



DOE Efficient New Homes Multifamily ERI Target Procedure Version 2 (Rev. 3)

National ERI Target Procedure for use with ANSI/RESNET/ICC 301

This document provides detailed instructions for determining the DOE Efficient New Homes ERI Target – the highest ERI value that each rated multifamily dwelling unit (excluding townhouses) may achieve to earn the DOE Efficient New Homes Multifamily Program Version 2 Certification. In addition to meeting the ERI Target for each unit, units shall also meet all mandatory requirements in Exhibit 1 of the DOE Efficient New Homes Multifamily Version 2 National Program Requirements. While Townhouses permitted before 1/1/2026 are eligible to earn DOE Efficient New Homes certification under the Multifamily Version 2 program, they must meet the ERI Target score established by the by DOE Efficient New Homes Single Family Version 2 ERI Target procedure.

A recognized Home Certification Organization for DOE Efficient New Homes (HCO for DOE) Approved Software Rating Tool shall automatically determine (i.e., without relying on a user-configured DOE Efficient New Homes Multifamily Reference Design) this target for each rated unit. This software is reviewed and approved by DOE. The target is created by configuring the DOE Efficient New Homes Multifamily Version 2 Reference Design in accordance with Exhibit 1, below, and calculating its associated ERI value. The ERI value shall be calculated using ANSI/RESNET/ICC Standard 301 including all Addenda and Normative Appendices, with new versions and Addenda implemented according to the implementation schedule defined by the HCO for DOE that the building is being certified under, with approved exceptions listed [here](#). This ERI value, rounded to the nearest whole number, shall equal the DOE Efficient New Homes Multifamily Version 2 ERI Target.

On-site power generation in the Design Dwelling may not be used to meet the DOE Efficient New Homes Multifamily Version 2 ERI target.

Exhibit 1: Expanded DOE Efficient New Homes Multifamily Target Dwelling Design Definition ¹

Foundations								
Construction Type and Structural Mass	Same as Rated Dwelling, ² except for masonry floor slabs, which are modeled with 80% of floor area covered by carpet and 20% of floor directly exposed to room air.							
Conditioning Type	Same as Rated Dwelling, except for crawlspaces, which are modeled as vented with net free vent aperture = 1 ft ² per 150 ft ² of crawlspace floor area.							
Gross Area	Same as Rated Dwelling							
Insulation ^{3, 4}	Insulation level based on climate zone (below)							
Climate Zone (CZ): ⁵	1	2	3	4	4C, 5	6	7	8
Slab Insulation R-Value:	0	0	10	10	10	10	10	10
Slab Insulation Depth (ft):	0	0	2	4	4	4	4	4
Basement Wall Assembly U-factor:	0.360	0.360	0.091	0.059	0.050	0.050	0.050	0.050
- Basement wall continuous insulation R-value only applies to conditioned basements; if applicable, insulation shall be located on interior side of walls - Floor assemblies above crawlspace foundations shall be configured to meet the applicable floor assembly U-factor listed in the building component section for floors over unconditioned spaces and crawlspace walls shall be uninsulated. - Slab floors with a floor surface less than 24" below grade shall be insulated to the slab insulation R-value. The insulation shall extend downward from the top of the slab on the outside of the foundation walls and then vertically below-grade to the slab insulation depth.⁶								



DOE Efficient New Homes Multifamily ERI Target Procedure Version 2 (Rev. 3)

Floors Over Unconditioned Space Volume, Non-Freezing Space, Unrated Heated Space, Multifamily Buffer Boundary, or over outdoor environment								
Construction type	Same as Rated Dwelling							
Gross Area	Same as Rated Dwelling							
Insulation	Insulation level based on climate zone (below)							
Climate Zone:	1	2	3	4	4C, 5	6	7	8
Joist/Framing Floor U-factor:	0.064	0.064	0.047	0.047	0.033	0.033	0.028	0.028
Mass Floor U-Factor:	0.322	0.087	0.074	0.051	0.051	0.051	0.042	0.038
Above-Grade Walls, adjacent to Exterior or Garage								
Interior and Exterior Construction Type	Wood frame							
Gross Area	Same as Rated Dwelling							
Solar Absorptance	0.75							
Emittance	0.90							
Insulation	Grade I installation, insulation level based on climate zone (below)							
Climate Zone:	1	2	3	4	4C, 5	6	7	8
Wall Assembly U-Factor:	0.084	0.084	0.060	0.045	0.045	0.045	0.045	0.045
Thermally Isolated Sunrooms								
None								
Doors								
Area	Same as Rated Dwelling, with door seal properly installed to minimize air leakage between the door and door frame, to avoid the 140 CFM50 addition to measured airflow per ANSI/RESNET/ICC Standard 380.							
Orientation	Same as Rated Dwelling							
Door Type ⁷	Same as Rated Dwelling, U/SHGC based on type and climate zone (below)							
Door Type:	Opaque	≤ ½-Lite	> ½-Lite (CZ 1-3)		> ½-Lite (CZ 4-8)			
Whole Door U-Factor:	0.17	0.25	0.30		0.30			
SHGC:	n/a	0.25	0.25		0.40			
Glazing								
Total Area	AG = 0.15 x CFA x FA x F, without exceeding available wall area. ⁸							
Orientation	Same as Rated Dwelling, by percentage of area							
Interior Shade Coefficient	Same as Energy Rating Reference Home, as defined by ANSI/RESNET/ICC Standard 301							
External Shading	None							
Skylights	None							
Climate Zone:	1	2	3	4	4C, 5	6	7	8
Non-Class AW Window U-Factor:	0.40	0.40	0.30	0.30	0.27	0.25	0.25	0.25
Non-Class AW Window SHGC:	0.23	0.23	0.25	0.30	0.30	0.30	0.30	0.30
Class AW Fixed Window U-Factor:	0.48	0.43	0.40	0.34	0.34	0.32	0.28	0.27
Class AW Operable Window U-Factor:	0.59	0.57	0.51	0.43	0.43	0.40	0.34	0.30
Class AW SHGC:	0.25	0.25	0.25	0.30	0.30	0.30	0.30	0.30
Ceilings, adjacent to Exterior or Unconditioned Space Volumes								
Construction Type	Wood frame							
Gross Area	Same as Rated Dwelling							
Insulation	Grade I installation, insulation level based on climate zone (below)							
Climate Zone:	1	2	3	4	4C, 5	6	7	8
Ceiling Assembly U-Factor:	0.035	0.026	0.026	0.024	0.024	0.024	0.024	0.024



DOE Efficient New Homes Multifamily ERI Target Procedure Version 2 (Rev. 3)

Attics	
Construction Type	Vented with aperture = 1 ft ² per 300 ft ² ceiling area ⁹
Radiant Barrier	None
Roofs	
Construction Type	Composition shingle on wood sheathing
Gross Area	Same as Rated Dwelling
Solar Absorptance	0.92
Emittance	0.90
Internal Mass	
Same as Energy Rating Reference Home, as defined by ANSI/RESNET/ICC Standard 301.	
Additional mass specifically designed as a Thermal Storage Element for the Rated Dwelling shall be excluded	
Lighting, Appliances, Fixtures, and Internal Gains	
Lighting	Fraction of qualifying Tier II fixtures to all fixtures in qualifying light fixture locations 100% for interior; 100% for exterior and garage
Refrigerator	If present in Rated Dwelling, annual energy use based on number of bedrooms: • 1-2 bedrooms: 450 kWh per year • 3-4 bedrooms: 600 kWh per year • 5 or more bedrooms: 650 kWh per year If no refrigerator present in Rated Dwelling, annual energy use same as Energy Rating Reference Home, as defined by ANSI/RESNET/ICC Standard 301: 637 + 18*(number of bedrooms).
Dishwasher Capacity	Same as Rated Dwelling, or Standard capacity if no dishwasher is installed in Rated Dwelling. For Standard capacity: LER = 270, GHWC = \$22.23, Elec = \$0.12, Gas = \$1.09, LCY = 208 For Compact capacity: LER = 203, GHWC = \$14.20, Elec = \$0.12, Gas = \$1.09, LCY = 208
Ceiling Fan	122 CFM per Watt, Quantity = Same as Rated Dwelling per ANSI/RESNET/ICC 301, either 0 or Number of bedrooms + 1
Clothes Washer	If the Rated Dwelling includes a clothes washer, then the clothes washer in the Target Dwelling is "Std 2018-Present" If the Rated Dwelling does not include a washer, then the clothes washer in the Target Home is the same as the Energy Rating Reference Home, as defined by ANSI/RESNET/ICC Standard 301.
Clothes Dryer	Same as Energy Rating Reference Home, as defined by ANSI/RESNET/ICC Standard 301
Water Fixtures	All showers and faucets ≤ 2.0 gpm
Internal Gains	Same as Energy Rating Reference Home, as defined by ANSI/RESNET/ICC Standard 301, except for adjustments for the lighting, refrigerator, dishwasher, clothes washer, and ceiling fans specified in this section



DOE Efficient New Homes Multifamily ERI Target Procedure Version 2 (Rev. 3)

Heating Systems								
Heating Capacity at 47F	Sized to equal the larger of the dwelling unit's heating and sensible cooling loads. For forced-air HVAC systems, degraded capacity from other than Grade I installation shall be accounted for using same methodology applied to Energy Rating Reference Home. Where heat from a central boiler is distributed by water-loop heat pumps within the Rated Unit, in accordance with the methodology for the Rated Home in ANSI/RESNET/ICC Standard 301, the Target Dwelling shall be configured such that the heating load is assigned to two separate heating systems: 1) a heat pump with a capacity that is equal to the Target Dwelling heating load divided by 4.5 COP and 2) a boiler with the balance of the capacity of (1-1/4.5) or 77.78%							
Heating Capacity at 17F	Calculated using the same method as the Energy Rating Reference Home (0.626*capacity at 47F).							
Fuel Type ¹⁰	Same as Rated Dwelling, except Target Dwelling shall be configured with gas where Rated Dwelling has non-electric equipment							
Installation Quality	For forced-air HVAC systems, Grade I total duct leakage ¹¹ , Grade I (-7.5%) blower fan airflow deviation, Grade I (0.45 W/CFM) blower fan efficiency, and for air-source heat pumps, Grade III refrigerant undercharge							
System Type ¹²	Same as Rated Dwelling, except Target Dwelling shall be configured with an in-dwelling, centrally ducted split system air-source heat pump with electric resistance back-up where Rated Dwelling has any of the following system types (serving one or multiple dwelling units): air-source heat pump (in any configuration); electric strip heat; or electric baseboard heat. When present, indoor (blower) fan type same as Energy Rating Reference Home (PSC). ASHP minimum compressor operating temperature same as Energy Rating Reference Home.							
2021 IECC Climate Zone:	1	2	3	4	4C, 5	6	7	8
Gas Furnace AFUE:	90	90	90	95	95	95	95	95
Gas Boiler AFUE:	90	90	90	95	95	95	95	95
Central Boiler, ≥ 300 KBtu/h E _t :	80	80	80	86	95	95	95	95
Central Boiler w/WLHP, ≥ 300 KBtu/h E _t :	80	80	80	89	90	90	90	90
Air-Source Heat Pump HSPF2:	7.8	7.8	7.8	7.8	8.0	8.0	8.0	8.0
Ground-Source Heat Pump COP:	2.7	2.7	2.7	2.7	2.8	2.8	2.8	2.8
For non-electric warm air furnaces and non-electric boilers, serving the Rated Dwelling and no other dwellings, the Electric Auxiliary Energy shall be determined in accordance with the methodology for the Energy Rating Reference Home in ANSI/RESNET/ICC Standard 301.								
For non-electric boilers and GSHPs, serving the Rated Dwelling and other dwellings through a shared circulation loop, the Electric Auxiliary Energy shall be determined in accordance with the methodology for the Rated Home in the ANSI/RESNET/ICC Standard 301.								
The Target Dwelling's E _{ae} must be calculated using either:								
- The same Shared Pump Power in kW (SP_{kW}) as the Rated Unit OR - The same Shared Pump Power in horsepower (HP) as the Rated Unit, converted to kW using the formula: $SP_{kW} = HP \times \frac{0.746}{0.85}$. An alternative motor efficiency may not be used in the conversion.								
The Target Dwelling's E _{ae} may be adjusted in proportion to the rated unit's system capacity, as follows:								
$\text{Adjusted Target Dwelling Eae} = \text{Calculated Target Dwelling Eae} \times \frac{\text{Target Dwelling Heating Design Load}}{\text{Rated Dwelling Heating System Capacity}}$								



DOE Efficient New Homes Multifamily ERI Target Procedure Version 2 (Rev. 3)

Cooling Systems ¹³									
Full Load Net Total Cooling Capacity at 95F	For air conditioners, sized to meet the sensible cooling load. For heat-pumps, sized to equal the larger of the dwelling unit's heating and sensible cooling loads. For forced-air HVAC systems, degraded capacity from other than Grade I installation shall be accounted for using same methodology applied to Energy Rating Reference Home.								
Fuel Type	Same as Rated Dwelling, except Target Dwelling shall be configured with gas where Rated Unit has non-electric equipment								
Installation Quality	For forced-air HVAC systems, Grade I total duct leakage ¹¹ , Grade I (-7.5%) blower fan airflow deviation, Grade I (0.45 W/CFM) blower fan efficiency and, for A/Cs and air-source heat pumps, Grade III refrigerant undercharge								
System Type	Same as Rated Dwelling, except Target Dwelling shall be configured with an in-dwelling, centrally ducted split system where Rated Dwelling has an air-source heat pump or electric air conditioner (in any configuration, serving one or multiple dwelling units). When present, indoor (blower) fan type same as Energy Rating Reference Home (PSC).								
2021 IECC Climate Zone:	1	2	3	4	4C, 5	6	7	8	
AC SEER2:	17.1	17.1	15.2	15.2	13.3	13.3	13.3	13.3	
AC EER2	13.3	13.3	12	12	11.7	11.7	11.7	11.7	
AC Compressor Type:	2-stage	2-stage	1-stage	1-stage	1-stage	1-stage	1-stage	1-stage	
Air-Source Heat Pump SEER2:	17.1	17.1	15.2	15.2	15.2	15.2	15.2	15.2	
Air-Source Heat Pump EER2:	10.8	10.8	11	11	11	11	11	11	
ASHP Compressor Type:	Variable	Variable	1-stage	1-stage	Variable	Variable	Variable	Variable	
Ground-Source Heat Pump EER:	16	16	14	14	14	14	14	14	
Where system type is a chiller or cooling tower with water-loop heat pumps, Target Dwelling SEER _{eq} shall be determined in accordance with the methodology for the Rated Home in ANSI/RESNET/ICC Standard 301, using the same pumping and fan power OR using 0.85 for motor efficiency and using the same HP as the pumps and fans serving the Rated Dwelling. For chillers, Target Dwelling SEER _{eq} shall be determined using 0.75 kW/ton. For water-loop heat pumps, Target Dwelling SEER _{eq} shall be determined using 15 EER									
Whole-House Fan	None. Per ANSI/RESNET/ICC 301, a Whole-House Fan is a forced air system that exhausts at least 5 ACH of indoor air to the outdoors thereby drawing outdoor air into a home through open windows and doors for the purpose of cooling the home.								
Service Water Heating Systems									
Domestic hot water service piping insulation	Hot water distribution piping that serves multiple dwelling units (including all central systems) insulated to R-3. Hot water distribution piping associated with water heaters serving only one dwelling unit insulated to R-0.								
Use (Gallons per Day)	Same as Energy Rating Reference Home, as defined by ANSI/RESNET/ICC Standard 301, with the following exceptions: Water use for dishwasher and clothes washer in the Target Dwelling determined by dishwasher and clothes washer specified according to the Lighting, Appliances, Fixtures, and Internal Gains Section.								
Tank Temperature	Same as Energy Rating Reference Home, as defined by ANSI/RESNET/ICC Standard 301								
Recirculation System	None (Standard distribution system water use effectiveness).								
Recirculation Pump Energy	For pumps serving the Rated Dwelling and no other dwellings: 0 kWh per year								
	For pumps serving the Rated Dwelling and other units: as defined by ANSI/RESNET/ICC Standard 301, using the same Shared HW Pump Power (SHWP _{kW}) OR using 0.85 for motor efficiency and using the same HP as the pump serving the Rated Dwelling.								
Plumbing Fixtures	Standard flow								



DOE Efficient New Homes Multifamily ERI Target Procedure Version 2 (Rev. 3)

Hot Water Pipe Length	Same as Energy Rating Reference Home (refPipeL), as defined by ANSI/RESNET/ICC Std. 301.								
Drain Water Heat Recovery	None								
Fuel Type	Same as Rated Dwelling except Target Dwelling shall be configured with gas where Rated Dwelling has non-electric equipment								
System Type	When Rated Dwelling is served by a commercial system: Same as system serving the Rated Dwelling, with no solar heating. For fossil-fuel boilers or water heaters, use 95% E _t . For electric boilers or water heaters, use 1.6 COP.								
	When Rated Dwelling is served by residential systems: Conventional storage water heater with no solar heating. Where Rated Dwelling has non-electric water heater, Target Dwelling shall be configured with a tankless gas water heater with 0.95 UEF. Where Rated Dwelling has electric water heater, Target Dwelling shall be configured with an electric heat pump water heater with 1.95 UEF and tank size equal to that of Rated Dwelling, or 60 gallon tank size if Rated Dwelling uses tankless electric water heater, and first hour rating (FHR) shall be equal to the Rated Dwelling or 63 if the Rated Dwelling does not specify FHR.								
Thermal Distribution Systems									
Duct Leakage to Outside	0 CFM25 per 100 ft² of conditioned floor area								
Duct Insulation	None								
Duct Surface Area	Same as Rated Dwelling								
Supply and Return Duct Locations	100% in conditioned space								
Dehumidifiers									
Type, capacity, and dehumidistat setpoint same as Energy Rating Reference Home, as defined by ANSI/RESNET/ICC 301, when dehumidification system is present in Rated Dwelling; otherwise, none.									
On-site Power Production									
None.									
On-site Energy Storage Systems									
None.									
Thermostat									
Type	Programmable								
Temperature Setpoints	Same as Energy Rating Reference Home, but with offsets for a programmable thermostat, as defined by ANSI/RESNET/ICC Standard 301								
Infiltration and Mechanical Ventilation									
Infiltration Rate	0.25 CFM50/ft² of enclosure area with A _{ext} applied to calculate Infiltration Rate, in accordance with ANSI / RESNET / ICC 301								
Mechanical ventilation system rate ¹⁴	CFM = 0.01 x CFA + 7.5 x (Nbr + 1), where CFA = Conditioned Floor Area and Nbr = Number of Bedrooms								
Mechanical ventilation system runtime	24 Hours/Day								
Mechanical ventilation system fan wats	Watts = CFM Rate/Ventilation Efficacy, where CFM Rate is determined above and Ventilation Efficacy is determined based on climate zone (below)								
Climate Zone:		1	2	3	4	4c, 5	6	7	8
Ventilation Efficacy (cfm/W):		2.9	2.9	2.9	2.9	1.2	1.2	1.2	1.2
Ventilation Type & Heat Recovery:		Supply				Balanced, 65% ASRE			



DOE Efficient New Homes Multifamily ERI Target Procedure Version 2 (Rev. 3)

Endnotes

¹ Any parameter not specified in this exhibit shall be identical to the value entered for the Rated Dwelling. Where envelope building components do not exist in the Rated Dwelling, such as a foundation or slab, they should not be modeled in the DOE Efficient New Homes Multifamily Target Dwelling, unless explicitly stated, such as vented attics where unvented attics are present in the Rated Dwelling. Where the envelope component is adiabatic in the Rated Dwelling, it shall also be adiabatic in the Multifamily Target Dwelling. Where the envelope component is not adiabatic but is adjacent to a space other than those specified in the Building Component column of Exhibit 1, model as uninsulated in the Target Dwelling.

² "Same as Rated Dwelling" indicates that the parameter shall be identical to the value entered for the Rated Dwelling.

³ Slab insulation R-values represent nominal insulation levels; and assembly U-factors for foundations, floors, walls, and ceilings represent the overall assembly, inclusive of sheathing materials, cavity insulation, installation quality, framing, and interior finishes.

⁴ If software allows the user to specify the thermal boundary location independent of the conditioned space boundary in the basement of the Rated Dwelling, then the thermal boundary of the DOE Efficient New Homes Multifamily Target Dwelling shall be aligned with this boundary. For example, if the thermal boundary is located at the walls, then the wall insulation shall be configured as if it was a conditioned basement. If the thermal boundary is located at the floor above the basement, then the floor insulation shall be configured as if it was a floor over an unconditioned space.

⁵ 2021 IECC Climate Zone designations, as defined and illustrated in Section R301 of the code, shall be used to configure the DOE Efficient New Homes Target Dwelling. Note that some locations have shifted to a different Climate Zone in the 2021 IECC compared to prior and subsequent editions.

⁶ For the purposes of the DOE Efficient New Homes Target Dwelling, the slab insulation R-value and depth shall be modeled even in jurisdictions designated by a code official as having Very Heavy Termite Infestation for the purpose of determining the DOE Efficient New Homes ERI Target.

⁷ Note that the U-factor requirement applies to the whole door while the SHGC only applies to the glazed portion.

DOE Efficient New Homes has adopted the following definitions for door types (from the ENERGY STAR eligibility criteria in the Version 6.0 Product Specification for Residential Windows, Doors, and Skylights):

Door or Sidelite Type	Glazing Area (per NFRC 100)	Notes
Opaque	None	
≤ ½-Lite Door	≤ 900 in ² (6.25 ft ² , 0.581 m ²)	Includes ¼- and ½-lite Doors and Sidelites
≤ ½-Lite Sidelite	≤ 281 in ² (1.95 ft ² , 0.181m ²)	
> ½-Lite Door	> 900 in ² (6.25 ft ² , 0.581 m ²)	Includes ¾-lite and fully glazed Doors and Sidelites.
> ½-Lite Sidelite	> 281 in ² (1.95 ft ² , 0.181m ²)	

⁸ When determining the DOE Efficient New Homes ERI Target, the following formula shall be used to determine total window area of the Multifamily Target Dwelling: $AG = 0.15 \times CFA \times FA \times F$

Where:

- AG = Total glazing area
- CFA = Total conditioned area



DOE Efficient New Homes Multifamily ERI Target Procedure Version 2 (Rev. 3)

- $FA = (\text{Gross above-ground thermal boundary wall area}) / (\text{Gross above-grade boundary wall area} + 0.5 \times \text{Gross below-grade thermal boundary wall area})$
- $F = 1 - 0.44 (\text{Gross common wall area}) / (\text{Gross above-grade thermal boundary wall area} + \text{Gross common wall area})$

And where:

- Thermal boundary wall is any wall that separates conditioned space from unconditioned space, outdoor environment, or the surrounding soil;
- Above-grade thermal boundary wall is any portion of a thermal boundary wall not in contact with soil;
- Below-grade boundary wall is any portion of a thermal boundary wall in soil contact; and
- Common wall is the total wall area of walls adjacent to other conditioned space, not including foundation walls.

⁹ A vented unconditioned attic shall only be modeled in the Multifamily Target Dwelling where attics (of any type) exist in the Rated Dwelling or when specified as the Duct Location in the Thermal Distribution systems section of this Exhibit. Where the Rated Dwelling has more than one ceiling type, the ceiling area used to calculate the vent aperture area shall be the area of the ceiling that is exposed to exterior, under attics, and/or under other unconditioned common spaces. Where the Rated Dwelling is entirely located beneath another dwelling unit or unrated conditioned space, no attic is modeled in the Target Dwelling.

¹⁰ Fuel type(s) shall be same as Rated Dwelling, including any dual-fuel equipment where applicable. For a Rated Dwelling with multiple heating, cooling, or water heating systems using different fuel types, the applicable system capacities and fuel types shall be weighted in accordance with the loads distribution (as calculated by accepted engineering practice for that equipment and fuel type) of the multiple systems, unless otherwise specified by ANSI/RESNET/ICC Standard 301.

¹¹ The Target Dwelling's duct leakage shall be configured as the maximum allowable total duct leakage to achieve Grade I, per Standard 310, section 5.4.1, Table 2a (shown below):

Time of Test	Number of Returns	Leakage Limit (CFM at 25 Pa)
Rough-In	< 3	The greater of ≤ 4 per 100 ft ² of CFA or ≤ 40
Rough-In	≥ 3	The greater of ≤ 6 per 100 ft ² of CFA or ≤ 60
Final	< 3	The greater of ≤ 8 per 100 ft ² of CFA or ≤ 80
Final	≥ 3	The greater of ≤ 12 per 100 ft ² of CFA or ≤ 120

¹² For a Rated Dwelling without a heating system, the DOE Efficient New Homes Multifamily Target Dwelling shall be configured with a 78% AFUE gas furnace system, unless the Rated Dwelling has no access to natural gas or fossil fuel delivery. In such cases, the Target Dwelling shall be configured with a 7.7 HSPF air-source heat pump.

Where a furnace or boiler is the heating system for the Rated Dwelling and is rated in thermal efficiency (Et), it shall be converted to AFUE using the following equation: $AFUE = Et$. Where rated in combustion efficiency (Ec), it shall be converted to AFUE using the following equation: $AFUE = Ec - 2\%$.

¹³ For a Rated Dwelling without a cooling system, the DOE Efficient New Homes Multifamily Target Dwelling shall be configured with a 13 SEER electric air conditioner.

¹⁴ Where dwelling units have local mechanical exhaust tied into an HRV or ERV system serving the whole dwelling unit, the energy model for the Rated Dwelling may use the guidance published in [ANSI/RESNET/ICC 301 Interpretation Request 301-2019-027](#).