



## SECTION 46

### EMERGENCY POWER SUPPLY, UNIT EQUIPMENT AND EXIT SIGNS AND LIFE SAFETY SYSTEMS

The purpose of this bulletin is to clarify how circuitry is connected to unit equipment and exit signs.

**Unit Equipment rule 46-304 states:**

#### ***46-304 Supply connections***

- 1) *Receptacles to which unit equipment is to be connected shall be not less than 2.5 m above the floor, where practicable, and shall be not more than 1.5 m from the location of the unit equipment.*
- 2) *Unit equipment shall be permanently connected to the supply if*
  - *the voltage rating exceeds 250 V; or*
  - *the marked input rating exceeds 24 A.*
- 3) *Where the ratings in Subrule 2) are not exceeded, the unit equipment shall be permitted to be connected using the flexible cord and attachment plug supplied with the equipment.*
- 4) *Unit equipment shall be installed in such a manner that it will be automatically actuated upon failure of the power supply to the normal lighting in the area covered by that unit equipment.*

#### **Note:**

Rule 46-304 (4) requires that unit equipment be actuated upon the failure of the power supply to the normal lighting in the area. The inspection department interprets normal lighting to be area lighting that is **not wired as night lighting**.

**Exit signs rule 46-400 states:**

#### ***46-400 Exit signs (see Appendices B and G)***

- 1) *Where exit signs are connected to an electrical circuit, that circuit shall be used for no other purpose.*
- 2) *Notwithstanding Subrule 1), exit signs shall be permitted to be connected to a circuit supplying emergency lighting in the area where these exit signs are installed.*
- 3) *The exit signs referred to in Subrules 1) and 2) shall be illuminated by an emergency power supply where emergency lighting is required by the National Building Code of Canada.*
- 4) *The circuitry serving luminaires used to illuminate exit signs that are not connected to an electrical circuit shall comply with Subrules 1) to 3), as required by the National Building Code of Canada*



If emergency lighting is required by the National Building Code of Canada (NBCC) Rule 46-304(4) requires that unit equipment (emergency lighting) to be installed in such a manner where if the normal lighting in a particular area fails, the unit equipment (emergency lighting) shall automatically activate in same area where the normal lighting is installed.

If exit lighting is required by the NBCC, rule 46-400(1) requires the exit lighting circuit be a dedicated circuit and used for no other purpose.

Rule 46-400(2) waives the dedicated circuit feeding exit lights under certain conditions. Exits signs are permitted to be supplied from a circuit supplying emergency lighting. Example: DC from a battery pack.

Rule 46-400(2) also waives the dedicated circuit requirements so the normal AC lighting in the area can supply unit equipment and exit signs. Example: Exit/Battery Pack combination units.

If you have any further questions regarding this matter please contact your local electrical inspection department.