Published December 20, 2023

PUBLIC NOTICE NOTICE IS HEREBY GIVEN TO THE PUBLIC OF THE FOLLOWING MATTERS OF INTEREST REGARDING THE PITKIN COUNTY BOARD OF COUNTY COMMISSIONERS:

Unless otherwise notified all regular and special meetings will be held in the BOCC Meeting Room first floor Administration/Sheriff's Building 530 East Main Street, Aspen, CO 81611

All regular meeting items begin at 12:00 p.m., or as soon thereafter as the conduct of business allows. Check agenda at: https://pitkincounty.com/1001/Events-Agendas or call 920-5200 for meeting times for special meetings. Copies of the full text of any resolution(s) and ordinance(s) referred to are available during regular business hours 8:00 – 5:00 in the Clerk to the Board of County Commissioners office, 530 East Main Street, Suite 302, Aspen Colorado or online at: https://pitkincounty.com/837/Legal-Public-Notices

NOTICE OF PUBLIC HEARINGS BEFORE THE BOARD OF COUNTY COMMISSIONERS ON WEDNESDAY, JANUARY 10, 2024:

ORDINANCE OF THE BOARD OF COUNTY COMMISSIONERS OF PITKIN COUNTY, COLORADO, AMENDING TITLE 11 (BUILDINGS AND CONSTRUCTION) OF THE PITKIN COUNTY CODE, SPECIFICALLY TO AMEND SECTION 11.32 (2021 INTERNATIONAL ENERGY CONSERVATION CODE) AND TO ADD A NEW SECTION 11.34 (ELECTRIC READY PROVISIONS)

ORDINANCE NO. _____-2023

RECITALS:

WHEREAS, Pursuant to 30-35-301 C.R.S., the Board of County Commissioners ("BOCC") of Pitkin County, Colorado a Home Rule County is authorized to make and publish ordinances for carrying into effect or discharging the powers and duties conferred upon such counties by law and as seems necessary; and

WHEREAS, Pursuant to Section 2.8.1 of the Home Rule Charter ("HRC"), the BOCC is authorized to take official action by Ordinance for certain matters where action is prescribed pursuant to the Colorado Revised Statutes as amended; and

WHEREAS, Pursuant to Ordinance 045-2022 the Board of County Commissioners adopted the 2021 International Building Codes as Title 11 of the Pitkin County Code, Buildings and Construction; and

WHEREAS, Pitkin County strives to stay current with new building construction technology that allows new buildings to benefit from current standards and technological advancement; and

WHEREAS, Pitkin County strives to provide for and promote the health, safety and welfare of Pitkin County citizens and visitors with the benefits of most current building standards; and

WHEREAS, in 2019, the Pitkin County Board of County Commissioners declared a Climate Emergency and established Climate Action goals to 1) Reduce annual emissions by 90% from 2019 levels by 2050; and 2) Require all new residential development be net zero by 2030.

WHEREAS, in order to reduce energy consumption, the Board of County Commissioners has determined that it is necessary to require improved residential construction practices, construction design, and construction methodologies as well as on-site generation of renewable energy infrastructure to achieve the greatest benefits of reduced energy consumption for the Pitkin County community.

WHEREAS, the Board appointed the Community Growth Advisory Committee, whose Final Report of Recommendations identified implementation of bold performance standards as one of the most powerful and preferred tools for achieving the County's climate and quality of life goals, and limiting exterior energy use (i.e. snowmelt, spas, pools, outdoor heating, etc.) as the

number one recommendation if Pitkin County is ultimately going to rely on a 100% renewable energy supply.

WHEREAS, external energy use remains one of the outstanding inefficiencies in Pitkin County's energy code and can be 2-3 times a building's total energy use and only a fraction of the building's square footage;

WHEREAS, the Colorado General Assembly passed the Building Energy Codes law (HB22-1362 Building Greenhouse Gas Emissions) in May of 2022 to improve energy use and efficiency in buildings. The State Energy Code Board adopted a Model Electric Ready Code on June 1, 2023. The State mandated local governments to adopt, at a minimum, the Model Electric Ready Code developed by the Colorado State Energy Office with any new code update.

WHEREAS, implementing a 200 million BTU/year external energy use budget for residential applications and implementing electric ready provisions are the next steps to meet the County's climate goals;

WHEREAS, the Pitkin County Board of County Commissioners has the authority to adopt and implement regulations for new and existing construction in Pitkin County; and

WHEREAS, The BOCC finds that adoption of this ordinance is in the best interest of the citizens of Pitkin County.

NOW, THEREFORE, BE IT ORDAINED by the Board of County Commissioners of Pitkin County, Colorado that it hereby adopts an Ordinance Amending Title 11 of the Pitkin County Code, Buildings and Construction, specifically to amend Section 11.32, International Energy Conservation Code, and to add a new section, Section 11.34, Electric Ready Provisions, as shown in Exhibit A, and authorizes the Chair or the Chair's designee to sign the Ordinance and upon the satisfaction of the County Attorney as to form, execute any other associated documents necessary to complete this matter.

INTRODUCED AND FIRST READ ON THE 6th DAY OF DECEMBER 2023 AND SET FOR SECOND READING AND PUBLIC HEARING ON THE 10th DAY OF JANUARY, 2024.

NOTICE OF PUBLIC HEARING AND TITLE AND SHORT SUMMARY OF THE ORDINANCE PUBLISHED IN THE ASPEN DAILY NEWS ON THE___ DAY OF_____, 2023.

NOTICE OF PUBLIC HEARING AND THE FULL TEXT OF THE ORDINANCE POSTED ON THE OFFICIAL PITKIN COUNTY WEBSITE (www.pitkincounty.com) ON THE ___ DAY OF _____, 2023.

ADOPTED AFTER FINAL READING AND PUBLIC HEARING ON THE ____ DAY of _____, 2024.

PUBLISHED BY TITLE AND SHORT SUMMARY, AFTER ADOPTION, IN THE ASPEN DAILY NEWS ON THE____ DAY OF_____ , 2024.

POSTED BY TITLE AND SHORT SUMMARY ON THE OFFICIAL PITKIN COUNTY WEBSITE (www.pitkincounty.com) ON THE ____ DAY OF _____, 2024.

ATTEST:

By _____
Sam Engen
Deputy County Clerk

BOARD OF COUNTY COMMISSIONERS

By: _____
Francie Jacober, Chair

Date: _____

APPROVED AS TO FORM:

_____
John Ely, County Attorney

MANAGER APPROVAL

_____
Jon Peacock, County Manager

EXHIBIT A

TITLE 11: BUILDINGS AND CONSTRUCTION

11.32: INTERNATIONAL ENERGY CONSERVATION CODE

11.32.010: ADOPTION OF THE 2021 INTERNATIONAL ENERGY CONSERVATION CODE

Section 11.32.010 of the Pitkin County code adopting the 2015 edition of the International Energy Conservation Code is hereby repealed and reenacted to read as follows:

Pursuant to the powers and authority conferred by the laws of the State of Colorado and Pitkin County, Colorado, there is hereby adopted and incorporated herein by reference as if fully set forth those regulations contained in by reference thereto, the International Energy Conservation Code, 2021 Edition, as published by the International Code Council, 4051 West Flossmoor Road, Country Club Hills, Illinois, 60478-5795, except as otherwise provided by amendment or deletion as contained herein.

11.32.020 Copies on file

The Pitkin County Building Division shall keep on file in its office in Aspen, Colorado, a full and complete copy of the International Energy Conservation Code 2021 edition, as adopted by this Article, and said copies shall be open to public inspection at all times during the regular business hours of said Division.

11.32.030 Severability

The provisions of this chapter are declared to be severable so that in the event any section or portion of any section hereof shall be declared by a court of competent jurisdiction to be unconstitutional, unlawful, or otherwise unenforceable, the remaining sections and provisions hereof not so found shall continue in full force and effect.

11.32.040 AMENDMENTS TO THE 2021 INTERNATIONAL ENERGY CONSERVATION CODE

Section R101.1 Title Jurisdiction, Pitkin County

Section R104.1 Fees is hereby amended as follows:

A permit shall not be valid until all fees as prescribed in the Pitkin County Community Development Fee Ordinance that is in effect at the time of permit submittal are paid in full, nor shall an amendment to the permit be released until the additional fees, if any, have been paid.

Section R104.5 Refunds is hereby amended as follows:

The Building Official shall authorize the refund for the full amount of any fee paid which was erroneously paid or collected. Not more than 80% of a permit fee paid may be refunded when no work has been done under a permit issued in accordance with this code. The Building Official shall not authorize refunding any fee paid except on written application filed by the original permittee not later than six months after the date of payment.

Refunds may be approved for up to 100% of a fee paid for REMP. No refund will be approved when requested more than 180 days after the Final Building Inspection is approved.

Section R110 Board of Appeals

R110.1 General is deleted in its entirety and is amended as follows:

Appeals shall be in accordance with Pitkin County Code Title 11, Chapter 11.04, Section R113.1.

Section R110 Liability is hereby amended as follows:

The Building Official or his authorized representative charged with the enforcement of this code, acting in good faith and without malice in the discharge of his duties, shall not thereby render himself personally liable for any damage that may accrue to persons or property as a result of any act or omission in the discharge of his duties.

This code shall not be construed to relieve or lessen the responsibility of any person owning, operating or controlling any building or structure for any damage to persons or property caused by defects on or in such premises, nor shall the code enforcement agency, any employee thereof, or Pitkin County be held as assuming any such responsibility or liability by reason of the adoption of this code or by the exercise of inspections authorized and carried out thereunder, or by the issuance of any permits or certificates issued pursuant to this code.

Section R301 Climate Zones shall be deleted in its entirety and is amended as follows:

Pitkin County, Colorado shall use Climate Zone 7 in determining the applicable requirements from Chapters 4 and 5.

Table 402.1.2 Maximum Assembly U-Factors and Fenestration Requirements is amended as follows:

Climate Zone 7: Fenestration U-Factor: 0.28, Skylight U-Factor 0.40

Table 402.1.3 Insulation Minimum R-Values and Fenestration Requirements by component is amended as follows:

Climate Zone 7: Fenestration U-Factor: 0.28, Skylight U-Factor 0.40

Section R402.4.2 Fireplaces is hereby amended as follows:

New wood-burning fireplaces and gas log fireplaces shall have gasketed doors and outdoor combustion air. Modifications shall not be made to listed and labeled factory built fireplaces unless approved by the manufacturer.

R402.4.5 Recessed lighting is hereby amended and the following sentence added**:**

Recessed luminaires must be of the shallow depth configuration and a minimum of 50% of the required insulation R-value must remain in place above the luminaire including any required separation or air space.

403.2 Hot water boiler temperature reset is hereby amended and the following sentence added**:**

All multiple boiler installations must sequentially stage. Any multiple boiler installations, or hydronic system consisting of more than five (5) zones will require commissioning with a full summary report provided to the building department. All new boilers installed in Pitkin County will meet a minimum of 95% AFUE (Annual Fuel Utilization Efficiency).

Section R403.7 Equipment sizing and efficiency rating is hereby amended as follows:

Heating and cooling equipment shall be sized in accordance with ACCA Manual S based on building loads calculated in accordance with ACCA Manual J or other approved heating and cooling calculation methodologies. All Gas fired furnaces shall meet a minimum 95% AFUE. All HVAC equipment will meet a minimum SEER (Seasonal Energy Efficiency Ratio) rating of 16

Add Section 403.7.1 HVAC commissioning

HVAC systems installations shall be balanced in accordance with generally accepted engineering standards. Air and water flow rates shall be measured and adjusted to deliver final flow rates within the tolerances provided in the product specifications. Test and balance activities shall include air system and hydronic system balancing.

Add Section R409 Whole Project Energy Budget and Renewable Energy Mitigation

Section R409.1 Scope. This section establishes criteria for compliance with the Pitkin County Whole Project Energy Budget through the Renewable Energy Mitigation Program (Appendix A).

Section R409.2 Mandatory requirements. Compliance with this section requires that the provisions identified in Appendix A be followed for dwelling units and deems Sections 402, 403, 404, 405, 406 and 408 as potential measures adopted by reference to aid in achieving the requirements of Appendix A. Sections 402, 403, 404, 405, 406 and 408 are not alternative paths to compliance and adherence to Appendix A is required.

R502.3.1 Building envelope is amended as follows**:**

Exception: New envelope assemblies in additions less than 1000 square are exempt from the requirements of Section R402.4.1.2 and 402.4.1.3

Section 503.1.1 Building envelope is hereby amended as follows and the following sentence added:

For alterations to the thermal envelope of a floor area greater than 1000 square feet, an air infiltration (blower door) test is required prior to commencement of the alteration/ and a final air infiltration test prior to final building inspection must demonstrate a fifteen (15) percent leakage reduction or compliance with Appendix A.

Section R503.1.1 Building envelope

Exceptions 2 & 5 are hereby amended as follows:

2. Existing thermal envelope exposed during construction shall be required to meet prescriptive code minimums unless a hardship is presented and approved by the Chief Building Official.

5. Roofs without insulation in the cavity and where the sheathing or insulation is exposed during reroofing shall be required to meet prescriptive code minimums unless a hardship is presented and approved by the Chief Building Official

APPENDIX A: Whole Project Energy Budget and Renewable Energy Mitigation Program (REMP)

SECTION 100 General Requirements

SECTION 101 SCOPE AND ADMINISTRATION

Section 101.1 Scope. Scope of this document includes Home Energy Performance, Exterior Energy uses, and energy production to offset home energy performance and exterior energy use. Compliance with this section will be documented via the free Public Domain tool "Pitkin County REMP Calculation Sheet" in the most current version at the time of permit application. This tool is available at www.pitkincounty.com. Projected energy use, associated energy offset required, fees and credits are defined within this tool.

Credits for on-site renewable energy. This REMP payment option is voluntary. Applicants interested in exterior energy use systems can alternatively choose to produce on-site renewable energy (Section 301) with solar photovoltaics and/or solar hot water or micro-hydro. The energy efficient technology of ground source heat pumps is also permitted for supplemental on-site energy.

Section 101.1.1 Home Energy Performance. Home Energy Performance will be predicted by the REM/Rate software and Energy Rating Index (ERI) certification. All dwelling units will be required to meet a maximum of ERI-60, prior to application of renewable energy production. Per the "Pitkin County REMP Calculation Sheet," all dwelling units will be required to meet ERI-30, or provide offset per the Calculation Sheet, or comply with Section 108.This section is optional for dwelling units under Appendix AQ Tiny Houses.

~~**Section 101.1.2 Exterior Energy Uses.** Residential, Commercial, and Governmental exterior energy uses (per list below) may be installed only if the supplemental energy meets the requirements of Appendix A. This applies to all installations for which an application for a permit or renewal of an existing permit is filed or is by law required to be filed with or without an associated Building Permit.~~

~~1. Snowmelt (ie: driveways, patios, walkways, etc.)~~
~~1. Exterior pools~~
~~2. Exterior spas~~
~~3. Electric heat tape for melting of roofs, gutters, downspouts, exterior piping etc.~~

Section 101.1.2 Exterior Energy Uses. Residential, Commercial, and Governmental exterior energy uses (per list below) may be installed only if the supplemental energy meets the requirements of Appendix A. This applies to all installations for which an application for a permit or renewal of an existing permit is filed or is by law required to be filed with or without an associated Building Permit.

1. In-Slab Snowmelt
2. Outdoor Electric Heat Mats

3. Outdoor Spa
4. Outdoor Pool
5. Heat Tape
6. Outdoor Electric Heaters
7. Outdoor Gas Fireplaces and Firepits

Section 101.1.3 Exterior Energy Use Budget. The total aggregate annual energy use of all exterior energy uses listed in Section 101.1.2 shall be limited to 200,000,000 BTU/yr per parcel. This energy use may be distributed among the types of regulated energy uses at the discretion of the applicant. There are no exemptions to the Exterior Energy Budget. The exterior energy budget only applies to residential applications.

Exception: Where a specific external energy use is demonstrated to be necessary to mitigate a life/safety concern, the Chief Building Official may waive the REMP payment for that specific use. The specific use will be calculated in the Exterior Energy Budget.

Section 101.1.43 Onsite Renewable Credits. ~~Credits for renewable energy production will be calculated and applied per "Pitkin County REMP Calculation Sheet" for energy generated onsite. Renewable energy methods listed in the calculator include: solar electric panels (aka. Solar photovoltaic, PV), solar thermal arrays, ground source heat pumps (GSHPs), air source heat pumps (ASHP), hydroelectric and wind power. Provision for alternative method calculations, including offsite renewable energy methods, is also provided, but will require specific review and approval by the Building Official.~~

Credits for renewable energy production will be calculated and applied per "Pitkin County REMP Calculation Sheet" for energy generated onsite. Renewable energy methods listed in the calculator include:

1. GSHP (Ground Source Heat Pump)
2. ASHP (Air Source Heat Pump)
3. SHW (Solar Hot Water)
4. PV (to be installed on site)
5. Alternative Renewable Energy Source

Provision for alternative method calculations, including offsite renewable energy methods, is also provided, but will require specific review and approval by the Building Official.

Section 101.2.1. Snowmelt System Requirements:

~~1. The maximum area of snowmelt is capped at 6,000 square feet per parcel.~~

1. R-15 insulation shall be installed under all areas to be snowmelted.
2. Required snowmelt controls. All systems are required to have automated controls to limit operation to when moisture is present, outdoor air temperature is below 40F and

above 20F, and the slab temperature sensing. Idling of residential slabs is not allowed, but is allowed in commercial projects where public safety is a factor.

3. Snowmelt heating appliances will have a minimum efficiency of 95% AFUE. Electric resistance and heat pump heaters will be allowed. Where condensing boilers are used, the boiler supply water temperature shall be a maximum of 130F to allow for efficient boiler operation.

Section 101.2.2. Exterior pool Requirement:

1. Pool covers are required for all pools, with a minimum R-value of 2.
2. Pool heating appliances will have a minimum efficiency of 95% AFUE. Electric resistance and heat pump heaters will be allowed. Where condensing boilers are used, the boiler supply water temperature shall be a maximum of 130F to allow for efficient boiler operation.

Section 101.2.3. Exterior Spa Requirements:

1. Spa covers are required for all spas, with a minimum R-value of 12.
~~2. Package spas less than 64 ft2 are exempt.~~
~~3. A maximum of (1) spa per property is allowed to be exempt.~~
~~4.~~2. Spa heating appliances will have a minimum efficiency of 95% AFUE. Electric resistance and heat pump heaters will be allowed. Where condensing boilers are used, the boiler supply water temperature shall be a maximum of 130F to allow for efficient boiler operation.

Section 101.2.4 Electric heat tape controls. Electric roof and gutter deicing systems shall include automatic controls capable of shutting off the system when outdoor temperature is above 40F and below 25 F, and when moisture is present.

Section 101.2.5 Hydronic roof and gutter deicing systems. These systems shall be considered snowmelt systems and shall comply with Appendix A.

Section 102 REMP Fee Payment. No refund of fee payment shall be made to an applicant for installation of renewable energy production that exceeds the on-site renewable credits required pursuant to Appendix A. All monies collected pursuant to this section shall be recorded in a separate fund and shall be spent in accordance with a ~~joint~~ resolution by the ~~Aspen City Council and~~ Pitkin County Board of County Commissioners. The proceeds of this fee will be used to reduce fossil fuel generated energy consumption in other improvements in Pitkin County, to administer the International Energy Conservation Code provisions adopted into the Pitkin County Code, to educate the development industry and the public at large of the methods of energy efficient construction practices and the benefits of energy conservation and to achieve the goals of the Pitkin County Climate Action Plan.

Section 103 Pre-Existing Systems. Pre-existing systems, for which a prior REMP fee was paid, regulated by the scope of this section sought to be replaced by an Applicant, shall receive a pro-rated credit calculated as a fraction of the number of years since prior REMP payment for the system divided by 20 years. For example, a REMP payment made for a system permitted 10 years

prior to the current replacement permit submittal would receive credit for ½ of the prior REMP payment and that amount shall be deducted from REMP payment owed for replacement system. For renewable systems installed on site, full credit will be given for up to 20 years after the date of installation. Credits will only be applied to properly permitted and functioning systems within the scope of the adopted Energy Code and applicable Mechanical and Electrical Codes. Systems installed prior to 20 years before the date of permit application are not eligible for pro-ration of system credits. Upgrades to existing mechanical equipment (boilers, heat pumps, HVAC equipment, etc.) or renewables energy systems will not require a re-submittal to the application program. However, additions to or replacement of exterior energy uses (as listed above in Section 101.1.2), or additions of 1,000ft2 or more will require re-submittal of the appropriate REMP compliance documents.

Section 104 Solar Photovoltaic Systems. System designer/installer must be certified by COSEIA (Colorado Solar Energy Industries Association) or NABCEP, (North American Board of Certified Energy Practitioners), or a licensed Professional Engineer in the State of Colorado.

Section 105 Solar Hot Water. The size of solar hot water systems is limited to 500 square feet of collector area absent approval by the Building Official. Systems larger than this limit will be considered, but will require documentation showing year-round utilization of this larger system.

Section 106 Ground Source Heat Pump. **(GSHP).** Each ground source heat pump system shall be tested and balanced and commissioned in accordance with C408. The design engineer shall certify in writing that it meets or exceeds the design coefficient of performance (COP) as specified in the "Pitkin County REMP Calculation Sheet". The ground loop system must be designed by a CGD (Certified Geo Exchange Designer certified by the Association of Energy Engineers) or a Professional Engineer licensed in the State of Colorado or an IGSHPA (International Ground Source Heat Pump Association) certified designer. The mechanical system must be installed by a certified IGSHPA contractor.

Section 107 Air Source Heat Pump (ASHP). Each air source heat pump system shall be tested and balanced and commissioned in accordance with C408. The design engineer shall certify in writing that it meets or exceeds the design coefficient of performance (COP) as specified in the "Pitkin County REMP Calculation Sheet."

Section 108 Energy Consumption Aggregated Information. The Building Official seeks to track the progress of the program through submitted energy bills or information regarding residential energy use from other sources. To assist with this program-wide measurement, Applicant is requested provide completed release forms for applicable Utility Providers (electric and gas for properties which have both services). Energy consumption information will be used to monitor program success on an aggregated basis, and not for distribution with property identifying markers attached.

Section 109 Hardship. Applicant may apply to the Building Official for a full or partial variance of the requirements of Appendix A. Applicant must show undue hardship and that the requirements of Appendix A disproportionately burden the Applicant if applied to a specific piece of property and typical onsite or offsite mitigation methods are not feasible. The Building

Official shall evaluate the application for waiver of requirements of Appendix A pursuant to criteria developed in the Community Development Manual and shall only approve a variance where application of Appendix A will cause undue hardship upon the owner of such property which cannot be mitigated, and the granting of relief from the strict application of Appendix A will not cause substantial detriment to the public good and will not substantially impair the intent and purpose of the Pitkin County Code Title 11. Applicant may appeal any denial under this section to the Board of County Commissioners.

SECTION 201 Governmental Renewable Exterior Energy Mitigation Program (GREMP)

Local, State and Federal Government Buildings and Structures may be exempted from mitigation payments and offsets defined previously in this code for a percentage of the requested snowmelt when there is a demonstrated risk to public safety related to snow and ice removal.

The following items and any related documentation will be reviewed and evaluated to determine the potential exemption. A percentage of exempted area will be determined and any remaining requested snowmelt will need to be paid for or mitigated in the typical format. Upon recommendation by the Chief Building Official, a formal request will be compiled by the Applicant and presented to the Board of County Commissioners for final approval at a regularly scheduled meeting.

Section 201.1 An application for review and approval would include the following:

1. Demonstration and declaration that typical mitigation methods were researched and proven not feasible.

2. Demonstration that the public service being provided by the entity applying offsets the energy consumption being requested in this application including any cumulative offset exemption requests for REMP mitigation.

   (ie: Bus Service vs. Vehicle Traffic)

3. Demonstration of safety risk to the General Public if exterior snowmelt is not installed including:

   a. Providing the ratio of total paved area vs. snowmelted pavement;
   b. Illustrating that the project minimizes the total amount of exterior energy used; and
   c. The installation of snowmelt only in critical public safety areas.

4. Demonstration that BTU's saved through other means (existing equipment upgrades, envelope improvements, or other energy saving measures) translate to mitigation BTU's for snowmelt credit. Examples include:

   a. Hybrids
   b. Wind Power
   c. Hydro-Electric
   d. Waste Oil Boilers
   e. Pellet Boilers

5. Demonstration that offsite mitigation alternatives have been considered at other offsite locations within Pitkin County for the installation of typical mitigation methods.

   a. Typical Ground Source Heat Pump, Solar, or Photovoltaic methods that are not feasible on site could be installed at a more feasible location.

6. Other creative or innovative alternatives proposed by the applicant.

Upon review and recommendation by the Chief Building Official, areas associated with these buildings or structures that are critical to pedestrian ingress, egress, or life safety may, at the discretion of the Board of County Commissioners, be exempted from REMP payments for all or a portion of the area snowmelted.

APPENDIX RB, 2021 International Energy Conservation Code

Appendix RB is adopted in its entirety and the provisions will be applied to New Construction, Alterations and Remodels that are not required to install a complete renewable energy system as indicated by other sections of this code.

Section RB103.9 All Pitkin County projects are required to provide one electric vehicle charging station.

Ord. 99-61 (part); prior code Title VII § 9-4); Chapter 11.32 repealed/replaced Ord. 01-10; Chapter 11.32 amended (part) Ord. 030-10) Chapter 11.32 amended (part) Ord. 016-13; Chapter 11.32 repealed and reenacted Ord. 016-2020,

ADD NEW SECTION 11.34 ELECTRIC READY PROVISIONS

11.34 ELECTRIC READY PROVISIONS

Chapter 1 Scope and Administration

SECTION 101 SCOPE AND GENERAL REQUIREMENTS.

101.1 Title. This code shall be known as the Electric Ready Code of Pitkin County, and shall be cited as such. It is referred to herein as "this code".

101.2 Scope. This code applies to all buildings and dwelling units, and the buildings' sites and associated systems and equipment.

101.3 Intent. This code shall regulate the design and construction of buildings to prepare new buildings for electric vehicle charging infrastructure, and electrification of building systems. This code is intended to provide flexibility and balance upfront construction costs with the future cost to retrofit buildings to accommodate these systems. This code is not intended to abridge safety, health or environmental requirements contained in other applicable codes or ordinances.

101.4. Applicability. Where, in any specific case, different sections of this code specify different materials, methods of construction or other requirements, the most restrictive shall govern. Where there is a conflict between a general requirement and a specific requirement, the specific requirement shall govern.

101.4.1 Residential Buildings. Residential buildings must comply with the Residential Chapters of this code.

101.4.2 Commercial Buildings. Commercial buildings must comply with the Commercial Chapters of this code.

SECTION 102 WAIVER AND VARIANCE.

102.1 Scope. The following waivers shall be permitted to be requested if buildings meet the following requirements.

102.1.2 Buildings Impacted by a Natural Disaster. Pitkin County is permitted to authorize, upon appeal in specific cases, a waiver from the requirements of this code where, owing to a declared natural disaster that has destroyed buildings or resulted in other exceptional and extraordinary circumstances as determined by Pitkin County, and Pitkin County determines enforcement of the provisions of this code will result in unnecessary hardship.

SECTION 103 CONSTRUCTION DOCUMENTS.

103.1 General. Construction documents and other supporting data shall be submitted in one or more sets, or in a digital format where allowed by the code official, with each application for a permit. The construction documents shall be prepared by a registered design professional where required by the statutes of the jurisdiction in which the project is to be constructed. Where special conditions exist, the code official is authorized to require necessary construction documents to be prepared by a registered design professional.

Exception: The code official is authorized to waive the requirements for construction documents or other supporting data if the code official determines they are not necessary to confirm compliance with this code.

103.2 Information on Construction Documents. Construction documents shall be drawn to scale on suitable material. Electronic media documents are permitted to be submitted where approved by the code official. Construction documents shall be of sufficient clarity to indicate the location, nature, and extent of the work proposed, and show in sufficient detail pertinent data and features of the building, systems, and equipment as herein governed. Details shall include, but are not limited to, the following as applicable:

Electric Ready Combustion Equipment:

1. Location and sizing of all proposed combustion equipment in BTU/hr.
2. Location and sizing of future electric equipment and demonstrated BTU/hr equivalency. Where heat pumps are used, heating capacity at design outdoor and indoor conditions is to be used.
3. Location of electrical receptacle/junction box showing compliance with RE302.5 Adjacency. Adequate physical space for equipment should be indicated on plans.
4. Location routing of electric ready conduit/circuitry to the dedicated electrical panel.
5. Engineered Load Calculation showing electrical service is sized with sufficient capacity to meet the electrical demand of the future electric equipment or appliance that is sized to serve a comparable capacity to meet the heating load.

    Exception: Engineered calculation is not required for services that will not exceed 400 amps

Electric Vehicle Equipment:

6. Number and location of EV capable light spaces.
7. Number and location of EV capable spaces.
8. Number and location of EV ready spaces.
9. Number and location of EVSE installed spaces.
10. Locations of conduit and termination points serving the aforementioned parking spaces.

103.3 Examination of Documents. The code official shall examine or cause to be examined the accompanying documents and shall ascertain whether the construction indicated and described is in accordance with the requirements of this code and other pertinent laws or ordinances. The code official is authorized to utilize a registered design professional, or other approved entity not affiliated with the building design or construction, in conducting the review of the plans and specifications for compliance with the code.

103.3.1 Approval of Construction Documents. When the code official issues a permit where construction documents are required, the construction documents shall be endorsed in writing and stamped "Reviewed for Code Compliance". Such approved construction documents shall not be changed, modified, or altered without authorization from the code official. Work shall be done in accordance with the approved construction documents. One set of "Reviewed for Code Compliance" construction documents shall be retained by the code official. The other set shall be returned to the applicant, kept at the site of work, and shall be open to inspection by the code official or a duly authorized representative.

103.3.2 Previous Approvals. This code shall not require changes in the construction documents, construction, or designated occupancy of a structure for which a lawful permit has been heretofore issued or otherwise

lawfully authorized, and the construction of which has been pursued in good faith within 180 days after the effective date of this code and has not been abandoned; except that the code official is authorized to grant one or more extensions of time for additional periods not exceeding 180 days each.

103.4 Amended Construction Documents. Changes made during construction that are not in compliance with the approved construction documents shall be resubmitted for approval as an amended set of construction documents by an approved change order building permit application.

103.5 Retention of Construction Documents. One set of approved construction documents shall be retained by the code official for a period of not less than 180 days from the date of completion of the permitted work, or as required by state or local laws.

103.6 Building Documentation and Closeout Submittal Requirements. The construction documents shall specify that the documents described in this section be provided to the building owner or owner's authorized agent within 90 days of the date of receipt of the certificate of occupancy.

Exception: Residential buildings.

103.6.1 Record Documents. Construction documents shall be updated to convey a record of the completed work. Such updates shall include mechanical, electrical, and control drawings that indicate all changes to size, type, and location of components, equipment, and assemblies.

103.6.2 Compliance Documentation. Compliance documentation and supporting calculations shall be delivered in one document to the building owner as a part of the project record documents or manuals, or as a standalone document. This document shall include the specific energy code edition utilized for compliance determination for each system.

SECTION 104 INSPECTIONS.

104.1 General. Construction or work for which a permit is required shall be subject to inspection by the code official, his or her designated agent or an approved agency, and such construction or work shall remain visible and able to be accessed for inspection purposes until approved. Approval as a result of an inspection shall not be construed to be an approval of a violation of the provisions of this code or of other ordinances of the jurisdiction. Inspections presuming to give authority to violate or cancel the provisions of this code or of other ordinances of the jurisdiction shall not be valid. It shall be the duty of the permit applicant to cause the work to remain visible and/or able to be accessed for inspection purposes. Neither the code official nor the jurisdiction shall be liable for expenses entailed in the removal or replacement of any material, product, system or building component required to allow an inspection to validate compliance with this code.

104.2 Required Inspections. The code official, his or her designated agent or an approved agency, upon notification, shall make the inspections set forth in Sections 104.2.1 through 104.2.3.

104.2.1 Electric Ready. Inspections shall verify all of the following as required by this code, approved plans, and specifications:

1. Branch circuits, conduit and/or raceway, wiring, junction boxes, and receptacles for future electric equipment or appliances are properly labeled and installed, as applicable.

2. Reserved physical space for future electric equipment or appliances.

3. Electrical capacity and reserved physical space for circuit breakers in the main electrical service panel are properly labeled.

104.2.2 Electric Vehicle Ready. Inspections shall verify all of the following as required by this code, approved plans, and specifications:

1. EV power transfer infrastructure requirements.

2. Electrical equipment associated with each parking space type, including branch circuits, conduit and/or raceway, junction boxes, receptacles, and EVSE are properly labeled and installed.

3. Electrical capacity and reserved physical space for circuit breakers in the main electrical service panel are properly labeled, if applicable.

104.2.3 Final Inspection. The final inspection shall include verification of the installation and proper labeling of all requirements of this code.

104.3 Reinspection. A building shall be reinspected where determined necessary by the code official.

104.4 Approved Inspection Agencies. The code official is authorized to accept reports of third-party inspection agencies not affiliated with the building design or construction, provided that such agencies are approved as to qualifications and reliability relevant to the building components and systems that they are inspecting.

104.5 Inspection Requests. It shall be the duty of the holder of the permit or their duly authorized agent to notify the code official when work is ready for inspection. It shall be the duty of the permit holder to provide access to and means for inspections of such work that are required by this code.

104.6 Reinspection and Testing. Where any work or installation does not pass an initial test or inspection, the necessary corrections shall be made to achieve compliance with this code. The work or installation shall then be resubmitted to the code official for inspection and testing.

SECTION 105 NOTICE OF APPROVAL.

105.1 Approval. After the prescribed inspections indicate that the work complies in all respects with this code, a notice of approval shall be issued by the code official.

105.2 Revocation. The code official is authorized to suspend or revoke, in writing, a notice of approval issued under the provisions of this code wherever the certificate is issued in error, or on the basis of incorrect information supplied, or where it is determined that the building or structure, premise, or portion thereof is in violation of any ordinance or regulation or any of the provisions of this code.

SECTION 106 VALIDITY.

106.1 General. If a portion of this code is held to be illegal or void, such a decision shall not affect the validity of the remainder of this code.

SECTION 107 REFERENCED STANDARDS.

107.1 General. The codes and standards referenced in this code shall be listed in Section 107.2, and such codes and standards shall be considered as part of the requirements of this code to the prescribed extent of each such reference.

107.2 Referenced Codes and Standards. The codes and standards referenced in this code are as follows:

1. International Building Code

a. Chapter 3

b. Chapter 11

2. International Energy Conservation Code

3. International Fire Code

4. International Residential Code

5. National Electrical Code Article 625

6. UL2202 and 2594

107.2.1 Conflicts. Where conflicts occur between provisions of this code and referenced codes and standards, the provisions of this code shall apply.

107.2.2 Provisions in Referenced Codes and Standards. Where the extent of the reference to a referenced code or standard includes subject matter that is within the scope of this code, the provisions of this code, as applicable, shall take precedence over the provisions in the referenced code or standard.

107.3 Applications of References. References to chapter or section numbers, or to provisions not specifically identified by number, shall be construed to refer to such chapter, section, or provision of this code.

107.4 Other Laws. The provisions of this code shall not be deemed to nullify any provisions of local, state, or federal law.

SECTION 108 STOPWORK ORDER.

108.1 Authority. Where the code official finds any work regulated by this code being performed in a manner contrary to the provisions of this code or in a dangerous or unsafe manner, the code official is authorized to issue a stop work order.

108.2 Issuance. The stop work order shall be in writing and shall be given to the owner of the property, the owner's authorized agent, or the person performing the work. Upon issuance of a stop work order, the cited work shall immediately cease. The stop work order shall state the reason for the order and the conditions under which the cited work is authorized to resume.

108.3 Emergencies. Where an emergency exists, the code official shall not be required to give a written notice prior to stopping the work.

108.4 Failure to Comply. Any person who shall continue any work after having been served with a stop work order, except such work as that person is directed to perform to remove a violation or unsafe condition, shall be subject to fines established by Pitkin County.

SECTION 109 BOARD OF APPEALS.

109.1 General. In order to hear and decide appeals of orders, decisions, or determinations made by the code official relative to the application and interpretation of this code, there shall be and is hereby created a board of appeals. The code official shall be an ex officio member of said board but shall not have a vote on any matter before the board. The board of appeals shall be appointed by the governing body and shall hold office at its pleasure. The board shall adopt rules of procedure for conducting its business and shall render all decisions and findings in writing to the appellant with a duplicate copy to the code official.

109.2 Limitations on Authority. An application for appeal shall be based on a claim that the true intent of this code or the rules legally adopted thereunder have been incorrectly interpreted, the provisions of this code do not fully apply or an equally good or better form of construction is proposed. The board shall not have the authority to waive the requirements of this code.

109.3 Qualifications. The board of appeals shall consist of members who are qualified by experience and training and are not employees of Pitkin County.

Chapter 2 Definitions

SECTION 201 GENERAL.

201.1 Scope. Unless stated otherwise, the following words and terms in this code shall have the meanings indicated in this chapter.

201.2 Interchangeability. Words used in the present tense include the future; words in the masculine gender include the feminine and neuter; the singular number includes the plural and the plural includes the singular.

201.3 Terms Defined in Other Codes. Terms that are not defined in this code but are defined in the International Building Code, International Fire Code, International Fuel Gas Code, International Mechanical Code, International Plumbing Code, International Energy Conservation Code, or International Residential Code shall have the meanings ascribed to them in those codes.

201.4 Terms not Defined. Terms not defined by this chapter or the codes listed under 201.3 shall have ordinarily accepted meanings such as the context implies.

SECTION 202 GENERAL DEFINITIONS.

APPROVED. Acceptable to the code official.

APPROVED AGENCY. An established and recognized agency that is regularly engaged in conducting tests or furnishing inspection services, or furnishing product certification, where such agency has been approved by the code official.

CODE OFFICIAL. The officer or other designated authority charged with the administration and enforcement of this code, or a duly authorized representative.

COMBUSTION EQUIPMENT. For this code, any equipment or appliance used for space- heating, service water heating, cooking, clothes drying or lighting that uses fuel gas or fuel oil.

COMMERCIAL BUILDING. For this code, all commercial buildings and R-Occupancies that are covered by the International Building Code.

CORE AND SHELL. The first phase of a commercial project that has the outer building envelope constructed and may contain interior lighting and heating and has not received a permanent Certificate of Occupancy.

DIRECT CURRENT FAST CHARGER (DCFC) EVSE. Equipment capable of fast charging on a 100A or higher 480VAC three-phase branch circuit. AC power is converted into a controlled DC voltage and current within the EVSE that will then directly charge the electric vehicle.

ELECTRIC VEHICLE (EV). An automotive-type vehicle for on-road use, including but not limited to, passenger automobiles, buses, trucks, vans, neighborhood electric vehicles, and electric motorcycles, primarily powered by an electric motor that draws current from a building electrical service, EVSE, a rechargeable storage battery, a fuel cell, a photovoltaic array, or another source of electric current. Off-road, self-propelled electric mobile equipment, including but not limited to, industrial trucks, hoists, lifts, transports, golf carts, airline ground support equipment, tractors, and boats are not considered electric vehicles.

ELECTRIC VEHICLE CAPABLE LIGHT SPACE (EV CAPABLE LIGHT SPACE). A designated vehicle parking space that has conduit and/or raceway installed to support future implementation of electric vehicle charging installation, and has sufficient physical space adjacent to the existing electrical equipment for future electric upgrades.

ELECTRIC VEHICLE CAPABLE SPACE (EV CAPABLE SPACE). A designated vehicle parking space that has the electric panel capacity and conduit and/or raceway installed to support future implementation of electric vehicle charging.

ELECTRIC VEHICLE READY SPACE (EV READY SPACE). A designated vehicle parking space that has the electric panel capacity, raceway wiring, receptacle, and circuit overprotection devices installed to support future implementation of electrical vehicle charging.

ELECTRIC VEHICLE SUPPLY EQUIPMENT (EVSE). An electric vehicle charging system or device that is used to provide electricity to a plug-in electric vehicle or plug-in hybrid electric vehicle, is designed to ensure that a safe connection has been made between the electrical grid and the vehicle, and is able to communicate with the vehicle's control system so that electricity flows at an appropriate voltage and current level.

ELECTRIC VEHICLE SUPPLY EQUIPMENT INSTALLED SPACE (EVSE INSTALLED SPACE). A vehicle parking space that is provided with a dedicated EVSE connection.

FIRST TENANT FINISH. The first tenant finish(es) in a new structure or core and shell building that is credited towards meeting the requirements of this Chapter.

FUEL GAS. A natural gas, manufactured gas, liquefied petroleum gas, or mixtures of these gasses.

FUEL OIL. Kerosene or any hydrocarbon oil having a flash point of not less than 100°F (38°C).

FUTURE ELECTRIC EQUIPMENT. Equipment or appliances necessary to support future all-electric space and water heating, cooking, or clothes drying.

PLUG-IN HYBRID ELECTRIC VEHICLE. An electric vehicle having a second source of motive power.

RESIDENTIAL BUILDING. For this code, one- and two-family dwellings and townhouses as defined in the International Residential Code.

Chapter 3 Electric Ready

PART 1 RESIDENTIAL ELECTRIC READY

SECTION RE301 SCOPE

RE301.1 General. These provisions shall be applicable for all new buildings, and major renovations and additions that are 1,000 sf floor area or more and altering combustion equipment systems.

SECTION RE302 ADDITIONAL ELECTRIC INFRASTRUCTURE

RE302.1 Additional Electric Infrastructure. Combustion equipment in residential buildings must meet the requirements of Sections RE302.2 through RE302.6.

Exceptions:

1. Interior fireplaces that do not serve as a primary source of heating.

2. Exterior fireplaces and firepits.

RE302.2 Combustion Equipment. Combustion equipment shall be provided with all of the following:

1. A dedicated, appropriately phased branch circuit sized to accommodate future electric equipment or appliances to serve a comparable capacity to meet the heating load.

2. An electric receptacle or junction box that meets the requirements of Section RE302.5, and is connected to the electrical panel through the branch circuit. Each electrical receptacle or junction box shall have reasonable access to the combustion equipment or dedicated physical space for future electric equipment with no obstructions other than the current combustion equipment.

3. Where combustion equipment is used for space or water heating, dedicated physical space shall be provided for future electric equipment, including an electric resistance backup coil for ducted systems, if applicable.

Exception: Dwelling units with installed air conditioning systems are not required to provide additional dedicated physical space for an outdoor heat pump.

4. Where combustion equipment is utilized for space or water heating, the electrical service shall be sized to include the electrical load necessary for a potential electrical replacement of the combustion-based system. The calculation of electrical loads must adhere to the guidelines outlined in the National Electrical Code (NEC).

RE302.3 Electrical Panel Space. The electrical panel shall have reserved physical space for a minimum two-pole or three-pole circuit breaker for each branch circuit provided for future electric equipment or appliances. The physical space in the electrical panel for each circuit breaker shall be sized with sufficient breaker capacity to meet the electrical demand of the future electric equipment or appliance that is sized to serve a comparable capacity to meet the heating load.

RE302.4 Labeling. The junction box or receptacle and the dedicated circuit breaker space serving future electric equipment or appliances in the electrical panel shall be labeled for their intended use.

RE302.5 Adjacency. The electrical receptacle or junction box must be provided within 3 feet of the combustion equipment or appliances, or within 3 feet of the dedicated physical space for future electric equipment or appliances.

Exception: For combustion equipment dedicated to space or water heating, the electrical receptacle or junction box shall be located not more than 6 feet from the combustion equipment or the dedicated physical space for future electric equipment.

RE302.6 Condensate Drain. Where combustion equipment for space heating and water heating is installed, a location shall be provided for condensate drainage.

PART 2 COMMERCIAL ELECTRIC READY

SECTION CE301 SCOPE

CE301.1 General. These provisions shall be applicable for all new buildings, first tenant finish permits, major renovations and additions that are 1,000 sf floor area or more and altering combustion equipment systems.

CE301.1.1 First Tenant Finishes. In the case that a first tenant finish to a commercial core and shell building or unfinished space is credited towards meeting the requirements of this Chapter, the code official shall not issue a Certificate of Occupancy to the tenant until the requirements of Section CE302 are met.

SECTION CE302 ADDITIONAL ELECTRIC INFRASTRUCTURE

CE302.1 Additional Electric Infrastructure. Combustion equipment in commercial buildings shall meet the electric infrastructure requirements of Sections CE302.2 or CE302.3.

Exceptions:

1. Interior fireplaces that do not serve as a primary source of heating.

2. Exterior fireplaces and fire pits.

3. Additions to buildings that do not provide new space-heating equipment will not be required to provide additional electrical infrastructure to the existing space-heating equipment.

CE302.2 Commercial Buildings and all R-Occupancies. Commercial buildings and all R- occupancies of any size, shall comply with Sections CE302.2.1 through CE302.2.5.

CE302.2.1 Combustion Equipment. Combustion equipment shall be provided with all of the following:

1. A dedicated, appropriately phased branch circuit sized to accommodate future electric equipment or appliances to serve a comparable capacity to meet the heating load.

2. An electric receptacle or junction box that meets the requirements of Section CE302.2.5, and is connected to the electrical panel through the branch circuit. Each electrical receptacle or junction box shall have reasonable access to the combustion equipment or dedicated physical space for future electric equipment with no obstructions other than the current combustion equipment.

3. Where combustion equipment is used for space or water heating, dedicated space shall be provided for all future electric equipment, including an electric resistance backup coil for ducted systems if applicable.

4. Where combustion equipment is utilized for space or water heating, the electrical service shall be sized to include the electrical load necessary for a potential electrical replacement of the combustion-based system. The calculation of electrical loads must adhere to the guidelines outlined in the National Electrical Code (NEC).

Exception: Buildings with installed air conditioning systems are not required to provide additional dedicated physical space for an outdoor heat pump.

CE302.2.2 Electrical Panel Space. The electrical panel shall have reserved physical space for a minimum two-pole or three-pole circuit breaker for each branch circuit provided for future electric equipment or appliances. The physical space in the electrical panel for each circuit breaker shall be sized with sufficient breaker capacity to meet the electrical demand of the future electric equipment or appliance that is sized to serve a comparable capacity to meet the heating load.

CE302.2.3 Labeling. The junction box or receptacle and the dedicated circuit breaker space serving future electric equipment or appliances in the electrical panel shall be labeled for their intended use.

CE302.2.4 Adjacency. The electrical receptacle or junction box must be provided within 3 feet of the combustion equipment or appliances or within 3 feet of the dedicated physical space for future electric equipment or appliances.

Exception: For combustion equipment dedicated to space or water heating, the electrical receptacle or junction box shall be located not more than 6 feet from the combustion equipment or the dedicated physical space for future electric equipment.

CE302.2.5 Condensate Drain. Where combustion equipment dedicated to space heating and water heating is installed, a location shall be provided for condensate drainage.

Chapter 4 Solar Ready

***Chapter 4 will not be adopted. Solar ready provisions currently live in Chapter 7 of the Pitkin County Land Use Code and will be addressed in a subsequent code adoption.**

Chapter 5 Electric Vehicle Ready

PART 1 RESIDENTIAL ELECTRIC VEHICLE READY

SECTION RV501 SCOPE

RV501.1 General. These provisions shall be applicable for all new buildings, and major renovations and additions that are 1,000 sf or more and altering combustion equipment systems.

SECTION RV502 ELECTRIC VEHICLE POWER TRANSFER INFRASTRUCTURE

RV502 Electric Vehicle Power Transfer Infrastructure. New vehicle parking spaces for residential buildings shall be provided in accordance with Sections RV502.1 and RV502.3.

RV502.1 One- and Two-family Dwellings and Townhouses. Each dwelling unit with a dedicated attached or detached garage or other onsite designated parking provided for the dwelling unit shall be provided with one EV ready space per dwelling unit.

RV502.2 EV Ready Spaces. Each EV ready space shall have a branch circuit that complies with all of the following:

1. Terminates at a receptacle, located within 3 feet of each EV ready space it serves. EV ready includes two adjacent parking spaces if the receptacle for the electrical facilities of this section is installed adjacent to and between both parking spaces.

2. Has a minimum circuit capacity of 40A at 208/240V.

3. The electrical panel, electrical distribution equipment directory, and all outlets or enclosures shall be marked "For future electric vehicle supply equipment".

Exception: A receptacle need not be provided if a hard-wired EVSE is installed.

RV502.3 Identification. Construction documents shall designate the EV ready space and indicate the locations of raceway and/or conduit and the termination points serving them. The circuits or spaces reserved in the electrical panel for EV ready spaces shall be clearly identified in the panel or subpanel directory. The calculation of electrical loads must adhere to the guidelines outlined in the National Electrical Code (NEC).

PART 2 COMMERCIAL ELECTRIC VEHICLE READY

SECTION CV501 SCOPE

CV501.1 General. These provisions shall be applicable for all new buildings, and major renovations and additions that are 1,000 sf or more and altering combustion equipment systems.

SECTION CV502 ELECTRIC VEHICLE POWER TRANSFER INFRASTRUCTURE

CV502 Electric Vehicle Power Transfer Infrastructure. Where new parking is provided for commercial buildings, it shall be provided with electric vehicle power transfer infrastructure in compliance with Sections CV502.1 through CV502.9.

CV502.1 Quantity. The number of required EVSE installed spaces, EV ready spaces, EV capable spaces, and EV capable light spaces shall be determined in accordance with this Section and Table CV502.1 based on the total number of provided vehicle parking spaces and shall be rounded up to the nearest whole number. This includes all covered parking under carports or detached garages.

CV502.1.1 Where more than one parking lot is provided on a building site, the number of provided vehicle parking spaces required to have EV power transfer infrastructure shall be calculated separately for each parking lot.

CV502.1.1.1 R-2 Occupancies, as defined in Chapter 3 of the International Building Code, shall use the total parking requirement for the entire development to determine the EV power transfer infrastructure requirements using Table CV502.1.

CV502.1.2 For commercial buildings that install a DCFC EVSE, each DCFC EVSE installed shall be permitted to be substituted for other space types as follows:

1. Commercial buildings other than R-2 Occupancies shall be permitted to substitute up to 10 spaces when the building provides a minimum of 20 percent of parking spaces as a combination of EV Capable, EV ready, or EVSE installed spaces.

2. R-2 Occupancies shall be permitted to substitute up to 5 spaces when the building provides a minimum of 60 percent of parking spaces as a combination of EV Capable light, EV Capable, EV ready, or EVSE installed spaces.

CV502.1.3 EVSE installed spaces that exceed the minimum requirements of this section are permitted to be used to meet minimum requirements for EV ready spaces, EV capable spaces, and EV capable light spaces.

CV502.1.4 EV ready spaces that exceed the minimum requirements of this section are permitted to be used to meet minimum requirements for EV capable spaces and EV capable light spaces.

CV502.1.5 EV capable spaces that exceed the minimum requirements of this section are permitted to be used to meet the minimum requirements for EV capable light spaces.

CV502.1.6 All attached garages with direct connection to a dwelling unit will be required to have one EV ready space.

Table CV502.1: EV Power Transfer Infrastructure Requirements

Building Type / Space Type	*EVSE Installed Space*	*EV Ready Space*	*EV Capable Space*	*EV Capable Light Space*
All *commercial buildings*, except for R-2 occupancies, with 10 or less parking spaces.	0	2 spaces	0	0
***Commercial buildings*, except for R-2 occupancies, with greater than 10 parking spaces.**	2% of spaces	8% of spaces	10% of spaces	10% of spaces
R-2 occupancies with 10 or less parking spaces	0	15% of spaces	10% of spaces	10% of spaces
R-2 occupancies with greater than 10 parking spaces.	5% of spaces	15% of spaces	10% of spaces	30% of spaces

CV502.2 EV Capable Light Spaces. Each EV capable light space shall comply with all of the following:

1. A continuous raceway and/or conduit shall be installed between a suitable electrical panel or other electrical distribution equipment and terminate within 3 feet of the EV capable light space and shall be capped. EV capable light includes two adjacent parking spaces if the raceway and/or conduit terminates adjacent to and between both parking spaces.

2. Installed raceway and/or conduit shall be sized and rated to supply a minimum of 208 volts and a minimum of 40-ampere rated circuits.

3. Dedicated physical space to accommodate all equipment necessary for electrical service to future EVSE.

4. The routing of the raceway and/or conduit must be noted on the construction documents and the raceway shall be permanently and visibly marked “EV CAPABLE” at the load center and termination point locations.

CV502.3 EV Capable Spaces. Each EV capable space shall comply with all of the following:

1. A continuous raceway and/or conduit shall be installed between a suitable electrical panel or other electrical distribution equipment and terminate within 3 feet of the EV capable space and shall be capped. EV capable includes two adjacent parking spaces if the raceway and/or conduit terminates adjacent to and between both parking spaces.

2. The installed raceway and/or conduit shall be sized and rated to supply a minimum of 208 volts and a minimum of 40-ampere rated circuits.

3. The electrical panel or other electrical distribution equipment to which the raceway and/or conduit connects shall have sufficient dedicated space and spare electrical capacity to supply a minimum of 208 volts and a minimum of 40-ampere rated circuits.

4. The termination point of the conduit and/or raceway and the electrical distribution equipment directory shall be marked: "For future electric vehicle supply equipment (EVSE)."

5. Reserved capacity shall be no less than 40A at 208/240V for each EV capable space.

CV502.4 EV Ready Spaces. Each EV ready space shall have a branch circuit that complies with all of the following:

1. Terminates at a receptacle or junction box located within 3 feet of each EV ready space it serves. EV ready includes two adjacent parking spaces if the receptacle is installed adjacent to and between both parking spaces.

2. Has a minimum circuit capacity of 40A at 208/240V.

3. The electrical panel, electrical distribution equipment directory, and all outlets or enclosures shall be marked "For future electric vehicle supply equipment (EVSE)."

CV502.5 Electric Vehicle Supply Equipment (EVSE). All EVSE shall meet all of the following requirements:

1. The installed EVSE shall meet one of the following requirements:

    a. A power capacity of at least 30A at 208/240V and has the ability to connect to the internet.

    b. An inductive charging system for battery-powered electric vehicles that:

    i. Is ENERGY STAR certified; and

    ii. Has the ability to connect to the internet.

2. An electric vehicle charging system shall be wall-mounted or pedestal style and may provide multiple cords to connect with electric vehicles.

3. An electric vehicle charging system shall be listed and labeled for EV charging and must comply with the current version of Article 625 of the National Electrical Code.

CV502.6 EVSE Installed Spaces. An installed EVSE with multiple output connections shall be permitted to serve multiple EVSE installed spaces. Each EVSE installed serving either a single EVSE installed space or multiple EVSE installed spaces, shall comply with all of the following:

1. Have a minimum charging rate in accordance with Section CV502.7.

2. Be located within 3 feet of each EVSE installed space it serves.

3. Be installed in accordance with Section CV502.8.

4. Have a minimum circuit capacity of 8.3 kVA (40A 208/240V).

5. Must meet the requirements of Section CV502.5.

CV502.7 EVSE Minimum Charging Rate. Each installed EVSE shall comply with one of the following:

1. Be capable of charging at a minimum rate 30A at 208/240V.

2. When serving multiple EVSE installed spaces and controlled by an energy management system providing load management, be capable of simultaneously sharing each EVSE installed space at a minimum charging rate of no less than 3.3 kVA.

CV502.8 EVSE Installation. EVSE shall be installed in accordance with NFPA 70 and shall be listed and labeled in accordance with UL 2202 or UL 2594. When serving an accessible parking space, EVSE shall be accessible in accordance with the International Building Code Chapter 11.

CV502.9 Identification. Construction documents shall designate all EVSE installed spaces, EV ready spaces, EV capable spaces, and EV capable light spaces, and indicate the locations of raceway and/or conduit and termination points serving them. The circuits or spaces reserved for EVSE installed spaces, EV ready spaces, and EV capable spaces shall be clearly identified in the panel or subpanel directory. The raceway and/or conduit for EV ready spaces, EV capable spaces and EV capable light spaces shall be clearly identified at both the panel or subpanel and the termination point at the parking space.