

Simplified Building Method—Lighting

Oregon Energy Efficiency Specialty Code Compliance Checklist

This checklist may be used to demonstrate compliance with the Simplified Building Method Compliance Path for Interior and Exterior Lighting, Section 9.3 of the Oregon Energy Efficiency Specialty Code (OEESC)/ASHRAE Standard 90.1. **COM***check* is not required.

Base requirements:

- 1. Allowed only for new buildings, alterations and additions where at least 80% of the floor area supports either office buildings, retail buildings, or school buildings.
- 2. The *gross floor area* of the building shall be less than 25,000 ft².
- 3. COM*check* certificate, if used, may show lighting results as "FAILS."

4. Where ap	we certificate, if used, may snow lighting results plicable, the energy credits required in Chapted, energy credits shall be identified using the En	er 11 and the OEESC		COM <i>check</i> is not	
CONTACT & BUILDING INFORMATION					
Contact name:			Phone number:	Phone number:	
Email:					
Site address: Map and tax lot:					
City:			State: Oregon	ZIP:	
	СОМ	PLIANCE			
The following table identifies the lighting power allowance (LPA), the correlating table in ASHRAE Standard 90.1 and the parts of this checklist to be completed based on the building type and area. Check the boxes that apply and complete the corresponding parts of this checklist.					
Building type	e Area: LPA 90.1 Table		Part of form to	complete	
Office		Table 9.3.1-1	Part I and Part IIA		
	Exterior: According to area type	Table 9.3.2	Part IID		
Retail		Table 9.3.1-2	Part I and Part IIB		
	Exterior: According to area type	Table 9.3.2	Part IID		
School	☐ Interior: 0.63 W/ft² ☐ Garage: 0.14 W/ft²	Table 9.3.1-3	Part I and Part IIC		
	Exterior: According to area type	Table 9.3.2	Part IID		
	ed floors of a garage shall use the <i>LPA</i> and co erior wattage allowances shall be calculated a checklist.				
PART I—LIGHTING POWER ALLOWANCE					
_	ng compliance results:	No exemptions or al	lowances are permitted.		
1. Proposed Interior Lighting Power (Total) Watts					
	<u> </u>				
3. Lighting Power Density (Total W /Floor Area): W/ ft² (Divide line 1 by line 2) * The Lighting Power Density must be less than the allowed lighting power for the building type as noted above.					
Where an interi	or garage is provided, repeat the calculation:	1 Watts	2 ft ² 3 V	V/ft²	

PART II—LIGHTING CONTROLS

Part IIA—Office Buildings: Simplified Building Method (Table 9.3.1-1)

Use the following checklist to demonstrate compliance with the lighting control requirements in each interior space type.

Interior Space Type		Controls (All lighting shall be controlled)	Location on the plans
	Office spaces ≤ 150 ft ² Classrooms, Conference rooms, Meeting rooms, Training rooms, Storage rooms, and Break rooms	Shall comply with one of the following: All lighting is automatically controlled to turn off when individual <i>spaces</i> are either unoccupied or scheduled to be unoccupied., OR Exception: Lighting loads do not exceed 0.02 W/ft² × gross lighted area. Shall comply with both of the following: Each <i>space</i> has a <i>manual control device</i> that allows the occupant to reduce	
	Office spaces > 150 ft ² , and Restrooms	lighting power by at least 50% and to turn the lighting off, AND Spaces are controlled by manual-ON occupant sensors Shall comply with one of the following: All lighting is automatically controlled to turn off when individual spaces are either unoccupied or scheduled to be unoccupied., OR	
		 □ Exception: Lighting loads do not exceed 0.02 W/ft² × gross lighted area. Shall comply with both of the following: □ Each space has a manual control device that allows the occupant to reduce lighting power by at least 50% and to turn the lighting off, AND □ Spaces are controlled by occupancy sensors. 	
	Stairwells and corridors in office buildings	Shall comply with one of the following: All lighting is automatically controlled to turn off when individual <i>spaces</i> are either unoccupied or scheduled to be unoccupied., OR Exception: Lighting loads do not exceed 0.02 W/ft² × gross lighted area. Shall comply with the following: Spaces are also controlled by occupant sensors that reduce the lighting power by at least 50% when no activity is detected for not longer than 15 minutes and be controlled to turn off when the building is either	
	Parking garages (See note below)	Shall comply with all of the following: All lighting is controlled by <i>occupant sensors</i> . Controls reduce the power by at least 50% when no activity is detected for not longer than 15 minutes. No device shall <i>control</i> more than 3600 ft ² .	

Note: Uncovered floors of a garage shall use the LPA and control requirements in Table 9.3.2 for parking lots. Interior and exterior wattage allowances shall be calculated and complied with separately, please complete Part IID of this form.

Part IIB—Retail Buildings: Simplified Building Method (Table 9.3.1-2)

Use the following checklist to demonstrate compliance with the lighting controls requirements in each interior space type.

Interior Space Type		Controls (All lighting shall be controlled)	Location on the plans
	Sales area	Shall comply with one of the following: All lighting is automatically controlled to turn off when individual <i>spaces</i> are either unoccupied or scheduled to be unoccupied, OR Exception: Lighting loads do not exceed 0.02 W/ft² × gross lighted area. Shall comply with all of the following: Spaces are automatically controlled to reduce the general lighting power by at least 75% during nonbusiness hours, Spaces are automatically controlled to turn off all lighting other than	
		general lighting during nonbusiness hours, and Spaces are automatically controlled by continuous daylight dimming controls in spaces with toplighting.	
	Stock rooms, Dressing/fitting rooms, Locker rooms, and Restrooms	Shall comply with one of the following: All lighting is automatically controlled to turn off when individual <i>spaces</i> are either unoccupied or scheduled to be unoccupied, OR Exception: Lighting loads do not exceed 0.02 W/ft ² × gross lighted area. Shall comply with the following:	
		Spaces are also controlled by auto-ON or manual-ON occupant sensors, and continuous daylight dimming controls in spaces with toplighting.	
	Office spaces, Conference rooms, Meeting rooms, Training rooms, Storage rooms, Break rooms, and Utility spaces	Shall comply with one of the following: ☐ All lighting is automatically controlled to turn off when individual <i>spaces</i> are either unoccupied or scheduled to be unoccupied, OR ☐ Exception: Lighting loads do not exceed 0.02 W/ft² × gross lighted area.	
		Shall comply with the following: Spaces are also controlled by manual-ON occupant sensors, and continuous daylight dimming controls in spaces with toplighting.	
	Stairwells and corridors in retail buildings and parking garages	Shall comply with one of the following: All lighting is automatically controlled to turn off when individual <i>spaces</i> are either unoccupied or scheduled to be unoccupied, OR Exception: Lighting loads do not exceed 0.02 W/ft ² × gross lighted area.	
		Shall comply with the following: Spaces are also controlled by occupant sensors that reduce the lighting power by at least 50% when no activity is detected for not longer than 15 minutes and be controlled to turn off when the building is either unoccupied or scheduled to be unoccupied.	
	Parking garages (See note below)	Shall comply with all of the following: All lighting is controlled by <i>occupant sensors</i> . Controls reduce power by at least 50% when no activity is detected for not longer than 15 minutes. No device shall <i>control</i> more than 3600 ft ² .	

Note: Uncovered floors of a garage shall use the LPA and control requirements in Table 9.3.2 for parking lots. Interior and exterior wattage allowances shall be calculated and complied with separately, please complete Part IID of this form.

PART IIC—School Buildings: Simplified Building Method (Table 9.3.1-3)

Use the following checklist to demonstrate compliance with the lighting controls requirements in each interior space type.

Interior Space Type		Controls (All lighting shall be controlled)	Location on the plans
	Classrooms, Offices spaces, Conference rooms, Meeting rooms, Library, Storage rooms, and Break rooms	Shall comply with one of the following: ☐ All lighting is automatically controlled to turn off when individual <i>spaces</i> are either unoccupied or scheduled to be unoccupied, OR ☐ Exception: Lighting loads do not exceed 0.02 W/ft² × gross lighted area. Shall comply with the following: ☐ <i>Spaces</i> are also controlled by <i>manual</i> -ON <i>occupant sensors</i>	
	Gymnasiums and Cafeterias	Shall comply with one of the following: All lighting is automatically controlled to turn off when individual <i>spaces</i> are either unoccupied or scheduled to be unoccupied, OR Exception: Lighting loads do not exceed 0.02 W/ft² × gross lighted area. Shall comply with the following: Spaces are also controlled by <i>occupancy sensors</i> .	
	Restrooms	Shall comply with one of the following: ☐ All lighting is automatically controlled to turn off when individual <i>spaces</i> are either unoccupied or scheduled to be unoccupied, OR ☐ Exception: Lighting loads do not exceed 0.02 W/ft² × gross lighted area. Shall comply with the following: ☐ <i>Spaces</i> are controlled by <i>occupancy sensors</i> .	
	Stairwells and corridors in school buildings and parking garages	Shall comply with one of the following: All lighting is automatically controlled to turn off when individual <i>spaces</i> are either unoccupied or scheduled to be unoccupied, OR Exception: Lighting loads do not exceed 0.02 W/ft² × gross lighted area. Shall comply with the following: Spaces are also controlled by <i>occupant sensors</i> that reduce the lighting power by at least 50% when no activity is detected for not longer than 15 minutes and be controlled to turn off when the <i>building</i> is either unoccupied or scheduled to be unoccupied.	
	Parking garages (See note below)	Shall comply with all of the following: All lighting is controlled by <i>occupant sensors</i> . Controls reduce power by at least 50% when no activity is detected for not longer than 15 minutes. No device shall <i>control</i> more than 3600 ft ² .	

Note: Uncovered floors of a garage shall use the LPA and control requirements in Table 9.3.2 for parking lots. Interior and exterior wattage allowances shall be calculated and complied with separately, please complete Part IID of this form.

PART IID—Building exteriors: Simplified Building Method (Table 9.3.2)

Use the following checklist to demonstrate compliance with the LPA and lighting control requirements in each exterior area type.

Exterior Area Type		Exterior LPA	Controls	Location on the plans
	All exterior areas		All lighting is automatically controlled to shut off the lighting when daylight is available.	
	Base allowance	200 W	Luminaires are turned off or the power is reduced by a minimum of 75% during nonoperating hours.	
	Façade lighting	0.10 W/ft^2	Luminaires are turned off or the power is reduced by a minimum of 75% during nonoperating hours.	
	Roof terraces, special feature areas, walkways, plazas and ramps	0.07 W/ft ²	Luminaires are turned off or the power is reduced by a minimum of 75% during nonoperating hours.	
	Landscape	0.036 W/ft^2	Luminaires are turned off or the power is reduced by a minimum of 75% during nonoperating hours.	
	Entry doors	14 W/linear ft	Luminaires are turned off or the power is reduced by a minimum of 75% during nonoperating hours.	
	Stairs	Exempt	No additional controls required.	
	Parking lots and drives	0.037 W/ft ²	Luminaires mounted 25 ft or less above grade are controlled to reduce the power by at least 50% when no activity is detected for not longer than 15 minutes.	
	All other areas not listed	0.20 W/ft ²	Luminaires are turned off or the power is reduced by a minimum of 75% during nonoperating hours.	