

International Energy Conservation Code (IECC) – 2021

Read Complete Code: https://codes.iccsafe.org/content/IECC2021P2/chapter-4-ce-commercial-energy-efficiency#IECC2021P2_CE_Ch04_SecC405.5

Often-used Interior Lighting Power Allowances: Building Area Method

International Energy Conservation Code (IECC) - 2021	
Table C405.3.2(1) Interior Lighting Power Allowances: Building Area Method	
Building Area Type	LPD, W/ft ²
Gymnasium	0.76
Hospital	0.96
Hotel/motel	0.56
Library	0.83
Manufacturing facility	0.82
Museum	0.55
Office	0.64
Parking garage	0.18
Retail	0.84
School/university	0.72
Sports arena	0.76
Warehouse	0.45
Workshop	0.91

Often-used Interior Lighting Power Allowances: Space-by-space Area Method

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Table C405.3.2(2) Interior Lighting Power Allowances: Space-by-space Area Method	
Common Space Types	LPD, W/ft ²
Computer Room, data centre	0.94
Conference/Meeting/Multipurpose Rooms	0.97
Corridor	0.41
Food Preparation Area	1.09
Laundry/Washing Area	0.53
Office:	
Enclosed	0.74
Open plan	0.61
Parking area interior	0.15
Restroom	0.63
Seating Area, General	0.23
Workshop	1.26

Table C405.5.2 (1) Exterior Lighting Zones

LIGHTING ZONE	DESCRIPTION
1	Developed areas of national parks, state parks, forest land, and rural areas
2	Areas predominantly consisting of residential zoning, neighborhood business districts, light industrial with limited nighttime use and residential mixed-use areas
3	All other areas not classified as lighting zone 1, 2 or 4
4	High-activity commercial districts in major metropolitan areas as designated by the local land use planning authority

Table C405.5.2 (2) Lighting Power Allowances for Building Exteriors

	Zone 1	Zone 2	Zone 3	Zone 4
Base Site Allowance	350 W	400 W	500 W	900 W
Uncovered Parking Areas				
Parking areas and drives	0.03 W/ft ²	0.04 W/ft ²	0.06 W/ft ²	0.08 W/ft ²
Building Grounds				
Walkways and ramps less than 10 feet wide	0.50 W/linear foot	0.50 W/linear foot	0.60 W/linear foot	0.70 W/linear foot
Walkways and ramps 10 feet wide or greater, plaza areas, special feature areas	0.10 W/ft ²	0.10 W/ft ²	0.11 W/ft ²	0.14 W/ft ²
Dining areas	0.65 W/ft ²	0.65 W/ft ²	0.75 W/ft ²	0.95 W/ft ²
Stairways	0.60 W/ft ²	0.70 W/ft ²	0.70 W/ft ²	0.70 W/ft ²
Pedestrian tunnels	0.12 W/ft ²	0.12 W/ft ²	0.14 W/ft ²	0.21 W/ft ²
Landscaping	0.03 W/ft ²	0.04 W/ft ²	0.04 W/ft ²	0.04 W/ft ²
Building Entrances and Exits				
Pedestrian and vehicular entrances and exits	14 W/linear foot of opening	14 W/linear foot of opening	21 W/linear foot of opening	21 W/linear foot of opening
Entry canopies	0.20 W/ft ²	0.25 W/ft ²	0.40 W/ft ²	0.40 W/ft ²
Loading docks	0.35 W/ft ²	0.35 W/ft ²	0.35 W/ft ²	0.35 W/ft ²
Sales Canopies				
Free-standing and attached	0.40 W/ft ²	0.40 W/ft ²	0.60 W/ft ²	0.70 W/ft ²
Outdoor Sales				
Open areas (including vehicle sales lots)	0.20 W/ft ²	0.20 W/ft ²	0.35 W/ft ²	0.50 W/ft ²
Street frontage for vehicle sales lots in addition to "open area" allowance	No allowance	7 W/linear foot	7 W/linear foot	21 W/linear foot

For SI: 1 foot = 304.8 mm, 1 watt per square foot = W/0.0929 m².

Table C405.5.2 (3) Individual Lighting Power Allowances for Building Exteriors

LIGHTING ZONES				
	Zone 1	Zone 2	Zone 3	Zone 4
Building facades	No allowance	0.075 W/ft ² of gross above-grade wall area	0.113 W/ft ² of gross above-grade wall area	0.15 W/ft ² of gross above-grade wall area
Automated teller machines (ATM) and night depositories	135 W per location plus 45 W per additional ATM per location			
Uncovered entrances and gatehouse inspection stations at guarded facilities	0.50 W/ft ² of area			
Uncovered loading areas for law enforcement, fire, ambulance and other emergency service vehicles	0.35 W/ft ² of area			
Drive-up windows and doors	200 W per drive through			
Parking near 24-hour retail entrances.	400 W per main entry			

For SI: For SI: 1 watt per square foot = W/0.0929 m².