

ASHRAE 90.1, Title 24 & IECC Daylight Harvesting Solutions from a Single Source

As lighting makes up nearly 30 percent of our commercial electricity use, new codes and standards are being introduced on the local municipal, state and national levels to conserve energy and ensure a more efficient future.

Leviton Solutions

With all the variables surrounding code compliance (location, project size, end user needs), selecting a system that will meet all requirements for its designed use can be overwhelming. Fortunately, you can rely on Leviton for quality, reliable, simplified solutions that can be used to comply with IECC, ASHRAE 90.1, and 2016 Title 24, Part 6 daylight harvesting for any sized project—from single office suites and classrooms up to high-rise mixed use buildings and school campuses. As we prepare for the future of energy usage and lighting system design, trust the company that has been innovating the way forward for over a century.

Daylight Harvesting Requirements

Although the specifics and locations vary, ASHRAE 90.1, IECC and Title 24 share a common goal—create a more sustainable future by introducing new energy saving strategies into standard lighting designs. ASHRAE 90.1, IECC and Title 24 all address the need for daylight harvesting strategies.

Daylight Harvesting

- Utilize the ambient light present in a space
- Dim or switch OFF lighting when sufficient ambient light is present or when the space is unoccupied
- Zones utilized to stagger the dimming and switching of lighting loads depending on their distance from ambient light sources, such as windows and skylights
- Mandatory in meeting Title 24 (Section 130.1[d]), ASHRAE 90.1 (Section 9.4.1.1) and IECC (Section C405.2.3)
- Leviton Solutions include Provolt™ Room Controller (PRC), Integrated Room Controller (IRC) and GreenMAX® Relay Control Panels

Solution Assistance and Support

Not only does Leviton provide daylight harvesting solutions from a single source, we offer our customers an unparalleled level of resources to make the project planning process easier.

Design Guides and Cookbooks offer examples of recommended energy code compliant solutions for typical commercial applications. Visit leviton.com/energycodes to download. For additional assistance, contact your Leviton sales representative.

Dollars & Sensors allows you to perform a full energy audit from the palm of your hand. Visit leviton.com/dollarsandsensors to download the free app for iPhone, Android or BlackBerry and generate ROI reports, analyses, Bill of Materials and submittal packages from your desktop.

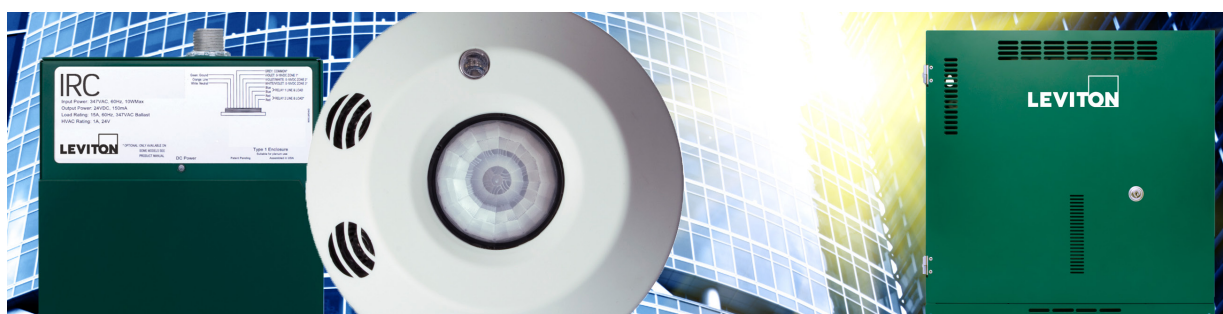
Occupancy Sensor Layout Service expertly creates occupancy sensor layouts directly on your CAD drawings with a List of Equipment at portal.leviton.com.


LightLogger® Program provides an accurate estimate of your energy savings potential with an exclusive payback analysis tool—go to leviton.com/logger.

ez-Learn™ is online training from the comfort of your home or office, available 24/7 at leviton.com/ezlearn.

ASAP Lighting Design Software is point-and-click software that allows you to quickly and simply design, specify and enter orders at leviton.com/asap.

Dedicated technical support at 800-959-6004.

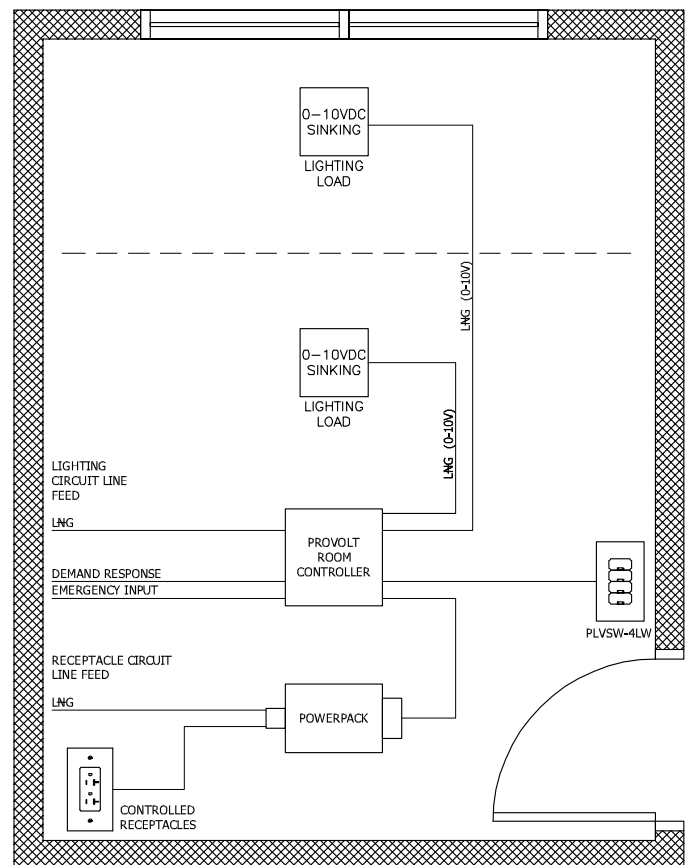


Control Type	2015 IECC	ASHRAE Standard 90.1 2016	California Title 24 2016
Automatic Daylight Control 	<ul style="list-style-type: none"> Control required in daylight control zones that provide these areas with separate control that is independent of the general lighting in the space, which can be stepped or continuous dimming Calibration must be readily accessible Required in spaces where more than 150W of lighting is installed in the Sidelit and Toplit zones Toplit zones must be controlled independent of lights in Sidelit zones Offices, classrooms, labs, and library reading rooms must dim lights continuously from full power to 15% of full light output and capable of full shutoff of all controlled lights Daylit zones in different orientations (N/S/E/W) over 150W must be controlled separately 	<ul style="list-style-type: none"> Sidelit and Toplit areas must be separately controlled by a photocontrol, which can be stepped or continuous dimming Must reduce lighting power in response to available daylight with continuous dimming or with control steps between 50-70%, 20-40%, and OFF 	<ul style="list-style-type: none"> In general area lighting areas, photocontrols are required in all interior daylight spaces with at least 24 sq ft of glazing and a total of 120W or more of installed lighting power in daylight and skylight zones Includes nearly every non-residential space with skylights or windows Secondary zones must have the same level of functionality as those in the primary zone Zones must be controlled separately Photocontrols are required in parking garages with at least 36 sq ft of opening and at least 60W of installed lighting power in daylight areas





Featured Leviton Daylight Harvesting Solution

Two-Zone Solution featuring Provolt Room Controller (PRC)

- Comprehensive solution integrates multiple lighting control strategies—occupancy sensing, 0-10V dimming, daylight harvesting, partial-ON, partial-OFF and demand response
- Combined line voltage multi-technology or PIR sensor, power pack and photocell in a self-contained, easy-to-install compact device
- Configure and test controls from an Android or Apple smart device via the Provolt Bluetooth Mobile App—reduces callbacks
- Can be used to comply with ASHRAE 90.1 requirements of daylight harvesting using receptacle control, space control, lighting controls and automatic shutoff, auto-ON/manual-ON/partial-ON, partial-OFF and full-OFF
- Can be used to comply with IECC requirements of stepped, separate daylight control and dimming
- Can be used to comply with 2016 Title 24, Part 6 daylight harvesting, occupancy/vacancy sensing control, 0-10V dimming, manual ON/OFF, receptacle control and area controls



List of Equipment

	Provolt Room Controller (PRC) O5C04-IDW	1
	Provolt Low-Voltage Keypad, 4-Button PLVSW-4LW	1
	OPP20 Super Duty Power Pack OPP20-0D1	1
	Marked "Controlled" Receptacles 16352-2PW	5

Leviton Manufacturing Co., Inc. Energy Management, Controls and Automation

20497 SW Teton Avenue, Tualatin, OR 97062 **tech line** 800-954-6004 **fax** 503-404-5594
©2017 Leviton Manufacturing Co. Inc. All rights reserved. Subject to change without notice.