

Energy Code for the State of Indiana

Indiana has its own State-specific energy Code. It is based on, but is more stringent than, the 1992 Model Energy Code (MEC).

The following are highlights of the Indiana State Energy Code which pertain to lighting controls.

INTERIOR LIGHTING.

INTERIOR LIGHTING SWITCHING. Switching shall be provided for each interior lighting circuit, so that the partial lighting required for custodial or for effective complementary use with natural lighting may be operated selectively.

INTERIOR LIGHTING POWER BUDGET. Power for interior lighting shall not exceed the lighting power budget. The interior lighting power budget is calculated by:

1. Determining illumination levels and areas;
2. Determining lighting system data;
3. Determining allowable wattage.

DETERMINING ILLUMINATION LEVELS & AREAS.

- Determine the visual tasks to be performed in each area and the number of planned locations where the tasks will be performed;
- Select illumination level for expected tasks in each area in accordance with the values listed in Table 505.3.2.1a;
- Calculate levels of any general lighting in each area;
- Calculate levels of any noncritical lighting in each area.

DETERMINING LIGHTING SYSTEMS DATA.

- Determine light source and luminaire types to use;
- Determine lamp lumens per watt and luminaire coefficients of utilization in accordance with the values listed in Table 505.3.2.1b.

DETERMINING ALLOWABLE WATTAGE.

- Calculate allowable wattage using the lumen method in accordance with the values listed in Table 505.3.3.3;
- Calculate the total interior space wattage by adding the task, general and non-critical lighting loads.

EXTERIOR LIGHTING.

EXTERIOR LIGHTING. In exterior spaces, the lighting power budget shall be based on the use for which the space is intended. The same criteria as those for interior spaces apply for illumination levels and lighting systems, with the addition of luminaires for floodlighting.

EXTERIOR LIGHTING (continued).

FACADE LIGHTING. Facade lighting for power budget purposes shall be no greater than 2% of the total interior of the building.

EXTERIOR LIGHTING POWER BUDGET. Power for exterior lighting shall not exceed the exterior lighting power budget. The exterior lighting power budget is calculated by:

1. Determining illumination levels and areas;
2. Determining lighting system data;
3. Determining allowable wattage.

DETERMINING ILLUMINATION LEVELS & AREAS.

- Determine the visual tasks to be performed in each area and the number of planned locations where the tasks will be performed;
- Select illumination level for expected tasks in each area in accordance with the values listed in Table 505.3.2.1a;
- Calculate levels of any general lighting in each area;
- Calculate levels of any noncritical lighting in each area.

DETERMINING LIGHTING SYSTEMS DATA.

- Determine light source and luminaire types to use;
- Determine lamp lumens per watt and luminaire coefficients of utilization in accordance with the values listed in Table 505.3.2.1b. For floodlighting, the beam lumen method and the coefficient of utilization of 0.75 shall be used.

DETERMINING ALLOWABLE WATTAGE.

- Calculate allowable wattage using the lumen method in accordance with the values listed in Table 505.3.3.3;
- Calculate the total interior space wattage by adding the task, general and non-critical lighting loads.

The above is a very brief guideline, as interpreted by Douglas Lighting Controls. Refer to the Indiana State Energy Code for details applicable to your lighting control project.

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