

5.4 Technical Specification: Commercial Lighting

Small Premium Project Type:

Commercial Lighting: Projects within this SPP category will involve the retrofit of existing lighting fixtures with fluorescent or LED lighting technology that improves the efficiency and reduces the energy consumption of the individual fixtures and the applicable space lighting as a whole. Lighting fixture replacements or retrofits must adhere to the fixture replacement schedule identified in this specification.

Description:

Eligible equipment will be lighting technology with high energy-efficiency, including fluorescent or LED. Lighting products must meet the external qualified product lists as specified. The equipment must be serving commercial spaces (i.e., office, retail) that operate during typical business hours.

Minimum Operation:

The eligible luminaire must be in operation for a minimum of 2,500 hours per year.

Equipment Type, Capacity and Performance:

The following features are required to be eligible for a commercial lighting tax credit:

1. General Requirements
 - a. Fluorescent lighting lamps and ballasts must be listed on the Qualifying Product List published by the Consortium for Energy Efficiency (CEE)
 - b. LED lamps must be listed on the QPL published by the Lighting Design Laboratory (LDL) or Energy Star listed
 - c. LED fixtures must be listed on the QPL published by the Design Lights Consortium (DLC) or LDL.
2. Lighting projects must have a simple payback, without incentives, of at least 3 years.
3. Ballast and lamp combinations must be compatible.
4. The total sum of ODOE tax credit incentives and any other incentives received for the project must not exceed project costs.
5. All equipment disposal related to the project shall comply with all applicable federal, state, and local waste disposal regulations.
6. T8 Fluorescent Retrofits to Reduced Wattage T8
 - a. Existing 4-foot T8 fixture with high wattage (32W or greater) lamps retrofit with new fixtures with low wattage (28W or 25W T8) CEE qualified lamps and compatible, listed low ballast factor ballast
 - b. Projects that involve de-lamping are not eligible
 - c. Relamp-only projects that do not require a ballast change-out are not eligible
 - d. Projects are required to maintain appropriate and sufficient lighting levels based upon industry standards for the applicable space type
7. T8 Fluorescent Retrofits to Tubular LED
 - a. Existing 4-foot T8 fixture retrofit to DLC or LDL qualified tubular LED using a retrofit kit that removes or bypasses the existing ballast
 - b. Projects that involve de-lamping are not eligible

- c. Relamp-only projects that do not require a ballast change-out (for example, projects that only replace the lamp and use the existing ballast to power the tubular LED) are not eligible
 - d. Projects are required to maintain appropriate and sufficient lighting levels based upon industry standards for the applicable space type
 - e. Tubular LED lamps must be 22W or less
 - f. Installer must attach a label in a prominent location on the interior of the fixture. This label must indicate the fixture has been retrofit with a tubular LED and fluorescent lamps should not be installed as replacements.
8. T8 Fluorescent Retrofits to LED Fixtures
- a. Existing 4-foot T8 retrofit to a DLC or LDL qualified LED fixture or fixture retrofit kit
 - b. Projects are required to maintain appropriate and sufficient lighting levels based upon industry standards for the applicable space type
 - c. Retrofits must adhere to the following requirements when retrofitting existing fixtures:

Existing Fixture	LED Wattage
<i>4-foot, two-lamp T8</i>	<i>45W or less</i>
<i>4-foot, three-lamp T8</i>	<i>60W or less</i>
<i>4-foot, four-lamp T8</i>	<i>60W or less</i>

9. High Bay Metal Halide Retrofit with High Bay LED
- a. Existing 400W high bay metal halide fixtures and lamps retrofit with DLC or LDL qualified high bay LED fixtures
 - b. Only one-to-one replacement projects are eligible
 - c. Projects are required to maintain appropriate and sufficient lighting levels based upon industry standards for the applicable space type
 - d. LED fixtures must be 250W or less

Measure Category	Make/Model of Fixtures	Nominal Watts per Fixture	Hours of Operation (hr/year)	Incentive	Quantity	Total Incentive (Incentive x Quantity)
Retrofit fixtures that have 4-foot 32W T8 lamps to fixtures that have 4-foot 25W or 28W lamps (bulb and ballast change out required)				\$5 per lamp		
Retrofit fixtures that have 4-foot T8 lamps to fixtures that have 4-foot tubular LED lamps (22W or less, ballast is removed/bypassed)				\$10 per lamp		
Retrofit fixtures that have 4-foot T8 lamps to LED fixtures, based on the following schedule: <ul style="list-style-type: none"> - Existing 2-lamp T8: 45W or less - Existing 3-lamp T8: 60W or less - Existing 4-lamp T8: 60W or less 				\$35 per fixture		
Replace 400 watt or greater high bay HID fixtures with high bay LED fixture				\$100 per fixture		
						Total Incentive: \$ _____