

External Email

I'd like to ask you to forward the following note about their upcoming meeting to the members of the Building Code TAG.

Thanks,  
Thad

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Dear Members of the Building Code TAG,

At your August 18th meeting, someone asked about the intent of applying the requirements in the current version of Section 429 to employee parking spaces at Group A, E, and M occupancies if they have designated employee parking, but exempting them otherwise. Presumably, employees would be parking their cars in those spaces for a number of hours, while they were at work, while anybody else parking at those buildings would be there for much shorter periods of time.

I agree with the comment that chargers in locations where people will only be parked briefly are not going to be of much practical use. If drivers have a place to charge at home or where they work, there's really not much of any point in their going to the trouble of dealing with a commercial Level 2 charger to add the five or ten miles of range they might get while plugged in for an hour or two, particularly if they are going to have to pay significantly more for the electricity than they would have to otherwise. (In fact, as EV's ranges grow, adding five or ten miles of range will matter less and less to people.)

I disagree with the comment that Level 2 chargers at places like these will make it possible for people who don't have charging at home to drive EVs. If there were a location like this very close to someone's residence, so they only had to walk a block to get home every time they parked the car, perhaps carrying their groceries, and they could be confident that a charger would be available and usable more or less every time, and they only had to walk a block back the next time they wanted to drive the car, and they were willing to pay commercial charging rates for the power, I suppose someone might decide to get an EV because they could use a charger like that. I doubt that many people would.

We are going to need a lot more chargers. As someone pointed out, we're expecting to be selling nothing but EVs by 2035 because of the ZEV mandate. Every new car sold will need a convenient place to charge. Since the Council's code changes can only require chargers in the relatively small number of new buildings that are constructed each year, I don't think its code changes could actually result in a new charger for every new EV even if every new building were required to have charging capacity for every new space... (Of course, that distribution of chargers wouldn't be very useful in any case.)

However, I do think that the Council needs to require more charging capacity than the recent rule does, and though it may be politically difficult, I think it would be far more useful to require all of the additional IBC charging in multifamily buildings, in workplace buildings where employees are likely to be parked for a full shift, and in designated employee parking spaces if buildings have them, rather than to spread it around so there's a little at every new building, including ones where most people won't be staying long enough to be interested in charging.

Best wishes,  
Thad Curtz

Dear TAG Members -

A couple of comments on the draft.

1. 429.4.1 EV Capable parking spaces begins by saying: "A listed raceway capable of accommodating a minimum 40-ampere dedicated 208/240-volt branch circuit shall be installed."

Then it says "Raceways and related components that are planned to be installed underground, and in enclosed, inaccessible or concealed areas and spaces, shall be installed at the time of original construction." As I read this, it suggests that the other raceways - those that are not planned to be underground, or in difficult spaces - don't have to be installed at the time of original construction. I think it would be clearer if it read:

"Any components related to the raceway that are planned to be installed underground, or in enclosed, inaccessible or concealed areas and spaces, shall also be installed at the time of original construction."

2. As I read the draft, it will result in half the required spaces (the EV-Ready ones) delivering 40 amps, and will allow the other half of the spaces (the EV-Capable ones) to load share in the long run. Having some of the spaces provide a relatively large amount of power, and having some of them provide a workable minimum, seems like a promising idea to me, at least for situations without dedicated parking. This might allow drivers to get significantly more range at their multifamily residence or at work from one set of chargers on the somewhat unusual days when they need that, and provide an adequate minimum in the other set of spaces for the ordinary days when adding 20 miles or so at 16 amps is perfectly adequate.

3. Re Group A, E, and M occupancies

As far as I can see, the Legislature's intent in not exempting employee parking in these buildings was clearly to provide usable workplace charging infrastructure for people who will actually be parked at the buildings for 8 hours, without requiring it for people who will only be there for a couple of hours at most. Given that, I don't think that one EV-Ready Space and one EV-Capable Space for every 200 parking spaces is nearly adequate for the E and M occupancies. As I imagine this, we're talking about questions like how many workplace EV parking spaces we expect to need over the next twenty or thirty years for the teachers and staff at a high school, or for the workers and managers at a department store or a supermarket. (As an example, the neighborhood Safeway a couple of miles from my house has something less than 200 parking spaces. As I read the draft, it would only have been required to have one EV-Ready space and one EV capable space; that doesn't seem as if it will be enough to me, leaving aside the fact that some customers might use the chargers sometime, and that we'd like to have some available when people came to work.) I think that the ratio of teachers and staff to spaces at a high school or college is considerably higher.

3. Re 429.4.4 - accessible parking spaces

As I read the draft, having an accessible EV-Ready space serve "adjacent spaces" as well would require larger circuits than 40 amps for those accessible space, since the EV-Ready space always has to supply 40 Amps. (I expect it would be possible to have a load-sharing setup that supplies power to the adjacent spaces if and only if the accessible space isn't drawing its 40 amps, but I don't know if that would be worth the trouble and expense.)

Best wishes,  
Thad Curtz