COLORADO
Division of Fire Prevention & Control
Department of Public Safety

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Guidance Associated with the Division's Adoption of the Colorado Model Electric Ready and Solar Ready Code

On August 15, 2025, the adoption of the Colorado Model Electric Ready and Solar Ready Code (CMERSRC) by the Division of Fire Prevention and Control (DFPC), as required by HB22-1362, will go into effect. The CMERSRC will impact construction across Colorado, including public school and healthcare facility construction projects.

Construction projects submitted to DFPC for building permits after August 14, 2025 will be subject to the requirements of CMERSRC. Separate plan sheets will be required for each of the three aspects of CMERSRC: Electric Ready, Solar Ready, and Electric Vehicle Ready.

Electric Ready plan sheets shall include at a minimum:

- All branch circuits, conduit and/or raceways, junction boxes, and receptacles sized to accommodate future electric equipment or appliances, as applicable.
- Reserved physical space for future electric equipment or appliances.
- Electrical capacity and reserved physical space for circuit breakers in the main electrical service panel and/or subpanels are properly labeled.
- Location for condensate drainage where combustion equipment for space heating and water heating is installed.

Solar Ready plan sheets shall include at a minimum:

- Location and size of the solar-ready zone.
- Structural design loads of roof dead load and roof live load.
- Pathways for routing of conduit labeled as "Potential Pathway" from the solar-ready zone to the electrical service panel.
- The main electrical service equipment and/or panel shall have a reserved space and ampacity to allow installation of a two-pole or three-pole circuit breaker for future solar electric. This space shall be labeled "For Future Solar Electric."
- Additionally, where the solar-ready zone is on an existing roof, a structural analysis of the roof structure will be required.

Electric Vehicle Ready plan sheets shall include at a minimum:

- Number and location of EV capable light spaces.
- Number and location of EV capable spaces.
- Number and location of EV ready spaces.
- Number and location of EVSE installed spaces.
- Locations of minimum sized conduit and termination points serving the aforementioned parking spaces with reserved capacity for each EV space based on the requirements of the CMERSRC.

Substantial Cost Differential Waiver requests may be submitted to the Division for consideration with the initial permit documents. Please consider the following when preparing a substantial cost differential waiver request:

- The burden of proof is upon the applicant to provide substantiation of a cost differential, such as quotes or other licensed design professional analyses to DFPC.
- "Substantial cost differential" means costs incurred as a result of compliance with the requirements of the CMERSRC would exceed one percent of total mechanical, electrical, and plumbing construction costs inclusive of materials and labor.

Major Renovations and Additions are subject to the requirements of the Code; however, these are not defined in the Colorado Model Electric Ready and Solar Ready Code. As such, the Division will use the following thresholds for application of the Code in regards to major renovations and additions:

- Major renovations will include space reconfiguration of more than 50% on all floors.
- Additions with combustion equipment will be required to be electric ready.
- Additions with 1000 sf of properly oriented roof area will be required to have a solar-ready zone as required by CMERSRC Section CS402.1.
- New parking spaces associated with major renovations and additions will be required to comply with CMERSRC for Electric Vehicle Ready

Please note: Permits and inspections may also be required by DORA for the portions of the CMERSRC that they regulate. Be sure to reach out to them for guidance before any construction commences.

Frequently Asked Questions Related to DFPC's Adoption of the CMERSRC:

1. When will projects submitted to DFPC for building plan review and permitting be subject to the requirements set forth in the CMERSRC?
    a. Any project submitted after August 14th, 2025 will be required to meet the CMERSRC provisions.

2. If a project has been submitted for a foundation permit prior to the August 15th adoption of the CMERSRC, will that count as having been submitted?
    a. Yes, if any phase of a project is submitted before our adoption, that project will not be required to meet the CMERSRC provisions.

3. If a project has been submitted to DORA for an Electrical Permit prior to the August 15th adoption of the CMERSRC, will that count as having been submitted?
    a. No, the project will need to have been submitted to DFPC prior to the CMERSRC adoption date if the intent is to not meet the provisions of the CMERSRC.

4. If a project has been submitted to a Prequalified Building Department prior to the August 15th adoption of the CMERSRC, will that count as having been submitted?
    a. Yes, if any phase of a project is submitted to a Prequalified Building Department before DFPC's adoption of the CMERSRC, that project will not be required to meet the CMERSRC provisions. A Prequalified Building Department is required to enforce the codes as adopted by DFPC. So, it follows that the key date will be when it has been submitted to the Prequalified Building Department.

5. We have a phased project in our office that was permitted over the course of several years. All the electrical equipment for the phased project was installed as part of an earlier phase and will not meet the CMERSRC. Is there any method of being grandfathered into the earlier codes for this project?
    a. This will be determined on a case by case basis.

6. If a project is being submitted after the August 15th adoption date, should designers allocate physical space for future all-electric equipment (e.g., larger electrical panels, conduit, or mechanical clearances)?
    a. Per the Colorado Model Electric Ready and Solar Ready Code, this is required.

7. Is there an expectation to show how the existing gas infrastructure can be removed or abandoned when the switch is made?
    a. No. DFPC has no expectation, but contact DORA for additional information.

8. Will this all-electric ready review happen at plan review, or is it verified during inspection as well?
    a. DFPC will perform plan review for compliance and DORA will inspect, as is currently the case with any electrical installation.

9. Do we need to calculate and design EV in every parking lot?
    a. All new parking lots/spaces should be designed to meet the EV provisions of the CMERSRC.

10. Will the EV power be derived from the building, or will a separate external electrical service be acceptable?
    a. This will likely vary by location and will need to be determined by the designer and the local utility company.

11. Will the Solar Ready connection need to be derived from the building, or will a separate grid connected system satisfy the code?
    a. This will likely vary by location and will need to be determined by the designer and the local utility company.

12. When seeking a waiver for the installation of electric vehicle power transfer infrastructure to an existing building can we submit the costs of the parking lot demolition and patch?
    a. Yes, DFPC will consider the costs of the related site work that is part of the electric vehicle power transfer infrastructure for new parking when reviewing requests for a substantial cost differential waiver.

13. As it relates to renovation projects, can the cost of structural upgrades and modification be allocated as 1% of the burden cost for the solar ready requirements?
    a. Yes, DFPC will take this into consideration as well.

14. To determine the capacity of the building load to accommodate future electric equipment or appliances to serve a comparable capacity to meet the heating load of the combustible equipment addressed in the provisions of CE302.3.1, does the design team need to provide cutsheets and design of electric units or can an estimate on the electrical load be assumed based on design professional experience?
    a. Cutsheets and design of comparable electric equipment that will meet the design heating load of the combustion equipment will be required to show compliance. In lieu of cutsheets an electrical plan sheet showing that it will meet the design heating load can be provided.