

HELP Program Home Energy Assessment Checklist & Measure Guide

An in-field guide for HELP Home Energy Assessors (HHEAs)

Assessment Details	
Assessor Name:	Assessment Date:
Premise Information Year Built: Square Check all that apply: Basement Present: Conditioned Uncondition	e Footage of Residence:
 Attic Present: Conditioned Unconditioned Crawl Space Present: Vented Sealed 	Unsure
Water Heater Old Energy Star Water Heating Fuel Type: Manufacturer: Model No.: Serial No.:	Tank Size: gallons Tankless:
Cooling Equipment Old Energy Star Cooling System: Cooling Capacity: tons Efficiency (SEER):	M () ID .
HVAC Thermostat Standard Programmable If Programmable: Programmed Not Programmed	

Heating Equipment Manufacturer:______ Old **Energy Star** Model No.: Residence Heating Fuel:____ Heating Type: Manufactured Date: Heating Capacity:______(kBtu/h) Efficiency (HSPF):_____ **Appliances** • Existing Unit Dimensions: Refrigerator: Old Energy Star " (W) x " (H) x " (D) Manufacturer:____ • Opening Dimensions: Model No.: " (W) x " (H) x " (D)* Serial No.: *Measure the width, height, and depth of the space where the fridge sits edge to edge—making sure to note the narrowest points and account for Size: cubic ft any trim, cabinets, or obstructions Ice Maker (Y/N):_____ Manufactured Date:_______ Door Opens From (R/L):_____ Unit Energy Consumption (UEC): • Existing Unit Dimensions: Freezer: Old **Energy Star** " (W) x " (H) x " (D) Manufacturer: Model No.:___

Serial No.:

Size: ____ cubic ft

Unit Energy Consumption (UEC):

Insulation

Attic Insulation	Basement/Sidewall Insulation
Existing R-Value:	Existing R-Value:
Existing Attic Area:	Length of Basement Wall:ft.
(L) x(W) =sq. ft.	Height of Basement Wall:
Floor Insulation	ft. (above grade) & ft. (below grade)
Existing R-Value:	- Rim Joist Insulation
Existing Floor Area:	Existing R-Value:
(L) x (W) = sq. ft.*	Existing Length of Rim Joist Area:ft.
*Area above basement/crawl space	Existing Height of Rim Joist Area:ft.
Wall Insulation	
Existing R-Value:	-
Existing Wall Cavity Size:	
" (W) x" (H) x" (D)	
Thermal Distribution	
• Duct Type:	Duct Leakage Observed:
• Duct Insulated: Yes No N/A	• Pipe Insulation: Yes No N/A
• Duct Sealed: Yes No N/A	Space Condition: Conditioned Unconditioned

Installed DI Measures

Advanced Smart Tier 2	Power Strip: QTY:	
Specialty LED Bulbs:		
Globe:		
QTY:	Wattage of Installed Bulb:	Wattage of Replaced Bulb:
BR30:		
QTY:	Wattage of Installed Bulb:	Wattage of Replaced Bulb:
GU10:	Westerne of Installed Dulle	Wattana of Dania and Dulla
	wattage of instatted butb:	Wattage of Replaced Bulb:
Candelabra: QTY:	Wattage of Installed Bulb:	Wattage of Replaced Bulb:
T8 Linear Tube:		<u> </u>
	Wattage of Installed Bulb:	Wattage of Replaced Bulb:
LED Outdoor Flood Ligh		
QTY:	Wattage of Installed Bulb:	Wattage of Replaced Bulb:
Specialty LED (other):		
QTY:	Wattage of Installed Bulb:	Wattage of Replaced Bulb:
Aerators:		
Bathroom Low Flow	Aerator:	
QTY:	Existing Unit Flow Rate:	Installed Unit Flow Rate:
Kitchen Low Flow A	erator:	
QTY:	Existing Unit Flow Rate:	Installed Unit Flow Rate:
Showerheads (SH):		
Fixed Low Flow SH:		
QTY:	Existing Unit Flow Rate:	Installed Unit Flow Rate:
Handheld Low Flow		
QTY:	Existing Unit Flow Rate:	Installed Unit Flow Rate:
Fixed Standard SH v		
QTY:	Existing Unit Flow Rate:	Installed Unit Flow Rate:
TSV SH Attachment:		
QTY:	Existing Unit Flow Rate:	Installed Unit Flow Rate:
Pipe Wrap Insulation (f	t): QTY:ft	
Energy Star Air Purifie	r:	
QTY:E	xisting Unit CADR (Clean Air Delivery Rate)	: Installed Unit CADR:
Wi-Fi Enabled Smart TI	hermostat: QTY:	

Direct Install Measure Guide

Advanced Smart Tier 2 Power Strip	
Residence Requirements	 Electric or Non-Electric Water Heating Electric or Non-Electric Space Heating
Measure Eligibility	Existing power strip must not include power-saving features
Measure Requirements	Must replace existing high use power strips or be installed in high use outlets such as in entertainment centers or home offices
Limits	1 per household
Identification Tips	Look to replace standard power strips that have one manual on/off switch (if any) and no energy-saving functionalities

Energy Star® LED Specia	alty Bulbs
Residence Requirements	 Electric or Non-Electric Water Heating Electric or Non-Electric Space Heating
Measure Eligibility	 Existing bulbs must be incandescent or T8/T12 fluorescent tubes in high-use areas (average of 2 hours per day) Lamps in permanent fixtures are eligible for replacement. Lamps in portable fixtures are eligible for replacement if there is no permanent fixture in the room and they are the main light source. Burnt out lamps or empty sockets may be replaced by an equivalent LED bulb to the burnt -out bulb, or to the wattage rated for the fixture. Bulbs in closets, storage rooms, or exterior fixtures are not eligible. Hallway fixtures are not typically designated as high-use areas.
Measure Requirements	 Replacement LED bulbs will meet the following requirements: Lumen Output: must be equivalent to that of the bulb the socket is rated to be installed Rated Life: 15,000 hours Efficacy: 61 lumens per watt (LPW) for directional, and 65 LPW for decorative lights CRI Minimum: 80 A19 LED bulbs are not eligible
Limits	18 per household
Identification Tips	 Look to replace any of the following eligible specialty bulb categories: Reflector bulbs (PAR, BR, MR) Decorative bulbs (Candelabra, Globe, etc.) Tube replacements How to identify if a Specialty Bulb is not an LED: Spiral (curly) bulb Bulb with filament (visible wire inside) Very hot to the touch Slow to brighten or flickers before reaching full brightness High wattage

LED Outdoor Flood Lights	
Residence Requirements	 Electric or Non-Electric Water Heating Electric or Non-Electric Space Heating
Measure Eligibility	Existing bulbs must be incandescent/halogen in applications likely to have a minimum use of two hours per day.
Measure Requirements	 Replacement LED Outdoor Flood Light must be an LED PAR30 with a wattage between 15W and 18W. Replacement units are available for front and back porch lights, and garage lights. Replacement units will reduce wattage by a minimum of 20%.
Limits	3 per household *Up to 4 bulbs per household are allowed when replacing multiple fixtures with 2-bulb sockets to ensure consistent lighting
Identification Tips	 How to identify if an Outdoor Flood Light is not an LED: High wattage Very hot to the touch Slow to brighten or flickers before reaching full brightness

Low Flow Showerhead	
Residence Requirements	Electric Water Heating
Measure Eligibility	Existing showerhead must be a standard showerhead with flow of 2.0 GPM or greater.
Measure Requirements	Replacement units will have a flow of 1.5 GPM or less at 80 PSI.
Limits	2 per household (regardless of showerhead type)
Identification Tips	 Check existing showerhead for a label or stamp that identifies GPM Complete a bucket test to calculate the current flow rate Reference table 1-1 for showerhead type recommendation

Standard Flow Showerhead with TSV	
Residence Eligibility	Electric Water Heating
Measure Eligibility	Existing showerhead must be a standard showerhead
Measure Requirements	Replacement unit's thermostat will be 95 degrees or lower
Limits	2 per household (regardless of showerhead type)
Identification Tips	Reference table 1-1 for showerhead type recommendation

Table 1-1: How to Recommend Low-Flow vs. Standard Flow with TSV Showerheads

	Low-Flow	Standard Flow with TSV
Description	Reduces both water consumption and hot water usage by lowering flow rate	Pauses the water flow when water reaches 95 degrees (or lower), reducing water waste during warm-up
Hot Water Wait Time	Short wait (< 30 sec)	Longer wait (30–60+ sec)
Water Pressure	Reduced pressure	Stronger water pressure
Best Use Case	A small home with short plumbing runs	A large home where it takes 60+ seconds to get hot water

Low Flow Aerator	
Residence Requirements	Electric Water Heating
Measure Eligibility	Homes eligible to receive a low flow aerator must have a standard aerator with flow of 2.2 GPM or greater.
Measure Requirements	Replacement units will have a flow of 1.5 GPM or less.
Limits	3 per household
Identification Tips	 Check existing aerator for a label that identifies GPM Complete a bucket test to calculate the current flow rate

Pipe Wrap Insulation	
Residence Requirements	Electric Water Heating
Measure Eligibility	Pipe wrap insulation is only available for exposed hot water pipes with no previous insulation. Existing insulation that is worn or torn is not eligible for replacement.
Measure Requirements	Pipe insulation will be taped or glued at all joints.
Limits	Limited to 15' total
Identification Tips	 Pipes that need insulation are typically: Warm to the touch

*Wi-Fi Enabled Smart Thermostat	
Residence Requirements	Electric HeatingCentral AC
Measure Eligibility	 Homes are not required to have Wi-Fi to be eligible for this measure. Existing programmable thermostats are eligible if not currently set to a schedule.
Measure Requirements	 Replacement units must be one of the approved models listed in table 1-2 Replacement units are required to be programmed with either the homeowner or landlord/management organization. Determine a set point for occupied hours For unoccupied hours, the temperature set point must be: ≥3°F warmer than the occupied set point in the summer, and ≤3°F cooler in the winter.
Limits	1 per household
Identification Tips	 Programmable thermostats will have buttons like "Program", "Set Schedule" or a digital display with time-based controls. Non-programmable thermostats typically only have a basic temperature readout and analog controls to manually adjust settings

^{*}If customer is eligible for a new HVAC system, the Wi-Fi-enabled smart thermostat will be installed during the follow-up visit, in coordination with the HVAC installation.

Table 1-2: Approved Wi-Fi Enabled Smart Thermostats

Ecobee	Sensi	Google Nest
 Ecobee3 Ecobee 4 Ecobee Smart Thermostat Ecobee Smart Thermostat with Voice Control Ecobee Smart Thermostat Premium Ecobee Smart Thermostat Premium 	 Sensi Lite Smart Thermostat Sensi Touch 2 Smart Thermostat Sensi Touch Smart Thermostat (Silver) Sensi Touch Smart Thermostat (White) Sensi Smart Thermostat 	 Google Nest Learning Thermostat Google Nest Thermostat Google Nest Thermostat E
Pelican	Honeywell Home Lyric	Honeywell
TS200TS200HTS250TS250H	 TH6220WF2006 TH6320WF2003 RCHT8610WF2016 RCHT8610WF2014 RCHT8610WF3005 RCHT9510WFW2017 RCHT8610WF3005 RCHT 	 TH8110R1008 RTH9585WF1004 TH8320R1003 RTH9585WF1012 TH8321R1001 TH6320WF1005 RTH6580WF1001 RTH6580WF1006 YTH8321WF1036 RTH6580WF1004 RTH8580WF1007 RTH8580WF1007 RTH8580WF1007 RTH9580WF1005 YTHX9421R5085WW RTH9580WF1013 RTH9580WF1013 YTHX9421R5127WW RTH9580WFKITHQ YTHX9421R5101WW RET97A5E1001

Energy Star® Air Purifier	
Residence Requirements	 Electric or Non-Electric Water Heating Electric or Non-Electric Space Heating
Measure Eligibility	Home must have an existing Air Purifier that is in use
Measure Requirements	Replacement unit must be Energy Star certified and the same size or smaller than the unit being replaced.
Limits	1 replacement per household
Identification Tips	 Ask the customer if they are currently using an Air Purifier Identify the brand name and model number on the label of the existing unit to determine eligibility Check for an Energy Star logo

Retrofit Measure Guide

Air Sealing	
Residence Requirements	 Electric or Non-Electric Space Heating Electric Cooling System (Central AC, Room AC, or Heat Pumps)
Measure Requirements	 Air sealing will be completed by properly certified personnel (BPI or equivalent). All accessible areas of the attic, floor, and exterior penetrations will be sealed. Additional air sealing measures may include door sweeps and seals, caulking around window and door openings, and outlet gaskets. Pre- and post-blower door tests will be performed on all air-sealed units. In single family homes, air sealing will be performed in conjunction with the attic insulation measure if existing insulation is insufficient. In multifamily homes, air sealing is recommended to be performed in conjunction with attic insulation measures if existing insulation is insufficient, where applicable (i.e., in the topmost floors of qualifying homes).
Identification Tips	 If customer is eligible for attic insulation, air sealing should be selected as an eligible measure Check for visible gaps or cracks and feel for drafts around windows, doors, baseboards, vents, light fixtures, outlets, etc.

Duct Sealing	
Residence Requirements	 Electric or Non-Electric Space Heating Central AC
Measure Requirements	 Ducts will be sealed with mastic sealant or mastic tape in unconditioned spaces. Duct sealing will be completed by properly certified personnel (BPI or equivalent). Acceptable methods of duct leakage testing include: Preferred: Duct Blaster (CFM25) Optional: Modified Blower Door Subtraction Method (CFM50)
Identification Tips	 If there's duct work in a conditioned basement, duct sealing is not eligible If there's duct work in a crawl space, duct sealing would be beneficial If customer is eligible for attic insulation, and duct work is present, duct sealing should be selected as an eligible measure Check for visible portions of ductwork and look for gaps, cracks, or disconnection sectioned, corroded or deteriorated material, dust buildup around duct connections, etc. Check for uneven air flow coming out of vents Use a thermal gun to identify temperature differences

Energy Star® Refrigerator	
Residence Requirements	 Electric or Non-Electric Water Heating Electric or Non-Electric Space Heating
Measure Eligibility	 Existing primary refrigerator must be operational or in need of minor repairs and manufactured 8 years or more prior to the current calendar year. Refrigerator must be owned by the property owner at the time of replacement. Renters are eligible to replace unit with landlord written approval. Approval may be requested on a case-by-case basis for non-operational units or those requiring major repairs, including units less than 8 years old.
Measure Requirements	 Replacement unit will be Energy Star certified and equivalent to the size of the unit currently installed, including features such as through-door ice and water, if applicable. Existing equipment will be disabled and removed from the property.
Limits	1 per household
Identification Tips	Identify the manufacturer, model number, and serial number on the nameplate of the existing unit to determine eligibility

Energy Star® Freezer	
Residence Requirements	 Electric or Non-Electric Water Heating Electric or Non-Electric Space Heating
Measure Eligibility	 Existing primary freezer must be operational or in need of minor repairs and manufactured 10 years or more prior to the current calendar year. Freezer must be owned by the property owner at the time of replacement. Renters are eligible to replace unit with landlord written approval. Approval may be requested on a case-by-case basis for non-operational units or those requiring major repairs, including units less than 10 years old.
Measure Requirements	 Replacement unit size will be Energy Star certified and equivalent to the unit currently installed. Existing equipment will be disabled and removed from the property.
Limits	1 per household
Identification Tips	Identify the manufacturer, model number, and serial number on the nameplate of the existing unit to determine eligibility

Energy Star® Heat Pump	
Residence Requirements	 Electric Heating Functional Duct System In Place
Measure Eligibility	If existing unit is a heat pump, efficiency must be below 14 SEER and below 65,000 Btu/h.
Measure Requirements	 Replacement units will be Energy Star certified and rated at 16 SEER2 or greater, HSPF2 8.5 or greater, and below 65,000 Btu/h. Heat pump replacement will be completed by properly certified personnel (HVAC-licensed individual on staff). Existing heat pump will be permanently removed from service. Heat pump warranty information will be left with the customer or apartment management organization. Exceptions may be approved on a case-by-case basis for homes with other heating and cooling source.
Limits	1 per household
Identification Tips	 Identify the manufacturer, model number, and serial number on the nameplate of the existing unit to determine eligibility. If existing ductwork is in good condition, a heat pump should be considered.

Energy Star® Mini Split Heat Pump	
Residence Requirements	Electric Heating
Measure Eligibility	If existing unit is a heat pump, efficiency must be below 14 SEER and below 65,000 Btu/h.
Measure Requirements	 Replacement units will be rated at 16 SEER2 or greater, HSPF2 8.5 or greater, and below 65,000 Btu/h. Heat pump replacement will be completed by properly certified personnel (HVAC-licensed individual on staff). Existing heat pump will be permanently removed from service. Heat pump warranty information will be left with the customer or apartment management organization. Exceptions may be approved on a case-by-case basis for homes with other heating and cooling source.
Limits	1 per household
Identification Tips	 Identify the manufacturer, model number, and serial number on the nameplate of the existing unit to determine eligibility. If the ductwork in the home requires major repairs or replacement, a mini-split heat pump should be considered.

Energy Star® Water Heater	
Residence Requirements	Electric Water Heating
Measure Eligibility	Existing primary water heater must be operational or in need of minor repairs and have been manufactured 5 years or more prior to the current calendar year.
Measure Requirements	Replacement unit will be Energy Star certified and based on household size.
Identification Tips	Identify the manufacturer, model number, and serial number on the nameplate of the existing unit to determine eligibility.

Attic Insulation	
Residence Requirements	Electric HeatingCentral AC
Measure Eligibility	Existing attic insulation must be R-11 or less.
Measure Requirements	 Total installed insulation will be R-49 for homes with electric space heating. Insulation type will be fiberglass or cellulose.
Identification Tips	Measure existing insulation with a ruler and reference table 1-3 insulation field guide to estimate R-value to determine eligibility.

Floor Insulation	
Residence Requirements	 Electric Heating Central AC Crawl Space
Measure Eligibility	Existing floor insulation must be R-5 or less.
Measure Requirements	 R-19 batt insulation will be applied to the underside of the floor. Floor insulation will only be installed when the floor separates conditioned and unconditioned spaces. Batts will be neatly installed, fitting tightly together at joints, fitting closely around obstructions, and filling all the space within the floor cavity. Batts will be cut accurately and squarely and installed in continuous contact with the subfloor. Hanging batts risk non-payment until corrected. Batts will be supported by twine, wire, wood lath, or lighting rods/tiger teeth (friction fit method is not acceptable for fiberglass batts). Fasteners for floor insulation will resist gravity, the weight of insulation, and the potential for moisture condensation.
Identification Tips	Measure existing insulation with a ruler and reference table 1-3 insulation field guide to estimate R-value to determine eligibility.

Wall Insulation	
Residence Requirements	Electric HeatingCentral AC
Measure Eligibility	 Multi-family home projects may be reviewed on a case-by-case basis. Existing wall insulation must be R-5 or less.
Measure Requirements	 Total installed insulation will be R-13 or greater. Only exterior walls are eligible or walls separating conditioned and unconditioned spaces. Insulation type will be fiberglass, cellulose, or spray foam.
Identification Tips	 Measure existing insulation with a ruler and reference table 1-3 insulation field guide to estimate R-value to determine eligibility. If home was built prior to 1950s, it is likely eligible for wall insulation.

Basement / Sidewall Insulation				
Residence Requirements	 Electric Heating Central AC Basement 			
Measure Eligibility	Existing basement / sidewall insulation must be R-5 or less.			
Measure Requirements	 Total installed insulation will be R-15 or greater. Insulation type will be fiberglass, cellulose, or spray foam. 			
Identification Tips	Measure existing insulation with a ruler and reference table 1-3 insulation field guide to estimate R-value to determine eligibility.			

Rim Joist Insulation			
Residence Requirements	Electric HeatingCentral AC		
Measure Eligibility	Existing rim joist insulation must be R-5 or less.		
Measure Requirements	 Total installed insulation will be R-20 or greater. Insulation type will be fiberglass, cellulose, or spray foam. 		
Identification Tips	Measure existing insulation with a ruler and reference table 1-3 insulation field guide to estimate R-value to determine eligibility.		

Table 1-3 Insulation Field Guide

Area	Common Insulation Type(s)	Depth Range	Estimated R-Value	Field Indicators
Attic (R-11 or less)	Blown fiberglassBlown celluloseFiberglass batts	≤ 4"	R-5 to R-10	Insulation appears sparse, patchy, or settled
Floor (R-5 or less)	Very thin battNone or old paper-backed batts	≤ 2"	R-5 or less	Visible joists; insulation may be falling or missing
Wall (R-5 or less)	Empty cavityPartial fiberglass battKnob & tube wiring (no insulation)	~0" to 2"	R-0 to R-5	Cold to touch; electrical outlets feel drafty
Basement/Sidewall (R-5 or less)	Exposed block wallThin foam board or fiberglass wrap	≤ 1" foam or thin batt	R-0 to R-5	Block walls bare or with light wrap; signs of moisture
Rim Joist (R-5 or less)	NoneMinimal fiberglassGaps/leaks present	≤ 1"	R-0 to R-5	Can see daylight or feel air; minimal coverage