



Kane County Development & Community Services Electric Vehicle Charging Station Handout

Kane County
Government Center
719 Batavia Ave Building A
Geneva, IL, 60134
(630) 232-3485

A building permit is required for all new installations and modification to electrical panels, meters, and electric outlets to accommodate an EV-Charger system. Please contact your auto dealership to determine the charging & installation needs for your vehicle.

There are 3 types of EV Charging systems: Car charging system should be installed on a minimum of a dedicated circuit following the manufacturer's requirement.

1. Level 1- Provides charging through 120-volt (120V) Alternating Current (AC) outlet. This charging level can take 40-50 hours to fully charge a battery electric vehicle (BEV) and 5-6 hours for a plug-in hybrid electric vehicle (PHEV).
2. Level 2- Provides higher-rate AC Charging through 240V (residential) or 208V (commercial) electrical service. This charging level can take 4-5 hours for a BEV and 1-2 hours for a PHEV. This level is common for home, workplace & public charging.
3. Direct Current Fast Charging- This level offers rapid charging along heavy-traffic corridors at installed stations. Most PHEVs currently on the market do not currently work with fast chargers.

Car charging system should be installed on a minimum of a dedicated circuit following the manufacturer's requirement. All charging levels require a continuous duty rating of not less than 125% of the maximum load. The panel location must have a 3 foot by 3-foot clear floor space in front of the electrical equipment.

REQUIRED SUBMITTALS

1. Building Permit Application
2. Building Plans must include the following information:
 - a. Type of Electric Vehicle Charging System (EVCS)- Level 1, 2 or DCFC
 - b. Floor plan indicating location of the charger/receptacle on the property, including equipment, disconnect, utility meter & service.
 - c. Electric plan/layout, including
 1. EV Charging unit brand, model, plug type & spec sheets
 2. Size of the electrical circuit required by the charger-amps or KW
 3. Conductor size, type & quantity per conduit run
 4. Wiring type and size
 5. Breaker size in amps
 6. Raceway size and NEMA wall plug type
 7. Drawing of electric route from panel to charger
 - d. Existing and proposed electrical service panel schedules.
 - e. Load Calculation Sheet.
3. Copy of Signed Contract & scope of work

Note: If the contractor is a registered EVCS installer with the Illinois Commerce Commission (ICC), provide the ICC Registration number on the Building permit application. Kane County reserves the right to request additional information at any time.

PERMIT FEES

-\$100.00 for the first \$1,000 of the total project cost plus \$10.00 per each \$1,000 thereafter ("base permit fee"); plus. Plan review fee of 25% of the base permit fee. *Note: Permit fees are paid after review and approval of the permit submittal. Review will be completed within 10 days after all required documents are received*

INSPECTION- Final inspection is required. The inspection will be scheduled within 5 days of the request for inspection.

Effective 1/1/2024