

(Effective until March 15, 2024)

WAC 51-11C-405054 Table C405.4.2(2)—Interior lighting power allowances—Space-by-space method.

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Interior Lighting Power Allowances—Space-by-Space Method**

Common Space-by-Space Types^a	LPD (w/ft²)
Atrium - Less than 20 feet in height	0.39
Atrium - 20 to 40 feet in height	0.48
Atrium - Above 40 feet in height	0.60
Audience/seating area - Permanent	
In an auditorium	0.61
In a gymnasium	0.23
In a motion picture theater	0.27
In a penitentiary	0.67
In a performing arts theater	1.16
In a religious building	0.72
In a sports arena	0.33
Otherwise	0.23
Banking activity area ⁿ	0.61
Breakroom (see lounge/breakroom)	
Classroom/lecture hall/training room	
In a penitentiary	0.89
Otherwise	0.71 ^m
Computer room, data center	0.94
Conference/meeting/multipurpose	0.97
Confinement cell	0.70
Copy/print room	0.31
Corridor	
In a facility for the visually impaired (and not used primarily by the staff) ^b	0.71
In a hospital	0.71
In a manufacturing facility	0.41
Otherwise ^c	0.41
Courtroom ^c	1.20
Dining area	
In a penitentiary	0.42
In a facility for the visually impaired (and not used primarily by the staff) ^b	1.27
In a bar/lounge or leisure dining ⁿ	0.86
In cafeteria or fast food dining	0.40
In a family dining area ⁿ	0.60
Otherwise	0.43
Electrical/mechanical	0.43

Common Space-by-Space Types^a	LPD (w/ft²)
Emergency vehicle garage	0.52
Food preparation	1.09
Guest room ^{a,b}	0.41
Laboratory	
In or as a classroom	1.11
Otherwise	1.33
Laundry/washing area	0.53
Loading dock, interior	0.88
Lobby ^c	
In a facility for the visually impaired (and not used primarily by the staff) ^b	1.69
For an elevator	0.65
In a hotel	0.51
In a motion picture theater	0.23
In a performing arts theater	1.25
Otherwise	0.84
Locker room	0.52
Lounge/breakroom ⁿ	
In a health care facility ⁿ	0.42
Otherwise ⁿ	0.59
Office	
Enclosed ≤ 250	0.74
Enclosed > 250	0.66
Open plan	0.61
Parking area, interior	0.15
Pharmacy area	1.66
Restroom	
In a facility for the visually impaired (and not used primarily by the staff) ^b	1.26
Otherwise ⁿ	0.63
Sales area	1.05
Seating area, general	0.23
Stairway (see space containing stairway)	
Stairwell ⁿ	0.49
Storage room	
< 50 ft ²	0.51
50-100 ft ²	0.38
All other storage	0.38
Vehicular maintenance	0.60
Workshop	1.26
Building Specific Space-by-Space Types^a	LPD (w/ft²)
Automotive (see vehicular maintenance)	

Building Specific Space-by-Space Types^a	LPD (w/ft²)
Convention center - Exhibit space	0.61
Dormitory living quarters ^{a,b}	0.50
Facility for the visually impaired ^b	
In a chapel (and not used primarily by the staff) ^b	0.70
In a recreation room (and not used primarily by the staff) ^b	1.77
Fire stations ^g	
Sleeping quarters	0.23
Gymnasium/fitness center	
In an exercise area	0.90
In a playing area	0.85
Health care facility	
In an exam/treatment room	1.40
In an imaging room	0.94
In a medical supply room	0.62
In a nursery	0.92
In a nurse's station	1.17
In an operating room	2.26
In a patient room ^g	0.68
In a physical therapy room	0.91
In a recovery room	1.25
Library	
In a reading area ⁿ	0.31
In the stacks	1.10
Manufacturing facility	
In a detailed manufacturing area	0.80
In an equipment room	0.76
In an extra high bay area (greater than 50-foot floor-to-ceiling height)	1.42
In a high bay area (25 - 50-foot floor-to-ceiling height)	1.24
In a low bay (< 25-foot floor-to-ceiling height)	0.86
Museum	
In a general exhibition area	0.31
In a restoration room	1.10
Performing arts theater dressing/fitting room	0.41
Post office - Sorting area	0.76
Religious buildings	
In a fellowship hall ⁿ	0.54
In a worship/pulpit/choir area ⁿ	0.85
Retail facilities	

Building Specific Space-by-Space Types^a	LPD (w/ft²)
In a dressing/fitting room	0.51
In a mall concourse	0.82
Sports arena - Playing area	
For a Class 1 facility ⁱ	2.94
For a Class 2 facility ^j	2.01
For a Class 3 facility ^k	1.30
For a Class 4 facility ^l	0.86
Transportation	
In a baggage/carousel area	0.39
In an airport concourse	0.25
At a terminal ticket counter ⁿ	0.51
Warehouse - Storage area	
For medium to bulky palletized items	0.33
For smaller, hand-carried items	0.69

For SI: 1 foot = 304.8 mm, 1 watt per square foot = 11 W/m².

- a In cases where both a common space type and a building area specific space type are listed, the building area specific space type shall apply.
- b A facility for the visually impaired is a facility that is licensed or will be licensed by local or state authorities for senior long-term care, adult daycare, senior support or people with special visual needs.
- c For spaces in which lighting is specified to be installed in addition to, and controlled separately from, the general lighting for the purpose of highlighting art or exhibits, provided that the additional lighting power shall not exceed 0.5 W/ft² of such spaces.
- d Reserved.
- e Reserved.
- f Reserved.
- g Where sleeping units are excluded from lighting power calculations by application of Section R404.1, neither the area of the sleeping units nor the wattage of lighting in the sleeping units is counted.
- h Where dwelling units are excluded from lighting power calculations by application of Section R404.1, neither the area of the dwelling units nor the wattage of lighting in the dwelling units is counted.
- i Class I facilities consist of professional facilities; and semiprofessional, collegiate or club facilities with seating for 5,000 or more spectators.
- j Class II facilities consist of collegiate and semiprofessional facilities with seating for fewer than 5,000 spectators; club facilities with seating between 2,000 and 5,000 spectators; and amateur league and high school facilities with seating for more than 2,000 spectators.
- k Class III facilities consist of club, amateur league and high school facilities with seating for 2,000 or fewer spectators.
- l Class IV facilities consist of elementary school and recreational facilities; and amateur league and high school facilities without provisions for spectators.
- m For classrooms, additional lighting power allowance of 4.50 W/lineal foot of white or chalk boards for directional lighting dedicated to white or chalk boards.
- n Additional lighting power allowance of 0.30 W/ft² for ornamental lighting. Qualifying ornamental lighting includes luminaires such as chandeliers, sconces, lanterns, neon and cold cathode, light emitting diodes, theatrical projectors, moving lights and light color panels when any of those lights are used in a decorative manner that does not serve as display lighting or general lighting.

[Statutory Authority: RCW 19.27A.025, 19.27A.045 and chapter 19.27 RCW. WSR 20-21-080, § 51-11C-405054, filed 10/19/20, effective 2/1/21.

Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-405054, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-405054, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-405054, filed 2/1/13, effective 7/1/13.]

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In a performing arts theater	1.16
In a religious building	0.72
In a sports arena	0.33
Otherwise	0.23
Banking activity area ⁱ	0.61
Breakroom (see lounge/breakroom)	
Classroom/lecture hall/training room	
In a penitentiary	0.89
Otherwise ^h	0.71
Computer room, data center	0.94
Conference/meeting/multipurpose	0.97
Confinement cell	0.70
Copy/print room	0.31
Corridor	
In a facility for the visually impaired (and not used primarily by the staff) ^b	0.71
In a hospital	0.71
In a manufacturing facility	0.41
Otherwise ^{c,i}	0.41
Courtroom ^c	1.20
Dining area	
In a penitentiary	0.42

Common Space-by-Space Types^a	LPD (w/ft²)
In a facility for the visually impaired (and not used primarily by the staff) ^b	1.27
In a bar/lounge or leisure dining ⁱ	0.86
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In or as a classroom	1.11
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Laundry/washing area	0.53
Loading dock, interior	0.88
Lobby ^c	
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Enclosed > 250	0.66
Open plan	0.61
Parking area, interior	0.15
Pharmacy area	1.66
Restroom	
In a facility for the visually impaired (and not used primarily by the staff) ^b	1.26
Otherwise ⁱ	0.63
Sales area	1.05
Seating area, general	0.23
Stairway (see space containing stairway)	
Stairwell ^{c,i}	0.49
Storage room	

Common Space-by-Space Types^a	LPD (w/ft²)
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Building Specific Space-by-Space Types^a	LPD (w/ft²)
Automotive (see vehicular maintenance)	
Convention center - Exhibit space ⁱ	0.61
Dormitory living quarters ^{a,b}	0.50
Facility for the visually impaired ^b	
In a chapel (and not used primarily by the staff) ^b	0.70
In a recreation room (and not used primarily by the staff) ^b	1.77
Fire stations	
Sleeping quarters	0.23
Gymnasium/fitness center	
In an exercise area	0.90
In a playing area	0.85
Health care facility ^{c,i}	
In an exam/treatment room	1.40
In an imaging room	0.94
In a medical supply room	0.62
In a nursery	0.92
In a nurse's station	1.17
In an operating room	2.26
In a patient room	0.68
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Library	
In a reading area ⁱ	0.96
In the stacks	1.10
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In a detailed manufacturing area	0.80
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In an extra high bay area (greater than 50-foot floor-to-ceiling height)	1.42
In a high bay area (25 - 50-foot floor-to-ceiling height)	1.24
In a low bay (< 25-foot floor-to-ceiling height)	0.86
Museum	
In a general exhibition area ⁱ	0.31
In a restoration room	1.10

Building Specific Space-by-Space Types^a	LPD (w/ft²)
Performing arts theater dressing/ fitting room	0.41
Post office - Sorting area	0.76
Religious buildings	
In a fellowship hall ⁱ	0.54
In a worship/pulpit/choir area ⁱ	0.85
Retail facilities	
In a dressing/fitting room	0.51
In a mall concourse	0.82
Sports arena - Playing area	
For a Class 1 facility ^d	2.94
For a Class 2 facility ^e	2.01
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For a Class 4 facility ^g	0.86
Transportation	
In a baggage/carousel area	0.39
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At a terminal ticket counter ⁱ	0.51
Warehouse - Storage area	
For medium to bulky palletized items	0.33
For smaller, hand-carried items	0.69

For SI: 1 foot = 304.8 mm, 1 watt per square foot = 10.76 W/m².

- a In cases where both a common space type and a building area specific space type are listed, the building area specific space type shall apply.
- b A facility for the visually impaired is a facility that is licensed or will be licensed by local or state authorities for senior long-term care, adult daycare, senior support or people with special visual needs.
- c Additional lighting power allowance of 0.2 watts per square foot for the purpose of highlighting art or exhibits. This additional power shall be permitted only where the specified lighting is installed in addition to and controlled separately from *general lighting* in accordance with Section C405.2.6. This additional power shall be used only for the specified luminaires and shall not be used for any other purpose and it shall not be added to any other space or the interior power allowance.
- d Class I facilities consist of professional facilities; and semiprofessional, collegiate or club facilities with seating for 5,000 or more spectators.
- e Class II facilities consist of collegiate and semiprofessional facilities with seating for fewer than 5,000 spectators; club facilities with seating between 2,000 and 5,000 spectators; and amateur league and high school facilities with seating for more than 2,000 spectators.
- f Class III facilities consist of club, amateur league and high school facilities with seating for 2,000 or fewer spectators.
- g Class IV facilities consist of elementary school and recreational facilities; and amateur league and high school facilities without provisions for spectators.
- h For classrooms, additional lighting power allowance of 4.50 W/lineal foot of white or chalk boards for directional lighting dedicated to white or chalk boards.

- i Additional lighting power allowance of 0.15 W/ft² for ornamental lighting. Qualifying ornamental lighting includes luminaires that are specifically used in a decorative manner. This additional power shall be permitted only where the specified lighting is installed in addition to and controlled separately from display or *general lighting* in accordance with Section C405.2.6. This additional power shall be used only for the specified luminaires and it shall not be added to any other space or the interior power allowance.
- j Where a space is designated as unfinished, neither the area nor the lighting power in the space shall be calculated as part of the LPA.

[Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapters 19.27A and 19.27 RCW. WSR 22-14-091, 23-12-101, and 23-20-021, § 51-11C-405054, filed 7/1/22, 6/7/23, and 9/25/23, effective 3/15/24. Statutory Authority: RCW 19.27A.025, 19.27A.045 and chapter 19.27 RCW. WSR 20-21-080, § 51-11C-405054, filed 10/19/20, effective 2/1/21. Statutory Authority: RCW 19.27A.020, 19.27A.025, 19.27A.160 and chapter 19.27 RCW. WSR 19-24-040, § 51-11C-405054, filed 11/26/19, effective 7/1/20. Statutory Authority: RCW 19.27A.025, 19.27A.160, and 19.27.074. WSR 16-03-072, § 51-11C-405054, filed 1/19/16, effective 7/1/16. Statutory Authority: RCW 19.27A.020, 19.27A.025 and chapters 19.27 and 34.05 RCW. WSR 13-04-056, § 51-11C-405054, filed 2/1/13, effective 7/1/13.]