

Understanding Electric Vehicles Infographic



CONNECTED to SAFETY

Understanding Electric Vehicles

Are you thinking about purchasing, or have you recently purchased an **electric vehicle**? Learn about the different charging options you have and how to **charge your electric vehicle safely**.

HOME CHARGING EVSE

Electric Vehicle Supply Equipment



Before using a charger, ensure the equipment has been listed by a **Nationally Recognized Testing Laboratory (NRTL)**.



Have a **qualified electrician** inspect your home to ensure your electrical system can handle charging.



Ensure both the **charger** and **charging cord** do not have **damage** before use.

LEVEL 1 EVSE CHARGING

Provides charging through a **standard household plug**. 2-5 miles of range per hour.



Ensure your charger or receptacle has **GFCI protection** to prevent accidental shocks and electrocution.



Ensure you are using a **dedicated circuit** to charge your vehicle. The circuit should not provide power to any other appliance.



Use a **manufacturer provided** charging cord.

LEVEL 2 EVSE CHARGING

Provides charging through **specialized 240v charging equipment**. 10 - 60 miles of range per hour.



Must be installed by a **qualified electrician**.



May require an **electrical service upgrade** to install.



Only use **outdoor rated** charging stations outdoors.



Ensure the charging station **cannot come in contact** with the electric vehicle.

Keep the **charging cable off the floor** to avoid tripping hazards and maintain the life of the cord.



LEVEL 3 EVSE CHARGING

Fastest charging option. **Not available** for residential installation.

WARNING

- Electric vehicles have **high voltage** batteries
- All maintenance should be **completed by the manufacturer**
- Avoid contact with **high-voltage orange cables**

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HOME CHARGING: ELECTRIC VEHICLE SUPPLY EQUIPMENT (EVSE)

- Before using a charger, ensure the equipment has been listed by a Nationally

Recognized Testing Laboratory (NTRL)

- Have a qualified electrician inspect your home to ensure your electrical system can handle charging
- Ensure both the charger and charging cord do not have damage before use

LEVEL 1 EVSE CHARGING

Level 1 provides charging through a standard household plug. 2-5 miles of range per hour charged

- Ensure your charger or receptacle has GFCI protection to prevent accidental shocks and electrocution
- Ensure you are using a dedicated circuit to charge your vehicle. The circuit should not provide power to any other appliance
- Use a manufacturer-provided charging cord

LEVEL 2 EVSE CHARGING

Provides charging through specialized 240v charging equipment. 10 – 60 miles of range per hour charged

- Must be installed by a qualified electrician
- May require an electrical service upgrade to install
- Only use outdoor-rated charging stations outdoors
- Ensure the charging station cannot come in contact with the electrical vehicle
- Keep the charging cable off the floor to avoid tripping hazards and maintain the life of the cord

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Source: *Republished with permission from Electrical Safety Foundation International (ESFI)*