



## SYSTEMS APPROACH

### DAYLIGHTING SYSTEMS

Daylighting has a major impact on a building's functionality from many perspectives – not only on energy costs associated with illumination and space conditioning, but it also may enhance the building's comfort, ambience, and the productivity of its occupants.

Daylighting systems incorporating sidelighting from windows or clerestories, and toplighting from skylights or roof monitors are eligible for incentives. The kWh savings estimates are based on the kW of lighting controlled, the Performance Index (PI) of the glazing (visible light transmittance/solar heat gain coefficient), and the total area of high-performance glazing.

Incentives for daylighting systems are calculated using \$0.05 per annualized kWh savings and will also receive \$100 per peak KW saved for all measures, subject to all applicable caps.

#### ELIGIBILITY REQUIREMENTS:

- For sidelighting, glazing must have a minimum Performance Index of 1.28.
- For toplighting, glazing must have a minimum Performance Index of 0.80.
- For toplighting with skylights, apertures must comprise at least 2% of the roof area above spaces to be daylit.
- Photocontrols must regulate primary luminaires in the daylit area(s) as defined by Title 24.
- Photocontrols must be capable of automatically adjusting illuminance levels, and must have both deadband and time delay features as defined by Title 24.
- Daylighting that is necessary to achieve compliance with Title 24 standards are not considered in the LPD reduction calculation.

### INTERIOR LIGHTING SYSTEMS

Interior lighting is a major component of any building's energy use. Thoughtful attention to illumination requirements within the building, along with thorough specifications for efficient components and appropriate controls, can substantially minimize energy usage while enhancing the functionality of interior spaces.

To qualify for *owner incentives*, projects need to exceed Title 24 standards by at least 10% in the building's lighting power density (LPD). The system must still provide adequate light levels as recommended by the Illuminating Engineering Society.

Incentives for interior lighting systems are calculated using \$0.05 per annualized kWh savings and will also receive \$100 per peak KW saved for all measures, subject to all applicable caps.

The following lighting measures should be considered in an efficient lighting system design, and may qualify for incentives:

- High-efficiency lamps
- Efficient ballasts
- Occupancy sensors
- Photoelectric dimming controls
- Improved lighting design

# LIGHTING GUIDELINES

Type of Use	2008 T24 Allowance	SAVINGS BY DESIGN Maximum W/sf	Type of Use	2008 T24 Allowance	SAVINGS BY DESIGN Maximum W/sf
<b>COMPLETE BUILDING METHOD</b>			<b>AREA CATEGORY METHOD CONT'D.</b>		
Auditoriums	1.50	1.35	Financial Transactions	1.20	1.08
Classroom Building	1.10	0.99	General Commercial/Industrial: High Bay	1.00	0.90
Convention Centers	1.20	1.08	General Commercial/Industrial: Low Bay	0.90	0.81
Financial Institutions	1.10	0.99	General Commercial/Industrial: Precision	1.20	1.08
General Commercial/Industrial: High Bay	1.00	0.90	Grocery Sales	1.60	1.44
General Commercial/Industrial: Low Bay	1.00	0.90	Hotel Function Area	1.50	1.35
Grocery Stores	1.50	1.35	Housing: Senior Housing Public & Common Areas	1.50	1.35
Industrial/Commercial Storage Buildings	0.60	0.54	Housing: Multifamily / Dormitory Public & Common Areas	1.00	0.90
Library	1.30	1.17	Kitchen/Food Preparation	1.60	1.44
Medical Buildings and Clinics	1.10	0.99	Laboratory, Scientific	1.40	1.26
Office Buildings	0.85	0.77	Laundry	0.90	0.81
Parking Garages	0.30	0.27	Library Reading Areas	1.20	1.08
Religious Facilities	1.60	1.44	Library Stacks	1.50	1.35
Restaurants	1.20	1.08	Lobby: Hotel	1.10	0.99
Schools	1.00	0.90	Lobby: Main Entry	1.50	1.35
Theatres	1.30	1.17	Locker/Dressing Room	0.80	0.72
All Others	0.60	0.54	Lounge/Recreation	1.10	0.99
<b>AREA CATEGORY METHOD</b>			Malls and Atria	1.20	1.08
Auditoriums	1.50	1.35	Medical/Clinical Care	1.20	1.08
Auto Repair	0.90	0.81	Office (>250 square feet)	0.90	0.81
Beauty Salon	1.70	1.53	Office (≤250 square feet)	1.10	0.99
Civic Meeting Place	1.30	1.17	Parking Garages: Parking Area	0.20	0.18
Classroom/Lecture/Training/Vocational Rooms	1.20	1.08	Parking Garages: Ramps and Entries	0.60	0.54
Commercial/Industrial Storage (Cond and Uncond)	0.60	0.54	Religious Worship	1.50	1.35
Commercial/Industrial Storage (Refrigerated)	0.70	0.63	Retail Merchandise Sales/Wholesale Showrooms	1.60	1.44
Convention/Conference/Multipurpose/Meeting Centers	1.40	1.26	Tenant Lease Space	1.00	0.90
Corridors/Restrooms/Stairs and Support Areas	0.60	0.54	Theaters: Motion Picture	0.90	0.81
Dining	1.10	0.99	Theaters: Performance	1.40	1.26
Electrical/Mechanical Rooms	0.70	0.63	Transportation Function	1.20	1.08
Exercise Center/Gymnasium	1.00	0.90	Waiting Areas	1.10	0.99
Exhibit/Museum Areas	2.00	1.80	All Others	0.60	0.54