

**NC Department of Insurance
Office of the State Fire Marshal - Engineering Division
1202 Mail Service Center, Raleigh, NC 27699-1202
919-647-0000**

Motion Detector Switched Means of Egress Emergency Illumination

Code: 2018 Building Code
Section: 1008.3

Date: September 13, 2018

Question:

Can means of egress emergency illumination as required by section 1008.3 of the Building Code be solely controlled by automatic motion sensor-type lighting switches?

Answer:

No. Sections 1008.2 and 1008.3 of the Building Code requires an emergency electrical system to automatically illuminate the areas described within the subsections of section 1008.3 when the room or space is occupied upon failure of the structure's normal electrical system.

Therefore, any means of controlling the emergency lighting circuits allowed by Part V in Article 700 of the 2017 Electrical Code must not be arranged in a manner that will de-energize the emergency illumination upon failure of the structure's normal electrical system.

Example: Typical florescent lay-in type florescent lighting fixtures are installed as the sole means of illumination in a corridor used for egress and are all normally operated by a motion sensor that monitors the entire corridor. The lighting fixtures are Code compliant only if the motion sensor is by-passed by an emergency circuit that illuminates enough lights to satisfy section 1008.3.5 automatically upon failure of the structure's normal electrical system. The most common method used is emergency ballasts within the light fixtures and in accordance with Article 700 of the 2017 Electrical Code.

Keywords:

switch, switched, means of egress, lighting, light, illumination, power, electrical, light fixture