

Fire Code

Extracts from the National Fire Code of Canada 2015

2.7. Safety to Life

2.7.3. Exit Lighting, Exit Signs and Emergency Lighting

2.7.3.1. Installation and Maintenance

- 1) Exit lighting, exit signs and emergency lighting shall be provided in buildings in conformance with the NBC. (See Note A-2.37.3.1.(1).)
- 2) Exit lighting and exit signs shall be illuminated during times when the building is occupied.
- 3) Emergency lighting shall be maintained in operating condition, in conformance with Section 6.5.

6.5. Emergency Power Systems and Unit Equipment for Emergency Lighting

6.5.1 General

6.5.1.1. Inspection, Testing and Maintenance

- 1) Except as provided in Articles 6.5.1.2. to 6.5.1.5., emergency power systems shall be inspected, tested and maintained in conformance with CSA-C282, "Emergency Electrical Power Supply for Buildings."
- 2) An emergency electrical power supply system for emergency equipment for health care facilities shall be inspected, tested and maintained in conformance with CSA Z32, "Electrical Safety and Essential Electrical Systems in Health Care Facilities." (See Appendix A.)

6.5.1.2. Notification

- 1) When an emergency power system or any part thereof is shut down, the supervisory staff shall be notified in conformance with Section 2.8.

6.5.1.3. Instructions

- 1) Where an emergency power system is installed, instructions shall be provided for switching on essential loads and for starting the generator when this is not done automatically.

6.5.1.4. Records

- 1) Written records shall be maintained as required in CAN/CSA-C282, "Emergency Electrical Power Supply for Buildings".

6.5.1.6. Inspection of Unit Equipment

- 1) Self-contained emergency lighting unit equipment shall be inspected at intervals not greater than one month to ensure that
 - a) pilot lights are functioning and not obviously damaged or obstructed,
 - b) the terminal connections are clean, free of corrosion and lubricated when necessary,
 - c) the terminal clamps are clean and tight as per manufacturer's specifications, and
 - d) the battery surface is kept clean and dry.
- 2) Self-contained emergency lighting unit equipment shall be tested
 - a) at intervals not greater than one month to ensure that the emergency lights will function upon failure of the primary power supply, and
 - b) at intervals not greater than 12 months to ensure that the unit will provide emergency lighting for a duration equal to the design criterion under simulated power failure conditions.
- 3) After completion of the test required in Clause (2)(b), the charging conditions for voltage and current and the recovery period shall be tested to ensure that the charging system is functioning in accordance with the manufacturer's specifications.

6.5.1.7. Inspection of Emergency Lights

- 1) Except as provided in Article 6.5.1.6., emergency lights shall be inspected at intervals not greater than 12 months to ensure that they are functional.

Generator Room

Extracts from the Canadian Standards Association 2015

Section 6.11

Emergency Lighting

6.11.1

The emergency electrical power supply room and the automatic transfer switch room, where separate, shall be equipped with unit equipment for emergency lighting that complies with CSA C22.2 No. 141. Sufficient lamps shall be provided to ensure that a minimum lighting level of 50 lx for 2h is available at all equipment locations requiring adjustment or service.

Note: This illumination level is significantly greater than that specified in the NBCC, which requires 10 lx for egress route emergency lighting

6.11.2

Emergency lighting units shall be tested in accordance with Table 2 and CSA C22.2 No. 141.

6.11.3

The emergency lighting unit shall include

- (a) automatic self-diagnostic circuitry; and
- (b) a transient voltage surge suppressor on the supply side of power to the unit.