

WAC 51-11C-405021 Section C405.2.1—Occupant sensor controls.

C405.2.1 Occupant sensor controls. Occupant sensor controls shall be installed to control luminaires in the space types listed in Table C405.2.1, and shall comply with the requirements listed in the table.

- EXCEPTIONS:
1. Corridors in manufacturing facilities.
 2. *General lighting* and task lighting in shop and laboratory classrooms.
 3. Luminaires that are required to have specific application controls in accordance with Section C405.2.6 unless specifically required to comply with this section by Section C405.2.6.

**Table C405.2.1
Occupant Sensor Compliance Requirements for Space Types**

Space Type	Comply with Section
Classrooms/lecture/training rooms	C405.2.1.1
Conference/meeting/multipurpose rooms	C405.2.1.1
Copy/print rooms	C405.2.1.1
Lounge/breakrooms	C405.2.1.1
Enclosed offices	C405.2.1.1
Open plan office areas	C405.2.1.3
Restrooms	C405.2.1.1
Storage rooms	C405.2.1.1
Locker rooms	C405.2.1.1
Other spaces 300 square feet (28 m ²) or less that are enclosed by floor-to-ceiling height partitions	C405.2.1.1
Warehouse storage areas	C405.2.1.2
Library stacks	C405.2.1.2
Enclosed fire rated stairways	C405.2.1.5
Corridors	C405.2.1.6

C405.2.1.1 Occupant sensor control function. Occupant sensor controls for the space types listed in Section C405.2.1 shall comply with all of the following:

1. They shall be configured to automatically turn off lights within 20 minutes of all occupants leaving the space.
2. They shall be manual on or configured to automatically turn the lighting on to not more than 50 percent power.
3. They shall incorporate a manual control to allow occupants to turn lights off.

EXCEPTION: Full automatic-on controls with no manual control shall be permitted in corridors, interior parking areas, stairways, restrooms, locker rooms, library stacks, lobbies, and areas where manual operation would endanger occupant safety or security.

C405.2.1.2 Occupant sensor control function in warehouse storage areas and library stacks. Lighting in library stacks and warehouse storage areas shall be controlled as follows.

1. Lighting in each aisleway shall be controlled independently of lighting in all other aisleways and open areas.
2. Occupant sensors shall automatically reduce lighting power within each controlled area to an unoccupied setpoint of not more than 50 percent within 20 minutes after all occupants have left the controlled area.
3. Lights which are not turned off by occupant sensors shall be turned off by time schedule sweep to turn lighting off within 20 minutes of all occupants leaving the space, or comply with Section C405.2.2 to turn lighting off when the building is vacant.
4. Restore lighting to full power or target light level when occupants enter the space.

5. A *manual* control shall be provided to allow occupants to turn off lights in the space.

C405.2.1.3 Occupant sensor control function in open plan office areas.

Occupant sensor controls in open plan office spaces less than 300 square feet (28 m²) in area shall comply with Section C405.2.1.1. Occupant sensor controls in all other open plan office spaces shall be configured to comply with all of the following:

1. *General lighting* is controlled separately in control zones with floor areas not greater than 600 square feet (55 m²) within the open plan office space.

2. *General lighting* in each control zone shall be permitted to automatically turn on upon occupancy within the control zone. *General lighting* in other unoccupied zones within the open plan office space shall be permitted to turn on to not more than 20 percent of full power or remain unaffected.

3. Automatically turn off *general lighting* in all control zones within 20 minutes after all occupants have left the open plan office space.

4. *General lighting* in each control zone shall turn off or uniformly reduce lighting power to an unoccupied setpoint of not more than 20 percent of full power within 20 minutes after all occupants have left the control zone.

5. Lighting controls in open plan office areas larger than 5,000 square feet must also comply with Section C405.2.8.

C405.2.1.4 Occupant sensor control function in enclosed fire rated stairways.

Occupant sensor controls shall be configured to automatically reduce lighting power by not less than 50 percent when no occupants have been detected in the stairway for a period not exceeding 20 minutes and restore lighting to full power when occupants enter the stairway. All portions of stairways shall remain illuminated to meet the requirements of Sections 1008 and 1025 of the *International Building Code* when the lighting power is reduced.

C405.2.1.5 Occupant sensor control function in corridors. Occupant sensor controls in *corridors* shall uniformly reduce lighting power to an unoccupied setpoint of not more than 50 percent of full power within 20 minutes after all occupants have left the space.

EXCEPTION: *Corridors* provided with less than two foot-candles of illumination on the floor at the darkest point with all lights on.

[Statutory Authority: RCW 19.27A.045 and chapter 19.27A RCW. WSR 24-16-145, § 51-11C-405021, filed 8/7/24, effective 9/7/24. 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-405021, 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-405021, 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-405021, 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-405021, 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-405021, filed 2/1/13, effective 7/1/13.]