

Applicability¹

These Electric Vehicle Ready provisions of the DOE Zero Energy Ready Home program must be met by any building eligible for certification under the Multifamily National Program Requirements Version 2 and the Multifamily California Program Requirements Version 2, unless one or more of the exceptions noted below applies. For Exception A, a project may be certified under the DOE Zero Energy Ready Home program if all other applicable program requirements are met, and this checklist is not required. If Exceptions B and/or C applies, check the box below. If this box is checked, the rater must record the percentage of spaces provided and may mark the EV-Ready checklist as complete on the Rater Checklist.

Exceptions

- A. The cost of the energy use of the parking garage or lot is not the responsibility of the Builder, Developer, Building Owner, or Property Manager, or no parking is provided.
- B. Where the local electric distribution entity has certified in writing that it is not able to provide 100% of the necessary distribution capacity that would be needed according to this checklist (assuming that all of the required EVSE, EV Ready, and EV Capable spaces are eventually energized) within 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. The Rater must include the utility's written explanation in the project records.
- C. Where meeting the capacity requirements associated with eventually energizing all of the EVSE, EV Ready, and EV Capable spaces required by this checklist 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, the required EV charging infrastructure shall be reduced based on the available existing electric distribution capacity. The Rater must include documentation from the utility regarding added costs in the project records.

Exception B and/or C applies and required documentation is retained by the rater.	
Both Exceptions require that EV charging infrastructure is installed based on the available existing electric distribution capacity. Document the percentage of total automobile parking spaces which are EV Capable, EV Ready, or EVSE spaces. All installed spaces must meet the design requirements of this checklist.	%

Notes

- 1. All electrical infrastructure shall be in accordance with NFPA 70.
- 2. An asterisk (*) denotes a requirement that must be field verified. All other requirements (i.e., those without an asterisk) may be verified based on construction documents or field verification.
- 3. These requirements are adapted from Appendix RE of the 2024 Residential IECC.



ltem	Requirement	Rater Verified ²	Builder or LP Verified ³
1*	Allocated parking for dwelling units in multifamily or mixed-use buildings are provided with an EV Capable, EV Ready, or EVSE space for 20% of units or automobile parking spaces, whichever is less. See endnotes for parking that is shared by multiple buildings ⁴ and alternative percentage requirements for Low-Power Level 2 (L2) charging. ⁵ The following minimum types of spaces are provided: ⁶ 10% of the spaces provided must be EVSE spaces. 10% of the spaces provided may be any combination of EVSE, EV Capable, or EV Ready spaces.		
	Advisory: DOE intends to raise these percentages in a future program update.		
All	EV Capable spaces must comply with items 2a – 2d, below.		
2a*	A continuous raceway or cable assembly is installed between a suitable panelboard (or other on-site electrical distribution equipment) and an enclosure or outlet located within 6 feet of the EV Capable space.		
	The raceway or assembly and panelboard (or other electrical distribution equipment) are sized and rated to supply a system capacity not less than:		
2b	6.2 kVA per space, if serving a single space or serving multiple spaces without an energy management system.		
	2.1 kVA per space, if serving multiple spaces with an energy management system. ⁷		
2c	The panelboard (or other electrical distribution equipment) to which the raceway or cable assembly connects has sufficient dedicated space and spare electrical capacity for a two-pole circuit breaker or set of fuses.		
2d*	The electrical enclosure or outlet and the panelboard (or other electrical distribution equipment) are both marked: "For electric vehicle supply equipment (EVSE)"		
All	EV Ready spaces must comply with items 3a – 3c, below.		
3a*	A branch circuit is installed and terminates at an enclosure or outlet located within 6 feet of the EV Ready space. The termination is marked "For electric vehicle supply equipment (EVSE)."		
3b	Circuit and panelboard (or other electrical distribution equipment) are sized and rated to supply a system capacity not less than: 6.2 kVA per space, if serving a single space or serving multiple spaces without an energy management system.		
3c*	 2.1 kVA per space, if serving multiple spaces with an energy management system.⁷ The electrical enclosure or outlet and the panelboard (or other electrical 		



	distribution aquinment) are both marked: "Ear electric vehicle supply					
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	equipment (EVSE)"					
All	All EVSE spaces must comply with items 4a – 4d, below.					
	An installed EVSE ⁸ with multiple output connections is permitted to serve multiple EVSE spaces.					
4a*	EVSE is installed within 6 feet of the EVSE space.					
4b	Circuit and panelboard (or other electrical distribution equipment) serving					
	EVSE are sized and rated to supply a system capacity not less than:					
	6.2 kVA per space, if serving a single space or serving multiple spaces					
	without an energy management system.					
	2.1 kVA per space, if serving multiple spaces with an energy management					
	system. ⁷					
4c	Nameplate charging capacity of installed EVSE is not less than:					
	6.2 kVA (or 30A and 208/240V) per space, if serving a single space or					
	serving multiple spaces without an energy management system.					
	2.1 kVA per space (or 10A at 208/240V), if serving multiple spaces with an					
	energy management system. ⁷					
4d	EVSE is listed and labeled in accordance with UL 2202 or UL 2594.					

Verification Signoffs				
Rater Name:	Rater Pre-Drywall	Rater Initials:		
Rater Company Name:	Inspection ⁹ Date(s):			
Rater Name:	Rater Final	Rater Initials:		
Rater Company Name:	Inspection ¹⁰ Date(s):			
Builder/Developer Employee:	Builder/Developer	Builder Initials:		
Builder/Developer Name:	Inspection Date(s):			
Licensed Professional:	Licensed Professional Inspection Date(s):	LP Initials:		



Endnotes

¹ For projects certifying under the ZERH Single Family Version 2 program requirements, this checklist must be applied to the shared parking area (if provided) when homes are not provided with a private driveway or garage. These project types are eligible to claim Exceptions A, B, and/or C, if applicable.

Only units seeking ZERH certification must be included when determining the number of spaces required to be EVSE, EV-Ready, and/or EV-Capable.

² The Rater is defined as the person(s) completing the third-party verification required for certification. Raters must comply with the following:

- Raters are required to complete all ZERH training modules applicable to the ZERH MF V2 program specifications (according to the timeline posted on the <u>ZERH website</u>) prior to completing a ZERH project's first inspection. Please note that required training modules are subject to change and Raters will have an allocated time period to complete additional or updated training modules as they become available. If a Rater does not successfully complete these modules before the end of the allocated time period, they may not certify ZERH projects until the modules are complete.
- Raters must be (a) a Certified Rater, Approved Inspector, as defined by ANSI / RESNET / IECC 301, or (b) credentialed by a Home Certification Organization for the Zero Energy Ready Home program (HCO for ZERH), or (c) meet the credential requirements of a Multifamily Review Organization for the Zero Energy Ready Home program (MRO for ZERH). Learn more and find a current list of HCOs and MROs for ZERH <u>here</u>.

³ At the discretion of the Rater, a licensed professional (LP) may verify those line items in this Checklist where a checkbox is in the "Licensed Professional" column. A Licensed Professional must be a Professional Engineer, Registered Architect, or other industry professional (e.g., electrician) in good standing and possess a current license. When exercised, the LP's responsibility will be formally acknowledged by the LP signing off on the checklist for the item(s) that they verified. However, if a quality assurance review indicates that Items have not been successfully completed, the Rater will be responsible for facilitating corrective action.

⁴ For developments where multiple buildings (and/or townhomes, when certifying under ZERH MF V2) share common parking area(s) (e.g., lot(s) or garage(s)), the percentage of spaces required by this checklist shall be applied to the total number of parking spaces in the common parking area(s) that are intended for use by the buildings' residents *or* by the total number of units in the buildings, whichever is less, and shall be based on the total number of dwelling units that share the parking area(s).

⁵ Projects that do not include an energy management system may opt to reduce the capacity of EVSE spaces (and associated circuit and panel board/distribution equipment) to a nameplate rating less than 6.2 kW (but no less than 3.3 kW, or 16A at 208/240V), if the percentage of EVSE spaces is increased from 10% to 20% of units or automobile parking spaces, whichever is less. If this alternative is used, the project is not required to provide any additional EV Ready or EV Capable spaces.

⁶ To determine the number of EVSE, EV-Ready, and EV-Capable spaces required for a project:

- 1. Calculate the number of spaces equal to 20% of spaces provided for resident parking or 20% of dwelling units, whichever is less. Round up to the next whole number.
- 2. At least half of these spaces must be EVSE. The remaining spaces may be any combination of EVSE, EV Ready, and/or EV Capable.



For example, a building with 70 dwelling units and 62 spaces provided for resident parking would require at least 7 EVSE spaces and 6 EVSE, EV Ready, or EV Capable spaces.

- 1. 20% of 62 = 12.4, rounded up to the next whole number = 13
- 2. At least half of 13 must be EVSE (7). The remaining 6 may be any combination of EVSE, EV Ready, and EV Capable.

⁷ An energy management system is defined as a system of one or more monitors, controllers, communications systems, or other devices used to control electric vehicle charging loads by increasing or reducing electric power supplied to the vehicle charging location. If used, an energy management system must not be configured to turn off electrical power to EVSE or EV Ready spaces used to meet ZERH requirements.

⁸ Electric Vehicle Service Equipment (EVSE) is equipment for plug-in power transfer, including: ungrounded, grounded, and equipment grounding conductors; electric vehicle connectors; attached plugs; any personal protection system; and all other fittings, devices, power outlets, or apparatus installed specifically for the purpose of transferring energy between the premises wiring and an electric vehicle.

⁹ Any Item that will be concealed by drywall (e.g., wall insulation) must be verified during the pre-drywall inspection. If drywall is installed prior to the inspection, then it must be entirely removed to fully verify all Items. It is not sufficient to remove only portions of drywall to inspect a subset of areas. Additional information is available in the ENERGY STAR Technical Bulletin: <u>Pre-Drywall Inspection Is Always Required</u>.

¹⁰ Some Items can typically only be verified at a later stage of construction than when the pre-drywall inspection occurs (e.g., bath fan airflow). Any Item that has not been verified during the pre-drywall inspection must be verified prior to or during the final inspection.