

SAFETY ALERT

9th December 2010

Potential to electrocute – faulty unbranded LED tube

Background

A NECA member has reported that an “unbranded” LED light tube used to replace an existing fluorescent tube was found to be unsafe. T8 LED tubes are being offered as an energy efficient/long life replacement for fluorescent lamps. The unsafe LED tube was found to have a dead short between the lamp pins at one end and the accessible metal body – top aluminium case. The exposed metal can be energised at 240 volts and could be lethal.

This means that when installed the exposed metal case is live (depending on which end of the tube is installed into the live tombstone lampholders of the light fitting). The tube will work as normal. In the example found, the product was not branded and the electrical regulators are responding. Indications are the sample may have been from a trial batch but NECA wish to advise all members and others of this potentially unsafe condition.



Live exposed rear metal case - low resistance between pins and aluminium.

Current situation

The regulators at both NSW Fair Trading and WorkCover have been notified.

The problem is that a LED tube could be installed without knowledge of this safety hazard and may only become a hazard when an unsuspecting person attempts to service or remove the unit. This may be at the end of its useful life, possibly years from now.

The supplier and seller have an obligation to ensure that products intended for connection to the electricity supply are safe.

Risk controls

Manufacturers and importers must ensure that product is safe. This can be indicated by appropriate testing and certification.

Electrical contractors and persons working with LED lighting that have exposed conductive parts (eg metal bodies or heat sinks) should be alert to the potential hazard of exposed live parts and take appropriate protective measures.

Electrical contractors should discuss the issue with their suppliers to ensure that any unbranded LED tubes they have purchased have been tested. Contractors are advised that pending further consideration of the matter by the regulators they should test existing installed unbranded LED tubes to ensure they are safe.

It would be advisable to label/mark each unit after test so that its status is known on subsequent inspections. Date and initials would be useful.

Building owners also have an obligation to ensure products are safe. They should ensure product safety by involving the supplier and if no certification is available, have all units tested and certified by a competent person.

For further information contact:

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