AUSTIN ENERGY GREEN BUILDING

2024 CITY OF AUSTIN ENERGY CODE

MULTIFAMILY
ELECTRIC VEHICLE (EV) READINESS GUIDE

Low-, Mid- and High-Rise with R-2 Occupancies


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WHAT'S HAPPENING?

- The City of Austin adopted the 2024 Energy Code with local amendments on April 10, 2025. It takes effect on July 10, 2025.
- The amendments align the Energy Code with other adopted City of Austin codes and climate goals while offering more compliance flexibility.
- New EV readiness requirements apply to all new residential and commercial construction.

OVERVIEW

This guide helps industry professionals understand the three levels of EV readiness requirements of the 2024 International Energy Conservation Code (IECC) as amended and adopted by the City of Austin. As a leader in energy efficiency, Austin amends the Energy Code to align with local goals and conditions. Austin's Climate Equity Plan aims for 40% of total vehicle miles traveled in Austin to be electrified and EV ownership that is culturally, geographically and economically diverse. By adopting EV readiness measures in the Energy Code, the City of Austin helps the whole community prepare for the future installation of electric vehicle charging infrastructure.

This document does not replace any applicable building, fire or structural codes and ordinances. Users must consult the relevant code documents during design and permitting. The Austin Development Services Department is responsible for interpretation and compliance decisions.

Disclaimer: *This guide is for informational purposes only. For specific requirements, consult the City of Austin Energy Code and Building Technical Codes. This is not design advice; consult a licensed design professional for project specific guidance.*

AUSTIN'S ENERGY CODE

On April 10, 2025, Austin City Council voted to adopt the 2024 IECC and local amendments. The ordinance takes effect July 10, 2025. EV readiness requirements appear in 2024 IECC Appendices **CG** and **RE** and apply to new construction. The ordinance applies to multiple building occupancy categories. This guide focuses on low-, mid- and high-rise multifamily dwellings with Group R-2 occupancies.

KEY DEFINITIONS OF EV READINESS

Table 1 below describes how key EV readiness terms are defined in the 2024 Energy Code with Austin amendments and this document. As a reminder, this document focuses on multifamily buildings and load sizing varies between the residential and commercial provisions of the 2024 IECC. Residential dwellings and non-residential buildings may use these terms with slight variations.

Table 1. EV Readiness Definitions

Term	Code Definition[1,2]	Guide Sheet Interpretation
EV Capable Space	A designated automobile parking space that is provided with electrical infrastructure such as, but not limited to, raceways, cables, electrical capacity, a panelboard or other electrical distribution equipment space necessary for the future installation of Electric Vehicle Supply Equipment (EVSE).	An EV capable space requires, at minimum, load sizing of 2.1 kVA[1,4] or 3.3 kVA and 25 amps[2,4] of electrical capacity per space, breaker space in a panel, raceway[3] (can be empty) and a raceway termination. The breaker space and raceway termination are required to be marked as "For future EVSE."
EV Ready Space	An automobile parking space that is provided with a branch circuit and an outlet, junction box or receptacle that will support an installed EVSE.	An EV ready space requires, at minimum, load sizing of 2.1 kVA[1,4] or 3.3 kVA, 25 amps[2,4] of electrical capacity, breaker marked as "For EVSE" in a panel, raceway with wiring and a receptacle or charger.
EVSE Space	An automobile parking space that is provided with a dedicated EVSE connection.	An EV ready space requires, at minimum, load sizing of 2.1 kVA[1,4] or 3.3 kVA, 25 amps[2,4] of electrical capacity, breaker marked as "For EVSE" in a panel, raceway with wiring and EV charger.

[1] 2024 IECC RE101 for low-rise multifamily
[2] 2024 IECC CG101.1 and 2024 IECC CG101.2.5.3.2 for mid- and high-rise multifamily
[3] When parking spaces are located in a parking garage, conduit/raceway installation is optional.
[4] Assumes energy management system (EMS) utilized for unassigned or unowned parking spaces. Otherwise, load sizing of 6.2 kVA of electrical capacity per space for Residential IECC or 7.2 kVA and 50 amps electrical capacity per space for Commercial IECC.

KEY REQUIREMENTS

The sections and charts below are designed to provide a baseline understanding of this local code, including the required quantities for each type of EV space and the associated power load requirements.

LOW-RISE MULTIFAMILY REQUIREMENTS

The 2024 IECC outlines requirements for low-rise multifamily buildings with R-2 occupancy under its residential provisions. These buildings — defined as four stories or fewer — or mixed-use buildings with parking allocated to R-2 occupancies shall include EV capable spaces, EV ready spaces or EVSE spaces for 40% of the dwelling units or automobile parking spaces, whichever is less. Austin's Energy Code does not include any amendments related to EV readiness for low-rise multifamily. Table 2 below outlines the associated infrastructure requirements.

Table 2. Low-Rise Multifamily EV Requirements

Requirement Type	EV Capable	EV Ready
Panelboard/Switchboard	Designed and installed to accommodate EV load. Could include upsizing panels, additional panels and/or efficient placement of circuits in panels. Reserved space in panels labeled "For future electric vehicle supply equipment."	Same as EV capable
Conduit/Raceway	Sized for calculated EV charging load of not less than 2.1 kVA[1] per space.	Same as EV capable
Electrical Enclosure	Located within six (6) feet of the EV capable space. Labeled "For electric vehicle supply equipment."	Located within six (6) feet of the EV ready space. Labeled "For electric vehicle supply equipment."
Transformer (utility side)	No requirement	Sized to accommodate calculated EV charging load.
Branch Circuit/Wiring	No requirement	Sized for calculated EV charging load of not less than 6.2 kVA with no EMS or 2.1 kVA with an EMS.
Breaker/Circuit	No installation requirement, however, spare electrical capacity for a two-pole circuit breaker or set of fuses.	Installation of branch circuit serving each EV ready space.
Installed EVSE	No requirement, however, EV capable required quantity may be reduced by the number of spaces served by installed EVSE.	
Energy Management Systems (EMS)[1]	No requirement, however, it is recommended for multifamily sites to consider this option to reduce overall electrical site load.	

[1] Many dual port electric vehicle charging stations utilize EMS. These stations double the number of EV readiness spaces while keeping the overall electrical demand within a building's existing capacity. The capacity of the electrical distribution system and each branch circuit serving multiple EV readiness spaces with a dual port system is reduced from 6.2 kVA to 2.1 kVA per space.

MID- AND HIGH-RISE MULTIFAMILY REQUIREMENTS

The 2024 IECC places requirements for mid- and high-rise multifamily buildings with R-2 occupancy under its commercial provisions. These buildings — defined as five stories or more — shall include at least 5% EV ready spaces and 35% EV capable spaces, based on the total number of dwelling units or automobile parking spaces, whichever is less. The local code includes amendments related to EV readiness for mid- and high-rise multifamily. Table 3 below outlines the associated infrastructure requirements.

Table 3. Mid- and High-Rise Multifamily EV Requirements

Requirement Type	EV Capable	EV Ready
Panelboard/ Switchboard	Designed and installed to accommodate EV load. Could include upsizing panels, additional panels and/or efficient placement of circuits in panels. Reserved space in panels labeled "For future electric vehicle supply equipment."	Same as EV capable
Conduit/ Raceway	Sized for calculated EV charging load of not less than 3.3 kVA[1] per space.	Same as EV capable
Electrical Enclosure	Located within three (3) feet of the EV capable space. Labeled "For electric vehicle supply equipment."	Located within three (3) feet of the EV ready space. Labeled "For electric vehicle supply equipment."
Transformer (utility side)	No requirement	Sized to accommodate calculated EV charging load.
Wiring	No requirement	Sized for calculated EV charging load of not less than 7.2 kVA per space with no EMS or 3.3 kVA with an EMS.
Breaker/Circuit	No installation requirement, however, spare electrical capacity for a two-pole circuit breaker or set of fuses.	Installation of branch circuit serving each EV ready space.
Installed EVSE	No requirement, however, EV capable required quantity may be reduced by the number of spaces served by installed EVSE.	
Energy Management Systems (EMS)[1]	No requirement, however, it is recommended for multifamily sites to consider this option to reduce overall electrical site load.	

[1] Many dual port electric vehicle charging stations utilize EMS. These stations double the number of EV readiness spaces while keeping the overall electrical demand within a building's existing capacity. The capacity of the electrical distribution system and each branch circuit serving multiple EV readiness spaces with a dual port system is reduced from 7.2 KVA to 3.3 kVA per space.

OTHER CONSIDERATIONS

PARKING

For R-2 occupancies, the code allows flexibility by letting project teams design EV readiness for 40% of the dwelling units or automobile parking spaces, whichever is less. Austin no longer requires a minimum number of parking spaces. If the project does not include any parking, the EV readiness requirements in 2024 IECC Appendices CG and RE do not apply.

NON-ELECTRICAL CONSIDERATIONS

The City of Austin adopted the EV readiness provisions of the 2024 IECC to reduce barriers to EV adoption and encourage integration of infrastructure during original construction, when it is most cost effective. EV readiness may also involve non-electrical elements such as concrete, rebar, siting, permits and inspections.

LOCAL AMENDMENTS AND EXCEPTIONS

The City of Austin has adopted a few local amendments to the commercial provisions of the 2024 IECC for EV readiness. These amendments would apply to mid- and high-rise multifamily, five (5) stories and more.

- Incorporated 2024 IECC Appendix CG into ASHRAE 90.1-2022 provisions (This guide includes citations to the model 2024 IECC, not ASHRAE 90.1-2022, for ease of access. Consult the local codes for the local version of these provisions.)
- Removed EVSE installation requirements at new construction and reduced the EV readiness percentage for R-2 occupancies
- Made conduit installation for EV capable spaces in parking garages optional
- Added a power allocation option
- Aligned EV readiness space requirements with Austin Fire Department restrictions on EVSE placement in parking garages

The residential provisions of the 2024 IECC also include two exceptions:

- Where the local electric distribution entity certifies in writing that it is not able to provide 100% of the necessary distribution capacity within two (2) years after the estimated certificate of occupancy date, the required EV charging infrastructure shall be reduced based on the available existing electric distribution capacity.
- Where a substantiation is approved that meeting the requirement of 2024 IECC RE101.2.5 will alter the local utility infrastructure design requirements on the utility side of the meter so as to increase the utility side cost to the builder or developer by more than $450 per dwelling unit.

BEST PRACTICES

Deciding whether to install EV stations in a new multifamily project at original construction ultimately rests with the building owner or developer. When planning to include EV readiness infrastructure, project teams can follow several best practices to fully benefit from the Energy Code and prepare for future EVSE installation.

Start by Consulting the Local Utility

Engage with your electric utility early in the design process — sooner than you might expect. For most projects in Austin, this will be Austin Energy. Early coordination helps you make informed decisions on transformer sizing, offsite improvements, siting and metering.

Planning for Near-Term EVSE Installation (3-5 Years)

If you plan to install EV stations in the near future, consider the following:

- Consult your electric utility about offsite improvements that could affect service.
- Size utility transformers to handle future EVSE load.
- Allocate conductor capacity for future EVSE use.
- Locate both utility- and building-side transformers in accessible areas.
- Design space for future meters dedicated to EVSE.
- Design space for protective features like bollards and wheel stops.
- Indicate future EVSE locations and infrastructure on design plans to reserve space and inform future project teams.
- Include future load data on local utility design forms, such as Austin Energy's Electric Service Planning Application (ESPA).
- Account for accessibility requirements in future EVSE locations.

Planning for Long-Term EVSE Installation (5+ Years)

If you expect to install EV stations further in the future, consider the following:

- Locate utility- and building-side transformers in accessible areas.
- Allocate use of transformer conductors to support future EVSE needs.
- Design space for future meters.
- Allocate space for protective measures like bollards and wheel stops.

OTHER GUIDES

2024 City of Austin Energy Code | Commercial Electric Vehicle Readiness Guide

LOCAL INCENTIVES

Many utilities and entities offer rebates to offset EVSE equipment and installation costs. Contact your utility to learn more about eligibility requirements and levels of incentives available.

MORE INFORMATION

2024 IECC: Codes.ICCsafe.org/Content/IECC2024V1.0

2024 Energy Code: AustinTexas.gov/Department/Building-Technical-Codes

Austin Energy Code Questions: EnergyCode@AustinEnergy.com

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