

Operations

- Schedule cooking equipment use such that energy use goes up and down with the quantity of meals served and is greatly reduced in slow times. Turn cooking equipment down or off when not in use.
- Monitor energy use and cost in relation to meals cooked, forming a metric of \$ per meal.
- Instruct personnel to not leave cooler doors propped open.
- Only run the dishwasher hood exhauster when the dishwasher runs.
- Run hoods only when needed instead of always on.
- Turn off food warming lamps in periods of low use, such as between lunch and dinner.
- Control multiple hoods independently, if one is needed 'now' and another 'later'.
- Limit kitchen cooling to 75°F degrees.
- Limit hood make-up air tempering to 50°F heating and 60°F cooling. Note the 'dead band' of ten degrees between them; this is a best practice.
 - Note: hood performance needs to have make-up air that is at least 50°F or hood 'capture' will be negatively affected.
- Disable the heating for the heating, ventilation, and air conditioning (HVAC) units that serve the kitchen area or lower the setting to only come on below 60°F. This is a 'cooling only' application and should not require heating.
- Limit cooler temperature to 37°F.
- Limit freezer temperature to 0°F unless there is a sensitive food item that requires colder temperatures. For example, if the whole freezer is kept at <-20°F> for ice cream, the ice cream could be put in a separate small chest freezer, allowing the main unit to be set higher temperature.
- Maintain tight sealing gaskets and door sweeps on walk-in cooler and freezer doors.
- Install hanging plastic strips at openings into walk-in coolers and freezers.
- Add a door switch interlock to stop refrigeration fans when the door is open.
- Use door closers for refrigerators and freezers.
- Try low-flow spray nozzles for dish and pot cleaning.
- Visually check the dishwasher drain; all it takes is a fork or rag stuck in a drain valve to allow continuous drain of hot water even when the dishwasher is off.

HVAC and Hot Water Controls

- Scheduled start-stop of HVAC equipment and lighting.

- Use a programmable thermostat to match building hours plus add an hour of warm-up time each day. Set space temperatures during unoccupied times up to 85°F and set them back to 60°F at night.
- Lock out cooling below 55°F outside air and use only 'free cooling' economizers.
- If there is a domestic hot water re-circulation pump, it can be turned off at night.

Maintenance

- Four times per year, carry out maintenance on heat exchanger coils, especially the condensers of refrigeration equipment, coolers, freezers and ice machines. Clear ice build-up on any freezers without automatic defrost.
- Annual heating and cooling unit checkup, including cleaning coils, refrigerant charge, flue temperature, supply air temperature, belt condition and tension, and outside air damper position, and anything needing repair. For cooling units with an air economizer, verify the controls are functional and the free-cooling effect is working.
- Change furnace and air conditioner filters regularly.
- Keep air conditioner outdoor unit (condensing unit) coils free from dirt, grass, etc. so they can breathe.
- Annually adjust/repair cooler and freezer door seals and sweeps, door closers, and hanging curtains to maintain a tight seal. With the cooler/freezer door closed, pulling a piece of paper under the door should feel some resistance. Check calibration of cooler and freezer thermometers annually.
- Adjust/repair oven doors to maintain a tight seal so hot air does not escape.
- Inspect building entry doors for tight seals and repair as needed; draft or light visible at the opening is an indicator.
- Insulate any bare hot piping for domestic water.

Cooking Equipment, if replaced

- Replace electric cooking grills, oven, etc. with natural gas heat, if natural gas is available.

Refrigeration Equipment, if replaced

- Combination walk-in freezer and cooler so entry to the freezer is from the walk-in cooler.
- High efficiency fan motors for walk-in coolers such as electronically commutated motors (ECM). Less energy used by these fan motors saves twice by also lowering the cooler refrigeration load.
- Keep the kitchen cooler by locating condensing units to reject heat outside for coolers, freezers, and ice makers.

Heating and Cooling Equipment, if replaced

- Evaporative cooling for the kitchen instead of air conditioning.
- Natural gas heating instead of electric heating.
- Higher efficiency cooling equipment with 'free cooling' economizer.

Water Heating Equipment, if replaced

- Use natural gas if available for lower operating cost.
- Separate water heater for kitchen (very hot) and public handwashing.
- Dishwasher electric 'booster heaters' can be switched to natural gas with appropriate venting.
- Compare chemical sanitizing to hot water scald sanitizing. Some good tradeoffs occur as warm water (not cold) combines with chemicals.
 - Note: Success of chemical sanitizing depends on the vendor and proper training of employees to watch key values like water temperature and when chemical bins get low. Where patrons are elderly or weakened, many facilities opt for the conservative approach of 180°F hot water.

Lighting Equipment, if replaced

- High efficiency lighting.
- Avoid incandescent / halogen lighting.