

Northville Township Fire Department

45745 W. Six Mile Rd. Northville, MI 48168 Phone: (248) 348-5807 Fax: (248) 348-5840

Email: thughes@twp.northville.mi.us

northvillemich.com

Revised April 23, 2020

Emergency Light Testing

Referenced Standards:

2015 International Fire Code as adopted by Chapter 79-2

Commentary:

Emergency lights are installed illuminate the path of egress (exit) from a building during a power failure and/or fire event. When a building loses power, emergency lights provide enough visibility for people to evacuate the building safely 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 that are required to power these lights for not less than 90 minutes after power failure. The building owner or designee is responsible for the maintenance and testing of emergency lights as outlined below:

| Make sure that all lights are attached, all covers are intact and there is not any physical damage |
|--|
| Make sure all lights are directed down into the exit path |
| Make sure that all bulbs are in working order |
| Make sure lights are not obstructed or blocked |
| Testing |
| Testing can be conducted by trained building maintenance personnel or hired contractor |

- Provide a test report from your contractor or complete the attached Emergency Light Test Log. 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. These reports should include monthly and
- o If lights fail during monthly or annual testing they need to be serviced, repaired or replaced.
- o If you utilize the circuit breaker to shut off the power, make sure that all computers or electronics attached to that breaker are disconnected. If you are unsure which breaker controls the emergency lights you may need to contact an electrician.

Monthly testing (Activation Test)

- Conduct a monthly functional test of each fixture for at least 30 seconds (IFC 604.6.1).
- For the 30 second test it is recommended that you shut off the circuit breaker controlling your emergency lights. 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 a full 30 seconds you are only testing the "surface charge" and not the actual battery (604.6.1.1).

☐ Annual testing (Power Test)

- Conduct a 90 minute functional test annually to verify that each light works properly (604.6.2).
- o For these longer tests it is best to shut off the circuit breaker controlling the emergency lights. Shut down or unplug any sensitive electronics when shutting off the power (604.6.2.1).

Standards:

1008.1 Means of egress illumination. Illumination shall be provided in the means of egress in accordance with Section 1008.2. Under emergency power, means of egress illumination shall comply with Section 1008.3.

- 1008.2 Illumination required. The means of egress serving a room or space shall be illuminated at all times that the room of space is occupied. Exceptions: 1) Occupancies in Group U, 2) Aisle access ways in Group A, 3) Dwelling units and sleeping units in Groups R-1, R-2, and R-3, 4) Sleeping units in Group I occupancies.
- **1008.2.1 Illumination level under normal power.** The means of egress illumination level shall be not less than 1 footcandle at the walking surface.
- **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 or 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.
- 1009.3.3 Rooms and corridors. In the event of apower 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 greater than 300 sq. ft.
- **1008.3.4 Duration.** The emergency power system shall provide power for a 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 Section 2702.

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 Marshal



Northville Township Fire Department

Emergency Lighting Test Record

Emergency lights in businesses and public spaces are required to be tested both **monthly** and **annually.** This is to ensure that they operate effectively when they are needed. Most emergency lighting is powered by a small battery located within the device. This battery is charged by the building's electrical system. You are required to test these devices monthly for 30 seconds and annually for 30 minutes. These tests can be conducted by pressing the TEST button located on the device or by shutting off the power at the circuit breaker. Document all tests on this form and leave on site to provide to the fire department upon inspection.

| | Date | Initials | Unit Location: |
|-----------|------|----------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|
| January | | | | | | | | | |
| February | | | | | | | | | |
| March | | | | | | | | | |
| April | | | | | | | | | |
| May | | | | | | | | | |
| June | | | | | | | | | |
| July | | | | | | | | | |
| August | | | | | | | | | |
| September | | | | | | | | | |
| October | | | | | | | | | |
| November | | | | | | | | | |
| December | | | | | | | | | |
| ANNUAL | | | | | | | | | |