

ROOFTOP HVAC RECOMMISSIONING

If you recommission your packaged rooftop unit you can earn an incentive of \$15 per ton and save up to 20 percent on HVAC energy costs.



Any existing electric rooftop heating and air conditioning system could benefit from recommissioning. Over time, inefficiencies crop up that could affect your building's heating and cooling. Correcting these inefficiencies will help reduce your monthly cooling and heating costs. Plus, poorly maintained equipment wears out faster, running up large repair or replacement bills.

A packaged rooftop recommissioning begins with a Progress Energy Business Energy Check. Performance before and after recommissioning is determined to ensure your equipment is operating at peak performance levels.

Incentive and savings example:

A retail store of 10,000 SF using a total of 25 tons of rooftop units could save over \$1,200 annually and receive an incentive of \$375 when recommissioned.*



Incentive requirements*:

- 1. Call Progress Energy for a free Business Energy Check.
- 2. All equipment tune-up and repairs must meet manufacturers' instructions and specifications.
- Rooftop HVAC recommissioning is a one-time incentive.

*See back of flyer for more incentive requirements.

Other requirements do apply.

Visit savethewatts.com for more details.

*Calculated savings based on \$0.13/kWh.





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Before recommissioning*

- **1** Document equipment manufacturer, model and serial numbers.
- Take high- and low-side refrigerant pressure readings. Document the return air, discharge air, mixed air and outdoor air temperatures at this time.
- 3. Take amp readings on the compressor(s), outdoor and indoor fan motor(s) and electric strip heater(s). Document the supply operating voltage at the disconnect for the unit.
- 4. Check for outside air makeup. Document the size of the opening in the cabinet, size of the outdoor air damper and position relative to the size of the opening. Note if a filter exists and the condition. Note if it is a fixed manual damper or automatic. If automatic determine how it is controlled.
- Document airflow for both supply and outside air if applicable.

 Use standard duct sizing charts to determine if existing return air duct(s) and filter grille(s) are adequate. Use standard sizing charts to determine if supply outlets are adequate.
- Document thermostat settings and readout. Check for temperature set point, heat-auto-cool setting and fan auto-on setting. Programmable thermostats should have start and stop times and days of operation noted.
- 7. Document overall condition of equipment cabinet and duct connections checked for leakage.

Document HVAC performance and condition after recommissioning*

- Inspect and clean the evaporator coil, condenser coils and blower wheel if necessary.
- 2. Clean the condensate drain, repair cabinet and duct leaks.
- 3. Document airflow readings with clean filter(s). If airflow is within specifications, proceed with the steps listed below. Note indoor fan amp reading. If airflow is below design then check fan speed, blower alignment, fan capacitor, voltage and duct sizing.
- 4. Adjust refrigerant charge if necessary and document high- and low-side pressure readings. Outdoor air damper should be closed while correcting refrigerant charge. When complete, note the compressor(s) amps(s).
- 5. Adjust the outdoor air intake to meet minimum requirements and verify operation under automatic control. Make recommendations if applicable to use demand control ventilation or unoccupied control for outdoor air.
- **6.** Document outdoor, return, discharge and mixed air temperatures.
- **7.** Document fan is cycling with cooling.
- **8.** Calibrate thermostat and change settings to increase energy savings as agreed upon by the customer. Make recommendations for programmable thermostat if appropriate.
- Check for proper operation of heating cycle.
- **10.** Repair or replace any cabinet deficiencies or duct connections that contribute to air leakage.





^{*}All information should be recorded on forms provided by your Progress Energy Advisor.