



Frequently Asked Questions

Title 20 California State Appliance Energy Regulation

Q: What is Title 20?

A: Title 20 is a California state appliance efficiency regulation and broadly covers areas related to energy reduction, reduced foreign energy dependence and global climate change. Title 20 requires higher ballast efficiencies for indoor and outdoor metal halide luminaires operating from 150 to 500 watts that are sold in the state of California.

There are four paths to compliance and Pinnacle Lighting currently utilizes the specific wattage bin option to meet compliance. For compliance, projects must utilize a ballast with a minimum efficiency of 88% and a relamping rated wattage within only one of the four wattage bins listed below. The luminaire shall have a permanent, pre-printed factory installed label that states the relamping rated wattage.

- a. 150W to 160W
- b. 200W to 215W
- c. 290W to 335W
- d. 336W to 500W (must be prepackaged with at least one lamp per socket having a minimum lamp mean efficacy of 80 lumens per watt.)

Q: When does Title 20 become effective?

A: The updated regulations are effective January 1, 2010.

Q: What Pinnacle Architectural Lighting products are affected?

A: Pinnacle Architectural Lighting's Peak Large is the only product line affected by these new regulations.

Q: Can I order replacement parts for existing projects?

A: Yes, Title 20 applies only to luminaires manufactured after January 1, 2010. Components can be purchased for products manufactured prior to the effective date.

Q: Will I need to retrofit luminaires purchased in 2009 but are scheduled to be installed in 2010?

A: No. All metal halide luminaires manufactured prior to January 1, 2010 can be installed in the state of California given the ballast is 88% efficient meeting the previously set EISA requirements.

Q: Are all lighting manufacturers required to comply with Title 20?

A: All luminaire manufacturers must comply with the updated Title 20 regulations.

Q: What states are impacted by Title 20?

A: Title 20 applies only to installations in the state of California.

Q: Are there any metal halide luminaires that are not required to meet the minimum ballast efficiencies?

A: Below are the metal halide systems that are exempt from Title 20:

1. Luminaires that use regulated lag ballasts,
2. Luminaires that use electronic ballasts which operate at 480 volts, or
3. Luminaires that meet all three of the following requirements:
 - a. Are rated for use only with 150 watt lamps, and
 - b. Are rated for use in wet locations, as specified by the National Electrical Code 2002, section 410.4(A), and
 - c. Contains a ballast that is rated to operate at ambient air temperatures above 50 degrees C, as specified by UL 1029-2001.

See chart on the following page for Pinnacle solutions to the updated Title 20 regulations.

The following 2 charts show the 3 paths to Title 20 compliance for Indoor and Outdoor Metal Halide. Pinnacle Lighting utilizes solution 1 for all Peak Large metal halide products. Locate the wattage specified in the "Lamp Wattage" column. See "Solution 1" column for Pinnacle Lighting's Peak Large lamp option that meets Title 20.

Indoor Metal Halide Options			
Lamp Wattage	Recommended Title 20 Compliant SOLUTION #1 (Specific Wattage Bins)	Recommended Title 20 Compliant SOLUTION #2 (Daylight / Occupancy Sensor with 88% efficient ballast)	Recommended Title 20 Compliant SOLUTION #3 (90% + efficient ballast for 150W-250W or 92%+ efficient ballast for 251W-500W)
150	Integral Electronic 150W, Use 200W, 100W	Not currently available with Pinnacle Lighting Product ¹	
175	Use 200W, 150 (integral ballast)		
200	Allowed, no change required		
250	Use 320W		
320	Allowed, no change required		
350	Use 320W		
360	Use 320W		
400	Use 320W		
450	Use 320W		

Outdoor Metal Halide Options			
Lamp Wattage	Recommended Title 20 Compliant SOLUTION #1 (Specific Wattage Bins)	Recommended Title 20 Compliant SOLUTION #2 (Daylight / Occupancy Sensor with 88% efficient ballast)	Recommended Title 20 Compliant SOLUTION #3 (90% + efficient ballast for 150W-250W or 92%+ efficient ballast for 251W-500W)
150	Allowed, no change required	Not currently available with Pinnacle Lighting Products ¹	
175	Use 200W		
200	Allowed, no change required		
250	Use 320W		
320	Allowed, no change required		
350	Use 320W		
360	Use 320W		
400	Use 320W		
450	Use 320W		

¹ As horizontal dimming with HID lamps and high wattage electronic ballasts become available, Pinnacle Lighting will offer these as Title 20 compliance paths.

For additional questions, please contact your quotes representative at Pinnacle Architectural Lighting at 303-322-5570.

