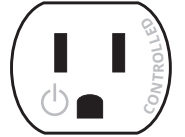# Controlled Receptacles

A GUIDE FOR BUILDING OPERATORS

Key Points

- **50% of receptacles in new construction must be controlled** in offices, conference rooms, printing rooms, break rooms, workstations and classrooms.
- Timers, occupancy sensors, or a combination of both can be used for controlling receptacles.
- Receptacles can be wired with only the top receptacles controlled (split), or a controlled duplex can be installed within 12 inches of each uncontrolled duplex (72 inches within individual work cubicles).
- Controlled receptacles must be marked with the power symbol and the word "controlled."
- Seattle Energy Code Section C408.3.1.1 and C408.3.1.2 show required commissioning procedures for the controls and overrides.

Controlled outlet

Identifying and Marking

- Controlled receptacles must be marked
- If receptacles were not installed with permanent marking etched into the outlet or coverplate, stickers can be used to mark controlled receptacles (permanent markings are preferred).

Permanently marked

Stickers for marking

- Ensure compliance by inspecting receptacles and replacing worn-out stickers as needed.

Override

- Where timer controls are present, override controls shall be available to provide power to receptacles as needed outside of scheduled occupied hours
- Override controls are generally in the form of wall switches
- Override time length can be a maximum of 2 hours

Override Length

30 minutes	2 hours
Opportunity for most energy savings	Least user intervention

What to Plug In or Not Plug In?

Use controlled receptacles for equipment that DOES NOT need to be on 24/7.

Printers, monitors, and peripherals

Kitchen appliances

Desk lighting / lamps

Computers (control through power-saving settings instead)

Clocks, phone

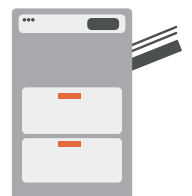*Safety, security & other 24-hr equipment*

Refrigerator

Special Cases

Should only be controlled by timers.

Devices that need to stay on during the day even if no occupancy is detected, but should be unpowered overnight.
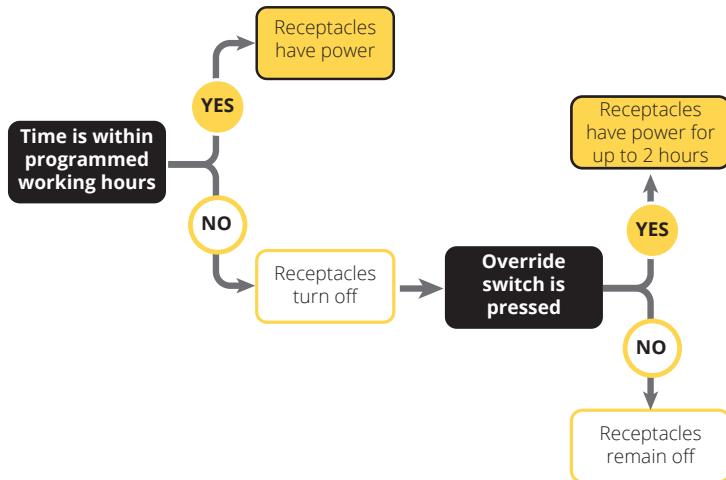
Coffee Pot Warmers

Network Printers
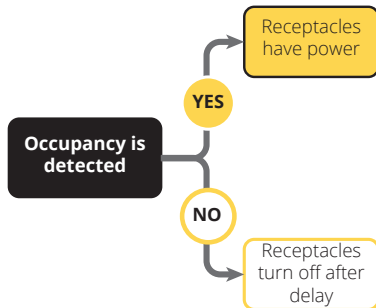
A GUIDE FOR BUILDING OPERATORS

Control Methods

Timer

Receptacles will be on during programmed working hours. Must use an override switch to provide power outside of working hours.
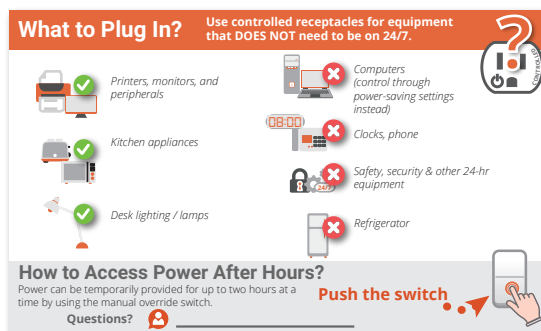

Considerations and Recommended Uses

- Large Spaces, Common Areas, Network Printers, Coffee Pot Warmers.
- If possible, ensure that receptacle programmed hours encompass the hours when the space is typically occupied
- Test override switches and inform occupants of procedure for override.
- Ensure no electrical or fire hazards are created from occupants daisy chaining power strips into uncontrolled receptacles.

Sensor

Receptacles will be on whenever occupancy is detected.

Considerations and Recommended Uses

- Small spaces, enclosed offices, personal printers, computer monitors, desk lamps, microwaves.
- To prevent unwanted shutoff, ensure occupants are in range of sensors with no obstructions or switch to ultrasonic sensors.
- Ensure shut off time delay from sensor is adequate for occupants but does not exceed 20 minutes.
- In some cases, controlled receptacles may also be controlled by the sensor that controls lighting.

Informing Occupants

Placards are available for occupants with guidance on what to plug in and to help identify override switches. Placards can be filled in with information specific to your building.

What Do Controlled Receptacles Do?

Controlled receptacles (outlets) save energy by automatically turning off power when it's not needed using:

- ☐ Schedule timers
- ☐ Occupancy sensors
- ☐ A combination of both

How to identify a controlled receptacle?

Controlled receptacles are marked with the word "Controlled" **1** and the power symbol **2**

Controlled outlet