

# Sample AkWarm Energy Ratings Features by Region

## Four Star Plus Home

	<b>Southeast</b>	<b>Southcentral</b>	<b>Interior</b>	<b>Northwest</b>	<b>Arctic</b>
Below grade floor perimeter insulation	n/a	none	none	n/a	n/a
Below grade wall insulation	n/a	R-19 Batt	R-10 Foam	n/a	n/a
Above grade floor insulation	R-19	n/a	n/a	R-38	R-38
Exterior wall insulation	2x4 R-13 batt	2x6 R-19 batt	2x6 R-21 batt	2x6 R-21 batt	2x6 furred, R-21 batt, 1.5" foam
Windows- 15% wall area	R-3, LowE	R-3, LowE	R-3, LowE	R-3, LowE	R-3, LowE
Ceiling Insulation	R-38	R-38	R-38	R-38	R-38
Air Leakage ach50	4 ACH@50	4 ACH@50	3 ACH@50	3 ACH@50	3 ACH@50
Ventilation system	Non-HRV	Non-HRV	Non-HRV	Non-HRV	Non-HRV
Space Heating AFUE efficiency	86% AFUE Boiler	80% AFUE Furnace	86% AFUE Boiler	86% AFUE Boiler	82% AFUE Boiler
Water heater energy factor	.81 EF integrated	.6 EF Tank	.81 EF integrated	.81 EF, integrated	.7 EF, integrated

## Five Star Home

	<b>Southeast</b>	<b>Southcentral</b>	<b>Interior</b>	<b>Northwest</b>	<b>Arctic</b>
Below grade floor perimeter insulation	n/a	2', R-10 foam board	none	n/a	n/a
Below grade wall insulation	n/a	R-19 Batt	R-20 Foam	n/a	n/a
Above grade floor insulation	R-38	n/a	n/a	R-38	R-38
Exterior wall insulation	2x6, R-21, Insul.headers	2x6, R-21, Insul.headers	2x6, R-21, Insul.headers	2x6 furred, R-21 batt, 1.5" foam	2x6 furred, R-21 batt, 1.5" foam
Windows—15% wall area	R-3, LowE	R-3, LowE	R-3, LowE	R-3, LowE	R-4, HM88
Ceiling Insulation	R-50	R-50	R-50	R-50	R-50
Air Leakage ach50	3 ACH@50	4 ACH@50	2 ACH@50	2 ACH@50	2 ACH@50
Ventilation system	Non-HRV	Non-HRV	HRV	HRV	HRV
Space Heating AFUE efficiency	86% AFUE Boiler	92% AFUE Furnace	86% AFUE Boiler	86% AFUE Boiler	82% AFUE Boiler
Water heater energy factor	.81 EF integrated	.62 EF Tank	.81 EF integrated	.81 EF integrated	.7 EF integrated

## Five Star Plus Home

	<b>Southeast</b>	<b>Southcentral</b>	<b>Interior</b>	<b>Northwest</b>	<b>Arctic</b>
Below grade floor perimeter insulation	n/a	2', R-10 foam board	2', R-10 foam board	n/a	n/a
Below grade wall insulation	n/a	R-19 Batt	R-20 Foam	n/a	n/a
Above grade floor insulation	R-30	n/a	n/a	R-50	R-50
Exterior wall insulation	2x6 furred, R-21 batt, 1.5" foam	2x6 furred, R-21 batt, 1.5" foam	2x4 12" double wall, R-38	2x6 furred, R-21 batt, 1.5" foam	2x4 12" double wall, R-38
Windows- 15% wall area	R-3, LowE	R-3, LowE	R-4, HM88	R-4, HM88	R-4, HM88
Ceiling Insulation	R-38	R-50	R-60	R-60	R-60
Air Leakage ach50	2 ACH@50	1.5 ACH@50	1.5 ACH@50	1.5 ACH@50	1.5 ACH@50
Ventilation system	HRV	HRV	HRV	HRV	HRV
Space Heating AFUE efficiency	86% AFUE Boiler	90% AFUE Combo	86% AFUE Boiler	86% AFUE Boiler	87.5% AFUE Boiler
Water heater energy factor	.81 EF- integrated	.86 EF- Combo	.81 EF- integrated	.81 EF- integrated	.82 EF- integrated

These sample ratings represent a 24' x 30' two story home with an attached garage. They are intended to provide guidance on how a home might meet these energy efficiency levels. These are examples only. Each home design should have its plans rated, since ratings will vary depending upon specific house designs, locations, and orientation on the site. There may also be more cost effective options to achieve the same energy rating than provided in these examples.