2.02.136 Amendment to IBC Chapter 4– by deletion and replacement of the WA State amendment Section 427 – Electric Vehicle Charging Infrastructure

427.1 Scope. The provisions of this section shall apply to <u>all newthe</u> construction of <u>new</u> buildings, and building additions that require <u>20-10</u> or more new or additional parking <u>stalls spaces</u> in accordance with TMC 13.

427.2 Required electric vehicle charging <u>stations and</u> infrastructure. Where parking is provided, Table 1 identifies the <u>thresholds which</u> that will trigger electric vehicle <u>stallsspaces</u> served by charging stations and/or charging station infrastructure. Table 1 also provides; and the <u>number percentage</u> of required parking spaces to be served by an EV-electric vehicle charging station and the percentage of spaces to be provided with electric vehicle charging infrastructure according to the occupancy group and use of the building served. AllNew or additional parking shall comply and in accordance, with Sections 427.3, 427.4, 427.5, and 427.6, if over the threshold requirement parking requirement. In addition, Table 1 identifies the number of parking spaces required to be EV ready with wiring/raceway and electrical room capacity requirements per Section 427.4. Alternatively, some, or all of these EV parking spaces served by an the EV electric vehicle station connected parking spaces are installed, this<u>may be used to</u> will reduce the number of EV electric vehicle ready spaces required. When the calculation of percent served results in a fractional parking space, the applicant shall round up to the next whole number.

Where pParking spaces serveing buildings with multiple occupancies or uses, or serve multiple buildings with different occupancies or uses, the applicant shall use the occupancy or use that provides the greatest number of electric vehicle spaces with shall provide the greatest number of electric vehicle spaces with shall provide the greatest number of electric vehicle spaces served by charging stations and/or infrastructure in accordance, with Table 1.

Table 1: Required Electric Vehicle Parking Quantities					
Use TypeOccupancy Group and Use	Thresholds applied for electric vehicle stalls served by stations and infrastructure	Required Parking Spaces to be connected toserved by an installed Evelectric vehicle charging Station	Required-Parking ≤ Spaces served by to be EVelectric vehicle rReady For nNew pParking pProvided charging infrastructure only* ************************************		
Group R-1 <u>-</u> Lodging (<u>H</u> hotel/ <u>M</u> motel <u>Only</u>)	<u>Applies to all.</u>	3% of new parking provided	7% raceway AND 20% electrical room capacity		
Group R-2 Multi-family	Threshold of at l east Where 2 10 or more parking spaces a re provided , or 10 or more dwelling or	None	20% raceway AND 20% electrical room capacity. Threshold of at least 20 parking spaces.		

	clooping units are		
	sleeping units are		
	provided.		
Group B Office	ThresholdWhere of 6	3% of new parking	7% raceway AND 20%
	or more parking spaces		electrical room capacity.
	are provided.	Threshold of 6 or more	
		parking spaces.	
Group B	Threshold of at	3% of new parking	7% raceway AND 20%
Institutional	leastWhere the	provided, up to 6 spaces.	electrical room capacity.
Adult Education	building area is 12,000	Threshold of at least	
	sq. ft. or greater	12,000 sq. ft. building	
	building area.	area.	
Group B – Other	Where 6 or more	3% of new parking	7% raceway AND 20%
than Adult	parking spaces are	provided, up to 6 spaces.	electrical room capacity.
Education	provided.		
Group I -	Threshold of at least	3% of new parking	7% raceway AND 20%
Institutional -	12,000 sq. ft. building	provided, up to 6 spaces.	electrical room capacity.
Hospitals, Other	area. Where the	Threshold of at least	
institutions	building area is 12,000	12,000 sq. ft. building	
	sq. ft. or greater.	area.	
Group M - Retail	Where the building	1% of new parking	Employee only parking
Mercantileand	area is 15,000 sq. ft. or	provided, up to 8 spaces.	spaces. 9% raceway AND
Shopping	greater. Threshold of at		20% electrical room
Center	least 15,000 sq. ft.	15,000 sq. ft. building	capacity.
	building area.	area.	
Group A_	Threshold of at	1% of new parking	Employee only parking
Assembly-1-	leastWhere 500 seats	provided, up to 12 spaces.	spaces. 9% raceway AND
Auditorium,	or more are	Threshold of at least 500	20% electrical room
stadium, and	provided Where 6 or	seats.	capacity.
theater	more parking spaces		. ,
	are provided.		

*Where <u>new EVelectric vehicle</u> connected parking spaces <u>served by an electric vehicle</u> <u>Station</u> are installed<u>provided</u>, those quantities can be used to reduce the infrastructure requirements for additional EVelectric vehicle ready spaces.

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 EV<u>Electric vehicle</u> <u>rReady sStationscharging infrastructure</u>. The <u>electrical</u> 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 spaces 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<u>or other device-or other develectric</u> <u>vehicleice</u>.

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 assembles.

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. Additional accessible EV stalls shall be provided at 10 percent of all parking spaces. Where possible, accessible electric vehicle charging stations should be located in close proximity to the building or facility entrance

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Each charging station space shall be posted with signage indicating the space is only for electric vehicle charging purposes. Days and hours of operations shall be included if time limits or tow away provisions are to be enforced. Way-finding signage shall also be provided where EV parking is provided in multi-level parking garages.

Charging station equipment shall be maintained in all respects, including the functioning of the charging equipment. A phone number or other contact information shall be provided on the charging station equipment for reporting when the equipment is not functioning or other problems are encountered.

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.

<u>Additional accessible EV stalls shall be provided at 10 percent of all parking spaces.</u>**427.6 Electric vehicle charging station signage.** Electric vehicle signage must meet the requirements of RCW 46.08.185.

Each charging station space shall be posted with signage indicating the space is only for electric vehicle charging purposes. Days and hours of operations shall be included if time limits or tow away provisions are to be enforced. Way-finding signage shall also be provided where EVelectric vehicle parking is provided in multi-levelectric vehicle ellevel parking garages.