

Residential New Construction Program All-Electric Home Bonus Incentive

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All-Electric homes provide builders and future homeowners with the ability to create their own renewable energy future. A high performance thermal envelope, coupled with efficient electric technologies for space conditioning and domestic hot water, can provide for better air quality, less carbon emissions, and greater efficiency, when compared to conventional fossil-fuel heated homes.

Prerequisites

- 1. All homes must meet the Residential New Construction ("RNC") program requirements for lighting & appliances as indicated on the Requirements & Submittal Checklist.
- 2. All homes must meet the RNC program requirements for RESNET Grade 1 insulation installation quality.
- 3. All homes must meet the RNC program requirements for PV & EV-Readiness as indicated in the PV/EV Ready Checklist.

Program Paths

The RNC program offers two paths for meeting the requirements for the All-Electric Home bonus incentive.

Option 1: Prescriptive Path

• This option provides builders with specific prescriptive guidelines in meeting program compliance.

Option 2: Hybrid Prescriptive/Performance Path

- Under this option, builders must meet specific prescriptive requirements for space conditioning, ventilation and domestic hot water ("DHW"), but there is flexibility in meeting insulation and window requirements through building energy modeling.
- Builders choosing this path can also elect to use Passive House certification to document compliance, but must also meet requirements for space conditioning, ventilation and DHW.

There are also two tiers of incentive for the all-electric home. See RNC application for more details.

					Option 2: Hybrid Approach			
Component				Single Family (Detached Dwelling Units)	Multi (Attached Dy	All Building Types		
Infiltration (ACH50)				2.5 ACH50	≥ 850 ft²	4.0 ACH50	≤80% of applicable code standard	
					≤ 850 ft²	5.0 ACH50		
Slab Insulation	< 2' BG			R-10 CI to 3.5′ BG				
	> 2' BG			R-5 Cl Under				
Basement/Crawlspace Wall Insulation				R-15 Cl or R-13 Cavity + R-5 Cl				
Framed Floor Insulation			ion	R-30 (Over Basement/Crawlspace) R-36 (Over Ambient)			Envelope UA ≥15% better than 2015	
Rim/Band Joist Insulation				R-24 Cavity or R-20 Cavity + R-5 Cl			IECC	
Above Grade Wall Insulation								
Ceiling Insulation	Flat							
	Vaulted							
Windows		U-Value						
Heating Systems & Efficiency	Air-Source		Ducted	\geq 9 HSPF and \geq 60% of Rated Output Capacity at 17°F				
	Heat Pu	mp	Non-Ducted	\geq 10 HSPF and \geq 60% of Rated Output Capacity at 17°F				
	Ground-Source Heat Pump		≥ 3.6/4.1 COP					
Domestic Hot Water Systems		System Type		Heat Pump Water Heater	Electric Resistance			
& Efficie	псу		Efficiency	≥ 2.74 EF	≥ 0.93 UEF			
Water Distribution				All DHW fixtures must be WaterSense® certified or equivalent All DHW piping insulated to ≥R3				
Duct System (If Applicable)				Duct leakage shall meet 2015 IECC standards (< 4 CFM ₂₅ /100 sq. ft.) if any part of the system is located outside of conditioned space ¹				
Ventilation System Type & Efficiency			System Type		Balanced (HRV/ERV)			
			Efficiency	Building shall be provided with ventilation that meets current code requirements				



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Component				Single Family (Detached Dwelling Units)	Multi (Attached D	All Building Types		
Infiltration (ACH50)				2.5 ACH50	\geq 850 ft ²	3.0 ACH50	≤60% of applicable code standard	
					$\leq 850 \ ft^2$	4.0 ACH50		
Clab In culation	< 2' BG			R-15 CI to 3.5' BG				
Slab Insulation	> 2' BG			R-5 CI Under				
Basement/Crawlspace Wall Insulation								
Framed Floor Insulation			ion		Envelope UA ≥30% better than 2015 IECC			
Rim/Band Joist Insulation				R-20 Cavity + R-7.5 Cl			IECC	
Above Grade Wall Insulation								
Ceiling	Flat			R-60 / R-25 Cavity + R-35 Cl				
Insulation	Vaulted							
Windows		U-Value						
Heating Systems & Efficiency	Air-Source		Ducted	≥ 9 HSPF and $\geq 60\%$ of Rated Output Capacity at 17°F				
	Heat P	ump	Non-Ducted		\geq 10 HSPF and \geq 60% of Rated Output Capacity at 17°F			
	Ground-Source Heat Pump		≥ 3.6/4.1 COP					
Domestic Hot Water Systems		System Type		Heat Pump Water Heater*				
& Efficier			Efficiency	≥ 2.74 EF				
Water Distribution				All DHW fixtures must be WaterSense® certified or equivalent All DHW piping insulated to ≥R3				
Duct System (If Applicable)				All air handlers and ductwork fully in conditioned space				
Ventilation System Type & Efficiency		System Type		Balanced (HRV/ERV)				
		Efficiency		≥70% SRE / ≥40% TRE				

*In scenarios where heat pump water heaters (HPWH) cannot be installed due to design limitations, electric resistance storage water heaters can be used, but must meet specific distribution and system efficiency requirements, and at least 50% of the estimated usage must be offset with renewable energy.





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