



1531 Interior Lighting Power Allowance. The interior lighting power allowance shall be calculated by multiplying the gross interior floor area, in square feet, by the appropriate unit lighting power allowance, in watts per square foot, for the use as specified in Table 15-1. Accessory uses, including corridors, lobbies, and toilet facilities shall be included with the primary use.

The lighting power allowance for each use shall be separately calculated and summed to obtain the interior lighting power allowance.

In cases where a lighting plan for only a portion of a building is submitted, the interior lighting power allowance shall be based on the gross interior floor area covered by the plan.

Plans submitted for common areas only, including corridors, lobbies, and toilet facilities shall use the lighting power allowance for common areas in Table 15-1.

When insufficient information is known about the specific use of the space, the allowance shall be based on the apparent intended use of the space.

1532 Exterior Lighting Power Allowance: All exterior building grounds luminaires that operate at greater than 100 watts shall contain lamps having a minimum efficacy of 60 lm/W unless the luminaire is controlled by a motion sensor or qualifies for one of the following exceptions.

The total exterior lighting power allowance for all exterior building applications is the sum of the individual lighting power densities permitted in Table 15-2 for these applications. Trade-offs are allowed only among exterior lighting applications listed in the Table 15-2 "Tradable Surfaces" section.

EXCEPTION: Lighting used for the following exterior applications is exempt when equipped with a control device independent of the control of the nonexempt lighting:

- a. Specialized signal, directional, and marker lighting associated with transportation.
- b. Lighting integral to equipment or instrumentation and installed by its manufacturer.
- c. Lighting for theatrical purposes, including performance, stage, film production, and video production.
- d. Lighting for athletic playing areas.
- e. Temporary lighting.
- f. Lighting for industrial production.
- g. Theme elements in theme/amusement parks.
- h. Lighting used to highlight features of public monuments.
- i. Group U Occupancy accessory to Group R-3 or R-4 Occupancy.

Note: See the City of Tacoma Energy Code for additional information on how to meet the Energy Code Lighting Requirements. The Energy Code is available on the City Web Site:

<http://govme.cityoftacoma.org/govme>

**TABLE 15-1
UNIT LIGHTING POWER ALLOWANCE (LPA)**

Use ¹	LPA ² (W/ft ²)
Automotive facility	0.9
Convention center	1.2
Courthouse	1.2
Cafeterias, fast food establishments ⁵ , restaurants/bars ⁵	1.3
Dormitory	1.0
Exercise center	1.0
Gymnasias ⁹ , assembly spaces ⁹	1.0
Health care clinic	1.0
Hospital, nursing homes, and other Group I-1 and I-2 Occupancies	1.2
Hotel/motel	1.0
Hotel banquet/conference/exhibition hall ^{3,4}	2.0
Laboratory spaces (all spaces not classified "laboratory" shall meet office and other appropriate categories)	1.8
Laundries	1.2
Libraries ⁵	1.3
Manufacturing facility	1.3
Museum	1.1
Office buildings, office/administrative areas in facilities of other use types (including but not limited to schools, hospitals, institutions, museums, banks, churches) ^{5,7,11}	1.0
Parking garages	0.2
Penitentiary and other Group I-3 Occupancies	1.0
Police and fire stations ⁸	1.0
Post office	1.1
Retail ¹⁰ , retail banking, mall concourses, wholesale stores (pallet rack shelving)	1.5
School buildings (Group E Occupancy only), school classrooms, day care centers	1.2
Theater, motion picture	1.2
Theater, performing arts	1.6
Transportation	1.0
Warehouses ¹¹ , storage areas	0.5
Workshop	1.4
Plans Submitted for Common Areas Only⁷	
Main floor building lobbies ³ (except mall concourses)	1.2
All building common areas, corridors, toilet facilities and washrooms, elevator lobbies, including Group R-1 and R-2 Occupancies	0.8



Footnotes for Table 15-1

¹ In cases in which a general use and a specific use are listed, the specific use shall apply. In cases in which a use is not mentioned specifically, the *Unit Power Allowance* shall be determined by the building official. This determination shall be based upon the most comparable use specified in the Table. See Section 1512 for exempt areas.

² The watts per square foot may be increased, by 2 percent per foot of ceiling height above 20 feet, unless specifically directed otherwise by subsequent footnotes.

³ The watts per square foot of room may be increased by 2 percent per foot of ceiling height above 12 feet.

⁴ For all other spaces, such as seating and common areas, use the *Unit Light Power Allowance* for assembly.

⁵ The watts per square foot of room may be increased by 2 percent per foot of ceiling height above nine feet.

⁶ Reserved.

⁷ For conference rooms and offices less than 150 ft² with full-height partitions, a Unit Lighting Power allowance of 1.1 w/ft² may be used.

⁸ Reserved.

⁹ For indoor sport tournament courts with adjacent spectator seating, for more than 5000 the *Unit Light Power Allowance* for the court area is 2.60 W/Ft².

¹⁰ Display window illumination installed within two feet of the window, provided that the display window is separated from the retail space by walls or at least three-quarter-height partitions (transparent or opaque) and lighting for freestanding display where the lighting moves with the display are exempt.

An additional 1.5 w/ft² of merchandise display and signage luminaires may be provided within localized display areas, including luminaires on display for sale, merchandise display lighting, and interior signs and billboards provided that they comply with all five of the following:

- a. That the overall increase in lighting within the building, for display lighting, does not exceed 0.5 watts per square foot of gross floor area of the building.
- b. Located on ceiling-mounted track or directly on or recessed into the ceiling itself (not on the wall).
- c. Adjustable in both the horizontal and vertical axis (vertical axis only is acceptable for fluorescent and other fixtures with two points of track attachment).
- d. Fitted with LED, tungsten halogen, fluorescent, or high intensity discharge lamps.
- e. Display lighting shall be controlled by an automatic timer.

This additional lighting power is allowed only if the lighting is actually installed.

¹¹ Provided that a floor plan, indicating rack location and height, is submitted, the square footage for a warehouse may be defined, for computing the interior *Unit Light Power Allowance*, as the floor area not covered by racks plus the vertical face area (access side only) of the racks. The height allowance defined in footnote 2 applies only to the floor area not covered by racks.

TABLE 15-2
LIGHTING POWER DENSITIES FOR BUILDING EXTERIORS

Tradable Surfaces (Lighting power densities for uncovered parking areas, building grounds, building entrances and exits, canopies and overhangs and outdoor sales areas may be traded.)	Uncovered Parking Areas Parking Lots and drives	0.15 W/ft ²
	Building Grounds Walkways less than 10 feet wide	1.0 W/linear foot
	Walkways 10 feet wide or greater	0.2W/ft ²
	Plaza areas	
	Special Feature Areas	
	Stairways	1.0 W/ft ²
	Building Entrances and Exits Main entries	30 W/linear foot of door width
	Other doors	20 W/linear foot of door width
	Canopies and Overhangs Canopies (free standing and attached and overhangs)	1.25 W/ft ²
	Outdoor Sales Open areas (including vehicle sales lots)	0.5 W/ft ²
Street frontage for vehicle sales lots in addition to "open area" allowance	20 W/linear foot	
Non-Tradable Surfaces (Lighting power density calculations for the following applications can be used only for the specific application and can-not be traded between surfaces or with other exterior lighting. The following allowances are in addition to any allowance otherwise permitted in the "tradable Surfaces" section of this table.)	Building Facades	0.2 W/ft ² for each illuminated wall or surface or 5.0W/linear foot for each illuminated wall or surface length
	Automated teller machines and night depositories	270 W per location plus 90 W per additional ATM per location
	Entrances and gatehouse inspection stations at guarded facilities	1.25 W/ft ² of uncovered area (covered areas are included in the "Canopies and Overhangs" section of "Tradable Surfaces")
	Loading areas for law enforcement, fire, ambulance and other emergency service vehicles	0.5 W/ft ² of uncovered area (covered areas are included in the "Canopies and Overhangs" section of "Tradable Surfaces")
	Material handling and associated storage	0.5 W/ft ²
	Drive-up windows at fast food restaurants	400W per drive-through
	Parking near 24-hour retail entrances	800 W per main entry