

2021 MEEP Application Specifications

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QUESTIONS

If you have program or application questions, call (866) 277-5605 or (602) 385-0900 or email apsmeep@dnv.com.

ADDITIONAL RESOURCES

aps.com
cee1.org
energystar.gov
ahridirectory.org

These APS Multifamily Energy Efficiency Program (MEEP) application specifications should be used in conjunction with the MEEP Policies and Procedures.

Residential Area

Product delivery is made to the APS customer or customer's representative after the pre-inspection by the MEEP team or Trade Ally. A Pre-Application must be completed to document the initial product quantities and types of products. The APS customer is responsible for the installation of the energy-saving products within 30 days of delivery. The MEEP team will conduct a post inspection to collect any unused or broken products and to get a final count on the products installed.

ENERGY-SAVING PRODUCTS

LEDs

The wattages of the new LED bulbs will be based on the existing lighting type and wattage. No substitutions of LED wattages will be allowed.

- 5 Watt LED replacing a 40 Watt Candelabra
- 8 Watt LED replacing a 65 Watt Flood PAR30
- 8 Watt LED replacing a 65 Watt Flood PAR38
- 9 Watt LED replacing a 60 Watt Incandescent Globe
- 9 Watt LED replacing a 60 Watt Incandescent Lamp

Smart HVAC Thermostat

The type of smart thermostat will be based on MEEP program requirements. APS will provide the smart thermostat for installation.

- Installing an APS-provided smart thermostat to replace a non-programmable thermostat.

Common Area

For details on Common Area energy-saving products, review the Solutions for Business [Application Specifications General Measures](#).

HVAC Quality Installation

To qualify for the rebate, the HVAC air conditioner or heat pump (package or split unit) must meet both the Equipment Requirements and Quality Installation Standards described below.

EQUIPMENT REQUIREMENTS

- Final Application submitted within 6 months after installation to be eligible for the rebate.
- Rebate amounts are on a per HVAC unit basis.
- The HVAC unit must be a new installation that replaces an existing heat pump or AC in an existing residence served by APS.
- HVAC window units and mini-splits do not qualify for a rebate.
- Minimum HVAC package and split systems energy efficiency standards:

PACKAGE UNITS	SEER	EER/HSPF	SPLIT SYSTEMS	SEER	EER < 4 TONS	EER > 4 TONS
AC	15	11 EER	AC	14	12.2 EER	11.7 EER
HP	15	8.0 HSPF or 11 EER	HP	14	----	8.2 HSPF or 11 EER

Note: The AHRI Directory of Certified Product Performance is used to validate all SEER and EER ratings. The HVAC unit's EnergyGuide label is used to determine the HSPF rating.

QUALITY INSTALLATION STANDARDS

- The HVAC equipment must be installed by an approved APS Trade Ally, licensed contractor or community maintenance team trained by APS in in the HVAC Quality Installation standards.
- Airflow across the coil, at fan design speed and full operating load, is within 15% of the airflow required per the system design and within the range recommended by the OEM product data.
 - Airflow across the coil is typically between 350 to 450 cfm per ton.
(ACCA Standard 5, ANSI/ACCA 5 QI-2007)
 - Target airflow of 400 CFM per ton or +/- 3°F of target temperature differential between supply and return air.
- A dated contractor invoice or receipt with work order will be required as proof of purchase and that includes the date of installation.
 - Invoice must include the manufacturer, model number, AHRI reference number, size (tons), SEER and EER efficiency levels, proof of installation at site address, proof of payment, and Trade Ally or contractor license number.
- Your Trade Ally or licensed contractor will fill out the rebate Final Application and include the required testing information results.
- All applications must include a cooling load calculation worksheet consistent with ACCA Manual J procedures. The Trade Ally or licensed contractor must size the equipment within 15% or one half-ton of the calculated cooling load ("Manual J Calculation" or equivalent). If an extended rating is used, please attach a copy of the document(s) used to perform this calculation.
- The installing Trade Ally or licensed contractor must completely fill out the APS Quality Installation Test Results required for the rebate.

- The installing Trade Ally or licensed contractor must correct and document the airflow across the evaporator.
- The refrigeration charge must be verified using superheat and subcooling from the equipment manufacturer's specifications. If installing Trade Ally or licensed contractor utilizes another form of determining refrigerant charge, provide documentation that includes the target and actual results for both test in and, if out of range, for test out.

New Construction

The APS Multifamily Energy Efficiency Program's New Construction (MEEP NC) Program promotes energy-efficient construction practices to developers, architects and builders of new multifamily projects.

- Eligible projects include new construction, new multifamily additions and major renovations.
- All projects shall comply with federal, state, and local codes.

APPLICATION PROCESS

The application process includes both a Pre-Application and Final Application. The MEEP team will work with the Trade Ally/builder and APS customer to complete the applications.

Project information such as design scope, builder, schedule and HERS rater (if applicable) will be collected in the applications.

All equipment must be new per the program specifications. Used or rebuilt equipment is not eligible for rebate. Participation forms will be collected throughout the building process. The rebate approach (Prescriptive or Performance) will be determined early in the design phase, if possible, by the Trade Ally builder and APS customer.

WI-FI CONNECTED SMART ELECTRIC WATER HEATER

- Multifamily new construction only
- Minimum size of 40 gallons
- Built-in Wi-Fi control
- Electric powered only

PRESCRIPTIVE APPROACH

- Periodic meetings should be held throughout the building process to ensure all prescriptive measures will be satisfied in order to receive a rebate per dwelling unit.
 - A dwelling unit is defined as a residential dwelling in a multifamily building and does not include common areas.
- Prescriptive measures include HVAC requirements by Climate Zone, Thermostat, Ductwork, Envelope Infiltration, Insulation, Windows, Water Heater, Lighting and Appliances and their requirements are presented in the following table:

HVAC Requirements (Climate Zones 2 & 3)	Room, Packaged and Terminal A/C		Central Chiller	
	Heat Pump	14 SEER A/C & 8.2 HSPF (See Ductwork) 15 SEER A/C & 8.0 HSPF (See Ductwork)	80 AFUE furnace or boiler 10% more efficient than local building codes	
	Boilers Gas Furnace Oil Furnace	80 AFUE		
HVAC Requirements (Climate Zones 4 & 5 Based on 2012 IECC Figure C301.1)	ENERGY STAR® qualified Gas Furnace (90% AFUE) OR ENERGY STAR qualified Heat Pump OR ENERGY STAR qualified Boiler (85% AFUE) OR ENERGY STAR qualified Oil Furnace (85% AFUE)			
Thermostat	ENERGY STAR qualified programmable thermostat			
Ductwork	1. All ducts and air handling equipment must be in the conditioned space (minimum 14 SEER) 2. Leakage must be less than or equal to 4 CFM to outdoors per 100 sq ft. (minimum 15 SEER) 3. Minimum R-6 insulation on ducts in unconditioned spaces (minimum 15 SEER)			
Envelope Infiltration (Climate Zones Based on 2012 IECC Figure C301.1)	Climate Zone 1 & 2 6 ACH50 Climate Zone 3 & 4 5 ACH50 Climate Zone 5 & 6 4 ACH50			
Insulation	Climate Zone	Ceiling R-Value	Wood Wall R-Value	Floor R-Value
	1 & 2	38	19	13
	3 & 4	38	19	19
	5 & 6	49	23	30
Windows	Climate Zone	U-Factor	SHGC	Window to Floor Area Equal to or Less Than 15% WFA per unit
	1 & 2	0.4	0.25	
	3	0.35	0.25	
	4	0.32	0.4	
	5 & 6	0.3	Any	
Water Heater	Gas Electric Gas Boiler	40 gallons = 0.61EF 40 gallons = 0.93EF	50 gallons = 0.57EF 50 gallons = 0.92EF	80 gallons = 0.53EF 80 gallons = 0.89EF
	Thermal Efficiency = 80% To determine domestic hot water (DHW) EF requirements for additional tank sizes, use the following equations: Gas DHW EF > 0.69 - (0.002 x Tank Gallon Capacity); Electric DHW EF > 0.97 - (0.001 x Tank Gallon Capacity)			
Lighting	75% ENERGY STAR Lamps and Light bulbs			
Appliances	Five (5) or more ENERGY STAR qualified appliances, light fixtures, ceiling fans with light fixtures and ventilation fans			

- Project completion must be communicated to the APS MEEP team at least 60 days prior to building occupancy.
- The APS MEEP team reserves the right to perform field inspections and testing as required to validate the results.

PERFORMANCE APPROACH

- The performance testing shall be conducted by a certified HERS rater.
- The performance testing HERS score of 60 and below must be satisfied to receive a rebate per dwelling unit.
 - A dwelling unit is defined as a residential dwelling in a multifamily building and does not include common areas.
- Project completion must be communicated to the APS MEEP team at least 60 days prior to building occupancy.
- The APS MEEP team reserves the right to perform field inspections and testing as required to validate the results.