



Northville Township Fire Department

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Updated March 30, 2016

Emergency Light Testing

Referenced Standards:

- 2009 International Fire Code as adopted by Chapter 79-2
- NFPA 101

Commentary:

Emergency lights are used to help illuminate the path of egress (exit) from a building during a power failure and/or fire event. When a building loses power, the emergency lights provide enough visibility for people to evacuate and for staff to shut down important machinery or equipment. Emergency lights are normally attached to the building's electrical supply which provide a constant charge to the battery. Emergency lights are also normally powered by internal batteries or on-site generators and shall provide power for not less than 90 minutes after power is lost. The building owner or designee is responsible for the maintenance and testing of emergency lights as prescribed below:

- Make sure that all lights are attached, all covers intact and not physically damaged
- Make sure all lights are directed into the exit path
- Make sure that all bulbs are in working order
- Make sure lights are not obstructed
- Testing
 - Testing can be conducted by trained building maintenance personnel or hired contractors
 - Please provide a test report or complete the Emergency Light Test Log form. Reports should include the number and location/ID of lights, test date, test time, tester's name, results of each test and comments for a failed test.
 - If lights fail during monthly or annual testing they need to be serviced, repaired or replaced.
- Monthly testing
 - Conduct a monthly functional test of each fixture for at least 30 seconds
 - For the 30 second test you may press and hold the "test" button on the device. If the lights dim during the 30 second test, the batteries are failing and in need of replacement. If you don't test the lights for 30 seconds you are only testing the "surface charge" and not the actual battery.
- Annual testing
 - Conduct a functional test annually to verify that each light works for at least 90 minutes
 - For these longer tests it is best to shut off the circuit breaker controlling the emergency lights. Make sure to shut down or unplug any sensitive electronics when shutting off the power.

Standards:

- **1006.1 Illumination required.** The means of egress, including the exit discharge, shall be illuminated at all times the building space served by the means of egress is occupied.
- **1006.2 Illumination level.** The means of egress illumination level shall not be less than 1 foot-candle at the walking surface.
- **1006.3 Illumination emergency power.** The power supply for means of egress illumination shall normally be provided by the premises' electrical supply. In the event of power supply failure, an emergency electrical system shall automatically illuminate all of the following areas:

- 1) Aisles and unenclosed egress stairways in rooms and spaces that require two or more means of egress.
- 2) Corridors, exit enclosures and exit passageways in buildings required to have two or more exits.
- 3) Exterior egress components at other than their levels of exit discharge until exit discharge is accomplished for buildings required to have two or more exits.
- 4) Interior exit discharge elements, as permitted in Section 1027.1, in buildings required to have two or more exits.
- 5) Exterior landings as required by Section 1008.1.6 for exit discharge doorway in buildings required to have two or more exits.

The emergency power system shall provide power for duration of not less than 90 minutes and shall consist of storage batteries, unit equipment or on-site generator. The installation of the emergency power system shall be in accordance with Chapter 27 of the IBC.

If you have any questions regarding this matter, please contact us directly at (248) 348-5807 or via email at thughes@twp.northville.mi.us.

Respectfully,



Thomas M. Hughes, Jr.
Fire Inspector