

CONNECTED THERMOSTATS

VERIFICATION CHECKLIST FOR COMMERCIAL CUSTOMERS

Thermostat that is web-connected to allow remote monitoring and control.



QUALIFIED PRODUCT LIST (QPL) REQUIREMENT

Yes

REQUIREMENTS

BASELINE

- Heating fuel can be electric or gas.
- Lodging, 24/7 occupancy, and semi-conditioned spaces do not qualify.
- Must replace existing non-web enabled thermostat.
- Buildings are eligible for more than one connected thermostat, as long as each connected thermostat controls an existing HVAC system with a separate supply fan serving a separate zone.
- Cannot be combined with ARC UES measure.

RECOMMENDED

INITIAL INSTALL

- Take a photo of installed thermostat that shows make/model to ensure it is a qualified product.
- Verify thermostat is connected to the internet.
- Verify occupancy schedule includes unoccupied setbacks and fan is set to auto mode during unoccupied hours.
- Verify maximum override duration is set to ≤ 3 hours.
- Verify strip heat lockout is enabled with appropriate temperature set-point for heat pump systems.
- Verify simultaneous heating and cooling is eliminated in cases where two or more systems serve spaces that are not separated by physical barriers (i.e., "invisible zones").

SUBSEQUENT VERIFICATION

- Write down the date the programming was verified. VERIFIED: _____
(Note: Verification must occur not less than 3 months from initial install or prior verification. The thermostat is eligible for up to four verification payments within two years of the initial install.)
- Verify thermostat configuration and setpoints meet all requirements specified for Initial Install qualification.

INCENTIVE

- Up to \$150 per thermostat (Initial Install)
- Up to \$50 per thermostat (Subsequent Verification)

POST INSTALL

Appears on BPA's QPL for connected thermostats and has capabilities including:

- Limited duration occupied-period override, three hours or less.
- Multiple setbacks including evenings, holidays, and breaks.
- Enables supply fan to operate continuously during occupied mode and in auto during unoccupied mode.
- Remote web-based monitoring and programming.
- Battery and memory backup for power losses.

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BEST PRACTICES

- Key site personnel should be properly trained on how to use the connected thermostat. They should be able to:
 - a. Log into web based platform
 - b. Check set-points, schedules and equipment status
 - c. Modify set-points and schedules
- One of the primary sources of savings is scheduling the fan to 'Auto' mode during unoccupied hours. Verifying this setting is properly configured during the initial install and subsequent verifications will help achieve desired energy savings.
- For Heat Pump units, discuss the auxiliary resistance lock-out set-point with site personnel to confirm it is appropriate. Lowering the set-point results in higher energy savings so long as the unit is properly sized to serve the space. If the auxiliary heat lockout is set too low, it could lead to occupant discomfort, especially if the controlled unit is undersized.
- For continued verification, ensure original thermostat settings are maintained, or discuss why changes may have occurred with the building owner.



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