

Electrical Top Seven

Top Seven for Electrical: They're all important, but since you can't check everything, check these. *Spend only the amount of time you already spend on energy code issues but prioritize these in this order.*

		Plan Review	Inspection
1	Commissioning C408	Statement on plans that they will do commissioning	Evidence that lighting controls, receptacles, and metering were commissioned and report filled out
2	Metering C409	Metering & display shown in documents.	Have contractor turn on display and demonstrate sub-metering
3	Controlled receptacles C405.10	Shown on plan, controls detailed	Spot check a few receptacles, have contractor demonstrate function
4	Renewable energy C412	Solar array shown on plans, or alternative path selected	Solar array in place and generating power.
5	Occ sensors C405.2.1	Check if shown on plans for space types on list in code	Spot check one or two rooms, and that Cx checked them
6	Daylight controls C405.2.4	Check if shown on plans at windows and skylights	Spot check one or two rooms, and that Cx checked them
7	Time switch controls C405.2.2	Check if system and sequence of operations shown on plans	Check that the system is set up and running.

Note: None of these seven items require an electrical inspector – any inspector can check compliance.

Electrical-related issues in the Energy Code

C405.2 Page 146 - 157 Lighting Controls

- C405.2.1 occupant sensors
- C405.2.2 Time switch controls
- C405.2.3 Manual controls
- C405.2.4 Daylight responsive controls
 - Sidelit zone
 - Toplit zone
- C405.2.5 Additional lighting controls
- C405.2.6 Exterior lighting controls
- C405.2.7 Area controls (how much can be controlled by a single switch)

C405.4 Page 158 – 169 interior lighting power

C405.5 Page 170 – 173 Exterior lighting power

C405.6 Page 173 – 174 Transformers (but who cares?)

C405.7 Page 175 Dwelling units, metering, receptacles at gas appliances

C405.8 Page 176 – 181 Motor efficiency & ECM requirements

C405.9 Page 181 Elevator & escalator

C405.10 Page 182 Controlled receptacles

C405.11 Page 182 Voltage drop

C405.12 Page 182 Commissioning (C408)

C406 Additional efficiency packages

- Lighting power
- Renewable power

C408 Commissioning (was it completed?)

C409 Metering

C411 Solar ready (conduit and space for gear next to service panel)

C412 Renewable energy