ORDINANCE NO. 14

Series 2025

AN ORDINANCE REPEALING ORDINANCES 2020-12, 2022-26, AND 2023-21 AND AMENDING CHAPTER 1 OF TITLE 8 OF THE BRECKENRIDGE TOWN CODE TO HEREINAFTER ADOPT THE INTERNATIONAL ENERGY CONSERVATION CODE, 2024 EDITION BY REFERENCE WITH AMENDMENTS AS PART OF THE TOWN OF BRECKENRIDGE BUILDING CODE SECTIONS 8-1-3 AND 8-1-9.

WHEREAS, the Town of Breckenridge adopts the International Code Council Library of Building Code Books and References every six (6) years; and

WHEREAS, after robust public process, the Town desires to adopt the 2024 International Energy Conservation Code ("IECC") with amendments and in the process repeal and replace all previous ordinances of the Town that implemented energy efficient building code provisions; and

WHEREAS, Colorado House Bill 22-1362, C.R.S. 24-38.5-401 requires adoption of the Colorado Model Electric Ready Solar Ready Code and those requirements have been updated in the Colorado Model Low Energy and Carbon Code, the Town desires to adopt specific referenced Sections of the Colorado Model Low Energy and Carbon Code as written by the Colorado Energy Code Board and published by the Colorado Energy Office in September, 2025 and found here; and

WHEREAS, specifically, the Town desires to repeal ordinances 2020-12, 2022-25, and 2023-21, which amended Chapter 1 of Title 8 of the Breckenridge Town Code (Specifically, "Building Code"); and

WHEREAS, by adopting the IECC with amendments to address local conditions, the Town of Breckenridge Building Code will be aligned with the international code system; and

WHEREAS, Town staff has held meetings with and solicited input from local, technical building code experts, including but not limited to members of the architectural, mechanical engineering, and construction community; and

WHEREAS, work sessions have been held with Town Council on August 12, 2025; and August 26, 2025 to discuss the adoption of the IECC along with the amendments;

WHEREAS, public educational meetings to introduce the new codes have been held and opportunities for interested party input regarding adoption of this new code have been made available; and

WHEREAS, an analysis done by the Town of Breckenridge Building Department, Mozingo Code Group and Group 14 Engineering retained by the Town of Breckenridge as part of the Energy Grant Awarded by the State of Colorado Energy Office demonstrates reasonable strategic amendments that are based on local market and weather conditions; and

WHEREAS, the Chief Building Official, also referred to herein as the "building official" is authorized to administer and enforce the Building Code; and

WHEREAS, as the culmination of input from Town Council, staff expertise, consultant expertise, and feedback from local design, building, and engineering professionals, the Town Council believes that the proposed Building Code adoption with amendments will result in more efficient and higher performance associated with building energy use, including outdoor energy; and

WHEREAS, it is in the furtherance of the public safety, health, and welfare and in the best interest of the citizens of and visitors to the Town for Breckenridge to continue to maintain a leadership role in energy code adoption and administration.

NOW THEREFORE, BE IT ORDAINED BY THE BRECKENRIDGE TOWN COUNCIL OF THE TOWN OF BRECKENRIDGE, COLORADO THAT:

Section 1. Amend Section 8-1-3(F) of the Breckenridge Town Code to adopt by reference the International Energy Conservation Code, 2024 Edition, published by the International Energy Code Council Inc., as well as Sections C406, C410 and R409 of the Colorado Model Low Energy and Carbon Code, published by the Colorado Energy Office, September 2025.

Section 2. Amend Section 8-1-9 of the Breckenridge Town Code, concerning the amendments to the International Energy Conservation Code, by amending subsection A and repealing subsections A(1) through A(23) and replacing those provisions as follows:

A. The following sections of the International Energy Conservation Code, 2024 Edition, amended to read as follows:

1. **C101.1, Title,** is amended as follows:

This code shall be known as the Energy Conservation Code of the Town of Breckenridge and shall be cited as such. It is referred to herein as "this code".

2. **Section C103.1, Creation of Enforcement Agency**, is amended by adding the name of the "Town of Breckenridge Building Division." The rest of the section will remain unchanged.

C103.1 Creation of enforcement agency. The Town of Breckenridge Building Division is hereby created.

3. **Section C105.6.2, Compliance Documentation**, is deleted in its entirety.

4. **Sectio C401.2** is amended to read as follows:

C401.2 Application. Commercial buildings shall comply with all the following:

1. The Colorado Model Electric-Ready and Solar Ready Code commercial provisions as found in the new Section C410 of the Colorado Model Low Energy and Carbon Code (LECC), (with the exception of the EV requirements found in Section C410 of this code).
2. Section C409 Renewable Energy Mitigation Program (REMP), of this code,
3. Section C410 Electric Vehicle (EV) Ready, of this code, and
4. Either Section C401.2.1 or C401.2.2, of this code.

5. **Section C401.2.1** is amended to read as follows:

C401.2.1 International Energy Conservation Code. Commercial buildings shall comply with one of the following:

1. Prescriptive Compliance. The Prescriptive Compliance option requires compliance with Sections C401.2, C402 through C406 and Section C408. Dwelling units and sleeping units in Group R-2 buildings shall be deemed to be in compliance with this chapter, provided that they comply with Sections C401.2 and R406.

2. *Simulated Building Performance.* The *Simulated Building Performance* option requires compliance with Section C401.2 and ANSI/ASHRAE/IES 90.1 Appendix G, as modified to be based on Site Energy Use Intensity in accordance with Section I6 of

Informative Appendix I. Section C407 of this code is deleted entirely. Utilizing the Simulated Building Performance Option removes all requirements of the IECC and replaces them with all requirements of ASHRAE 90.1-2022 as applicable, with the exception of the requirement for compliance with the Colorado Electric Ready and Solar Ready Code as amended by Section C410 of this code, and Section C409 REMP.

Exception: *Additions, alterations, repairs* and changes of occupancy to existing buildings complying with Chapter 5, unless called out within Section C410 of the Model Low Energy and Carbon Code or REMP.

6. **Section C401.2.2** is amended to read as follows:

C401.2.2 ASHRAE 90.1. Commercial buildings shall comply with Section C410 of the Model Low Energy and Carbon Code as amended to include Section C410 of this code, Section C409 REMP, and ASHRAE 90.1-2022. The Energy Cost Budget pathway is deleted. ANSI/ASHRAE/IES 90.1 Appendix G is modified to be based on Site Energy Use Intensity in accordance with Section I6 of Informative Appendix I.

7. **Section C402.1** is amended to read as follows:

C402.1 General. Building thermal envelope assemblies for buildings that are intended to comply with the code on a prescriptive basis in accordance with the compliance path described in Item 1 of Section C401.2.1 shall comply with the following:

1. The opaque portions of the building thermal envelope shall comply with the specific insulation requirements of Section C402.2 and the thermal requirements of Section C402.1.2, C402.1.3 or C402.1.4. Where the total area of through penetrations of mechanical equipment is greater than 1 percent of the opaque above-grade wall area, the building thermal envelope shall comply with Section C402.1.2.1.8.
2. Wall solar reflectance and thermal emittance shall comply with Section C402.3.
3. Roof solar reflectance and thermal emittance shall comply with Section C402.4
4. Fenestration in the building thermal envelope shall comply with Section C402.5. Where buildings have a vertical fenestration area or skylight area greater than that allowed in Section C402.5, the building and building thermal envelope shall comply with Item 2 of Section C401.2.1, C401.2.2 or C402.1.4.
5. Air leakage of building thermal envelope shall comply with Section C402.6. Air barrier and air sealing details, including the location of the *air barrier*, shall comply with Section C105.2. Proof that an *approved* third party for *air leakage* testing has been engaged shall be provided.
6. Thermal bridges in above-grade walls shall comply with Section C402.7.
7. Walk-in coolers, walk-in freezers, refrigerated warehouse coolers and refrigerated warehouse freezers shall comply with Section C403.12.

8. **Section C402.1.4 Component Performance Method** is amended to read as follows:

C402.1.4 Component performance method. Building thermal envelope values and fenestration areas determined in accordance with Equation 4-1 shall be an alternative to compliance with the maximum allowable fenestration areas in Section C402.5.1. Fenestration shall meet the applicable SHGC requirements of Section C402.5.3.

Equation 4-1 AP + BP + CP + □ AT + BT + CT + - VF - VS

where:

AP = Sum of the (area × U-factor) for each proposed building thermal envelope assembly, other than slab-on-grade or below-grade wall assemblies.

BP = Sum of the (length × F-factor) for each proposed slab-on-grade edge condition.

CP = Sum of the (area × C-factor) for each proposed below-grade wall assembly.

AT = Sum of the (area × U-factor permitted by Tables C402.1.2 and C402.5) for each proposed building thermal envelope assembly, other than slab-on-grade or below-grade wall assemblies.

BT = Sum of the (length × F-factor permitted by Table C402.1.2) for each proposed slab-on-grade edge condition.

CT = Sum of the (area × C-factor permitted by Table C402.1.2) for each proposed below-grade wall assembly.

PF = Maximum vertical fenestration area allowable by Section C402.5.1, C402.5.1.1 or C402.5.1.2.

QF = Proposed vertical fenestration area.

RF = QF – PF, but not less than zero (excess vertical fenestration area).

SF = Area-weighted average U-factor permitted by Table C402.5 of all vertical fenestration assemblies.

TF = Area-weighted average U-factor permitted by Table C402.1.2 of all exterior opaque wall assemblies.

UF = SF – TF (excess U-factor for excess vertical fenestration area).

VF = RF × UF (excess U × A due to excess vertical fenestration area).

PS = Maximum skylight area allowable by Section C402.1.2.

QS = Actual skylight area.

RS = QS – PS, but not less than zero (excess skylight area).

SS = Area-weighted average U-factor permitted by Table C402.5 of all skylights.

TS = Area-weighted average U-factor permitted by Table C402.1.2 of all opaque roof assemblies.

US = SS – TS (excess U-factor for excess skylight area).

VS = RS × US (excess U × A due to excess skylight area).

9. **Section C403.1** is amended to read as follows:

C403.1 General. Mechanical systems and equipment serving the building heating, cooling, ventilating or refrigerating needs shall comply with one of the following:

1. Section C403.1.1 and Sections C403.2 through C403.17.
2. Data Centers shall comply with Section C403.1.1, Section C403.1.2 and Sections C403.6 through C403.17.

10. **Section C403.12.2 Snow- and ice-melt system controls** is amended to read as follows:

C403.14.2 Snow- and ice-melt system controls.

Snow- and ice-melt system controls shall include automatic controls in accordance with REMP Section C409.3.2, #2.

11. **Section C404 Service Water Heating** is amended by adding the following new Section C404.11:

C404.11 Building Water Use Reduction.

All commercial buildings shall comply with the requirements as set forth in Section C404.11 and as shown in Table C404.11.1.

Exception: All structures complying with the Department of Energy's Zero Energy Ready Home National Program do not have to comply with Section C404.11.

Table C404.11.1. PLUMBING FIXTURES AND FITTINGS REQUIREMENTS

PLUMBING FIXTURE	MAXIMUM
Water Closets (toilets) - flushometer single-flush valve type	Single-flush volume of 1.28 gal (4.8 L)
Water Closets (toilets) - flushometer dual-flush valve type	Full-flush volume of 1.28 gal (4.8 L)
Water Closets (toilets) - single-flush tank-type	Single-flush volume of 1.28 gal (4.8 L)
Water Closets (toilets) - dual-flush tank-type	Full-flush volume of 1.28 gal (4.8 L)
Urinals	Flush volume 0.5 gal (1.9 L)
Public lavatory faucets	Flow rate - 0.5 gpm (1.9 L/min)
Public metering self-closing faucet	0.25 gal(1.0 L) per metering cycle
Residential bathroom lavatory sink faucets	Flow rate - 1.5 gpm (5.7 L/min)
Residential kitchen faucets	Flow rate - 1.8 gpm (6.8 L/min)a
Residential showerheads	Flow rate - 2.0 gpm (7.6 L/min)
Residential shower compartment (stall) in dwelling units and guest rooms	Flow rate from all shower outlets total of 2.0 gpm (7.6 L/min)211 elk

a. With provision for a temporary override to 2.2 gpm (8.3 L/min) as specified in Section 404.11.1(g)

C404.11.1 Plumbing Fixtures and Fittings.

Plumbing fixtures (water closets and urinals) and fittings (faucets and showerheads) shall comply with the following requirements as shown in Table C404.11.1.

A. Water Closets (toilets) - flushometer valve type. For single-flush, maximum flush volume shall be determined in accordance with ASME A112.19.2/CSA B45.1 and shall not exceed 1.28 gal (4.8 L) per flush. For dual-flush, the full flush volume shall not exceed 1.28 gal (4.8L) per flush. Dual -flush fixtures shall also comply with the provisions of ASME A112.19.14.

B. Water Closets (toilets) - tank-type. Tank-type water closets shall be certified to the performance criteria of the USEPA WaterSense Tank-Type High-Efficiency Toilet Specification and shall have a maximum full-flush volume of 1.28 gal (4.8L) per flush. Dual-flush fixtures shall also comply with the provisions of ASME A112.19.14.

C. Urinals. Maximum flush volume, when determined in accordance with ASME A112.19.2/CBA B45.1, shall not exceed 0.5 gal (1.9L) per flush. Flushing urinals shall comply with the performance criteria of the USEPA WaterSense Specification for Flushing Urinals. Non-water urinals shall comply with ASME A112.19.19 (vitreous china) or IAPMO Z124.9 (plastic) as appropriate.

D. Public Lavatory Faucets. Maximum flow rate shall not exceed 0.5 gpm (1.9L/min) when tested in accordance with ASME A112.18.1/CSA B 125.1.

E. Public Metering Self-Closing Faucet. Maximum water use shall not exceed 0.25 gal (1.0 L) per metering cycle when tested in accordance with ASME A112.18.1/CSA B125.1.

F. Residential Bathroom Lavatory Sink Faucets. Maximum flow rate shall not exceed 1.5 gpm (5.7 L) when tested in accordance with ASME A112.18.1/CSA B125.1. Residential WaterSense High-Efficiency Lavatory Faucet Specifications.

G. Residential Kitchen Faucets. Maximum flow rate shall not exceed 1.8 gpm (6.8 L/min) when tested in accordance with ASME A112.18.1/CSA B125.1. Kitchen faucets shall be permitted to temporarily increase the flow greater than 1.8 gpm (6.8 L/min) but shall not exceed 2.2 gpm (8.3 L/min) and must automatically revert to the established maximum flow rate of 1.8 gpm (6.8 L/min) upon physical release of the activation mechanism or closure of the faucet valve.

H. Residential Showerheads. Maximum flow rate shall not exceed 2.0 gpm (7.6 L/min) when tested in accordance with ASME A112.18.1/CSA B125.1. Residential showerheads shall comply with the performance requirements of the USEPA WaterSense Specifications for Showerheads.

I. Residential Shower Compartment (stall) in Dwelling Units and Guest Rooms. The allowable flow rate from all shower outlets (including rain systems, waterfalls, body sprays, and jets) that can operate simultaneously shall be limited to a total of 2.0 gpm (7.6 L/min).

Exception: Where the area of a shower compartment exceeds 2600 inch^2 (1.7 m^2), an additional flow of 2.0 gpm (7.6 L/min) shall be permitted for each multiple of 2600 inch^2 (1.7 m^2) of floor area or fraction thereof.

J. Water Bottle Filling Stations. Water bottle filling stations shall be an integral part of, or shall be installed adjacent to, not less than 50% of all drinking fountains installed indoors on the premises.

C404.11.2 Appliances.

Commercial appliances shall comply with the following requirements:

A. Clothes Washers and Dishwashers installed within dwelling units shall comply with the ENERGY STAR program requirements for Clothes Washers and ENERGY STAR Program requirements for Dishwashers. Maximum water use shall be as follows:

1. Clothes Washers - Maximum water factor (WF) of 5.4 gal/ft^3 of drum capacity (0.7 L/L of drum capacity)

2. Dishwashers - Standard size dishwashers shall have a maximum WF 3.8 gal/full operating cycle (14.3 L/full operating cycle). Compact sizes shall have a maximum WF of 3.5 gal/full operating cycle (13.2 L/full operating cycle). Standard and compact size shall be defined by ENERGY STAR criteria.

B. Clothes washers installed in publicly accessible spaces (multifamily and hotel common areas), and coin/card operated clothes washers of any size used in laundromats, shall have a maximum WF of 4.0 gal/ft^3 of drum capacity during normal cycle (.053 L/L of drum capacity during normal cycle).

C. Commercial dishwashers in commercial food service facilities shall meet all ENERGY STAR requirements as listed in the ENERGY STAR Program requirements for Commercial Dishwashers, Version 2.0.

C404.11.3 Commercial Food Service Operations.

Commercial food service operations (restaurants, cafeterias, food preparation kitchens, caterers, etc.) shall comply with the following requirements:

A. Shall use high-efficiency pre rinse spray valves (I.e. valves that function at 1.3 gpm (4.9 L/min) or less and comply with a 26 second performance requirement when tested in accordance with ASTM F2324.

B. Shall use dishwashers that comply with the requirements of the ENERGY STAR Program for Commercial Dishwashers.

C. Shall use boiler-less/connectionless food steamers that consume no more than 2.0 gal/h (7.5 L/h) in the full operational mode.

D. Shall use combination ovens that consume not more than 10 gal/h (38 L/h) in full operational mode.

E. Shall use air-cooled ice machines that comply with the requirements of the ENERGY STAR Program for Commercial Ice Machines.

F. Shall be equipped with hands-free faucet controllers (foot controllers, sensor activated, or other) for all faucet fittings within the food preparation area of the kitchen and the dish room, including pot sinks and washing sinks.

C404.11.4 Medical and Laboratory Facilities.

Medical and laboratory facilities, including clinics, hospitals, medical centers, physician and dental offices, and medical and nonmedical laboratories of all types shall comply with the following:

A. Use only water-efficient steam sterilizers equipped with:

1. Water-tempering devices that allow water to flow only when the discharge of condensate or hot water from the sterilizer exceeds 140°F (60°C).

2. Mechanical vacuum equipment in place of venture-type vacuum systems for vacuum sterilizers.

B. Use film processor water-recycling units where large-frame X-ray films of more than 6 inches (150 mm) in either length or width are processed.

Exception: Small dental X-ray equipment is exempt from this requirement.

C. Use digital imaging and radiography systems where the digital networks are installed.

D. Use a dry-hood scrubber system or, if the applicant determines that a wet-hood scrubber is required, the scrubber shall be equipped with a water recirculation system. For perchlorate hoods and other applications where a hood wash-down system is required, the hood shall be equipped with self-closing valves on those wash down systems.

E. Use only dry vacuum pumps unless fire and safety codes (International Fire Code) for explosive, corrosive, or oxidative gases require a liquid ring pump.

F. Use only efficient water treatment systems that comply with the following criteria:

1. For all filtration processes, pressure gauges shall determine and display when to backwash or change cartridges.

2. For all ion exchange and softening processes, recharge cycles shall be set by volume of water treated or based on conductivity or hardness.

3. For reverse osmosis and nanofiltration equipment with a capacity greater than 27 gal/h (100 L/h), reject water shall not exceed 60% of the feed water and shall be used as scrubber feed water or for the other beneficial uses on the project site.

4. Simple distillation is not an acceptable means of water purification.

G. With regard to food service operations within medical facilities, comply with Section 404.11.3.

12. **Section C405.2.8.1** is amended to read as follows:

C405.2.8.1 Demand responsive lighting control function. Where installed, demand responsive controls for lighting shall be capable of the following: (remainder of section unchanged)

13. **Section C405.2.10.2**, subnumeral 2 is amended to read as follows:

C405.2.10.2 Sleeping units in congregate living facilities.

2. Each unit shall have a manual control by the entrance that turns off all lighting and where installed, switched receptacles in the unit, except for lighting in bathrooms and kitchens. The manual control shall be marked to indicate its function.

14. **Section C405.15 Renewable energy systems** is deleted in its entirety.

15. **Section C406** is deleted in its entirety and replaced with Section C406 of the Colorado Model Low Energy and Carbon Code.

16. **Section C409 is deleted in its entirety and replaced as follows:**

C409 Title.

Renewable Energy Mitigation Program (REMP) – Commercial Provisions

C409.1 Scope.

This section establishes criteria for compliance with the Breckenridge Renewable Energy Mitigation Program (REMP). The scope of this program includes exterior energy uses and energy production to offset exterior energy use.

C409.2 Mandatory Requirements.

Mandatory Requirements. Compliance with this section requires that the provisions of this section be followed for all exterior energy use. Compliance with this section will be documented via the free Public Domain tool "Breckenridge REMP Calculation Sheet" in the most current version at the time of permit application. Projected energy use, associated energy offset required, fees and credits are defined within this tool.

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

C409.3 Exterior energy uses.

Commercial exterior energy uses (per list below) may be installed only if the supplemental energy meets the requirements of the Renewable Energy Mitigation Program. This applies to all installation for which an application for a permit is filed or is by law required to be filed with or without an associated Building Permit. This does not apply to work on existing systems that were permitted prior to this code.

1. Snowmelt (i.e. driveways, patios, walkways, etc.)

2. Exterior pools

3. Exterior hot tubs and spas

4. Permanent natural gas or electric systems for heating outdoor commercial spaces.

C409.3.1 On-site renewable credits.

Credits for renewable energy production will be calculated and applied per "Breckenridge REMP Calculation Sheet" for energy generated on-site. Renewable energy methods listed in the calculator include: solar photovoltaic, solar thermal, ground source heat pumps, hydroelectric and wind power. Provision for alternative method calculations is also provided, but it will require specific review and approval by the Building Official.

C409.3.2 Snowmelt systems.

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 shall be controlled via slab temperature sensing to a maximum of 38F. Idling of commercial slabs is only allowed 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.

4. Up to 100 square feet of snowmelt per emergency egress pathway is exempt.

C409.3.3 Exterior pools.

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 92% 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.

C409.3.4 Exterior hot tubs and spas.

1. Hot tub and spa covers are required for all hot tubs and spas, with a minimum R-value of 12.

2. Hot tub and spa heating appliances will have a minimum efficiency of 92% 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.

C409.3.5 Other permanent natural gas or electric heating and cooking elements.

1. A combined 350,000 BTU budget is allowed for permanent natural gas or electric heating and cooking elements at a reduced renewable offset requirement.

C409.3.6 Gas fireplace, firepit, fire table controls.

Commercial outdoor natural gas fireplaces, firepits, and fire tables shall include timers required to limit the run time of the system. Controls and switching shall be configured so as not to allow continuous operation.

C409.3.7 Electric heat tape controls.

Electric roof and gutter deicing systems shall include either automatic controls capable of shutting off the system when outdoor temperature is above 40F and below 25F, and which limit the use of the system to daylight hours by means of a programmable timer or automated clock, or moisture detection sensors.

C409.4 Permit Validity.

A permit shall not be valid until all fees as in effect at the time of permit submittal are paid in full, or the renewable energy system is proposed for on-site credit. Nor shall a change order to the permit be released until the additional fees, if any, have been paid. REMP compliance will be verified at Certificate of Occupancy or Certificate of Completion according to the proposed plans. C.O. can be withheld if the project is non-compliant.

C409.5 Pre-existing systems.

Pre-existing systems, for which a prior permit was applied for and granted prior to the effective date of this code, are exempt from this program. Additions or expansions of existing systems that require a permit will require compliance with this above code program.

Pre-existing systems for which a prior REMP payment was paid and which seek to be replaced shall receive a pro-rated credit calculated by the number of years since prior REMP payment divided by 20 years. For example, a REMP payment made for a system permitted 10 years prior to the current replacement being sought will receive credit for ½ of the prior REMP payment and that amount shall be deducted from the REMP payment owed on the replacement. 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 renewable energy systems will not require submittal to the REMP program.

C409.6 Solar photovoltaic systems.

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

C409.6.1 Solar thermal.

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 the system.

C409.6.2 Ground source heat pumps.

In order to use ground source heat pumps for on-site renewable credit, the GSHP system must supply at least 20% of the peak load for heating all the exterior energy uses. Each GSHP shall be tested and balanced and the design engineer shall certify in writing that it meets or exceeds a design coefficient of performance of 3.0 inclusion of source pump power. Design conditions for determining COP will be 30F ground loop temperature measured at the GSHP inlet, and 110F GSHP load side outlet.

17. New **Section C410** is added as follows:

C410 Electric Vehicle (EV) Ready.

C410.1 General. The provisions of this section shall be applicable for new *commercial buildings*, and major renovations and *additions*.

C410.2 Electric Vehicle Power Transfer Infrastructure. Where new parking is provided for *commercial buildings*, it shall be provided with electric vehicle power transfer infrastructure in accordance with Sections C410.2.1 through C410.2.8.

C410.2.1 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 C410.2.1 based on the total number of vehicle parking spaces provided and shall be rounded up to the nearest whole number. This includes all covered parking under carports or detached garages.

Table C410.2.1 EV Power Transfer Infrastructure Requirements

Building Type/Space Type	Level 2 EVSE Installed Spaces	Level 2 EV ready Spaces	Level 2 EV Capable Spaces	Level 2 EV Capable Light Spaces
Commercial buildings, except for Group R-2 occupancies, with 15 or fewer parking spaces	1	20% of spaces (not fewer than 2)	0	0
Commercial buildings, except for Group R-2 occupancies, with greater than 15 parking spaces	2% of spaces	8% of spaces	10% of spaces	10% of spaces
Group R-2 occupancies with 10 or fewer parking spaces	1	15% of spaces	10% of spaces	10% of spaces
Group R-2 occupancies with greater than 10 parking spaces	5% of spaces	15% of spaces	10% of spaces	30% of spaces

C410.2.1.1 Multiple Parking Lots. Where more than one parking lot is provided on a *building* site, the number of vehicle parking spaces provided is required to have *EV* power transfer infrastructure shall be calculated separately for each parking lot.

C410.2.1.2 Group R-2 Occupancies. *Group R*-2 occupancies shall use the total parking requirement for the entire development to determine the *EV* power transfer infrastructure requirements of Table C410.2.1.

C410.2.1.3 Space Type Substitutions. *Commercial buildings* shall be permitted to substitute *EV* parking spaces required in Table C410.2.1 in accordance with Sections C410.2.1.3.1 through C410.2.1.3.5.

C410.2.1.3.1 DC Fast Charging. 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 *Group 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. *Group 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*.

C410.2.1.3.2 Excess EVSE Installed Spaces. *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*.

C410.2.1.3.3 Excess EV Ready Spaces. *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*.

C410.2.1.3.4 Excess EV Capable Spaces. *EV capable spaces* that exceed the minimum requirements of this section are permitted to be used to meet minimum requirements for *EV capable light spaces*.

C410.2.1.3.5 Attached garages. All attached garages with direct connection to a *dwelling unit* will be required to have one Level 2 *EV ready space*.

Exception: One- and two-family dwellings built under the International Residential Code

C410.2.2 Level 2 EV Capable Light Spaces. Each *EV capable light space* shall comply with all 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.

   Exception: Conduit installed with a pull string from the termination locations at parking spaces to a location of a future transformer or future electrical panel with electrical service size determined at the time of future permit.
2. Installed raceway and/or conduit shall be sized and rated to supply a minimum of 208/240 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.

C410.2.3 Level 2 EV Capable Spaces. Each *EV capable space* shall comply with all the following:

1. A continuous raceway and/or conduit with a pull string from the termination locations at parking spaces 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 208/240 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 208/240 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 8.3 kVA (40A 208/240V) for each *EV capable space*.

C410.2.4 Level 2 EV Ready Spaces. Each *EV ready space* shall have a branch circuit that complies with all 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. It has a minimum circuit capacity of 8.3 kVA (40A 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)."

C410.2.5 Level 2 EVSE Installed Spaces. An installed *EVSE* with multiple output connections shall be permitted to serve multiple *EVSE installed spaces*. Each *Level 2 EVSE* installed serving either a single *EVSE installed space* or multiple *EVSE installed spaces* shall comply with all the following:

1. Have a minimum charging rate in accordance with Section C410.2.7.
2. Be located within 3 feet of each *EVSE installed space* it serves.
3. Be installed in accordance with Section C410.2.8.
4. Have a minimum circuit capacity of 8.3 kVA (40A 208/240V).

C410.2.6 Level 2 EVSE Minimum Charging Rate. Each installed *Level 2 EVSE* shall comply with one of the following:

1. Be capable of charging at a minimum rate of 6.2 kVA (or 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 not less than 3.3 kVA.

C410.2.7 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.

C410.2.8 Accessible EV Parking Spaces. For Level 2 *EVSE installed spaces* required by Table C410.2.1, a minimum of 5 percent (not less than one space) shall be van accessible spaces in accordance with Section 1107.2.2 of the International Building Code. In addition, 5 percent (not less than one space) of the total vehicle parking spaces required by Table C410.2.1 to be Level 2 *EV ready*, *EV capable*, or *EV capable light spaces* shall meet one of the following:

1. Be van accessible parking spaces in accordance with Section 1107.2.2 of the International Building Code.
2. Have the electrical infrastructure that is required by Section C410.2.2 for *EV capable light spaces*, Section C410.2.3 for *EV capable spaces*, or Section C410.2.4 for *EV ready spaces* be configured so that future *EVSE* shall be capable of serving van accessible parking spaces.

18. **Section R101.1 Title** is amended as follows:

R101.1 Title This code shall be known as the Energy Conservation Code of the Town of Breckenridge and shall be cited as such. It is referred to herein as **"this code".**

19. **Section R103.1 Creation of enforcement agency** is amended as follows**:**

R103.1 Creation of enforcement agency. The Town of Breckenridge Building Division is hereby created (remainder of sentence to be unchanged)

20. A new **Section R104.1.1.1 Deemed to comply** section is added to the requirements for Above Code Programs:

R104.1.1.1 Deemed to comply. The following programs shall be considered deemed to comply with the above code program requirements as found in Section R104.1.1

1. The Department of Energy's Zero Energy Ready Homes (ZERH) program, Version most recently published at time of permit submittal, shall be deemed to comply as an above code program when including new Section R409 of the Colorado Model Low Energy and Carbon Code, and the REMP provisions found in R409 of this Code.
2. The State of Colorado Model Low Energy and Carbon Code – Residential Provisions, plus the REMP provisions as found in R409 of this code shall be met.

21. Section R401.2 Application is amended to read as follows:

R401.2 Application. Residential buildings shall comply with all of the following:

1. the Colorado Model Electric Ready and Solar Ready Code, as updated in New Section R409 of the Model Low Energy and Carbon Code.
2. Section R409 (of this code)Breckenridge Renewable Energy Mitigation Program (REMP), and

3. either Section R401.2.1, R401.2.2, or R401.2.3.

Exceptions

1. Additions, alterations, repairs and changes of occupancy to existing buildings complying with Chapter 5, unless otherwise noted in the Colorado Model Electric Ready and Solar Ready Code and R409 (REMP) of this code.
2. Residential buildings complying with the Department of Energy's Zero Energy Ready Homes (ZERH) Program in accordance with Section R104.1.1.
3. Residential buildings complying with the Residential Provisions of the Colorado State Model Low Energy and Carbon Code in its entirety.

22. **Table R402.1.2** U-Factor Assemblies is amended to change the Vertical Fenestration U-factor from .27 to .30 and remove footnote d. in its entirety.

23. **Table R402.1.3** R-Value Alternative is amended to change the Vertical Fenestration U-factor from .27 to .30 and remove footnote g. in its entirety.

24. **Section R402.2.13 Sunroom and Heated Garage Insulation** is amended by removing the exception in its entirety. The remainder of R402.2.13 is unchanged.

25. New **Section R402.2.14 Thermal Bridging** is added as follows:

R402.2.14 Thermal bridges in above-grade walls. Thermal bridges in above-grade walls shall comply with Sections R402.2.14.1 through R402.14.3 or an approved design.

Exceptions:

1. Any thermal bridge with a material thermal conductivity not greater than 3.0 Btu/h-ft-°F.
2. Blocking, coping, flashing, and other similar materials for attachment of roof coverings.
3. Thermal bridges accounted for in the U-factor or C-factor for a building thermal envelope.

R402.2.14.1 Balconies and floor decks. Balconies and concrete floor decks shall not penetrate the building thermal envelope. Such assemblies shall be separately supported or shall be supported by approved structural attachments or elements that minimize thermal bridging through the building thermal envelope.

Exceptions: Balconies and concrete floor decks shall be permitted to penetrate the building thermal envelope where:

1. an area-weighted U-factor is used for above-grade wall compliance which includes a U-factor of 0.8 Btu/h-°F-ft2 for the area of the above-grade wall penetrated by the concrete floor deck, or
2. an approved thermal break device of not less than R-10 is installed in accordance with the manufacturer's instructions.

R402.2.14.2 Cladding supports. Linear elements supporting opaque cladding shall be off set from the structure with attachments that allow the continuous insulation, where present, to pass behind the cladding support element.

Exceptions:

1. An approved design where the above-grade wall U-factor used for compliance accounts for the cladding support element thermal bridge.
2. Anchoring for curtain wall and window wall systems.

R402.2.14.3 Structural beams and columns. Structural steel and concrete beams and columns that project through the building thermal envelope shall be covered with not less than R-5 insulation for not less than 2 feet (610 mm) beyond the interior or exterior surface of an insulation component within the building thermal envelope.

Exceptions:

1. Where an approved thermal break device is installed in accordance with the manufacturer's instructions.
2. An approved design where the above-grade wall U-factor used to demonstrate compliance accounts for the beam or column thermal bridge.

26. **Section R402.4 Fenestration** has been amended to read as follows:

R402.4 Fenestration. In addition to the requirements of Section R402, fenestration shall comply with Sections R402.4.1 through R402.4.6.

27. **Section R402.4.5 Sunroom and heated garage fenestration** is amended to remove the exception in its entirety. The remainder of R402.4.5 is unchanged.

28. A new **Section R402.4.6** is added as follows:

R402.4.6 Maximum area. The vertical fenestration area, not including opaque doors and opaque spandrel panels, shall be not greater than 30 percent of the gross above grade framed wall area enclosing conditioned space. The skylight area shall be not greater than 3 percent of the gross roof area over conditioned space.

Exception: Vertical fenestration in residential buildings complying with an above code program in accordance with Sections R104.1.1 or R104.1.1.1

29. **Section R403.1.1 Programmable Thermostats** is amended by adding the following Exception. The remainder of Section R403.1.1 is unchanged:

Exception: Thermostats serving hydronic radiant systems

30. **Section R403.5.1.2 Heat Trace systems** is deleted and replaced with the following:

R403.5.1.2 Electric heat tape controls. Electric roof and gutter deicing systems shall include automatic controls in accordance with REMP Section R411.1.

31. **Section R403.7.1 Electric-resistance space heating** is amended to read as follows:

R403.7.1 Electric-resistance space heating. Detached one- and two-family dwellings and multiple single-family dwellings (townhouses) and Group R-2, R-3 and R-4 buildings three stories or less in height *above grade plane* in Climate Zone 7 shall not use electric-resistance for space heating.

Exceptions:

1. Where electric-resistance heating is used for heat pump supplementary heat in accordance with Section R403.1.2.
2. Electric-resistance heating used for freeze protection.
3. Electric-resistance heating where the criteria in Section R408.2.2.2 for evaporative cooling are met.
4. Electric-resistance heating not exceeding a cumulative total of 1kW per dwelling unit, with a thermostat and fan.
5. Electric-resistance heating that is 100% offset by renewable energy
6. Electric-resistance heating where the criteria in Section R408.2.1.1(6)≥20% reduction in total TC are met.

32. **Section R403.9.2 Snow- and ice-melt system controls** is amended to read as follows:

R403.9.2 Snow- and ice-melt system controls.
Snow- and ice-melt system controls shall comply with REMP Section R409.3.2, item #2.

33. A new **Section R403.13 WaterSense** is added as follows:

R403.13 WaterSense. All water-using appliances and plumbing fixtures within the residential building shall be EPA WaterSense labeled products.

34. **Section R404.4 Renewable energy certificate (REC) documentation** is deleted in its entirety.

35. **Section R405.2 Simulated building performance compliance**, item #3, is amended as follows. The remainder of Section R405.2 is unchanged:

R405.2 Simulated building performance compliance.

3. For each dwelling unit with greater than 4500 square feet of conditioned space, the annual energy cost of the dwelling unit shall be reduced by an additional 5 percent of annual energy cost of the standard reference design. Energy prices shall be taken from an approved source, such as the US Energy Information Administration's State Energy Data system prices and expenditures reports. Code official shall be permitted to require time-of-use pricing in energy cost calculations. Heated garages shall be evaluated separately from the remainder of the home by showing compliance with the Prescriptive R-Value or U-Factor thermal envelope provisions and will not require air leakage testing.

Exception: Buildings complying with Section R405.2 Simulated Building Performance, utilizing a site energy use target as found in the Colorado Model Low Energy and Carbon Code (LECC).

36. **Section R406.3 Building thermal envelope** is amended by adding the following sentence to the end of the Section (remainder of section unchanged):

R406.3 Heated garages shall be evaluated separately from the remainder of the home by showing compliance with the Prescriptive R-Value or U-Factor thermal envelope provisions, with the exception of air leakage testing.

37. **Section R407 Tropical Climate Region Compliance Path** is deleted in its entirety.

38. **Section R408.2 Additional energy efficiency credit requirements** is amended as follows:

R408.2 Additional energy efficiency credit requirements. Residential buildings shall earn not less than 10 credits from not less than two measures specified in Table R408.2. Five additional credits shall be earned for dwelling units with more than 4500 square feet of conditioned space (remainder of text unchanged).

Exception: Residential buildings complying with Section R408.3 Additional energy efficiency prescriptive Pathway on a Platter requirements.

39. **Table R408.2 Credits for Additional Energy Efficiency** is amended by the following:

a. Change Table R408.2.1.2 Improved Fenestration to a U-Factor of .28 for residential buildings up to 4500 sq ft of conditioned space and .25 for homes 4500 sq ft or larger for Climate Zone 7.
b. Delete credits allowed for R408.2.2(2) and R408.2.2(3), also deleting the subsections R408.2.2(2) and (3) in their entirety.
c. Delete credits allowed for R408.2.5(1) and R408.2.5(3), also deleting the subsections R408.2.5 (1) and (3) in their entirety.

40. Add new **Section R408.3 Additional energy efficiency Prescriptive Pathway on a Platter Requirements**, as follows:

R408.3 Additional energy efficiency Prescriptive Pathway on a Platter Requirements. Residential buildings utilizing this optional prescriptive platter approach to additional energy efficiency shall comply with R408.3.1 or R408.3.2 as applicable.

R408.3.1 Regular Platter Requirements. Residential buildings that enclose 4500 square feet or less of conditioned space shall include all of the following additional efficiency requirements:

1. If forced air-furnace system installed, minimum 97% AFUE,100% of ducts inside conditioned space and space conditioning equipment utilized for heating is located completely inside condition space.
2. If Radiant heating system installed, minimum 95% AFUE in combination with hydronic thermal distribution system and space conditioning equipment is located completely inside condition space.

3. If heat pump installed, must be cold climate heat pump with minimum ability to meet 90% capacity at 5 degrees Fahrenheit or as first approved by the code official.
4. If stand-alone gas water heater installed, must be minimum .86 Uniform Energy Factor (UEF)
5. If electric water heater is installed, must meet minimum 2.2 Uniform Energy Factor (UEF) for integrated HPWH or UEF 3.75 for split-system HPWH.
6. Window U-Factor of .28 in accordance with R408.2.1.2.
7. Maximum Vertical Fenestration Area of 30% in accordance with R402.4.6.

In Addition to the above items, one additional selection from the list below shall be required in order to Comply with this Section:

- R-60 roof/ceiling insulation installed, or R49 roof/ceiling installed uncompressed over the top plate and verified by approved 3rd party meeting the requirements of Section R107.4.
- An air leakage rate equal to or less than 2.3 ACH50 or an air leakage rate equal to 2.5 ACH50 plus air sealing inspection performed by Approved 3rd party meeting the requirements of Section R107.4.
- On-site renewable energy measure, minimum 1.0 watt PV system per square foot of conditioned space.

R408.3.2 Large Platter Requirements. Residential buildings that enclose greater than 4500 square feet of conditioned space shall include all of the Regular Platter Requirements as found in R408.3.1, plus two additional selections from the list below:

- A 10% reduction in total Thermal Conductance in accordance with R408.2.1.1(4)
- An air leakage rate equal to or less than 2.3 ACH50 with ERV or HRV installed in accordance with R408.2.5(2) or air leakage rate equal to 2.5 ACH50 plus air sealing inspection performed by Approved 3rd party meeting the requirements of Section R107.4.
- R-60 roof/ceiling insulation installed, or R49 roof/ceiling installed uncompressed over the top plate and verified by approved 3rd party meeting the requirements of Section R107.4.
- A Window U-Factor of .25 in accordance with R408.2.1.2
- On-site renewable energy measure, minimum 1.0 watt PV system per square foot of conditioned space.
- No exterior energy use is required to be mitigated as defined by Sections R409-R414.2.

41. **Sections R409- R409.7.2 Renewable Energy Mitigation Program (REMP)** are added as follows:

R409 Title. Renewable Energy Mitigation Program (REMP) – Residential Provisions

R409.1 Scope.

This section establishes criteria for compliance with the Breckenridge Renewable Energy Mitigation Program (REMP). The scope of this program includes exterior energy uses and energy production to offset exterior energy use.

R409.2 Mandatory Requirements.

Compliance with this section requires that the provisions of this section be followed for all exterior energy use. Compliance with this section will be documented via the free

Public Domain tool "Breckenridge REMP Calculation Sheet" in the most current version at the time of permit application. Projected energy use, associated energy offset required, fees and credits are defined within this tool.

Credits for on-site renewable energy. The payment-in-lieu option is voluntary. Applicants interested in exterior energy use systems can alternatively choose to produce on-site renewable energy (Section R412) with renewable energy sources such as solar photovoltaics and/or solar hot water, wind, or micro-hydro. The energy efficient technology of ground source heat pumps is also permitted for supplemental on-site energy.

R409.3 Exterior energy uses.

Residential exterior energy uses (per list below) may be installed only if the supplemental energy meets the requirements of the Renewable Energy Mitigation Program. This applies to all installation for which an application for a permit is filed or is by law required to be filed with or without an associated Building Permit. This does not apply to work on existing systems that were permitted prior to this code.

1. Snowmelt (i.e. driveways, patios, walkways, etc.)

2. Exterior pools

3. Exterior hot tubs and spas

4. Permanent natural gas or electric systems for heating outdoor residential spaces.

R409.3.1 On-site renewable credits.

Credits for renewable energy production will be calculated and applied per "Breckenridge REMP Calculation Sheet" for energy generated on-site. Renewable energy methods listed in the calculator include: solar photovoltaic, solar thermal, ground source heat pumps, hydroelectric and wind power. Provision for alternative method calculations is also provided, but it will require specific review and approval by the Building Official.

R409.3.2 Snowmelt systems.

1. R-15 insulation shall be installed under all areas to be snow melted.

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 permitted.

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.

4. Up to 100 square feet of snowmelt continuous to a residential building is exempt for safety.

R409.3.3 Exterior pools.

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 92% 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.

R409.3.4 Exterior hot tubs and spas.

1. Hot tub and spa covers are required for all spas, with a minimum R-value of 12.

2. Packaged spas less than 64 square feet are exempt.

3. A maximum of (1) hot tub or spa per residential property is exempt. For residential HOAs with individual ownership, 64 square feet of hot tub or spa space is exempt for every 10 residential units.

4. Hot tubs and spa heating appliances will have a minimum efficiency of 92% 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.

R409.3.5 Other permanent natural gas or electric heating and cooking elements.

1. A combined 200,000 BTU budget is allowed for permanent natural gas or electric heating or cooking elements at a reduced renewable offset requirement.

R409.4 Gas fireplace, firepit, fire-table controls.

Residential outdoor natural gas fireplaces, firepits, and fire tables shall include timers required to limit the run time of the system. Controls and switching shall be configured so as not to allow continuous operation.

R409.4.1 Electric heat tape controls.

Electric roof and gutter deicing systems shall include either automatic controls capable of shutting off the system when outdoor temperature is above 40F and below 25F, and which limit the use of the system to daylight hours by means of a programmable timer or automated clock, or moisture detection sensors.

R409.5 Renewable energy mitigation payment.

A permit shall not be valid until all fees as in effect at the time of permit submittal are paid in full, or the renewable energy system is proposed for on-site credit. Nor shall a change order to the permit be released until the additional fees, if any, have been paid. REMP compliance will be verified at Certificate of Occupancy or Certificate of Completion according to the proposed plans. C.O. can be withheld if the project is non-compliant.

R409.6 Pre-existing systems.

Pre-existing systems, for which a prior permit was applied for and granted prior to the effective date of this code are exempt from this program. Additions or expansions of existing systems that require a permit will require compliance with this above code program.

Pre-existing systems for which a prior REMP payment was paid, and which seek to be replaced, shall receive a pro-rated credit calculated by the number of years since prior REMP payment divided by 20 years. For example, a REMP payment made for a system permitted 10 years prior to the current replacement being sought will receive credit for ½ of the prior REMP payment and that amount shall be deducted from the REMP payment owed on the replacement. 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 renewable energy systems will not require submittal to the REMP program.

R409.7 Solar photovoltaic systems.

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

R409.7.1 Solar thermal.

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 the system.

R409.7.2 Ground source heat pumps.

In order to use ground source heat pumps for on-site renewable credit, the GSHP system must supply at least 20% of the peak load for heating all the exterior energy uses. Each GSHP shall be tested and balanced, and the design engineer shall certify in writing that it meets or exceeds a design coefficient of performance of 3.0 inclusion of source pump power. Design conditions for determining COP will be 30F ground loop temperature measured at the GSHP inlet, and 110F GSHP load side outlet.

42. **Section R502.2.5 Additional energy efficiency credit requirements for additions** is amended to read as follows:

R502.2.5 Additional energy efficiency credit requirements for additions.
Additions shall comply with sufficient measures from amended Table R408.2, to achieve not less than five credits from at least two different measures. Five additional credits shall be earned for additions that add to or create a dwelling unit of more than 4500

square feet of conditioned space. Alterations to the existing building that are not part of the addition but are permitted with an addition shall be permitted to be used to achieve this requirement.

Exceptions:

1. Additions that increase the building's total conditioned floor area by less than 25 percent.
2. Additions that do not include the addition or replacement of equipment covered in Section R403.5 or R403.7.
3. Additions that do not increase conditioned space.
4. Where the addition alone or the existing building and addition together comply with Section R405 or R406
5. Where the addition alone or the existing building and addition together comply with R408.3.

43. **Section R503.1.1.3 Above-grade wall alterations** is amended to read as follows:

R503.1.1.3 Above-grade wall alterations. Above-grade wall alterations shall comply with the following as applicable:

1. Where wall cavities are exposed, the exposed cavities shall be filled with insulation complying with Section R303.1.4. New cavities created shall be insulated in accordance with Section R402.1, at an R-Value of R-23 minimum or an approved design that minimizes deviation from Section R402.1. An interior vapor retarder shall be provided where required in accordance with Section R702.7 of the International Residential Code or Section 1404.3 of the International Building Code, as applicable.
2. Where exterior wall coverings and fenestration are added or replaced for the full extent of any exterior facade of one or more elevations of the building, continuous insulation shall be provided where required in accordance with Section R402.1 or the wall insulation shall be in accordance with an approved design that minimizes deviation from Section R402.1. Where specified, the continuous insulation requirement also shall comply with Section R702.7 of the International Residential Code. Replacement exterior wall coverings shall comply with the water-resistance requirements of Section R703.1.1 of the International Residential Code or Section 1402.2 of the International Building Code, as applicable, and manufacturers' instructions.
3. Where new interior finishes or exterior wall coverings are applied to the full extent of any exterior wall assembly of mass construction, insulation shall be provided in accordance with Section R402.1 or an approved design in compliance with Section R104.1 that minimizes deviation from Section R402.1.

44. **Section R503.1.5 Additional efficiency credit requirements for substantial improvements** is amended to read as follows:

R503.1.5 Additional efficiency credit requirements for substantial improvements.

Substantial improvements shall comply with sufficient measures from Table R408.2 to achieve not less than three credits. Substantial improvements to homes greater than 4500 of conditioned space shall require 5 credits from amended Table R408.2.

Exceptions:

1. Alterations that are permitted with an addition complying with Section R502.2.5.
2. Alterations that comply with Section R405 or R406.
3. Substantial improvements that do not include the addition or replacement of equipment covered in either Section R403.5 or R403.7.
4. Substantial improvements complying with R408.3

Section 4. Ordinances 2020-12, 2022-26, and 2023-21 are hereby repealed.

Section 5. The effective date of this Ordinance is January 13, 2026.

INTRODUCED, READ ON FIRST READING, APPROVED AND ORDERED PUBLISHED IN FULL this 9th day of September 2025.

This ordinance was published in full on the Town of Breckenridge website on September 10, September 11, September 12, September 13 and September 14, 2025.

A public hearing on this ordinance was held September 23, 2025.

READ, ADOPTED ON SECOND READING AND ORDERED PUBLISHED IN FULL ON THE TOWN'S WEBSITE the 23rd day of September 2025 with an Effective and Enforceable Date of the 13th day of January 2026. A copy of this Ordinance is available for inspection in the office of the Town Clerk.

ATTEST:

Mae Watson, Town Clerk

TOWN OF BRECKENRIDGE

Kelly Owens, Mayor

APPROVED IN FORM

10/14/25

Town Attorney Date

This Ordinance was published on the Town of Breckenridge website on September 25, September 26, September 27, September 28, and September 29, 2025. This ordinance shall become effective on January 13, 2026.