*application ideas*

# THE BENEFITS AND OPEX SAVINGS OF EMERGENCY LIGHT MONITORING

**P** PLATFORMATICS™

# PRODUCTS

## poe emergency light node assembly

- ▶ **AUTOMATED REQUIRED MONTHLY & ANNUAL TESTING**

- ▶ **REAL TIME BATTERY HEALTH MONITORING**

- ▶ **AUTO DISCOVERY & CONTROL**

## emergency test button

- ▶ **WALL MOUNTED WITH SINGLE GANG**

- ▶ **GROUP TEST FIXTURES INTO ZONES**

- ▶ **RUNS 30-SECOND OR 90-MINUTE TESTS**

TEST

While this short app note discusses the finer points of NFPA (National Fire Protection Association) regulations, don't lose sight of the real goal. Emergency Lighting exists to save lives in a power outage emergency. Some test and monitoring strategies are better than others. The best approach calls for each customer to create a test cadence and process that provides them with the highest level of safety and compliance possible. That might mean that for some job sites, their existing manual test procedure is best. For large customer sites, automated testing may provide the best level of protection.

The NFPA Life Safety Code 101-2017 Section 7.9.3.1.3 states:

Testing of required emergency lighting systems shall be permitted to be conducted as follows:

(1) Computer-based, self-testing/self-diagnostic battery-operated emergency lighting equipment shall be provided.

(2) Not less than once every 30 days, emergency lighting equipment shall automatically perform a test with a duration of a minimum of 30 seconds and a diagnostic routine.

(3) The emergency lighting equipment shall automatically perform annually a test for a minimum of 1-1⁄2 hours.

(4) The emergency lighting equipment shall be fully operational for the duration of the tests required by 7.9.3.1.3(2) and 7.9.3.1.3(3).

(5) The computer-based system shall be capable of providing a report of the history of tests and failures at all times.

By using a computer-based monitoring system, some customers achieve complete compliance with the NFPA code (and local codes—consult your local AHJ, Authority Having Jurisdiction) at all times.

Automated monitoring and testing provide several benefits:

▶ It removes human error and shortcuts taken during the monthly and annual testing process.

▶ The system ensures that the building operator always has a real-time view of device test status.

▶ It gives designers and customers the ability to relocate unsightly test buttons to building locations with lower aesthetic standards. If a test button is used at all to initiate the test sequence, only one is usually required per emergency light zone (consult local codes for details). This ensures that test button locations are easily accessible.

▶ It makes it easier for customers to know that their emergency lighting will work in a real emergency.

▶ The system can help facility managers understand the "battery charge fingerprint" with active monitoring of battery charge conditions. By providing deep insight into charge patterns, it's now possible to help the operator predict when a battery is likely to fail its monthly test. This allows for the proactive replacement of multiple units using the same service call—thus eliminating costly and frequent "Break/Fix" repairs.

▶ Actively monitored emergency lighting with battery condition reporting also helps the building operator know when a service technician replaced a faulty/dying battery with another faulty/dying battery. In short, it audits the work of the service tech—again, ensuring compliance and saving money for the customer.

The Platformatics Connect software allows customers to have a real-time view of ELN (Emergency Light Node Batteries) and their current test status. A red line indicates that the ELN failed its last test. It also shows the test date, time, and battery voltage, giving the operator the information necessary to maintain a written logbook (yes, some jurisdictions still require this). Keep in mind, a written log or monthly screenshot printout may be the best way to guarantee that an accurate and timely record is always available for inspection by your local AHJ (think Fire Marshall, Building Inspector, or equivalent for your area). If you lose access to Connect or the cloud storage reporting system, you may not be able to produce a monthly test report until the connection or server is restored.

For more information about Emergency Lighting requirements, visit NFPA.org. You can order a copy of the latest NFPA Life Safety Code 101 from their catalog.

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