

January 2, 2008

To: EncapSulite Customers

From: EncapSulite International Inc.

Subj: **NEC CODE 410.73(G)**

This letter will confirm that all EncapSulite International Inc. luminaries (Lighting Fixtures) are in compliance with the new **NEC Code 410.73(G)**.

410.73 (G) Disconnecting Means. In indoor locations, other than dwellings and associated accessory structures, fluorescent luminaries (fixtures) that utilize double-ended lamps and contain ballast(s) that can be serviced in place or reballasted luminaries that are supplied from multiwire branch circuits and contain ballast(s) that can be serviced in place shall have a disconnecting means either internal or external to each luminaire (fixture), to disconnect simultaneously from the source of supply all conductors of the ballast, including the grounded conductor if any. The line side terminals of the disconnecting means shall be guarded. The disconnecting means shall be located so as to be accessible to qualified persons before servicing or maintaining the ballast. This requirement shall become effective January 1, 2008.

Exception 1: A disconnecting means shall not be required for luminaires (fixtures) installed in hazardous (classified) location(s).

Exception 2: A disconnecting means shall not be required for emergency illumination required in 700.16.

Exception 3: For cord-and-plug-connected luminaries, an accessible separable connector or an accessible plug and receptacle shall be permitted to serve as the disconnecting means.

Exception 4: A disconnecting means shall not be required in industrial establishments with restricted public access where conditions of maintenance and supervision ensure that only qualified persons service the installation by written procedures.

Exception 5: Where more than one luminaire is installed and supplied by other than a multiwire branch circuit, a disconnecting means shall not be required for every luminaire when the design of the installation includes locally accessible disconnects, such that the illuminated space cannot be left in total darkness.

For example, by installing a disconnecting means for each ballast allows the building owner a definite safeguard in preventing accidental shocks when servicing ballasts. Cost may become an issue. For a small office building, this scenario would not affect the budget. But for a high-rise or commercial building, installing a disconnect at each ballast becomes very costly. This is when the exceptions have their merit. For example, Exceptions 3 and 5 can keep the area safe for servicing while staying within budget. Exception 3 allows the installation of a plug type disconnect, so that the individual ballast can be unplugged and serviced safely. Exception 5 allows multiple luminaires to share one disconnect or plug. Now, a design with 50 luminaires can perhaps have two disconnects means or plugs, having every other luminaire or a series on one branch, and the others on a separate branch. This way only one branch would be disconnected at a time to service the illuminated space and not be left in total darkness when doing so.

Keep in mind, this new requirement will allow electricians to de-energize ballasted luminaires without removing illumination to an entire area. Then they can safely change out the ballast without being exposed to a shock hazard. This change has been given an effective date of Jan. 1, 2008, to allow manufacturers time to develop products for this application and allow sufficient time for the industry to prepare to include switches for this type of lighting.