

## STATE BUILDING CODE OPINION 20-June01

**CODE:** 2015 Washington State Energy Code, Commercial  
2015 International Building Code

**SECTION:** WSEC Section C405.2.5  
IBC Section 1008.3

**QUESTION:** For the conditions specified in Sections 1008.3.1, 1008.3.2 and 1008.3.3 of the 2015 IBC, an emergency electrical system is required to ‘automatically illuminate’ specific areas of a building. However, Section C405.2.5 of the 2015 WSEC require occupancy motion sensors that would prevent the emergency lights from illuminating unless there is motion by an occupant in the area where the light is located.

Because the IBC says the electrical system shall “automatically illuminate” the specified area but the WSEC requires the emergency lighting to “automatically shut off” when the areas served by the emergency lights are unoccupied, does this constitute a conflict between the IBC and the WSEC?

If the answer to the above question is yes, then which code should apply?

If the answer is no, did the Council anticipate that the emergency lights may not function properly if the motion sensors are obscured by smoke?

**ANSWER:** **No. The intent was that the emergency lighting required by the IBC would govern. This requirement in the WSEC was based on the 2012 IBC language in Section 1006.1, which is comparable to the 2015 IBC Section 1008.2, and addresses means of egress illumination when the building is occupied. During an emergency, it was the intent that the 90 minutes of emergency lighting would still be provided per IBC Section 1008.3, and the level of emergency lighting required by the code at an average of 1 footcandle would be met by the 0.02 watts/sq. ft. exception.**

**SUPERSEDES:** None

**REQUESTED BY:** City of Bellevue

**1008.2 Illumination required.** The *means of egress* serving a room or space shall be illuminated at all times that the room or space is occupied.

**Exceptions:**

1. Occupancies in Group U.
2. *Aisle accessways* in Group A.
3. *Dwelling units* and *sleeping units* in Groups R-1, R-2 and R-3.
4. *Sleeping units* of Group I occupancies.

**1008.3 Emergency power for illumination.** The power supply for means of egress illumination shall normally be provided by the premises' electrical supply.

**1008.3.1 General.** In the event of power supply failure in rooms and spaces that require two or more means of egress, an emergency electrical system shall automatically illuminate all of the following areas:

1. *Aisles*.
2. *Corridors*.
3. *Exit access stairways* and *ramps*.

**1008.3.2 Buildings.** In the event of power supply failure in buildings that require two or more *means of egress*, an emergency electrical system shall automatically illuminate all of the following areas:

1. *Interior exit access stairways* and *ramps*.
2. *Interior* and *exterior exit stairways* and *ramps*.
3. *Exit passageways*.
4. Vestibules and areas on the level of discharge used for *exit discharge* in accordance with Section 1028.1.
5. Exterior landings as required by Section 1010.1.6 for *exit doorways* that lead directly to the *exit discharge*.

**1008.3.3 Rooms and spaces.** In the event of power supply failure, an emergency electrical system shall automatically illuminate all of the following areas:

1. Electrical equipment rooms.
2. Fire command centers.
3. Fire pump rooms.
4. Generator rooms.
5. Public restrooms with an area greater than 300 square feet (27.87m<sup>2</sup>).

**WSEC, Section C405.2.5 Additional lighting controls.** Specific application lighting shall be provided with controls, in addition to controls required by other sections, for the following:

**7.** Luminaires serving the exit access and providing means of egress illumination required by Section 1006.1 of the International Building Code, including luminaires that function as both normal and emergency means of egress illumination shall be controlled by a combination of listed emergency relay and occupancy sensors, or signal from another building control system, that automatically shuts off the lighting when the areas served by that illumination are unoccupied.

**Exception:** Means of egress illumination serving the exit access that does not exceed 0.02 watts per square foot of building area is exempt from this requirement.