



111-2018 Revision  
7/26/18

STATE OF WASHINGTON  
**STATE BUILDING CODE COUNCIL**

Washington State Energy Code Development  
**Standard Energy Code Proposal Form**

Code being amended:  Commercial Provisions  Residential Provisions

Code Section # C401.2 & C402.2

**Brief Description:**

The commercial code references the residential code and its definition of "high-efficiency lighting" for dwelling unit lighting efficiency. However, the definition of "high-efficacy lamps" has not been updated to reflect the changes in the market due to increased federal minimums and greater availability/affordability of LED and other high-efficiency lighting. Because of this, the code is actually becoming less stringent as the baseline for lighting equipment is raised.

**Proposed code change text:** (Copy the existing text from the Integrated Draft, linked above, and then use underline for new text and ~~strikeout~~ for text to be deleted.)

Add Definitions:

**LAMP EFFICACY.** The ratio of the light output from a light source to the power consumed by the lamp and ballast measured in lumens per Watt (lm/W).

**LIGHT FIXTURE EFFICACY:** Light output of an entire luminaire divided by the total power consumed by the lamps and ballasts measured in lm/W

Revise C405.1 as follows:

**C405.1 General (Mandatory).** This section covers lighting system controls, the maximum lighting power for interior and exterior applications, electrical energy consumption, vertical and horizontal transportation systems, and minimum efficiencies for motors and transformers.

No less than 90% of the permanently installed lighting serving dwelling units shall be provided by lamps with an efficacy of not less than 65 lm/W or light fixtures with an efficacy of not less than 55 lm/W, or with Sections C405.2.4 and C405.3. ~~Dwelling units within multi-family buildings shall comply with Section R404.1. All other dwelling units shall comply with Section R404.1, or with Sections C405.2.4 and C405.4. Sleeping units shall comply with Section C405.2.4, and with Section R404.1 or C405.4.~~

Lighting installed in walk-in coolers, walk-in freezers, refrigerated warehouse coolers and refrigerated warehouse freezers shall comply with the lighting requirements of Section C410.2.



## **Economic Impact Data Sheet**

Briefly summarize your proposal's primary economic impacts and benefits to building owners, tenants and businesses.

Provide your best estimate of the construction cost (or cost savings) of your code change proposal? (See OFM Life Cycle Cost [Analysis tool](#) and [Instructions](#); use these [Inputs](#). **Webinars on the tool can be found [Here](#) and [Here](#)**)

Click here to enter text./square foot (For residential projects, also provide Click here to enter text./ dwelling unit)

Show calculations here, and list sources for costs/savings, or attach backup data pages

Provide your best estimate of the annual energy savings (or additional energy use) for your code change proposal?

Click here to enter text.KWH/ square foot (or) Click here to enter text.KBTU/ square foot

(For residential projects, also provide Click here to enter text.KWH/KBTU / dwelling unit)

Show calculations here, and list sources for energy savings estimates, or attach backup data pages

List any code enforcement time for additional plan review or inspections that your proposal will require, in hours per permit application:

**All questions must be answered to be considered complete. Incomplete proposals will not be accepted.**