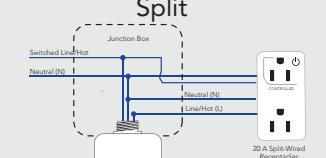
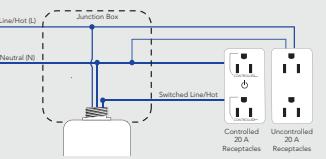




CONTROLLED RECEPTACLES

- Controlled receptacles save energy by automatically turning off power when it's not needed.
- Control of receptacles is now part of the energy code as a requirement in some spaces.
- Areas that can benefit from controlled receptacles include offices, conference rooms, printing rooms, reception lobbies, break rooms, workstations, classrooms, hotel and motel guest rooms.
- Timers, occupancy sensors, or a combination of both can be used for controlling receptacles.
- Controlled receptacles must be visibly differentiated, and at a minimum marked with the power symbol.
- Receptacles can be wired with only one receptacle controlled (split), or a controlled duplex can be installed within 6 feet of each uncontrolled duplex. Local codes may require distances shorter than 6 feet.
- Check local code requirements for possible additional guidelines on controlled receptacles.

Design Considerations

Design	Options	Considerations	Suggested Use
Receptacle Wiring Controlling 50% of the receptacles can be achieved through two methods	Split  Duplex 	<ul style="list-style-type: none"> ■ Installation cost may be slightly higher than for separate duplexes ■ Generally more intuitive for occupants ■ Accommodates a greater variety of furniture layouts 	Split receptacles throughout a facility provide the most intuitive configuration for users. All Areas
		<ul style="list-style-type: none"> ■ Separate duplex or quad receptacles may be useful for locations where many pieces of equipment need to be plugged in simultaneously 	Any area where occupants may regularly need more equipment plugged in.
Control Integration Select control method based on space layout and expected occupant use	Timer	<ul style="list-style-type: none"> ■ May cost less overall ■ Can control up to 5,000 ft² of receptacles, per floor, at the panel level ■ A central system with software can allow the building to be divided into control zones 	Applies to all areas but best for open layouts: Open Office Areas
	Occupancy Sensor	<ul style="list-style-type: none"> ■ Control is more directly aligned with occupant need providing greater energy savings potential ■ Occupancy sensors that control lighting can simultaneously control receptacles 	Areas with enclosed layouts and regularly fluctuating occupancy such as: Enclosed Offices / Breakrooms Conference Rooms Classrooms Printer/Copy Rooms
	Combination	<ul style="list-style-type: none"> ■ Cost is higher but can maximize energy savings ■ Energy savings occur outside of business hours, as well as when a space is vacant 	All areas can benefit from central timer controls. Adding occupancy sensors to enclosed spaces in conjunction with timer controls in open spaces will provide greater control and savings

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Design Considerations (cont.)

Design	Options	Considerations	Suggested Use
Override: Manual override of timed controls must be accessible to the occupant	Wall Switch 	<ul style="list-style-type: none"> Install in areas controlled by timers Test override switches and ensure override time is set to a maximum of 2 hours The override switch should be adjacent to the override switch for lighting governing the same area, and labeled as such It is possible to use the same override switch for both lighting and outlets in any one area 	
Marking: Receptacles must be marked	Engraved and Colored Coverplates 	<ul style="list-style-type: none"> Coverplates and outlets engraved with the power symbol can be installed Use of marked different-colored coverplates can help occupants differentiate between controlled and uncontrolled outlets Select a color or finish that will work with current and future interior design throughout the facility 	Permanently marked coverplates are recommended Marked colored plates can be useful when choosing Duplex Wiring .
	Stickers 	<ul style="list-style-type: none"> Not recommended Stickers can be applied to receptacles without permanent markings Stickers can fall off and therefore require periodic maintenance for the building operator 	Apply if permanently marked coverplates are not installed