

## ***Residential Kitchen Lighting***

### **2010 California Energy Code Section 150 – Mandatory Features and Devices**

- a. Section 150 (k) 2: **Light in Kitchens:** Permanently installed luminaires in kitchens shall be high efficacy luminaires.

**EXCEPTION:** Up to 50 percent of the total rated wattage of permanently installed luminaires in kitchens may be luminaires that are not high efficacy luminaires, provided that these luminaires are controlled by switches separate from those controlling the high efficacy luminaires. The wattage of high efficacy luminaires shall be the total nominal rated wattage of the installed high efficacy lamp(s). The wattage of luminaires shall be determined as specified by section 130 (c).

- b. Section 150 (k) 1: **High Efficacy Luminaires<sup>1</sup>:** High Efficacy Luminaires for residential lighting shall contain only high efficacy lamps and shall not contain a medium screw base socket (E24/E26). A high efficacy lamp has a lamp efficacy that is no lower than the efficacies contained in TABLE 150-C<sup>1</sup>. Ballasts for lamps rated 13 Watts or greater shall be electronic<sup>2</sup> and shall have an output frequency no less than 20 kHz.

**EXCEPTION:** High intensity discharge luminaires containing hardwired electromagnetic ballasts<sup>3</sup> in medium screw base sockets shall be considered high efficacy luminaires for the purposes of meeting Section 150 (k) 6, provided they meet the efficacies contained in TABLE 150-C.

**NOTE:** To determine the minimum lamp efficacy category only the watts of the lamp (not the ballast) are to be considered.

#### **Footnotes:**

<sup>1</sup> **High Efficacy Luminaires** are those that produce 40 lumens per watt at 15 watts or less; 50 lumens per watt over 15 watts up to 40 watts; 60 lumens per watt over 40 watts. (This information is reproduced from Table 150-C).

<sup>2</sup> **Electrical Ballasts** have a four pin design and do not flicker.

<sup>3</sup> **Magnetic Ballasts** have a two pin design and can produce a flicker.