ORDINANCE NO. 2024-07

AN ORDINANCE OF THE TOWN COUNCIL OF THE TOWN OF MOUNTAIN VILLAGE, COLORADO ADOPTING BY REFERENCE THE 2021 EDITION OF THE INTERNATIONAL ENERGY CONSERVATION AND THE COLORADO MODEL ELECTRIC READY AND SOLAR READY CODE WITH CERTAIN AMENDMENTS THERETO AND REPEALING AND REENACTING SECTION 17.7.12 OF THE MOUNTAIN VILLAGE MUNICIPAL CODE ACCORDINGLY

WHEREAS, the Town of Mountain Village ("Town") is a home rule municipality duly organized and existing under Article XX of the Colorado Constitution and the Town of Mountain Village Home Rule Charter of 1995, as amended ("Charter"); and

WHEREAS, the Town has previously adopted by reference the 2018 edition of the International Code ("IECC"), which serves as one of the building codes for the Town as set forth in Chapter 17.7 of the Mountain Village Municipal Code ("Code"); and

WHERAS, pursuant to C.R.S. § 31-15-602 [3.5], the Town is required to adopt and enforce an energy code that achieves equivalent or better energy performance than the 2021 IECC and the model electric ready and solar ready code; and

WHEREAS, to comply with state law and promote the health, safety, and welfare of Town residents, the Town's Building Department has recommended that the Town adopt the 2021 IECC and the model electric ready and solar ready code; and

WHEREAS, Town staff have reviewed the 2021 IECC and the model electric ready and solar ready code; in light of the Town's unique physical setting and development needs and determined that the amendments set forth herein will ensure efficient administration and enforcement of the IECC and the model electric ready and solar ready code; and

WHEREAS, on May 16, 2024, the Town Council held a duly noticed public hearing concerning the adoption of the 2021 IECC in accordance with C.R.S. § 31-16-206; and

WHEREAS, the Town Council finds and determines that it is in the best interests of the Town and its residents to adopt by reference the 2021 IECC, as amended and set forth herein, and the model electric ready and solar ready code, and amend the Code accordingly.

NOW, THEREFORE, BE IT ORDAINED BY THE TOWN COUNCIL OF THE TOWN OF MOUNTAIN VILLAGE, COLORADO, as follows:

<u>Section 1. Recitals</u>. The above recitals are hereby incorporated as findings of the Town Council in support of the enactment of this Ordinance.

<u>Section 2. Adoption by Reference</u>. Except as provided in the following sections, the Town Council hereby adopts by reference the 2021 IECC, and any appendices thereto, promulgated and published as such by the International Code Council, Inc., 4051 West Flossmoor Road, Country Club Hills, IL 60478. In lieu of full publication of the

foregoing, a true and correct copy of the 2021 IECC and the model electric ready and solar ready code shall be available for inspection at the office of the Town Clerk.

<u>Section 3. Repeal and Reenactment</u>. The Town Council hereby repeals Section 17.7.12 of the Code in its entirety and replaces it to read as set forth in <u>Exhibit A</u>, attached hereto and incorporated by reference herein.

<u>Section 4. Severability</u>. If any portion of this Ordinance is found to be void or ineffective, it shall be deemed severed from this Ordinance and the remaining provisions shall remain valid and in full force and effect.

<u>Section 5. Repeal</u>. Any ordinance of the Town or part thereof whose provisions are in conflict with this Ordinance is hereby repealed; provided, however, this Ordinance shall not affect the prosecution of any violation of the 2018 edition of the IECC that occurred prior to the effective date of this Ordinance.

<u>Section 6. Safety Clause</u>. The Town Council hereby finds, determines, and declares that this Ordinance is promulgated under the general police power of the Town, that it is promulgated for the health, safety, and welfare of the public, and that this Ordinance is necessary for the preservation of health and safety and for the protection of public convenience and welfare. The Town Council further determines that the Ordinance bears a rational relation to the proper legislative object sought to be obtained.

<u>Section 7. Effective Date</u>. This Ordinance shall become effective thirty (30) days following publication or upon approval on second reading, whichever is later ("Effective Date") and shall be recorded in the official records of the Town kept for that purpose and shall be authenticated by the signatures of the Mayor and the Town Clerk.

<u>Section 8. Public Hearing</u>. A public hearing on this Ordinance was held on the 16th day of May 2024, in the Town Council Chambers, Town Hall, 455 Mountain Village Blvd., Mountain Village, Colorado 81435.

<u>Section 9. Publication</u>. The Town Clerk or Deputy Town Clerk shall post and publish notice of this Ordinance as required by Article V, Section 5.9 of the Charter.

INTRODUCED, READ, AND REFERRED to public hearing before the Town Council of the Town of Mountain Village, Colorado on the 25th day of April 2024.

TOWN OF MOUNTAIN VILLAGE:

TOWN OF MOUNTAIN VILLAGE, COLORADO, A HOME-RULE MUNICIPALITY

By: ____

Martinique Prohaska, Mayor

ATTEST:

Kim Schooley, Deputy Town Clerk

HEARD AND FINALLY ADOPTED by the Town Council of the Town of Mountain Village, Colorado this 16th day of May 2024.

TOWN OF MOUNTAIN VILLAGE:

TOWN OF MOUNTAIN VILLAGE, COLORADO, A HOME-RULE MUNICIPALITY

 $\mathbf{R}_{\mathbf{V}}$

Martinique Prohaska, Mayor

ATTEST:

Kim Schooley, Deputy Town Clerk

-/ //₩//

Approved as

David McConaughy, Town Attorney

- I, Kim Schooley, the duly qualified and acting Deputy Town Clerk of the Town of Mountain Village, Colorado ("Town") do hereby certify that:
- 1. The attached copy of Ordinance No. 2024-07 ("Ordinance") is a true, correct, and complete copy thereof.
- 2. The Ordinance was introduced, read by title, approved on first reading and referred to public hearing by the Town Council the Town ("Council") at a regular meeting held at Town Hall, 455 Mountain Village Blvd., Mountain Village, Colorado, on April 25, 2024, by the affirmative vote of a quorum of the Town Council as follows:

Council Member Name	"Yes"	"No"	Absent	Abstain
Martinique Prohaska, Mayor	X			
Scott Pearson, Mayor Pro-Tem	X			
Harvey Mogenson	X			
Peter Duprey	X			
Jack Gilbride			X	
Tucker Magid	X			
Huascar E. Gomez (Rick)	X			

- 3. After the Council's approval of the first reading of the Ordinance, notice of the public hearing, containing the date, time and location of the public hearing and a description of the subject matter of the proposed Ordinance was posted and published in the Telluride Daily Planet, a newspaper of general circulation in the Town, on May 1, 2024 in accordance with Section 5.2(d) of the Town of Mountain Village Home Rule Charter.
- 4. A public hearing on the Ordinance was held by the Town Council at a regular meeting of the Town Council held at Town Hall, 455 Mountain Village Blvd., Mountain Village, Colorado, on May 16, 2024. At the public hearing, the Ordinance was considered, read by title, and approved without amendment by the Town Council, by the affirmative vote of a quorum of the Town Council as follows:

Council Member Name	"Yes"	"No"	Absent	Abstain
Martinique Prohaska, Mayor	X			
Scott Pearson, Mayor Pro-Tem	X			
Harvey Mogenson	X			
Peter Duprey	X			
Jack Gilbride			X	
Tucker Magid	X			
Huascar E. Gomez (Rick)	X			

5. The Ordinance has been signed by the Mayor, sealed with the Town seal, attested by me as Deputy Town Clerk, and duly numbered and recorded in the official records of the Town.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed the seal of the Town this 16th day of May 2024.

Kim Schooley, Deputy Town Clerk (SEAL)



Exhibit A

- A. *Adoption*. The Town of Mountain Village hereby adopts and incorporates herein by reference as the Energy Conservation Code of the Town, the International Energy Conservation Code, 2021 Edition ("IECC") as published by the International Code Council, Inc. 4051 West Flossmoor Road, Country Club Hills, IL 60478 and the model electric ready and solar ready code on file at the Town of Mountain Village, 455 Mountain Village Blvd., Suite A, Mountain Village, CO 81435;
- B. Amendments, Additions, and Modifications. The IECC is hereby amended as follows:

Section C101. Section C101 of the IECC is hereby amended as follows:

- 1. Section C101.1, Title. This Code shall be known as the International Energy Conservation Code of the Town of Mountain Village and shall be cited as "this code" or the "IECC" and the Colorado Model Electric Ready and Solar Ready Code."
- 2. Section C101.5.2, Scope and General Requirements. Add Section C101.5.2 to read: "Section C101.5.2 Creation of Agency. The Town of Mountain Village Building Department is hereby charged with enforcing the IECC, and the official in charge thereof shall be known as the code official."
- 3. Section C104.2 Fee schedule. Delete and replace with: "All fees shall be per the Planning and Development Services Fee Schedule."

Section R101. Section R101 of the IECC is hereby amended as follows:

- 1. Section R101.1, Title. This Code shall be known as the International Energy Conservation Code of the Town of Mountain Village and shall be cited as "this code" or the "IECC" and the Colorado Model Electric Ready and Solar Ready Code."
- 2. Section R101.5.2, Scope and General Requirements. Add Section C101.5.2 to read: "Section C101.5.2 Creation of Agency. The Town of Mountain Village Building Department is hereby charged with enforcing the IECC, and the official in charge thereof shall be known as the code official."
- 3. Section R104.2 Fee schedule. Delete and replace with: "All fees shall be per the Planning and Development Services Fee Schedule."

Section R401. Section R401 of the IECC is hereby amended as follows:

- 1. Section R401.2 Applications. Delete and replace with: "Residential Buildings shall comply with Section 401.2.1."
- 2. Section R401.2.1 Prescriptive Compliance Option. Delete and replace with: "R401.2.1 Local Energy Saving Measures."
 - a. *Scope*. The following requirements apply to all new residential construction, remodels, or additions, including without limitation single-family dwellings, multifamily dwellings, and mixed-use developments.

- b. *Mandatory Requirements*. All projects shall comply with the local energy savings measures as set forth herein.
- c. HERS Ratings.
- i. All new detached single-family or detached condominium dwellings shall achieve one of the following Home Energy Rating System ("HERS") ratings prior to the issuance of a building permit based on the gross floor area of the home. A prescriptive method may be used for homes 3,600 square feet or less with no HERS verification prior to a Certificate of Occupancy. The prescriptive or performance (HERS) method shall be confirmed prior to issuing a building permit. Performance methods must meet the follow HERS ratings outlined below.
- (a) 3,601 sq. ft. to 7,000 sq. ft.: HERS rating of 60 or lower.
- (b) 7,001 to 13,000 sq. ft.: HERS rating of 55 or lower
- (c) 13,001 feet and larger: HERS rating of 50 or below.

A confirmed HERS rating is required at or before CO. Where no exterior snowmelt is included on the project either electrical or gas, the lowest required HERS rating shall be 60.

- d. Smart Building Program. (Ordinance 2015-02) The intent of the Smart Building Program ("Program") is to reduce the amount of energy and greenhouse gas emissions produced in the community through the promotion of energy efficient designs and building practices.
- i. The following incentives are provided to accomplish the intent of the Program:
- (a) Renewable Energy. A renewable energy 20% building permit fee discount shall be provided when (1) there is no exterior energy use; and (2) at least 20% of the estimated energy use is offset by a renewable energy source.
- (b) Roof Design. Roofs are designed to function in this climate without the need for snowmelt systems and with snow and ice fall safety measures (protected entries) Roofs free of snowmelt systems are eligible for a 20% building permit fee discount. This would apply to new buildings and additions only (the rebate only applies to the portion of the permit that includes new square footage), and designs that meet this requirement must be approved by the Building Official.
- (c) Exterior Energy Use: Buildings designed with no exterior energy use elements other than lighting are eligible for an additional 15% building permit fee discount. When this rebate is awarded, a covenant shall be recorded for the property with the Town, acknowledging the acceptance of the owner's forfeit of right to install any exterior energy use items after obtaining the CO for a period of fifty years. If during this period after CO it is found that exterior energy use items are desired by the owner and installed, the awarded rebate pertaining to exterior energy use shall be returned to Mountain Village per the terms of the agreement.

(d) Interior Energy Use HERS Rating: Buildings designed with a HERS rating below 50 are eligible for a building permit fee discount. The discount calculation begins at a HERS rating of 50. A new building with a HERS rating of 50 would pay 100% of the building permit fee. The building permit fee would be reduced proportionately with the percentage reduction in the HERS rating. For instance, a HERS score of 25 is a 50% reduction in the building permit fee. A HERS score of 53 would result in a 100% building permit fee discount. HERS ratings can be lowered by either on-site or off-she solar photovoltaic systems.

These four (4) owner incentives can be used collectively toward a building permit fee discount. Maximum collective building permit fee discount available with the Program efficient home design is 100% of the building permit fee.

- ii. Exterior Energy Use. The IECC or accepted performance compliance methods do not address exterior energy use. However, it is the intent of the Program to include all energy use on site in the evaluation of the building's performance regarding energy use. Therefore, the energy required of exterior snowmelt systems, as well as site-built pools and spas must also be offset with renewable energy via the Offset Program (see below).
- iii. *Program Scope*. The Program shall apply to site built outdoor, spas, pools and all exterior energy used for snowmelt.
- iv. Snowmelt.
- (a) All snowmelt systems on the property shall be offset via the Renewable Energy Mitigation Program (REMP) except for:
- (i) Single-family Development: 1,000 square feet of exempt hydronic snow melt that shall be allowed without mitigation located only on the main drive and/or code required exit walkways, decks, stairs and landings.
- (ii) Multifamily, Mixed Use and Commercial Development:
- 1,000 sq. ft. plus 50 square feet per dwelling unit of exempt hydronic snow melt that shall be allowed without mitigation located only on the main drive(s) decks, amenity areas and/or code required exit walkways, stairs and landings.
- (iii) Attached single-family units reviewed from the IRC (Duplex and Townhomes). 500 square foot of exempt per dwelling unit hydronic snowmelt shall be allowed without mitigation located only on the main drive and/or code required exit walkways, decks stairs and landings.
- (iv) Pedestrian routes and plaza areas in the Village Center and other public use areas.
- (v) Pool deck areas for multifamily or mixed-use hotbed development sites as envisioned in the Comprehensive Plan.
- v. *Spas*. Factory built spas (hot tubs) that are in compliance with the current California Energy Commission requirements in section 1604 of title 20 and have a maximum

- standby energy use of 205 watts per hour are exempt. Spa energy uses above 205 watts per hour adjusted for local climatic conditions are included in renewable energy mitigation offset requirements. Proof that the site-built spa meets this requirement may be provided by a Town engineering consultant, if needed, and will be at the expense of the owner. The owner of said property shall have the option of providing energy from a Town approved renewable energy system, or making payment in lieu, or a combination of both, in order to offset energy used by exterior energy use equipment with renewable energy sources.
- vi. Exterior Pools. Exterior heated swimming pools must prove compliance with the currently adopted Energy Codes. The Council may waive the need to offset exterior pool heating for projects that are envisioned in the Comprehensive Plan or may use a portion of the project revenues to pay for part of or all the energy offset.
- vii. *Heated Garages*. Heated garages must prove compliance with the currently adopted Energy Codes. This can be accomplished with a free program known as RES-Check. The garage would be included in the Res-Check calculation with the heated home. The blower door test required as per R402.4.1.2 shall apply only to the homes habitable space and the air sealing for the garage shall be visually inspected.
- viii. Exterior Energy Use Calculation. The total exterior energy use that must be offset with renewable energy, or payment made as a payment in-lieu as allowed in these regulations, will be calculated by the Town Building Official using the Build Smart Exterior Energy Calculation Spreadsheet ("Spreadsheet") (Appendix 17-2). The Spreadsheet calculations were developed using the standard amount of energy used by the exterior systems and adjusted for local climatic conditions. Alternate and creative engineering solutions to reduce exterior energy use are encouraged and may be accepted as an offset method, when approved by the Building Official. The Spreadsheet will be updated regularly according to market fluctuations and may be amended and adopted by the annual Fee Resolution.
- iv. Renewable Energy Credit Calculation. Renewable mitigation offsets may be produced on-site or off-site and must be approved by the Town. On site renewable energy methods receive double credit for offset purposes. For example, if a town approved renewable energy source such as solar, geothermal heat pump, etc. installed on site produces 4KW then it will get credit for offsetting 8KW of exterior energy use. As new technology or other offsite renewable energy projects come on-line, they may also be considered as approved systems by the Building Official. Where the necessary amount of renewable energy is unattainable on-site, a combination of renewable energy methods may be used.
- v. Payment In-lieu. The Town has the resources and ability to install renewable energy systems on public property or invest in offsite renewable energy systems that will offset exterior energy used in the community. If preferred by the property owner, the Town may accept payment from the owner of the affected property, in lieu of providing energy produced by a Town approved renewable energy system, Or, the Town may accept partial payment in lieu from the affected property owner that provides only partial energy produced by a Town approved on-site or off-site renewable energy mitigation system. The owner shall make payment prior to receiving the building permit. The payment in lieu shall be calculated using the Spreadsheet.

- vi. Approved Renewable Energy Systems. All renewable energy systems proposed as part of the Build Smart Renewable Mitigation Program must be approved in advance by the Building Official. An engineering analysis may be required for calculating the renewable energy mitigation credit produced by an on or off site system. Review of the system by a Town engineering consultant, if needed, will be at the expense of the owner.
- (a) On-site renewable energy systems provided to offset exterior energy use will be required to be maintained and operated for the lifetime of the property, through a written agreement with the property owner and a covenant on the property.
- (b) Off-site renewable mitigation shall only be approved by the Building Official if, through a written agreement: (1) the system is legally tied to the property using exterior energy use with the inability to transfer to another property; and (2) the Town can easily verify at any time the offsite renewable energy system continues to provide renewable energy as provided for herein, with no restrictions on the Town's ability to access renewable energy utility information.
- xii. Shut-off Timers. Exterior energy use such as outdoor firepits and exterior gas illumination fixtures shall be required to have timers with a maximum of 60 minutes and shall not have continuously burning pilots.
- viii. Appropriation of funds. All REMP payments in lieu received by the Town shall be deposited into a separate account with the Town to be used for energy reducing town projects and programs that benefit the community. Carbon reducing town projects and programs may be considered an appropriate use of REMP funds with Town Manager approval.
- e. Engineered Heating Systems. All detached single-family dwellings with equipment that meets the requirements for commissioning per sub-section N must have engineered heating systems. Where mechanical ventilation is required high efficiency energy recovery ventilators or heat recovery units shall be utilized for this purpose.
- f. *Direct Vent Furnace*. When the scope of the work of an addition to a dwelling or a remodel of a dwelling requires replacement of a furnace, the furnace shall be replaced with a direct vent unit that has a minimum 92 percent AFUE.
- g. *Direct Vent Boiler*. When the scope of the work of an addition to a dwelling or a remodel of a dwelling requires replacement of a boiler, the boiler shall be a direct vent unit that has a minimum 90 percent AFUE.
- h. *Fireplaces*. Fireplaces located in sleeping areas must have shut off timer with 90 minute maximum or thermostat setting maximum of 80 degrees. Wood burning fireplaces shall meet the Solid Fuel Burning Device Regulations.
- i. *Programmable Thermostats*. Programmable thermostats are required for forced air central heating and cooling systems.
- j. Automatic Exhaust Fan Switches. Timers, humidistats or motion sensors are required for bath exhaust fans.

- k. Local Insulation Requirements.
- i. Headers shall be insulated full open depth.
- ii. Framed corners must be capable of being insulated.
- iii. Shaft and knee walls for skylights shall be insulated as exterior walls and provided with adequate backing to support the insulation.
- 1. Range Hood Ducting. Range hoods are required and must be ducted to the exterior.
- m. *Mechanical Systems Commissioning and Completion Requirements*. Engineering and commissioning of the mechanical and hot water heating systems shall be required on all residential where any of the following apply:
- i. The equipment input rating exceeds 200,000 btu.
- ii. The heated water exceeds 210 deg. F
- iii. The heated water or water glycol storage capacity exceeds 120 gallons Prior to the approval of the final mechanical inspection, the registered design professional shall provide evidence of mechanical systems commissioning and completion of the mechanical system installation to the Building Official.
- n. Systems Adjusting and Balancing. HVAC systems 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.
- o. *Air Systems Balancing*. Each supply air outlet and zone terminal device shall be equipped with a means for air balancing in accordance with the International Mechanical Code. Discharge dampers are prohibited on constant volume fans and variable volume fans with motors of 10 hp (7.35 kW) and larger. Air systems shall be balanced in a manner to first minimize throttling losses then, for fans with system power of greater than 1 hp (735 W), fan speed shall be adjusted to meet design flow conditions.

Exception: Fans with fan motor horsepower of 1 hp (735 W) or less.

p. *Hydronic Systems*. Balancing. Individual hydronic heating and cooling coils /zones shall be equipped with means for balancing and measuring flow. Hydronic systems shall be proportionately balanced in a manner to first minimize throttling losses, then the pump impeller shall be trimmed, or pump speed shall be adjusted to meet design flow conditions. Each hydronic system shall have either the capability to measure pressure or temperature across the pump or shall have test ports at each side of each pump.

Exceptions: pumps with pump motors of 5 hp (3677 W) or less where throttling results in not greater than 5 percent of the nameplate horsepower draw above that required if the impeller were trimmed.

- q. Functional Performance Testing. Functional performance testing shall be in accordance with the requirements of this section.
- r. Equipment. Equipment functional performance testing shall demonstrate the installation and operation of components, systems, and system-to-system interfacing relationships in accordance with approved plans and specifications so that operation, function, and maintenance serviceability for each of the commissioned systems is confirmed. Testing shall include all specified modes of control and sequence of operation, including under full-load, part-load and all of the following emergency conditions:
- i. Each mode as described in the sequence of operation.
- ii. Redundant or automatic backup mode.
- iii. Performance of alarms.
- iv. Mode of operation upon a loss of power and restoration of power.
- s. *Controls*. HVAC control systems shall be tested to document that control devices, components, equipment, and systems are calibrated, adjusted and operated in accordance with the approved plans and specifications. Sequences of operation shall be functionally tested to document that they operate in accordance with the approved plans and specifications.
- t. *Economizers*. Air economizers shall undergo a functional test to determine that they operate in accordance with the manufacturer's specifications.
- u. *Acceptance*. Buildings, or portions thereof, shall not pass the final mechanical inspection until such time as the code official has received a final commissioning report from the design professional.
- v. *System Balancing Report*. A written report describing the activities and measurements completed shall be provided.
- w. Final Commissioning Report. A complete report, signed and sealed by the registered design professional, documenting that the mechanical and service water heating systems comply with the International Energy Conservation Code, the approved plans and manufacturer's specifications shall be provided to the Building Official.
- x. Site Built Spas and Pools. Site built pools and Spas shall be insulated equivalent to current California Energy compliant factory built hot tubs and spas or be offset by a Town approved renewable energy source. (Ord. No. 2023-03 §2).
- 3. Section R401.2.2 Total Building Performance Option. Delete in its entirety.
- 4. Section R401.2.3 Energy Rating Index Option. Delete in its entirety.
- 5. Section R401.2.4 Tropical Climate Region Option. Delete in its entirety.