



STATE OF WASHINGTON  
**STATE BUILDING CODE COUNCIL**

May 2018  
Log No. \_\_\_\_\_

**1. State Building Code to be Amended:**

- International Building Code
- ICC ANSI A117.1 Accessibility Code
- International Existing Building Code
- International Residential Code
- International Fire Code
- Uniform Plumbing Code

- International Mechanical Code
- International Fuel Gas Code
- NFPA 54 National Fuel Gas Code
- NFPA 58 Liquefied Petroleum Gas Code
- Wildland Urban Interface Code

For the Washington State Energy Code, please see specialized [energy code forms](#)

**Section(s):**

Washington State Building Code, IBC, Section 427

**Title:** Modifications to Section 427 as directed by the legislature through HB 1257 – 2019.

**2. Proponent Name** Washington State Department of Commerce

**Proponent:** Michael Breish  
**Title:** Sr. Energy Policy Specialist  
**Date:** April 15, 2019

**3. Designated Contact Person:**

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## 4. Proposed Code Amendment.

Code(s) Washington State Building Code / IBC Section(s) SECTION 427

### SECTION 427 ELECTRIC VEHICLE CHARGING INFRASTRUCTURE

**427.1 Scope.** The provisions of this section shall apply to the construction of new buildings.

#### **427.2 Required electric vehicle charging infrastructure. (effective through June 30, 2021)**

Where parking is provided, five percent of parking spaces shall be provided with electric vehicle charging infrastructure in compliance with Sections 427.3, 427.4 and 427.5. When the calculation of percent served results in a fractional parking space, the applicant shall round up to the next whole number.

**Exception:** Group R and Group B occupancies served by less than 20 on-site parking.

#### **427.2 Required electric vehicle charging infrastructure. (effective July 1, 2021)**

Where parking is provided, the greater of one parking space or ten- percent of parking spaces shall be provided with electric vehicle charging infrastructure in compliance with Sections 427.3, 427.4 and 427.5. When the calculation of percent served results in a fractional parking space, the applicant shall round up to the next whole number.

#### **Exceptions:**

1. For assembly, education or mercantile occupancies, the requirements of this section apply only to employee parking spaces.
2. Occupancies classified as residential R-3, utility, or miscellaneous.

**427.3 Electrical room(s).** Electrical room(s) serving parking areas shall be designed to accommodate the electrical equipment and distribution required to serve a minimum of 20 percent of the total parking spaces with 208/240 V 40-amp electric vehicle charging infrastructure.

**427.4 Electric vehicle charging infrastructure.** Electric vehicle charging infrastructure shall be installed meeting one of the following requirements:

1. A minimum number of 208/240 V 40-amp, electric vehicle charging stations required to serve the parking spaces specified in section 427.2. The electric vehicle charging stations shall be located to serve spaces designated for parking and charging electric vehicles, or
2. Additional service capacity, space for future meters, panel capacity or space for additional panels, and raceways for future installation of electric vehicle charging stations. The service capacity and raceway size shall be designed to accommodate the future installation of the number of 208/240 V 40-amp, electric vehicle charging stations specified in section 427.2. The raceway shall terminate at spaces designated for parking and charging electric vehicles in the future. Where designated electric vehicle charging locations serve exterior on-grade parking spaces that are located more than 4 feet from a building, raceways shall be extended below grade to a pull box in the vicinity of the designated future electric vehicle charging locations or stub above grade in the vicinity of the designated future electric vehicle charging locations, protected from vehicles by a curb or other device.

**Exception:** In lieu of surface-mounted raceway between the electrical panel and the designated electric vehicle charging locations, it is permitted to provide permanent markings indicating the pathway for future raceway, and one-inch diameter capped sleeves through each wall and floor assembly that are penetrated along that route. This pathway and the locations of capped sleeves shall also be indicated on the electrical plans. Raceway shall be installed for any portion of the pathway located below slabs, below grade, or within floor, wall or roof assemblies.

**427.5 Electric vehicle charging infrastructure for accessible parking spaces.** When electric vehicle charging infrastructure is required, one accessible parking space shall be served by electric vehicle charging infrastructure. The electric vehicle charging infrastructure may also serve adjacent parking spaces not designated as accessible parking.

5. **Briefly explain your proposed amendment, including the purpose, benefits and problems addressed.** Specifically note any impacts or benefits to business, and specify construction types, industries and services that would be affected. Finally, please note any potential impact on enforcement such as special reporting requirements or additional inspections required.

This code change implements modifications to EV charging infrastructure included in Section 427 as directed by the legislature through HB 1257 – 2019. This update will be required beginning July 1, 2021. As such we recommend publishing it in the next edition of the building code.

The code text changes the scope of this section to include all new construction covered by the IBC, except occupancies classified as residential R-3, utility, or miscellaneous. For several occupancies - assembly, education or mercantile – the covered parking spaces only include employee parking.

This code change also increases the number of spaces required to be provided with EV charging infrastructure. The greater of one parking space or ten- percent of parking spaces shall be provided with electric vehicle charging infrastructure.

6. **Specify what criteria this proposal meets.** You may select more than one.

- The amendment is needed to address a critical life/safety need.
- The amendment clarifies the intent or application of the code.
- The amendment is needed to address a specific state policy or statute.
- The amendment is needed for consistency with state or federal regulations.
- The amendment is needed to address a unique character of the state.
- The amendment corrects errors and omissions.

7. **Is there an economic impact:**  Yes  No

Explain:

We acknowledge that there will be an economic impact. But because this requirement is specified by state legislation we will not be developing a detailed cost / benefit analysis.

If there is an economic impact, use the tool below to estimate the costs and savings of the proposal on construction practices, users and/or the public, the enforcement community, and operation and maintenance. If preferred, you may submit an alternate cost benefit analysis.

Provide your best estimate of the construction cost (or cost savings) of your code change proposal? (See OFM Life Cycle Cost [Analysis tool](#) and [Instructions](#); use these [Inputs](#). **Webinars on the tool can be found [Here](#) and [Here](#)**)

\$Click here to enter text./square foot (For residential projects, also provide \$Click here to enter text./dwelling unit)

Show calculations here, and list sources for costs/savings, or attach backup data pages

List any code enforcement time for additional plan review or inspections that your proposal will require, in hours per permit application:

There will be additional plan review and inspections required to assure these measures are implemented.

Please send your completed proposal to: [sbcc@des.wa.gov](mailto:sbcc@des.wa.gov)

All questions must be answered to be considered complete. Incomplete proposals will not be accepted.