U.S. DOE Zero Energy Ready Home Program Multifamily National Program Version 2, EV-Ready Checklist DRAFT

These Electric Vehicle Ready provisions of the DOE Zero Energy Ready Home program shall be met by any building eligible for certification under the Multifamily Version 2 National Program Requirements, unless one or more of the exceptions noted below applies. If one or more exceptions apply, a project may be certified under the DOE Zero Energy Ready Home program if all other applicable program requirements are met.

Exceptions:

A. 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 date of the certificate of occupancy, 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.

B. 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 $400 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.

If either exception applies, check the first row in the checklist below. Confirming that an exception applies and documenting the percentage of spaces provides acceptable documentation that the EV Ready Checklist has been completed.

Note that all electrical infrastructure shall be in accordance with NFPA 70.

These requirements were adapted from the provisions drafted for the 2024 Residential and Commercial IECC.

U.S. DOE Zero Energy Ready Home Program Multifamily National Program Version 2, EV-Ready Checklist[1]			
Item #	**Requirement**	**Rater Verified[2]**	**Builder Verified[3]**
	Exception A or B applies, and required documentation is retained by the rater. Because both Exception A and B 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.	☐ ___%	
1	Allocated parking for dwelling units[4] in multifamily or mixed-use buildings shall be provided with an EV Capable space[5], EV Ready space[6], or EVSE space[7] for 40% of units or automobile parking spaces, whichever is less. To meet this 40% threshold, the following minimum types of spaces are provided: • 10% of the total (based on units or automobile parking spaces) must be EVSE spaces • The remaining 30% of the total may be any combination of EVSE, EV Capable, or EV Ready spaces The number of required compliant spaces shall be rounded up to the nearest whole number.	☐	
2. All EV Capable spaces comply with the following:			
2a	A continuous raceway or cable assembly is installed between an enclosure or outlet located within 3 feet of the EV Capable space and a suitable panelboard or other onsite electrical distribution equipment. The following exceptions to the 3 feet requirement apply: • Parking spots in a covered garage are deemed EV-Capable if the conduit terminates anywhere within the garage on that parking level. • Projects with a common area electrical room may have the conduit terminate anywhere within the electrical room.	☐	☐
2b	Installed raceway or cable assembly is sized to accommodate a minimum circuit capacity as described Item 5 below.	☐	☐
2c	The electrical distribution equipment to which the raceway or cable assembly connects has sufficient dedicated space and spare electrical capacity for a 2-pole circuit breaker or set of fuses.	☐	☐
2d	The electrical enclosure or outlet and the panelboard or other electrical distribution equipment directory is marked: "For future electric vehicle supply equipment (EVSE)."	☐	
3. All EV Ready spaces comply with the following:			

3a	Branch circuits serving EV Ready spaces terminate at an outlet or enclosure, located within 3 feet of each EV Ready space it serves.	☐	☐
3b	Branch circuits serving EV Ready spaces have a minimum circuit capacity as described in Item 5, below.	☐	☐
3c	The panelboard or other electrical distribution equipment directory designates the branch circuit as "For electric vehicle supply equipment (EVSE)" and the outlet or enclosure shall be marked "For electric vehicle supply equipment (EVSE)."	☐	
4. An installed EVSE with multiple output connections is permitted to serve multiple EVSE spaces. Each EVSE installed to meet the minimum charging rate, serving either a single EVSE space or multiple EVSE spaces, shall comply with all of the following:			
4a	Have a minimum circuit capacity as described in Item 5, below.	☐	☐
4b. Have a minimum charging rate as follows:			
4b.1	An EVSE serving a single EVSE space must be capable of charging at a minimum rate of 6.2 kVA (30A at 208/240V).	☐	☐
4b.2	An EVSE serving multiple EVSE spaces and controlled by an energy management system providing load management must be capable of simultaneously charging each ESVE space at a minimum rate of no less than 2.1 kVA.	☐	☐
4c	Be located within 3 feet of each EVSE space it serves.	☐	
4d	Installed EVSE equipment is listed and labeled in accordance with UL 2202 or UL 2594.	☐	
5. The capacity of electrical infrastructure serving each EV Capable space, EV Ready space, and EVSE space shall comply with the following:			
5a	Each branch circuit serving an individual space shall have a rated capacity not less than 8.3kVA (40A at 208/240V).	☐	☐
5b	Each branch circuit serving multiple EVSE, EV Ready, or EV Capable spaces designed to be controlled by an energy management system providing load management shall have a minimum capacity of 2.7 kVA per space.	☐	☐

Endnotes:

[1] These requirements do not apply to parking garages or lots where 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.

[2] The Rater is defined as the person(s) completing the third-party verification required for certification. The person(s) shall: a) be a Certified Rater or Approved Inspector, as defined by ANSI / RESNET / ICC Standard 301, or an equivalent designation as determined by a DOE-recognized Home Certification Organization for

ZERH (HCO for ZERH). All Raters for DOE ZERH projects must successfully complete a DOE ZERH orientation course. The Rater shall also have a signed partnership agreement in place with the DOE ZERH program.

[3] At the discretion of the Rater, the builder may verify those line items in this Checklist where a checkbox is in the "Builder Verified" column. When exercised, the builder's responsibility will be formally acknowledged by the builder 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] In this document, 'dwelling units' includes both dwelling units and sleeping units, unless otherwise specified.

[5] An Electric Vehicle Capable Space (EV-capable space) is defined as: "A designated automobile parking space that is provided with electrical infrastructure, such as, but not limited to, raceways, cables, electrical capacity, and panelboard or other electrical distribution equipment space, necessary for the future installation of an EVSE."

[6] An Electric Vehicle Ready Space (EV-ready space) is defined as: "An automobile parking space that is provided with a branch circuit and either an outlet, junction box, or receptacle, that will support an installed EVSE."

[7] Electric Vehicle Supply Equipment (EVSE) is defined as: "Equipment for plug-in power transfer including the ungrounded, grounded, and equipment grounding conductors, and the electric vehicle connectors, attachment plugs, 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 the electric vehicle."

Electric Vehicle Supply Equipment Installed Space (EVSE space) is defined as: "An automobile parking space that is provided with a dedicated EVSE connection."