Tightness		4 ACH @ 50Pa	Meets ASHRAE 62.2																
		OR																	
		4.6 ACH @ 50Pa	Meets WAVIAQ Table 3-2																
Heating & Cooling Equipment																			
Gas Furnace		.92 AFUE	Installed according to Northwest ENERGY STAR Homes specifications for sizing, controls, air flow, and refrigerant charge. Performance testing is required.																
Water Heating																			
Natural Gas	≤60 gal	0.61	Gas Commercial tank water heaters may be used if they have standby losses that do not exceed the following (btu/hr):																
	> 60 gal	0.6																	
Electric	≤70 gal	0.93																	
	> 70 gal	0.92																	
		<table border="1"> <thead> <tr> <th>Gallons</th> <th>70-74</th> <th>75-79</th> <th>80-84</th> <th>85-89</th> <th>90-94</th> <th>95-99</th> <th>100+</th> </tr> </thead> <tbody> <tr> <td>Max Standby Loss</td> <td>930</td> <td>960</td> <td>980</td> <td>1010</td> <td>1030</td> <td>1060</td> <td>1080</td> </tr> </tbody> </table>		Gallons	70-74	75-79	80-84	85-89	90-94	95-99	100+	Max Standby Loss	930	960	980	1010	1030	1060	1080
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Max Standby Loss	930	960	980	1010	1030	1060	1080												
Appliances & Lighting																			
Appliances		ENERGY STAR qualified	Applies to built-in appliances only																
Lighting		ENERGY STAR qualified	A minimum of 50% of sockets to be either ENERGY STAR bulbs, fixtures, or both																
Doors & Windows																			
Doors		R-5																	
Glazing	Skylights	≤U-0.50	Skylights count as 4X their actual size, counted toward the total glazing amount allowed.																
	Windows	≤U-0.30, SHGC ≥ .28																	
	Max glazing area	12%	Combined window and skylight area.																
Modifiers to Allowed Glazing Percent																			
	Glazing percentage increase or decrease		The modifiers to the base pathway, identified to the left, can be used to increase or decrease the allowed glazing percentage for the federal tax credit.																
Wall Insulation	5%	R-21+5 gr 2	The following examples illustrate how the modifiers can be used. Example 1: Using an R-21 grade 3 wall insulation instead of R-21 grade 2 will decrease the glazing percentage by 3% resulting in a maximum glazing percentage of 9%. Example 2: Using an R-19 +5 grade 2 wall insulation in conjunction with a .94 AFUE furnace will increase the glazing percentage by 5% resulting in a maximum glazing percentage of 17%. As illustrated in the above example, it is possible to use modifier options together resulting in a net effect to the maximum glazing percentage.																
	4%	R-21+5 gr 3 -OR- R-19+5 gr 2																	
	3%	R-19+5 gr 3																	
	1%	R-21 gr 1																	
	-3%	R-21 gr 3																	
Ceiling Insulation	2%	R-49 blown, gr 2; no vault																	
	1%	R-49 blown, gr 2; max 10% of CFA as vault (R-38 gr 2)																	
Gas Furnace	2%	.94 AFUE																	
	1%	.93 AFUE																	
Ducts	-2%	Up to 100% of returns in attic, only allowed in conjunction with R-49 attic modifiers. All returns located in attic must have R-8 insulation.																	