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# PERMITTING and INSPECTIONS GUIDE

## FOR RESIDENTIAL ELECTRIC VEHICLE SUPPLY EQUIPMENT

This guide is designed to assist those who wish to install Electric Vehicle Supply Equipment (EVSE), or EV charging stations, on residential sites.

### FREQUENTLY ASKED QUESTIONS

**Why are permits required for Electric Vehicle Supply Equipment (EVSE)?**  
 State law (NCGS 160A-417) requires the permit, and obtaining the proper permits and inspections helps ensure that the equipment is properly installed to protect the health, safety, and welfare of our citizens.

**Where can I find the rules for installing Electric Vehicle Supply Equipment (EVSE)?**  
 Rules for the installation of EVSE can be found in the latest edition of the North Carolina Electrical Code (the National Electrical Code (NEC) with North Carolina Amendments). If the installation requires work done in another trade—such as mechanical for ventilation—that work must be done in accordance with the applicable NC Code.

### HOW TO APPLY FOR A PERMIT

Apply for a permit in just two simple steps:

- Have Your Equipment Plan**
  - Equipment layout
  - Electrical requirements for equipment
  - Size of electrical service (proposed or existing)
  - Ventilation requirements
  - Provide all equipment and plan documents on-site at the time of inspection
- Complete Permit Application Online**
  - Enter all pertinent plan and equipment details in the Notes section of the online application
  - Payment is required at the time of application for online permit applications

**PROCESSING TIME**  
 Processing time for EVSE online permit applications is approximately two business days from the submittal date of a complete and accurate application. Upon approval, your permit will be emailed to you.

### FEES

The minimum permit fee (\$60) is applied per trade.

The example below shows the permit fees for a *typical* residential EVSE installation:

**Electrical Permit (\$60) + Mechanical Permit\* (\$60) = \$120 Total Permit Fees**

\*if ventilation is required

Actual fees may vary, depending upon the specific installation. For a complete listing of current fees and rates per the Town of Cary’s approved budget, please visit the Inspections & Permits Web page at [www.townofcary.org](http://www.townofcary.org).

## INSPECTIONS and DESIGN REQUIREMENTS

### GENERAL INFORMATION

For your safety, EVSE installations are inspected to ensure that they are done in compliance with the applicable NC Codes and manufacturer's instructions. Inspections are required for:

- (1) Electrical work
- (2) Mechanical work, if any

The required inspections may vary depending upon the specific equipment and installation, such as mechanical work if ventilation is required, per the manufacturer's specifications.

It is the responsibility of both the owner and contractor to ensure that the installation is done in compliance with all applicable laws and regulations.

### IMPORTANT!

- All electrical equipment must be listed and labeled by an approved testing agency.

### ELECTRICAL INSPECTIONS for EVSE

Electrical work must comply with Article 625 of the National Electrical Code. Typical inspections are listed below. Other inspections may be required depending upon the specific equipment and installation instructions.

**Electrical Groundwork Inspection (E100)** includes, but is not limited to:

- Underground conduits or cables

**Electrical Final Inspection (E300)** includes, but is not limited to:

- Completed installation of all equipment

Please Note: An Electrical Rough-In Inspection (E200) is required if the items above would not be visible and accessible at the time of a final inspection. If you have any questions about what inspections your particular installation may require, please call Inspections & Permits at (919) 469-4043.

### MECHANICAL INSPECTIONS for EVSE

Mechanical work must comply with the current North Carolina Mechanical Code. Typical inspections are listed below. Other inspections may be required depending upon the specific equipment and installation instructions.

**Mechanical Final Inspection (M300)** includes, but is not limited to:

- Completed installation of all equipment and components of any ducted ventilation or exhaust system in accordance with the manufacturer's installation instructions and the NC Code.

Please Note: A Mechanical Rough-In Inspection (M200) is required if the items above would not be visible and accessible at the time of a final inspection. If you have any questions about what inspections your particular installation may require, please call Inspections & Permits at (919) 469-4043.