

Electric Vehicle Charging Stations – What you need to know

The growing need to offer drivers relief from the increasingly high cost of gasoline has produced various models of vehicles powered by alternate sources, i.e. natural gas, hybrid and electric, to name just a few. The purpose of this article is to provide you with guidance on the installation of electric vehicle (EV) charging stations at residential locations.

An EV charging station supplies electricity to recharge electric or plug-in hybrid vehicles (PHEV) to minimize the charging time. Even though most electric cars can be recharged from a standard household wall receptacle, the charging time for a fully depleted battery can take longer than the typical eight hour overnight charge. This makes EV charging stations a practical means of faster charging.

Just like any other electrical installation, the charging systems for electric vehicles are required to comply with the construction codes adopted by the State of New Jersey in the Uniform Construction Code (UCC). That doesn't mean that the installation of these devices ALWAYS requires a construction permit. However, when a permit is required, the process should be quick and uncomplicated.

So, when are construction permits required for the installation of the charging systems for electric vehicles?

<i>PROJECT</i>	<i>PERMIT REQUIRED</i>	<i>INSPECTION REQUIRED</i>	<i>CLASSIFICATION</i>
Existing outlet is sized correctly but plug configuration is not compatible w/ equipment plug necessitating the replacement of the outlet to one w/ proper configuration	No	No	Ordinary Maintenance NJAC 5:23-2.7(e)3 http://www.state.nj.us/dca/divisions/codes/codreg/ucc.html
Upgrade circuit breaker and wire to higher rating (15 amp to 20 amp)	Yes ¹	Yes ²	Minor Work NJAC 5:23-2.17A http://www.state.nj.us/dca/divisions/codes/codreg/ucc.html
Vehicle charging system being installed that requires new 120 or 240 volt outlet or an electrical line that will be directly connected to the system	Yes ¹	Yes ²	Minor Work NJAC 5:23-2.17A http://www.state.nj.us/dca/divisions/codes/codreg/ucc.html
1 - The issuance of a construction permit is not required before the work may proceed. However, the owner or electrical contractor acting on behalf of the owner must notify the local code enforcing agency before the work begins. Also, a permit application must be filed and must be delivered in person or by mail within five business days from the date of oral notice.			
2 - An inspection must be performed within 30 days of the request for inspection and is based upon what is visible at the time of the inspection with the certificate of approval stating so.			

Although home charging of electric vehicles will likely necessitate the installation of an EV charging station, it should not be a deterrent to considering these cars.

For additional information regarding the installation of EV charging stations, please contact the Department of Community Affairs, Division of Codes and Standards, Code Assistance Unit at (609) 984-7609.