

# City of El Segundo

## PLUMBING, MECHANICAL, AND ELECTRICAL PLAN CHECK QUESTIONNAIRE

**Job Address:** \_\_\_\_\_

The above-proposed project **may** require plumbing, electrical, and mechanical plan checking. These questions are directed to the **new** work requested for the applicable permit requested **not** what exists. In order for this to be accurately determined and to eliminate confusion or delays in the permitting please complete or have the design professional complete the questions below.

If the answer to any of the questions below is “**YES**,” a plan check application is required for the corresponding discipline. To expedite the permit process please submit an application, plans (2 sets) and be prepared to pay plan check fees (we do not accept credit cards). NOTE: The Building Official may make exceptions to minor work, additions, and alterations.

### Plumbing

**NO**      **YES**

- |  |                          |                          |
|--|--------------------------|--------------------------|
| 1. Does the project contain more than 12 drainage fixtures? (Single Family Dwellings are exempt.)      | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Is the potable water supply piping required to be 2” or larger?                                     | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Is the fuel gas piping required to be 2” or larger?   | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Is there any installation, alterations, or relocations in locations classed as hazardous locations? | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Is there any installation, alterations, or relocations of a grease interceptor?                     | <input type="checkbox"/> | <input type="checkbox"/> |

### Mechanical

- |  |                          |                          |
|--|--------------------------|--------------------------|
| 1. Are there any installations where the aggregate BTU input is greater than 500,000 for comfort heating or cooling?                                       | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. Is there any new installation of a containing a commercial type kitchen hood or product conveying duct system?  | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Are there any installations containing a single comfort heating or cooling air handling system with a capacity of 10,000 cubic feet per minute or more? | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. Are there any installations, alterations, relocation of smoke or fire dampers?  | <input type="checkbox"/> | <input type="checkbox"/> |
| 5. Does the new equipment weight total 250 lbs or more?  | <input type="checkbox"/> | <input type="checkbox"/> |
| 6. Does the installation, alteration, or relocation of any refrigeration system contain ammonia?   | <input type="checkbox"/> | <input type="checkbox"/> |

## **General Electric Plan Check Requirements**

1. In General:
  - a. A new building, or addition to an existing building, where their computed area in either case exceeds 30,000 square feet (2787 m<sup>2</sup>).
  - b. Any installation where the total installed load exceeds 84 K.V.A.
  - c. Installation of an equipment rater 600 amperes or more.
  - d. High voltage installations (over 600 volts.)
  
2. By Special Occupancies:
  - a. Theaters or motion picture theaters.
  - b. Places of assembly as defined in Article 518 of the California Electrical Code (C.E.C).
  - c. All health care facilities within the scope of Article 517 of the C.E.C.
  - d. Installations in an environment which is classified as a hazardous location due to presence of combustible or flammable materials as described in Chapter 4 of the C.E.C.
  
3. By Special Equipment:
  - a. Luminaires (lighting fixtures) weighing over 300 pounds
  
4. By Special Conditions:
  - a. Installation of exit signs, egress lighting or required security lighting.
  - b. Installation of Emergency Power Systems or Legally Required Standby Power Systems.
  - c. Installation of Fire Alarm Systems.

Exceptions:

  - i. Addition of strobe power supplies fed from a separate branch circuit and their associated devices connected to any existing fire control unit or panel.
  - ii. Installation of special extinguishing systems, central station monitoring system, dialers, and their associated devices.
  - iii. Addition of any fire warning device connected to an existing programmable fire warning system.
  - d. Gas Detection Systems.
  - e. Installations of complicated electrical system as determined by the Department based on fire, shock and injury risks, such as Industrial/Manufacturing Process Systems, Grouped Motors, 400 Cycle Systems, Container Cranes.
  
5. By Energy Conservation Regulation, T-24:
  - a. Indoor lighting. All new luminaire (light fixture) installations or replacement over 50% of the existing luminaries in a permitted area.
  - b. Outdoor lighting. All new luminaire installations or replacement over 50% of the existing luminaries in a permitted area, as of October 1, 2005.
  - c. Illuminated signs. All new internally or externally illuminated sign installations (indoor and outdoor) ,as of October 1, 2005.

## **QUALIFICATION CRITERIA FOR COUNTER PLAN CHECK**

A counter plan check offers applicants the convenience and expedience of the same day plan check review and permit issuance without an appointment. Most construction projects as well as small tenant improvements or alterations may be checked over-the-counter.

The following is a list of various types of projects which may qualify as a Counter Plan Check. If further clarification is needed regarding this project description list, please contact the electrical plan check supervisor.

- General wiring 600 volts or less solidly grounded system within a commercial, educational, mercantile, storage (non hazardous) and residential occupancy (including single family dwellings) with no more than 60.
- General wiring less than 600 volts with a service or load rated not more than 800 amperes.
- Required fire alarm system with not more than 200 devices.

- Emergency, legally required standby, security or egress lighting system and exit sign with not more than 200 occupants.
- Title 24, State energy compliance for four-story (or higher) residential and all other occupancies (as defined by the standard) within a building or a room having a conditioned space of 30,000 square feet or less and occupant load of 49 or less, calculated per Table 10A of the Building Code.

#### Institutional (I):

- All 600 volts or less solidly grounded system wiring work within health care centers, clinics, nurseries, nursing homes, sanitariums or outpatient hospitals and similar places having an occupant load of not more than 6.

#### Industrial or Factory (F):

- All 600 volts or less solidly grounded system wiring work within with not more than 800 amperes of load or disconnect with a total motor load not exceeding 100 horsepower within factories or industrial facilities such as motion pictures and television filming and videotaping, furniture, dry cleaning and dyeing, clothing, laundries, food processing, musical instruments, optical goods, plastic products, printing and publishing or any other similar locations which are not considered as a classified hazardous area by the Electrical Code and Fire Department.
- Title 24, State energy compliance for four-story (or higher) residential and all other occupancies (as defined by the standard) within a building or a room having a conditioned space of 30,000 square feet or less and occupant load of 49 or less, calculated per Table 10A of the Building Code.

#### Hazardous (H):

- All hazardous

#### Assembly (A):

- General wiring 600 volts or less solidly grounded system within any place of assembly as defined in Article 518 of the NEC, having an occupant load not more than 300.
- Emergency, legally required standby or egress lighting system and exit sign with not more than 200 occupants.
- Title 24, State energy compliance for four-story (or higher) residential and all other occupancies (as defined by the standard) within a building or a room having a conditioned space of 30,000 square feet or less and occupant load of 49 or less, calculated per Table 10A of the Building Code.

### **QUALIFICATION CRITERIA FOR REGULAR PLAN CHECK**

Regular plan check jobs require detailed review and is usually done in the backroom office. These jobs typically take more than 1 hour to review, and usually complex in nature, and usually needs code and engineering research. They usually contain numerous equipment and installation specifications, calculations, details, and they require engineering research and analysis to verify code compliance. It is recommended that applicant call the plan check supervisor for preliminary review, workload information and plan check assignment for complicated projects.

The following is a list of various types of projects which may qualify as a Regular Plan Check. If further clarification is needed regarding this project description list, please contact the electrical plan check supervisor.

- General wiring within a commercial, educational, mercantile, storage (non hazardous) and residential occupancy (including single family dwellings) with more than 80 branch circuits.
- General wiring with a service or load rated over 800 amperes.
- Required fire alarm system with more than 200 devices.
- Emergency, legally required standby, security or egress lighting system and exit sign with more than 200 occupants.

- Title 24, State energy compliance for four or larger story residential and all other occupancies (as defined by the standard) within a building or a room having a conditioned space of over 30,000 square feet and occupant load of more than 49, calculated per Table 10A of the Building Code.
- Over 600 volts wiring.

#### Institutional (I):

- All 600 volts or less wiring work within health care centers, clinics, nurseries, nursing homes, sanitariums or outpatient hospitals and similar places having an occupant load of more than 6.
- Over 600 volts wiring.
- Required fire alarm system with more than 200 devices.
- Emergency, legally required standby or egress lighting system and exit sign with more than 200 occupants.
- Title 24, State energy compliance.

#### Industrial or Factory (F):

- All wiring system with more than 800 amperes of load or disconnect with total motor load exceeding 100 horsepower.
- General wiring with a service rated more than 800 amperes.
- Required fire alarm system with more than 200 devices.
- Emergency, legally required standby or egress lighting system and exit sign with more than 200 occupants.
- Title 24, State energy compliance for four or larger story residential and all other occupancies (as defined by the standard) within a building or a room having a conditioned space of over 30,000 square feet and occupant load of more than 49, calculated per Table 10A of the Building Code.
- Over 600 volts wiring.

#### Hazardous (H):

- All wiring work except as permitted for counter plan check (regardless of voltage or current).
- Title 24, State energy compliance for four or larger story residential and all other occupancies (as defined by the standard) within a building or a room having a conditioned space of over 30,000 square feet and occupant load of more than 49, calculated per Table 10A of the Building Code.

#### Assembly (A):

- General wiring solidly grounded system within any place of assembly as defined in Article 518 of the NEC, having an occupant load more than 200.
- Over 600 volts wiring.
- Required fire alarm system with more than 200 devices.
- Emergency, legally required standby or egress lighting system and exit sign with not more than 200 occupants.
- Title 24, State energy compliance for four-story (or higher) residential and all other occupancies (as defined by the standard) within a building or a room having a conditioned space of 30,000 square feet or less and occupant load of 49 or less, calculated per Table 10A of the Building Code.