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| CITY & COUNTY OF DENVER COMMUNITY PLANNING & DEVELOPMENT BUILDING PERMIT POLICY | | |
| Subject: EV READY REQUIREMENTS FOR ONE- & TWO- FAMILY DWELLINGS AND IRC TOWNHOMES | | |
| Approved: Eric Browning, PE – Interim Building Official | | Drafted by: Pafford |
| Number: IRC N1104.2 | Effective Date: 03/17/2021 | Page 1 of 2 |

**References: 2019 Denver Building Code IRC Sections N1104.2
2018 International Residential Code R104.9
2018 International Energy Conservation Code Section R404.2**

Scope: The 2019 Denver Building Code Amendment to the International Residential Code (IRC) Section N1104.2 does not provide the flexibility required to currently charge most models of residential electric vehicles available to the general public. This policy provides an alternative path for meeting the provisions of the 2019 Denver Building Code IRC Section N1104.2 through the application of the 2019 Denver Building Code IRC Section R104.9. Its implementation will provide developers, homeowners, and construction teams the flexibility necessary to install more appropriate equipment and devices required to charge currently available electric vehicles.

Policy:

The 2019 Denver Building Code IRC Section R104.9 allows materials, equipment, and devices where approved by the building official to be constructed and installed.

The requirements contained in 2019 Denver Building Code IRC Section N1104.2 may be considered satisfied when designed and installed as follows:

N1104.2 One- and Two-Family Dwellings and Townhouses *Electric vehicle (EV) charging requirements.* *Electric vehicle (EV) charging shall be provided and installed in accordance with this section and the National Electrical Code (NFPA 70).*

Exception: The number of *electric vehicle ready spaces* per *lot* shall not be required to exceed one *electric vehicle ready space* per *dwelling unit* on that *lot*.

N1104.2.1 *Electric vehicle (EV) ready spaces for new dwelling units.* Each new *dwelling unit* with *on-site parking spaces* shall be provided with a minimum of one *electric vehicle ready space*.

N1104.2.2 *Electric vehicle (EV) ready spaces for new garages and carports.* Each new garage and/or carport with *on-site parking spaces* shall be provided with a minimum of one *electric vehicle ready space*.

N1104.2.3 *Electric vehicle (EV) ready spaces for new on-site parking spaces.* Each new *on-site parking space* shall be provided with a minimum one *electric vehicle ready space*.

N1104.2.4 *Minimum Electric Vehicle (EV) Ready Space infrastructure.* Each *Electric Vehicle (EV) Ready Space* shall provide the following infrastructure:

1. Installation of conductors.
 - a. Conductors shall be installed of sufficient size to accommodate a 120VAC 20Amp branch circuit to each parking space where required.
 - b. Conductors shall terminate in either
 - i. a 20Amp NEMA receptacle or SAE J1772 EV plug.
 - ii. a junction or outlet box that is capped off and the cap labeled as 'EV Ready

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for Future Use’.

- iii. an EVSE installed within the parking space.
2. The circuit breakers and/or circuit breaker spaces reserved for the *electric vehicle ready spaces* shall be clearly identified on the panelboard. The branch circuit shall be identified as ‘EV Ready’ on the panelboard schedule, and the termination location shall be marked as ‘EV Ready’.

N1104.2.5 Construction Documents. Construction documents shall graphically indicate and label all *EV ready spaces* and associated termination locations. For all IRC Townhouses and one- and two-family dwellings with an electrical utility service exceeding 200Amps, a panelboard schedule shall be provided indicating the EV Ready circuit breaker space(s) and the circuit designation(s).

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