



EXHIBIT 410.6 A listed Type IC recessed luminaire suitable for use in insulated ceilings and installed in direct contact with thermal insulation.

- (3) The recessed luminaire shall be listed and shall be installed in accordance with a tested fire resistance-rated assembly. When a tested fire resistance-rated assembly allows the installation of a recessed fluorescent luminaire, a recessed LED luminaire of comparable construction shall be permitted.

410.117 Wiring.

(A) **General.** Conductors that have insulation suitable for the temperature encountered shall be used.

(B) **Circuit Conductors.** Branch-circuit conductors that have an insulation suitable for the temperature encountered shall be permitted to terminate in the luminaire.

(C) **Tap Conductors.** Tap conductors of a type suitable for the temperature encountered shall be permitted to run from the luminaire terminal connection to an outlet box placed at least 300 mm (1 ft) from the luminaire. Such tap conductors shall be in suitable raceway or Type AC or MC cable of at least 450 mm (18 in.) but not more than 1.8 m (6 ft) in length.

410.118 Access to Other Boxes. Luminaires recessed in ceilings, floors, or walls shall not be used to access outlet, pull, or junction boxes or conduit bodies, unless the box or conduit body is an integral part of the listed luminaire.

Part XI. Construction of Flush and Recessed Luminaires

410.120 Temperature. Luminaires shall be constructed such that adjacent combustible material is not subject to temperatures in excess of 90°C (194°F).

410.122 Lamp Wattage Marking. Incandescent lamp luminaires shall be marked to indicate the maximum allowable wattage of lamps. The markings shall be permanently installed,

in letters at least 6 mm (¼ in.) high, and shall be located where visible during relamping.

410.124 Solder Prohibited. No solder shall be used in the construction of a luminaire recessed housing.

410.126 Lampholders. Lampholders of the screw shell type shall be of porcelain or other suitable insulating materials.

Part XII. Special Provisions for Electric-Discharge Lighting Systems of 1000 Volts or Less

410.130 General.

(A) **Open-Circuit Voltage of 1000 Volts or Less.** Equipment for use with electric-discharge lighting systems and designed for an open-circuit voltage of 1000 volts or less shall be of a type identified for such service.

(B) **Considered as Energized.** The terminals of an electric-discharge lamp shall be considered as energized where any lamp terminal is connected to a circuit of over 300 volts.

(C) **Transformers of the Oil-Filled Type.** Transformers of the oil-filled type shall not be used.

(D) **Additional Requirements.** In addition to complying with the general requirements for luminaires, such equipment shall comply with Part XII of this article.

(E) Thermal Protection — Fluorescent Luminaires.

(1) **Integral Thermal Protection.** The ballast of a fluorescent luminaire installed indoors shall have integral thermal protection. Replacement ballasts shall also have thermal protection integral with the ballast.

(2) **Simple Reactance Ballasts.** A simple reactance ballast in a fluorescent luminaire with straight tubular lamps shall not be required to be thermally protected.

(3) **Exit Luminaires.** A ballast in a fluorescent exit luminaire shall not have thermal protection.

(4) **Egress Luminaires.** A ballast in a fluorescent luminaire that is used for egress lighting and energized only during a failure of the normal supply shall not have thermal protection.

Thermal protection that is integral with the ballast is required for fluorescent luminaires installed indoors. Thermally protected ballasts are also required as replacements for nonthermally protected ballasts in older fixtures. Thermally protected fluorescent lamp ballasts intended for use in accordance with 410.130(E) are marked "Class P." LED drivers are the LED lighting system's equivalent to ballasts. "LED driver" is a common industry term referring to the power supply for the LED.

Because different Class P ballasts have different heating characteristics, the heating characteristics should be considered