

ARTICLE 625

ELECTRIC VEHICLE POWER TRANSFER SYSTEM

Introduction to Article 625—Electric Vehicle Power Transfer System

This article covers the installation of wiring and equipment used to connect electric vehicle power transfer systems to premise wiring. Electric vehicles have evolved over the last decade into not only a load that consumes power, but one that also must be managed and may be used as an interconnected contribute power system. Many of these rules are outside of the scope of this material, however we do cover the following topics in this article:

- ▶ Scope
- ▶ Electric Vehicle Branch Circuit
- ▶ Overcurrent Protection
- ▶ Disconnecting Means
- ▶ Interactive Equipment
- ▶ Wireless Power Transfer Equipment
- ▶ GFCI

Part III. Installation

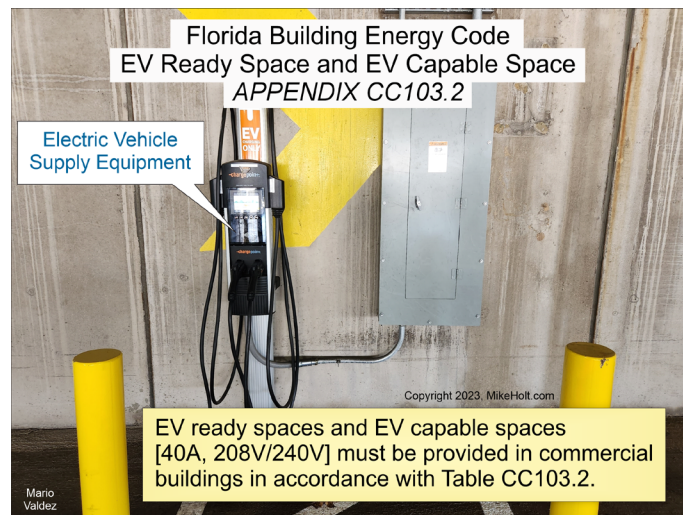
625.40 Electric Vehicle Branch Circuit

The branch circuit for electric vehicle supply equipment rated greater than 16A or 120V must be supplied by an individual branch circuit.

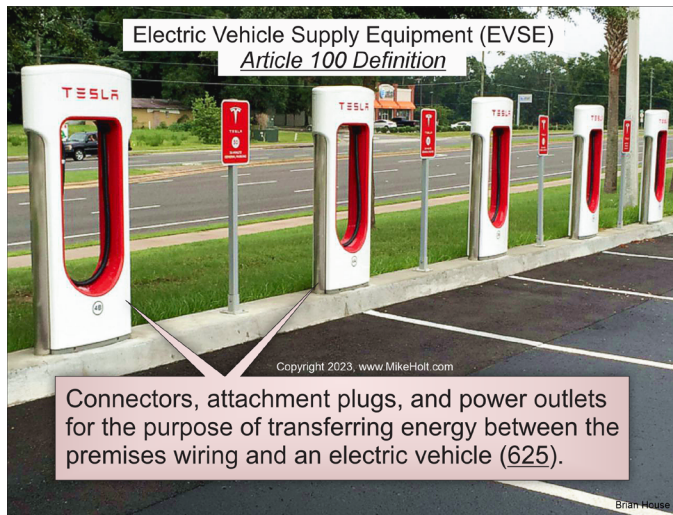
▶Figure 625-6

According to Article 100, “Electric Vehicle Supply Equipment (EVSE)” includes the conductors, electric vehicle connectors, attachment plugs, personnel protection system, devices, and power outlets installed for the purpose of transferring energy between the premises wiring and the electric vehicle. ▶Figure 625-7

An “Individual Branch Circuit” is a branch circuit that supplies only one utilization equipment.



▶Figure 625-6



►Figure 625-7

Ex: A single branch circuit is permitted to supply more than one electric vehicle supply equipment when the loads are managed by an energy management system in accordance with 625.42(A) or (B).