

MANUFACTURERS STATEMENT

PACIFIC LUMINAIRE P.A.T. & AS/NZS 3760:2003

1.4 DEFINITIONS

For the purpose of this product, the definitions below apply:

1.4.1 Accessible earthed parts

(a) Accessible earthed parts are a conductive part of electrical equipment, required to be connected to a protective earth, which:

- (i) Is separated from live parts by basic insulation; and
- (ii) Can be touched with the jointed test finger as specified in AS 1939; and
- (iii) Is not a live part but can become live if basic insulation fails.

NOTE: The neutral wire shall also be considered a live part.

(b) The term accessible earthed parts does not apply to the following:

- (i) Live parts;
- (ii) Parts separated from live parts by double insulation or reinforced insulation, or by other metal parts themselves earthed or having double insulation or reinforced insulation;
- (iii) Metal nameplates, screw-heads, covers or plates, and their means of fixing, which cannot become live in the event of failure of insulation of live parts, or be exposed to arcing contact with live parts;

NOTE: 'Failure of insulation' in this context is taken to include accidental bridging of an insulating gap by metal, or partially conducting material, such as carbon dust or moisture, as well as electrical breakdown.

(iv) Parts within an enclosure, the cover of which requires the use of a tool for its removal;

NOTE: A key is not considered to be a tool except where special circumstances prevail, e.g. the use of the key is restricted to technical service personnel having an appropriate level of electro-technical training.

(v) Parts within equipment, the configuration and mass of which are such that the parts are not accessible during normal use and movement of the equipment.

NOTE: Non-metallic material which is conductive to a degree which may contribute to a hazardous condition arising shall be deemed to be an accessible earthed part, subject to the above provisions.

1.4.2 Accessible unearthed parts

Accessible unearthed parts shall be all external parts that are not connected to the protective earthing conductor and are separated from live parts by double insulation or reinforced insulation, and includes parts used to support the equipment in operation.

1.4.3 Class I equipment (basic insulated, protectively earthed equipment)

Equipment in which protection against electric shock does not rely on basic insulation only, but which includes an additional safety precaution, in that conductive accessible parts are connected to the protective earthing conductor in the fixed wiring of the installation in such a way that those accessible parts cannot become live in the event of a failure of the basic insulation.

NOTES:

- 1 Class I equipment may have parts with double insulation or parts operating at extra-low voltage.
- 2 This provision includes a protective earthing conductor as part of the flexible cord or cable for equipment intended for use with a flexible cord or cable

Based on the above requirements please refer to the ACTUAL requirements for earth testing in the excerpt below.

A3 TEST CONDITIONS

- (a) Earthing continuity resistance shall be measured between any accessible earthed parts, including rotating metal parts, and the earth pin of the plug.
The resistance shall not exceed 1 Ω .

As the role of the tester is to ascertain that there is a less than 1 Ohm resistance between the earth pin on the appliance plug and the accessible earthed parts on the appliance, there should be no question of testing the UNearthed parts.

The role of the tester is to ascertain that the equipment is functioning safely in the way it was designed and approved - not to question the design approval of the equipment.

Therefore Selecon advises that majority of the metal parts of the Pacific luminaire are separated from live components by reinforced insulation and therefore require no protective earth connection. Hence the lamp house / lens tubes do not require earth continuity testing under AS/NZS 3760:2003.