

Table 4.11 The classification of luminaires according to the degree of electrical protection

Luminaire class	Degree of electrical protection
0	A luminaire having functional insulation, but no double insulation or reinforced insulation throughout, and without provision for earthing. This type of luminaire is not permitted in the UK.
1	A luminaire having at least functional insulation throughout and provided with an earthing terminal or earthing contact, and, for luminaires designed for connection by means of a flexible cable or cord, provided with either an appliance inlet with earthing contact, or a non-detachable flexible cable or cord with earthing contact and a plug with earthing contact
2	A luminaire with double insulation and/or reinforced insulation throughout and without provision for earthing
3	A luminaire designed for connection to extra-low voltage circuits and which has no circuits, either internal or external which operate at a voltage greater than extra-low safety voltage

Flammability

The temperature of a luminaire may limit the surfaces on which it can be mounted. If the surface is non-combustible, then any luminaire may be mounted on it. But when the surface is either normally flammable or readily flammable, restrictions may apply. A normally flammable surface is one having an ignition temperature of at least 200 °C and that will not deform or weaken at this temperature. A readily flammable surface is one that cannot be classified as normally flammable or non-combustible. Readily flammable materials are not suitable for direct mounting of luminaires. The IEC recommends a two part classification system. For luminaires suitable for direct mounting only on non-combustible surfaces, a warning notice may be required. For luminaires suitable for direct mounting on normally flammable surfaces a symbol consisting of a letter F inside an inverted triangle is required.

