

Smart Single Source for Nevada Energy Code Compliance

The Nevada energy code refers to 2021 IECC for its commercial requirements. Lighting control requirements remain unchanged from the original IECC. The latest code version went into effect on June 1, 2021.

Control Type	2021 IECC					
Automatic Receptacle Control	Required in: • Hotel/motel guest rooms					
Automatic Shutoff	 Automatic time switches are required in most areas that are not controlled by an occupancy sensor. The switch must also have a manual override Occupancy sensors are required in a number of applications that must auto-OFF after 20 minutes of vacancy, be manual-ON or auto-ON to no more than 50% power, and incorporate a manual control 					
Manual Space Controls	 Every area enclosed by walls or floor-to-ceiling partitions must have a manual control Controls must be located within the area served by the controls, or must be a remote switch clearly identifying the lights it controls with a status indicator Control must be readily accessible to occupants 					
Parking Garage Control	Parking garage lighting shall be controlled by an occupant sensor or a time switch control Additional lighting controls shall be provided: Lighting power of each luminaire shall be automatically reduced by not less than 30 percent when there is no activity detected within a lighting zone for 20 minutes					
Automatic Daylight Control	 Daylight responsive controls required in toplit and sidelit daylight areas, independently controlled with accessible calibration devices Daylighting zones must be controlled independently from general area lighting using either stepped or continuous dimming methods Daylight responsive controls shall dim lights continuously from full light output to 15 percent of full light output or lower 					
Functional Testing	All lighting controls must be tested by a party not involved with the design or construction team to ensure that the products are working properly					
Application Specific Control Requirements	Required for: • Hotel/motel sleeping units and guest suites • Must have a master control device at the main room entry that controls all permanently installed luminaires and switched receptacles and switches OFF within 20 minutes of vacancy • Display lighting in galleries, museums and monuments that is in addition to general lighting • Lighting for non-visual applications such as plant growth and food warming • Task lighting for medical and dental purposes that is in addition to general lighting					
Exterior Lighting Control	 Lighting must automatically turn OFF as a function of available daylight Building facade lighting to be controlled via dusk/dawn and a set opening and closing time Any other lighting shall have controls configured to reduce connected lighting power by not less than 30% during specific times No later than one hour after business closing to not earlier than one hour before business opening 					
Area Lighting Controls	Each area required to have manual partial-OFF control is also required to be able to reduce the lighting by 80%					

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This document is for informational purposes only. Each project will have its own specific requirements for satisfying 2021 IECC standard compliance based on a variety of factors. Other exceptions or details may apply. Review the standard for specific requirements and/or consult with a professional advisor. Leviton Mfg. Co., Inc. is not responsible for any loss resulting from the use of any information found in this document.

Non-Residential Solutions for 2021 IECC Compliance

Sensing Control

- Broadest range of sensors for any application
- Provolt integrates occupancy sensing, daylight harvesting, and manual-ON/auto-OFF override control in a single unit—no special control stations required
- Plug load control with OPP20 Super Duty Power Pack
- 24V AC/DC input for integration with HVAC/BAS systems

Smart Wallbox Sensors

- Simple sensing and dimming or switching control solution
- Available in two dimming models and a switching model
- Plug load control with ODD24-IDW and OPP20 Super Duty Power Pack
- Easy programming and configuration using the Smart Sensor App

Provolt™ Room Controller (PRC)

- Requires only two devices to be installed for high performance lighting controls—0-10V dimming, occupancy/vacancy sensing, partial-ON, partial-OFF, daylight harvesting and demand response
- Perform all testing, configuration and control from a smart device or tablet via the Provolt App
- Features customizable room templates for fast multi-room replication

Integrated Room Control(IRC)

- Combines occupancy sensing, daylight harvesting, 0-10V dimming, partial-ON, partial-OFF, and demand response capabilities in a stand-alone package
- Kitted with factory configured sensor, photocell, and 4-button switch
- Autocal™ automatic photocell calibration and Ladderless Commissioning™
- Easy automatic closed or open loop multi-zone daylight harvesting control
- Auto 100 hour burn-in

Lumina™ RF Wireless Room Control System

- Compatible with virtually all lamps
- Wireless control for any ON/OFF, 0-10V and phase cut dimming applications
- Add additional components for multi-location control, occupancy/vacancy sensing, daylight harvesting and more
- Lumina RF Standalone App—the only setup tool needed

Integrated Fixture Controls

- Virtually any fixture can be Intellect-enabled
- Complete end-to-end professional lighting and wireless control solution
- Professional smart lighting control based on wireless technology
- Configure, monitor and control the system with the GreenMAX DRC App

GreenMAX® DRC Room Control System

With Wired and Wireless Solutions

- Fully scalable, wired and wireless distributed room control system with each room operating independently of others
- Implement a plug-and-play, Category 6, RJ45 hardwired digital network or wireless mesh system
- Fully configurable from the GreenMAX DRC App



















Non-Residential Solutions for 2021 IECC Compliance

EZ-MAX® Plus Standalone Relay System

- Centralized building lighting control and daylight harvesting in a contractor-friendly, quick to install, simple to configure compact enclosure
- Low voltage inputs allow connection of photocells, occupancy sensors, low-voltage switches, and digital switches for a comprehensive yet easily installed energy management solution
- Built-in astronomical time clock and scheduler
- Auto-detection and auto-assign of installed network switches

GreenMAX® Relay Control System

- Integrates common sensing, dimming, switching, and advanced daylight harvesting applications from the same cabinet
- BACnet IP native in each cabinet for seamless BMS integration
- Industry leading 25,000A Short Circuit Current Rating (SCCR) at 277V
- Integrated 0-10V dimming/switching relay
- Built-in override switch allows manual control of each load individually
- Programming is done with preset "Behaviors" via the industry-exclusive Handheld Display Unit (HDU)

LEVITON

Track Light Limiting Panel (TLLP)

- Prevents overloaded circuits
- Provides tamper-proof current limiting protection for track lighting
- Sets a fixed power consumption limit for designer lighting installations by using the volt amperage rating of the breaker instead of watts per linear feet
- Factory configured to customer specifications—arrives ready to install
- Reduces installation costs—no programming required

Dimensions® D4000

- Offers both stand-alone and integrated room dimming and control
- LED compatible with power extender
- Complete multi-event scheduler and integrated astronomical time clock
- Interfaces with HVAC, emergency, time clock, and load shed auxiliary systems

Sapphire™ Room Controller

- Room Controller function—connects all energy management devices together in a space without requiring a gateway or hub
- Color turning—for circadian rhythms
- Scheduler—provides 7-day rotating schedule, holiday exception calendar, special events calendar and astronomical time clock
- AV controls—delivers single control interface for lighting and AV; ideal for classroom and restaurant applications

Marked Controlled Receptacles

- Meets requirements for identifying receptacles that will automatically be de-energized as part of an overall plug load control program
- 2014 and 2017 NEC requires all 15A and 20A, 125V receptacles that are automatically controlled to be marked with a specific symbol (**U**)











2021 IECC S	tandards							
	C405.2.6 Interior Manual Lighting Controls	C405.2.3 Light Reduction Controls	C405.2.2 Automatic Time Switch Control	C405.2.1 Occupancy Sensors	C405.2.4.1 Daylight Zone Control	C405.5 Specific Application Controls	C405.2.7 Exterior Lighting Control	C408.2.3 Functional Testing
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Product Sol	lutions							
Wall Box Dimmers	×	×				×		
Occupancy Sensors			×	×				
Vacancy Sensors			×	×				
Photocells		×			×			
Smart Wallbox Sensors	×	×	×	×	×	×		
PRC		×	×		×			
IRC		×	×		×			All Leviton solutions are manufactured to the highest quality and performance standards, which can easily be
Lumina™ RF Wireless System	×	×	×	×	×	×		
Integrated Fixture Controls	×	×	×	×	×	×		
GreenMAX® DRC Room Control System	×	×	×	×	×	×		demonstrated at the time of installation to fulfill IECC
EZ-MAX®		×	×		×		×	2021 Section C408.3
Plus		×	×		×		×	
GreenMAX®								
Track Light Limiting Panel (TLLP)		×				×		
D4000			×	-	×	-		
Sapphire™	×	×	×		×			
Marked Controlled Receptacles						×		

NOTE: Solutions may require other products to complete a code compliant energy control solution—consult Leviton for more information.

Leviton Manufacturing Co., Inc. Lighting & Controls