



Common Electrical Plan Review Deficiencies 2024




Get your plans approved!
On the first review!






First Things First !

Do you require a plan review?

- Plans are not required for the following work:
 - New construction, additions, or alterations on one-or-two-family dwellings. The connected load must be less than 200 amps and all equipment rated 600 V or less.
 - This excludes wiring and equipment related to fire alarm systems, fire pump systems, and solar panel systems.
 - Service conductor installation with a connected load of 200 amps or less
 - Alterations to interior wiring of commercial buildings or individual tenant spaces of less than 2,000 sq. ft. in total floor area.
 - Alterations to commercial buildings limited to:
 - Replacing general electrical equipment rated 600 volts or less. (No new wiring.)
 - Replacing fire alarm notification and initiating devices. (No new wiring or panels.)
 - Telecommunications cable.
 - Temporary wiring with an on-site power source for an approved use.
 - Electrical vehicle charger stations meeting the **EVC permit standard**.
 - Solar Arrays meeting the **Solar permit standard**
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Did you provide a contract?

- **A-903.2 Electrical permit fees** - The permit fee for electrical work shall be twenty-five dollars (\$25) for each one thousand dollars (\$1,000) or fraction thereof of estimated electrical construction costs. The minimum fee shall be fifty dollars (\$50). Except as provided in Section A-903.2.1 (Solar electric system or photovoltaic system), the construction costs shall be determined by inclusion of the following:
 - 1. All electrical equipment, conductors, conduit, etc.,
 - 2. All material,
 - 3. All labor,
 - 4. Overhead and profit.
- 



An Apartment is not a one family dwelling!

- The occupancy selected on the electrical application must be consistent with the occupancy of the building the work is being performed with in.
 - A structure with more than Two Dwelling units or any number of Dwelling units and a commercial space is considered a commercial occupancy and be selected as such on the application.
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Is a Building Permit Required?

- Certain scopes of electrical work can not be performed with out the presence of an approved building permit.
 - Make sure your Electrical Application is linked to the Correct Building Permit.
 - Are you proposing a method of installation that would not require the issuance of a building permit? If so, please include it on your description of work.





Timeline to expect

- Standard Review – 15 Days
- Comply with Ez-Standard – 2 to 3 Days
- Accelerated Reviews - 5 Days





Do you need a Refusal?

- If you have designed a project utilizing Alternative Materials, or Construction Methods you can request a refusal that can be appealed to the Board of Building Standards. This request can be added in your work description.
- Examiners evaluate plans for compliance with the applicable electrical codes and standards. Once it is identified that aspect of the design is not code compliant, they examiner does not have the authority to approve it.





Starting The Plan Review Process off Right!

Provide a comprehensive work description including all included scopes of work

- Ensure you have provided plans in line with proposed scope of work
- Ensure you have provided any additional documentations that would be helpful to your examiner when making determination of code compliance.
 - Additional work summary with explanation of areas of design which may be unclear.
 - Specific detail or manufacturers specifications on devices.
 - Necessary documentation from other effected departments such as Peco.
- Link the electrical permit to the correct Construction Permit
 - Confirm Use and occupancy is consistent



Error by Omissions

1. Did you include all systems that were requested for review in your submission - Service, Fire Pump, Smoke alarm, Stand-By/Emergency Power
2. Is your cost of work over \$25,000? If so P.E Seal is required.
3. Are all Spaces Labeled to their use on the floor plan?
4. Is there a Title Block and is the requested permitted address, correct?

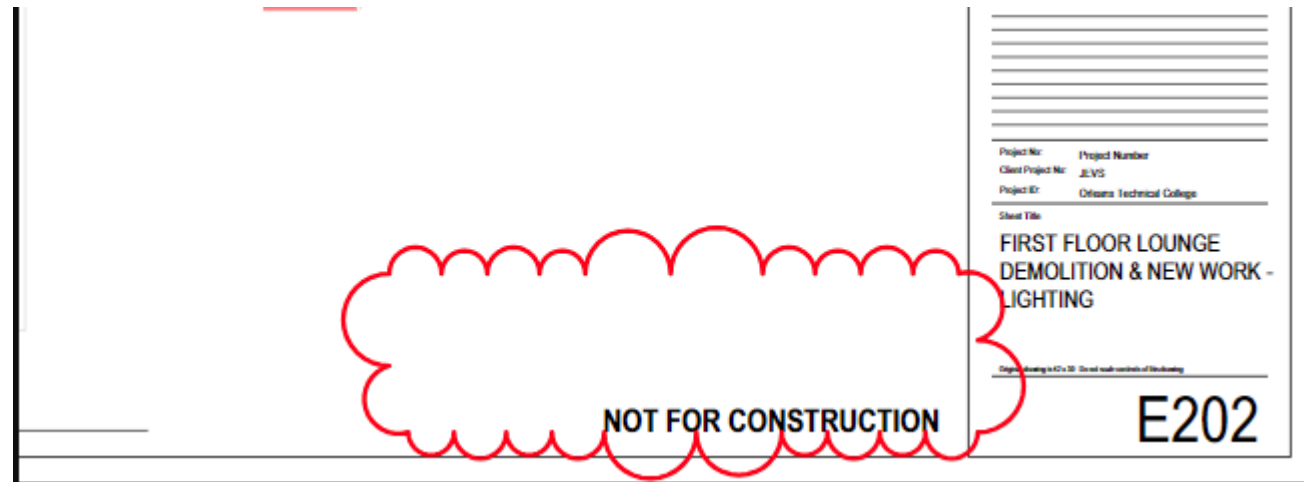


EXPIRES:

CLIENT	Joanne Doe Street Address City Postal code		
ARCHITECT	ACME Architects Street Address City Postal code info@acme.com 123-478-4783 www.acme.com		
SITE	Street Address City Postal code		
TITLE	Floor Plans		
SCALE 1:96 @ Arch E	DATE 1/4/20	DRAW KN	CHECK MW
Project No 12345	Drawing No ArchE/123	Revision D	



Correct Plans Submitted





Common Misses !





Meter Bank Locations

240.24 (B) Occupancy


Each occupant shall have ready access to all overcurrent devices protecting the conductors supplying that occupancy.

OR

230.92 Locked Service Overcurrent devices

Where the service overcurrent devices are locked or sealed or are not readily accessible to the occupant, branch-circuit or feeder overcurrent devices shall be installed on the load side, shall be mounted in a readily accessible location, and shall be of lower ampere rating than the service overcurrent device.

Furthermore: Please Check with your local utility (PP&L, Peco) for their utility requirements as Department of License and Inspections adheres to the 2017 NEC.






Meeting Rooms

Meeting Rooms – informational Note No. 1: For the purpose of this section, meeting rooms are typically design or intended for gathering of seated occupants for such purposes as conferences, deliberations, or similar purposes, where portable electronic equipment such as computers, projects, or similar equipment is likely to be used.

(B) Receptacle Outlets Required. *The total number of receptacle outlets, including floor outlets and receptacle outlets in fixed furniture, shall not be less than as determined in (1) and (2). These receptacle outlets shall be permitted to be located as determined by the designer or building owner.*

(2) Floor Receptacle Outlets. *A meeting room that is at least 3.7 m (12 ft) wide and that has a floor area of at least 20 m² (215 ft²) shall have at least one receptacle outlet located in the floor at a distance not less than 1.8 m (6 ft) from any fixed wall for each 20 m² (215 ft²) or major portion of floor space.*

Question: Would/Could ceiling projector receptacles suffice for the floor receptacle requirements? **One Batman Cookie for Participation**





Show Windows

210.62 Show Windows.

At least one 125-volt, single-phase, 15- or 20-ampere-rated receptacle outlet shall be installed within 18 inches of the top of a show window for each 12 linear feet or major fraction thereof of show window area measured horizontally at its maximum width





Electrical Room Door Swings

110.26(C)(3) Personnel Doors.

Where equipment rated 800 A or more that contains overcurrent devices, switching devices, or control devices is installed and there is a personnel door(s) intended for entrance to and egress from the working space less than 7.6 m (25 ft) from the nearest edge of the working space, the door(s) shall open in the direction of egress and be equipped with listed panic hardware.





Thank You!

